UNIVERSAL REGISTRATION DOCUMENT 2023

comprising the annual report, the management report and the corporate governance report

CARBIOS

Biotechnology powering plastic and textile circularity

SUMMARY

CARBIOS

Société anonyme (public limited company) with capital of €11,791,941.00
Headquarters: Cataroux site - 8 rue de la Grolière - 63100 Clermont-Ferrand, France
Trade and Companies Register (RCS) Clermont-Ferrand 531 530 228

UNIVERSAL REGISTRATION DOCUMENT 2023

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This Universal Registration Document was filed on April 19, 2024 with the Autorité des Marchés Financiers (AMF), as the competent authority in respect of (EU) Regulation No. 2017/1129, without prior approval, in accordance with Article 9 of said regulation.

The Universal Registration Document may be used in support of a public offering of securities or the admission to trading of financial securities on a regulated market if it is supplemented by a transaction note and, if applicable, a summary note and all amendments made to the Universal Registration Document. The set of documents is approved by the AMF in accordance with (EU) Regulation No. 2017/1129.

Pursuant to Article 19 of (EU) Regulation No. 2017/1129, the following elements are included by reference in this Universal Registration Document:

- the separate financial statements for the fiscal year ended December 31, 2021 and the related Statutory Auditors' report as presented in sections 5.1 (pages 98 to 122) and 5.3 (pages 123 to 124) of the Universal Registration Document filed with the AMF on April 20, 2022 under the number D. 22-0317;
- the review of the Company's results and financial position for the fiscal year ended December 31, 2021, presented in section 2.1 (pages 43 to 54) of the Universal Registration Document filed with the AMF on April 20, 2022 under the number D. 22-0317;
- the simplified consolidated pro forma financial information for the fiscal year ended December 31, 2021 and the related Statutory Auditors' report as presented in sections 5.4 (pages 128 to 130) and 5.5 (page 131) of the Universal Registration Document filed with the AMF on April 20, 2022 under the number D. 22-0317;
- the consolidated financial statements under IFRS for the fiscal year ended December 31, 2021 and the related Statutory Auditors' report as presented in sections 5.6 (pages 132 to 182) and 5.7 (page 183) of the Universal Registration Document filed with the AMF on April 20, 2022 under the number D. 22-0317;
- the separate financial statements for the fiscal year ended December 31, 2022 and the related Statutory Auditors' report as presented in sections 5.1 (pages 114 to 138) and 5.2 (pages 139 to 140) of the Universal Registration Document filed with the AMF on April 12, 2023 under the number D. 23-0263;
- the review of the Company's results and financial position for the fiscal year ended December 31, 2022, presented in section 2.1 (pages 48 to 52) of the Universal Registration Document filed with the AMF on April 12, 2023 under the number D. 23-0263; and
- the consolidated financial statements under IFRS for the fiscal year ended December 31, 2022 and the related Statutory Auditors' report as presented in sections 5.3 (pages 141 to 186) and 5.4 (page 187) of the Universal Registration Document filed with the AMF on April 12, 2023 under the number D. 23-0263.

The information included in these two Registration Documents, other than those referred to above, is replaced or updated by the information included in this Universal Registration Document. These two Registration Documents are available at the Company's registered office and on its internet site **www.carbios.com**.

Copies of this Universal Registration Document are available free of charge at Carbios' registered office, Site de Cataroux - 8, rue de la Grolière - 63100 Clermont-Ferrand - France, the Company's website (**www.carbios.com**) and the AMF's website (**www.amf-france.org**).

In this document, the terms:

- “Carbios” or the “Company” refers to the Carbios company,
- “Universal Registration Document” refers to this document.

Forward-looking information

This Universal Registration Document contains statements regarding the Company’s objectives and areas of development. These statements are sometimes identified by the use of the future and conditional tenses and terms of a forward-looking nature such as “consider,” “envisage,” “think,” “aim,” “expect,” “intend,” “should,” “hope,” “estimate,” “believe,” “wish,” “may,” or, as the case may be, the negative form of these same terms, or any other variant or similar terminology.

Readers should note that these objectives and areas of development depend on circumstances or facts whose occurrence or completion is uncertain.

These objectives and areas of development are not historical data and should not be interpreted as guarantees that the stated facts and data will occur, the assumptions be verified or the objectives achieved. By their nature, these objectives may not be achieved and the statements or information contained in this Universal Registration Document may prove to be incorrect, and the Company is not obliged in any way to update them, subject to the regulations in force, in particular the General Regulation of the Autorité des Marchés Financiers.

This Universal Registration Document also contains information relating to the Company’s business activity as well as the market and industry in which it operates. This information comes from, among other places, studies conducted by internal and external sources (analyst reports, specialized studies, industry publications, all other information published by market research companies, companies and public bodies). The Company believes that this information gives a true and fair view of the market and industry in which it operates and accurately reflects its competitive position; however, although this information is considered reliable, it has not been independently verified by the Company.

Risk factors

Investors are also invited to take into account the risk factors described in Chapter 3 “Risk factors” in the Universal Registration Document before making their investment decision. The occurrence of one or more of these risks could have an adverse effect on the business, outlook, financial position, financial income and outlook of the Company. Other risks not yet identified or considered not to be significant by the Company may have the same adverse effect and investors may lose all or part of their investment.

Rounding

Some figures (including data expressed in thousands or millions) and percentages presented in the Universal Registration Document have been rounded. If applicable, the totals presented in the Universal Registration Document may differ slightly from those that would have been obtained by adding the exact (unrounded) values for these figures.

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Translation for information purpose only. In case of discrepancy between the French and the English version of this Universal Registration Document, the French version should prevail.

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1. PRESENTATION OF CARBIOS AND ITS ACTIVITIES

1.1 GENERAL PRESENTATION

1.1.1 CARBIOS: A GLOBAL PIONEER IN THE ENZYMATIC DEPOLYMERIZATION OF PLASTICS AND TEXTILES

The context:

A major global environmental challenge: 353 million metric tons of plastic waste are generated each year, of which 79 million metric tons escape the management systems(1).

However, only 9% of plastic waste was recycled worldwide in 2019(1).

If nothing changes, the global production of plastic waste is expected to almost triple by 2060(1).

Two target markets: PET (PolyEthylene Terephthalate), nearly 90 million metric tons produced each year(2), whose market growth is expected to almost double in 25 years from 101 million metric tons in 2025 to 186 million metric tons by 2050(3); and PLA (Polylactic Acid) with a production capacity expected to increase from 440,000 metric tons in 2022(4) to more than 700,000 metric tons in 2026.

Focus on Carbios and its technologies:

A core business, the marriage of biology and plastics to serve the circular economy.

Two proprietary technologies protected by 58 patent families and certified Efficient Solution by the Solar Impulse Foundation.

International recognition: PET enzymatic depolymerization recycling technology is recognized by the most prestigious scientific journals: Nature, Chemical Reviews, ACS Catalysis.

An industrial reality: the construction of the world's first PET biorecycling plant is underway in Longlaville (France), with the aim of starting deliveries to customers in 2026.

Commitment is at the heart of Carbios' DNA. In early 2023, Carbios joined the Ellen MacArthur Foundation's circular economy network.

(1) Source: OECD 2022. (2) Source: IHS Markit in 2021 (3) Source: Carbios in 2023 (Outlook for this reference scenario based on McKinsey & Company's "Accelerating Momentum" scenario of 2023) (4) Source: IHS Markit in 2021

Carbios, a biotechnology company created in April 2011, develops and industrializes biological solutions to reinvent the life cycle of plastics and textiles. Through its unique approach combining biology and plastics for the first time, Carbios aims to address new consumer expectations and the challenges of the broader environmental transition faced by governments and industrial companies by taking up a major challenge of our time: avoiding plastic and textile waste pollution, and accelerating the transition to a circular economy. Its two innovative technologies dedicated to the biorecycling of PET and the biodegradation of PLA are in the industrial and commercial scale-up phase internationally.

Through its biorecycling technology, Carbios provides an industrial solution to the recovery of PET (the dominant plastic in polyester bottles, trays and textiles), which is a market of nearly 90 million metric tons per year worldwide.

This technology converts all types of PET waste into its basic components (monomers). These can then be reused to manufacture new products from 100% recycled and 100% recyclable PET, without loss of quality.

Since July 2022, Carbios has had a fully operational industrial demonstration plant. Located in Clermont-Ferrand, this facility represents the final stage of development of the process and prefigures the design of future industrial units. The results obtained at the industrial demonstration plant and the detailed engineering study for Carbios' first commercial plant define the basic engineering and operational guidelines for the units that will be operated under license agreements by industrial companies that will build and operate their own plants.

In line with its forward plan, the Company aims to commission its own PET enzymatic recycling plant in 2025[1], with an estimated processing capacity of 50,000 metric tons of PET waste per year. In October 2023, Carbios obtained the building permit and the authorization to operate this plant, allowing construction to begin on schedule. This plant is now under construction in Longlaville (54) in the Grand-Est region, on 13.7 hectares of land acquired by Carbios and adjacent to the Indorama Ventures PET production site. Its commissioning should make it possible to secure the production of the first industrial and commercial volumes of biorecycled PET from 2026 and consolidate the Company's business model.

The Company has also developed **a solution for the enzymatic biodegradation of PLA**[2](plant-based) plastics. The production capacity of this market is currently estimated at 400,000 metric tons per year, with a weighted annual growth rate estimated at 28% until 2025[3]. This unique enzymatic solution called CARBIOS Active, integrated into the heart of packaging during the plastic conversion processes, makes it possible to create a new generation of PLA products that are 100% compostable, even at room temperature, without leaving toxic residues or microplastics. CARBIOS Active was recently certified by the Biodegradable Products Institute (BPI), the leading North American authority on compostable products and packaging. This solution, dedicated to the biodegradation of PLA plastics, is also included in the inventory of food contact substances (FCS) of the United States Food and Drug Administration (FDA) with the food contact notification (FCN) 2325, in force since February 29, 2024. This innovation, for which the commercial deployment should take place in 2024[4], is operated under license by Carbiolice, a wholly-owned subsidiary of Carbios.

[1] Provisional date depending in particular on the terms of the collaboration agreement to be formalized with Indorama Ventures and more generally on the risks presented in section 3 of this Universal Registration Document.
[2] Polylactic Acid.
[3] Source: HIS Markit in 2021.
[4] Initially planned for 2023.

1.1.2 KEY DATES IN THE GROUP'S DEVELOPMENT

2011
Creation of Carbios

2012
Launch of the R&D project THANAPLAST™

2013
IPO on Euronext Growth Paris

2016
Creation of Carbiolice

2019
Packaging Consortium founded with L'Oréal and joined by Nestlé Waters, PepsiCo and Suntory Beverage & Food Europe

2020
Publication in the scientific revue Nature

Creation of the PoPLaB with INSA Toulouse

2021
First food-grade PET bottles produced from biorecycled plastic

Commissioning of the industrial demonstration plant

2022
Fiber-to-Fiber Consortium with On, Patagonia, PVH, Puma et Salomon

Project to build the first PET biorecyling plant with Indorama Ventures

Strategic alliance with Novozymes

2023
Signature of a Memorandum of Understanding with Indorama Ventures

Obtaining of the building permit and the authorization to operate the Longlaville plant

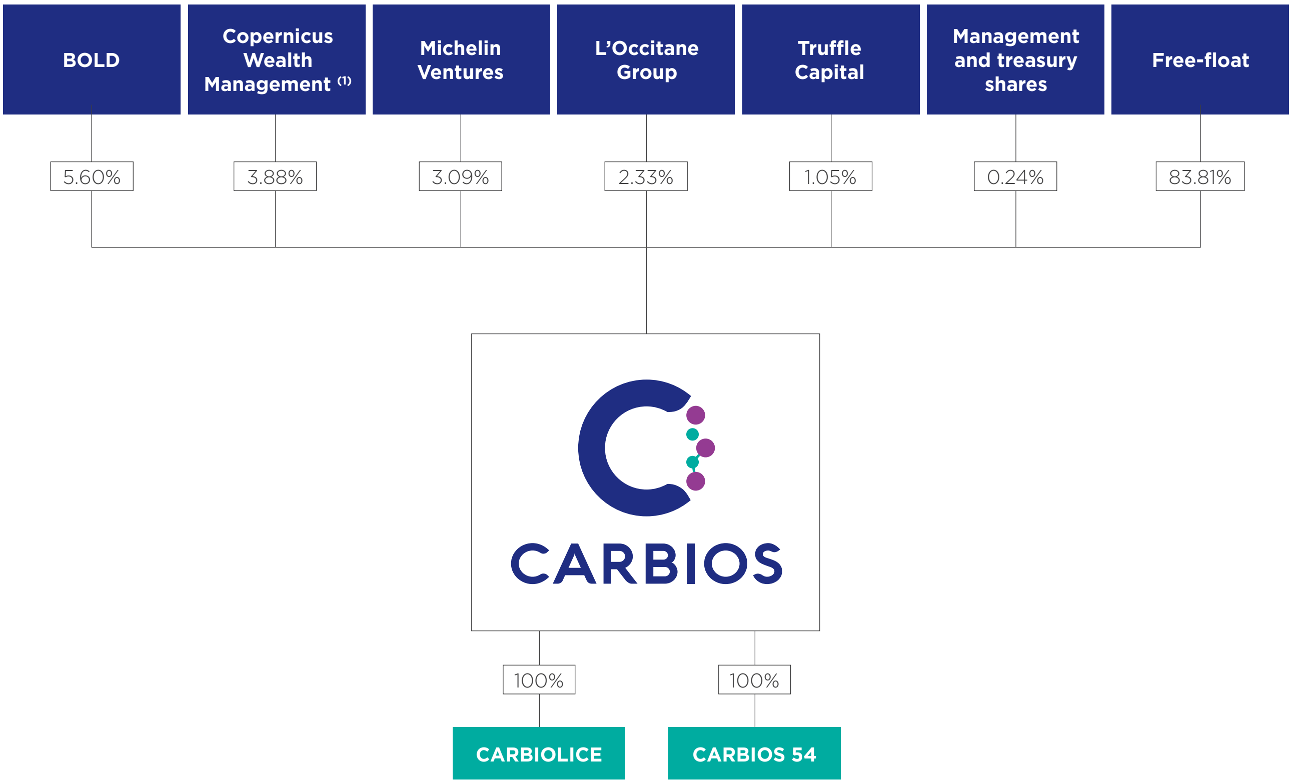
Inauguration of a textile preparation line

1.1.3 A COMMITTED SHAREHOLDER BASE

Carbios' shareholding is based on committed investors:

- the BOLD fund (Business Opportunities for L'Oréal Development): a private equity fund created by L'Oréal to support the development of innovative start-ups;
- the Michelin Ventures fund, created by Michelin in order to materialize Michelin's open innovation approach and to invest in high-tech materials that include a sustainable development dimension;
- the L'Occitane Group, a major player in the natural cosmetics market and a shareholder of the Company since May 2021;
- Copernicus Wealth Management, an asset management company which invests on behalf of individual third parties in innovative sectors with high growth potential and a positive social or environmental impact; and
- Truffle Capital, a venture capital fund with a total of more than €500 million in assets spread over several investment vehicles (December 2022).

The following organizational chart is based on the share capital held by each shareholder (excluding potential share capital) at the date of this Universal Registration Document:



(1) Shares held by funds and/or individuals with Copernicus Wealth Management SA as their management company.
Carbios 54: a wholly-owned subsidiary of Carbios for its industrial operations in Longlaville

The above percentages refer to share capital, not voting rights. The percentage of voting rights is not identical to the percentage of share capital. For more information on the Company's main shareholders and their percentage of voting rights, please refer to section 6.1 of this Universal Registration Document.

Carbios share data sheet

Market: Euronext Growth Paris

Mnemonic code: ALCRB

ISIN code: FR0011648716

LEI: 969500M2RCIWO4NO5F08

First day of trading: December 19, 2013

ICB Classification: Chemicals/Specialty chemicals

Indices: Euronext Growth All-share, Euronext Growth Bpifrance Innovation, Euronext Tech Croissance, Euronext Tech Leaders, CAC PME and Enternext PEA-PME 150

Number of shares at April 11, 2024: 16,845,630

Fiscal year-end date: December 31

1.1.4 ORGANIZATION AND EMPLOYEES

The Company is organized around an industrial development division (Pilot plant, Industrial demonstration plant and Plant project), an R&D, innovation and Intellectual Property division, a division dedicated to biodegradation activities and support functions (Business Development, Finance, HR, Purchasing, Logistics, Legal, QHSE, CSR, Communication, Public Affairs, etc.). All these activities are the responsibility of the members of the Executive Committee.

Functional organizational chart of Carbios on the date of this universal registration document

Executive Committee

- Chief Executive Officer
- Industrial Development Director
- SVP Corporate Affairs, Sustainability and Communication
- Chief Strategy and Financial Officer
- Chief Scientific Officer
- HR and Legal Director
- SVP Business Development, Feedstock Recycling
- Chief Biorecycling Business Officer
- Public Funding and Regulation Director
- Intellectual Property Director

R&D, industrialization and support functions

- Administrative department
- Human Resources division
- Innovation division
- CSR division
- Plastic processing division
- Finance division
- Regulatory Affairs division
- Research and Development division
- QHSE division
- Purchasing and Logistics division
- PLA Biodegradation division
- Business Development division
- Legal division
- Communication division
- IT division
- Intellectual Property division

In 2023, the Company continued to strengthen its Executive Committee with the appointment of Delphine DENOIZE as Public Funding and Regulation Director.

On October 23, 2023[1], the Company's Executive Committee was joined by Bénédicte GARBIL as SVP Corporate Affairs, Sustainability and Communication, then by Sophie BALMARY as HR and Legal Director on December 6, 2023.[2]

As of the date of this Universal Registration Document, the Carbios Executive Committee has ten members.

With the acceleration of its developments, the Company also bolstered its teams in fiscal year 2023 in order to gain additional expertise in key areas such as industrial engineering and industrial and commercial development. At December 31, 2023, the Carbios Group employed 134 people.

In addition to these staff, nearly 20 researchers are also mobilized at its academic partners, particularly within the enzymatic engineering research center ***PoPLab***[3] in Toulouse.

The ability to recruit and retain highly qualified scientific, technical and management personnel is a key success factor for the Company. As part of its budgeted growth, the Carbios Group expects to hire additional employees, which will bring its headcount to approximately 170 full-time equivalents (FTE) at the end of the 2024 fiscal year.

With a view to developing its attractiveness and retaining its employees, Carbios favors permanent hires and implements an incentive-based compensation policy that is attractive to its business sector. The hiring planned for 2024 mainly concerns new jobs created in the regions to support the project to build the Longlaville plant and strengthen the support functions in anticipation of future licensing.

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[1] Please refer to the press release of October 23, 2023.
[2] Please refer to the press release of December 6, 2023.
[3] Plastic Polymers and Biotechnologies.

In 2023, Carbios took a new step in its commitment to Quality of Life at Work (QLW) by setting up an annual internal barometer to value the voices of its employees, measure their satisfaction and respond effectively to their needs in terms of well-being at work. The results of the 2023 questionnaire enabled Carbios to be certified "Great Place to Work", and also to roll out a 12-month action plan to better meet the expectations of its employees.

In addition, with a score of 94/100 on the Professional Equality Index and balanced representation of women and men, CARBIOS has taken an important step towards gender equality and thus reaffirms its commitment to a more inclusive future where everyone can grow.

In order to retain its employees, in 2023, Carbios implemented a new system to share the increase in the Company's value via a global benefits plan incorporating new compensation components.

This new system includes:

- an incentive scheme for an initial period of two years aimed at rewarding the involvement of all Group employees in achieving defined CSR objectives, particularly in terms of safety, the environment and skills development;
- a profit-sharing agreement;
- a value-sharing bonus (PPV); and
- a target bonus combining individual and collective performance criteria.

This system was supplemented in early 2024 by the deployment of an employee shareholding plan for all Group employees who are members of the company savings plan. This employee shareholding plan was subscribed by 123 employees, i.e. 88.49 % of the salaried workforce concerned and thus enables employees to be involved in the Group's development and performance. It contributes to bringing the employee shareholding of Carbios, within the meaning of Article L. 225-102 of the French Commercial Code, to around 0.08 % of the share capital.

In order to provide individualized support to all its employees, the Company conducts annual assessments in the form of Individual Activity Interviews and proposes a continuous and tailor-made training offer, adapted to all moments in the life of each employee within the structure.

1.1.5 AN EXPERIENCED MANAGEMENT TEAM

The Carbios Executive Committee is a central body in the management of the Company's projects:

- it ensures and coordinates the development of activities;
- it manages operational matters and determines the actions to be taken;
- it coordinates the approach to cross-functional topics and projects;
- it ensures the development of academic, industrial and commercial partnerships; and
- it anticipates and prepares organizational and strategic changes for the Company.

Carbios executives ensure the implementation of its strategy and are responsible for the coordination and implementation of action plans within the Company.

Emmanuel LADENT
CHIEF EXECUTIVE OFFICER

30 years of international industrial experience in the mobility sector, specializing in the development of profitability and the transformation of activities through innovation

Michelin : President - B2C Global Automotive business line
President - B2B Global Agricultural & Off Highway Transportation Business Line

Graduate of Neoma Business School, Executive Programs: - Supply Chain Excellence at Stanford University; - Customer Centricity at IESE Business School; and - Finance and M&A at London Business School

Lionel ARRAS
DIRECTOR OF INDUSTRIAL DEVELOPMENT

More than 25 years of experience in process engineering and the chemical industry

Engineer graduated from ENSIC Nancy and holds an MBA from the Lyons School of Management

Sophie BALMARY
HR AND LEGAL DIRECTOR

More than 25 years of experience, including 6 years at Michelin and more than 20 years within Renault Group

Michelin : Director of Labor Relations
Renault: Head of Labor Relations France, Head of Renault Headquarters, Senior International Legal Officer

Lawyer graduated from the University of Grenoble in Business Law

Mathieu BERTHOUD
SVP BUSINESS DEVELOPMENT, FEEDSTOCK RECYCLING

More than 30 years of experience, including 10 years at Rhodia (now Solvay) and more than 20 years at Suez

Suez : Chief Executive Officer of subsidiaries, Chief Operating Officer North Europe, Chief Technology Officer of the Waste business at **Suez**

Scientific university studies and holder of an MBA from HEC Paris

Pascal BRICOUT
DIRECTOR OF STRATEGY AND FINANCE

More than 30 years of experience in international finance and strategy, and in Mergers & Acquisitions

Michelin : Chief Financial Officer in Asia and execution of major strategic external growth transactions
PwC: Manager in the international Transactions Services teams in London and Paris

Graduate in Corporate Finance from Paris-Dauphine University
Executive Programs:
. Essec (Business Strategy)
. Amsterdam Institute of Finance by Insead/IMD Prof. (M&A: Valuation, Private Equity, Negotiation Dynamics)
. IESE Business School (Customer Centricity)

Delphine DENOIZE
PUBLIC FUNDING AND REGULATION DIRECTOR

Innovation financing expert

Carbios : PET project manager
- Responsible for innovation and regulations
Céréales Vallées competitiveness cluster: Innovation financing

Agricultural Engineer

Stéphane FERREIRA
CHIEF BIORECYCLING BUSINESS OFFICER

More than 20 years of experience in specialty chemicals, in-depth knowledge of the materials and life sciences markets

Dupont and Arkema in strategic and operational functions in several countries including France, Germany and Korea. Former Vice-President of Transformation for Arkema's business coatings entity.

Holder of a Master's of Science in Life Sciences and Graduate of the "Institut Agro" de Montpellier

Bénédicte GARBIL
SVP CORPORATE AFFAIRS, SUSTAINABILITY AND COMMUNICATION

Expert in public policies and financing of innovative projects

Commissariat Général à l'Investissement: Deputy Director of Health and Biotechnologies
Direction Générale des Entreprises: Health Industries Bureau Manager

Graduate of Science-Po Lille, holder of a Master's degree in Health Law and Regulatory Affairs and a University degree in Pharmacoeconomics.

Lise LUCCHESI
DIRECTOR OF INTELLECTUAL PROPERTY

Intellectual property expert

Metabolic Explorer : Market Analyst & Head of the intelligence department

Biotechnology engineer, holds a CEIPI diploma (Center for International Intellectual Property Studies) in "inventive patents" and a specialized master's degree in Management of Biotechnology Companies.

Alain MARTY
CHIEF SCIENTIFIC OFFICER

International expert in enzymology and biological processes

INSA National Institute of Applied Sciences: Professor and Head of an Expert research group on behalf of the **AERES** French Agency for Research and Higher Education Assessment and ANR French National Research Agency

PhD in Biology, Biochemical Engineer, University of Toulouse.

STRENGTHENED CSR GOVERNANCE

Convinced that the successful deployment of a CSR strategy depends on solid governance, Carbios has integrated CSR into the Company's governance bodies. Thus, the members of the Executive Committee and the Board of Directors are made aware of socio-environmental issues through regular training (eco-design, ISO regulations and certification, etc.) or through their respective professional experiences (energy transition, business ethics, creation of impact funds, reduction of CO2 emissions in industrial activities, etc.). In 2023, Carbios set up a CSR commission that meets several times a year. Chaired by an independent director, its general mission is to assist and make recommendations to the Board of Directors on the Company's CSR commitments, action programs and roadmap.

The effective implementation of Carbios' CSR strategy also relies on the full mobilization of all internal departments. Thus, a CSR Committee was set up at the end of 2022. Led by the CSR manager, it is made up of nine "ambassador" employees covering a wide range of expertise: Research & Development, Engineering, QHSE (Quality, Health, Safety, Security), Human Resources, Investor Relations, Communication.

In June 2023[1], Carbios included its "Raison d'Être" or Purpose in its bylaws, as permitted by the PACTE law of 2019, following the vote of the shareholders' meeting of June 22, 2023, namely "to generate a significant positive social, societal and environmental impact in the exercise of its activities." This Purpose underpins Carbios' activity, which is a response to the environmental emergency of the fight against plastic pollution.

In December 2023[2], Carbios published its second Sustainability Report confirming its commitment and desire for transparency in terms of environmental, social and governance initiatives. Acting beyond the industrial development of its innovative technologies, the Company shares its progress and ambitions for the future through this report.

[1] Please refer to the press release of June 28, 2023.
[2] Please refer to the press release of December 20, 2023.

1.2 MARKET CONTEXT AND OPPORTUNITIES

Every year in the world:

- 86% of packaging waste is not recycled(1),
- More than 450 million metric tons(2) of plastics are produced each year, including 90 million metric tons of PET with an estimated value of more than $100 billion (+4% per year)(3),
- At the current rate, the amount of plastic waste produced worldwide is expected to nearly triple by 2060(4).
- 353 million metric tons of plastic waste are generated(5).
- 55 million tons are collected and only 33 million tons are recycled(6).
- 500 billion units(7) of plastic bottles are produced and less than 50% are collected for recycling.

(1) Source: Citigroup in 2018, Euromonitor in 2017. (2) (4) and (5) Source: OECD in 2022. (3) Source: IHS Markit in 2021.
(6) Source: OECD 2019. (7) Source: Citigroup in 2018.

In light of the environmental consequences of the difficulties of controlling the end-of-life of plastics through conventional processes, turning plastic and textile waste into resources is essential and is currently one of the major focuses of the circular economy.
To meet these objectives, industries must make profound changes and take up new challenges that create industrial opportunities.

1.2.1 AN ENVIRONMENTAL CHALLENGE: RETHINKING THE END-OF-LIFE OF PLASTICS AND TEXTILES

Plastic must be used more carefully. The fact remains that this material is essential in a large number of applications, combining unrivaled properties and low cost. Plastics, which today are still mainly of fossil origin, take around 400 to 500 years[1] to degrade under natural conditions. With the development of our industrial societies, the generation of plastic waste has continued to grow and has led to an accumulation of plastic in the environment, including in the most remote and pristine regions of the world. The OECD estimates that only 9% of the plastic waste generated each year worldwide is recycled and 19% is incinerated. The remainder, almost 72%, accumulates in landfills and in the environment where it contributes to polluting our soils, rivers and marine environments.[2]

Better management of the life cycle of plastics and textiles and limiting the use of fossil energies are not only major challenges of our time but also an unprecedented business opportunity to initiate this transition towards a circular economy model, thanks to innovation.

1.2.2 GROWING REGULATORY PRESSURE

Decision-makers around the world are looking for effective regulatory and economic instruments to address the environmental pressures generated by the production, consumption and end-of-life management of plastics. In many countries, the implementation of new regulatory provisions is stepping up to work in favor of better management of the life cycle of plastics and the development of the circular economy.

These changes make it possible to progress on three focuses representing the three principles of the circular economy and better known as the 3Rs:

1. reducing waste, by banning plastics that we do not need or by encouraging less consumption;

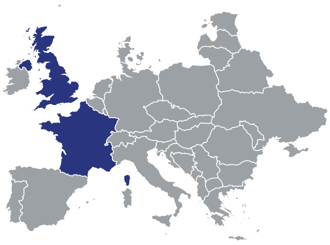
2. reuse; and

3. recycling, by promoting innovation to ensure that the plastics we need are designed and marketed in such a way that they can be reused.

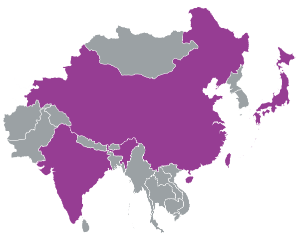
These measures, necessary to reduce the flow of plastic waste that ends up in the environment, require all players in the sector to adapt and create favorable conditions for the industrial and commercial deployment of Carbios technologies.

The main regulatory provisions relating to the business sectors of interest to Carbios are listed below.

[1] Source: World Wildlife Fund (Australia) in 2018.
[2] Source: OECD in 2022.



Ban on single use plastic	10 types of plastic bags representing 70% of marine waste
	All single-use plastic bags by 2040
Compostability	Mandatory for a specific packaging list
	Mandatory for certain items
EPR: Extended Producer Responsibility	Producers pay to cover end-of-life costs for packaging
	Producers pay to cover end-of-life costs for packaging
	Producers pay an EPR fee for the collection, sorting and recycling of packaging waste
EPR harmonization	Mandatory and harmonized EPR systems for textiles in all EU Member States from 2025
	Promotion of interoperability between England, Scotland, Northern Ireland and Wales
Reuse and refill system	Promote reuse and refill systems. Target: reduce waste production by 20%
	Promote recharging systems
EPR eco-modulation	Premium granted for eco-design and recycled content of packaging
	Discount for textiles made from recycled fibers
	Textile recyclability premium
Plastic tax	Tax on packaging containing less than 30% recycled plastic
	Tax on the virgin plastic content of non-reusable packaging
	Tax on the virgin plastic content of single-use (i.e. MACSI) and non-compostable packaging
Mandatory recycled content	Incorporation of recycled PET in packaging: 30% in 2030 and up to 60% in 2040
Recyclability	Require all packaging to be recyclable from 2030
	Require all packaging to be recyclable from 2025



Ban on single use plastic	19 single-use items
Compostability	Mandatory for certain items
Mandatory recycled content	Recycled plastic content in packaging increasing gradually over the years: 30% in 2025

EPR Harmonization	Harmonization of EPRs between provinces
Mandatory recycled content	**(CA, CT, ME, NJ, WA) :** Recycled content of bottles, gradually increasing over the years: up to 50% in 2030
	Recycled content of bottles, gradually increasing over the years: up to 50% in 2030
	Recycled plastic content in packaging gradually increasing over the years: 25% in 2025
	Recycled plastic content in packaging gradually increasing over the years: 15% in 2025.

"Circular Economy" legislative package

Since 2017, France has worked on a roadmap for the circular economy and established a list of 50 measures to achieve certain sustainable development goals from the United Nations' 2030 Agenda. To achieve the goals defined in this commitment, in 2018, France signed the Ellen MacArthur Foundation's "Global Commitment" and drafted and co-signed the National Plastic Packaging Pact, alongside agrifood companies, retail players and several NGOs.

In 2018, the European Commission formed the foundations of the Circular Economy Package, for which the Framework Directives are being drafted. Measures concerning plastics have been transcribed in the Single Use Plastics Directive. A framework directive is also expected for textile waste, the separate collection of which will be made mandatory in all member states from 2025.

No-waste circular economy law (AGEC Law)

Presented in July 2019, the Law on the fight against waste and on the circular economy was definitively adopted by the French Senate on January 30, 2020. It focuses on four main areas: reinforcing consumer information, fighting against waste in order to preserve natural resources, mobilizing manufacturers to transform production methods and improving waste collection.

This Law provides, among others, for:

- the target of moving towards 100% recycled plastic by January 1, 2025;
- the obligation to reuse, reemploy or recycle unsold products;
- the establishment of environmental information for clothing;
- the ban on plastic tea and tisane bags and sachets unless they are biodegradable;
- the ban on the "compostable" labeling on products that may only be composted under industrial conditions; and
- the target of ending single-use plastic packaging by 2040.

Packaging and Packaging Waste Regulation

In November 2022, the European Commission presented a proposal to revise EU legislation on packaging and packaging waste entitled the "Packaging and Packaging Waste Regulation"[1]. This regulatory provision, which is no longer a directive, will make it possible to harmonize the objectives between all Member States by requiring that all packaging now be recyclable. The objective is to prevent and reduce the impact of any type of packaging and packaging waste on the environment and on human health, but also to promote the transition to a circular economy. This regulation will be adopted in 2024.

Among other things, it provides for:

- An obligation that all packaging be recyclable;
- Targets for the share of recycled PET in packaging and bottles: 30% r-PET in 2023 and up to 65% in 2040;
- An obligation to have reusable packaging;
- A target to reduce the quantity of packaging;
- An additional ban on certain types of single-use packaging;
- Implementation of a return and collection system for packaging waste; and
- Extended producer responsibility requirements.

This regulation incorporates and reinforces the objectives already mentioned in other directives (e.g. (EU) Single-Use Plastics No. 2019/904) with the aim of achieving carbon neutrality by 2050.

Transfer of waste

The European regulation on the transfer of waste strengthens the rules for exporting waste from the EU to third countries. The export of waste to non-OECD countries will be prohibited as soon as the regulation comes into force, while exports of waste to OECD countries will be subject to stricter conditions. Within the EU, the exchange of information and data on waste shipments will now be digitalized, via a central electronic hub, to improve reporting and transparency. The transfer of waste for disposal in another EU country will only be authorized in exceptional circumstances.

[1] Source: https://environment.ec.europa.eu/publications/proposal-packaging-and-packaging-waste_en

Eco-design

Since 2009, the European Eco-Design Directive has set energy efficiency requirements covering different product groups (computers, refrigerators, water pumps, etc.).

On December 5, 2023, the EU Council and Parliament reached a provisional agreement on new eco-design requirements for sustainable products. This agreement proposes new requirements such as sustainability, reusability, scalability and repairability of products, or the presence of substances that hinder circularity, energy efficiency and efficient use of resources, recycled content, remanufacturing and recycling, carbon footprint and environmental footprint and information requirements, including a digital product passport.

Sustainable textiles strategy

The sustainable and circular textile strategy defines a vision for the transition of the textile industry. By 2030, the EU market will offer sustainable, recyclable, largely recycled and environmentally friendly textile products. Consumers will benefit from more sustainable and affordable textiles, moving away from fast fashion and benefiting from cost-effective and readily available reuse and repair services. Producers throughout the value chain will take responsibility for their products, even after they have become waste. The circular textile ecosystem will thrive through robust fiber-to-fiber recycling, minimizing the incineration and landfill of textiles.

The implementation of Extended Producer Responsibility (EPR) on textiles is essential to separate the production of textile waste from the growth of the sector. Some EU Member States are considering requiring an EPR for textiles in order to meet the EU waste legislation requirement for separate collection of textile waste from January 1, 2025. The Commission plans to propose harmonized EU EPR rules for textiles with flexible fees, as part of the revision of the Waste Framework Directive in 2023. The aim is to create a circular economy for the collection, sorting, reuse and recycling of textiles while encouraging the design of products that align with the principles of the circular economy.

Beyond the borders of Europe

Since January 1, 2018, China has banned the importation of certain plastic waste from third-party countries.[1] This ban, which has reduced global exports of plastic waste, is forcing waste-exporting countries to accelerate the implementation alternative solutions for the treatment of previously exported waste. In addition to these import restrictions, in its 13th five-year plan, China plans to initiate a transition towards a circular economy model for the collection and recycling of plastic waste. This approach is significant, given that the Chinese market represents 17% of the global consumption of PET.[2]

Since January 1, 2021, the Basel Convention on the control of transboundary movements of hazardous wastes and their disposal has incorporated unsorted plastic waste into its fold, which prohibits its export or import to or from a State not party to the Convention. The export of unsorted plastic waste must be authorized in writing by the importing State.

After Europe and China, the United States is committed to implementing measures to improve the collection and recycling of plastic waste. Currently, numerous US states aim to find a way to eliminate the waste that was previously partly exported to China. This situation is expected to continue, since the remaining countries that still accept plastic waste from abroad are in the process of closing their doors, including Vietnam[3] and Thailand[4]. In addition, US companies, non-profit organizations, government agencies and other stakeholders have made a commitment to work collectively within the U.S. Plastics Pact to promote the circular economy of plastics. Lastly, an American coalition that includes the plastics industry association, the American Council of Chemistry and waste recycling industrialists is putting pressure on the federal government so that $500 million in public funding is allocated to modernizing recycling infrastructures[5] over the next few years.

On March 2, 2022[6], the Heads of State, the Ministers of the Environment and other representatives of 175 countries approved, during the United Nations Environment Assembly (UNEA-5) held in Nairobi, an historic resolution aimed at ending plastic pollution and developing the first legally binding international treaty by end 2024.

[1] Source: China Daily - July 21, 2017 edition.
[2] Source: IHS Markit in 2021, Transparency Market Research in 2015 and Pira International in 2012.
[3] Source: https://resource-recycling.com/recycling/2019/04/02/officials-say-vietnam-to-end-plastic-imports-in-2025/.
[4] Source: https://thethaiger.com/hot-news/plastics/thailand-to-ban-import-of-plastic-waste.
[5] Source: https://www.plasticsnews.com/article/20190307/NEWS/190305416/industry-coalition-eyes-500m-federal-push-for-domestic-recycling.
[6] Source: https://news.un.org/fr/story/2022/03/1115462.

1.2.3 STRONG INITIATIVES AND COMMITTED MANUFACTURERS

In addition to public action policies to combat plastic pollution, pressure from consumers and NGOs are encouraging industrial players to commit to a transition towards more sustainable solutions. They represent powerful backing for innovation in the fields of recycling and biodegradation, the core of the bioprocesses developed by Carbios.

As such, Carbios benefits from numerous supports, notably through its Packaging Consortium[1] with L'Oréal (co-founder of the Consortium), Nestlé Waters, PepsiCo and Suntory Beverage & Food Europe (Orangina-Schweppes in France) and more recently through a Fiber-to-Fiber Consortium[2], with the brands On, Patagonia, PUMA, Salomon, and the PVH Group[3] (the parent company of Tommy Hilfiger and Calvin Klein).

The Fashion Pact

A similar initiative, dedicated to the textile industry, was launched in France on August 26, 2019 at the G7 organized by France in Biarritz. After being launched with 32 signatories, this Fashion Pact today brings together more than 75 companies from 17 countries, representing nearly a third of the global fashion industry. This large-scale cooperation should make it possible to limit the sector's impact on the climate, biodiversity and the oceans via targets set for 2030 and 2050.

One Ocean Summit

The summit for the protection of the oceans, held in Brest in February 2022 as part of the French Presidency of the Council of the European Union, led more than thirty States and economic players to commit themselves against plastic pollution of the oceans. The announcement by the shipowner CMA CGM that it would no longer transport plastic waste on any of its vessels from June 1, 2022 marks a positive step forward to accelerate the structuring of a new European collection and recycling channel for plastic packaging waste. More than 1.5 million metric tons of plastic waste were exported outside the EU in 2019[4].

Global Tourism Plastic Initiative

The Global Tourism Plastics Initiative brings together industry players to tackle the root causes of plastic pollution (more than 200 signatories). It enables companies, public authorities and other tourism players to lead by example by switching to a circular economy for plastics. The signatories of the Global Tourism Plastics Initiative have made the following tangible commitments for 2025:

- Eliminate problematic or unnecessary plastic packaging and items;
- Move away from single-use plastic products/items;
- Adopt 100% reusable, recyclable or compostable plastic packaging;
- Increase the recycled content of all plastic packaging and items used;
- Commit to cooperating and investing to increase plastic recycling and composting rates; and
- Report publicly, on an annual basis, on the progress made in achieving these objectives.

Industrial companies' commitments

Major manufacturers are going beyond the regulatory provisions by committing to incorporating 35 to 100% recycled materials in their packaging by 2025. In view of current recycling rates, achieving these objectives requires the development of new, more environmentally-friendly technologies that preserve the quality of recycled raw materials to enable them to be used in all original applications.

[1] Please refer to the press release of April 29, 2019
[2] Please refer to the press release of July 6, 2022.
[3] Please refer to the press release of February 18, 2023
[4] Source: https://www.eea.europa.eu/publications/the-plastic-waste-trade-in/the-plastic-waste-trade-in.

Packaging

L'ORÉAL

Nov. 2018:
"By 2025, 50% of plastic used in our packaging will be recycled or bio-sourced" and "by 2025, 100% of our plastic packaging will be refillable, reusable, recyclable or compostable".

Nestlé Waters

Jan. 2019:
"Nestlé Waters will increase the recycled PET content in its bottles to 35% by 2025".

PEPSICO

Oct. 2016:
"Design 100% of its packaging to be recyclable, compostable or biodegradable by 2025".

SUNTORY BEVERAGE & FOOD EUROPE

Sept. 2019:
"Our ambition? Offer 100% sustainable plastic bottles made from recycled or bio-sourced materials for our entire beverage portfolio".

Textile

Key target:
"Polyester is the material we use more than any other. To reduce the environmental footprint associated with our use of this performance fabric, we are working to phase out virgin polyester and polyamide and use only 100% recycled Polyester (rPES)".

PUMA

2021:
"As part of our 10FOR25 targets, PUMA has committed to scaling up the usage of recycled polyester to 75% by 2025. In 2021, we used 43% recycled polyester across all product categories".

PVH

Key target:
"Sustainably source 100% of PVH's cotton and viscose by 2025, and 100% of polyester by 2030".

patagonia

"For the Fall 2022 season, 91% of our polyester fabrics were made with recycled polyester. As a result of not using virgin polyester, we avoided more than 12.3 million pounds of CO2e being emitted into the atmosphere".

SALOMON

Feb. 2019:
"The concept for a fully recyclable running shoe is the first step in Salomon's commitment to have 100 percent of its new products designed to one or several of the company's circular economy principles by 2025".

1.2.4 THE CIRCULAR ECONOMY: A TRANSITION SUPPORTED BY CONSUMER DEMAND

The circular economy aims to preserve the intrinsic value and quality of products and materials at every stage of their use. In contrast to the linear model of "producing, consuming, and disposing," the circular economy creates the conditions for the development of a virtuous system where use replaces consumption, while limiting the wasting of raw materials and sources of energy.

The circular economy involves, therefore, a more efficient use of fossil resources, reduction of waste and lower energy consumption, and guidelines for the strategic development of a new, efficient and sustainable industrial ecology.

Only new technologies can enable manufacturers to meet their sustainable development objectives and thus initiate a real transition towards greater circularity.

Today, consumers are at the heart of this movement. Wishing to adopt more responsible consumption patterns to combat plastic waste pollution, they expect companies to take concrete measures in favor of a more sustainable and less intensive model.

Conscious of new consumer expectations and the issue of sustainability in purchasing decisions, manufacturers have made strong commitments to meet these expectations and make their production methods more respectful of environmental issues and societal expectations.

1.3 STRATEGY

1.3.1 AMBITION: BECOME A GLOBAL LEADER IN THE CIRCULAR ECONOMY OF PLASTICS AND TEXTILES

In light of the environmental consequences of growing global production and consumption of plastics, turning these materials into resources is essential and is currently one of the major focuses of the circular economy.

Carbios is revolutionizing the life cycle of plastics and textiles through innovative biological processes based on the use of enzymes, thus contributing to a systemic change and a positive recovery of materials.

By offering reliable, sustainable and innovative solutions, Carbios brings plastics and textiles into the circular economy and aims to become a major player in the worldwide plastic, recycling and biodegradation markets to meet the environmental challenges of our time and creating long-term value for its shareholders and society as a whole.

Carbios stands out for its ability to mobilize together the world of research, manufacturers, brands and committed organizations, to form an ecosystem of partners to serve a greener and more sustainable plastic and textile industry.

1.3.2 KNOW-HOW THAT IS UNIQUE IN THE WORLD

Enzymes are currently used in numerous applications (detergents, biofuels, food processing, textiles, paper), but using them for the biodegradation and recycling of polymers had never been considered.

The unprecedented alliance of enzymology and plastics processing is a world first developed by Carbios. This innovative approach is a real breakthrough, contributing to reducing the environmental impact of plastics and textiles and thus providing a response to the new regulatory challenges related to their production.

Carbios has developed two biological solutions to reinvent the life cycle of plastics and textiles

These technologies use the remarkable catalytic properties of enzymes that have the power to deconstruct the existing bonds between plastic molecules. This unique know-how, known as enzymatic depolymerization, is now available through the development of two major innovations dedicated to the recycling and biodegradation of plastics.

1. ENZYMATIC RECYCLING: Carbios is the first company in the world to develop an industrial-scale biological technology to recycle plastics and textiles.

Unlike the limited potential of conventional recycling processes, the Carbios approach gives value to types of plastic waste that were not previously exploited by allowing them to be recycled after use. For the first time in the history of the plastics industry, the closed-loop recycling of plastic waste into new plastic materials, without any meticulous prior sorting, has become possible by taking advantage of the natural selectivity of enzymes.

Supported by the excellent results of its industrial demonstration plant located at Parc Cataroux in Clermont-Ferrand, the 2023 fiscal year was marked by several major scientific and operational advances.

These developments took the form of:

- The announcement, on January 12, 2023[1], of an exclusive and long-term agreement with Novozymes guaranteeing the industrial production of the enzymes that will then be supplied by Novozymes to all future licensees of Carbios's technology.
- The announcement on February 3, 2023[2] of the successful closure of the CE-PET project[3] co-financed by the French State as part of the Programme d'Investissements d'Avenir ("Investments in the Future Program") (PIA No. 1882C0098), now part of France 2030, and operated by ADEME (French Environment and Management Agency), which demonstrated the applicability of the Carbios technology to the recycling of PET polyester fiber waste.
- The announcement, on April 3, 2023[4], of the completion of the licensing documentation for the global commercialization of Carbios' PET biorecycling technology. Thus, Carbios' future licensees will have access to all the process documentation required to reliably engineer, supply, construct and operate their own PET biorecycling plants, in compliance with HSE standards.
- The announcement, on June 1, 2023, of the signing of a Memorandum of Understanding with Indorama Ventures[5] to build the world's first PET biorecycling plant in France.
- The announcement, on October 26, 2023[6], of the obtention of the building permit and operating authorization for the first PET biorecycling plant in the world, thus enabling work to begin.

2. ENZYMATIC BIODEGRADATION: In this area, Carbios has designed a product called "CARBIOS Active" which contains an encapsulated enzyme. This product can be added to the heart of PLA (biosourced plastic) packaging during their manufacture to ensure their biodegradability, even at room temperature. These enzymated PLA packaging, integrated with bio-waste, degrade without leaving microplastics or toxic residues. This innovation is aimed at plastics and packaging applications which, by their nature, cannot be recycled. It is particularly suitable for fine plastics, which are too complex to recycle or are soiled by food (flexible films, trays, bags, capsules, wedging bubbles, etc.). This innovation enables these plastics to reach zero waste in complete safety.

[1] Please refer to the press release of January 12, 2023.
[2] Please refer to the press release of February 3, 2023.
[3] CE-PET: acronym given to the "Circular Economy PET" project
[4] Please refer to the press release of April 3, 2023.
[5] Please refer to the press release of June 1, 2023.
[6] Please refer to the press release of October 26, 2023.

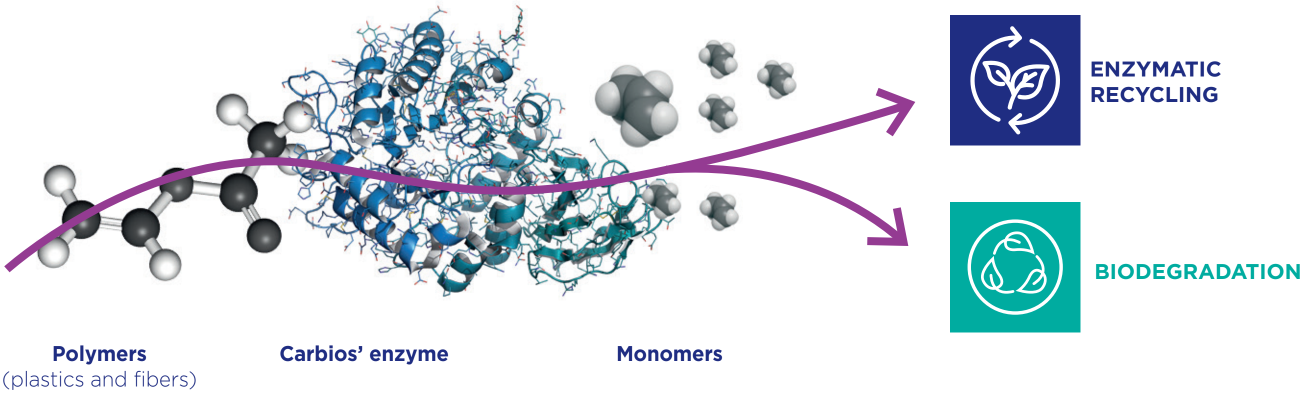
Focus on enzymes

In nature, microorganisms degrade more or less complex compounds present in their immediate environment and use them as a source of carbon for their growth. When the carbon sources present are comprised mainly of plastics, the only microorganisms able to survive in these complex environments are those that have developed the ability to degrade and assimilate the polymers that make up plastics.

To degrade these complex materials, micro-organisms produce biocatalysts called enzymes, which act like pairs of scissors to cut the links between the monomers of the material that they degrade.

In other words, an enzyme is a natural protein that accelerates the speed of chemical reactions. It is a catalyst consisting of a chain of amino acids in a specific and unique order.

When applied to industrial processes, enzymes make it possible to achieve complex chemical reactions in a highly selective manner. Using the potential of enzymes allows manufacturers to accelerate production processes, limit unwanted co-products and work under conditions that are less demanding and costly than chemical processes in terms of energy.



1.3.3 STRATEGIC APPROACH

1.3.3.1 An innovation strategy

Since its founding, Carbios has implemented a pragmatic innovation strategy that focuses on the creation of industrial value to provide manufacturers with "turnkey" biological processes for specific areas of application.

The collaborative model set up by Carbios enables the mobilization of significant scientific and technical resources to ensure the best chances of success in the development of its industrial bioprocesses while providing the Company with world exclusivity for the results obtained as part of this work.

The bioprocesses developed by Carbios are based on a unique combination of biotechnology and plastics manufacturing. These innovative technologies rely on many fields of expertise such as microbiology, enzymology, polymer chemistry, micro-fluids, plastics engineering and process engineering.

From its creation, the Company set up several collaborative Research and Development programs, bringing together the best public (INRAE, TWB, INSA Toulouse through the TBI laboratory, CNRS) and private sector experts dedicated to the discovery and optimization of enzymes.

Since 2020, Carbios has had a world-class research center dedicated to enzymatic engineering for the recycling and biosynthesis of plastics.[1] This laboratory, called ***PoPLaB*** in reference to Plastic Polymers and Biotechnologies, was created in partnership with INSA Toulouse through its TBI laboratory.[2] Its teams aim to optimize the catalytic properties and thermostability of the enzymes used in the processes developed by Carbios and to extend these technologies to other applications and polymers of interest to industry, notably polyamides and polyolefins.

Carbios is also involved in multiple academic collaborations around innovation projects, notably with the École polytechnique de Paris, the Laboratoire de Génie Chimique de Toulouse, the Synchrotron SOLEIL (Paris), the University of Delaware, the University of Portsmouth, the University of Manchester, the University of Greifswald, the University of Hamburg, ProteraBio, Aminoverse (IA) and the laboratory of the Paul Pascal Research Center in Bordeaux (Microfluidics).

Carbios carries out the industrial development of its bioprocesses at its facilities and in particular at its industrial demonstration plant.

At the date of this Universal Registration Document, the Company has a research laboratory, a plastics pilot plant, a technical center dedicated to the development of its biorecycling technology for PET plastics and fibers, an industrial demonstration unit, a textile preparation line, an industrial and commercial production line for its enzymatic PLA packaging biodegradation solution[3] and a cooperative research center based in Toulouse.

[1] Please refer to the press release of January 17, 2020.
[2] Toulouse Biotechnology Institute.
[3] Polylactic Acid.

1.3.3.2 An industrialization phase

Carbios is today fully committed to the industrialization of its technologies.

Building on the excellent results obtained in its industrial demonstration plant, the Company is now focusing its efforts on the construction of its industrial and commercial unit for the depolymerization of used PET into Terephthalic Acid (TA) and Ethylene Glycol (EG) by enzymatic hydrolysis.

The demonstration phase, initiated in 2021, ensured the successful development of the process and the production of recycled products (monomers from the depolymerization of materials) meeting the specifications of manufacturers. The optimizations carried out at the demonstration plant made it possible to validate all the parameters required for an industrial-scale operation of this technology.

After announcing in February 2022[1], a collaboration between Carbios and Indorama Ventures to launch a project in France to build the world's first PET biorecycling plant, a memorandum of understanding was signed in June 2023[2] between the two partners with a view to forming a Joint Venture to build and operate this industrial and commercial unit whose processing capacity is estimated at 50,000 metric tons per year and to potentially extend the implementation of this technology to other Indorama Ventures sites.

For more information on this project, please refer to section 1.4.5 of this Universal Registration Document.

1.3.3.3 A strong ecosystem of partners

The success of the Group's industrialization model is based, in particular, on its ability to forge strategic partnerships. Thanks to the robustness of its activities, Carbios has brought together an ecosystem of leading partners in the fields of research, business and industrialization, as well as consortiums with major brands in the packaging, cosmetics and textiles sectors.

[1] Please refer to the press release of February 23, 2022.
[2] Please refer to the press release of June 1, 2023.

Fiber-to-Fiber Consortium

Since July 2022[1], Carbios has extended its collaborations to the textile industry with the creation of a new Consortium bringing together On, Patagonia, PUMA, Salomon and joined in February 2023 by PVH Group[2], the parent company of the Tommy Hilfiger and Calvin Klein brands. This collaboration aims to develop solutions that increase the recyclability of their products and to accelerate the deployment of Carbios' biorecycling technology in the polyester fibers (PET) segment, which is a major challenge for the textile industry. Carbios and its partners also aim to conduct research on how products can be recycled, evaluate the development of collection solutions for used polyester items and test sorting and processing technologies. The shared ambition of the players in this Consortium is to establish true circularity in this industry by innovating to recycle "from fiber to fiber" and thus reduce the problem of textile waste in a collaborative approach.

The process developed by Carbios is a real breakthrough in the recycling of polyester fibers (PET) which, alone or combined with other fibers, are widely used in the clothing, footwear and sporting goods sectors. PET polyester is the main fiber in the textile industry, with 60 million metric tons produced[3], even exceeding cotton with 23 million[4]. Carbios' biorecycling process uses an enzyme capable of selectively extracting the polyester and regenerating it to recover a virgin fiber. This revolutionary process makes it possible to deconstruct the PET polyester present in all textile waste that cannot be recycled with current technologies.

CARBIOS patagonia PUMA SALOMON PVH

[1] Please refer to the press release of July 6, 2022.
[2] Please refer to the press release of February 18, 2022.
[3] Source: IHS Markit in 2021.
[4] 2019 market data.

Packaging Consortium

During the 2023 fiscal year, Carbios and its partners within the Packaging Consortium - L'Oréal, Nestlé Waters, PepsiCo and Suntory Beverage & Food Europe - continued their collaboration, in particular to work on the challenges of structuring the upstream supply chain for PET waste (validation of PCR flows[1]) and also on regulatory issues (food contact and calculation of recycled content, in particular with concerted actions to update SUP and PPWR regulatory texts). The members of the Consortium also studied the environmental impact of biorecycling compared to the production of virgin PET by updating the life cycle analysis of the production of recycled PET via Carbios' technology with data from the future Longlaville plant.

Food-grade bottles from Carbios' proprietary enzymatic recycling technology (Photo credits: Jérôme Pallé).

Strategic alliance with Novozymes

Building on a close collaboration initiated in 2019, Carbios and Novozymes, leader in biological solutions, announced an exclusive, long-term strategic partnership on January 12, 2023.[2] Under this agreement, Novozymes undertakes to produce and distribute the PET degradation enzymes of Carbios on an industrial scale for the Longlaville plant (France), as well as for future plants operated under license. This agreement grants both parties exclusivity in the field of the partnership.

From left to right: Hans Ole Klingenberg, Vice President, Marketing Agricultural & Industrial Biosolutions, Novozymes - Tina Sejersgård Fanø, Executive Vice President, Agricultural & Industrial Biosolutions, Novozymes - Emmanuel Ladent, Chief Executive Officer of Carbios - Alain Marty, Scientific Director of Carbios. (Photo Carbios)

De Smet Engineers & Contractors

Post-closing, Carbios announced on February 15, 2024[3], a collaboration with the company De Smet Engineers & Contractors, a global provider of engineering, procurement and construction services in the biotechnology and agro-industry sectors, to complete the construction of the first PET biorecycling plant in the world. Under this agreement, De Smet was entrusted with project management and detailed engineering, including procurement assistance and management of Carbios' partners, in order to ensure the execution of the construction of the Longlaville plant (France). With more than 70 members of De Smet's team of experts dedicated to the project and working alongside the Carbios teams, the collaboration aims to ensure the project's schedule and budget while respecting strict standards in terms of quality, safety, health and the environment. At the date of this Universal Registration Document, construction is underway and on schedule.

Ellen MacArthur Foundation

In March 2023[4], Carbios joined the Ellen MacArthur Foundation network, with which the Company shares the commitment to accelerate the transition to a circular economy, particularly in the fields of plastics and textiles. By joining the Ellen MacArthur Foundation network, Carbios is in contact with other leaders within the Foundation's circular economy network composed of companies, policy makers, researchers, innovators and opinion leaders from around the world.

Paris Good Fashion

Post-closing, Carbios announced, on March 26, 2024[5], its membership of Paris Good Fashion, the association that brings together more than 100 French players in the sector - brands, designers, experts - around their commitment to sustainable fashion. Carbios is the first recycling technology supplier to join the association, demonstrating the importance given by the sector to recycling to achieve textile circularity. Carbios will be particularly involved in the association as part of the project to create a working group dedicated to the development of a "fiber-to-fiber" sector, one of the key priorities of the next five years for the Paris Good Fashion project. While only 1% of textiles are currently recycled fiber-by-fiber, i.e. in a circular fashion, this working group will study ways to significantly increase the share of recycled fibers in the industry.

[1] Post-consumer recycled content.
[2] Please refer to the press release of January 12, 2023.
[3] Please refer to the press release of February 15, 2024.
[4] Please refer to the press release of March 6, 2023.
[5] Please refer to the press release of March 26, 2024.

1.3.3.4 An active intellectual property protection policy

Safeguarding its know-how and its technological advances is a major challenge for Carbios: the Company's commercial success depends in particular on its ability to obtain patents in order to ensure the protection of its resulting innovations, products and processes.

To guarantee the exploitation of the results of its Research and Development, Carbios has, since its creation, pursued an active policy of securing and strengthening its innovations. This takes place through the protection of its results, starting from the upstream phase and consolidated by improvements made during development. It may be supplemented by the acquisition of know-how and rights from third parties up to the final phase during industrialization.

Carbios has thus ensured that it can guarantee a strategic competitive advantage in sizable markets over its current and future industrial partners.

Carbios is the owner or co-owner, with each of its partners, of the results obtained under the ThanaplastTM, CE-PET, OPTI-ZYME and INTER-ZYME programs, as well as those under the PoPLaB cooperative laboratory set up with INSA Toulouse. For all these results, Carbios holds the exclusive worldwide exploitation rights for the Company's areas of activity. Moreover, Carbios is the sole owner of the results of the services provided to it under the service provision contracts concluded by the Company and holds the exclusive worldwide exploitation rights in the Company's fields of activity. Carbios will also own the results that it will generate as part of the LIFE project and will benefit from exploitation rights in its field of the results generated by its partners. Carbios will also own the results it will generate as part of the WhiteCycle project, a consortium initiated in July 2022 by Michelin, whose main objective is to develop a circular solution to transform complex[1], textile-based plastic waste[2].

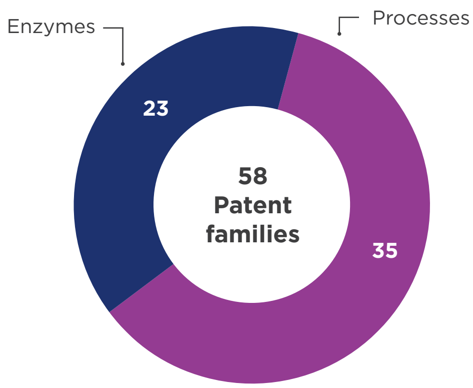
The Company dedicates a significant share of its resources to protecting its innovations. At December 31, 2023, gross investments made by Carbios in patents amounted to €3,443 thousand, of which €573 thousand in 2023.

Changes in the patent portfolio

Since January 1, 2023, 5 new patent families enhanced the Carbios Group's own portfolio. The new applications filed relate to its PET and PLA degrading enzymes, its enzymatic recycling process and to new compositions of PLA-based biodegradable plastics.

At March 31, 2024, the Group's Intellectual Property portfolio included 58 patent families (including one under an exclusive worldwide license with the CNRS and University of Poitiers), representing 398 titles filed across the world's key regions, and covering the Company's various areas of development (biodiversity, enzymatic recycling process, biodegradable plastic production process and bioproduction). Of these 58 families, 12 patent families belong to the subsidiary Carbiolice and are directly related to the Company's activity, namely the production of biodegradable plastics, and more particularly those incorporating enzymes.

In 2023, 40 new patents were granted in all the Group's fields of activity in various countries or regions of the world (including the United States, Canada, Brazil, China, India, South Korea, Indonesia, Japan and Europe, Mexico and Australia), bringing the number of patents granted to 119 out of the 398 titles in the Group's portfolio. Of the 58 patent families in the portfolio, 33 families have at least one patent granted out of the titles filed in different countries or regions of the world.



Trademarks

The Company has registered the following trademarks:
- two French **Carbios** word trademarks registered with the INPI (Institut National de la Propriété Industrielle – French National Institute of Industrial Property) for asset classes 1, 5, 42, 42 on March 28, 2012 and for asset classes 1, 5, 16 and 17 on May 4, 2011, under numbers 3908795 and 3828679 respectively;
- an international **Carbios** word trademark under number 1149637 registered on September 13, 2012 with the World Intellectual Property Organization (WIPO) in classes 1, 5 and 42, designating the European Union, Algeria and Morocco, and in classes 1 and 42, designating China;
- a French word trademark, **C-ZYME** registered under asset classes 1 and 40 on September 29, 2020 with the French INPI under number 204686549;
- an international word trademark, **C-ZYME**, under number 1597043 registered on March 11, 2021 in classes 1 and 40 with WIPO, designating the European Union, Mexico, the United States, the United Kingdom, Indonesia, Japan, South Korea, Thailand and the United States;
- a Taiwanese word trademark, **C-ZYME**, filed on March 23, 2021 under number 110019461 in classes 1 and 40;
- a French figurative trademark filed with the INPI on April 6, 2021 in classes 1, 16, 17 and 40 under number 4751992;
- an international figurative trademark under number 1636545 registered on October 5, 2021 in classes 1, 16, 17 and 40 at WIPO designating the European Union, the United Kingdom, the United States, Indonesia, Japan, South Korea, Mexico and class 40 in China;
- a Taiwanese figurative trademark filed on October 6, 2021 in classes 1, 16, 17 and 40 under number 110072188;
- a French figurative trademark "Carbios enzymes powering the circular economy" filed with the INPI on April 6, 2021 in classes 1, 16, 17 and 40 under number 214751995;

[1] Complex waste: multi-material waste (rubber products, composites and multi-layer textiles).
[2] For more information on the CE-PET, OPTI-ZYME, INTERZYME and WhiteCycle projects, please refer to sections 1.4.2 and 1.4.5.1 of this Universal Registration Document.

- an international word trademark, **Carbios** on September 21, 2022, in classes 1, 16, 17, 20, 21, 22, 40, 42 and 45 under the number 1707682 applicable in Algeria, Australia, Brazil, Canada, Chile, Colombia, South Korea, Egypt, the United States, the United Arab Emirates, Indonesia, India, Israel, Japan, Malaysia, Morocco, Mexico, Monaco, New Zealand, the United Kingdom, Switzerland, European Union and Vietnam. In 2023, the Company made subsequent designations for the following countries: Singapore, Norway, Russia, Pakistan, Belarus, Iran, Oman, Brunei, Turkey, Thailand, Tunisia, China; and
- national word trademarks Carbios, in classes 1, 16, 17, 40, 42 and 45, in South Africa and Taiwan and in classes 1, 16, 17, 21, 22, 40, 42 and 45 in Hong Kong. In 2023, the Company continued to extend the Carbios word trademark by registering it in classes 1, 16, 17, 22, 40, 42 and 45 in Kuwait, Qatar, Argentina, Nigeria and Bangladesh.

In 2023, the Company filed two French figurative trademarks in classes 1, 16, 17, 22, 40, 42 and 45, respectively on March 22, 2023 and March 24, 2023 with the INPI under the numbers 4947772 and 4948395. The Company has also filed a French word trademark application **Carbios Active** in classes 1, 8, 16, 17, 20, 21 and 22 on December 6, 2023 under number 5011904.

In early 2024, the Company registered a word trademark 嘉碧世 (Jia Bi Shi) in China for each of classes 1 (under number 76874043), 16 (under number 76879920), 17 (under number 76879216), 22 (under number 76879930), 40 (under number 76877237) , 42 (under number 76871660) and 45 (under number 76869626) and continued to extend the Carbios word trademark by filing it in classes 1, 16, 17, 22, 40, 42 and 45 in Saudi Arabia.

The term of protection of a French trademark is ten years from its filing. Outside France, this period is also generally ten years, subject to exceptions in certain countries. This protection may be renewed for equivalent periods and indefinitely in France and abroad.

Carbiolice is the owner of the following trademarks:

- a word trademark **Biolice** no. 008338832 filed in the European Union on June 3, 2009 and renewed on June 3, 2019, in classes 1,16 and 17; and cloned in the United Kingdom;
- a French word trademark, **Carbiolice**, filed on November 22, 2018 with the INPI under number 18/4502311 in classes 1, 16 and 17;
- an international word trademark, **Carbiolice**, filed on May 16, 2019 in classes 1, 16 and 17 and applicable in the European Union, the United Kingdom, the United States, China, Mexico, Japan and India, with WIPO under number 1485245;
- a French figurative trademark, filed on November 22, 2018 with INPI under number 18/4502225 in classes 1, 16 and 17;
- an international figurative trademark filed on May 17, 2019 in classes 1, 16 and 17 and applicable in the European Union, the United Kingdom, the United States, China, Mexico, Japan and India, with WIPO under number 1498422; and
- a French word trademark, **Enzymeo** filed on November 22, 2018 with the INPI under number 18/4502351 in classes 1, 16 and 17.

1.3.4 A VALUE-CREATING BUSINESS MODEL

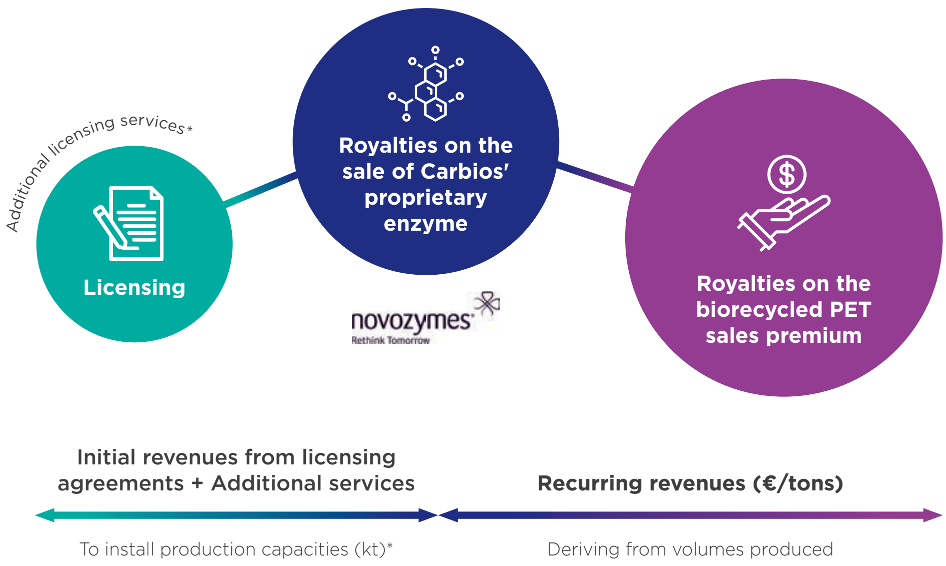
Carbios' business model, based on the licensing of its unique PET bio recycling technology, is based on a rational approach to capital expenditure and on three sources of revenue (upfront payments and recurring revenue, the details of which are provided below). This business model will be applied to all plants, including the first, at Longlaville, France:

(i) granting of licenses for the use of its know-how and intellectual property: these will generate revenue in the form of upfront payments paid by the licensee on the basis of the installed capacity for an amount of around €200 per metric ton;

(ii) royalties from the sale by Novozymes of Carbios proprietary enzymes directly to manufacturers using Carbios technology. This revenue stream will result from a portion of the margin realized by Novozymes (under an exclusive and long-term partnership) on the sale of fully patented Carbios enzymes to the licensee. This revenue stream will be proportional to the volume of enzymes sold; and

(iii) royalties from the premium generated by manufacturers on the sale of biorecycled PET.

Subsection (ii) and (iii) royalty flows are estimated at around €250 or more per metric ton of recycled PET produced.



** Technical assistance services to licensees such as training and supervision during detailed engineering, construction, commissioning, start-up and performance testing of the industrial plants.*

In the fast-growing recycled PET market, Carbios aims to capture a share of 4 to 8% by 2030 and an 8 to 12% share by 2035.

Due to its constant efforts to broaden its areas of innovation and extend its proprietary technologies to other polymers, in particular polyamides and polyolefins, the R&D costs and the related costs of industrial projects are expected to increase by 15 to 20% every year until 2035. At the same time, general and administrative expenses are expected to increase by 8 to 10%, mainly to support the commercial and licensing efforts led by the Company.

With regard to the granting of licenses, the repayment of the capital expenditure for a plant of 100,000 metric tons should be made in less than seven years and offer an internal rate of return of more than 20%.

With a technological offer unique in the world and the support of several global leaders in their respective fields, Carbios engages all industry players (collectors, producers, processors, users and consumers) in a sustainable transition to a true circular economy model.

Thus, the Carbios model is based on the development of breakthrough innovations and intense collaboration with all stakeholders. Today, it offers manufacturers sustainable and eco-friendly alternative solutions for mass consumption markets.

By placing the circular economy at the heart of its innovations and strategy, Carbios strives to create sustainable financial, environmental, social and economic value.

Strategic update

In June 2023[1], Carbios organized a Strategic update to present the Group's developments and prospects, as well as its business model and ambitions for 2030-2035.

This Strategic update, published on June 6, 2023, as part of a videoconference[2] and transcribed in a press[3] release made available on the Company's website, focused on the following topics:

1. Business model (see above)
2. Benefits of Carbios bio recycling technology
3. Licensing strategy
4. Advanced recycled PET market
5. Launch of the construction of the first industrial plant in 2023
6. Enzyme performance update
7. First marketing of the PLA biodegradation solution scheduled for 2024
8. Extension of innovations to other plastics (polyamides and polyolefins)

[1] Please refer to the press release of June 6, 2023.
[2] Videoconference available on replay via the following link: https://edge.media-server.com/mmc/p/u2qw4cir
[3] Please refer to the press release of June 6, 2023.

1.3.5 DEVELOPMENTS AND OUTLOOK

The Company is now fully committed to the industrialization of its PET biological recycling technology.

The full-year operation of its industrial demonstration plant confirmed the robustness of this technology, as well as its industrial and commercial prospects.

During the 2023 fiscal year, this demonstration plant made it possible to process approximately 40 metric tons of PET waste and to prepare the engineering documents to build and operate, on its own behalf, the world's first PET biorecycling plant. It also made it possible to initiate from 2024, the first licensing of this technology to manufacturers who will be able to build and operate their own units.

With regard to the core of the process, the depolymerization kinetics and the yields obtained on PET plastic waste, at the demonstration unit, confirm the technological choices and sizing of the equipment of the first plant. At this stage, the main work focuses on optimizing productivity, yields and the qualification of sources of raw materials that will supply the Longlaville plant. In this respect, in October 2023[1], Carbios inaugurated a textile preparation line within its demonstration plant. This patented line includes all the preparation stages (shredding and extraction of hard spots such as buttons or closures), and provides Carbios with an efficient and scalable development tool. The line will contribute to validating the textile biorecycling technology at the industrial demonstration plant scale (in 2024), and gives Carbios expertise with collection and sorting players to specify the quality of textiles and the necessary preparation stages to make them suitable for enzymatic recycling.

Construction of the world's first PET biorecycling plant

By 2025[2], the Company aims to complete the construction of a PET biorecycling plant, with an estimated processing capacity of 50,000 metric tons of PET waste per year. This plant, on which construction has started in Longlaville (54), on land adjacent to Indorama Ventures' PET production site in France, will also secure the marketing of the first volumes of recycled PET by organic means and consolidate the Company's business model, which consists of licensing the use of its technologies and know-how. This plant will also make it possible to train future licensees under large-scale operating conditions.

Engineering studies are continuing (adaptation to the specificities of the site, value engineering to optimize costs, etc.) and long-lead time equipment purchasing activities were initiated in 2023. The building permit and the operating authorization for the plant were obtained in October 2023[3] in accordance with the provisional schedule and the land was officially acquired by Carbios from Indorama Ventures on February 14, 2024. These positive advances made it possible to start preparing the ground (earthworks) in Q4 2023.

Stages of industrial and commercial deployment of the industrial demonstration plant

DÉMONSTRATEUR INDUSTRIEL	
2023	✔ Continued operations in the industrial demonstration plant ✔ Finalization of the Technical Information Summary, constituting the engineering documentation for the deployment of the technology in the form of international licenses; and ✔ Extension of operations to the recycling of PET polyester textile fibers.
2nd half-year 2024	• First license concessions[4].
LONGLAVILLE PLANT	
2022	✔ Filing of construction permit.
2023	✔ First orders of equipment with lengthy lead times. ✔ Finalization of process engineering documents; and ✔ Receipt of the building permit and operating authorizations allowing the start of construction of the Plant[5].
2024	• Recruitment of Carbios 54 operations team[6] and training at the Cataroux Demonstration facility.
2026	• First significant deliveries to customers.

For more information on the strategy implemented by the Company for the industrialization of its PET biorecycling technology, please refer to section 1.4.5 of this Universal Registration Document.

[1] Please refer to the press release of October 2, 2023.
[2] Provisional date depending in particular on the terms of the agreement to be formalized for this collaboration with Indorama Ventures and, more generally, on the risks presented in Chapter 3 of the 3 Universal Registration Document.
[3] Please refer to the press release of October 26, 2023.
[4] Estimated date depends, in particular, on the risks presented in section 3 of this Universal Registration Document.
[5] Please refer to the press release of October 26, 2023.
[6] A wholly-owned subsidiary of Carbios for its industrial operations in Longlaville.

1.4 ENZYMATIC RECYCLING OF PET: AN INNOVATION FOR THE CIRCULARITY OF PLASTICS AND TEXTILES

Global PET market: nearly 90 million metric tons produced each year(1)

A market for recycled PET supported by a powerful trio: governments, consumers and brands

Enzymatic recycling: the first technology for the infinite recycling of PET plastics and polyester fibers

Global partners: L'Oréal, Nestlé Waters, PepsiCo, Suntory Beverage & Food Europe, On, Patagonia, PUMA, PVH Group, Salomon, Michelin, L'Occitane, Novozymes, De Smet Engineers & Contractors, Technip Energies and Indorama Ventures

(1) Source: IHS Markit in 2021.

1.4.1 THE PET PLASTICS AND POLYESTER FIBERS MARKET

Since its creation, Carbios has chosen to focus on PET recycling, which is a promising market today that is both growing and accessible. The revolution that has begun within the plastics industry to promote recycling and to set up true innovative circular economy solutions supports the relevance of the strategy implemented by our Company.

SIZE OF TARGETED MARKETS

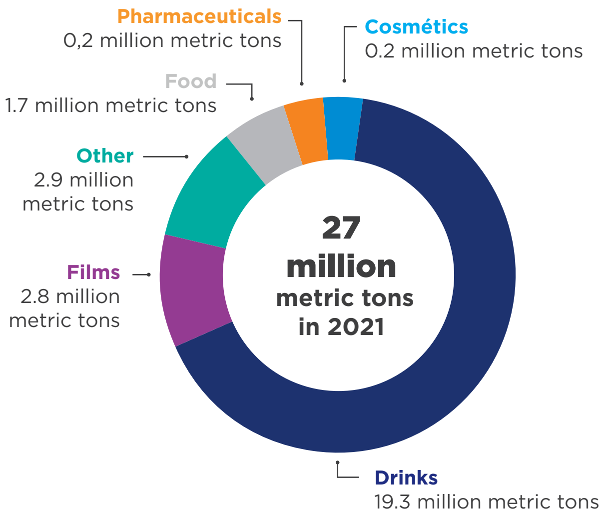
Description of virgin PET markets[1] (excluding recycled PET)	Production		Growth rate	Target markets (waste)	
	World	Europe		World	Europe
PET packaging (bottles, trays and other containers)	27 MT	3.2 MT	2.2%	27 MT	3 MT
PET textiles (clothing, technical fibers, rugs, carpets, etc.)	60 MT	0.2 MT	6.2%	60 MT	10 MT

PET recycling

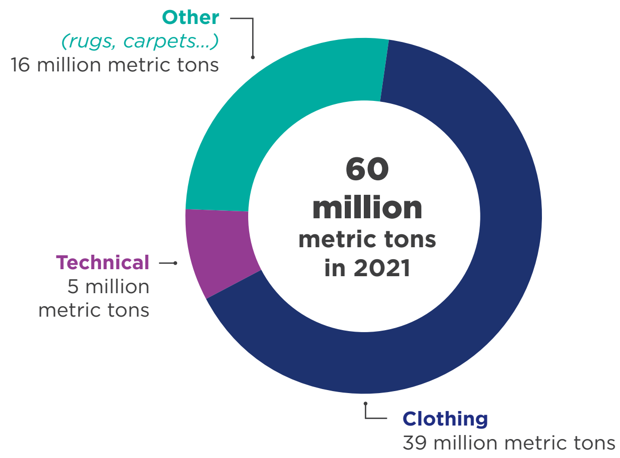
The market for resins and films made of PET (bottles, packaging, etc.) – a polyester of fossil origin widely used by manufacturers – represented global production of around 27 million metric tons in 2021 with an annual growth rate of 2.2%. This production could reach over 31 million metric tons in 2026.[2] The market for PET fibers (textiles, rugs, carpets, pillows, duvets, etc.) represented an estimated global production of 60 million metric tons in 2021 with an annual growth rate of 6.2%, which would take the market to 75 million metric tons in 2026[3].

[1] Source: IHS Markit in 2021.
[2] Source: HIS Markit in 2021.
[3] Source: HIS Markit in 2021.

BREAKDOWN BY APPLICATION OF VIRGIN VIRGIN RESIN PET CONSUMPTION



BREAKDOWN BY APPLICATION OF VIRGIN PET CONSUMPTION

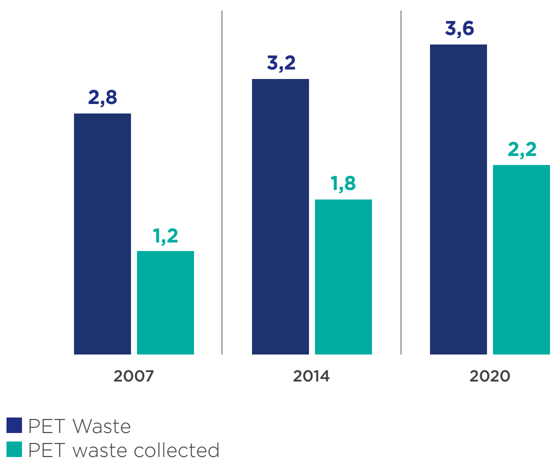


Almost all PET products marketed, whether resins or fibers, turn into waste. PET, which offers significant advantages (weight, cost, durability and flexibility) compared to alternative materials, is therefore a priority target for recycling. However, the recycling rates for waste vary widely and are greatly hindered by current techniques.

As a result of its activity, the Company believes that it can generate positive environmental outcomes, in particular by opening up recycling to a larger fraction of packaging, which would otherwise be sent to landfill and incineration. Studies conducted in 2023 made it possible to estimate that the technology developed by Carbios for the enzymatic recycling of PET would allow a potential savings of 57% of CO2 emissions compared to the production of virgin PET in Europe (Ecoinvent), taking into account the avoidance of a conventional end-of-life (landfill and incineration) for half of the waste entering the process.

In Europe, the demand for resin-grade PET used to manufacture bottles and trays was estimated at 5.1 million metric tons in 2020, including 3.0 million tons of virgin PET, 1.3 of r-PET and 0.8 of imports[1], and the share of collected waste that they generate corresponds to 2.2 million metric tons, just over 43%. Carbios' PET enzymatic recycling process would make it possible to treat 100% of resin-grade PET waste, representing an additional source of 1.4 million metric tons in Europe, which is currently incinerated or goes into landfills as it cannot be recycled.[2]

HISTORICAL QUANTITIES OF PET WASTE (BOTTLES) PRODUCED AND COLLECTED IN THE EUROPEAN UNION (IN MILLIONS OF METRIC TONS)[3]



Average annual growth rate of PET waste[4]: 2% between 2007 and 2022.

Average annual growth rate of PET waste collected: 4% between 2007 and 2020.

In Europe, the collection of PET waste is increasing at a rate twice that of PET consumption (and therefore the production of PET waste). However, it is necessary to intensify collection efforts to achieve the objectives set by the European Union (Packaging and Packaging Waste Regulation) and meet the growing demand for recycled PET (r-PET) from players in the plastics and textile industries.

[1] Source: Natural Mineral Waters Europe, Petcore Europe, Plastics Recyclers Europe and Unesda in 2022.
[2] Source: Carbios.
[3] Source: PlasticsEurope in 2015, PetCore Europe in 2015.
[4] Sources: PlasticsEurope in 2015 and Natural Mineral Waters Europe, Petcore Europe, Plastics Recyclers Europe and Unesda in 2022.

Price trends for virgin PET and recycled PET (r-PET)[1]

The price of virgin PET, which stood at around €1,150/t in January 2024, is strongly correlated with that of oil. However, the price of r-PET is currently uncorrelated with the oil price, due to strong demand from market players and a limited supply in terms of both quantity and quality. At around €1,400/t in early 2019, the price of r-PET steadily increased until September 2022 when it peaked at €2,570/t. Since this high of 2022, the price of r-PET has fallen and is now at around €1,260/t in January 2024, i.e. the average price recorded before the Covid-19 pandemic.

The r-PET market is strongly supported by a powerful trio combining government policies, consumer expectations and the commitments of brands that use PET, and in particular the beverage industry. However, these manufacturers are encountering increasing difficulties in obtaining r-PET: both quantitative and qualitative difficulties related to the low level of clear PET, the only one currently usable by thermomechanical recycling to obtain clear, food-grade r-PET, so much so that several groups have asked the European Commission to set up a regulatory framework guaranteeing them access to food-grade r-PET. This tension on the supply of r-PET, and thus the price, is expected to intensify over time in view of the new regulatory provisions and the commitments of market players.

Thanks to its biorecycling technology for plastics and textiles, Carbios allows the return to monomers with a quality equivalent to virgin petrochemical monomers. The industrial use of this technology should make it possible to considerably increase the share of bottles and other vials produced from PET waste, and thus reduce the share of secondary applications (such as fibers) which are the main destination of r-PET today.

The ability of Carbios' technology to process all PET waste (jars, trays, clear, colored, opaque bottles, PET polyester fibers, etc.) should significantly increase the PET recycling rate and promote the implementation of new flows perfectly adapted to enzymatic recycling. Carbios intends to offer that market a competitive process compared with the thermomechanical recycling process by enabling the reintroduction of the monomers stemming from the depolymerization of all PET waste into the PET production chain.

In accordance with its objectives, Carbios has made its technology applicable to the recycling of PET polyester fibers with, in particular:

- the production in November 2020[2] of the first transparent bottles made from PET polyester textile waste recycling; and
- the production in March 2022[3] of a white PET fiber that is 100% enzymatically recycled from colored textile waste.

On the strength of these results, Carbios continued its developments in the field of PET polyester fiber recycling with the inauguration, in October 2023, of an automated textile preparation line[4] integrating all the steps to transform textile waste into resources for enzymatic recycling.

These advances confirm the potential of Carbios' enzymatic recycling process, which makes it possible to produce a wide variety of products from any PET waste, including textiles, with a quality equivalent to those of petro-sourced origins.

The results obtained by the Company in the area of PET plastic and polyester fiber waste recycling are a real technological breakthrough, allowing the Company to envisage the rapid industrial and commercial deployment of this innovation in high value-added markets.

1.4.2 INNOVATION

The recycling process developed by the Company is a biological process which makes it possible to recycle PET plastics and polyester textiles by going back to the initial monomers, which can be reused in all applications of the original material.

This proprietary technology uses an enzyme capable of specifically depolymerizing the PET contained in the various plastics or textiles to be recycled. At the end of this stage, the monomers that result from the depolymerization are filtered, purified and repolymerized into PET of equivalent quality to virgin PET. For the first time in the industry's history, it has become possible to create a true circular economy system that enables the recycling and production of new 100% recycled and 100% recyclable PET products, without loss of quality.

MAIN STAGES OF THE CARBIOS ENZYMATIC PET RECYCLING PROCESS

Enzymatic depolymerization of PET plastic waste to form terephthalic acid (TA) and monoethylene glycol (MEG) in a hydrolysis reactor and the repolymerization of these monomers into food quality PET, 100% recycled and 100% recyclable (Credit: Carbios).

In the recycling process designed and developed by Carbios, as illustrated above, plastic waste or PET polyester fibers are pretreated (extrusion, size reduction, etc.) and then enzymatically depolymerized in an aqueous medium at low temperature (approx. 65°C). After the depolymerization phase, the two constituent monomers of the original polymer, PTA and MEG are recovered by downstream processes (filtration, decoloration, purification, AT crystallization, MEG distillation, etc.). These monomers can then be repolymerized to produce a food-grade PET, 100% recycled and 100% recyclable.

[1] Source ICIS between 2018 and 2021.
[2] Please refer to the press release of November 19, 2020.
[3] Please refer to the press release of March 10, 2022.
[4] Please refer to the press release of October 2, 2023.

Scientific progress in 2023 and after the close

CE-PET project

In February 2023[1], Carbios announced the successfully completion of the final key stage of the CE-PET research project, co-financed by the French State as part of the Investment for the Future Program, now part of France 2030, and operated by ADEME, the French Environment and Energy Management Agency. This project demonstrated the ability of Carbios to recycle complex waste enzymatically to produce new bottles and fibers and proved the robustness of its recycling process.

For the validation of the entire project, Carbios will have received a total amount of €4.1 million (€1.0 million in subsidies and €3.1 million in repayable advances) and its partner INRAE-TWB €3.4 million.

OPTI-ZYME project

In December 2023[2], Carbios announced that it had received an initial payment of €1.2 million from ADEME for the OPTI-ZYME research project, carried out in partnership with INRAE[3], INSA[4] and CNRS[5] via the mixed TWB service[6] and TBI research units[7], a project co-financed by the French State as part of France 2030 operated by ADEME. The project provides for total financing of €11.4 million, of which €8.2 million directly for Carbios (€3.2 million in subsidies and €5 million in repayable advances) and €3.2 million for its academic partners INRAE, INSA and CNRS (via the mixed TWB service and TBI research units).

This four-year project, led by Carbios, aims to investigate the scientific and technical levers to increase the competitiveness of the PET plastic and polyester fiber biorecycling process, optimize the necessary investments and reduce its environmental footprint.

The optimizations, the new developments planned and the exploration of innovative solutions should lead to reinforced flexibility in the technology with respect to incoming waste and allow optimal adaptation to various sources of raw materials for which there is currently little or no recovery, in particular food and textile trays, or mixtures of input materials. The project aims to optimize and continuously improve the enzymatic recycling technology developed by Carbios, as well as the exploration of new disruptive solutions to help maximize the economic profitability and competitiveness of the process. Thus, the project aims for an overall improvement in performance, combining efficiency, quality and environmental sustainability, for the benefit of the Longlaville plant, for which construction has started, and future licensed plants.

The OPTI-ZYME project was filed with ADEME on December 22, 2022 and its financing was obtained at the end of May 2023. It began on January 2, 2023 for a period of 48 months, i.e. until December 31, 2026.

INTER-ZYME project

In May 2023[8], Carbios announced that it had obtained €30 million in financing under the France 2030 Plan, in response to the national "Plastic recycling" call for projects operated by ADEME, as well as €12.5 million from the Grand-Est region, subject to the validation and ratification of grants by the European Commission. The implementation of this financing is subject to the approval by the European Commission of the corresponding State aid scheme and then to the conclusion of national aid agreements. Filed on July 3, 2022 with ADEME, the Carbios project entitled INTER-ZYME was selected to industrialize its unique PET biorecycling process. This project, which began in July 2022 for a period of 54 months, i.e. until December 2026, has as its objectives the engineering, construction and commissioning up to the achievement of full capacity of the Longlaville plant in the Grand Est region of France. This plant will offer the possibility of relaunching production in France of the two basic components of PET, PTA and MEG[9], both from the Carbios process.

SCIENTIFIC PUBLICATIONS

In March 2023[10], Carbios announced the publication in ***Chemical Reviews***, one of the 10 most influential scientific journals in the world, of an article entitled *"Enzymes' power for plastics degradation"*[11]. 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. Co-authored by biotechnology researchers from Carbios and TBI, as well as two eminent professors in polymer science from the University of Bordeaux, the article brings together expertise in the fields of enzymology, polymer science and industry in order to accelerate the transition to a circular economy for plastic. Beyond the comprehensive bibliographical study, the authors analyzed the data to discuss the scope, limitations, challenges and opportunities of enzymatic plastic recycling with a view to developing innovations and industrial processes. The article's unique standpoint and added value with regard to issues surrounding plastic pollution is its critical view on technology transfer and industrial scalability.

In October 2023[12], Carbios announced the publication in ***ACS Catalysis***, of an article entitled "Assessment of Four Engineered PET Degrading Enzymes Considering Large-Scale Industrial Applications". The article demonstrates that Carbios's LCCICCG enzyme (published in Nature in 2020) outperforms the three competitors considered to be the most promising in the scientific literature: two variants of the IsPETase enzyme produced by Ideonella sakaiensis described by the University of Manchester and by the University of Austin in Texas, and a variant of PES-H1 (also known as PHL7) described by the University of Greifswald. Through their international standardized method for comparing the performance of enzymes capable of degrading PET under industrial conditions, Carbios and Toulouse Biotechnology Institute validate the superior performance of Carbios' enzyme, and thus confirm its leading position in the subject. In addition, since 2020, Carbios has greatly improved the enzyme used in this article, which further increases Carbios' head start. This next-generation enzyme (whose results have not yet been published) will be used in the world's first PET biorecycling plant.

[1] Please refer to the press release of February 3, 2023.
[2] Please refer to the press release of December 20, 2023.
[3] France's National Research Institute for Agriculture, Food and Environment.
[4] Institut National des Sciences Appliquées (National Institute of Applied Sciences).
[5] Centre National de la Recherche Scientifique (National Center for Scientific Research).
[6] Toulouse White Biotechnology.
[7] Toulouse Biotechnology Institute.
[8] Please refer to the press release of May 31, 2023.
[9] PTA = purified terephthalic acid; MEG = monoethylene glycol.
[10] Please refer to the press release of March 22, 2023.
[11] Source: https://pubs.acs.org/doi/10.1021/acs.chemrev.2c00644
[12] Please refer to the press release of October 12, 2023.

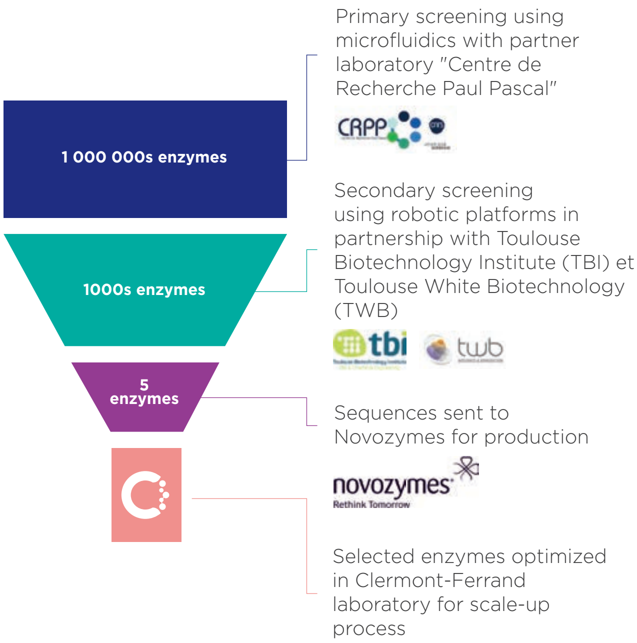
R&D DEVELOPMENT

In April 2023[1], Carbios announced that it had developed an **ultra-high throughput microfluidic screening** of enzymes that depolymerize PET, in partnership with the Paul Pascal Research Center (a joint research unit of CNRS and the University of Bordeaux, specializing in microfluidics). This cutting-edge technology makes it possible to screen millions of enzymes in one day compared to a few thousand per week with conventional technologies, thus accelerating the process of optimizing PET-degrading enzymes. This competitive advantage enables Carbios to reduce the time between the R&D phase and the production of its proprietary enzymes. The future polymers of interest will benefit from the power of this microfluidic technology, enabling Carbios to more quickly develop its portfolio of innovations on different types of plastics, in particular polyamides.

Microfluidics: the science of droplets

Microfluidics makes it possible to manufacture devices that handle very small quantities of liquid. Each droplet generated can be considered as an independent microreactor with a volume of the order of one picoliter (10^{-12} liter) and containing a particular enzyme whose PET depolymerization activity will be screened. These droplets travel in analysis units the size of an electronic chip, which allows ultra-high throughput screening of 150 enzymes per second. Previously, conventional robotic systems allowed screening in microplate format with a volume of around one milliliter (10–3 liter) and with rates of approximately one enzyme per minute.

Microfluidics accelerates enzymatic screening process



DISTINCTIONS

In May 2023[2], Carbios was selected from among the 22,000 start-ups of the French Tech ecosystem to represent French innovation in the **6th "Choose France" Summit**. This international business summit was dedicated to the attractiveness of France, an initiative of Emmanuel Macron, President of the French Republic. Only ten companies, including Carbios, exhibited their technologies at the Château de Versailles. On this occasion, Carbios also joined the **"Coq Vert" community launched by** Bpifrance in partnership with ADEME and the French Ministry for the Ecological Transition.

In November 2023[3], Carbios, along with L'Oréal, world leader in beauty and Carbios' partner since 2017, won the **"Pioneer Awards"** in the industry category, awarded by the Solar Impulse Foundation at the first World Alliance Summit. This prize was awarded to Carbios for its PET enzymatic recycling solution, labeled "Efficient Solution" by the Solar Impulse Foundation since 2019, and to L'Oréal for using this disruptive technology for the first time in a prototype cosmetics bottle.

1.4.3 SUMMARY OF THE STAGE OF DEVELOPMENT

Carbios	Enzymatic recycling of PET plastic waste and polyester fibers(1)	
Target polymer	PET (plastics)	PET (textiles)
Applications	Packaging (bottles, flasks, trays, films)	Clothing, linens and furnishings (duvets, pillows, etc.)
Development stage	Industrial demonstration/Industrial and commercial unit under construction	
Development partners	L'Oréal, Nestlé Waters, PepsiCo, Suntory Beverage & Food Europe, L'Occitane, On, Patagonia, PUMA, Salomon, PVH Group, Novozymes, De Smet Engineers & Contractors, Technip Energies and Indorama Ventures	

(1) PET (PolyEthylene Terephthalate): polymer used to manufacture polyester bottles, vials, trays and textiles.

[1] Please refer to the press release of April 18, 2023.
[2] Please refer to the press release of May 15, 2023.
[3] Please refer to the press release of November 14, 2023.

1.4.4 COMPETITIVE ADVANTAGES

Current recycling practices do not provide a satisfactory response to market needs, either in terms of volumes treated, or in terms of recovery.
Indeed, only a small portion of PET waste can be recycled by conventional technologies today. Thermomechanical recycling, which is currently the only industrial process, has limitations, as only clear plastic may be recycled in closed loops ("bottle-to-bottle"), with a loss of quality in each cycle, making it difficult to obtain new products from 100% recycled PET. Moreover, conventional recycling processes do not allow textile waste to be recycled in a closed loop, unlike the Carbios process, which makes it possible to truly return to the original materials for an identical use.
Thanks to Carbios' technology, it is now possible to:

- recycle all PET plastic waste and fibers without the need for meticulous sorting, including multi-layered, colored and/or opaque plastics and polyester fibers;
- produce recycled PET of equivalent quality to the original polymer that can be used for all applications, even the most demanding.

Positioning of Carbios' technology vis-à-vis conventional or competing recovery technologies

The PET recycling technology designed and developed by Carbios differs from other technologies by its selectivity and its high tolerance for the waste that it can recycle. Unlike conventional thermomechanical recycling, it makes it possible to process a much wider typology of PET waste while maintaining an optimal level of quality, making it possible to satisfy all original applications, including food contact.

Thermomechanical recycling

Thermomechanical recycling is a simple and relatively inexpensive secondary plastic production process. In this approach, plastic waste is simply collected, sorted, cleaned, chopped into shavings and remelted to produce r-PET granules. However, some impurities remain after the cleaning step, in particular additives used to obtain certain properties. These impurities and the deterioration of the mechanical properties of the mechanically recycled polymer, inherent in the grinding phase, result in lower performance of the recycled materials compared to their virgin equivalent. This process only allows a limited number of cycles, which results in fine in plastics that become waste that must be incinerated or landfilled. In the absence of a return to the original raw material, thermomechanical processes are simply not completely circular and do not make it possible, for example, to produce transparent r-PET from colored PET waste.

Gasification

Gasification of waste consists of heating it to temperatures between 900°C and 1,200°C in the presence of a small quantity of oxygen (which can be supplied by the air, air enriched in O_2, pure dioxygen [O_2], carbon dioxide [CO_2] or steam). Apart from the mineral fraction of the waste and a small amount of unconverted fixed carbon that make up the solid residue, all of the waste is converted into synthesis gas called syngas. This energy-intensive technology makes it possible to treat heterogeneous waste, but only a fraction of the gases resulting from the reaction can be converted into monomers and then into polymers. Despite the advantage of this technology being suitable for heterogeneous waste, gasification products that may contain various impurities (tars, halogens, particles, heavy metals and alkali compounds) are mainly intended for combustion, and therefore for the production of energy. It is therefore more energy recovery than recycling.

Pyrolysis

The pyrolysis of waste consists of heating it to temperatures generally between 350 and 650°C in the absence of oxygen. This results in the production of a fuel gas, a liquid (pyrolysis oil), and a by-product that contains the mineral fraction of the input waste, as well as the "fixed carbon," the carbon present in the waste that has not been transformed into gas or liquid. When mixed with virgin petroleum (mass balance), this pyrolysis oil can be transformed into virgin plastic. As with gasification, the use of high temperatures makes the pyrolysis unsuitable for oxygenates such as PET.

Chemical recycling (or organic solvolysis)

Chemical recycling, based on the use of organic solvents and/or organic catalyzers such as methanol or glycol (methanolysis or glycolysis processes), is today subject to numerous developments that should enable the industrial-scale exploitation of these technologies by 2025. Methanolysis makes it possible to obtain monomers called DMT (dimethyl terephthalate) and MEG (monoethylene glycol) from PET waste. Globally, less than 5% of PET production plants use DMT as a starting monomer, mainly for the production of specialty polyesters.

Glycolysis makes it possible to produce BHET, an intermediate product of the esterification of PET from its initial monomers (PTA or DMT and MEG). Few data are available on the acceptability of complex PET waste by the glycolysis process (color, presence of polyolefins, textile). On an industrial scale, although BHET can technically be introduced as a mixture on existing polymerization lines, many new skills and operational capabilities must be developed for its use: regulatory (product stewardship), quality control, supply chain, industrial processes.

Carbios biological recycling (enzymatic hydrolysis)

Carbios' biological technology makes it possible to obtain PTA and MEG from PET plastic or textile waste. These monomers, resulting from the enzymatic depolymerization of PET, are compatible with more than 95% of the industrial capacities installed by PET producers worldwide. Thus, the Carbios technology does not require the creation of additional plastic production capacity, but instead replaces the use of fossil resources by the use of PET waste. Furthermore, this process, unique in the world, also operates under mild conditions, with hydrolysis in an aqueous medium, at low temperature (approx. 65°C) and at atmospheric pressure. The proprietary enzyme used by Carbios is also highly selective and particularly tolerant of impurities. This approach makes it possible to preserve all the use properties of the polymer and therefore its use in all the original applications, including food, according to a true circular economy principle.

Panorama of technologies for the revalorisation and recycling of plastics

			ORGANIC SOLVOLYSIS		
	GASIFICATION	**PYROLYSIS**	**METHANOLYSIS**	**GLYCOLYSIS**	**ENZYMATIC HYDROLYSIS**
Description	• Decomposition at high temperature, in the presence of a gasification agent, to produce diesel, kerosene and naphta. • Conversion into monomers and polymers	• Decomposition at high temperature, in the absence of oxygen, to produce a pyrolysis oil • Conversion of the oil into monomers and polymers	• PET is treated with methanol to produce two monomers : DMT and MEG • The combination of both monomers enables the production of virgin-like r-PET	• PET is treated with glycol to produce an oligomer: BHET • BHET combined with PTA and MEG enables the production of virgin-like PET	• Water-based enzymatic depolymerization of PET to produce two monomers : PTA and MEG • The combination of both monomers enables the production of virgin-like r-PET
Pros	✓ Technology adapted to various flows of organic materials (products derived from wood, organic waste) and to rubber and plastic (e.g. tires)	✓ Possible to produce « virgin plastics » from pyrolysis oil ✓ Technology adapted to polyolefins ✓ Tolerance to waste (excl. PVC)	✓ Produces monomers registered for food contact applications ✓ Accepts blends of PET and other polymers	✓ Only one compound to isolate: BHET	✓ Accepts all kind of PET plastics and fibers ✓ Works at low temperature (around 65°Celsius) and atmospheric pressure ✓ Produces monomers registered for food contact applications ✓ More than 95% of the world's PET production capacities uses PTA + MEG
Development stage	Industrial	Industrial	Preindustrial	Industrial	Preindustrial
Cons	✗ Highly energy intensive ✗ A small fraction of these gases can be converted into polymers ✗ Emits significant amounts of GHG	✗ Energy intensive ✗ Transformation of pyrolysis oil requires mixing with virgin fuel (mass balance) ✗ Not suitable for organic compounds such as PET	✗ Does not accept certain organic compounds (elastane fibers, pigments...) ✗ Less than 5% of the world's PET production capacities uses DMT + MEG ✗ High industrial constraints for the use of DMT (SEVESO classification)	✗ Only works with high quality PET waste (clear or slightly colored) ✗ BHET is not an imput for PET production ✗ BHET is not registered in Europe to manufacture food-grade plastics	✗ Pretreatment of PET plastics and polyester fibers required to accelerate the hydrolysis ✗ Purification of PTA complex

HIGH ← **Energy intensity** → LOW

For information on Carbios' potential competitors in PET recycling, the reader is invited to consult section 3.2.1.3 "Risks associated with the emergence of competing technologies" in this Universal Registration Document.

1.4.5 INDUSTRIALIZATION STRATEGY

Within its facilities, Carbios carries out the development of its biorecycling technology through the operation of its industrial demonstration plant dedicated to the depolymerization of PET plastic waste into monomers. In accordance with the Company's industrialization strategy, the work carried out at the demonstration plant level made it possible to prepare the licensing documentation and the detailed engineering study for Carbios' first commercial plant in April 2023. These technical deliverables define the basic engineering and operational guidelines for the units that will be operated under license agreements.

PILOT UNIT

1. Transposition of R&D results from the laboratory to the Pilot scale
2. Process development and optimization of the various steps

1 M^3 reactor
Launched: July 2018

INDUSTRIAL DEMONSTRATION PLANT

1. Transposition of the Pilot process to the industrial demonstration scale
2. Tests on different waste streams and adaptation of the process to the specificities of the collection systems
3. Preparation of complete engineering documents for the process (Process Design Package) for the construction of future plants

20 M^3 reactor
Production: ~ 100 tons
Start of operation: September 2021

LONGLAVILLE INDUSTRIAL AND COMMERCIAL UNIT

1. Obtaining of the construction permits and environmental authorization (Nov. 2023)
2. Plant construction (2023 – 2025)

Processing capacity: 50,000 tons of PET waste per year.
Partners: Indorama Ventures, De Smet Engineers & Contractors
Planned mechanical completion in 2025

1.4.5.1 Industrial pilot phase of the technology

Within its pilot unit, the Company optimizes the first stages of pre-treatment of plastic and textile waste, depolymerization of PET and purification of monomers. Validation of the quality of the monomers obtained is then achieved by r-PET[1] re-polymerization tests, transformation into products (bottles and fibers), and tests to characterize the mechanical and food-contact properties of these finished products. This work has already made it possible to produce batches of transparent bottles from monomers resulting from the depolymerization of PET plastic waste as well as from PET polyester textile waste. It is also thanks to its pilot unit that Carbios and the partners of its PET Consortium produced the first prototypes of food-grade bottles entirely made from enzymatically recycled plastic.[2]

The work carried out on a pilot scale notably as part of the CE-PET project made it possible to meet three objectives:

1. ensure the development of the pilot-scale process for PET plastic waste;

2. adapt and optimize the process for the recycling of PET textile clothing, linens and upholstery waste (duvets and pillows with high PET content) up to the pilot scale; and

3. ensure the competitiveness of the process.

To this end, Carbios and its academic partner TWB have focused on the development of a new generation of enzymes whose activity, thermostability and absorption will be improved compared to the enzymes previously developed by Carbios. This work, carried out within the cooperative laboratory PopLaB in Toulouse, and which continues today in the context of new projects, contributes to obtaining the best possible yield and productivity during the depolymerization stage of PET plastic waste.

In February 2023[3], Carbios announced the validation of the final key stage of the CE-PET research project, which enabled it to demonstrate its ability to enzymatically recycle complex waste to produce new bottles and fibers and prove the robustness of its recycling process. This last key stage of the CE-PET project was fully approved by ADEME.

Main technical results of the CE-PET project:

- The development and optimization of a high-performance and competitive enzyme for the depolymerization of PET plastic and textile waste;
- The replicability of the process performance at the pilot scale and the definition of the various unit operations for the transposition of the process to the scale of an industrial demonstration plant;
- The characterization and specifications of sources of PET that can be used in the process;
- The production of r-PET bottles 100% from PET plastic and textile waste, and compliant with food-grade applications; and
- The production of a white r-PET fiber made from 100% plastic and textile waste, even colored ones.

Reactor for the depolymerization of plastic waste and PET textiles into monomers at the Carbios pilot unit.

[1] r-PET: recycled PET.
[2] Please refer to the press release of June 24, 2021.
[3] Please refer to the press release of February 3, 2023.

1.4.5.2 The industrial demonstration plant: from project to operation

Since July 2022, Carbios has had a fully operational industrial demonstration plant. This facility represents the final stage of development of the process and prefigures the design of future industrial units. The installation of this demonstration plant on the Cataroux site in Clermont-Ferrand in a closed building allows Carbios and Michelin to pool the utilities and services necessary for the operation of this facility while securing access.

It includes storage areas for raw materials and finished products (terephthalic acid and monoethylene glycol), the pre-treatment of PET waste, a hydrolysis reactor with a capacity of 20 m3 and equipment for the purification of monomers (terephthalic acid and monoethylene glycol) enabling the production of high-purity batches. In October 2023, this equipment was supplemented by a new automated textile preparation line. The facility is operated by a team of around 20 people (production, processes, maintenance/new works), with a now stable workforce.

During the 2023 fiscal year, Carbios continued to operate its industrial demonstration plant for the processing of PET food packaging waste (bottles, trays).

Modules were also added in 2022 and 2023 to integrate a mixture of more than 30% of textile into the process.

The operations carried out at the demonstrator make it possible to acquire the operating know-how, as well as the key data necessary for the optimization and extrapolation of the technologies of each step of the process. Performance tests are carried out on each unit operation of the process and included in the technology process book. Assumptions regarding the sizing of equipment, material balance and consumption of utilities (water, steam, etc.) are confirmed and included in the design documents for the Longlaville plant project. All of the results obtained support the structural assumptions of the industrial project (environmental impact, performance, technologies, sizing on a commercial scale, cost, schedule).

It is also the tool of choice for the validation of PET waste sources and batches of monomers, products of depolymerization. In 2023, the reliability of the facilities and the qualification of the technology was carried out using food trays prepared in France, as an extension of the PET feedstock processing of colored bottles carried out in 2022.

The results obtained at the industrial demonstration plant and the detailed engineering study for Carbios' first commercial plant define the basic engineering and operational guidelines for the units that will be operated under license agreements. From technology promotion with the Technical Information Summary (TIS[1]) to project development with a specific design and engineering documentation (Process Design Package – PDP[2]) and technology and operations manual (Process Book), future Carbios licensees will be handed all necessary process documentation to reliably engineer, procure, construct and operate their PET biorecycling plants under stringent HSE standards[3] and with high product quality.

In 2023, Carbios gave priority to volume tests:

- Performance tests were carried out on each unit operation of the process and included in the technology process book. Assumptions regarding the sizing of equipment, material balance and consumption of utilities (water, steam, etc.) are confirmed and included in the design documents for the plant project. All of the results obtained support the structural assumptions of the industrial project (environmental impact, performance, cost, schedule).
- Main PET feedstocks for the first commercial plant were successfully tested: colored bottles, food trays, secondary products from the PET waste pre-treatment industry (optical over-sorting).
- In 2023, Carbios continued its program to diversify the PET feedstocks processed at its demonstration plant with the addition of modules aimed at integrating textiles, alone or as a mixture, into the process.
- Carbios carried out a long production campaign of recycled monomers from a feedstock mix representative of that of the first commercial plant. These monomers, repolymerized in batches of r-PET, are being made available to promote the technology to partners and prospects (B2C with Consortia Brand Owners, B2B with licensing prospects: PET producers, chemical manufacturers and waste management companies, etc.).

At the end of 2023, after a preparatory R&D phase on textile feedstock, Carbios successfully completed its first manufacture of recycled monomers from textiles at the demonstration plant.

[1] TIS = Technical Information Summary.
[2] PDP = Process Design Package.
[3] Health, Safety and Environment.

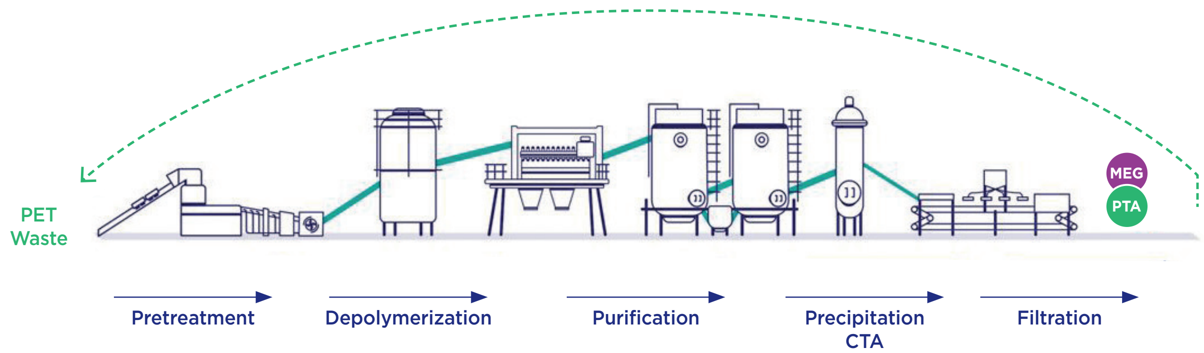
In 2024, the demonstration plant program provides for:

- Production campaigns with optimized operating conditions. Standardization of procedures and routines. Training of production and maintenance staff of the first plant. Setting up of night shifts to increase production capacity, testing and opening time for staff training.
- Tests with textile feedstocks, documentation of results. Building on the positive results of the first campaign at the end of 2023, new production test campaigns are planned from these new feedstocks with a target of 50% of textile input to the process in the second half of 2024 and 100% by the end of the year.
- Environmental impact: tests to improve the technology to reduce the water consumption of the process and achieve a level of quality well above the regulatory requirements for treated water before return to the environment.

At the date of this Universal Registration Document, the industrial scale-up of this biorecycling technology is supported by the excellent results obtained in the demonstrator since its commissioning.

With regard to the core of the process (enzymatic depolymerization), the highlights of 2023 are:

- The validation of the target feedstock mix for the first plant, consisting of a majority of PET packaging waste streams that cannot be recycled by conventional processes;
- Compliance of the batches of monomers produced in 2023 with the product quality objectives; and
- The quality of the batches of r-PET produced from these monomers, significantly superior to PET recycled by conventional processes (color, impurity levels) and in line with the expectations of all applications.

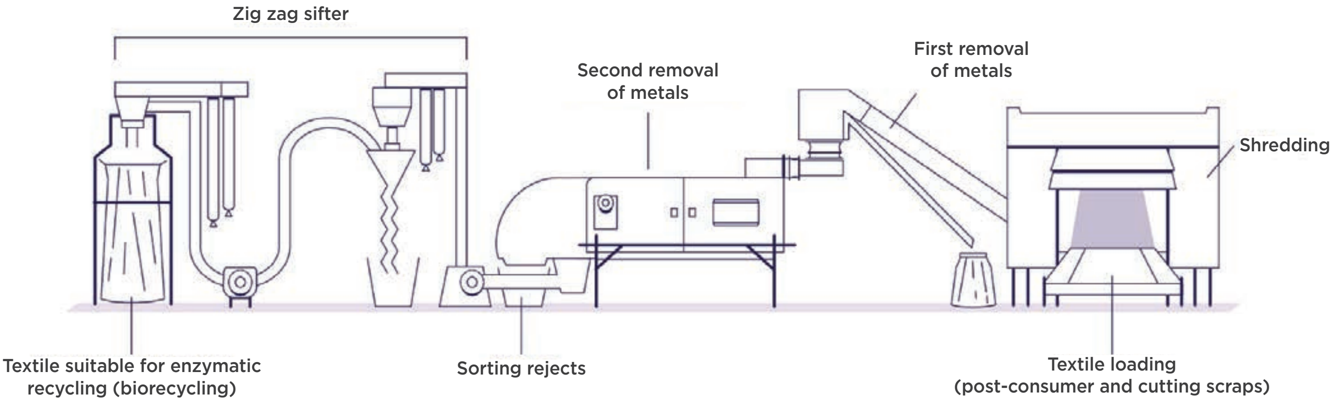


Modeling of the main stages of the process of enzymatic depolymerization of PET waste into monomers, as used at the industrial demonstration plant

Carbios industrial demonstration plant for the depolymerization of PET plastic waste and textiles into monomers. (Carbios)

Inauguration of a textile preparation line

In October 2023[1], Carbios announced the inauguration of a textile preparation line at its industrial demonstration plant in the presence of Mr Lescure, Deputy Minister in charge of Industry. To streamline the essential stage of textile preparation, currently carried out mainly by hand or on several lines, Carbios has developed an integrated and automated line to produce textile waste from used clothing or production offcuts capable of being depolymerized with its enzymatic biorecycling process. This patented line includes all the preparation stages (shredding and extraction of hard spots such as buttons or closures), and provides Carbios with an efficient and scalable development tool. The line will contribute to validating the textile biorecycling technology at the industrial demonstration plant scale (in 2024), and gives Carbios expertise with collection and sorting players to specify the quality of textiles and the necessary preparation stages to make them suitable for enzymatic recycling. This expertise will also be valuable for brands in the eco-design of their products.



Modeling of the main stages of textile waste preparation (from right to left), as implemented in the industrial demonstration plant (Carbios)

Loading of the demonstration plant's textile waste preparation line. (Carbios)

[1] Please refer to the press release of October 2, 2023.

1.4.5.3 Construction of the world's first PET biorecycling plant

In order to ensure the industrial deployment of its proprietary PET biorecycling technology, the Company has embarked on a plant construction project in the Grand-Est region of France. This first industrial and commercial unit aims to consolidate Carbios' business model, which consists of granting operating licenses for its technologies and know-how to its licensees, who will build their own PET biological recycling production units.

After announcing in February 2022[1], a collaboration between Carbios and Indorama Ventures to launch a project in France to build the world's first PET biorecycling plant, a memorandum of understanding was signed in June 2023[2] between the two partners to form a joint venture to build and operate this plant and possibly extend the technology to other Indorama Ventures PET sites for future development purposes.

This collaboration confirms the opportunity to set up the world's first PET enzymatic recycling unit in France, with an estimated processing capacity of 50,000 metric tons of PET waste per year, representing the equivalent of 2 billion bottles or more than 2.5 billion trays. The project is expected to create around 150 direct and indirect full-time jobs.

3D modeling of the Carbios industrial unit for the depolymerization of PET plastic and textile waste into monomers (credit: Technip Energies)

On June 8, 2022, Carbios 54, a wholly-owned subsidiary of Carbios for its industrial operations in Longlaville, was created.

In 2023, Indorama Ventures was involved in the industrial project in different ways:

- continuation of technological due diligence;
- technical cooperation on sub-assemblies with an upstream/ downstream interface or for which Indorama Ventures has industrial expertise; and
- project progress reviews.

The building permit and the environmental authorization were granted by the authorities on schedule.

Soil preparation and earthworks began at the Longlaville site in October 2023.

In June 2023, at 80% completion of the project planning phase, Carbios announced a target investment cost for the project of €230 million, up by €30 million compared to the FEL 2 estimate due to the materialization of risks: inflation, and technical and environmental specificities of the Unit's construction site.( )

The pre-project FEL 3 activities continued with Technip Energies' operational center in Lyon. They were extended by three months compared to the initial schedule to:

- increase design maturity;
- specify the execution strategy and reduce project risks accordingly (organization, contracts, planning); and
- reduce budget uncertainties at the start of the execution phase. This work was carried out in collaboration with the Global Capex projects function of Indorama Ventures.

The first equipment orders were placed from mid-2023 in accordance with the master schedule.

Following a call for tenders for the execution phase (detailed engineering, purchasing management and construction supervision), Carbios signed a partnership with **De Smet Engineers & Contractors**[3].

As part of this project, Carbios benefits from solid financial support from the French government and local public authorities.

On May 31, 2023[4], Carbios announced the State's selection of its project with a view to obtaining €30 million in financing by the French State as part of France 2030, as well as €12.5 million by the Grand-Est region. The implementation of this financing is subject to approval by the European Commission of the corresponding State grants scheme and then to the conclusion of national aid agreements. As part of the national call for "Plastic recycling" projects made by ADEME, the Carbios project to industrialize its unique PET bio recycling process was selected. The Longlaville unit will be the first PET biorecycling plant in the world and will offer the possibility of relaunching production in France of the two basic components of PET, PTA and MEG, both from the Carbios process.

To support the ramp-up and quality of the project, Carbios is strengthening its team with internal resources and service providers who are experts in engineering and operations, project management and support functions. At the end of 2023, the Carbios project and project management team had around 75 people working under the responsibility of the Project Director.

The Plant Manager, recruited in November 2022, has the main assignments of participating in the major design reviews of the project, planning the reception (or commissioning) of the subsystems and preparing the industrial operations.

[1] Please refer to the press release of February 23, 2022.
[2] Please refer to the press release of June 1, 2023.
[3] Please refer to the press release of February 15, 2024.
[4] Please refer to the press release of May 31, 2023.

Plant supply

As of the date of this Universal Registration Document, Carbios has secured more than 70% of the raw materials needed to achieve a processing capacity of 50,000 metric tons per year when the Longlaville plant is operating at full capacity. Thanks to the partnership with Landbell Group in Germany, the call for tenders won by Citeo in France for multi-layer trays and the memorandum of understanding with Indorama Ventures, problematic PET applications such as multi-layer, colored and opaque trays from packaging waste and polyester textile waste may be redirected to recycling.

1. CITEO

To support the industrial and commercial deployment of its PET bio recycling activities by 2025, Carbios secured a first supply contract with Citeo in April 2023[1] as part of a consortium formed with the companies Valorplast and Wellman Neufchateau Recyclage. This long-term contract covers the supply of PET waste consisting of multi-layer and single-layer trays and their biological recycling. As part of this agreement, Carbios will ensure the biological conversion of this PET waste into monomers that will be used to manufacture new 100% recycled and 100% recyclable products, in accordance with a true circular economy principle. This Consortium relies on Valorplast's experience in resource management for the recovery of collected and sorted plastics flows, the expertise of Wellman Neufchateau Recyclage in the field of resource preparation and the innovative enzymatic depolymerization technology of Carbios. The input flows of raw materials in the form of bales from single-and multi-layer trays (representing at least 5,000 metric tons per year) will be collected by Citeo and transported by Valorplast to the Wellman Neufchateau Recyclage processing plant, one of the largest major recyclers in Europe and a subsidiary of Indorama Ventures (world leader in the production of recycled PET or r-PET and partner of Carbios in its plant project). The trays will be separated, crushed, washed and prepared into flakes for recycling in the future Carbios plant.

2. LANDBELL GROUP

Post-closing, Carbios and Landbell Group[2], a global operator of more than 40 producer responsibility organizations (PROs) and a leading provider of closed-loop recycling solutions, announced on February 29, 2024 the signing of a memorandum of understanding for the supply, preparation and recycling of post-consumer PET waste using Carbios biorecycling technology in its first commercial plant in Longlaville from 2026. The partnership will draw on the expertise and network of Landbell Group in terms of supplying PET packaging and textile waste that will be prepared for biorecycling. From 2026, Landbell Group will supply Carbios with 15,000 metric tons per year of prepared PET, thus ensuring a regular supply chain for the Longlaville plant. These flakes will be used as raw material for the production by Carbios of food-grade PTA and MEG, which will then be repolymerized in PET.

Plant financing

The financing of the Longlaville plant should be based on a joint venture in which Carbios intends to remain the majority stakeholder with a 75% stake compared to Indorama Ventures' 25%. The investment for the construction of this plant is estimated at €230 million and should be financed by:

- **An investment to be received from Indorama Ventures in the amount of €110 million** in equity capital and non-convertible loans, on the basis and subject to the terms and conditions of the memorandum of understanding signed with Indorama Ventures[3];
- **Funding of €30 million by the State as part of** France 2030, as well as **€12.5 million by the Grand-Est region**[4]. The implementation of this financing is subject to the approval by the European Commission of the corresponding State grants scheme and then to the conclusion of national aid agreements; and
- **A portion of the Company's available cash**, including 85% of the proceeds of the capital increase with preferential subscription rights maintained successfully completed in July 2023 and which amounted to a total gross amount of €141 million.

Project milestones:

2022	✔ Filing of construction permit.
2023	✔ First orders of equipment with lengthy lead times; ✔ Finalization of process engineering documents; and ✔ Receipt of the building permit and operating authorizations allowing the start of construction of the Plant[5].
2024	• Recruitment of Carbios 54 operations team[6] and training at the Cataroux Demonstration facility.
2026	• First significant deliveries to customers.

[1] Company with a mission created by businesses in the mass consumption and distribution sectors to reduce the environmental impact of their packaging and paper by offering them reduction, reuse, sorting and recycling solutions.
[2] Please refer to the press release of February 29, 2024
[3] Please refer to the press release of June 1, 2023.
[4] Please refer to the press release of May 31, 2023.
[5] Please refer to the press release of October 26, 2023.
[6] A wholly-owned subsidiary of Carbios for its industrial operations in Longlaville.

1.4.5.4 Industrialization and licensing model

The success of Carbios' industrialization model lies in its ability to build strategic industrial partnerships.[1] To facilitate the implementation of such agreements, the Company favors, as of the upstream technological development phases, the signing of "Joint Development Agreements," "Consortium Agreements" or "Letters of Intent" which combine R&D cooperation and competitiveness analyses. Building on its developments, from 2024, Carbios aims to grant the first operating licenses for its proprietary enzymatic recycling technology for plastic waste and PET polyester fibers to manufacturers who will build and operate their own units.

Carbios' licensing model is based on the operation, by third parties (PET producers, chemical manufacturers, waste management companies, etc), of licensed industrial units fed by both plastic and textile waste. Indeed, the possibility of treating PET waste in plastic or textile form, alone or as a mixture, in the same recycling unit would not only diversify the sources of supply and regulate the PET content of incoming waste, but also massify incoming waste streams and make it possible to adapt to available supplies depending on the geographical location of the units.

The size of the units may vary depending on the geographical areas where they operate. Carbios' biorecycling process makes it possible to consider two complementary location options: either in areas that already produce PET, or in areas that consume PET products and therefore generate waste. The main target regions are initially Europe, then the United States and Asia and, after that, Africa-Middle East (AME). The two predominant criteria taken into account in future choice of location are, on the one hand, the availability of waste and the efficiency of the collection and sorting network in the country where the licencee is located and, on the other hand, the choice of countries with high per capita GDP (e.g. United States, Europe, Japan, South Korea, etc.) because the consumption of plastic packaging and textiles is significant and consumers are more aware of circularity and sustainable development factors.

Carbios' business development model is based on three types of revenue:

- **granting of licenses for the use** of its know-how and intellectual property: the licenses granted will generate revenue in the form of upfront payments paid by the licensee on the basis of the installed capacity;
- **royalties** from the sale by Novozymes of Carbios proprietary enzymes directly to manufacturers using Carbios technology; and
- **royalties** from the premium generated by manufacturers on the sale of biorecycled PET.

As part of the technological licensing, Carbios will thus derive the value of its innovation through revenue from upfront payments and royalties from the granting of licenses, engineering assistance services and technical assistance until the start-up of the units.

The Process Book resulting from the work carried out at the demonstration plant should enable Carbios to license its enzymatic recycling process to PET producers (or other industrial players) who will build and operate their own units and repolymerize the monomers produced on their existing lines, of which more than 95% currently use PTA and MEG for the production of PET.

This license will also be accompanied by the provision of technical support services to the licensees, such as training and supervision during the detailed engineering, construction, commissioning, start-up and performance tests of the units.

At the same time, the enzymes intended to feed the PET producer units will be produced by Novozymes, in accordance with the strategic agreement signed between Carbios and Novozymes on January 11, 2023[2].

[1] For more information on the strategic partnerships related to the PET project, please refer to section 2.5 of this Universal Registration Document.
[2] Please refer to the press release of January 12, 2023.

Developments in international prospecting for the industrial deployment of the technology.

In April 2023[1], Carbios announced that its licensing documentation was now ready for the global commercialization of its PET bio recycling technology. The successful ongoing operations in its demonstration unit in Clermont-Ferrand and the advanced engineering study for its first commercial plant define the engineering basis and operational guidelines for units to be operated under license agreements. From technology promotion with the Technical Information Summary (TIS[2]) to project development with a specific Process Design Package (PDP[3]) and Process Book, future Carbios licensees will be handed all necessary process documentation to reliably engineer, procure, construct and operate their PET bio recycling plants under stringent HSE standards[4] and with high product quality.

To ensure the deployment of its activities internationally, Carbios continued to structure its internal and external resources dedicated to the implementation and management of its licensing strategy.

During the 2023 fiscal year, the Company set up a licensing offer and structured its international organization to support the promotion and commercial deployment of its biorecycling technology. This licensing offer is based in particular on the Intellectual Property portfolio guaranteeing the protection of this Carbios proprietary technology and also on the freedom to operate study. It is also based on engineering and design documentation (choice of equipment, unit operations, operating methods, etc.) as well as specifications of inputs (characteristics of incoming waste) and outputs (characteristics of finished products) for the process.

The licensing strategy is broken down into three main stages:

- **Identification of prospects:** the priority target includes PET producers, specialty chemical producers as well as waste management companies. The expanded target includes consumer product brands, public entities and sovereign wealth funds.
- **Activation of prospects:** this is based on an initial contact and one or more non-confidential presentations of the technology.
- **Qualification of prospects:** this begins with the signing of a confidentiality agreement allowing the disclosure of detailed technical and economic information and quantified environmental benefits. It is generally accompanied by visits to R&D and pre-industrial facilities and may be supplemented by the transmission of product samples under a material transfer agreement.

Targeted profiles for Carbios PET biorecycling technology

CORE TARGET

PET Producers
- Sustainable offer with highest value

Chemicals Groups
- Production diversification with highest value

Waste Management Companies
- Downstream integration
- Feedstock valorization

ENLARGED TARGETS

Brand owners
- Upstream integration
- Feedstock securization

Public Entities municipalities& sovereign funds
- Investment opportunities

[1] Please refer to the press release of April 3, 2023.
[2] TIS = Technical Information Summary.
[3] PDP = Process Design Package.
[4] Health, Safety and Environment.

1.5 CARBIOS ACTIVE: AN INNOVATIVE PRODUCT DEDICATED TO THE BIODEGRADATION OF PLA-BASED PLASTICS

Global biosourced plastics production capacity: 0.9 million metric tons in 2021[1]

Global PLA production capacity: 440 thousand metric tons in 2021[2]

CARBIOS Active: the first biological solution that allows plastics with a high PLA content to achieve OK compost HOME certification by TÜV AUSTRIA Group

A solution approved by the FDA and included in the inventory of food contact substances

Technology labeled Efficient Solution by the Solar Impulse Foundation[3] and GreenTech Innovation by the French Ministry for the ecological transition.[4]

1.5.1 ACCESSIBLE MARKETS

The development of biosourced plastics (i.e. made from natural resources such as corn or sugar cane) started over 20 years ago through the development of green chemistry and the desire to market products stemming from renewable resources as an alternative to products derived from petrochemicals, in order to address (i) the dwindling of oil resources, (ii) the greenhouse gas issue and (iii) the preservation the environment.

Even though they have been around for a long time, biosourced plastics currently account for less than 1% of global plastic production[5] but offer strong growth prospects. In 2022, global production capacity for biosourced plastics[6] was estimated at 0.7 million metric tons and should reach 2.7 million metric tons by 2026.

Among these biosourced plastics, Carbios, via its subsidiary Carbiolice, was particularly interested in PLA (PolyLactic Acid), whose market is both promising and growing strongly.

PLA is a biosourced and biodegradable plastic polymer according to the EN13432 standard (industrial compost environment) which is also biocompatible.

It is currently used for the following applications[7]:

- rigid packaging, mainly for food (35% of the market);
- flexible packaging, mainly for food (27% of the market);
- non-woven textiles: tea bags, diapers, wipes, filters (19% of the market);
- consumer products in cosmetics, 3D printing and automotive (13% of the market); and
- agricultural or horticultural uses: mulching films, clips and pots (6% of the market).

		Estimated global production		
Process	**Description of markets**	**2021**	**2026**	**Growth rate**
Global PLA production capacities	Flexible or rigid packaging, textile fibers and medical applications for which the biodegradability of PLA is sought. PLA is also an excellent substitute for PET, PE, PS or PP.	440 kT (1)	790 kT (2)	28% (1)
Global biosourced plastics production capacity		742 kt (3)	2,66 MT (3)	29,1%

(1) Source: IHS Markit in 2021. (2) Source: European Bioplastics, nova-institute in 2022 (3) Source: Plastics Europe in 2021.

[1] Source: European Bioplastics, nova-institute in 2023.
[2] Source: HIS Markit in 2021.
[3] Please refer to the Carbiolice press release of January 20, 2021.
[4] Please refer to the Carbiolice press releases of January 20, 2021 and May 3, 2021.
[5] Source: World plastics production 2021, PlasticsEurope in 2022.
[6] Source: European Bioplastics, nova Institute in 2023.
[7] Source: Global Polylactic Acid Market Size Report, 2021-2028 (grandviewresearch.com) and Biopolymers facts and statistics, IfBB 2020, p43.

Globally, PLA production capacity was estimated at around 440,000 metric tons per year[1] in 2021.

In recent years, many investments have been made and capacity expansions have been implemented on the sites of major producers such as NatureWorks LLC in the United States[2], TotalEnergies Corbion in Thailand[3] and BBCA in China. New investments announced or in progress make it possible to estimate the installed production capacity at more than 790 KT by 2026.

Major projects for the production of PLA include:

- the construction by NatureWorks of a second unit in Thailand with a capacity of 75 KT per year, which will be fully integrated with the production of lactic acid for an estimated investment of $600 million;[4]

- an extension of BBCA capacity in China to reach a capacity of 100 KT[5] per year;

- the construction of a unit in the United States via a joint venture between ADM and the LGChem group[6]; and

- Futerro's investment in France at the Port-Jérôme site in Normandy for a new production capacity of 75 KT of PLA from the fermentation of wheat and the construction of an adjoining recycling unit with an announced investment of more than €500 million[7].

Demand for PLA is currently supported by mature markets such as the United States and Europe, and the strongest growth rates are observed in Asia and mainly in China, India, Japan and Korea.

In France, less than 8% of plastic packaging, excluding bottles and flasks, is recycled, even though it represents more than 50% of packaging[8]. Contrary to some initial fears, compostable packaging can be integrated into conventional plastic flows. Thus, according to an ADEME opinion published in November 2019[9] on the environmental impact of fruit and vegetable bags in November 2019: *"The tests carried out by the Technical Committee for the recycling of plastic packaging show that near-infrared optical sorting technologies can perfectly separate compostable films from low-density polyethylene films without a significant difference in efficiency compared to other resins."* This opinion reinforces the relevance of the use of compostable plastics for targeted applications, and particularly when it is difficult to integrate them into the recycling stream of conventional plastics for technical (complex plastics, too small or thin, difficult to identify), economic (upstream sorting, washing) or environmental (additional sorting and washing operations, landfill, etc.) reasons.

In August 2022, a test was carried out by TotalEnergies Corbion and the company Tomra Recycling to sort PLA trays in a municipal waste stream containing PET.[10] Once again, this test conducted on an industrial scale demonstrated that PLA can be sorted by infrared, a technology widely used in sorting centers. In addition, PLA plastics do not disrupt the processing of other plastic flows such as PET.

By avoiding incineration or landfills, compostable plastics represent an appropriate solution for many uses. This is the case, for example, for food packaging used in places where containers can be difficult to wash on site (fast food restaurants, stadiums, festivals, etc.). With the generalization of at-source sorting of bio-waste made mandatory from January 1, 2024, compostable packaging may be treated by composting or anaerobic digestion. Carbiolice is performing technical validation tests of CARBIOS Active with several manufacturers in various applications, both technical such as sealing bubbles, tamper-evident seals and for flexible or rigid food packaging. To address the food packaging markets, it is essential to obtain food contact approvals. A "Food Contact Notification" application was filed in September 2023 with the Food & Drug Administration (FDA) in the United States; a favorable opinion was issued on February 29, 2024, allowing CARBIOS Active to be marketed for food contact uses in the United States and in countries that recognize the FDA's opinions. An approval application for food contact will also be filed in Europe with EFSA.

The first commercial achievements are expected in the course of 2024 in the United States and also in Europe.

[1] Source: HIS Markit in 2021.
[2] Source: NatureWorks | NatureWorks announces additional lactide monomer purification technology to expand the availability of Ingeo biopolymer from Blair facility (natureworksllc.com).
[3] Source: Total Corbion in 2021: https://www.totalenergies-corbion.com/media/11llbcko/210906-total-corbion-pla-marks-100kt-luminy-pla-production-milestone.pdf.
[4] Source: NatureWorks | NatureWorks Passes Final Authorization Milestone for New Fully Integrated Ingeo PLA Manufacturing Plant in Thailand (natureworksllc.com).
[5] Source: Carbios data in 2022.
[6] Source: Unlocking Nature. Enriching Life. | ADM.
[7] Source Futerro: Futerro aims to set-up a new fully integrated PLA biorefinery in Normandy, France. | Futerro
[8] Source: CITEO activity report 2020.
[9] Source: ADEME Opinion of November 14, 2019: https://presse.ademe.fr/2019/11/reviews-de-lademe-limpact-environnemental-des-sacs-demballage-de-fruits-et-legumes.html
[10] Source: Sorting PLA from Municipal Plastic Waste is Proven Easy Again (plasticstoday.com).

1.5.2 INNOVATION

The innovation of the biodegradation process developed by Carbios for PLA-based plastics consists of introducing enzymes into plastic materials to make them biodegradable and 100% compostable, including at ambient temperature. These enzymes enable PLA-rich plastics to be 100% compostable under aerobic (industrial composting, domestic composting, in soil) and anaerobic (methanization) conditions.

This technology is now used on an industrial scale in the form of an enzyme masterbatch called CARBIOS Active that is integrated into the core of the plastics and packaging during their manufacture in conventional plastics processes (blow film extrusion, calendering extrusion, injection, etc.).

The enzymes, specifically optimized for the degradation of PLA, are firstly integrated into a polymer matrix, which protects them from high temperatures. The encapsulated enzyme thus obtained is then integrated, up to 5%, as a mixture with PLA or compounds with a high level of PLA, on traditional plastics processing tools in order to shape finished products (flexible films, sheets, etc.).

In order to extend the application field of this technology and make the masterbatch even more efficient in the most critical processes of plastics manufacturing (injection, fiber extrusion, etc.) and very thick applications, Carbiolice has, in addition to its industrial and commercial production line, an R&D workshop and pilot tools. This equipment makes it possible to test formulations and manufacturing processes for the additive and then to shape different types of finished products. A pilot extruder, single-layer and multi-layer inflation and calendering extruders as well as an injection molding machine are thus available to the Carbiolice teams. A laboratory equipped for the needs of materials characterization and enzymology also makes it possible to validate the developments carried out for the extension of this technology to new applications with high added value.

Internationally, this technology is currently protected by 28 patent families belonging to Carbios or Carbiolice or licensed to Carbios, and which cover the enzyme, the formulation and the process for preparing the enzyme Masterbatch, as well as the finished products in which it can be introduced.

ENZYMATIC SOLUTION TO MAKE PLA COMPOSTABLE AT AMBIENT TEMPERATURE

1.5.3 SUMMARY OF THE STAGE OF DEVELOPMENT

PLA plastics biodegradation process for which Carbios has granted an operating license to its subsidiary Carbiolice:

Commercial product	CARBIOS Active Masterbatch
Target polymer	PLA
Applications	Flexible packaging, mulching films, methanizable bags, sachets, industrial films, trays, rigid and flexible food packaging, coffee capsules, etc.
Development stage	Industrial
First licensing revenues for Carbios	2016(1)
Marketing to end customers	2024
Development partners	Carbios and Novozymes

(1) Fixed royalty of €8 million received in 2016 under a patent and know-how license agreement signed with Carbiolice SAS.

The enzymatic biodegradation of PLA-based bioplastics (made from natural resources such as corn or sugar cane) makes it possible to create a new generation of plastics that are 100% compostable, including at ambient temperature, thanks to the integration of enzymes into the core of these plastics. The introduction of the CARBIOS Active solution in the manufacture of PLA-based plastic products allows them to fully biodegrade in industrial or domestic composts, or in methanization units. The commercial launch of CARBIOS Active was initiated in December 2020 for the purpose of conducting tests at end customers. It is the first biological solution that allows plastics with a high PLA content (flexible films and rigid plastic packaging) to achieve OK compost HOME certification from TÜV AUSTRIA Group[1].

In addition, Carbiolice has conducted several series of end-of-life tests on packaging incorporating CARBIOS Active to assess the benefits when it is processed in industrial composting or methanization. Tests in an industrial composting station were successfully carried out in collaboration with the Copack Chair (AgroParisTech) and demonstrated good biodegradation performance in real conditions. Similar results were obtained in the United States with the Alliance des composteurs Industriels (CMA). Tests in a mesophilic methanization unit - i.e. at a temperature of 38°C - have demonstrated the ability of CARBIOS Active to degrade PLA at low temperatures and increase the quantity of green biogas produced. These results make the use of PLA packaging perfectly compatible with the deployment on a European scale of the collection of bio-waste and its treatment by composting or methanization.

1.5.4 COMPETITIVE ADVANTAGES

The introduction of CARBIOS Active into PLA packaging makes it possible to guarantee compostability at room temperature, without residue and without ecotoxicity and to obtain the OK Compost Home certification from TÜV AUSTRIA in accordance with the NFT 51-800 standard.

This innovative and eco-friendly alternative offers a positive response to some disadvantages of the biodegradable plastics currently on the market, namely:

- a real capacity for biodegradation under domestic conditions, whatever the temperature, unlike the majority of currently so-called biodegradable products that only biodegrade under industrial conditions (temperature above 60°C); and
- new plastics designed to be competitive, and which can replace fossil-based plastics in the most common applications, for which no recycling or recovery solution is suitable.

For example, the use of one ton of CARBIOS Active will reduce the amount of plastic waste generated when replacing fossil-based polymers by 20 metric tons

With its technological offering, Carbiolice should be able to exploit this competitive advantage in high value-added application markets.

For information on Carbiolice's potential competitors in PLA plastic biodegradation, the reader is invited to consult section 3.2.1.3 "Risks associated with the emergence of competing technologies" in this Universal Registration Document.

[1] Please refer to the Carbiolice press release of December 1, 2020 and of September 2, 2021.

1.5.5 CARBIOLICE: AN INDUSTRIAL AND COMMERCIAL COMPANY

Created in 2016, Carbiolice is a French company resulting from a tripartite agreement between Carbios, the SPI ("Sociétés de Projets Industriels – Industrial Project Companies") investment fund managed by Bpifrance Investissement and Limagrain Ingrédients.

Following the purchase of all of the equity interests of Limagrain Ingrédients and the SPI fund in the capital of Carbiolice, which took place respectively in October 2020[1] and June 2021[2], Carbios holds 100% of the share capital and voting rights of Carbiolice.

As part of the project to consolidate the activities of the Carbios Group, the Carbiolice teams, the laboratory, the pilot equipment and the industrial line joined the Cataroux site in February 2023. This grouping on a single site helps to strengthen synergies between teams and projects.

With an operational industrial tool and multidisciplinary teams (Industrial Research and Development, production, quality, applications, etc.) and a dedicated sales function, Carbiolice continues to market the PLA biodegradation solution with tests with manufacturers and has begun the scale-up of a new generation of enzymes that will expand the potential of accessible markets.

The production and marketing of its Masterbatch (CARBIOS Active) are secured by a joint development agreement signed in January 2019 by Carbios and Carbiolice with Novozymes[3], in which the latter agrees to become, in the long term, the exclusive supplier of Carbiolice, and to produce on an industrial scale the proprietary enzyme developed by Carbios for the biodegradation of PLA.

Through its production unit, Carbiolice intends to address specific areas of application, namely the flexible film markets (bags and sachets, industrial films and food packaging), all rigid applications in the agriculture and horticulture sectors and rigid food packaging (food containers for fast-food outlets, trays, etc.).

1.5.5.1 Licensing

On August 30, 2016, Carbios granted an exclusive worldwide license to Carbiolice for the operation of the enzymatic biodegradation technology for all mixes (plastic compositions and masterbatches) based on certain specific biodegradable polyesters, and notably PLA, for certain specific applications ("the Field"). In an amendment to the license agreement dated June 28, 2018, the scope of the license to Carbiolice was extended to new patent families, applications and products.

On August 30, 2016, for the granting of patent licenses and know-how by Carbios to Carbiolice, Carbios recorded non-monetary operating revenue of €8 million, of which the counterparty was a receivable from Carbiolice, subsequently converted into an equity interest in that company. This license agreement also provides for the payment of royalties on the sales of products integrating Carbios' patented enzymatic biodegradation technology. The amendment to the license agreement dated June 28, 2018 also provides, in consideration for the extension of the number of patent families and new applications licensed to Carbiolice, for the payment to Carbios of an additional lump sum, conditional upon achievement by Carbiolice of a defined amount of revenue.

Following the purchase of the shares of the SPI fund in the capital of Carbiolice which took place on June 3, 2021, Carbiolice, as an affiliate of Carbios, now directly holds the exclusive worldwide operating license for the patent family owned by the CNRS and the University of Poitiers. In this respect, Carbiolice may pay royalties to the joint owners with the revenues generated by Carbiolice's exploitation of this family of patents. No royalties from Carbiolice to the

co-owners were recognized in fiscal year 2023. The income recorded for 2023 corresponds to the sale of samples, covered by "Material Transfer Agreements", for the performance of tests and industrial validation trials.

[1] Please refer to the press release of October 8, 2020.
[2] Please refer to the press release of June 4, 2021.
[3] Please refer to the press release of January 29, 2019.

CARBIOS Active production line (Credit Carbiolice)

1.5.5.2 Funding of Carbiolice and change in capital structure

Funding of Carbiolice

Since its creation in 2016, the historical shareholders of Carbiolice – Limagrain Ingrédients, the SPI fund and Carbios – have invested €18 million, which was released in four phases over 4 years depending on the achievement of technical and commercial milestones. These investments in Carbiolice's share capital were made in accordance with the initial commitments and the provisional schedule, as detailed below:

- the first tranche of funding of €4 million, of which €1.5 million was provided by Carbios, took place on the business start-up in September 2016;
- a second tranche of funding of €3.35 million, initially scheduled to be paid in 2019, was released early in July 2018 (including €1.1 million provided by Carbios) given the acceleration of Carbiolice's developments, namely the implementation of a new business plan and the filing of several patent applications confirming the achievement of new milestones;
- a third tranche of funding in the amount of €3.35 million (including €1.1 million provided by Carbios) was released in July 2019; and
- a fourth and final tranche of funding for an amount of €7.3 million (including €2.8 million from Carbios and the balance by the SPI fund) was released in October 2020.

In addition, Carbios continued to finance the activities of Carbiolice, and set up a partner's current account, amounting to €4.7 million at December 31, 2023, which was subject to a new payment of €1 million in January 2024.

Acquisition of the stake of the Bpifrance Investissement SPI funding the capital of Carbiolice

As a reminder, on June 4, 2021[1], Carbios had announced the acquisition from the SPI fund of Bpifrance Investissement of its entire stake of 37.29% in the capital of Carbiolice. This acquisition, which took place on June 3, 2021 for a price of €17.9 million, ended 5 years of structuring collaboration with the SPI fund. Since this acquisition, which was paid exclusively in cash, Carbios now holds 100% of the share capital and voting rights of Carbiolice. This transaction, which took place as part of the rationalization of the Company's portfolio, followed the acquisition, in October 2020, of the entire stake of Limagrain Ingrédients in the capital of Carbiolice[2].

[1] Please refer to the press release of June 4, 2021.
[2] Please refer to the press release of January 29, 2019.

HISTORY OF EQUITY CONTRIBUTIONS IN CARBIOLICE

(In euros)	Carbios	Limagrain Ingrédients	SPI
Creation of the entity	1	-	-
Incorporation of the Company	98	1	-
Distribution of share capital at inception	**99**	**1**	-
Distribution of share capital at inception (in %)	**99.00%**	**1.00%**	**0.00%**
Carbios cash contribution	1,499,901	-	-
Conversion of Carbios receivables into Carbiolice equity securities	8,000,000	-	-
Partial contribution of Limagrain Ingrédients assets	-	3,499,999	-
SPI cash contribution	-	-	2,500,000
Distribution of share capital at December 31, 2016	**9,500,000**	**3,500,000**	**2,500,000**
Distribution of share capital at December 31, 2016 (in %)	**61.29%**	**22.58%**	**16.13%**
Distribution of share capital at December 31, 2017	**9,500,000**	**3,500,000**	**2,500,000**
Distribution of share capital at December 31, 2017 (in %)	**61.29%**	**22.58%**	**16.13%**
Cash contribution 2nd installment	1,100,000	250,000	2,000,000
Distribution of share capital at December 31, 2018	**10,600,000**	**3,750,000**	**4,500,000**
Distribution of share capital at December 31, 2018 (in %)	**56.23%**	**19.90%**	**23.87%**
Cash contribution 3rd installment	1,100,000	250,000	2,000,000
Distribution of share capital at December 31, 2019	**11,700,000**	**4,000,000**	**6,500,000**
Distribution of share capital at December 31, 2019 (in %)	**52.70%**	**18.02%**	**29.28%**
Acquisition of the stake of Limagrain Ingrédients	4,000,000	(4,000,000)	-
Cash contribution 4th installment	2,800,000	-	4,500,000
Distribution of share capital at December 31, 2020	**18,500,000**	**-**	**11,000,000**
Distribution of share capital at December 31, 2020 (in %)	**62.71%**	**0.00%**	**37.29%**
Acquisition of the stake of the SPI fund of BPIfrance Investissement	11,000,000	-	(11,000,000)
Distribution of share capital at December 31, 2021	**29,502,000**	**-**	**-**
Distribution of share capital at December 31, 2021 (in %)	**100.00%**	**0.00%**	**0.00%**
Distribution of share capital at December 31, 2022	**29,502,000**	**-**	**-**
Distribution of share capital at December 31, 2022 (in %)	**100.00%**	**0.00%**	**0.00%**
Distribution of share capital at December 31, 2023	**29,502,000**	**-**	**-**
Distribution of share capital at December 31, 2023 (in %)	**100.00%**	**0.00%**	**0.00%**

1.5.5.3 Collaborations and developments

Collaborations

Novozymes

As a reminder, in January 2019, Carbios and Carbiolice signed a co-development agreement with Novozymes for the production and supply of PLA degradation enzymes on an industrial scale[1]. During fiscal year 2022, this collaboration continued, in particular for the preparation of the Food Contact approval files for Masterbatch.

AgroParisTech – Copack Chair

The CoPack Chair is a sponsorship partnership chair led by the AgroParisTech Foundation, an institution recognized as being of public utility in the development of projects with solutions for the future. Launched in 2021 for a period of five years, its mission is to contribute to reducing the environmental footprint of the food packaging sector, while respecting the evolution of society. In collaboration with players from all parts of the packaging sector, from raw material producers to end-of-life waste management agents, the CoPack Chair implements scientific projects with the aim of proposing new packaging solutions. CARBIOS Active is an integral part of the test system under real composting conditions and the pursuit of biodegradation under soil conditions.

Other collaborative projects

Carbiolice is also involved in 3 European collaborative projects aimed at developing compostable packaging and bringing together several university and industrial partners.

- The PRESERVE and SISTERS projects, which started in January 2021, should make it possible to accelerate the evaluation of Carbiolice Masterbatch for applications in compostable flexible packaging with improved properties.

- The SEALIFE project, which is due to continue until September 2024, and in which the Company collaborates with the Spanish technical center ITENE and the company Bio4pack for the development of compostable food utensils and containers under domestic conditions.

Developments

“OK compost HOME” Certification

In September 2021[2], Carbiolice announced that it had obtained Ok compost HOME certification from the TÜV Austria Group for rigid PLA-based (up to 70%) packaging containing CARBIOS Active. New requests for OK compost HOME certification have been filed with TÜV Austria for flexible 100% PLA films up to a thickness of 90 µm and 100% PLA sheets of up to 800 µm in order to highlight the significant advances in disintegration speed. They also aim to confirm the performance of CARBIOS Active by a third-party organization and to accelerate the certification process of the finished products of future customers.

BPI certification and FDA approval

In March 2024, Carbios announced that its CARBIOS Active enzymatic solution, dedicated to the biodegradation of PLA, was included in the inventory of food contact substances (FCS) of the **US Food and Drug Administration (FDA)** with the food contact notification (FCN) 2325, in force since February 29, 2024. Thanks to this step, CARBIOS Active can be used to manufacture food contact packaging in the United States (rigid and flexible packaging, and other applications). CARBIOS Active was also **certified by the Biodegradable Products Institute** (BPI), the leading North American authority on compostable products and packaging. Food contact notification and BPI certification guarantee the quality of CARBIOS Active, offering brands and industrial composters a reliable solution for the design and marketing of fully biodegradable packaging, in line with circularity commitments.

All of these certifications will accelerate the marketing process and give Carbiolice’s future customers the opportunity to build on the results of tests already carried out.

From left to right: PLA Pellets and CARBIOS Active Masterbatch (Credit: SkotchProd)

[1] Please refer to the press release of January 29, 2019.
[2] Please refer to the Carbiolice press release of September 2, 2021.

Distinctions

Since 2021, Carbiolice Masterbatch has been certified ***Efficient Solution*** by the Solar Impulse Foundation. This distinction is awarded on the basis of criteria combining technical feasibility, environmental impact and potential for economic profitability.

The technology driven by Carbiolice also received the label ***"Greentech Innovation"*** from the French Ministry for the Ecological Transition. This recognition attests to the innovative nature of the enzymatic biodegradation technology of plastics implemented by Carbiolice and its ability to make a significant contribution to the environmental transition. Carbiolice thus joins the network of 247 start-ups labeled[1] Greentech Innovation since its creation in 2016.

PLA-based plastics decomposition stages integrating the CARBIOS Active solution (Credit: SkotchProd)

[1] Source: The Greentech innovation initiative | French Ministry for the Ecological Transition (ecologie.gouv.fr).

1.6 OTHER AREAS OF DEVELOPMENT

As part of its research and development work, Carbios aims to extend its recycling and biodegradation processes to other polymers and other applications of interest to industry. Building on its experience in developing these two PET or PLA technologies, Carbios can draw on the technical resources put in place to accelerate future projects for the degradation of other polymers.

1.6.1 RECYCLING OF POLYAMIDES

Considering the technical accessibility (strength of the bonds and presence of heteroatoms in the polymer) and the size of the market, priority is now given to the **development of a polyamides (PA) recycling process**, including PA6 (global market of 5.3 million metric tons valued at €14.6 billion[1]) and PA6.6 (global market of 3.0 million metric tons estimated at €15 billion[2]). Work has been underway since early 2023, notably with the TBI laboratory (Toulouse Biotech Institute) as part of the cooperative laboratory set up with INSA.

The polyamides are present in the packaging and textiles sectors, such as PLA and PET, and also in other sectors, in particular the automotive sector where an extended producer responsibility chain exists in France, but where end-of-life recovery methods are still very limited.

The enzymatic recycling of polyamide waste is a process allowing the PA to be depolymerized and returned to its original monomers. The monomers obtained can then be purified and repolymerized to produce new recycled PA products of the same quality as those obtained from virgin PA, according to the same principle as that developed by Carbios for PET.

Some technologies for the chemical recycling of PA6 already exist on the market and make it possible to return to monomers under acidic conditions. However, current global capacities remain very low (around 40 to 50 thousand metric tons). These technologies mainly recycle fishing nets, one of the post-consumer products with a high level of PA6 and easily collectable.

There is currently no chemical recycling technology for PA6.6. Some projects are at the demonstration stage.

1.6.2 OTHER POLYMERS

Work was also launched in 2023 by the Company on the degradation of:

- **polyolefins** of which polyethylene PE (global market of 107 million metric tons[3]) and polypropylene PP (global market of 72 million metric tons[4]). Work is currently underway with the BBF (Fungi Biodiversity and Biotechnology) laboratory at INRAE in Marseille, specializing in the study of the ability of filamentous fungi to degrade complex polymers.

- **elastomers** of which natural rubber (global market of 13.8 million metric tons[5]).

These polymers have particularly resistant chemical structures, which are therefore less accessible to enzymes. Being able to recover them is therefore a long-term project for Carbios.

The chemical inertia of these polymers that give them their unique properties, in particular their strength and durability, is at the same time the problem, due to their lack of degradability. It seems interesting today to develop methods to reintegrate synthetic polymers into the carbon cycle. In this context, the possibility of degrading/depolymerizing polymers by a biocatalytic process is still in its infancy and large areas of the field need to be explored. At present, there are no effective biological solutions for the degradation of C-C polymers, due to their chemical inertia. To meet these challenges, we can draw inspiration from the tricks developed by nature. Fungi, in particular, have had millions of years of coevolution with plants and insects to develop strategies to deal with the resistance of biopolymers (for example, lignocellulose, waxes, cuticle) and have developed an arsenal of ad hoc enzymatic weapons, and particularly oxidoreductase. We believe that these filamentous fungi, and their enzymes, can be exploited/adapted for the degradation of synthetic polymers.

The collaboration with the BBF therefore aims to research enzymatic activities on elastomers and polyolefins through the exploration of fungal biodiversity.

A collaboration with the TBI laboratory (Toulouse Biotechnology Institute) was also carried out to work on the optimization of the expression and purification of two rubber oxygenase enzymes previously identified as having activities on natural rubber.

The enzymes developed for the degradation of PLA and the enzymatic recycling process of PET could also serve as a basis for the development of the **enzymatic recycling of PLA waste**, thus making it possible to depolymerize the PLA and return to the starting monomer, lactic acid. As part of its research and development work, Carbios has demonstrated its ability to depolymerize PLA to obtain lactic acid. These results were confirmed by the success of the depolymerization of the PLA to 90% in 24 hours. This progress has made it possible to prove the concept of closed-loop recycling with the production of recycled PLA from lactic acid stemming from the PLA enzymatic recycling process. Carbios has thus demonstrated the circularity of the PLA recycling process and its applicability to commercial items (flexible and rigid packaging). However, for the enzymatic recycling of PLA, Carbios is targeting a nascent market, since the availability of PLA waste is still too low. At the date of this Universal Registration Document, the Company does not intend to launch the industrial or commercial utilization of this technology.

Lastly, Carbios could also consider adapting its enzyme incorporation process developed for PLA to other biosourced polymers such as PHAs (Polyhydroxyalkanoates).

[1] Sources: Research and Markets in 2020, Straits Research in 2021 and Icis in 2022.
[2] Sources: Paaler Mats in 2019, Transparency Market Research in 2018, ReportsnReports in 2023, Maximize Market Research in 2021 and Icis in 2022.
[3] Source: Mordor Intelligence in 2020 and Icis in 2019.
[4] Source: Precedence Research relayed by GlobeNewswire in 2020.
[5] Source: Association of Natural Rubber Producing Countries relayed by Tire Business in 2019.


2

2.
COMMENTS ON THE BUSINESS

Section 2.1 focuses on the presentation of the Company's results and financial position based on its audited consolidated financial statements prepared under IFRS for the fiscal years ended December 31, 2022 and December 31, 2023, each lasting 12 months.

Section 2.3 focuses on the Company's results and financial position based on the audited separate financial statements for the fiscal years ended December 31, 2022 and December 31, 2023, each lasting 12 months.

This chapter should be read in the light of the Universal Registration Document as a whole. In particular, please read the description of the Company's operations presented in Chapter 1 of this Universal Registration Document. Likewise, please refer to the financial statements for the fiscal years ended December 31, 2022 and December 31, 2023, as well as the notes thereto, presented in Chapter 5 of this Universal Registration Document. The Company's separate financial statements were prepared in accordance with the accounting standards applicable in France for companies registered under French law.

2.1 ANALYSIS OF THE BUSINESS AND THE GROUP'S INCOME

The consolidated financial statements of the Company as of December 31, 2023 and December 31, 2022, are presented in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB) and adopted by the European Union.

For the 2023 fiscal year, these IFRS consolidated financial statements include the financial statements of Carbios, the parent company, and the financial statements of its fully integrated subsidiaries Carbiolice and Carbios 54[1] at December 31, 2023.

The 2022 data includes the full-year Carbios and Carbiolice financial statements as well as the Carbios 54 financial statements for the period from June 8, 2022 to December 31, 2022, since, on May 30, 2022, the Company subscribed to 100% of the share capital, i.e. €10,000, thus granting it control of its new subsidiary Carbios 54, whose registered office is located in Longlaville (54) France and whose objective is to carry out the construction project of the PET biorecycling plant.

Consolidated income statement *(in thousands of euros)*	**Notes**	**12/31/2023**	**12/31/2022**
Revenue	16	24	70
Research and development expenses	17.1	(10,958)	(12,993)
Research and development expenses	*17.1*	*(18,830)*	*(19,057)*
Subsidies and other income from activities	*17.1*	*5,385*	*4,776*
Capitalization of development costs	*17.1*	*2,487*	*1,287*
Sales and marketing expenses	17.2	(5,809)	(4,373)
General and administrative expenses	17.3	(12,134)	(8,807)
Other operating income and expenses		-	2
Operating income/(expenses)		**(28,878)**	**(26,101)**
Financial income	20	1,655	(1,640)
Share of net income of equity-accounted companies		-	-
Income/(expenses) before taxes		**(27,224)**	**(27,741)**
Income tax	21	-	-
Net income/ (loss) for the period		**(27,224)**	**(27,741)**
Basic earnings per share (in euros)	*22*	*(1.96)*	*(2.47)*
Diluted earnings per share (in euros)	*22*	*(1.96)*	*(2.47)*

[1] A wholly-owned subsidiary of Carbios for its industrial operations in Longlaville.

2.1.1 KEY FACTORS SIGNIFICANTLY AFFECTING THE GROUP'S REVENUE

2.1.1.1 Key factors significantly affecting the Group's operating revenue

The Group is made up of three companies. Carbios is an innovative green chemistry company whose goal is to accelerate the green revolution in chemistry for our everyday lives by re-thinking the life cycle of plastic and textile polymers. Its main activity thus consists in searching for innovative industrial bioprocesses to optimize the technical, economic and environmental performance of polymers by exploiting the biological properties of enzymes and developing these bioprocesses to license them to industrial partners for their commercial use and marketing.

The subsidies granted for the OPTI-ZYME program were released according to the project's progress and the submission of reports to ADEME regarding the completion of each key stage stipulated in the signed framework agreement. The payment of the subsidies is conditional upon the completion of each key stage under the relevant conditions, depending on the deliverables:

(In euros)	KS1 (50%)	KS2 (30%)	KS3 (0%)	KS4 (20%)	Total
Planned payment year	**2023**	**2024**	**2025**	**2026**	
Subsidy	€1,559,238	€935,543	€0	€623,695	€3,118,476
Repayable advance	€2,521,538	€1,512,923	€0	€1,008,615	€5,043,076
TOTAL	**€4,080,776**	**€2,448,466**	**€0**	**€1,632,310**	**€8,161,552**

Carbiolice is a French company resulting from a tripartite agreement between Carbios, the SPI investment fund, whose management company is Bpifrance Investissement, and Limagrain Ingrédients. Following the purchase of all of Limagrain Ingrédients' and SPI fund's stakes in the capital of Carbiolice, which took place respectively in October 2020[1] and June 2021[2], Carbios holds almost 100% of the share capital and voting rights of Carbiolice, and since that date has fully integrated the company in its consolidated financial statements under IFRS. With an operational industrial tool and multidisciplinary teams (Industrial Research and Development, production, quality, applications, etc.) and a dedicated sales function, Carbiolice continues to market the PLA biodegradation solution with tests with manufacturers and has begun the scale-up of a new generation of enzymes that will expand the potential of accessible markets.

The Group's operations and results are mainly impacted by the R&D expenses for the projects it undertakes. The Group also dedicates a large part of its resources to the protection of its intellectual property by filing patent applications at an early stage.

The Group's original business model is based on the industrialization and marketing of its products and/or enzymes, its technologies and its bioprocesses through the concession of operating licenses for its know-how and its intellectual property to major manufacturers in the sectors concerned by the innovations of Group companies. The Group thus intends to identify one or more leading manufacturers offering the best potential for the use of the innovation on an industrial and commercial scale.

The creation of Carbios 54 in June 2022 should enable the Group to generate its first commercial revenues on an industrial scale and to be in a position to become profitable.

Carbios and Carbiolice are eligible for the Research Tax Credit (CIR), a scheme that offers a refundable tax credit to companies investing in R&D. The impact of operating expenses on the Group's net income can thus be reduced by the recognition of the CIR as a deduction from the related expenses. All R&D expenses are recognized as operating expenses in the fiscal year in which they are incurred, with the exception of certain expenses for the Company's industrial demonstration plant, which are capitalized and recognized under "Capitalized production".

Research Tax Credit (CIR) *(in euros)*	**12/31/2023**	**12/31/2022**
Observed	3,199,963	3,192,581
Cashed	3,176,838	2,985,771

[1] Please refer to the press release of October 8, 2020.
[2] Please refer to the press release of June 4, 2021.

2.1.1.2 Government, economic, budgetary, monetary or political factors that have materially affected or could materially affect, directly or indirectly, the Group's operations

Recent regulations on waste, such as the Energy Transition Law for Green Growth, the "France 2030" investment project and the "Circular Economy" package adopted by the European Commission (section 1.2.2 of this Universal Registration Document) can also present opportunities for the Group, particularly in terms of revenue.

2.1.2 INCOME

For the fiscal years 2022 and 2023, income accounted under IFRS 15 is related to feasibility studies, tests and research services with performance obligations, as well as deliveries of raw materials and samples of CARBIOS Active by Carbiolice.

At December 31, 2023, the Group's income stood at €24 thousand, compared to €70 thousand at December 31, 2022.

2.1.3 RESULTS

2.1.3.1 OPERATING EXPENSES

The Company's operating expenses mainly consist of R&D costs and salaries. For the past two fiscal years, they break down as follows:

Consolidated income statement *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
Revenue	**24**	**70**
Research and development expenses	(10,958)	(12,993)
Research and development expenses	*(18,830)*	*(19,057)*
Subsidies and other income from activities	*5,385*	*4,776*
Capitalization of development costs	*2,487*	*1,287*
Sales and marketing expenses	(5,809)	(4,373)
General and administrative expenses	(12,134)	(8,807)
Operating expenses	**(28,902)**	**(26,173)**
Other operating income and expenses	-	2
Operating income/(expenses)	**(28,878)**	**(26,101)**

With regards to the presentation of its IFRS consolidated statements, the Group shows a statement of income by destination. As such, recurring operating expenses are categorized and presented in the income statement as: Net research and development expenses, Sales and marketing expenses and General and administrative expenses.

For 2023, operating expenses stood at €28,902 thousand, compared to €26,173 thousand for 2022.

To support the growth of its activities, the average number of employees within the Company increased from 104 in 2022 to 134 in 2023.

Net Research and Development expenses: The Group pursued its research and development efforts on all its proprietary pipeline of innovations and notably on its PET biorecycling technology. Net research and development expenses amounted to €10,958 thousand in 2023 compared to €12,993 thousand in 2022.

- Research and development expenses amounted to €18,830 thousand. The slight decrease in expenses is mainly due to the launch of the

OPTI-ZYME project financed by ADEME, where the Group's academic partners are financed directly through the said project. In addition, due to the progress of the plant construction project, engineering expenses are no longer recognized as expenses, but directly capitalized in the fixed asset account. Finally, it should be noted that to carry out its R&D and industrial projects, the company is continuing to strengthen its teams, which explains the significant increase in personnel expenses in 2023.

- Subsidies and other income from the Group's activity amounted to €5,385 thousand in the 2023 fiscal year. The balance is mainly composed of the amount of the tax research credit ("CIR") to be received for €2,543 thousand for Carbios, and €672 thousand for Carbiolice, as well as grant received during the year with the launch of the OPTI-ZYME project financed by ADEME.

- Lastly, the Group continued to capitalize Development costs related to the PET enzymatic recycling project for €2,487 thousand.

Sales and marketing expenses: For the 2023 fiscal year, sales and marketing expenses amounted to €5,809 thousand compared to €4,373 thousand at December 31, 2022. The increase in these expenses is mainly due to the efforts made by the Company to target the market and sell its licenses in the near future. The Group is also continuing its structuring work with a reinforcement of its teams in order to be able to achieve its development objectives and target an international market.

General and administrative expenses: In respect of the 2023 fiscal year, general and administrative expenses stood at €12,134 thousand compared to €8,807 thousand for the previous fiscal year. Carbios continues to structure itself, in particular with the construction of the plant, which explains the increase in general expenses, more specifically in personnel expenses. Fees are also up in 2023, illustrating the need for external consultants to move forward and structure itself on various topics (recruitment, QHSE, or IT).

2.1.3.2 Financial income and expenses

Financial income includes:
- expenses related to the Company's financing: interest paid and accretion of repayable advances and financial liabilities;
- income related to interest on term deposits and the capitalization contract;
- income related to repayable advances.

NET FINANCIAL INCOME/(EXPENSES) *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
Foreign exchange gains	3	1
Other financial income	3,781	133
Financial income	**3,784**	**134**
Gross cost of borrowing	(2,838)	(1,724)
Monetary interest expenses (1)	*(1,644)*	*(1,224)*
Non-monetary interest expenses (EIR)	*(1,030)*	*(325)*
Interest expense on lease liabilities	*(155)*	*(171)*
Interest expense on employee benefit obligations IAS 19	*(10)*	*(4)*
Capitalization of borrowing costs (2)	721	-
Net cost of borrowing	(2,118)	(1,724)
Other financial expenses	(11)	(49)
Financial expenses	**(2,129)**	**(1,774)**
Net financial income/(expenses)	**1,655**	**(1,640)**

(1) Net financial interest paid amounted to €1,944 thousand at December 31, 2023 (including €300 thousand in accrued interest).

(2) Capitalization of borrowing costs related to the PET biorecycling plant (IAS 23 Borrowing costs - non-monetary item) - See note 5.2.

The Company's financial income consists of interest on money-market investments and term account deposits. All available cash is placed in risk-free money market products. The significant increase in financial income is mainly due to the increase in liquidity following the capital increase during the fiscal year.

Financial expenses come from interest expenses on loans and repayable advances.

2.1.3.3 Net income

Consolidated income statement *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
Operating income/(expenses)	**(28,878)**	**(26,101)**
Financial income	**1,655**	**(1,640)**
Share of net income of equity-accounted companies	-	-
Income/(expenses) before taxes	**(27,224)**	**(27,741)**
Income tax	-	-
Net income/ (loss) for the period	**(27,224)**	**(27,741)**

The Group's companies have not distributed any dividends or other income (Art. 243 bis of the French General Tax Code) during the last three fiscal years.

2.2 CASH FLOW AND FINANCIAL STRUCTURE OF THE GROUP

Consolidated statement of financial position *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
ASSETS		
Goodwill	20,583	20,583
Intangible assets	21,874	22,457
Property, plant and equipment	49,199	24,965
Right-of-use assets	6,175	6,765
Financial assets	1,219	906
Total non-current assets	**99,049**	**75,674**
Trade receivables and related accounts	6	57
Inventories	511	-
Other current assets	10,621	7,670
Cash and cash equivalents	191,821	100,557
Total current assets	**202,960**	**108,284**
Total assets	**302,009**	**183,959**
EQUITY AND LIABILITIES		
Share capital	11,786	7,870
Share and Contribution premium	276,569	146,968
Consolidated reserves	(2,900)	(5,482)
Retained earnings	(23,917)	3,826
Net income – share attributable to equity holders of the parent company	(27,224)	(27,741)
Equity	**234,314**	**125,441**
Non-current provisions	216	184
Current and non-current borrowings and financial liabilities	39,226	35,395
Non-current lease liabilities	4,639	5,142
Other non-current liabilities	449	546
Deferred tax liabilities	1,694	1,694
Total non-current liabilities	**46,224**	**42,961**
Current provisions	-	-
Current borrowings and financial liabilities	3,524	2,782
Current lease liabilities	1,232	1,346
Trade payables and related accounts	4,829	4,021
Other current liabilities	11,888	7,408
Total current liabilities	**21,472**	**15,557**
Total liabilities and equity	**302,009**	**183,959**

2.2.1 CAPITAL

Consolidated financial statements *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
Equity	234,314	125,441
Loans and financial liabilities	48,621	44,665
Cash and cash equivalents	191,821	100,557
Debt (Cash) – Net position	(143,200)	(55,892)
Net financial debt to equity	N/A	N/A

2.2.2 CASH FLOW STATEMENT

Consolidated cash flow statement *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
Cash and cash equivalents at beginning of period	**100,556**	**104,956**
Cash flow from operating activities	(22,589)	(21,820)
Cash flow from investing activities	(22,391)	(9,327)
Cash flow from financing activities	136,246	26,747
Change in cash position	***91,265***	***(4,398)***
Cash and cash equivalents at end of period	**191,821**	**100,557**

In 2023, the Group's activity generated €91 thousand in cash, which went from €101 million at the end of 2022 to €192 million at December 31, 2023.

Cash flows from operating activities absorbed €22.6 million, mainly corresponding to the accounting loss recognized for the Group.

Investment flows absorbed €22.4 million mainly in the context of investments relating to the PET biorecycling plant project (mainly engineering and various studies), and also the continuation of investments for the industrial demonstration plant on the Cataroux site, improvements to premises, in particular for the arrival of the Carbiolice production line and the installation of the textile line.

Financing activities generated €136.2 million in cash, mainly consisting of the capital increase carried out in July 2023 for a net amount of €133 million.

Continuing to benefit from the net proceeds of the €114 million raised in 2021, as well as from the €30 million loan[1] from the European Investment Bank (EIB), obtained in 2021 which was received in June 2022, and now with €133 million following the capital increase carried out in July 2023, the Group had a net cash position of €192 million at December 31, 2023, enabling it to pursue current developments beyond the next 12 months.

Concerning the Company's financial risks, please refer to section 3.3.2 of this Universal Registration Document.

[1] Please refer to the press release of December 20, 2021.

2.2.3 FINANCING

At the date of this Universal Registration Document, the Company does not have any bank loans.

On December 19, 2012, Carbios received a grant from Bpifrance consisting of €3.7 million in conditional advances recognized as equity (and €3.1 million in subsidies) spread over a period of 60 months from 2012 to 2017. The grants were released according to the project's progress and the submission of reports regarding the completion of each key stage stipulated in the framework agreement signed with Bpifrance.

In the event that the research program is successful, the Company had undertaken to reimburse the repayable advance to Bpifrance Innovation for an amount of €4.5 million (with an annual discount rate of 2.67%) upon achieving cumulative income of €10 million generated by the exploitation of products resulting from the Thanaplast™ program.

In addition, as soon as the reimbursement of the repayable advance has been completed, the agreement stipulates that the Company shall pay a bonus equal to 4% of its revenue generated by the utilization of the products if it exceeds a cumulative amount of €100 million. This additional payment is however subject to a time limit (applicable only for a period of five consecutive years from the date of the end of the reimbursement of the advance), and an amount cap (ceiling of €7.1 million).

On November 23, 2018, the Company obtained an innovation loan of €1,500 thousand from Bpifrance at a variable rate of 3.03% over a 7-year period to finance the intangible expenses linked to the industrial and commercial launch of an innovation. After a grace period of 8 quarters, constant capital repayments of €75 thousand will take place from March 31, 2021 to December 31, 2025.

On November 20, 2019, for the same project, the Company obtained a new 7-year loan of €1,500 thousand from Bpifrance at a variable rate of 4.34%. After a grace period of 8 quarters, the constant capital repayments of €75 thousand will take place from September 30, 2022 to June 30, 2027.

On April 8, 2019, the Company obtained a grant from ADEME for the CE-PET project, composed of repayable advances totaling €3,102 thousand and subsidies of €1,034 thousand spread over a 48-month period from 2018 to 2022. The grants were released according to the project's progress and the submission of reports regarding the completion of each key stage stipulated in the framework agreement signed with ADEME. The agreement provides for a total grant rate of 60% that is applied to total eligible expenditures and used for each key stage, 25% of which is a subsidy and 75% a repayable advance (with conditions).

Following the validation of key stage 4 and more generally the success of the project by ADEME at the end of 2022, the Company received on April 27, 2023 the expected balance of subsidy of €207 thousand and a conditional advance of €620 thousand and thus received the total amount of the program's assistance, i.e. €1,034 thousand in subsidies and €3,102 thousand in conditional advances.

The repayment of this last amount is scheduled in four annual installments of €802 thousand, including €776 thousand in capital and €27 thousand in interest. The first payment was made on December 29, 2023. And the outstanding capital therefore amounts to €2,327 thousand at December 31, 2023.

Since 2019, the Company financed major capital expenditures on laboratory equipment for the set-up of its pilot through finance leasing totaling €605 thousand.

On July 23, 2020, Carbios announced the success of a capital increase through an offering to qualified investors by way of an accelerated book-building process. The Company issued 1,028,572 new ordinary shares each with a nominal value of €0.70, at a price of €26.25 per share, issue premium included, for a total amount of €27,000,015, which represents 14.79% of the Company's share capital prior to the transaction on an undiluted basis, i.e. a dilution of 12.89%. Strategic shareholders L'Oréal, through its private equity fund BOLD (Business Opportunities for L'Oréal Development), and Michelin Ventures subscribed to the capital increase in accordance with the undertakings they had made, for a total amount of €3.9 million, which represents 148,571 new shares or 14.44% of the total number of new shares issued as part of this capital increase.

Carbiolice subscribed to two State-guaranteed loans (PGE) in 2020 in the amount of €950 thousand each. The first one bears interest at the rate of 1.09% with a two-year grace period. The second bears interest at a rate of 2.09% with a two-year grace period. They entered into the scope of consolidation with the takeover of Carbiolice in June 2021. In August 2020, Carbios also obtained a French State-guaranteed bank loan of €1 million, repayable in full within one year, with the possibility of extending the repayment date through an additional amortization period of up to 5 years.

In May 2021, Carbios announced the success of a capital increase carried out with cancellation of shareholders' preferential subscription rights by way of a public offering and with a priority period. The Company issued 3,000,000 new ordinary shares with a par value of €0.70 per share, at a unit price of €38, including the issue premium, for a total amount of €114 million, representing 36.7% of the Company's share capital before the transaction.

The purpose of the funds raised is to finance:

- the construction of a PET biorecycling plant using the Carbios' enzymatic technology for recycling 100% of PET with an estimated production capacity of 50,000 metric tons per year, amounting to approximately 65% of the net proceeds from the issue; it is specified that the part of the investment in the PET biorecycling plant not financed by the net proceeds of the issue will be, when the time comes, through other sources of financing;

- the Company's operating expenses, amounting to approximately 5% of the net proceeds of the issue;

- operating expenses related to the demonstration plant located in Clermont-Ferrand, representing approximately 5% of the net proceeds of the issue;

- expenses related to R&D activities specific to PET and PLA and the deployment of the Company's Research activities into other polymers and/or other applications, amounting to approximately 10% of the net proceeds of the issue; and

- streamlining of the Company's portfolio to develop its biodegradation technologies beyond PLA, up to approximately 15% of the net proceeds of the issue.

In 2021, Carbiolice obtained two subsidies from the European Commission for the PRESERVE and SISTERS projects, financing two R&D projects, for respective amounts of €8,000 thousand, of which €331 thousand for Carbiolice, and €8,340 thousand, of which €86 thousand for Carbiolice.

On November 25, 2021, Carbios announced that it had obtained European funding of €3.3 million (including €3 million for the Company) in the form of a subsidy through the LIFE program, alongside its partners T.EN Zimmer GmbH and Deloitte. T.EN Zimmer GmbH provides its expertise on the repolymerization of monomers in 100% recycled PET and Deloitte on the analysis of the environmental performance (in particular via the Life Cycle Analysis) of the process from plastic and textile waste. The European Commission's LIFE program is a large grant program aimed at supporting innovative projects with a low environmental impact and a proven industrial deployment capacity. Carbios is fully in line with the European Commission's objectives through its C-ZYME® technology. This financing, composed of subsidies, will be paid in several tranches over the duration of the project with: a first pre-financing of 40% within 30 days of the signature of the contract, i.e. €1,320 thousand received on November 5, 2021, of which €32 thousand goes to partners and €1,288 thousand to CARBIOS; and a second pre-financing of 40% subject to having used 100% of the pre-financing deposit previously paid, i.e. €1,320 thousand received on August 8, 2023, of which €32 thousand goes to partners and €1,288 thousand to CARBIOS.

On December 20, 2021, Carbios and the European Investment Bank (EIB) announced the signature of a €30 million loan agreement supported by the European Commission's InnovFin energy demonstration program. The objective of this type of financing is to support innovative projects with high potential, developed by companies aiming to achieve major changes in line with the EU's climate objectives and contributing to the leadership of European industry in the development of sustainable technologies. This loan of €30 million, disbursed in a single installment by the EIB on June 29, 2022, carries a fixed annual interest of 5%, with a maturity of 8 years. This agreement is supplemented by a share subscription warrant agreement under the terms of which Carbios will issue 2.5% of the fully diluted share capital in the form of share subscription warrants for the benefit of the EIB, including 1.25% with an exercise price of €40 per share and 1.25% with an exercise price of €38.8861 per share, corresponding to the volume-weighted average price of the Company's ordinary share during the last three (3) trading days prior to the fifth day preceding the signature date. The creation and issue of these EIB share subscription warrants, and therefore the disbursement of the loan of €30 million, were subject to a vote by Carbios' Extraordinary Shareholders' Meeting of February 2, 2022 with a delegation of authority to the Board of Directors, and a decision of the Company's Board of Directors using this delegation of authority.

Carbios, leader and coordinator of the project, announced in May 2023 the granting of a total of €11.4 million by the State as part of the OPTI-ZYME project of France 2030 operated by ADEME, of which €8.2 million directly for Carbios (€3.1 million in subsidies and €5 million in repayable advances) and €3.1 million for its academic partners INRAE, INSA and CNRS (via the mixed service TWB and research TBI units). This financing, which consists of subsidies and repayable advances, will be paid in several tranches over the duration of this project, including an initial tranche of 15%, the equivalent of €1.2 million, received by CARBIOS on December 5, 2023.

On July 11, 2023, Carbios announced the success of its capital increase with preferential subscription rights maintained for an amount of approximately €141 million. The costs of the capital increase are deducted directly from the issue premium, bringing the total amount after deduction to €133 million.

At the date of filing of this Universal Registration Document and on the basis of cash flow items and its forecast operating expenses, the Company considers that it is in a position to meet its future payments beyond the next twelve months.

Expected sources of funding

In addition, as part of the LIFE project, financed by the European Commission, Carbios is eligible for a subsidy of €3.2 million, of which €2.6 million has already been received to date.

As part of the Whitecycle project, led by Michelin (leader), financed by the European Commission and starting on July 1, 2022, for a period of 48 months, Carbios will be able to obtain a subsidy of up to €564 thousand (out of the €7 million allocated to the complete project). In this respect, the Company has received an advance of €197 thousand (35%).

As part of the OPTI-ZYME project financed by ADEME, Carbios is expected to receive a total of €8.2 million paid in several tranches over the duration of this project, including an initial tranche of 15%, in the amount of €1.2 million, has already been received by CARBIOS on December 5, 2023.

2.2.4 INVESTMENTS

The Group has financed all of its investments through its equity capital, and also received in 2014 an interest-free loan from the FIAD of €605 thousand( ) for the acquisition of a pre-pilot laboratory. Since 2017, the Group has also financed equipment leasing for the implementation of its PET enzymatic recycling pilot for a total of €605 thousand[1], for its industrial production line and extrusion equipment for €1,064 thousand and lastly €5,799 thousand for the deployment of its industrial demonstration plant at the Cataroux site (the financing had been signed with several banks).

The investments made or in progress are all located in France.

2.2.4.1 Main investments made by the Group over the last three fiscal years

2.2.4.1.1 Laboratory, pilot plant, demonstration plant and PET biorecycling plant

Investments in equipment for its laboratories continued, amounting to €293 thousand in 2021, €436 thousand in 2022 and €214 thousand in 2023 (offset by the scrapping of part of the Carbiolice laboratory following its relocation at the beginning of 2023), bringing the total to €2,938 thousand at December 31, 2023. To this is added €605 thousand in equipment for the Carbios pilot, financed by leasing during the 2020 and 2021 fiscal years.

In addition, the Group invested €3,250 thousand in the equipment for its industrial demonstration plant at December 31, 2023, with an additional €5.8 million in equipment refinanced under finance leases.

Lastly, an amount of €22,322 thousand was invested for the construction of the PET biorecycling plant located in Longlaville, bearing in mind that only expenses incurred after November 1, 2022 have been capitalized.

[1] Please refer to section 5.1.4.13 of this Universal Registration Document.

2.2.4.1.2 Patents

The Group also dedicates a large part of its resources to the protection of its intellectual property by filing patent applications at an early stage.

At the end of 2023, the Carbios group's intellectual property portfolio included 58 patent families (including one under exclusive worldwide license from the CNRS and the University of Poitiers). At the end of 2023, Carbiolice's intellectual property portfolio included 12 patent families, all of which protect innovation in the production of enzymated biodegradable plastics.

At December 31, 2023, gross investments made by the Group in patents amounted to €3,829 thousand, of which €669 thousand in 2021, €694 thousand in 2022 and €696 thousand in 2023.

2.2.4.1.3 Other investments

As the Group has centralized its activities on the Cataroux site since the beginning of the second half of 2022 with the reception of Carbiolice from 2023, it carried out development and fitting work for a total of €18,456 thousand, of which €7,988 thousand in 2021, €5,678 thousand in 2022 and €4,171 thousand in 2023.

At the same time, the Group invested €709 thousand in the development and renewal of its IT system, with €113 thousand invested in 2023, €136 thousand in 2022 and €70 thousand in 2021. For the furniture item, €44 thousand were invested in 2023, €143 thousand in 2022 and €35 thousand in 2021 for a total of €349 thousand.

Lastly, Carbiolice invested a total of €3,644 thousand in its production line, of which €638 thousand in 2021 and €93 thousand in 2022.

With respect to the other fixed asset items, the Group's companies have not made any other significant investments over the last three fiscal years.

2.2.4.2 Main investments in progress

In accordance with accounting standards, the item "Property, plant and equipment in progress", which amounted to €22.6 million at the end of 2023, consists mainly of the costs relating to the project to build the PET biorecycling plant mentioned above (2.2.4.1.1).

Finally, the Group undertook a major project that should result in the implementation of an ERP, and capitalized €264 thousand in 2023 including personnel expenses (for €59 thousand) and external consultants (for €204 thousand).

2.2.4.3 Environmental impact of the use of property, plant and equipment

To the best of the Company's knowledge, no factor of an environmental nature has influenced the Group's operations in recent years or is likely to influence them significantly, directly or indirectly.

The Company's business activity and that of its subsidiaries is subject to environmental laws and regulations.

At the time of their acquisition, all real estate assets held by the Group were subjected to the diagnostics required under the applicable regulations.

2.3 ANALYSIS OF THE BUSINESS AND THE COMPANY'S RESULTS

Audited separate financial statements – French standards *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
Operating income (*)	7,446	6,800
Of which income derived from contracts with CARBIOLICE	*783*	*165*
Of which income derived from contracts with CARBIOS 54	*120*	-
Of which income from rebilling to CARBIOS 54	*2,072*	*2,744*
Operating expenses	28,537	25,239
OPERATING INCOME (LOSS)	**(21,091)**	**(18,440)**
Financial income	2,748	(1,060)
CURRENT INCOME BEFORE TAXES	**(18,343)**	**(19,500)**
Extraordinary gain or loss	(102)	(165)
Income tax	(2,528)	(2,538)
PROFIT OR LOSS	**(15,917)**	**(17,127)**

2.3.1 KEY FACTORS WHICH HAVE SIGNIFICANT IMPACT ON CARBIOS' REVENUE

2.3.1.1 Key factors significantly affecting the Company's operating revenue

Carbios is an innovative green chemistry company whose goal is to accelerate the green revolution in chemistry for our everyday lives by re-thinking the life cycle of plastic and textile polymers. Its main activity thus consists in searching for innovative industrial bioprocesses to optimize the technical, economic and environmental performance of polymers by exploiting the biological properties of enzymes and developing these bioprocesses to license them to industrial partners for their commercial use and marketing.

The Company's operations and results are mainly impacted by the R&D expenses for the projects it undertakes. The Company also dedicates a large part of its resources to the protection of its intellectual property by filing patent applications at an early stage.

The Company's original business model is based on the industrialization and marketing of its products and/or enzymes, its technologies and its bioprocesses through the concession of operating licenses for its know-how and its intellectual property to major manufacturers in the sectors concerned by the Company's innovations. The Company thus intends to identify one or more leading manufacturer(s), offering the best potential for the industrial and commercial use of the innovation.

The subsidies granted for the OPTI-ZYME program were released according to the project's progress and the submission of reports to ADEME regarding the completion of each key stage stipulated in the signed framework agreement. The payment of the subsidies is conditional upon the completion of each key stage under the relevant conditions, depending on the deliverables:

(In euros)	**KS1 (50%)**	**KS2 (30%)**	**KS3 (0%)**	**KS4 (20%)**	**Total**
Planned payment year	**2023**	**2024**	**2025**	**2026**	
Subsidy	€1,559,238	€935,543	€0	€623,695	€3,118,476
Repayable advance	€2,521,538	€1,512,923	€0	€1,008,615	€5,043,076
TOTAL	**€4,080,776**	**€2,448,466**	**€0**	**€1,632,310**	**€8,161,552**

The activities of Carbios since its creation and until 2023 (with the exception of 2016) generated operating losses insofar as the projects developed require increasing financial needs, with no operating revenues recorded before the first license agreements. All R&D expenses are thus recognized as operating expenses for the fiscal year in which they are incurred.

In 2016, the Company founded the joint venture Carbiolice with Limagrain Ingrédients and the SPI ("Sociétés de Projets Industriels") investment fund for which the management company is Bpifrance Investissement. This company took over the production and sale of granules for the bio-sourced and biodegradable plastic products of Limagrain Ingrédients. It intends to develop this business through Carbios' technologies. To this effect, a license agreement for Carbios' patents and know-how was signed on August 30, 2016 between SAS Carbiolice and Carbios (supplemented by an amendment on June 28, 2018). With this agreement, Carbios recorded its first licensing revenues in the 2016 fiscal year.

Since January 1, 2012, the Company has been eligible for Research Tax Credit (CIR), a scheme which offers a refundable tax credit to companies investing in R&D. The recognition of this tax credit thus reduces the impact of operating expenses on the Company's net income.

Research Tax Credit (CIR) *(in euros)*	**12/31/2023**	**12/31/2022**
Recognized as income	2,527,503	2,537,656
Cashed	2,521,913	2,264,860

2.3.1.2 Government, economic, budgetary, monetary or political factors that have materially affected or could materially affect, directly or indirectly, the Issuer's operations

For the Thanaplast™ project, the Company obtained 5-year funding from Bpifrance, with its academic and industrial partners. At December 31, 2017, this funding had been fully released.

The Company's future financing needs will depend on several factors, including the following:

- the required investments in laboratory equipment, human resources and partnerships for the pre-industrial development of the processes;
- the signing of license agreements in the fields targeted by the bioprocesses developed by the Company, which can generate income in the short or medium term.

As part of the CE-PET project, the Company obtained financial assistance from ADEME over 4 years, 100% of which had been received on at December 31, 2023 following the full validation of the project.

Recent regulations on waste, such as the Energy Transition Law for Green Growth, the "France 2030" investment project and the "Circular Economy" package adopted by the European Commission (section 1.2.2 of this Universal Registration Document) can also present opportunities for the Company, particularly in terms of revenue.

2.3.2 OPERATING REVENUES

The projects conducted by the Company generated licensing revenues for the first time in 2016. Other operating revenues mainly stem from operating subsidies and the provision of services to the subsidiary Carbiolice recognized at the end of the fiscal years. Operating revenues amounted to €7,446 thousand in 2023 (compared with €6,800 thousand in 2022).

Thus, in respect of the fiscal year 2023, the Company recorded income of €468 thousand from the subsidy granted by ADEME, corresponding to the first installment for the OPTI-ZYME project as well as €1,126 thousand through the European Commission LIFE program launched at the end of 2021 and €21 thousand for the WHITECYCLE project.

In 2023, the Company recognized income of €600 thousand in respect of a service agreement entered into with its subsidiary CARBIOLICE on January 1, 2023, and tacitly renewable.

The Company also rebilled a total of €182 thousand to its subsidiary corresponding to various expenses, mainly for fees regarding regulatory matters.

In 2023, the Company recognized income of €120 thousand in respect of a service agreement entered into with CARBIOS 54.

Since October 1, 2021, the Company has decided to capitalize its development expenses related to the PET recycling project. Capitalized production in the amount of €1,637 thousand was, therefore, recognized in this respect in the past fiscal year.

Lastly, the Company recognized €2,444 thousand in operating income in respect of reversals of depreciation, amortization and provisions, transfers of expenses, mainly consisting of rebilling sent to Carbios 54 relating to the provision of personnel for €1,891 thousand.

Other operating income amounted to €1,062 thousand.

2.3.3 RESULTS

2.3.3.1 Operating expenses

The Company's operating expenses mainly consist of R&D costs and salaries. For the past two fiscal years, they break down as follows:

Audited separate financial statements – French standards *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
OTHER COSTS AND EXTERNAL EXPENSES		
External studies, subcontracting and scientific consultations	2,587	3,432
Consumables	395	315
Supplies	589	354
Rentals, maintenance and upkeep expenses	3,136	1,878
Expenses and fees related to industrial property	268	74
Fees	5,491	6,317
Business travel	650	614
Miscellaneous expenses	588	926
TOTAL OTHER EXPENSES AND EXTERNAL EXPENSES	**13,704**	**13,910**
Taxes and similar payments	124	138
Salaries and wages	8,500	6,580
Social security contributions	3,368	2,510
Depreciation of fixed assets	2,587	1,910
Other expenses	255	191
TOTAL OPERATING EXPENSES	**28,537**	**25,239**

In 2023, Carbios spent €28,537 thousand on operational activities (compared to €25,239 thousand in 2022), of which 52% concerned RDI (Research & Development and Industrialization).

As such, these are operating expenses that were directly allocated to research and development. In accordance with the Company's roadmap and priorities, this effort has mainly focused on the development of the enzymatic recycling process for PET plastics and fibers. The decrease in external study, subcontracting and scientific consulting items is mainly due to the launch of the OPTI-ZYME project financed by ADEME, where the Group's academic partners are financed directly through the said project. Fee expenses have decreased because the plant's engineering expenses are no longer recognized as expenses at Carbios in 2023. In 2022, approximately €3 million directly related to the PET biorecycling plant project linked to Carbios 54, a subsidiary created by the Company in 2022 to build and operate the PET biorecycling plant. Nevertheless, on a like-for-like basis, the Company has sought its advice more on many subjects (recruitment, QHSE, IT) in order to continue its development and structuring.

Lastly, personnel expenses (Salaries and wages, and social security contributions) continue to increase significantly in line with the significant growth in the Company's headcount, in view of its structuring.

In general, R&D expenses include the expenses related to the following:

- external studies conducted in collaboration with the Company's academic partners and the outsourcing of a certain amount of technological work to its partners for the development of processes dedicated to the end-of-life of plastic materials;
- research personnel costs, including salaries, emoluments and social contributions, as well as environment expenses such as workstations and travel;
- scientific consultancy contracts with scientific experts and advisers who assist the Company in defining and supervising its R&D programs;
- expenses and fees related to industrial property; and
- the structural costs of the Company's R&D department.

No sumptuary expenditure was recorded for fiscal year 2023, and expenses not deductible from corporate income tax amounted to €117,510 for fiscal year 2023 (Article 223 quater and 39-4 of the French General Tax Code).

2.3.3.2 Financial income and expenses

The Company's financial income consists of interest on money-market investments and term account deposits. With the aim of optimizing returns on its available cash, the Company opened term deposit accounts for a total amount of €172 million during the fiscal year, allowing it to benefit from attractive returns as well as guaranteed capital that is available at all times. Cash is therefore systematically invested in risk-free money market products.

The Company obtained two loans from Bpifrance, for a total of €3 million at a rate of 3.03% for the first on November 23, 2018 and 4.34% for the second on November 20, 2019. In addition, a State-guaranteed loan of €1 million was released on August 31, 2020 at a rate of 0.25%. The conditional advances granted by Bpifrance (OSEO) and ADEME also bear interest with discount rates of 2.67% and 0.84% respectively.

Finally, the Company took out a loan for €30 million with the European Investment Bank on June 29, 2022 at the rate of 5% (1st maturity on December 29, 2022).

Financial income - Audited separate financial statements *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
Financial income	4,430	134
Financial expenses	1,681	1,194
FINANCIAL INCOME	**2,748**	**(1,060)**

Financial income mainly comes from investments of available cash amounting to €3,778 thousand.

In 2023, financial expenses mainly consisted of interest on EIB loans for €1.5 million.

2.3.3.3 Net income

Net income - Audited Separate Financial Statements *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
Current income before taxes	**(18,343)**	**(19,500)**
Extraordinary gain or loss	**(102)**	**(165)**
Income tax (tax credit)	(2,528)	(2,538)
PROFIT OR LOSS	**(15,917)**	**(17,127)**

For the 2023 fiscal year, the extraordinary gain or loss was negative by €102 thousand, mainly composed of a loss on treasury shares of €79 thousand.

There was also a sale-leaseback transaction for an amount of €4,262 thousand relating to investments made on the industrial demonstration plant, which had no impact on extraordinary gain or loss since it did not generate any capital gains or losses.

Carbios also benefited from a Research Tax Credit of €2,528 thousand (compared to €2,538 thousand in 2022), calculated on the basis of eligible expenses for the Research and Development undertaken by the Company in 2023.

Income statement for the last five financial years

Income statement for the last five financial years	2023	2022	2021	2020	2019
Share capital (in euros)	11,786,048	7,869,866	7,825,630	5,673,708	4,833,226
Number of ordinary shares	16,837,212	11,242,666	11,179,472	8,105,297	6,904,609
Number of shares with priority dividends	-	-	-	-	-
Maximum number of shares to be created by:					
conversion of bonds:	-	-	-	-	-
exercise of:					
BSA	318,158	298,528	179,600	208,400	208,400
BSPCE	686,498	674,937	518,048	478,423	169,530
AGAP	84,150	-	-	-	-
OPERATIONS & PROFIT AND LOSS FOR THE PERIOD (thousands of euros)					
Revenue excluding taxes	1,747	1,227	968	1,346	1,025
Income before tax, employee profit-sharing, additions to and reversals of depreciation, amortization and provisions	(15,799)	(17,462)	(12,637)	(7,179)	(4,201)
Additions to and reversals of depreciation, amortization and provisions	2,645	2,203	764	455	349
Income tax	(2,528)	(2,538)	(2,265)	(1,488)	(800)
Employee profit-sharing	-	-	-	-	-
Profit and loss for the period	(15,917)	(17,127)	(11,136)	(6,146)	(3,749)
Distributed earnings	-	-	-	-	-
EARNINGS PER SHARE (in euros)					
Profit and loss before additions to and reversals of depreciation, amortization and provisions	(0.94)	(1.55)	(1.13)	(0.89)	(0.61)
Profit and loss for the period	(0.95)	(1.52)	(1.00)	(0.76)	(0.54)
Dividend paid per share	-	-	-	-	-
STAFF					
Average headcount	95	66	46	31	24
Payroll for the year (in thousands of euros)	8,500	6,580	5,277	2,904	2,018
Amount of employee benefits (in thousands of euros)	3,367	2,510	2,077	1,288	912

The Company has not distributed any dividends or other income (Art. 243 bis of the French General Tax Code) during the last three fiscal years.

2.4 CASH FLOW AND FINANCIAL STRUCTURE OF THE COMPANY

Statement of financial position - Audited Separate Financial Statements *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
FIXED ASSETS		
Intangible assets	**5,370**	**3,376**
Concessions, patents, licenses, software	1,795	1,681
Pending patents	0	0
Development costs	3,576	1,696
Property, plant and equipment	**20,320**	**21,652**
Office and IT hardware	459	344
Laboratory equipment and material	4,311	2,035
Fixtures and fittings	15,317	12,652
Property, plant and equipment under construction	233	6,621
Advances on assets under construction	0	0
Financial assets	**67,258**	**43,182**
Equity interests	38,381	38,381
Receivables related to equity investments	27,561	3,785
Deposits and guarantees	339	325
Liquidity contract	512	563
Treasury shares	465	129
TOTAL FIXED ASSETS	**92,948**	**68,211**
CURRENT ASSETS		
Laboratory raw material inventories	0	52
Receivables	2,730	419
State receivables	4,256	3,548
Subsidies receivable	64	207
Other receivables	3,389	1,218
Subscribed capital - called up, not paid up	3	233
Cash, cash equivalents and marketable securities	191,266	101,041
Prepaid expenses	352	183
TOTAL CURRENT ASSETS	**202,060**	**106,901**
Deferred expenses	413	448
OVERALL TOTAL	**295,422**	**175,559**

Statement of financial position - Audited Separate Financial Statements *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
EQUITY		
Share capital	11,786	7,870
Issue, merger and contribution premiums	276,569	146,967
Retained earnings	(28,263)	(11,136)
Investment subsidies	604	249
Profit and loss for the period	(15,917)	(17,127)
TOTAL EQUITY	**244,779**	**126,823**
OTHER EQUITY CAPITAL		
CONDITIONAL ADVANCES	**4,464**	**3,707**
PROVISIONS FOR CONTINGENCIES AND CHARGES		
PROVISIONS FOR CHARGES	**384**	**292**
DEBT		
Loans	34,904	35,974
Bank overdrafts	-	750
Trade and other payables	4,787	4,534
Tax and social liabilities	3,115	2,680
Other liabilities	2,534	180
Deferred income	455	618
TOTAL LIABILITIES	**45,795**	**44,736**
OVERALL TOTAL	**295,422**	**175,558**

2.4.1 CAPITAL

Audited Separate Financial Statements *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
Equity	244,779	126,823
Other equity capital (conditional advances)	4,464	3,707
Loans and financial liabilities	35,288	37,016
Cash and cash equivalents	191,266	101,041
Debt (Cash) – Net position	(155,978)	(64,026)
Net financial debt to equity	N/A	N/A

If the projects are successful, the conditional advances recognized as quasi-equity will become liabilities to be repaid.

At December 31, 2023, conditional advances totaled €4,464 thousand.

2.4.2 CASH FLOW STATEMENT

2.4.2.1 Comments on working capital and working capital requirements

Working capital is positive at €218,702 thousand, up €120,599 thousand compared to 2022, due to the difference between:
- sustainable resources for the fiscal year up following the capital increase carried out in 2023; and
- the Company's needs, i.e. gross capital expenditure of €4,055 thousand and loan repayments.

The working capital requirement is positive at €27,436 thousand (cash consumption), up €30,374 thousand compared to fiscal year 2022, due to:
- the increase in current account items for its subsidiaries, (€23,776 thousand), trade receivables (€2,310 thousand) and other receivables (€3,250 thousand) in connection with the sale agreement for land; and
- the increase in trade payables and tax and social liabilities;

With working capital of €218,702 thousand and a working capital cash requirement of €27,436 thousand, the cash position is positive at €191,266 thousand at December 31, 2023.

2.4.2.2 Information on terms of payment

Invoices received and issued, outstanding and past due at the fiscal year closing date (table required under item I, Article D. 441-4 of the French Commercial Code):

	Article D. 4411.1: Invoices received, outstanding and past due at the closing date						Article D. 4411.2: Invoices issued, outstanding and past due at the closing date					
	0 days (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	91 days and more	Total (1 day and more)	0 days (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	91 days and more	Total (1 day and more)
(A) OVERDUE PAYMENT PERIODS												
Number of invoices involved						473						2
Total amount of invoices involved, excl. tax		926,700	195,188	29,270	34,180	1,185,339		192,598				192,598
Percentage of the year's total purchases, excl. tax		3.52%	0.74%	0.11%	0.13%	5.13%						
Percentage of revenue excluding tax of the fiscal year								11.03%				11.03%
(B) INVOICES EXCLUDED FROM (A) RELATING TO DISPUTED OR UNRECOGNIZED PAYABLES AND RECEIVABLES												
Number of invoices excluded												
Total amount of excluded invoices												
(C) CONTRACTUAL OR LEGAL PAYMENT TERMS USED (ARTICLE L. 441-6 OR ARTICLE L. 443-1 OF THE FRENCH COMMERCIAL CODE)												
Payment terms used for the calculation of overdue payments	Contractual terms: invoice due date						Contractual terms: 30 days from invoice date					

It should be noted that any invoice for which the payment period indicated by the supplier is "on receipt" is automatically considered as not paid in the "past due" term, given the Carbios invoice settlement process (and internal control), which requires the advance verification and validation of invoices and therefore several days of processing after receipt in order to proceed with payment.

2.4.2.3 Cash flow statement

Audited Separate Financial Statements *(In thousands of euros)*	**12/31/2023**	**12/31/2022**
Cash flows related to operations (A)		
Profit and loss for the period	(15,917)	(17,127)
Depreciation and amortization (including investment subsidies)	2,674	2,201
Gains or losses on asset disposals	2	141
Changes in working capital requirements for operations	(26,275)	1,732
Net cash absorbed by operations	***(39,516)***	***(13,053)***
Cash flows related to investments (B)		
Acquisition of property, plant and equipment and intangible assets	(7,456)	(11,639)
Acquisition of non-current financial assets	(391)	(4,368)
Disposals of fixed assets	4,277	1,575
Change in fixed asset liabilities	(314)	(2,289)
Net cash absorbed by investments	***(3,884)***	***(16,721)***
Net cash flow from financing activities (C)		
Net proceeds from the issuance of shares and BSAs	133,518	670
Inflows from loans, net of repayments and expenses	(1,626)	29,018
Inflows from repayable advances and investment subsidies	1,733	243
Net cash from financing activities	***133,625***	***29,931***
Change in cash and cash equivalents (A+B+C)	***90,226***	***158***
Cash and cash equivalents at the beginning of the period	101,041	100,884
Cash and cash equivalents at end of period	**191,266**	**101,041**

In 2023, the cash flow absorbed by the Company's operations amounted to €39,516 thousand. This was notably due to the accounting loss recognized, along with the €23,776 thousand increase in current account advances for its subsidiaries.

Regarding investment flows, they absorbed €3,884 thousand mainly as part of the installation of the industrial demonstration plant on the Cataroux site, building improvements, and the renovation of offices.

Financing activities generated €133,625 thousand in cash, mainly consisting of the capital increase carried out during the fiscal year.

Concerning the Company's financial risks, please refer to section 3.2.2 of this Universal Registration Document.

2.4.3 FINANCING

At the date of this Universal Registration Document, the Company does not have any bank loans.

On December 19, 2012, Carbios received a grant from Bpifrance consisting of €3.7 million in conditional advances recognized as equity (and €3.1 million in subsidies) spread over a period of 60 months from 2012 to 2017. The grants were released according to the project's progress and the submission of reports regarding the completion of each key stage stipulated in the framework agreement signed with Bpifrance.

In the event that the research program is successful, the Company had undertaken to reimburse the repayable advance to Bpifrance Innovation for an amount of €4.5 million (with an annual discount rate of 2.67%) upon achieving cumulative income of €10 million generated by the exploitation of products resulting from the Thanaplast™ program.

In addition, as soon as the reimbursement of the repayable advance has been completed, the agreement stipulates that the Company shall pay a bonus equal to 4% of its revenue generated by the utilization of the products if it exceeds a cumulative amount of €100 million. This additional payment is however subject to a time limit (applicable only for a period of five consecutive years from the date of the end of the reimbursement of the advance), and an amount cap (ceiling of €7.1 million).

On November 23, 2018, the Company obtained an innovation loan of €1,500 thousand from Bpifrance at a variable rate of 3.03% over a 7-year period to finance the intangible expenses linked to the industrial and commercial launch of an innovation. After a grace period of 8 quarters, constant capital repayments of €75 thousand will take place from March 31, 2021 to December 31, 2025.

On November 20, 2019, for the same project, the Company obtained a new 7-year loan of €1,500 thousand from Bpifrance at a variable rate of 4.34%. After a grace period of 8 quarters, the constant capital repayments of €75 thousand will take place from September 30, 2022 to June 30, 2027.

On April 8, 2019, the Company obtained a grant from ADEME for the CE-PET project, composed of repayable advances totaling €3,102 thousand and subsidies of €1,034 thousand spread over a 48-month period from 2018 to 2022. The grants were released according to the project's progress and the submission of reports regarding the completion of each key stage stipulated in the framework agreement signed with ADEME. The agreement provides for a total grant rate of 60% that is applied to total eligible expenditures and used for each key stage, 25% of which is a subsidy and 75% a repayable advance (with conditions).

Following the validation of key stage 4 and more generally the success of the project by ADEME at the end of 2022, the Company received on April 27, 2023 the expected balance of subsidy of €207 thousand and a conditional advance of €620 thousand and thus received the total amount of the program's assistance, i.e. €1,034 thousand in subsidies and €3,102 thousand in conditional advances. The repayment of this last amount is scheduled in four annual installments of €802 thousand, including €776 thousand in capital and €27 thousand in interest. The first payment was made on December 29, 2023. And the outstanding capital therefore amounts to €2,327 thousand at December 31, 2023.

Since 2019, the Company financed major capital expenditures on laboratory equipment for the set-up of its pilot through finance leasing totaling €605 thousand.

On July 23, 2020, Carbios announced the success of a capital increase through an offering to qualified investors by way of an accelerated book-building process. The Company issued 1,028,572 new ordinary shares each with a nominal value of €0.70, at a price of €26.25 per share, issue premium included, for a total amount of €27,000,015, which represents 14.79% of the Company's share capital prior to the transaction on an undiluted basis, i.e. a dilution of 12.89%. Strategic shareholders L'Oréal, through its private equity fund BOLD (Business Opportunities for L'Oréal Development), and Michelin Ventures subscribed to the capital increase in accordance with the undertakings they had made, for a total amount of €3.9 million, which represents 148,571 new shares or 14.44% of the total number of new shares issued as part of this capital increase.

In May 2021, Carbios announced the success of a capital increase carried out with cancellation of shareholders' preferential subscription rights by way of a public offering and with a priority period. The Company issued 3,000,000 new ordinary shares with a par value of €0.70 per share, at a unit price of €38, including the issue premium, for a total amount of €114 million, representing 36.7% of the Company's share capital before the transaction.

The purpose of the funds raised is to finance:

- the construction of a PET biorecycling plant using the Carbios' enzymatic technology for recycling 100% of PET with an estimated production capacity of 50,000 metric tons per year, amounting to approximately 65% of the net proceeds from the issue; it is specified that the part of the investment in the PET biorecycling plant not financed by the net proceeds of the issue will be, when the time comes, through other sources of financing;
- the Company's operating expenses, amounting to approximately 5% of the net proceeds of the issue;
- operating expenses related to the demonstration plant located in Clermont-Ferrand, representing approximately 5% of the net proceeds of the issue;
- expenses related to R&D activities specific to PET and PLA and the deployment of the Company's Research activities into other polymers and/or other applications, amounting to approximately 10% of the net proceeds of the issue; and
- streamlining of the Company's portfolio to develop its biodegradation technologies beyond PLA, up to approximately 15% of the net proceeds of the issue.

On November 25, 2021, Carbios announced that it had obtained European funding of €3.3 million (including €3 million for the Company) in the form of a subsidy through the LIFE program, alongside its partners T.EN Zimmer GmbH and Deloitte. T.EN Zimmer GmbH provides its expertise on the repolymerization of monomers in 100% recycled PET and Deloitte on the analysis of the environmental performance (in particular via the Life Cycle Analysis) of the process from plastic and textile waste. The European Commission's LIFE program is a large grant program aimed at supporting innovative projects with a low environmental impact and a proven industrial deployment capacity. Carbios is fully in line with the European Commission's objectives through its C-ZYME® technology. This financing, composed of subsidies, will be paid in several tranches over the duration of the project with: a first pre-financing of 40% within 30 days of the signature of the contract, i.e. €1,320 thousand received on November 5, 2021, of which €32 thousand goes to partners and €1,288 thousand to CARBIOS; and a second pre-financing of 40% subject to having used 100% of the pre-financing deposit previously paid, i.e. €1,320 thousand received on August 8, 2023, of which €32 thousand goes to partners and €1,288 thousand to CARBIOS;

On December 20, 2021, Carbios and the European Investment Bank (EIB) announced the signature of a €30 million loan agreement supported by the European Commission's InnovFin energy demonstration program. The objective of this type of financing is to support innovative projects with high potential, developed by companies aiming to achieve major changes in line with the EU's climate objectives and contributing to the leadership of European industry in the development of sustainable technologies. This loan of €30 million, disbursed in a single installment by the EIB on June 29, 2022, carries a fixed annual interest of 5%, with a maturity of 8 years. This agreement is supplemented by a share subscription warrant agreement under the terms of which Carbios will issue 2.5% of the fully diluted share capital in the form of share subscription warrants for the benefit of the EIB, including 1.25% with an exercise price of €40 per share and 1.25% with an exercise price of €38.8861 per share, corresponding to the volume-weighted average price of the Company's ordinary share during the last three (3) trading days prior to the fifth day preceding the signature date. The creation and issue of these EIB share subscription warrants, and therefore the disbursement of the loan of €30 million, were subject to a vote by Carbios' Extraordinary Shareholders' Meeting of February 2, 2022 with a delegation of authority to the Board of Directors, and a decision of the Company's Board of Directors using this delegation of authority.

Carbios, leader and coordinator of the project, announced in May 2023 the granting of a total of €11.4 million by the State as part of the OPTI-ZYME project of France 2030 operated by ADEME, of which €8.2 million directly for Carbios (€3.2 million in subsidies and €5 million in repayable advances) and €3.2 million for its academic partners INRAE, INSA and CNRS (via the mixed service TWB and research TBI units). This financing, which consists of subsidies and repayable advances, will be paid in several tranches over the duration of this project, including an initial tranche of 15%, the equivalent of €1.2 million, received by CARBIOS on December 5, 2023.

On July 11, 2023, Carbios announced the success of its capital increase with preferential subscription rights maintained for an amount of approximately €141 million. The costs of the capital increase are deducted directly from the issue premium, bringing the total amount after deduction to €133 million.

At the date of filing of this Universal Registration Document and on the basis of cash flow items and its forecast operating expenses, the Company considers that it is in a position to meet its future payments beyond the next twelve months.

Expected sources of funding

In addition, as part of the LIFE project, financed by the European Commission, Carbios is eligible for a subsidy of €3.2 million, of which €2.6 million has already been received to date.

Lastly, as part of the Whitecycle project, led by Michelin (leader), financed by the European Commission and starting on July 1, 2022, for a period of 48 months, the Company will be able to obtain a subsidy of up to €564 thousand (out of the €7 million allocated to the complete project). In this respect, the Company has received an advance of €197 thousand (35%).

As part of the OPTI-ZYME project financed by ADEME, Carbios is expected to receive a total of €8.2 million paid in several tranches over the duration of this project, including an initial tranche of 15%, in the amount of €1.2 million, has already been received by CARBIOS on December 5, 2023.

2.4.4 INVESTMENTS

The Company has financed all of its investments through its equity capital, and also received in 2014 an interest-free loan from the FIAD of €605 thousand[1] for the acquisition of a pre-pilot laboratory. From 2019 to 2021, the Company also leased equipment for the implementation of its PET enzymatic recycling pilot for a total of €605 thousand. In addition, the Company entered into a second sale-leaseback agreement for a total amount of €5.8 million with several banks to finance part of the equipment for its industrial demonstration plant.

The investments made or in progress are all located in France.

2.4.4.1 Main investments made by the Company in the past three fiscal years

2.4.4.1.1 Laboratory, pilot plant and demonstration plant

Investments in equipment for its laboratories continued, amounting to €231 thousand in 2021, €389 thousand in 2022 and €206 thousand in 2023, bringing the total to €2,652 thousand at December 31, 2023, plus €605 thousand of equipment under finance leases in 2020 and 2021.

In addition, the Company had invested €3,301 thousand in equipment for its industrial demonstration plant as of December 31, 2023, with an additional €5.8 million in equipment already refinanced under finance leases.

2.4.4.1.2 Patents

The Company also dedicates a large part of its resources to the protection of its intellectual property by filing patent applications at an early stage.

At the end of 2023, Carbios Group's intellectual property portfolio included 58 patent families (including one under exclusive worldwide license from the CNRS and the University of Poitiers) of which 27 protecting its innovation in the enzymatic recycling of PET plastics and fibers as well as 28 patent families, all of which protect innovation in the production of enzymated biodegradable plastics.

At December 31, 2023, gross investments made by Carbios in patents amounted to €3,443 thousand, of which €600 thousand in 2021, €611 thousand in 2022 and €573 thousand in 2023.

[1] Please refer to section 5.1.4.13 of this Universal Registration Document.

2.4.4.1.3 Equity interests

At December 31, 2023, the Company held nearly 100% of the share capital of Carbiolice, created in 2016 and whose registered office is located in Clermont-Ferrand, France (Department 63), following the acquisition by the Company of the entire stake of Limagrain Ingrédients and the SPI fund managed by Bpifrance Investissement in the share capital of Carbiolice.[1] Carbiolice shares thus appear on Carbios' statement of financial position for a total amount of €38,371,461. In addition, at December 31, 2023 Carbios had committed an amount of €4.7 million on behalf of its subsidiary Carbios 54 (receivable formalized through a current account advance agreement).

On May 30, 2022, the Company subscribed for 100% of the share capital of €10,000, thus granting it control of its new subsidiary Carbios 54, whose registered office is located in Longlaville, France (Department 54), whose objective is to carry the construction project of the PET biorecycling plant. In addition, at December 31, 2023, Carbios had committed an amount of €22.2 million on behalf of its subsidiary Carbios 54 (receivable formalized through a current account advance agreement) in external expenses (fees) and in personnel expenses rebilled to Carbios 54.

2.4.4.1.4 Other investments

As the Company has centralized its activities on the Cataroux site since the beginning of the second half of 2022, it carried out development and fitting work for a total of €18,206 thousand, of which €4,323 thousand in 2023, €5,678 thousand in 2022 and €7,988 thousand in 2021.

At the same time, the Company invested €44 thousand in office furniture and equipment, and €113 thousand in the development and renewal of its IT system. Regarding the furniture and IT equipment items, the Company invested €279 thousand in 2022 and €95 thousand in 2021.

With respect to the other fixed asset items, the Company has not made any other significant investments over the last three fiscal years.

2.4.4.2 Main investments in progress

In accordance with accounting standards, "Property, plant and equipment under construction" amounted to €233 thousand in 2023, including €146 thousand in respect of laboratory materials, €35 thousand in office and IT materials and €52 thousand in industrial demonstration plant materials and equipment.

The "Property, plant and equipment under construction" items will be subject to a reclassification in "property, plant and equipment" when it is commissioned.

2.4.4.3 Joint ventures and significant shareholdings

Subsidiary	Share capital	Equity	Share of capital in %	Carrying amount of securities	Loans and advances in fixed assets	Guarantees and endorsements given by Carbios	Income excluding VAT at 12/31/2023	Net income at 12/31/2023
Carbiolice	28,618,748	(23,303,622)	99.99%	38,371,461	4,047,540	-	25,044	(5,052,142)
Carbios 54	10,000	(3,282,875)	100.00%	10,000	22,840,473	-	-	(2,466,041)

2.4.4.4 Environmental impact of the use of property, plant and equipment

To the best of the Company's knowledge, no factor of an environmental nature has influenced the Company's operations in recent years or is likely to influence them significantly, directly or indirectly.

The Company's business activity is subject to environmental laws and regulations.

At the time of their acquisition, all diagnostics required by the applicable regulations were performed on all real estate assets held by the Company.

[1] Please refer to the press release of June 4, 2021.

2.5 EVENTS AFTER THE REPORTING PERIOD

MOST SIGNIFICANT TRENDS SINCE DECEMBER 31, 2023

On March 5, 2024, the Company announced that CARBIOS Active, its enzymatic solution for the biodegradation of PLA, is included in the inventory of food contact substances (FCS) of the US Food and Drug Administration (FDA) with the food contact notification (FCN) 2325, in force since February 29, 2024. Thanks to this step, CARBIOS Active can be used to manufacture food contact packaging in the United States (rigid and flexible packaging, and other applications).

On February 14, 2024, the Company announced that it had acquired the land (in Longlaville) from Indorama Ventures that will host the first PET biorecycling plant in the world.

On April 3, 2024, the Company announced the great success of its first employee shareholding plan for all Group employees who are members of the employee savings plan in France. This employee shareholding plan, launched on February 12, 2024, was subscribed by 123 employees, i.e. 88.49% of the employees concerned and thus made it possible to involve employees in the Group's development and performance. It contributes to bringing the employee shareholding of Carbios, within the meaning of Article L. 225-102 of the French Commercial Code, to around 0.08% of the share capital.

2.6 OUTLOOK AND OBJECTIVES

The Company does not publish any forecasts or estimates of its net income or operating income, or those of its subsidiaries.

KNOWN TRENDS THAT ARE REASONABLY LIKELY TO HAVE A MATERIAL EFFECT ON THE ISSUER'S PROSPECTS

Situation in the Middle East

The Company's activity in the Middle East is very limited and the Company has not been affected to date by recent developments in conflicts in the region.

Ukraine/Russia conflict

Since the beginning of the conflict in Ukraine, the Company has not, as of the date of publication of this document, encountered any difficulties in pursuing its activities or its planned investments. To date, the Company has no direct or indirect relations with Ukraine or Russia, and the Company has managed to limit any delays directly related to this crisis in the industrial and commercial deployment of its technologies.

However, if this crisis were to continue and/or generate lasting economic consequences, the Company could have difficulties in containing the adverse effects of this crisis and in particular, the increase in the cost as well as the extension to the lead times of supplies of certain materials, equipment and products necessary for the construction of its PET enzymatic depolymerization plant. This extension of lead times and the increase in prices could delay the construction of this industrial and commercial unit. In addition, the negative impact of this conflict on the financial markets and potentially on the Company's share price could intensify if the conflict continues.

In view of the current situation between Russia and Ukraine, the Company specifies that its economic and balance sheet exposure to these two countries is not significant. In 2023, Carbios did not record any expenses with suppliers based in Russia and Ukraine.

2.7 MATERIAL CONTRACTS

The main agreements to which the Company is party are the following:

AGREEMENTS ASSOCIATED WITH THE DEVELOPMENT OF THE COMPANY'S TECHNOLOGIES

- On February 3, 2023, Carbios announced that it had successfully completed the last key stage of the CE-PET project, which was approved without reservation by ADEME. For the validation of the whole project, Carbios will have received a total amount of €4,136,000 (€1,034,000 in subsidies and €3,102,000 in repayable advances) and its partner INRAE-TWB €3,416,000.[1] As a reminder, the CE-PET project, initiated on April 1, 2018 aimed to support the upscaling of Carbios' industrial and commercial project in the field of enzymatic recycling of plastic waste and PET fibers.
- Since January 17, 2020, the Company, along with INSA Toulouse through its TBI laboratory, has access to an internationally renowned enzymatic engineering research center for the recycling and biosynthesis of plastics.[2] This laboratory, called PoPLaB, in reference to Plastic Polymers and Biotechnologies, was inaugurated on January 28, 2020. On this occasion, Carbios announced that it had become a sponsor of the INSA Toulouse Foundation for a period of three years.
- On November 25, 2021, Carbios announced that it had received support from the European Commission through the LIFE program for the "LIFE cycle of PET" project. For this project, Carbios, project coordinator and its partners T. EN Zimmer GmbH and Deloitte, obtained a subsidy of €3.3 million (including €3 million for Carbios) spread over the 39 months dedicated to the project.

  A Grant Agreement has been signed with the European Commission and a consortium agreement is being signed with Carbios partners for this project. As part of this project, Carbios will benefit from full ownership and exclusive exploitation rights of the results it will have generated. It will also have the exploitation rights in the field of enzymatic recycling on the results generated by its partners.
- On August 9, 2022, CARBIOS announced that it had joined the WhiteCycle project, launched in July 2022 and coordinated by Michelin. The main objective of this innovative European project is to develop a circular solution to transform complex waste containing PET (such as textile fibers from tires or complex clothing textiles) into high added-value products. This four-year project brings together sixteen entities[3].

  A Grant Agreement was signed by the European Commission and Michelin, in its capacity as coordinator of the project, and a Consortium Agreement was signed between all partners with an effective date of July 1, 2022. As part of the project, Carbios is implementing its proprietary PET depolymerization and monomer recovery and purification technologies.
- Since January 1, 2023, the optimization work carried out jointly between Carbios and its academic partners INRAE and INSA is eligible for ADEME funding as part of the OPTI-ZYME project for which Carbios received the funding notification on June 30, 2023, and in which Carbios is the project leader and coordinator. For this project, ADEME granted a total of €11.4 million, distributed in the amount of €8,161,552 (€3,118,476 in subsidies and €5,043,076 in repayable advance) for Carbios, €2,949,868. for INSA and €300,642 for INRAE to support, over a period of 48 months, the continued research for the optimization and continuous improvement of the enzymatic technologies developed by Carbios, as well as the exploration of new breakthrough solutions. The contract signed between INSA, INRAE and Carbios on October 26, 2019 as part of this project is governed by the rules defined by the TWB consortium agreement. In accordance with the TWB rules on competitive contracts, it provides that Carbios will have full ownership of the competitive results obtained under this project.

[1] Please refer to the press release of February 3, 2023.
[2] Please refer to the press release of January 17, 2020.
[3] For more information on the WhiteCycle project, please refer to section 1.4.2 of this Universal Registration Document.

CONTRACTS RELATED TO THE INDUSTRIAL DEMONSTRATION PLANT:

- Since February 2017, Carbios and Technip Energies have been collaborating on the industrial development of the PET enzymatic recycling process developed by Carbios. On March 1, 2019, a Research, Engineering and Purchasing Assistance contract entered into force between Carbios and Technip Energies. This contract includes an option for the monitoring of supplies, markets and the coordination of an engineering project relating to the definition of a demonstration unit for terephthalic acid (TA) and ethylene glycol (EG) monomers by recycling used PET.

  Carbios holds the intellectual property rights for the research and work conducted under this agreement. In April 2020, Carbios exercised the option provided for under this agreement so that Technip Energies also supports the Company during the construction phase and the start-up of the industrial demonstration plant operated by Carbios.

- In September 2020, the Company announced that it was bringing together its teams on the same site belonging to the Michelin Group and located near the Carbios facilities in Clermont. The buildings leased by Carbios make it possible to house the vast majority of the Company's activities previously spread over several sites and in particular, the development laboratory, the pilot plant, the support activities, the industrial demonstration plant, a textile preparation line and, since March 2023, the Carbiolice industrial production equipment.

  The industrial demonstration plant, integrated into the Michelin Group's Cataroux site, was commissioned in September 2021. In this context, two commercial leases were signed on April 13, 2021 between the Company and the Michelin group to define the terms and conditions of the provision of two buildings known as "B80" and "O24".

  Since July 2022, the Company's development laboratory, pilot and support activities teams have been grouped together in the same B80 building on the Cataroux site. The Carbiolice laboratory and support activities teams joined their colleagues in the B80 building in February and March 2023.

  In March 2023, Carbiolice's industrial production equipment joined the building housing the Company's demonstration plant, known as "O24," which is also located at the Cataroux site.

CONSORTIUM CONTRACTS AND PARTNERSHIPS

- The Company signed a consortium agreement with L'Oréal on December 31, 2017 for an initial four-year period from its launch date, i.e. April 19, 2019. The latter specifically concerns the enzymatic recycling of PET (the "Consortium") and has since been extended until December 31, 2024.

  On April 29, 2019, Carbios and L'Oréal had already announced the arrival of three other partners in the Consortium: Nestlé Waters, PepsiCo and Suntory Beverage & Food Europe[1]. The Consortium's partners hope to industrialize Carbios' technology and thus increase the availability of high-quality recycled plastics to support their commitments to sustainable development.

  Technical stages are planned and the Consortium's partners pay an annual flat-rate contribution to support Carbios' developments to meet their expectations in terms of the recyclability of their products. In the context of this Consortium, to accelerate the industrialization of the process developed by Carbios, the partners further agreed to support the Company in the structuring of the new value chain for the recycled PET resulting from this innovative process.

- On July 6, 2022, the Company announced the signing of a consortium agreement on the same day with the companies On, Patagonia, PUMA, and Salomon to develop solutions that increase the recyclability and circularity of their products. An important aim of the two-year deal will be to speed up the introduction of Carbios' unique biorecycling technology for the textile industry. Carbios and its four partners will also conduct research into how textile products can be recycled, evaluate the development of collection solutions for used polyester items and test sorting and processing technologies. It will also consolidate data on "fiber-to-fiber" recycling as well as on circularity models. In January 2023, PVH group[2], the parent company of the Tommy Hilfiger and Calvin Klein brands, also joined the Fiber-to-Fiber Consortium.

[1] Please refer to the press release of April 29, 2019.
[2] Please refer to the press release of February 18, 2023.

CONTRACTS RELATED TO THE LONGLAVILLE INDUSTRIAL UNIT PROJECT

- On January 28, 2020, the Company signed a co-development agreement with Novozymes, world leader in enzyme production, for the production of its proprietary enzyme dedicated to the recycling of PET plastics and fibers. This collaboration will guarantee the production of its proprietary PET degradation enzyme during the demonstration and industrial deployment phases of the enzymatic PET recycling technology developed by Carbios. On January 12, 2023, the Company announced the signing, on January 11, 2023, of a major agreement with Novozymes that strengthens the previous collaboration via a strategic, exclusive and long-term partnership. This agreement guarantees the production and supply of Carbios PET degradation enzymes on an industrial scale for its first plant, in which the start of production is planned for 2026 in Longlaville (France), as well as for future licensed plants, and guarantees both parties exclusivity in the area of the partnership.

- On March 16, 2022, the Company and Technip Energies entered into a contract for studies, engineering, purchasing assistance, monitoring of supplies, markets and site coordination. This contract defines the terms and conditions for Technip Energies to carry out, initially, engineering studies for the FEL 2 phase of the project to build an Industrial PET enzymatic depolymerization unit. Amendment No. 1 to this contract was signed with an effective date of July 2, 2022. Through this amendment, the Company entrusted Technip Energies with carrying out the engineering studies for phase FEL 3 of the plant construction project.

- On January 24, 2024, Carbios awarded De Smet SA Engineers & Contractors a contract for detailed engineering, construction management and the scheduling, management and coordination of works for the future Longlaville plant.

AGREEMENTS ASSOCIATED WITH CARBIOLICE[1]

- On August 30, 2016, Carbios granted Carbiolice an exclusive worldwide license for the utilization of its PLA-based plastics enzymatic biodegradation technology. In an amendment to the license agreement dated June 28, 2018, the scope of the license was extended to new patent families, applications and products.

- In January 2019, Carbios and Carbiolice signed a co-development agreement with Novozymes, the global leader in enzyme production[2].

- In order to support the takeover of Carbiolice by Carbios, the two companies entered into a management contract on August 2, 2021, enabling Carbiolice to benefit from the skills, expertise and certain material and human resources available to Carbios. This contract allows Carbios to provide management services to redefine Carbiolice's strategic orientations as well as develop its associated activities and resources.

FINANCIAL COMMITMENTS RELATED TO THE EXPLOITATION OF THE RESULTS

PLA biodegradation process

- Since 2015, Carbios has benefited from a license on a patent family protecting a production process for biodegradable plastics through the inclusion of an enzyme and filed jointly by the CNRS, Poitiers University and Valagro. This license agreement has already given rise to the payment of a sum of €800 thousand to the co-owners as return following the upfront of 2016 received by Carbios when the license was granted to Carbiolice. Subsequent remuneration from this agreement will come in the form of royalties to the joint owners in correlation with the revenues generated by Carbiolice's exploitation of this family of patents. The first royalties were recognized in view of the revenue generated by Carbiolice through the operation of this family in 2020.

  Following the purchase of the shares of the SPI fund in the capital of Carbiolice on June 3, 2021, Carbiolice, as an affiliate of Carbios, now directly holds the exclusive worldwide operating license for this patent family. In this respect, Carbiolice may pay royalties to the joint owners with the revenues generated by Carbiolice's exploitation of this family of patents. No royalties from Carbiolice to the co-owners were recognized in 2023.

[1] Please refer to section 1.5.5 of this Universal Registration Document concerning Carbiolice.
[2] Please refer to the press release of January 29, 2019.

- As part of the Thanaplast™ project which ended on June 30, 2017, Carbios is still bound by the commitments made on the returns payable by Carbios to its partners in the event of exploitation[1] of the results obtained as part of the Thanaplast™ project.

  As such, for the part of the project dedicated to PLA biodegradation, 6 patent families resulting from the project were licensed to Carbiolice and resulted in a retrocession in the form of flat-rate amounts (in 2016) and royalties (from 2020). Thus, in July 2017, Carbios signed an operating agreement with INRAE Transfert, on behalf of INRAE, INSA Toulouse and CNRS, on a patent family jointly owned with INRAE/INSA/CNRS. This agreement concerns an enzyme for the degradation of polyesters developed at TBI as part of the research collaboration agreement with INRAE, itself part of the Thanaplast™ project.

  Carbios is 50% co-owner of this patent family and benefits from an exclusive worldwide utilization license and a utilization sub-licensing right for this family of patents. The signing of this utilization agreement follows Carbios' granting of a license to Carbiolice on August 30, 2016 concerning this family of patents in particular. This agreement has already resulted in a payment of €50 thousand to INRAE Transfert as repayment following the upfront payment received by Carbios in 2016.

  Subsequent remuneration from this agreement will come in the form of royalties to INRAE Transfert in correlation with Carbios' revenues generated by Carbiolice's utilization of this family of patents. No payments of royalties are to be declared for 2023. In addition, in order to comply with their obligations related to the use of genetic resources collected from the territories of the signatory States of the Nagoya Protocol, Carbios and INRAE signed an agreement in 2020 with the University of Kasetsart (Thailand), where the strain from which the aforementioned enzyme originated was obtained, and which allows access to and use of said biological material.

- In December 2019, Carbios also signed an operating agreement with INRAE Transfert, on behalf of INRAE, INSA Toulouse and CNRS, on a patent family for a second polyester degradation enzyme. This enzyme was developed with TBI as part of the collaborative services contract within the Thanaplast™ project and optimized under a competitive research contract signed with INRAE, under the aegis of TWB.

  Under the terms of this agreement, Carbios has the exclusive ownership of the intellectual property rights over this enzyme and has committed, as a counterparty, to compensate INRAE if this technology is utilized. On June 28, 2018, Carbios and INRAE Transfert signed an amendment to the license granted to Carbiolice, including the said patent family.

  Following this, Carbios and INRAE Transfert signed an operating agreement providing for the payment of a flat-rate amount of €25 thousand at the signature of the agreement in December 2019 and additional payments associated with the revenues received by Carbios in the event of effective direct or indirect use of this patent family via Carbiolice. No additional payments are to be declared for 2023.

PET biorecycling process

In addition, 6 patent families fully owned by Carbios were filed under the Thanaplast™ project for the enzymatic recycling process for polyesters, and in particular PET, and for the associated enzymes. In the event that these families are exploited or licensed for future exploitation, they could also result in a financial retrocession to INRAE in the form of lump sums, since three of them came from work conducted under the research services agreement with INRAE.

- For the CE-PET project, the contract signed between TWB and Carbios on July 9, 2019[2] notably provides for financial returns to TWB in the event of exploitation of the results arising from the collaboration, in accordance with the rules of the TWB Consortium. Within this framework, a valuation agreement defining the terms and conditions for the returns was signed between Carbios, INRAE and INRAE Transfert on December 18, 2019.

- In addition, Carbios will have full ownership of the results obtained under the competitive contract entered into with INSA and which came into force on November 1, 2021, as well as the results obtained as part of the OPTI-ZYME project (contract signed with INRAE and INSA) from January 1, 2023. In the event that these results are exploited or licensed by Carbios for future exploitation, this exploitation could also give rise to a financial retrocession to the academic partners in the form of a lump sum.

  For the 2023 fiscal year, no financial retrocession to the academic partners of the Thanaplast™, CE-PET or OPTI-ZYME projects is to be declared, in connection with the exploitation of the PET biorecycling process.

[1] Please refer to section 2.2.3 of this Universal Registration Document concerning the return commitments made to Bpifrance.
[2] Please refer to section 2.5 "Agreements associated with the development of the Company's technologies" in this Universal Registration Document.


3

3. RISK FACTORS

Investors are invited to review all of the information contained in this Universal Registration Document, including the risk factors described in this section.

The main risk factors liable, as at the date of publication of this Universal Registration Document, to have a negative impact on the Company, its business, its financial position, its results or its ability to achieve its objectives, are set out below.

These risk factors are Company-specific. They are grouped into 6 categories and are classified according to their degree of net criticality, in decreasing order. The risk's probability of occurrence and its magnitude are assessed according to three levels ("low," "moderate" and "high"). Future events that are internal or external to the Company may modify this order.

The net criticality of the risk factors is assessed by combining each risk's probability of occurrence and magnitude, after taking into account the risk management measures implemented by the Company to manage them. The combination of these two criteria makes it possible to assess each risk and classify them into 3 levels of criticality (criticality = probability x magnitude): Significant, Moderate, Minor.

As of the date of this Universal Registration Document, the Company is not aware of any significant risks other than those summarized below.

However, the attention of investors is drawn to the fact that the list of risks and uncertainties described below is not exhaustive. Other risks, of which it is not currently aware or that it does not consider to be significant, on the date of publication of this Universal Registration Document, could also have an adverse impact on its business and financial position, its results or its ability to achieve its objectives. Investors are invited to carefully review each of the risks listed below, along with all of the information provided in this Universal Registration Document.

3.1 SUMMARY OF SIGNIFICANT AND SPECIFIC RISKS

Risk type	Probability of occurrence	Risk magnitude	Net degree of criticality
1. Risks related to the Company's business and market			
Risks related to technology development	Average	High	Significant
Risks related to raw materials	Average	Average	Moderate
Risks related to the emergence of competing technologies	High	Low	Moderate
Risks related to dependence on key partners	Low	Average	Moderate
Risks related to the partnership with Indorama Ventures	Low	Average	Moderate
2. Financial risks	Average	High	Significant
3. Risks related to changes in the macroeconomic environment			
Risks related to the military conflict between Russia and Ukraine and the situation in the Middle East	High	Moderate	Moderate
4. Risks related to the Company's organization			
Risks of dependence on key personnel	Average	Average	Moderate
5. Intellectual property risks			
Risks associated with uncertain protection of patents	Average	Low	Moderate
Risks associated with dependence on third-party technology	Low	Low	Minor
6. Regulatory risks			
Risks associated with compliance with the Nagoya Protocol on Access to Genetic Resources	Low	Low	Minor
Risks associated with regulations on plastics intended to come into contact with foodstuffs	Low	Low	Minor

3.2 DETAILED PRESENTATION OF SIGNIFICANT AND SPECIFIC RISKS

3.2.1 RISKS RELATED TO THE COMPANY'S BUSINESS AND MARKET

3.2.1.1 Risks related to technology development

3.2.1.1.1 Risk identification

The Company invests significant amounts in the research and development of products (bioprocesses, enzymes, technologies, etc.). During the course of an R&D project and in its various upscaling phases, it is not certain that the products under development will be launched commercially. It is also possible that Carbios will not invest in the most promising technologies or products that will be required and, as a result, it may be unable to launch new products or build a solid portfolio of products to meet customer needs.

Technical, industrial, regulatory or commercial difficulties with these bioprocesses could have an impact on the Company's growth and profitability:

- the launch of new products and/or enzymes, technologies or bioprocesses may require greater investments than planned in terms of research and development and marketing, as well as sales force and sales support, and customer and/or licensee training;

- it may be too costly or there may be technical difficulties in manufacturing certain new products on an industrial scale or in finding the necessary supplies to manufacture and market them. The difficulties encountered in obtaining sufficient volumes of PET waste to supply an enzymatic recycling industrial plant could generate costs such that the economic viability of the technology developed by the Company could be called into question;

- technical, industrial, regulatory or intellectual property issues could delay the commercial launch of the Company's products and adversely affect the commercial success of the systems proposed;

- new products may not be sufficiently responsive to market needs. The Company's business is dependent on the risks associated with the development of innovative technologies and/or products that may lead to discrepancies between the studies carried out and the reality of the target market;

- the Company could decide to abandon all or part of a project.

As part of its PET recycling project, the Company aims to build a first plant that will enable it to extrapolate the data from its demonstration plant on an industrial scale in order to consolidate its business model, which consists of the licensing of its technologies and know-how to its licensees, who will build their own recycled PET production units.

The main risks of the plant project are as follows:

• Delay
- In the detailed pre-project studies
- In the award of works contracts
- Construction issues (e.g. climatic hazards, unexpected geotechnical condition, equipment supply delays)
- Occurrence of start-up contingencies

• Cost
- consequences of the above delays.
- price inflation for equipment, supplies and works contracts,
- uncertainties in the prices and quantities of industrial supplies (metal frames, concrete, cables, piping measurements) at the start of the execution phase,
- additional costs for the solutions selected to develop the site (flooding, geotechnics, soil pollution, environmental quality of the Chiers river into which the treated wastewater will be discharged).
- surcharge for over-sizing retained in anticipation of the increase in site capacity and the availability of new feedstocks (textiles)
- additional work during the construction phase

However, the difficulties identified above could hinder the successful implementation of this strategy in accordance with the planned schedule.

These risks could prevent the Company from having the necessary and sufficient data to build its plant within the announced deadlines. They could also prevent it from entering into licensing agreements for its technology, including the engineering documentation of the process and the supply of the enzymes that are respectively necessary for the construction and operation of higher capacity industrial units.

In such a case, any delay or failure in the industrialization phase of the PET recycling technology could prevent the Company from meeting, or to a limited extent, the needs for recycled PET expressed by end-users according to the schedule that it has set and thus jeopardize the Company's commitments and its long-term survival.

In any event, the abandonment of a project for which significant human and financial resources have been invested could have an adverse effect on the Company or its business, financial position, results, growth or outlook.

In the event of the abandonment of a major area of scientific development, which would definitively call into question the viability of the Company's business model, it would then be necessary to consider the optimal way of valuing the assets accumulated by the Company at the date of such an observation. Measures, such as the partial or total sale of these assets, should also be taken to minimize the impact of such a situation on its shareholders. In such an event, the long-term survival of the Company could be brought into question.

3.2.1.1.2 Risk management

At the date of this Universal Registration Document, the Company has set up strategic partnerships which support its technical, industrial and commercial ambitions in its main areas of development, i.e. the enzymatic recycling of PET and the biodegradation of PLA.

Carbios is developing its internal industrial team, with the recruitment of engineers experienced in technologies and projects to run the plant project and the industrial demonstration plant test plan at the same time. The latter's production team is adapted to support the ramp-up of the purification steps and the testing of new raw materials. The network of technology experts is maintained and strengthened in order to have independent advice from equipment suppliers.

Risk management is integrated into the management of the plant project and reviewed periodically.

At the start of the execution phase, the Project management is advised by consultants who are experts in the field (management of strategic projects, first biotech start-up project) on governance, adaptation of the organization to new challenges, management of strategic partners and tactical choices.

The project's procurement and supply plan is initiated in advance to take into account potentially deteriorated market conditions for the supply of certain materials, equipment and products necessary for the construction and deployment of the Longlaville Plant.

The recruitment of the management of the future operating team is almost completed, with the 2024 target being the deployment of the start-up preparation plan and the recruitment of supervisory staff.

3.2.1.1.3 Degree of criticality of the risk

Significant.

3.2.1.2 Risks related to raw materials

3.2.1.2.1 Risk identification

As part of the enzymatic recycling process developed by the Company, plastic or textile waste composed mainly of PET or polyester fibers is the main raw material required for large-scale operations.

Household plastic packaging waste is currently recycled using mechanical technologies and the quantities collected and available are limited. The textile waste is today relatively poorly collected. The recyclable waste stems from across Europe and is collected locally. The volumes of waste required for future industrial units are substantial and will, therefore, require an efficient collection system that is expanded both geographically and to all types of PET waste (packaging waste that is currently not collected and textile waste).

The Company and its partners could encounter difficulties in supplying industrial units with the required quantities, or have to bear costs and quality levels in sourcing supplies that would hinder the competitiveness of the process.

Indeed, two players with competing processes (methanolysis) have announced the construction of industrial units in France requiring a cumulative capacity of 275,000 metric tons per year of PET waste. Such competing technologies could potentially have an adverse effect on the supply of raw materials for the industrial and commercial operation of the PET enzymatic recycling technology developed by the Company.

Like all companies developing an industrial process, the Company has to deal with volatility in terms of prices and the availability of all the raw materials involved in its process.

Other entrants are also concerned, since the Carbios technology consumes commodity raw materials and energy sources whose price fluctuations in the current market context could negatively impact production costs.

3.2.1.2.2 Risk management

The difficulties that the Company may encounter in accessing raw materials are a challenge faced by all of Carbios' competitors.

In order to secure this supply for industrial and commercial operations, the Company signed a supply contract with Citeo in April 2023, as part of a consortium formed with the companies Valorplast and Wellman Neufchateau Recyclage. This long-term contract covers the supply of PET waste consisting of multi-layer and single-layer trays and their biological recycling.

In February 2024[1], Carbios has also signed a memorandum of understanding with Landbell Group for the supply, preparation and recycling of post-consumer PET waste using Carbios biorecycling technology in the commercial plant in Longlaville from 2026.

This agreement covers the supply to Carbios of 15,000 metric tons per year of prepared PET from 2026.

Through the partnership with Landbell Group in Germany, the call for tenders won by Citeo in France for multi-layer trays and the memorandum of understanding with Indorama Ventures, Carbios will have found more than 70% of the raw materials needed to reach a processing capacity of 50,000 metric tons per year when the Longlaville plant is operating at full capacity.

In addition, Carbios is continuing its depolymerization tests on various types of waste at its demonstration plant. The aim is to diversify the sources of supply required to operate its recycling process. The Company also participates in European working groups with the aim of improving the efficiency of the collection and recycling of plastic waste and textiles made of PET.

In addition, the location of the Company's future plant in Meurthe-et-Moselle will make it possible to envisage a supply of waste from France and from Belgium, Luxembourg and Germany, which has an excellent collection system, including for post-consumer textiles.

An industrial working group was set up with Novozymes to define the means of production, storage and logistics of the enzyme, from the Novozymes site(s) to the PET biorecycling plant in Longlaville (54).

[1] Please refer to the press release of February 29, 2024.

3.2.1.2.3 Degree of criticality of the risk

Moderate.

3.2.1.3 Risks related to the emergence of competing technologies

3.2.1.3.1 Risk identification

The various markets in which the Company operates are the target of growing environmental and industrial interest, which in practice gives rise to growing competition. Furthermore, projects such as the Company's, whose purpose is to promote a circular economy, are strongly encouraged. The development of competing technologies, in particular based on chemical recycling processes, has been emerging over recent years and certain pilot plants are being started up.

The Company cannot guarantee that technically, environmentally or economically better solutions other than its technologies will not be developed and marketed in the near future. Moreover, the Company cannot guarantee that its processes will be brought to the market more quickly than those of its competitors.

At the same time, the identification of enzymes intended for the enzymatic recycling of PET is the subject of research by various universities around the world. The Company cannot guarantee that these academic laboratories will not develop an enzyme that is more efficient than Carbios' proprietary enzymes.

Such events could have a material adverse effect on the Company's business, outlook, financial position, results and growth.

Fields of application	Industrial competitors
Recycling	**PET and/or polyester fibers:** Samsara, Eastman*, Ioniqa*, Teijin*, Jeplan*, Gr3n*, Garbo*, Axens IFP Group Technologies*, BP*, Loop Industries*, Cumapol*, Revalyu Recycling* **Other polymers:** Galactic*, Creacycle*, Worn Again*
Biodegradation	Advanced Enzyme Science Limited and its Enzymoplast® product Manufacturers of compostable plastics for home composting (such as Novamont and its Mater-Bi®, Sphere) PLA/PHA mixtures developed by Danimer

** Competitors using chemical and non-biological technologies.*

3.2.1.3.2 Risk management

Carbios is a pioneer in the development of bioprocesses dedicated to optimizing the life cycle management of plastics and textiles. It has many strengths to enable its processes to be marketed despite the emergence of competing technologies. To this end and in order to obtain a competitive advantage, the Company has established strategic collaborations with several industrial leaders in their fields, such as Novozymes, L'Oréal, Nestlé Waters, PepsiCo, Suntory Beverage & Food Europe, Michelin, l'Occitane, On, Patagonia, PUMA, Salomon, PVH and Indorama Ventures. These partners, keen to initiate a real transition towards a circular economy model to manage the life cycle of plastics and textiles, support the Company in the industrial and commercial implementation of its technologies.

The Company continues to strengthen its academic partnerships in order to provide itself with the possibility of acquiring upstream technologies that may be developed in the field of enzymatic recycling from Universities. In addition, the Company has intellectual property covering the entire recycling process, regardless of the enzyme used.

3.2.1.3.3 Degree of criticality of the risk

Moderate.

3.2.1.4 Risks related to dependence on key partners

3.2.1.4.1 Risk identification

The Company's business depends on its collaboration with academic laboratories and industrial partners, which give it access to technologies, expertise and know-how. If that access were to be impeded, the Company may be forced to stop or delay the projects involved.

<u>Academic partnerships</u>

In order to ensure the development of its technologies at the laboratory stage, the Company has entered into collaboration or research service agreements with academic laboratories. This is notably the case with the Thanaplast™ program (now completed) and the CE-PET project (completed in February 2023). For the latter, a consortium agreement was signed in 2019 with INRAE, acting on behalf of the Toulouse White Biotechnology Mixed Services Unit (TWB). Since 2020, Carbios has a cooperative laboratory, called PoPLaB, which was created in partnership with INSA Toulouse through its TBI laboratory (Toulouse Biotechnology Institute). As part of its innovation projects, Carbios is also involved in multiple international academic collaborations.

The academic partners could fail to complete the entrusted research work by the set deadline. The Company could then be forced to stop or delay the projects concerned, to commit unforeseen investments and/or additional resources. This could have an adverse effect on the Company's technology development and financial position. If it could no longer benefit from these renowned academic partnerships, the Company could no longer have access to state-of-the-art data, materials and equipment. The Company would then be forced to make financial investments that it may not be able to support.

Industrial partnerships

Since September 2021, Carbios has operated an industrial demonstration plant dedicated to the depolymerization of PET plastic and textile waste into monomers.

As part of its project to build its first Plant on the Longlaville site (France), on March 16, 2022, the Company signed a contract with Technip Energies for studies, engineering, purchasing assistance, monitoring of supplies, contracts and site coordination. This defines the terms and conditions for Technip Energies to carry out, initially, engineering studies at FEL 2 level for this project. Amendment No. 1 to this contract was signed with an effective date of July 2, 2022. Through this amendment, the Company entrusted Technip Energies with carrying out the engineering studies for phase FEL 3 of this plant construction project.

The phase of detailed engineering studies, construction management and scheduling, management and coordination of works on the plant was entrusted to De Smet Engineers & Contractors on January 24, 2024.

At the same time, in order to safeguard the supply of the associated proprietary enzymes to support the industrialization of these technologies, the Company entered into three exclusive co-development agreements with Novozymes, the global leader in enzyme production:

- the first in January 2019, with Carbiolice, for the development of the PLA-based single-use plastics enzymatic biodegradation technology; and
- the second, in January 2020, for the development of the Carbios technology for the enzymatic recycling of PET fibers and plastics. This agreement guarantees the production of the proprietary enzyme designed and developed by Carbios in the demonstration phase and for the industrial and commercial operation of the technology; and
- the third on January 11, 2023 with Carbios, which strengthens the previous collaboration via a strategic, exclusive and long-term partnership. This new agreement confirms the production and supply of Carbios' PET degradation enzymes on an industrial scale for its first plant in Longlaville (France), as well as for future plants under license from Carbios, and guarantees exclusivity in the area of partnership for both parties.

These partners may not validate the key stages of the collaboration, in particular the profitability studies of the planned partnership. They may not complete their tasks within the set deadlines or, more generally, fail to meet their commitments. The Company could then be forced to stop or delay the industrialization of the project(s) involved. Such a delay could have an adverse effect on the Company's business and financial position, especially if new investments proved necessary.

For such partnerships in particular, the Company generally depends on a single partner, which ranks among the leaders in its field. In the event of the termination or deterioration of its relations with this industrial partner, the Company could find it impossible to strike an agreement with other partners with the necessary capabilities to meet the Company's needs and requirements. This could adversely affect its ability to successfully develop, produce at a competitive cost and market its products or processes.

In addition, the Company continues to look for partnerships in order to carry out its industrial strategy. In this context, on June 1, 2023, Carbios announced the signing of a Memorandum of Understanding with Indorama Ventures concerning the Longlaville plant. If this partnership were not to materialize, or if the Company were unable to find other suitable industrial partners, its industrial strategy could be called into question or delayed.

3.2.1.4.2 Risk management

The set-up of each partnership of a structural nature for the Company involves the negotiation and signing of a contract between the Company and the partner. The Company pays special attention to the contract termination and guarantee clauses, to cover itself in the event of a breach by the partner or its early termination of the contract.

At the same time, each partnership is monitored on the basis of a "project management" model. This includes the appointment of project managers within the Company and its partners; the set-up of monitoring and reporting tools; and the establishment of steering committees within the Company's management team and that of its partners in order to be able to quickly anticipate any delay in work or other major problem.

Lastly, partnerships related to pre-industrialization or industrialization generally depend on a single partner. The Company has focused on building a solid long-term partnership relationship with its engineering partners and Novozymes, which strengthens mutual trust and is an asset for the success of these partnerships.

3.2.1.4.3 Degree of criticality of the risk

Moderate.

3.2.1.5 Risks related to the partnership entered into with Indorama Ventures

3.2.1.5.1 Risk identification

On June 1, 2023, the Company announced, together with Indorama Ventures Public Company Limited ("IVL"), the signing of a memorandum of understanding to form a joint venture for the construction in France of the first PET biorecycling plant in the world. The share capital of the common structure would be held at 75% by Carbios and at 25% by IVL.

Under the terms of the memorandum of understanding, Carbios acquired approximately 13 hectares of land adjacent to the existing Indorama PET plant in Longlaville. Carbios applied for a building permit and an environmental authorization request in December 2022 and, in October 2023, received all the authorizations required for the construction and operation of this plant for which the start of production is planned for 2026. Preparatory work began on the site at the end of October 2023. However, construction work could be delayed for various reasons over which the Company and its partner have little or no control.

The total investment for the new plant is estimated at around €230 million. On the basis and subject to the general conditions of the memorandum of understanding, IVL plans to mobilize approximately €110 million for the joint venture in equity capital and non-convertible loans, it being specified that this equity capital and these non-convertible loans may only be granted to the joint venture and not to Carbios. In addition to the sums mobilized by IVL, the project will be financed by grants from the French State and the Grand-Est Region (for which the implementation is subject to the approval by the European Commission of the corresponding State aid scheme then to the signature of the national grant agreements), and by the acquisition of a stake by Carbios in the joint venture. Part of Carbios' equity capital contribution to the joint venture will be partly financed by Carbios' cash. The remainder of the financing for the Company's first plant, which will extend until the commissioning, will be achieved through the balance of the proceeds of the capital increase with preferential subscription rights maintained for the Company's shareholders carried out in July 2023 and which raised approximately €141 million. However, the cost of building the plant could prove to be higher than expected for various reasons (inflation, impact of the war in Ukraine, unforeseen constraints, etc.) which would require the mobilization of additional funds for its financing.

IVL's investment in the plant project remains subject to the completion of the technical documentation as well as the completion of final economic feasibility studies. However, these economic feasibility studies may not prove satisfactory and thus delay or even compromise the signing of the final legal documentation for the project. More generally, IVL may not validate the key stages of the collaboration relating to the project, or fail to comply with its commitments provided for in the memorandum of understanding, particularly in terms of financial mobilization. The Company would then be required to mobilize other sources of financing to complete this plant project, which could have a material adverse impact on its activities, financial position and outlook. In this situation, the Company would also have to delay the deployment and operation of this plant.

In accordance with the protocol, IVL will ensure the repolymerization of 100% of the joint venture's production and the two partners will work together to ensure the supply of raw materials. If IVL were unable to repolymerize all of the PET biorecycled by the joint venture, the Company would be forced to find another industrial partner capable of repolymerizing the monomers produced by the joint venture in similar quantities and under satisfactory conditions.

Lastly, in the event of a breakdown or deterioration of relations with Indorama Ventures, Carbios could find itself unable to renew strategic relations enabling it to operate this plant under satisfactory conditions.

Risks related to the governance of the joint venture

To date, not all of the elements relating to the governance of the joint venture have been finalized between Indorama Ventures and Carbios. The Company undertakes to communicate them to the market as soon as they are, namely when the final documentation is finalized. The Company may not be able to definitively decide on governance that is sufficiently favorable to Carbios' interests, which could have a material adverse impact on its activities, financial position and outlook.

3.2.1.5.2 Risk management

The Company has endeavored to develop a particularly solid partnership with IVL with a long-term vision. On the occasion of the signing of the protocol, IVL confirmed its intention to potentially extend the technology developed by Carbios to other PET production sites with a view to future developments.

If Indorama were unable to repolymerize all of the monomers produced by the joint venture, the Company may turn to other well-established polymerists.

3.2.1.5.3 Degree of criticality of the risk

Moderate.

3.2.2 THE COMPANY'S FINANCIAL RISKS

3.2.2.1 Risk identification

At December 31, 2023, the cash and marketable securities held by the Company totaled €191 million.

At December 31, 2023, the Company's financial liabilities consisted solely of conditional advances of €4.5 million and loans of €34.9 million.

Please refer to section 5.1.4 for an overview of the Company's conditional advances (Note 13) and debt schedule at December 31, 2022 (Note 8).

It should also be noted that the Company's historical deficit can be explained by the fact that it is still in its development phase. During this phase, research expenses increase while no recurring revenue is generated. This may create a liquidity risk for the Company, excluding subsidies or additional fundraising.

The Company could also be exposed to risks related to additional financing needs, in connection with the construction of the first plant, for which the total investment is estimated at €230 million (financed by the Company in the amount of €120 million).

Thus, for the fiscal year ended December 31, 2023, it is recalled that the Company's operational activities had consumed €16 million in cash. Flows from investments in fixed assets (excluding financial items) consumed €28 million, and the Company absorbed these negative flows by receiving €133 million of funds raised in July 2023.

The cash flow forecasts for the 2024 fiscal year take the following items into consideration:

- available cash of around €191 million at December 31, 2023;
- the receipt of the tax research credit (CIR) of €2.5 million (amount recognized at December 31, 2023), for which the payment should take place during the 2nd quarter of 2023; and
- the planned receipt of ADEME aid relating to the OPTI-ZYME project, namely €1.1 million in subsidies as well as €1.8 million in repayable advances.[1]

[1] Please refer to section 5.3.4, Note 13 of this Universal Registration Document.

3.2.2.2 Risk management

On March 31, 2024, the Company carried out a specific review of its liquidity risk on the basis of cash items, which amount to €160 million at March 31, 2024. On this date, and on the basis of its investments and current operating expenses, the Company considers that it will be able to meet its future maturities for at least the next twelve months. These items take into account the investments planned for the engineering work of the Longlaville plant as well as equipment orders for this plant.

3.2.2.3 Degree of criticality of risk

Significant.

3.2.3 RISKS RELATED TO CHANGES IN THE MACROECONOMIC ENVIRONMENT

3.2.3.1 Risks related to the military conflict between Russia and Ukraine and the situation in the Middle East

3.2.3.1.1 Risk identification

Situation in the Middle East

The Company has not been affected to date by recent developments in conflicts in the region.

Conflict between Russia and Ukraine

Since the beginning of the conflict in Ukraine, the Company has not, as of the date of publication of this document, encountered any difficulties in pursuing its activities or its planned investments. To date, the Company has no direct or indirect relations with Ukraine or Russia, and the Company has managed to limit any delays directly related to this crisis in the industrial and commercial deployment of its technologies.

However, if this crisis were to continue and/or generate lasting economic consequences, the Company could have difficulties in containing the adverse effects of these measures and in particular, the increase in the cost as well as the extension to the lead times of supplies of certain materials, equipment and products necessary for the construction of its Longlaville plant. This extension of lead times and the increase in prices could delay the construction of the first industrial and commercial unit using the PET recycling technology developed by the Company. In addition, the negative impact of this conflict on the financial markets and potentially on the Company's share price could intensify if the conflict continues.

3.2.3.1.2 Risk management

In view of the current situation between Russia and Ukraine, the Company specifies that its economic and balance sheet exposure to these two countries is not significant. During the 2023 fiscal year, Carbios did not record any expenses with suppliers based in Russia or Ukraine.

3.2.3.1.3 Degree of criticality of the risk

Moderate

3.2.4 RISKS RELATED TO THE COMPANY'S ORGANIZATION

Risks of dependence on key personnel

3.2.4.1 Risk identification

The success of the Company depends largely on the work and expertise of its executives and its key scientific and business development personnel. These people are in particular the Chief Executive Officer, Emmanuel LADENT, the Scientific Director, Professor Alain MARTY, the Intellectual Property Director, Lise LUCCHESI, the Chief Strategy and Financial Officer, Pascal BRICOUT, the Industrial Development Director, Lionel ARRAS, the SVP Business Development, Feedstock Recycling, Mathieu BERTHOUD, the SVP Corporate Affairs, Sustainability and Communication, Bénédicte GARBIL, the HR and Legal Director, Sophie BALMARY, the Public Funding and Regulation Director, Delphine DENOIZE and the Chief Biorecycling Business Officer, Stéphane FERREIRA.

The loss of their skills could affect the Company's ability to achieve its objectives.

At December 31, 2023, the Carbios Group had 134 employees. The Company anticipates significant growth in its business. It will, therefore, need to recruit additional employees to expand its operational activities, in particular qualified scientific and technical employees to assist in its developments and the industrialization of its PET biorecycling technology.

The Company is in competition with other companies, groups, research organizations and academic institutions for the recruitment and retention of highly qualified scientific, technical and management personnel. In this context, the Company may not be able to attract or retain these key employees under economically acceptable conditions. It may therefore not be able to compete with reputable companies, groups or organizations with greater financial strength.

The Company's inability to retain, attract and retain these key individuals could prevent it from achieving its growth objectives. This would have a material adverse effect on its business, prospects, financial position, results and development.

Moreover, the Company may not be able to manage its growth and may encounter unexpected difficulties as it expands. In such a case, the business, outlook, financial position, results and growth of the Company could be affected.

3.2.4.2 Risk management

To reduce the risk of losing its key personnel, the Company has notably set up systems to share the rise in value of the Company via free performance share allocation plans (AGAP), which encourage key beneficiaries to stay in the Company and work for its success.

In addition, the Company has rolled out a comprehensive social benefits plan incorporating new compensation elements for its employees with the implementation starting in 2023:

- an incentive scheme for an initial period of two years aimed at rewarding the involvement of all Group employees in achieving defined CSR objectives, particularly in terms of safety, the environment and skills development;
- a profit-sharing agreement;
- a value-sharing bonus (PPV);
- a target bonus combining individual and collective performance criteria.

This system was supplemented in February 2024 by the deployment of an employee shareholding plan for all Group employees who are members of the company savings plan.

With the acceleration of its developments, the Company strengthened its Executive Committee and the teams of its various operational divisions during the 2023 fiscal year in order to gain additional expertise in key areas such as Human Resources and Legal, Corporate Affairs and Sustainable Development. The strengthening of the Executive Committee and operational teams also helps to mitigate the risks related to the departure of key personnel. Lastly, the Company also introduced annual assessments and a training plan to enable each employee to keep up with the Company's developments over the long term.

3.2.4.3 Degree of criticality of risk

Moderate.

3.2.5 INTELLECTUAL PROPERTY RISKS

3.2.5.1 Risk identification

The intellectual property rights held by Carbios, in particular the patents protecting its technological innovations, are Carbios assets that require special precautions. To ensure the success of the business model, it is thus essential that the Company, as well as its current or future licensors and licensees, be in a position to obtain, maintain and ensure the respect of their intellectual property rights.

The challenging of intellectual property rights and the use – by unauthorized third parties – of any assets, products or processes covered by intellectual property rights constitute a major risk for Carbios.

Risks associated with uncertain protection of patents

It cannot be ruled out that the inventions developed may be used by competitors, particularly in the following cases:

- the inventions developed by the Company are not patentable;
- the patents for which applications have been filed, including in countries likely to offer major commercial development prospects, are not issued;
- the extent of the protection provided by a patent is insufficient to prevent the use of the relevant invention by competitors.

Despite the care taken, it is possible that the patent applications filed by Carbios have a more limited scope than expected.

Third parties or competitors could also successfully challenge, before a competent court, the validity of the intellectual property rights that the Company owns directly or jointly or holds under license. Furthermore, some third parties may successfully infringe on or circumvent the Company's intellectual property rights with their own innovations.

A lawsuit may prove necessary to ensure the respect of the intellectual property rights, to protect the commercial trade secrets or to uphold the validity and scope of the Company's intellectual property rights. Any litigation may result in significant expenditure, reduce profit and fail to provide the protection sought by the Company.

Risks associated with dependence on third-party technology

Carbios' success will also depend on its ability, and that of its partners, to use the Company's exclusive technologies without infringing upon, misappropriating or otherwise violating any third parties' intellectual property rights or exclusive rights. However, despite the efforts made, the Company may not be aware of all of the intellectual property rights held by third parties and potentially linked to the Company's technologies. Therefore, the Company cannot guarantee that its processes do not infringe on patents held by third parties, or that it will not be accused of such infringement.

Any litigation or claim against the Company, regardless of the outcome, could result in substantial costs and compromise its reputation. The occurrence of one or more of these risks could have an adverse effect on the Company's business, outlook, financial position, results and growth.

Any such litigation could also force the Company to stop developing, selling or using the products or bioprocesses that would depend on the allegedly infringing intellectual property. It could also require it to obtain a license from the holder of the intellectual property rights, which may not be obtained on reasonable terms, if at all.

3.2.5.2 Risk management

In order to counter these intellectual property risks, Carbios ensures, before entering into any research contracts with third parties, that it will have exclusive property rights over the results or, in the event of joint property, the exclusive right to use the results in its field of activity.

In addition, with the backing of the Company's scientists, an in-house team is tasked with keeping a watch on competitors, technology and patents. This watch makes it possible to identify existing prior art before applying for patents and improves the chances of obtaining patents. It also makes it possible to identify emerging work, expertise and patents in relevant fields in order to take them into account in the development of innovations and ensure that the Company's processes and products can be used without restrictions.

Moreover, given the paramount importance of patents in its business sector, the Company has formed a non-statutory Intellectual Property Committee that meets periodically to define the Company's industrial property strategy. Carbios also benefits from the in-house expertise of three industrial property specialists and is regularly assisted by an intellectual property consultancy firm.

3.2.5.3 Degree of criticality of risks

Risks associated with uncertain protection of patents: Moderate.

Risks associated with dependence on third-party technology: Minor.

3.2.6 REGULATORY RISKS

3.2.6.1 Risk identification

Risks associated with compliance with the Nagoya Protocol on Access to Genetic Resources

The Rio Convention on Biological Diversity (CBD), signed by over 150 states, requires prior informed consent for any biological material collection and access to genetic resources in a given state, as well as an agreement governing the terms of transfer of the genetic resource and the conditions for sharing the benefits from the exploitation of that resource.

These conditions for the fair and equitable sharing of benefits arising from the utilization of genetic resources of "plants, animals, bacteria or other organisms, for commercial or research purposes, or for other objectives" are set out in a supplementary agreement to the CBD, the Nagoya Protocol, ratified by some 120 states.

The Company could therefore be faced with reluctance or refusal on the part of the local authorities to issue the collection or utilization permits, or be unable to meet the demands of the local authorities when negotiating a benefit-sharing agreement. The Company mainly works on genetic resources that are not identified by Carbios from a natural strain but in public databases ("Digital Sequence Information"), and for which the research work does not require a collection permit.

The only exception to date has been the identification of an enzyme for the degradation of polyesters in collaboration with INRAE and for which Carbios and INRAE signed an agreement in 2020 to access and use biological material with the University of Kasetsart (Thailand). The strain from which the aforementioned enzyme originated was obtained from this university.

In addition, as a company operating on French soil, the Company must comply with European regulations (EU No. 511/2014 on "compliance measures for users from the Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization in the Union" and its Implementing Regulation No. 2015/1866). These lay down detailed rules for the utilization of genetic resources, whenever the enzymes used by the Company fit the definition of "genetic resource."

To reinforce this European regulation, law No. 2016-1087 of August 8, 2016 and its implementing decree No. 2017-848 of May 9, 2017 include new provisions. These provisions relate, in particular, to the due diligence to be carried out in the event of use of genetic resources taken from the territories of the signatory States of the Nagoya Protocol.

The Company may thus encounter difficulties with the suppliers of biological materials and/or the authorities of the States concerned in obtaining the necessary information and making the declarations required by these regulations.

Risks associated with regulations on plastics intended to come into contact with foodstuffs

The Company is developing a PET recycling technology that can be regarded as a chemical recycling process. Regulation 2022/1616/EU on recycled plastic materials and articles intended to come into contact with foodstuffs, published in September 2022, establishes the criteria for the marketing and development of technologies and use with foodstuffs for plastic packaging. This new regulation applies regardless of the type of recycling process used. Nevertheless, processes involving a return to monomers, as is the case for the PET recycling technology developed by Carbios, are expressly excluded by Article 1 of this new regulation.

The monomers resulting from the Company's process must therefore comply with:

- substances registered according to the REACH Regulation No. 1907/2006 concerning the registration, evaluation and authorization of chemical substances; and
- Regulation No. 10/2011 (currently being revised) on plastic materials and articles intended to come into contact with foodstuffs.

Monomers, resulting from the chemical (or biological) recycling of PET waste, could have impurity characteristics that are not those of monomers from petrochemicals. This could potentially lead to a separate registration of the monomers from the Company's PET enzymatic recycling technology and therefore to additional registration costs and/or lead times for the Company.

3.2.6.2 Risk management

Concerning the management of risks associated with compliance with the Nagoya Protocol on access to genetic resources

The Company must ensure that it has the right to use every enzyme that it may come to develop or industrialize. To this effect, when working on specific genetic resources, the Company conducts the following checks:

- identification of the likely State of origin of the genetic resource; and
- study of the terms defined by said State, either under the Nagoya Protocol or its national law, concerning the sharing of benefits.

Concerning the management of risks associated with regulations on plastics intended to come into contact with foodstuffs

The Company participates in working groups on chemical recycling regulations with the European association PETCORE (Monomer recycling) as part of discussions with European bodies such as DG Santé and EFSA (European Food Safety Authority). In addition, Carbios has strengthened its teams with two people dedicated to regulatory issues and its collaborations with expert firms.

3.2.6.3 Degree of criticality of risks

Risks associated with compliance with the Nagoya Protocol on Access to Genetic Resources: Minor.

Risks associated with regulations on plastics intended to come into contact with foodstuffs: Minor

3.3 RISK MANAGEMENT MEASURES

3.3.1 INTERNAL CONTROL ORGANIZATION AND PROCEDURES

As part of its internal control, the Company has, since its inception, implemented detailed procedures to ensure compliance with the rules in force and to guard against the related risks. These procedures are validated by the Company's management and distributed to all employees who undertake to comply with them. They are also regularly reviewed and adjusted to take into account structural and/or organizational changes in the Company in order to maintain a minimum level of risk.

In addition, the finance team ensures compliance with procedures on a quarterly and half-yearly basis by performing random self-checks on various procedures. The results are sent to the Audit Committee (below) and to the Statutory Auditor. The teams receive regular feedback on this subject, and corrective measures are taken if necessary.

See Section 4.1.5.2.1.2. "Audit Committee" which details the composition and role of the Audit Committee. It reports to the Board of Directors and aims to review internal control and proper risk management.

In addition to its annual (and sometimes half-yearly) closing work, the Company's Statutory Auditors regularly audit the internal control systems set up by the Company to ensure that documented procedures are in place and effective.

3.3.2 INSURANCE AND RISK COVERAGE

At the date of this Universal Registration Document, the Company believes that it has adequate insurance coverage for its activities. In the future, the Company does not foresee any particular difficulties in maintaining adequate levels of insurance within the limits of availability and market conditions.

The Company has taken out a "Professional Multi-Risk" insurance policy for the premises of its registered office, which is now located at the Cataroux site, 8 rue de la Grolière, 63100 Clermont-Ferrand, France.

The main clauses of this insurance policy are as follows:

- property insurance against risks of fire, explosions, natural disasters, climate events, water damage, electrical damage, theft, vandalism, demonstrations, riots, machinery breakdown, glass breakage, the cost of reconstructing the archives for previous events on the Company's premises; and

- insurance for the financial consequences of the cessation of activity due to a covered claim.

The Company has also taken out Civil Liability Insurance which covers the civil liability of the Company due to its operations.

This insurance is extended to the Company's activities carried out on premises made available by public laboratories. The policy guarantee covers the financial consequences of the civil liability that the Company may incur as a result of material and immaterial damage to property entrusted to the Company in the course of its activities.

In addition, the Company has also taken out insurance policies in connection with the work undertaken as part of the installation of the industrial demonstration plant and its operation, namely "comprehensive construction site/comprehensive test and assembly," "structural damage" and "machinery breakdown" insurance policies.

Lastly, as part of the two innovation loans, the Company has taken out a borrower guarantee in the event of death, total and irreversible loss of autonomy, total and permanent disability or total inability to work for key insured persons.

During the fiscal year ended December 31, 2023, the Company recognized an amount of €135 thousand in premiums for all insurance policies to which it has subscribed.

3.3.3 LEGAL AND ARBITRATION PROCEEDINGS

There are no governmental, judicial or arbitration proceedings (including any proceedings of which the Company is aware that are in abeyance or that are threatened) that may or might have had a significant effect on the financial position or profitability of the Company in the last 12 months.

The Company has therefore not recorded any provision for litigation.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4. CORPORATE GOVERNANCE

4.1 GOVERNANCE ORGANIZATION

4.1.1 BOARD OF DIRECTORS

The Company is a French Société Anonyme (public limited company) with a Board of Directors whose mode of operation is described in the bylaws and in section 7.2 of this Universal Registration Document. At its meeting of February 7, 2023, the Board of Directors duly noted the resignation of Jacqueline LECOURTIER, Jean-Claude LUMARET, Alain CHEVALLIER and Jean FALGOUX from their directorships. Karine AUCLAIR, Mateus SCHREINER GARCEZ LOPES, Amandine DE SOUZA and Sandrine CONSEILLER were co-opted as directors to replace the four who resigned.

The Shareholders' Meeting of June 22, 2023 ratified the appointment of Mrs. Karine AUCLAIR, Mr. Mateus SCHREINER GARCEZ LOPES and Mrs. Amandine DE SOUZA as members of the Board of Directors. The Shareholders' Meeting of June 22, 2023 noted the expiry of the term of office of Mrs. Sandrine CONSEILLER as an independent director and renewed said term of office for a period of four years.

4.1.1.1 Directors

Information concerning the directors
At the date of this Universal Registration Document, the Board of Directors was composed of the following 11 directors and one non-voting director:

First name-Surname or company name	Main position held within the Company	Gender	Main position held outside the Company	Age	Nationality	First appointment	Member of a statutory committee (2)
Philippe POULETTY (1)	Chairman of the Board of Directors from April 1, 2022	Male	Chief Executive Officer of Truffle Capital SAS	65	French	04/01/2022	-
Emmanuel LADENT	Director	Male	Chairman Carbiolice	55	French	05/05/2022	-
BOLD, Business Opportunities for L'Oréal Development, represented by Laurent SCHMITT	Director	Male	Chief Corporate Finance and Financial Communication Officer of the L'Oréal Group	59	French	06/23/2021	-
MICHELIN VENTURES, represented by Nicolas SEEBOTH	Director	Male	Technical Director of the High Tech Materials Business Unit Michelin	46	French	06/23/2021	Member of the Audit Committee
Vincent KAMEL	Independent director	Male	Chairman of Kamergy SAS	61	French	06/23/2021	-

First name-Surname or company name	Main position held within the Company	Gender	Main position held outside the Company	Age	Nationality	First appointment	Member of a statutory committee (2)
Juan DE PABLO	Independent director	Male	Executive Vice-President for Science, Innovation, National Laboratories and Global Initiatives and Liew Family Professor of Molecular Engineering University of Chicago Pritzker School of Molecular Engineering Senior Scientist Argonne National Laboratory	61	American	06/29/2022	Member of the Scientific Committee
Isabelle PARIZE	Independent director	Female	Director of ODYS SPRL, Belgium	66	French	06/29/2022	Chairman of the Audit Committee
Mateus SCHREINER GARCEZ LOPES	Independent director	Male	Global Director for Energy Transition and Investments at Raizen	41	Brazilian	02/07/2023	-
Karine AUCLAIR	Independent director	Female	Professor of Chemistry McGill University	51	Canadian	02/07/2023	Member of the Scientific Committee
Amandine DE SOUZA	Independent director	Female	Chief Executive Officer Leboncoin	45	French	02/07/2023	-
Sandrine CONSEILLER	Independent director	Female	Chief Executive Officer De Beers Brands	52	French	02/07/2023	-
Copernicus Wealth Management represented by Mr. Alen VUKIC	Non-voting director	Male	Chief Financial Officer Copernicus Wealth Management	48	Switzerland	06/22/2022	

(1) Philippe POULETTY was appointed Chairman of the Board of Directors after having been co-opted as a director of the Company to replace TRUFFLE CAPITAL, which resigned. Until its resignation, TRUFFLE CAPITAL was represented by Philippe POULETTY on the Board of Directors.

(2) Only the members of a statutory committee are mentioned in this table. The Company has also set up non-statutory commissions. Please refer to section 4.1.5.2 of this Universal Registration Document for a description of these.

Each director is domiciled at the Company's registered office at the Cataroux site - 8 rue de la Grolière - 63100 Clermont-Ferrand, France.

Director biographies

Philippe POULETTY, Chairman of the Board of Directors

A medical doctor (University of Paris VI), immunologist, former intern at Hôpitaux de Paris and immunology specialist at Institut Pasteur (general immunology), Philippe POULETTY did postdoctoral research at Stanford University. He is the inventor of 32 patents, including Stanford University's second most lucrative patent in the field of life science.

Philippe POULETTY is the co-founder and CEO of Truffle Capital, a private equity firm managing funds of €700 million (January 2021). He was Chairman of France Biotech (the French association of biotechnology companies) for 9 years and was formerly Vice-Chairman of Europabio (the European biotech federation). He is also the founder or co-founder of 17 biotechnology and medical device companies in Europe and the United States (including Carbios), which have already generated a capitalization of more than €2.5 billion and which have developed numerous drugs and innovative medical devices. He is currently Chairman or Board member of several biotechnology and medical device companies in Europe, several of which are listed on the stock exchange.

Philippe POULETTY has contributed to several government initiatives in France, including the law of 1999 on the simplification of corporate law (SAS), the 2002 "Biotech Plan" to revive and develop biotechnology and the Young Innovative Company status which grants significant tax exemptions to technology companies.

Emmanuel LADENT, Chief Executive Officer and member of the Board of Directors

Emmanuel LADENT, a graduate of Neoma Business School, has 30 years of experience in the automotive sector and more specifically in mobility. He previously managed the MICHELIN Group's largest Business Line, the Global Automotive Brands division. His career as an executive is characterized by a strong international footprint, with more than 20 years spent on several continents. Specialized in the development of profitability and the transformation of activities through innovation, Emmanuel LADENT has contributed to the development of subsidiaries with several billion euros in revenue. As a true leader, he has been able to mobilize multidisciplinary and intercultural teams around a common vision and a shared ambition.

Laurent SCHMITT (representative of BOLD, Business Opportunities for L'Oréal Development), member of the Board of Directors

Laurent SCHMITT has dedicated more than 30 years of his career to the L'Oréal Group, where he has taken on many leadership roles internationally. He has held the positions of Chief Financial and Supply Chain Director in the Czech Republic and then in Brazil, Chief Executive Officer of the luxury goods business unit in Brazil, Chief Financial Officer in France for the Professional Products Division and Chief Financial Officer for the Africa, Middle East and Pacific regions. He currently holds the positions of Chief Corporate Finance and Financial Communication Officer of the L'Oréal Group and Chief Executive Officer of BOLD, "Business Opportunity for L'Oréal Development," a venture capital investment fund of the L'Oréal Group. Laurent SCHMITT is a graduate of the Institut d'Études Politiques de Paris (Sciences-Po).

Nicolas SEEBOTH (representative of Michelin VENTURES), member of the Board of Directors

Nicolas SEEBOTH is the Technical Director of the Michelin Group's High Tech Materials Business Unit. With a solid knowledge of chemistry and polymers, for over 15 years, he held various research positions at Michelin after obtaining a doctorate focusing on organometal chemistry at the École Polytechnique de Paris. He is the inventor of more than 40 patents, among which are some of the Michelin Group's major innovations (specialty polymers and chemical additives) and regularly speaks at international conferences. He is also Chairman of Toulouse White Biotechnology, a public-private consortium aimed at accelerating the development of industrial biotechnologies.

Vincent KAMEL, member of the Board of Directors

Vincent KAMEL holds an engineering degree from École Centrale de Lyon. He has more than 35 years of experience in the chemical industry (Rhône Poulenc, Rhodia, Solvay), in France and abroad (China, Korea, Brazil), during which he held leading positions as Chief Executive Officer of the Polyamide Division of Solvay, Director of the Coatis Business Unit and Asia Director for "Engineering Plastics." In particular, he has developed an in-depth knowledge of regulatory, industrial and business development aspects of recycling. Vincent KAMEL also held the position of COO at Domo Chemicals until January 2023.

Juan DE PABLO, member of the Board of Directors

Professor of Molecular Engineering at the Pritzker School and Executive Vice-President for Science, Innovation, National Laboratories and Global Initiatives at the University of Chicago, Juan DE PABLO is also a Senior Scientist at the Laboratoire National Argonne. Most of his work is dedicated to the understanding and design of new materials, and he is at the forefront of polymeric material simulations. Juan DE PABLO holds more than twenty patents and is the author or co-author of more than 600 publications.

Juan DE PABLO strives to maximize the reach of the University's efforts in innovation, technology and science, and to connect them to political and industrial issues. In 1990, he obtained a PhD in Chemical Engineering from the University of California, Berkeley and did post-doctoral studies at the Swiss Federal Institute of Technology in Zurich.

Isabelle PARIZE, member of the Board of Directors

Isabelle PARIZE is a graduate of the École Supérieure de Commerce in Paris. After holding various positions at Procter & Gamble between 1980 and 1993, including Hygiene and Beauty Marketing Director, she joined the Henkel Group in 1994. She was then Chief Executive Officer of Schwarzkopf - Henkel France from 1994 to 1998, then Senior Vice-President of Europe, Middle East and Africa (based in Germany) from 1998 to 2001. She became Chairwoman of Canal+ Distribution and Chairwoman and Chief Executive Officer of CanalSatellite in 2001. She then became Chairwoman of the perfumes division of Quest International Group (2005-2007) and Chief Executive Officer and then Vice-Chairwoman of Betclic (2007-2011). She then joined Nocibé as Chairwoman of the Management Board (2011-2016). She was Chairwoman and Chief Executive Officer of Douglas Holding AG until October 2017. From 2018 to August 2021, she became CEO of Delsey and its holding company DHI Compagny. Today, she is Director of ODYS SPRL, Belgium and is a member of several other Boards of Directors, including Carbios.

Mateus SCHREINER GARCEZ LOPES, member of the Board of Directors

Mateus SCHREINER GARCEZ LOPES is Global Director of Energy Transition and Investments at Raizen (world leader in bioenergy in Brazil) where he leads technology, new business development and intellectual property. He was previously Global Director of Innovation and Business Development in the renewable chemicals sector at Braskem (the largest producer of thermoplastic resins in the Americas and the largest producer of biopolymers in the world). Before joining the corporate world, Mateus held several research and teaching positions in synthetic biology and metabolic engineering at universities in Mexico, Germany, the United States and Brazil. He is also a member of the Board of Directors of Iogen Energy Corporation, Vice-Chairman of the Board of Directors of the Brazilian Bio-Innovation Association and a member of the Advisory Committee of the MIT Energy Initiative.

Karine AUCLAIR, member of the Board of Directors

Prof. Karine AUCLAIR is a Professor of Chemistry at McGill University and holder of the "Tier 1 Canada Research Chair" on antimicrobials and green enzymes. She has received numerous awards over the years, including the Clara Benson Award from the Canadian Society of Chemistry, the McGill Tomlinson Professorship, the Leo Yafe Teaching Award and the McGill Fessenden Professorship, to name but a few. An internationally renowned bio-organic chemist, she has made significant scientific contributions in the fields of antimicrobial resistance, biocatalysis and enzymology. Her research has resulted in several patents, particularly in the field of closed-loop enzymatic depolymerization of untreated PET with high crystallinity. Her work has been the subject of nearly 100 peer-reviewed publications in high-impact journals and is often highlighted by the media. As a recognized leader in her field, she is often invited to speak at industry and academic conferences around the world, and to review theses and applications for subsidies from international institutions.

Amandine DE SOUZA, member of the Board of Directors

Amandine DE SOUZA is currently Chief Executive Officer of Leboncoin and an independent director of Christofle and United B. Amandine has 17 years of experience in companies of very different sizes and governance: from family businesses to multinationals and start-ups. She has been Chief Executive Officer of BHV MARAIS (large French retail, decoration and fashion stores), Eataly (Italian gastronomy concept franchise) and Home, DIY and Leisure Purchases of the Galeries Lafayette Group (since April 2018), of which she is also a member of the Executive Committee (since February 2020). She was Chief Executive Officer France at Westwing (a pure-player e-commerce start-up) from 2015 to 2018. From 2009 to 2015, she was Merchandise Director for various categories, mainly non-food, and sourcing at the Casino group (food and non-food distribution). Previously, she worked as a strategy consultant at Bain & Company in France and abroad.

Sandrine CONSEILLER, member of the Board of Directors

Sandrine CONSEILLER is the current Chief Executive Officer of De Beers Brands within De Beers Group. She was previously Chief Executive Officer of Aigle (an iconic French brand committed to sustainable fashion). Before joining Aigle, Sandrine was Executive Vice-President of Marketing & Branding at Lacoste (another iconic French fashion brand) from 2011 to 2015. She contributed to the turnaround of the House of Lacoste, of which she was a member of the Executive Committee, with strong growth and numerous professional awards, including several Cannes Lions Awards. Sandrine began her career at Unilever and spent 18 years managing international businesses, mainly in the Personal Care division, in Latin America, Europe and Asia. Sandrine is also a member of the Board of Directors of Raise Don (the leading philanthropic endowment fund dedicated to start-ups) and a founding partner of NEO FOUNDERS (a venture capital fund sponsoring impact start-ups). Sandrine is an independent Director with IFA Science-Po certification and an INSEAD International Directors program.

List of offices and positions held by directors in all companies over the last 5 years

First name-Surname or company name of the member	Other offices currently held in other companies	Other offices and positions held in other companies over the past five years and no longer held at the date of this Universal Registration Document
Philippe POULETTY	**As permanent representative of TRUFFLE CAPITAL:** Chairman of the Board of Directors of Diaccurate S.A. Co-founder and Director of Affluent Medical S.A. Co-founder and Director of Holistick Medical S.A.S.U. Co-founder and Director of Deinove S,A. - Euronext Growth Paris Co-founder and Director of Skinosive S.A.S. Co-founder and Director of Artedrone S.A.S. Chairman of the Board of Directors of PK Med S.A.S. Co-founder and Director of Bariatek S.A.S. Chairman of the Board of Directors of Caranx Medical S.A.S. Co-founder of Skinnate S.A.S. Co-founder & Chairman of SpikImm S.A.S. **In a personal capacity:** Chief Executive Officer of TRUFFLE CAPITAL S.A.S. Manager of NAKOSTECH SARL Founder and Chairman of the Board of Directors of ABIVAX S.A. - Euronext Paris Director of France Biotech (French non-profit organization under French Law of 1901)	**As permanent representative of TRUFFLE CAPITAL:** Member of the Executive Committee of DEINOBIOTICS S.A.S. Director of VEXIM S.A. Director of PLASMAPRIME S.A.S. Director of NEOVACS S.A. – Euronext Growth Paris Member of the Executive Committee of KEPHALIOS Member of the Executive Committee of LUOPOWERS Chairman of NANOSIVE SASU Co-founder and Director of Carmat S.A. - Euronext Growth Paris Co-founder and Director of Pharnext S.A. - Euronext Growth Paris Director of Biokinesis S.A.S. **In a personal capacity:** Member of the Supervisory Board of INNATE PHARMAS.A. - Euronext Growth Paris (December 2016) Chairman and Director of SPLICOS S.A.S. Member of the Supervisory Board of CYTOMICS S.A. Director of Association Centre Chirurgical Marie Lannelongue (French non-profit organization under French Law of 1901) Honorary Chairman of France Biotech (French non-profit organization under French Law of 1901)
Emmanuel LADENT	Chairman of Carbiolice	None.
Laurent SCHMITT (representative of BOLD, Business Opportunities for L'Oréal Development)	**As permanent representative of BOLD, Business Opportunities for L'Oréal Development:** None. **In a personal capacity:** Chief Corporate Finance and Financial Communication Officer of the L'Oréal group Chairman of BOLD - "Business Opportunities for L'Oréal Development"	**As permanent representative of BOLD, Business Opportunities for L'Oréal Development:** None. **In a personal capacity:** None.
Nicolas SEEBOTH (representative of Michelin Ventures)	**As representative of MICHELIN VENTURES:** None. **In a personal capacity:** None.	**As representative of MICHELIN VENTURES:** None. **In a personal capacity:** None.
Vincent KAMEL	Director and Chairman of Kamergy S.A.S.	Director of Rhodia Opérations S.A.S. Director of PolyTechnyl S.A.S. Chairman of GBU Solvay PEPOL COO of Domo Chemicals
Juan DE PABLO	Member of the Scientific Advisory Board of Solvay Director of the Toyota Technical Institute of Chicago Member of the Board of the American Academy of Arts and Sciences Member of the Scientific Advisory Board of the Dreyfus Foundation Member of the Board of the Laboratory Schools of Chicago	None.
Isabelle PARIZE	Chairwoman of the Supervisory Board of Delsey Partner of ODYS S.P.R.L. Member of the Board of Directors and of the Audit Committee of COTY[1] Member of the Board of Directors of FLO Health Inc.	Member of the Board of Directors of Air France-KLM S.A. until July 2023 Chairwoman of DHI S.A.S. until July 2021 Chairwoman of Delsey S.A.S. until July 2021 Member of the Board of Directors of Auchan Retail International until October 2018 Member of the Board of Directors of Robertet(1) until June 2020 Member of the Board of Directors of Delsey Luggage Inc. and Delsey DUSH until August 2021 Member of the Board of Directors of Delsey Asia Limited, Delsey Hong Kong Ltd and Delsey Dongguan until September 2021 Member of the Board of Directors and Audit Committee of Pandora[1] until November 2021

Mateus SCHREINER GARCEZ LOPES	Global Head of Energy Transition and Investments at Raizen Vice-Chairman of the Board of the Brazilian Bioinnovation Association	Global Head of Innovation and Business Development in the renewable chemicals sector at Braskem until July 2021
Karine AUCLAIR	Professor of chemistry at McGill University	None.
Amandine DE SOUZA	Chief Executive Officer of Leboncoin Independent Director of Christofle Independent Director of United B	Chief Executive Officer of Bazar De l'Hotel De Ville (BHV) Chief Executive Officer of BHV Exploitation Chief Executive Officer of Restauration du Bazar Chief Executive Officer of Eataly Chief Executive Officer of Home, DIY and Leisure Purchasing at the Galeries Lafayette Group Member of the Executive Committee of the Galeries Lafayette Group Chief Executive Officer France of Westwing
Sandrine CONSEILLER	Chief Executive Officer of De Beers Brands - De Beers Group Independent Director of Raise Don Founding partner of NEO FOUNDERS	CEO of Aigle - Maus Freres Brand Group Independent Director of Raise Sherpa Independent Director of Mouvement Impact France

(1) Société cotée

4.1.1.2 Non-voting directors

Information about non-voting directors

During the fiscal year ended December 31, 2023, the following non-voting director took part in the meetings of the Board of Directors:

First name-Surname or company name	Gender	Main position held outside the Company	Age	Nationality	First appointment	Expiry of the term of office
Copernicus Wealth Management represented by Mr. Alen VUKIC	Male	Chief Financial Officer Copernicus Wealth Management	48	Switzerland	06/22/2022	2024 OGM for fiscal year 2023

Biography of the non-voting director

Alen VUKIC (representative of Copernicus Wealth Management), non-voting director

Copernicus Wealth Management is a manager of discretionary mandates and private and public investment funds, based in Switzerland and recognized by the local supervisory body FINMA, the CSSF in Luxembourg, the CBI in Ireland and the FME in Liechtenstein, and which, through the investment vehicles it manages, favors investments in innovative companies with high growth potential that can improve social well-being and address important issues such as environment.

Alen VUKIC, Chief Financial Officer of Copernicus Wealth Management, is co-founder of the Copernicus group. He is also Chairman of Thalia Capital Advisors S.A. and Finpartners Financial Services S.A. and spent 11 years at BSI Group (now EFG), including four years at the group's wealth management company, Patrimony 1873 S.A., which he helped create. Since his beginnings in 2001 as a financial analyst, he has held the positions of co-manager of the BSI Multinvest Asia ex-Japan fund, Risk Manager Asset Management at BSI, member of the Fondazione di Previdenza BSI S.A. and Fondo Complementare di Previdenza BSI S.A. (two foundations of the BSI group). He is a member of the Board of Directors of several dedicated private funds managed by Copernicus in Ireland and Luxembourg, and of Centrica SICAV, Copernicus's undertaking for collective investment in SICAV securities, as well as of the Alliance of Swiss Wealth Managers since 2021.

List of offices and positions held by the non-voting director in all companies over the last 5 years

First name-Surname or company name of the non-voting director	Other offices currently held in other companies	Other offices and positions held in other companies over the past five years and no longer held at the date of this Universal Registration Document
Copernicus Wealth Management represented by Mr. Alen VUKIC	**In a personal capacity:** Non-Executive Director of Gaea QIAIF ICAV Non-Executive Director of B Settlement Fund SICAV-SIF Non-Executive Director of Bernhei Investment Fund SICAV-SIF Non-Executive Director of Palessia Multi Asset Fund SICAV-SIF Non-Executive Director of Centrica until September 2022 Executive Director of Copernicus Wealth Management S.A. Chairman and Non-Executive Director of Thalia Capital Advisors S.A. Chairman of Finpartner Financial Services S.A. Non-Executive Director of Alliance of Swiss Wealth Managers Non-Executive Director of Italian Private Opportunities S.p.A Non-Executive Director of Sorgenti Italiane Regionali S.p.A. Non-Executive Director of IPO Fashion & Design S.r.l. Non-Executive Director of IPO Services S.r.l. Non-Executive Director of IPO Caffè S.p.A.	**In a personal capacity:** Non-Executive Director of Centrica until September 2022

4.1.2 EXECUTIVE MANAGEMENT

4.1.2.1 Composition of Executive Management

Emmanuel LADENT has been Chief Executive Officer since December 1, 2021, for a term of five years. He is domiciled at the Company's registered office, Cataroux Site - 8 rue de la Grolière - 63100 Clermont-Ferrand - France.

First name-Surname or company name	Date of 1st appointment	Expiry of the term of office	Main position held within the Company	Main position held outside the Company
Emmanuel LADENT	Board of Directors meeting of November 5, 2021 (with effect from December 1, 2021)	December 1, 2026	Chief Executive Officer	Chairman of Carbiolice

The Management team is also composed of Alain MARTY, Chief Scientific Officer, Lise LUCCHESI, Intellectual Property Director, Pascal BRICOUT, Chief Strategy and Financial Officer, Mathieu BERTHOUD, SVP Business Development, Feedstock Recycling, Lionel ARRAS, Industriel Development Director, Stéphane FERREIRA, Chief Biorecycling Business Officer, Delphine DENOIZE, Public Funding and Regulation Director, Sophie BALMARY, HR and Legal Director and Bénédicte GARBIL, SVP Corporate Affairs, Sustainability and Communication, whose biographies are presented below:

Professor Alain MARTY holds an Engineering degree and a Doctorate in Biochemical and Food Engineering from INSA (Institut National des Sciences Appliquées) in Toulouse. He started his career in 1992 as Lecturer at INSA Toulouse. In 2004, he obtained an accreditation to direct research and was appointed Professor in 2007. At the time, he conducted his research in the INSA/CNRS/INRAE TBI laboratory, in particular in the fields of biotechnology, biocatalysis, enzymology, enzymatic molecular engineering, the development of intensified enzymatic reagents and metabolic engineering. During his career, he combined cutting-edge research with the drive to implement it in the industrial world. He was appointed expert for AERES (the French agency for the assessment of research and higher education) and for ANR (the French national research agency). Alain MARTY has been Chief Scientific Officer at Carbios since June 1, 2015.

Lise LUCCHESI is a biotechnology engineer. She also holds a CEIPI diploma (Center for International Intellectual Property Studies) and a Specialized Masters in Management of Biotechnology Companies. After a few years as a market analyst in a green chemistry company, Lise joined Carbios in 2012 as Head of Strategic Monitoring, then held the position of Head of Intellectual Property and Agreements. Today, she is the Director of Intellectual Property and is in charge of managing the Company's patent and trademark portfolios, and also has responsibility for contracts involving intellectual property rights (licensing, research collaboration, services, etc.).

Pascal BRICOUT leads the management and organization of Carbios' finance function and is also in charge of Strategy, Investor Relations and the deployment of the Group's CSR approach. He joined Carbios in 2022 with more than thirty years of experience in finance, strategy and international mergers & acquisitions. He holds a degree in Finance from the University of Paris-Dauphine and has held the position of Chief Financial Officer for the Michelin Group in Asia, a region of strong growth for the Group. Over the past ten years, he has focused on major strategic acquisitions.

Mathieu BERTHOUD has more than 30 years of experience, including 10 years at Rhodia (now Solvay) and more than 20 years at Suez, in various business development positions or general management of subsidiaries in France or abroad (Benelux, Germany). He was most recently Technical and Performance Director of the recycling and recovery activities of the entire Group. A university-trained scientist, he also holds an MBA from HEC Paris. At Carbios, he is responsible for securing the supply of PET waste for the future Longlaville plant.

Lionel ARRAS is a graduate of ENSIC Nancy and holds an MBA from the Lyon School of Management. Before joining Carbios, Lionel ARRAS was Director of Technology and Project Europe at Elkem Silicones, Director of Strategic and Industrial Projects (increases in capacity, improvement of efficiency) and in charge of managing the portfolio of current investments for the production activities of large on-site intermediaries with substantial productivity, cost and HSE challenges. He was also responsible for R&D projects and resources in Chemistry and Processes Europe and contracts with external development partners. He was heavily involved in the development of the global Technology and Projects organization between Europe, China and Norway. Prior to that, Lionel ARRAS held positions as process engineer and production manager in factories. He began his career in 1998 in the engineering and technology center of Rhône-Poulenc in Décines (France) after a cooperation with Purdue University in Indiana (United States).

Stéphane FERREIRA is Chief Biorecycling Business Officer at Carbios, where he is in charge of the international business development of Carbios and will manage the relationship with all the industrial and commercial partners. With more than 20 years of experience in specialty chemicals, Stéphane FERREIRA has in-depth knowledge of the materials and life sciences markets. A graduate of the Institut Agro Montpellier, he holds a Masters of Science in Life Sciences. He has held strategic and operational positions at DuPont and Arkema, working in several countries including France, Germany and Korea. More recently, Stéphane FERREIRA was Vice-President of Transformation for Arkema's coatings business entity. His leadership and customer focus have enabled him to successfully carry out major transformation projects, developing the culture, processes and strategic partnerships essential to business growth.

Delphine DENOIZE: after several years spent in innovation in the agricultural world, Delphine DENOIZE joined the Company in 2016 and is one of the Group's top twenty employees. First in charge of Innovation Financing and Regulation, then Project Manager for PET biorecycling, she supports the Company's projects. Her responsibilities include the French and European public financing of innovation, the validation of the compliance of processes and products with various regulations around the world, as well as the assessment of their environmental impact through tools such as life cycle analysis.

Sophie BALMARY: A lawyer graduated in Business Law from the University of Grenoble, Sophie BALMARY has more than 25 years of experience, including 6 years at Michelin and more than 20 years at Groupe Renault where she was respectively Director of Labor Relations and Director of Labor Relations France, Director of Renault Headquarters, Senior International Legal Officer. As HR and Legal Director, Sophie BALMARY is in charge of supporting the growth of the Company's organization and its activities: steering organizational changes, developing talents and contributing to developing a stimulating and fulfilling work environment, and also securing Carbios' activities in the context of its industrial and commercial development.

Bénédicte GARBIL: An expert in public policies and financing of innovative projects, Bénédicte GARBIL is a graduate of Sciences-Po Lille, and holds a Master's degree in Health Law and Regulatory Affairs and a University Diploma in Pharmacoeconomics. Before joining Carbios, Bénédicte GARBIL was Deputy Director of Health and Biotechnologies for the French General Investment Commission (CGI), Head of the Bureau des Industries de Santé at the Direction Générale des Entreprises (DGE), then managed Edwards Lifesciences in France for 4 years and created a consulting company helping biotechnology and healthcare companies. As SVP Corporate Affairs, Sustainability and Communication, she is responsible for three departments: Public Affairs, Institutional Affairs and Sustainable Development. In Institutional Affairs, she oversees the Communication, Regulatory, Project Management and Innovation Financing functions. In terms of Sustainable Development, she oversees the CSR, QHSE and LCA functions. Bénédicte Garbil also joins the Executive Committee.

4.1.2.2 Personal information relating to members of Executive Management

Emmanuel LADENT, Chief Executive Officer

Emmanuel LADENT, 55, a graduate of Neoma Business School, has 30 years of experience in the automotive sector and more specifically in mobility. He managed the Michelin Group's largest Business Line, the Global Automotive Brands division. His career as an executive is characterized by a strong international footprint, with more than 20 years spent on several continents. Specialized in the development of profitability and the transformation of activities through innovation, Emmanuel LADENT has contributed to the development of subsidiaries with several billion euros in revenue.

4.1.2.3 List of offices and positions held by the members of Executive Management in any company over the last 5 years

First name-Surname or company name of the member	Other offices currently held in other companies	Other offices and positions held in other companies over the past five years and no longer held at the date of this Universal Registration Document
Emmanuel LADENT	Chairman of Carbiolice	None.

4.1.3 DECLARATIONS CONCERNING THE MEMBERS OF THE BOARD OF DIRECTORS AND EXECUTIVE MANAGEMENT

Over the past five years, none of the members of the Company's Board of Directors or Executive Management:

- has been found guilty of any fraud;
- has been involved in any bankruptcy, receivership or liquidation proceedings as an executive or corporate officer;
- has been banned, by a court of law, from acting as a member of an administrative, management or supervisory body of an issuer or being involved in the management or conduct of such a company's business;
- has been subject to any official public indictment and/or sanction by any statutory or regulatory authorities (including designated professional bodies).

4.1.4 CONFLICTS OF INTEREST AT THE LEVEL OF THE ADMINISTRATIVE BODIES AND EXECUTIVE MANAGEMENT

As of the date of this Universal Registration Document, BOLD holds 5.60% of the share capital and 5.60% of the exercisable voting rights of the Company, and Michelin Ventures holds 3.09% of the share capital and 3.08% of the exercisable voting rights of the Company. However, subject to this reserve, at the date of this Universal Registration Document, to the Company's knowledge:

- there are no conflicts of interest between the duties of the members of the Board of Directors and Executive Management within the Company and their private interests;
- there is no arrangement or agreement entered into with the main shareholders, customers, suppliers or others pursuant to which a member of the Board of Directors or Executive Management has been appointed;
- there is no restriction agreed to by the members of Board of Directors or the Executive Management concerning the disposal, within a certain period of time, of their interests in the issuer's share capital.

4.1.5 FUNCTIONING OF THE ADMINISTRATIVE AND EXECUTIVE BODIES

4.1.5.1 Terms of office of the members of the Board of Directors and Executive Management

Executive Management

The Company is represented with regard to third parties by Emmanuel LADENT, Chief Executive Officer, who was appointed in this capacity by decision of the Board of Directors on November 5, 2021.

Executive Management (Article 17 of the bylaws)

Please refer to section 7.2.2.3 of this Universal Registration Document.

Board of Directors

Terms of office of the members of the Board of Directors

At the date of this Universal Registration Document, the Board of Directors was composed of the following members:

First name-Surname or company name	Date of 1st appointment	Expiry of the term of office
DIRECTORS		
Philippe POULETTY	03/31/2022	2025 OGM for fiscal year 2024
Emmanuel LADENT	05/05/2022	2025 OGM for fiscal year 2024
Vincent KAMEL(1)	06/23/2021	2025 OGM for fiscal year 2024
BOLD, Business Opportunities for L'Oréal Development (represented by Laurent SCHMITT)	06/23/2021	2025 OGM for fiscal year 2024
MICHELIN VENTURES (represented by Nicolas SEEBOTH)	06/23/2021	2025 OGM for fiscal year 2024
Juan DE PABLO(1)	06/29/2022	2025 OGM for fiscal year 2024
Isabelle PARIZE(1)	06/29/2022	2025 OGM for fiscal year 2024
Karine AUCLAIR(1)	02/07/2023	2025 OGM for fiscal year 2024
Mateus SCHREINER GARCEZ LOPES(1)	02/07/2023	2025 OGM for fiscal year 2024
Amandine DE SOUZA(1)	02/07/2023	2025 OGM for fiscal year 2024
Sandrine CONSEILLER(1)	02/07/2023	2027 OGM for fiscal year 2026
NON-VOTING DIRECTORS		
Copernicus Wealth Management (represented by Alen VUKIC)	06/22/2022	2024 OGM for fiscal year 2023

(1) Independent members of the Board of Directors.

All directors may be reappointed at the end of each 4-year term of office and all non-voting directors at the end of each 1-year term.

The Board of Directors (Articles 13 to 16 of the bylaws)

Please refer to section 7.2.2.1 of this Universal Registration Document.

Non-voting directors (Article 15.6 of the bylaws)

Please refer to section 7.2.2.2 of this Universal Registration Document.

Attendance rate of directors and non-voting directors at meetings of the Board of Directors

The minutes of each meeting are prepared under the responsibility of the Chairman of the Board of Directors. It is transcribed in the minutes register after signature by the Chairman and one of its members.

During the fiscal year ended December 31, 2023, the Company's Board of Directors met 9 times on the days and months listed below.

Board meeting dates	Number of directors and non-voting directors present or represented	Attendance rate
February 7, 2023	Directors: 7 Non-voting directors: 1	Directors: 100% Non-voting director: 100%
April 5, 2023	Directors: 10 Non-voting directors: 1	Directors: 90.9% Non-voting director: 100%
May 4, 2023	Directors: 11 Non-voting directors: 1	Directors: 100% Non-voting director: 100%
June 19, 2023	Directors: 10 Non-voting director: 0	Directors: 90.9% Non-voting director: 0%
June 20, 2023	Directors: 10 Non-voting directors: 1	Directors: 90.9% Non-voting director: 100%
June 28, 2023	Directors: 11 Non-voting directors: 1	Directors: 100% Non-voting director: 100%
September 7, 2023	Directors: 9 Non-voting directors: 1	Directors: 81.8% Non-voting director: 100%
September 27, 2023	Directors: 10 Non-voting directors: 1	Directors: 90.9% Non-voting director: 100%
December 20, 2023	Directors: 11 Non-voting directors: 1	Directors: 100% Non-voting director: 100%

At the end of the next annual Shareholders' Meeting, the Board will examine the results of the votes and decide on the possibility of a communication on this subject.

Service agreements between members of the administrative or executive bodies and the Issuer or one of its subsidiaries (Article 19 of the bylaws)

At the date of this Universal Registration Document, there is no service agreement binding the members of the Board of Directors and Executive Management to the Company.

Article 19 – Agreements between the Company and a director, the Chief Executive Officer, a Deputy Chief Executive Officer or a shareholder holding more than 10% of voting rights

19.1 Agreements subject to prior authorization

Except for agreements concerning day-to-day operations and taking place under normal conditions, any agreement taking place directly, or via a third person, between the Company and one of its Board members, the Chief Executive Officer, a Deputy Chief Executive Officer or a shareholder holding more than 10% of the Company's voting rights (or if such a shareholder is a legal entity, the Company controlling it within the meaning of Article L. 233-3 of the French Commercial Code) shall be subject to the Board of Directors' prior authorization.

The same applies to any agreements in which one of the persons referred to in the previous paragraph has an indirect interest.

Prior authorization is also required for agreements between the Company and another company, if the Company's Chief Executive Officer, one of its Deputy Chief Executive Officer, or one of its Board members is an owner, unlimited liability partner, manager, Board member, member of the Supervisory Board or, generally, an executive officer of said company.

Such agreements must be authorized and approved as required by law.

19.2 Prohibited agreements

Under penalty of nullity of the contract, Board members other than legal entities are prohibited from taking out any form of loan from the Company, obtaining any overdraft from the Company, through a current account or otherwise, or getting the Company to guarantee or stand surety for their commitments to third parties.

This ban also applies to the Company's Chief Executive Officer, its Deputy Chief Executive Officers and the permanent representatives of any legal entities who are Company directors. It also applies to the spouses, ascendants and descendants of the persons mentioned in this Article, as well as any intermediary.

19.3 Current agreements

Agreements relating to day-to-day operations and entered into under normal conditions are not subject to the legal authorization and approval process.

4.1.5.2 Information concerning committees

The bylaws (Article 16) provide that the Board of Directors may set up a certain number of special purpose committees.

4.1.5.2.1 Statutory committees

4.1.5.2.1.1 Scientific Committee

The Scientific Committee or Scientific Advisory Board (SAB) is an ad hoc advisory committee whose general mission is to assist the Board of Directors with any scientific matter by issuing opinions, proposals and recommendations. It reports to the Board of Directors on a regular basis.

The members of the SAB are appointed by the Board of Directors and are chosen for their expertise and scientific renown, or from among the researchers working for the Company. They are appointed for a fixed term at the Board's discretion, with the understanding that the Board of Directors may terminate the duties of the members of the Scientific Committee at any time, without compensation, without prior notice and without having to justify its decision.

As of the date of this Universal Registration Document, the Scientific Committee is composed of the following members: Prof. Alain MARTY, member and Chairman of this Committee, Juan DE PABLO and Karine AUCLAIR.

The Scientific Committee's duties are as follows:

- scientific monitoring of the Company's research projects: analysis of the scientific and technological barriers encountered by the Company and proposals of research strategies to overcome them;
- scientific and technological watch in the various areas of the Board's expertise: the Committee informs the Company of recent international advances in each of these areas;
- identifying new research topics likely to support the Company's development;
- proposing public or private partners or service providers with the required expertise to perform the tasks sought after by the Company within its research projects.

The Scientific Advisory Board meets 3 times a year, at the request of its Chairman or the Board of Directors.

The Scientific Advisory Board's decisions are adopted by a majority of the members present at the meeting. A member cannot be represented by another member and the decisions of the Scientific Advisory Board are counter-signed in its minutes.

4.1.5.2.1.2 Audit Committee

The Audit Committee is an ad hoc advisory committee whose general mission is to assist the Board of Directors with regard to the accuracy of the financial statements, the quality of the internal control system, the quality and relevance of the information provided and the Statutory Auditors' proper execution of their assignment. It does this by issuing opinions, proposals and recommendations. To this effect, the Audit Committee's duties are the following:

- verifying that the Company has set up and uses an organization and resources to provide fair, accurate and reliable accounting information to shareholders and the market;
- ensuring that procedures have been laid down and are implemented with regard to choosing the Statutory Auditors and complying with the latter's recommendations;
- ensuring that the financial information published is consistent with the Company's financial statements;
- examining the replies provided by the Executive Management to the questions submitted by stock market authorities and financial analysts;
- ensuring that procedures have been laid down and are implemented correctly to identify, qualify and control the risks incurred by the Company;
- ensuring the existence and assessing the relevance of financial control and internal audit procedures.

The members of the Audit Committee are appointed by the Board of Directors for a fixed term set by the appointment decision, with the understanding that the Board of Directors may terminate the duties of the members of the Audit Committee at any time without compensation, without prior notice and without having to justify its decision.

Isabelle PARIZE and Nicolas SEEBOTH are members of the Audit Committee. Isabelle PARIZE is its Chairwoman. Alain CHEVALLIER is an external consultant to the Audit Committee.

The Audit Committee meets 2 or 3 times a year, at the request of its Chairwoman or the Board of Directors.

The Audit Committee's decisions are adopted by a majority of the members present at the meeting. A member cannot be represented by another member and the decisions of the Audit Committee are counter-signed in its minutes.

4.1.5.2.2 Non-statutory committees

4.1.5.2.2.1 Intellectual Property Committee

The Intellectual Property Committee is an ad hoc advisory body whose general mission is to assist the Board of Directors on any issue related to the Company's intellectual property. It does this by issuing opinions, proposals and recommendations. It reports to the Board of Directors on a regular basis.

The Intellectual Property Committee is composed of the following members: Philippe POULETTY, who is also its Chairman, and Emmanuel LADENT. Mr. Jean-Claude LUMARET is an external consultant within the Intellectual Property Committee.

The Intellectual Property Committee meets as required, at least once a year.

Its duties involve the following:

- examining intellectual property matters;
- reviewing competition in terms of intellectual property;
- strategy for the filing, extension and defense of rights;
- issuing recommendations to the Board of Directors regarding intellectual property.

4.1.5.2.2.2 Compensation and Appointments Committee

The Compensation and Appointments Committee is an ad hoc advisory body whose general mission is to assist the Board of Directors on any issue related to the compensation of any person performing a task for the Company, such as its executive officers, employees and consultants. It does this by issuing opinions, proposals and recommendations. The committee's mission is also to assist the Board of Directors in the appointment of any person to the functions of, in particular, directors and executive officers.

It reports to the Board of Directors on a regular basis.

It is composed of the following members: Sandrine CONSEILLER, Philippe POULETTY, and BOLD, "Business Opportunities for L'Oréal Development," represented by Laurent SCHMITT. It is chaired by Laurent SCHMITT.

The Compensation and Appointments Committee meets at least once a year.

Its duties involve the following:

- analyzing compensation;
- proposing the award of exceptional compensation;
- putting forward proposals to define criteria and objectives;
- appointment proposals.

4.1.5.2.2.3 Strategy Committee

The Strategy Committee meets whenever the Company wishes to address strategic issues.

It is composed of the following members: Philippe POULETTY, Isabelle PARIZE, Vincent KAMEL, Matheus SCHREINER and Emmanuel LADENT, who chairs it.

The Strategy Committee meets as many times as the Chairman of the Board of Directors deems necessary.

The Industrialization Committee created in December 2019 was integrated into the Strategy Committee.

Its duties involve the following:

- participate in determining the strategy of the Company and the Group and in monitoring its implementation;
- maintain an ongoing dialog with Executive Management on the strategic developments of the Company and the Group;
- verify that Executive Management follows a thorough reflection process and examines all possible options;
- bring together experts to examine the appropriateness of the strategic choices considered.

4.1.5.2.2.4 CSR Committee

When the Company wishes to address Corporate Social and Environmental Responsibility (CSR) issues, the CSR Committee meets.

It is composed of the following members: Emmanuel LADENT, Amandine DE SOUZA and Sandrine CONSEILLER, who chairs it.

The CSR Committee meets as many times as its Chairwoman deems necessary.

Its general mission is to assist and make recommendations to the Board of Directors on the Company's CSR commitments, action programs and roadmap.

4.1.5.2.3 Corporate governance statement

At the date of this Universal Registration Document, the Company refers to the corporate governance guidelines for small and mid-caps as published in September 2021 by Middlenext. The Company also improves its internal control principles by taking into account, in particular, the risk management and internal control reference framework for small and mid-caps published by the AMF on July 22, 2010.

The following table presents the Middlenext recommendations with which the Company complies and those with which it intends to comply in the future:

Middlenext Code Recommendations	Applied	Not applied
I "Supervisory" power		
R1: Code of Ethics for Board members	X	
R2: Conflicts of interest	X	
R3: Composition of the Board – Presence of independent members on the Board	X	
R4: Board member information	X	
R5: Board member training(1)		X
R6: Organization of Board and Committee meetings	X	
R7: Creation of committees(2)	X	
R8: Establishment of a specialized Corporate Social Responsibility (CSR) committee	X	
R9: Establishing internal rules for the Board(3)	X	
R10: Selection of each director	X	
R11: Duration of terms of office of Board members(4)	X	
R12: Directors' compensation	X	
R13: Establishing an assessment of the Board's work(5)	X	
R14: Relations with "shareholders"	X	
II Executive power		
R15: Diversity and equity policy within the Company	X	
R16: Definition and transparency of compensation for executive corporate officers	X	
R17: Preparation for the succession of "executives"	X	
R18: Holding of both employment contract and corporate office	X	
R19: Severance payments	X	
R20: Supplementary pension schemes(6)		X
R21: Stock options and allocation of free shares	X	
R22: Review of points to be monitored	X	

(1) As of the date of this Universal Registration Document, no training plan is currently in place within the Company. This provides for a review on this issue to assess the advisability of complying with this recommendation.
(2) As of the date of this Universal Registration Document, the Company complies with this recommendation, except for the independence of the Chairman of the Compensation and Appointments Committee. Indeed, Laurent SCHMITT chairs the Compensation and Appointments Committee. Although the latter is not an independent director, in view of his experience as well as his in-depth knowledge of management and issues specific to large groups of companies, his appointment as Chairman of the Compensation and Appointments Committee is appropriate for the Company.
(3) The internal rules of the Board of Directors may be consulted at the Company's registered office.
(4) This recommendation is applied, with the exception of the staggering of terms of office. A review of this subject will be carried out.
(5) The procedure for the annual assessment of the Board of Directors concerns its operating methods, composition and organization, measures the contribution and involvement of directors and makes it possible to verify that important issues are properly prepared, addressed and discussed during meetings. The Board's assessment is carried out annually on the basis of a detailed questionnaire sent to each director, the responses to which are summarized by the Compensation and Appointments Committee and discussed at a meeting of the Board of Directors. The recommendations for improvement resulting from these assessments are discussed by the Compensation and Appointments Committee and the Board of Directors before their implementation, where applicable.
(6) Given the history of the Company, its shareholder structure and its size, implementing such procedures would be too heavy a burden. The Company does not therefore foresee a supplementary pension scheme for its executives.

Concerning the equity ratio provided for in recommendation R16, for the fiscal year ended December 31, 2023 it is 42[1] for Mr. Emmanuel LADENT and 3 for Mr. Philippe POULETTY (Chairman of the Board of Directors since April 1, 2022). Furthermore, the lowest salary within the Company is €1,958 gross per month.

[1] Calculation of the ratio: total compensation payable as the numerator and the minimum wage for the reference year or the comparative period as the denominator.

4.1.5.3 Diversity and equity policy

The Company works to promote diversity and monitors that it does not discriminate on any grounds whatsoever. It ensures equal opportunities for all in terms of recruitment, training, compensation, assignments and professional development, according to personal skills and aptitudes. The Company also ensures that all its employees are treated fairly.

The Company is committed to inclusion, diversity and equality as it believes that respect for these values enables employees to be more professionally and personally fulfilled and more involved. It is therefore essential for the Company to create an environment where difference is encouraged and where employees can each make a contribution to the Company's momentum.

Any employee who experiences or witnesses behavior that goes against the values of diversity or fairness advocated by the Company is expected to report it to the appropriate authorized person, who is generally his or her line manager or the HR manager.

The Company has already observed that this policy enables it to have better productivity, higher levels of innovation and better decision-making.

4.1.5.4 Independent Directors

The Company has 7 independent directors, Vincent KAMEL, Juan DE PABLO, Isabelle PARIZE, Karine AUCLAIR, Mateus SCHREINER GARCEZ LOPES, Amandine DE SOUZA and Sandrine CONSEILLER, i.e. 63.64% of the total number of directors, which the Company considers have met recommendation No. 3 of the Middlenext Code since their appointment, namely:

- to be neither an employee nor an executive corporate officer of the Company or its group and not to have been so within the last five years;
- to not have and not have had over the last two years a significant business relationship with the Company or its group (customer, supplier, competitor, service provider, creditor, etc.);
- to neither be a lead shareholder of the Company nor hold a significant percentage of voting rights;
- to not have a close relationship or close family ties with a corporate officer or lead shareholder; and
- to not have been a Statutory Auditor of the Company within the last six years.

4.2 COMPENSATION AND BENEFITS

Tables 1, 2, 3, 6, 7, 10 and 11 of Appendix 2 to the AMF Position-Recommendation No. 2021-02 are presented below. Tables 4, 5 and 9 are not applicable. Table 8 is presented in section 6.4.2 of this Universal Registration Document.

The following table shows all of the compensation of any nature, benefits in kind and other compensation paid to the members of the Board of Directors and the Executive Management of Carbios during the fiscal years ended December 31, 2022 and 2023:

TABLE 1: SUMMARY OF COMPENSATION AND OPTIONS/SHARES ALLOCATED TO EXECUTIVE CORPORATE OFFICERS

(In euros) (1)	12/31/2023	12/31/2022
Philippe POULETTY, Chairman of the Board of Directors from April 1, 2022		
Compensation awarded for the fiscal year	53,100(2)	8,929(2)
Value of multi-year variable compensation awarded during the fiscal year	-	-
Value of options awarded during the fiscal year	-	-
Value of free shares awarded during the fiscal year	-	-
Value of other long-term compensation plans	-	-
Emmanuel LADENT, Chief Executive Officer		
Compensation awarded for the fiscal year	878,990(2)	493,372(2)
Value of multi-year variable compensation awarded during the fiscal year	-	-
Value of options awarded during the fiscal year	-	2,224,825(3)
Value of free shares awarded during the fiscal year	267,997(4)	-
Value of other long-term compensation plans	-	-
TOTAL	**1,200,087**	**2,727,126**

(1) Gross amount before tax.
(2) Details in Table 2: Summary of the compensation of each Executive Corporate Officer.
(3) The valuation of the options granted (BSPCE) indicated here is the fair value (total expense, not deferred) of the options granted in 2022. It should be noted that the related accounting expense amounted to €638 thousand in the consolidated financial statements (IFRS) for 2023. Please refer to section 6.4.2 of this Universal Registration Document concerning the BSPCEs granted to executive corporate officers.
(4) The valuation of the free shares (AGAP) shown here is the fair value (total expense, not deferred) of the free shares allocated in 2023. It should be noted that the related accounting expense amounted to €23 thousand in the consolidated financial statements (IFRS) for 2023. Please refer to section 6.4.2 of this Universal Registration Document concerning the AGAP granted to executive corporate officers.

TABLE 2: SUMMARY OF THE COMPENSATION OF EACH EXECUTIVE CORPORATE OFFICER

	12/31/2023		12/31/2022	
(In euros) (1)	Amounts payable	Amounts paid	Amounts payable	Amounts paid
Philippe POULETTY, Chairman of the Board of Directors from April 1, 2022			-	-
Fixed compensation	-	-	-	-
Annual variable compensation	-	-	-	-
Multi-year variable compensation	-	-	-	-
Exceptional compensation	-	-	-	-
Compensation allocated in respect of his office as director	53,100	36,757	8,929	3,571
Benefits in kind	-	-	-	-
Emmanuel LADENT, Chief Executive Officer and director (since May 5, 2022)				
Fixed compensation	363,373	363,373	330,000	330,000
Annual variable compensation(2)	196,663	148,500	148,500	13,750
Multi-year variable compensation	-	-	-	-
Exceptional compensation(3)(4)	416,031	416,031	2,224,825	2,224,825
Compensation allocated in respect of his office as director	-	-	-	-
Benefits in kind(5)	14,871	14,871	14,872	14,872
TOTAL	**1,044,038**	**979,532**	**2,727,126**	**2,587,018**

(1) Gross amount before tax.

(2) In accordance with the commitments made by the Company, Emmanuel LADENT is likely to receive an annual bonus equal to 50% of his annual compensation, subject to the cumulative achievement, within the stipulated deadlines, of defined professional objectives. These elements are reassessed every year by the Board of Directors following the presentation of recommendations by the Compensation and Appointments Committee. At the beginning of the calendar year, the latter proposes to the Board of Directors to set precise and quantifiable annual strategic objectives for the Company's management team by applying a weighting coefficient for each objective according to its importance. At the end of the year, or at the beginning of the following year, the Compensation and Appointments Committee proposes that the Board of Directors record the achievement of all or part of each of the objectives. It is the cumulative achievement of each of the objectives that defines the percentage of the annual bonus to be paid to Emmanuel LADENT. For the fiscal year 2023, the bonus was paid in January 2024, but was provisioned in the Company's financial statements as at December 31, 2023, in accordance with applicable accounting principles.

(3) Exceptional compensation is an item granted by the Board of Directors on the basis of a proposal by the Compensation and Appointments Committee and relating to achievements not planned within the framework of the annual objectives initially set. For 2023, exceptional objectives to be achieved by the management team were set during the year. Emmanuel Ladent thus received exceptional compensation of €148,034.

(4) Emmanuel LADENT was awarded BSPCEs in 2022 and AGAPs in 2023. The granting of these benefits has been valued, in accordance with the recommendations of the AMF, and appears in this table for the Fair value at the time of their allocation as used in the context of the application of IFRS 2. Thus, in 2022, these BSPCEs were valued, in accordance with IFRS, for a total amount of €2,225 thousand, of which €638 thousand were recognized in the consolidated financial statements for 2023. The AGAPs were also valued in accordance with IFRS for a total amount of €267 thousand, of which €23 thousand were recognized in the consolidated financial statements for 2023. Please refer to section 6.4.2 of this Universal Registration Document concerning the BSPCEs and AGAP granted to executive corporate officers.

(5) Emmanuel LADENT receives benefits in kind in the form of a company car, a supplementary pension, "Civil liability for corporate officers" insurance and an executive unemployment insurance.

TABLE 3: DIRECTORS' FEES AND OTHER COMPENSATION RECEIVED BY NON-EXECUTIVE CORPORATE OFFICERS

Gross compensation payable (In euros)	**12/31/2023**	**12/31/2022**
Jacqueline LECOURTIER, director until February 6, 2023		
Compensation (fixed, variable)	-	12,429
Other compensation	-	-
Jean-Claude LUMARET, Industrial Director until March 31, 2022 and director until February 6, 2023		
Compensation (fixed, variable)	-	22,857
Other compensation(1)	-	143,947
Alain CHEVALLIER, director until February 6, 2023		
Compensation (fixed, variable)	-	17,643
Other compensation	-	-
Jean FALGOUX, director until February 6, 2023		
Compensation (fixed, variable)	-	24,786
Other compensation	-	-
BOLD, Business Opportunities for L'Oréal Development, represented by Laurent SCHMITT		
Compensation (fixed, variable)	-	-
Other compensation	-	-
MICHELIN VENTURES, represented by Nicolas SEEBOTH		
Compensation (fixed, variable)	-	-
Other compensation	-	-
Vincent KAMEL, director		
Compensation (fixed, variable)	53,300	24,643
Other compensation	-	-
Juan DE PABLO, director		
Compensation (fixed, variable)	20,900	7,071
Other compensation	-	-
Isabelle PARIZE, director		
Compensation (fixed, variable)	23,300	9,429
Other compensation	-	-
Karine AUCLAIR, director		
Compensation (fixed, variable)	16,000	-
Other compensation	-	-

Mateus SCHREINER GARCEZ LOPES, director		
Compensation (fixed, variable)	26,000	-
Other compensation	-	-
Amandine DE SOUZA, director		
Compensation (fixed, variable)	22,000	-
Other compensation	-	-
Sandrine CONSEILLER, director		
Compensation (fixed, variable)	24,400	-
Other compensation	-	-
TOTAL	**185,900**	**262,804**

(1) Amounts received in respect of his contract as Industrial Director (December 2021 until March 31, 2022).

TABLE 6: FREE SHARES ALLOCATED TO EACH CORPORATE OFFICER

Free shares allocated to each Corporate Officer						
Free shares allocated by the Shareholders' Meeting during the fiscal year to each corporate officer by the issuer and by any Group company (nominative list)	**Plan number and date**	**Number of shares allocated during the fiscal year**	**Valuation of shares according to the method used for the consolidated financial statements(2)**	**Vesting date**	**Availability date**	**Performance conditions**
Emmanuel LADENT Chief Executive Officer from December 1, 2021	N°: 2023-1 Plan Date: September 27, 2023(1)	12,000	267,965	September 27, 2026	September 27, 2026	Yes(3)
TOTAL	-	**12,000**	**267,965**	-	-	-

(1) In accordance with the 22nd resolution adopted by the Combined Shareholders' Meeting of June 22, 2023, the Board of Directors, at its meeting of September 27, 2023, decided to allocate 84,150 free Company shares.

(2) Value of the shares at the time of their allocation as used in the context of the application of IFRS 2, after taking into account, in particular, any discount linked to performance criteria and the probability of presence in the company at the end of the vesting period, but before spreading the expense under IFRS 2 over the vesting period.

(3) 1) for 30% of the free shares allocated to the beneficiary ("Tranche 1"): the achievement, in 2026, of a production rate at the PET biorecycling plant that complies with the specifications set by the Board of Directors;

2) for 30% of the free shares allocated to the beneficiary ("Tranche 2"): the commitment, by the end of 2026, of a significant number of plants operating under licenses for a total industrial capacity on PET technology in accordance with the business plan, as assessed by the Board of Directors;

3) for 25% of the free shares allocated to the beneficiary ("Tranche 3"): a quantity of shares equal to the product of (i) the maximum quantity of shares allocated in respect of Tranche 3 multiplied by (ii) a number "N" between 0 and 1 determined in the Plan Regulations.

4) for 15% of the free shares allocated to the beneficiary ("Tranche 4"): the achievement, at the end of the vesting period, of a GAIA score of 70 out of 100 (currently 64 for Carbios compared to a score of 57 for the companies in the benchmark according to GAIA).

TABLE 7: FREE SHARES ALLOCATED DURING THE FISCAL YEAR TO EACH EXECUTIVE CORPORATE OFFICER

None.

TABLE 10: HISTORY OF FREE SHARE ALLOCATIONS

None.

TABLE 11: DETAILS CONCERNING THE CONDITIONS APPLICABLE TO THE COMPENSATION AND OTHER BENEFITS GRANTED TO EXECUTIVE CORPORATE OFFICERS

	Employment contract		Supplementary pension scheme		Indemnities or benefits due or liable to be due on severance or change of position		Compensation under a non-compete clause	
Executive corporate officers	Yes	No	Yes	No	Yes	No	Yes	No
Philippe POULETTY **Chairman of the Board of Directors** Start of term: 04/01/2022 End of term: 2025		X		X		X		X
Emmanuel LADENT **Chief Executive Officer, director** Start of term: 12/01/2021 End of term: 12/01/2026		X		X	X(1)			X

(1) Emmanuel LADENT receives severance pay related to the end of or change in duties under the social security regime for company managers (GSC).

As of the date of this Universal Registration Document, no member of the Board of Directors is bound to the Company by an employment contract and does not receive any compensation from the Company other than that paid to him or her in respect of their corporate office.

Emmanuel LADENT benefits, in respect of his office as Chief Executive Officer, from job loss insurance, the contribution of which is 100% covered by the Company. In the event that this insurance provides for a waiting period during which Emmanuel LADENT cannot benefit from the proposed guarantees, the Company undertakes to indemnify Emmanuel LADENT so that he is paid, during this waiting period, a sum equivalent to 70% of his net compensation.

The directors are not entitled to any pension scheme, severance pay or non-compete compensation.

4.3 TRANSACTIONS CARRIED OUT BY EXECUTIVES ON THE COMPANY'S SHARES

To the best of the Company's knowledge, the following declarations were sent to the AMF during the fiscal year ended December 31, 2023 by persons required to file a declaration, with a view to publication on its website: internet (www.amf-france.org):

Identity of the executive	Transaction date	Financial instrument	Nature of the transaction	Number of shares	Unit price in €
Jacqueline LECOURTIER (Former director)	January 23, 2023	Share	Exercise of BSA share subscription warrants	1,600	11.2240
Alain MARTY (CSO)	March 2, 2023	Share	Disposal	1,500	40.0000
TRUFFLE CAPITAL SAS (legal entity linked to Philippe POULETTY, Chairman of the Board of Directors	June 15, 2023	Share	Acquisition	627	39.9195
	July 13, 2023	Share	Acquisition	129,427	30.9055
Sandrine CONSEILLER (director)	July 12, 2023	Share	Acquisition	867	27.4100
Emmanuel LADENT (Chief Executive Officer and director)	July 4, 2023	Share	Acquisition	7	32.4100
	July 13, 2023	Share	Acquisition	1,345	25.3200

To the Company's knowledge, no other executive or corporate officer has declared having traded in the Company's shares during the fiscal year ended December 31, 2023.

4.4 OPERATIONS WITH AFFILIATES

4.4.1 TRANSACTIONS WITH RELATED PARTIES

The reader is invited to see Note 17 "Related parties" in section 5.3.4 of this Universal Registration Document.

The transactions with related parties shown in the table below generated operating income in 2023 of €3,788 thousand.

Affiliate	Transaction completion date	Nature of transaction	Amount
Carbiolice (company 99.99% owned by the Company as of the date of this document)	August 30, 2016 Amendment dated June 28, 2018	Licensing and sublicensing of patent and know-how licenses	The contract states that Carbios will receive a lump-sum royalty of €8 million and a variable royalty on revenue resulting from the use by Carbiolice of the technology licensed. No variable royalties were recognized in respect of 2023.
	September 17, 2018	Letter of agreement for service provision rebilling	Rebilling of services performed by service providers on behalf of Carbios and Carbiolice. This resulted in income of €182 thousand being recognized in 2023.
	January 25, 2023	Current account advance agreement	Advance to Carbiolice to finance its activity. This advance amounted to €4,720 thousand at 12/31/2023. No income was recognized in this respect.
	January 1, 2023	Service agreement	The agreement provides for the payment of monthly compensation of €50 thousand for services rendered by Carbios staff. In addition, the agreement provides for the free use of Carbios premises. In this respect, income of €600 thousand was recognized in 2023.
Carbios 54 (company 100% owned by the Company as of the date of this document)	July 1, 2022	Employee secondment agreement	Rebilling of Carbios staff working as part of the Reference Unit project on behalf of Carbios 54. This resulted in income of €1,891 thousand being recognized in 2023.
	September 1, 2022	Employee secondment agreement	
	January 1, 2023	Service agreement	The agreement provides for the payment of monthly compensation of €10 thousand for services rendered by Carbios staff. In addition, the agreement provides for the provision of Carbios premises free of charge. In this respect, income of €120 thousand was recognized in 2023.
	July 1, 2022	Cash management agreement	The cash management agreement provides for the free management of Carbios 54's cash flows for cash optimization purposes, with interest being paid as compensation. This resulted in financial income (interest) of €647 thousand being recognized in 2023. In addition, income of €181 thousand was recognized for the re-billing of invoices to Carbios 54.

Michelin (company holding 3.09% of the Company's share capital at the date of this document)	April 13, 2021	Leasing contract	The contract provides for the provision of premises and utilities for the so-called B80 building. In this respect, expenses of €499 thousand were recognized in 2023.
	April 13, 2021 Amendments dated September 14, 2021, July 1, 2022 and November 30, 2022	Leasing contract	The contract provides for the provision of premises and utilities for the so-called O24 building. In this respect, expenses of €695 thousand were recognized in 2023.
L'Oréal (company holding 5.60% of the Company's share capital at the date of this document)	July 1, 2021	Research services agreement	The contracts provide for the financial contribution for participation in the various works of the Consortium as well as compensation for the research work carried out. This resulted in income of €348 thousand being recognized in 2023 in respect of these contracts.
	October 3, 2017	Consortium agreement	
Kamergy, company represented by Vincent KAMEL, director	November 28, 2023	Consulting contract	The contract provides for the performance of a marketing consulting mission. In this respect, an expense of €4 thousand was recognized in 2023.

4.4.2 STATUTORY AUDITORS' REPORT ON REGULATED AGREEMENTS

Regulated agreements are mentioned in the Statutory Auditors' special reports presented below for the years 2022 and 2023.

4.4.2.1 Statutory Auditors' special report on regulated agreements (fiscal year ended December 31, 2022)

To the Shareholders' Meeting,

In our capacity as Statutory Auditors of your Company, we hereby present our report on regulated agreements.

It is our responsibility to inform you, on the basis of the information provided to us, of the characteristics, the main terms and conditions as well as the reasons justifying the interest for the Company of the agreements of which we have been informed or that we have discovered during our mission, without having to comment on their usefulness and merits nor to seek the existence of other agreements. It is your responsibility, under the terms of Article R. 225-31 of the French Commercial Code, to assess the interest in signing these agreements in order to approve them.

In addition, it is our responsibility, where applicable, to provide you with the information provided for in Article R. 225-31 of the French Commercial Code relating to the execution, during the past fiscal year, of agreements already approved by the Shareholders' Meeting.

We have conducted our review in accordance with the procedures that we considered necessary with regard to the professional standards of the Compagnie Nationale des Commissaires aux Comptes [French National Company of Statutory Auditors] relating to this mission. These procedures consisted in verifying that the information provided to us was consistent with the source documents from which it was taken.

AGREEMENTS SUBJECT TO APPROVAL OF THE SHAREHOLDERS' MEETING

We hereby inform you that we have not been given notice of any authorized agreement entered into during the past fiscal year to be submitted to the Shareholders' Meeting for approval pursuant to the provisions of Article L. 225-38 of the French Commercial Code.

AGREEMENTS ALREADY APPROVED BY THE SHAREHOLDERS' MEETING

Agreements approved in previous fiscal years

Pursuant to Article R. 225-30 of the French Commercial Code, we have been informed that the following agreements, already approved by the Shareholders' Meeting in previous fiscal years, continued during the past fiscal year.

Letter of agreement on the rebilling of services between Carbios and Carbiolice

• *Type and purpose:*
Carbios signed a letter of agreement on the rebilling of expenses related to regulatory matters and work related to enzymes with Carbiolice on September 17, 2018.
The terms of this letter were authorized by the Board of Directors on September 20, 2018.

• *Modalities and financial implications:*
During the 2022 fiscal year, Carbios recorded income of €45,309 in respect of the rebilling of expenses incurred in 2022 and received an amount of €19,820 in respect of expenses rebilled in 2022.

Patent license agreement between Carbios and Carbiolice

• *Type and purpose:*
A patent and know-how license agreement was signed on August 30, 2016 at the creation of the company Carbiolice, including an option for the concession of a worldwide and exclusive exploitation right in the field of new developments as notified by Carbios.
The terms of this agreement were authorized by the Board of Directors on June 21, 2016.
In 2018, Carbios signed an amendment to the license agreement in order to extend the scope of the license to new families of patents, applications and products.
The terms of this letter were authorized by the Board of Directors on September 20, 2018.

• *Modalities and financial implications:*
This patent and know-how license agreement is established for a period up to the expiry of the last of the granted patents and provides for flat-rate compensation of €8 million in capital upon signing the agreement and a variable amount on net sales of the products covered by the patents.
The amendment signed in 2018 provides for the payment of an additional lump sum in the form of a capital increase, subject to the achievement by Carbiolice of a cumulative amount of income.
No income or expense was recorded during the fiscal year in respect of this contract.

Employment contract between Carbios and Jean-Claude Lumaret, Chief Executive Officer

• *Type and purpose:*
Jean-Claude Lumaret, director, was bound to the Company by an employment contract in respect of his duties as Chief Executive Officer until November 30, 2021.
Under his employment contract, Jean-Claude Lumaret receives a fixed annual compensation and an annual bonus.
The employment contract was signed on April 1, 2011.
The terms of this agreement were authorized at the Board of Directors meeting of February 20, 2013.

• *Modalities and financial implications:*

In accordance with the commitments made by Carbios, Jean-Claude Lumaret may receive an annual bonus equal to 40% of his annual compensation. The annual bonus is paid in January of the following year.

Exceptional compensation is an item granted by the Board of Directors on the basis of a proposal by the Compensation and Appointments Committee and relating to achievements not planned within the framework of the annual objectives initially set.

The components of compensation paid to Jean-Claude Lumaret during the fiscal year in respect of his position as Chief Executive Officer are as follows:

- Bonus (2021): €91,974

Employment contract between Carbios and Jean-Claude Lumaret, Industrial Director

• *Type and purpose:*
Jean-Claude Lumaret, director, was bound by an employment contract with the Company in respect of his duties as Industrial Director from December 1, 2021.
Under his employment contract, Jean-Claude Lumaret receives a fixed annual compensation and an annual bonus conditional on the cumulative achievement, within the stipulated timeframe, of defined professional objectives.
The employment contract was signed on December 1, 2021.
The terms of the contract were approved at the Board of Directors meeting of November 5, 2021.

• *Modalities and financial implications:*
In accordance with the commitments made by Carbios, Jean-Claude Lumaret may receive an annual bonus equal to 40% of his annual compensation.
Exceptional compensation is an item granted by the Board of Directors on the basis of a proposal by the Compensation and Appointments Committee and relating to achievements not planned within the framework of the annual objectives initially set.

The components of compensation paid to Jean-Claude Lumaret during the fiscal year in respect of his position as Industrial Director are as follows:

- Fixed compensation (2022): €144,947

- Bonus (2021): €8,361

It should be noted that the employment contract of Jean-Claude Lumaret in respect of his position as Industrial Director expired on March 31, 2022.

Lyon, April 11, 2023

The Statutory Auditor

PricewaterhouseCoopers Audit

Gonzague Van Royen

4.4.2.2 Statutory Auditors' special report on regulated agreements (fiscal year ended December 31, 2023)

To the Shareholders' Meeting,

In our capacity as Statutory Auditors of your Company, we hereby present our report on regulated agreements.

It is our responsibility to inform you, on the basis of the information provided to us, of the characteristics, the main terms and conditions as well as the reasons justifying the interest for the Company of the agreements of which we have been informed or that we have discovered during our mission, without having to comment on their usefulness and merits nor to seek the existence of other agreements. It is your responsibility, under the terms of Article R. 225-31 of the French Commercial Code, to assess the interest in signing these agreements in order to approve them.

In addition, it is our responsibility, where applicable, to provide you with the information provided for in Article R. 225-31 of the French Commercial Code relating to the execution, during the past fiscal year, of agreements already approved by the Shareholders' Meeting.

We have conducted our review in accordance with the procedures that we considered necessary with regard to the professional standards of the Compagnie Nationale des Commissaires aux Comptes [French National Company of Statutory Auditors] relating to this mission. These procedures consisted in verifying that the information provided to us was consistent with the source documents from which it was taken.

AGREEMENTS SUBJECT TO APPROVAL OF THE SHAREHOLDERS' MEETING

Agreements authorized and concluded during the past fiscal year

Pursuant to Articles L. 225-42 and L. 821-10 of the French Commercial Code, we inform you that the following agreements have not been subject to prior authorization by your Board of Directors.

It is our responsibility to inform you of the circumstances in which the procedure was not followed.

Service agreement with Carbiolice (Mr. Ladent, Chairman of Carbiolice and Chief Executive Officer of Carbios)

• *Type and purpose:*
Carbios may provide services to its subsidiary Carbiolice such as strategic guidelines, financial advice, R&D, intellectual property, legal, Human Resources and regulatory matters. Carbios also provides some of the premises in the O24 and B80 buildings free of charge.

The agreement takes effect retroactively, specifying the above services at January 1, 2023. The latter provides for a fixed monthly compensation of €50,000 excl. tax.

• *Modalities and financial implications:*
For 2023, Carbios recorded income of €600,000.

• *Reasons for its interest for the Company:*
The agreement improves the flexibility to organize and finance the Group's activities.

Current account advance agreement with Carbiolice (Mr. Ladent, Chairman of Carbiolice and Chief Executive Officer of Carbios)

• *Type and purpose:*
The agreement makes it possible to make cash advances to Carbiolice, without any financial interest.
The agreement was signed on January 25, 2023. This agreement will expire no later than December 31, 2026.

• *Modalities and financial implications:*
As of December 31, 2023, the amount of advances granted to Carbiolice was €4,720 thousand.

• *Reasons for its interest for the Company:*
The agreement improves the flexibility to organize and finance the Group's activities.

Consulting contract with Kamergy (Mr. Vincent KAMEL, director of Carbios and Chairman of Kamergy)

• *Type and purpose:*
The contract provides for the performance of a marketing consulting mission.
The agreement was signed on November 28, 2023.

• *Modalities and financial implications:*
For 2023, Carbios recorded expenses of €4,074.

• *Reasons for its interest for the Company:*
The agreement allows Carbios to benefit from Mr. Vincent KAMEL's expertise in marketing under competitive economic conditions, given his experience in this area, and his knowledge of the company and its markets.

We note that the procedure for authorizing regulated agreements was not followed by simple omission.

We inform you that, at its meeting of April 10, 2024, your Board of Directors decided to authorize this agreement retrospectively.

AGREEMENTS ALREADY APPROVED BY THE SHAREHOLDERS' MEETING

Agreements approved in previous fiscal years

Pursuant to Article R. 225-30 of the French Commercial Code, we have been informed that the following agreements, already approved by the Shareholders' Meeting in previous fiscal years, continued during the past fiscal year.

Letter of agreement on the rebilling of services between Carbios and Carbiolice

• *Type and purpose:*
Carbios signed a letter of agreement on the rebilling of expenses related to regulatory matters and work related to enzymes with Carbiolice on September 17, 2018.

The terms of this letter were authorized by the Board of Directors on September 20, 2018.

• *Modalities and financial implications:*
During the 2023 fiscal year, Carbios recorded income of €181,939 in respect of the rebilling of expenses incurred in 2023.

Patent license agreement between Carbios and Carbiolice

• *Type and purpose:*
A patent and know-how license agreement was signed on August 30, 2016 at the creation of the company Carbiolice, including an option for the concession of a worldwide and exclusive exploitation right in the field of new developments as notified by Carbios.

The terms of this agreement were authorized by the Board of Directors on June 21, 2016.

In 2018, Carbios signed an amendment to the license agreement in order to extend the scope of the license to new families of patents, applications and products.

The terms of this letter were authorized by the Board of Directors on September 20, 2018.

• *Modalities and financial implications:*
This patent and know-how license agreement is established for a period up to the expiry of the last of the granted patents and provides for flat-rate compensation of €8 million in capital upon signing the agreement and a variable amount on net sales of the products covered by the patents.

The amendment signed in 2018 provides for the payment of an additional lump sum in the form of a capital increase, subject to the achievement by Carbiolice of a cumulative amount of income.

No income or expense was recorded during the fiscal year in respect of this contract.

Lyon, April 19, 2024

The Statutory Auditor

PricewaterhouseCoopers Audit

Gonzague Van Royen


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5. FINANCIAL STATEMENTS

Pursuant to Article 19 of (EU) Regulation No. 2017/1129, the following elements are included by reference in this Universal Registration Document:

- the separate financial statements for the fiscal year ended December 31, 2021 and the related Statutory Auditors' report as presented in sections 5.1 (pages 98 to 122) and 5.2 (pages 123 to 124) of the Universal Registration Document filed with the AMF on April 20, 2022 under the number D. 22-0317;
- the simplified consolidated pro forma financial information for the fiscal year ended December 31, 2021 and the related Statutory Auditors' report as presented in sections 5.4 (pages 128 to 130) and 5.5 (page 131) of the Universal Registration Document filed with the AMF on April 20, 2022 under the number D. 22-0317; and
- the consolidated financial statements under IFRS for the fiscal year ended December 31, 2021 and the related Statutory Auditors' report as presented in sections 5.6 (pages 132 to 182) and 5.7 (page 183) of the Universal Registration Document filed with the AMF on April 20, 2022 under the number D. 22-0317;
- the separate financial statements for the fiscal year ended December 31, 2022 and the related Statutory Auditors' report as presented in sections 5.1 (pages 114 to 138) and 5.2 (pages 139 to 140) of the Universal Registration Document filed with the AMF on April 12, 2023 under the number D. 23-0263; and
- the consolidated financial statements under IFRS for the fiscal year ended December 31, 2022 and the related Statutory Auditors' report as presented in sections 5.3 (pages 141 to 186) and 5.4 (page 187) of the Universal Registration Document filed with the AMF on April 12, 2023 under the number D. 23-0263.

5.1 CONSOLIDATED FINANCIAL STATEMENTS PREPARED UNDER IFRS FOR THE FISCAL YEAR ENDED DECEMBER 31, 2023

5.1.1 CONSOLIDATED STATEMENT OF FINANCIAL POSITION

Consolidated statement of financial position (in thousands of euros)	**Notes**	**12/31/2023**	**12/31/2022**
ASSETS			
Goodwill	5.1	20,583	20,583
Intangible assets	5.1	21,874	22,457
Property, plant and equipment	5.2	49,199	24,965
Right-of-use assets	5.5	6,175	6,765
Financial assets	6	1,219	906
TOTAL NON-CURRENT ASSETS		**99,049**	**75,674**
Trade receivables and related accounts	8	6	57
Inventories	7	511	-
Other current assets	8	10,621	7,670
Cash and cash equivalents	11	191,821	100,557
TOTAL CURRENT ASSETS		**202,960**	**108,284**
TOTAL ASSETS		**302,009**	**183,959**

Consolidated statement of financial position (in thousands of euros)	**Notes**	**12/31/2023**	**12/31/2022**
EQUITY AND LIABILITIES			
Share capital		11,786	7,870
Share and Contribution premium		276,569	146,968
Consolidated reserves		(2,900)	(5,482)
Retained earnings		(23,917)	3,826
Net income – share attributable to equity holders of the parent company		(27,224)	(27,741)
EQUITY	**12**	**234,314**	**125,441**
Non-current provisions	14 & 23	216	184
Current and non-current borrowings and financial liabilities	15	39,226	35,395
Non-current lease liabilities	5.5	4,639	5,142
Other non-current liabilities	9	449	546
Deferred tax liabilities	21	1,694	1,694
TOTAL NON-CURRENT LIABILITIES		**46,224**	**42,961**
Current provisions	14 & 23	-	-
Current borrowings and financial liabilities	15	3,524	2,782
Current lease liabilities	5.5	1,232	1,346
Trade payables and related accounts	9	4,829	4,021
Other current liabilities	9	11,888	7,408
TOTAL CURRENT LIABILITIES		**21,472**	**15,557**
TOTAL LIABILITIES AND EQUITY		**302,009**	**183,959**

5.1.2 CONSOLIDATED INCOME STATEMENT

Consolidated income statement (In thousands of euros)	**Notes**	**12/31/2023**	**12/31/2022**
Revenue	16	24	70
Research and development expenses	17.1	(10,958)	(12,993)
Research and development expenses	*17.1*	*(18,830)*	*(19,057)*
Subsidies and other income from activities	*17.1*	*5,385*	*4,776*
Capitalization of development costs	*17.1*	*2,487*	*1,287*
Sales and marketing expenses	17.2	(5,809)	(4,373)
General and administrative expenses	17.3	(12,134)	(8,807)
Other operating income and expenses		-	2
OPERATING INCOME/(EXPENSES)		**(28,878)**	**(26,101)**
FINANCIAL INCOME	**20**	**1,655**	**(1,640)**
Share of net income of equity-accounted companies		-	-
INCOME/(EXPENSES) BEFORE TAXES		**(27,224)**	**(27,741)**
INCOME TAX	**21**	**-**	**-**
NET INCOME/ (LOSS) FOR THE PERIOD		**(27,224)**	**(27,741)**
Basic earnings per share (in euros)	*22*	*(1.96)*	*(2.47)*
Diluted earnings per share (in euros)	*22*	*(1.96)*	*(2.47)*

5.1.3 CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

Consolidated statement of comprehensive income (In thousands of euros)	**12/31/2023**	**12/31/2022**
Net income/(loss) for the period	**(27,224)**	**(27,741)**
Actuarial gains or losses	(3)	120
Other comprehensive income that cannot be reclassified in profit or loss	**(3)**	**120**
Translation differences	-	-
Other comprehensive income that can be reclassified in profit or loss	**-**	**-**
Comprehensive income/(loss)	**(27,227)**	**(27,621)**

5.1.4 CHANGE IN CONSOLIDATED EQUITY

Change in consolidated equity (In thousands of euros)	**Carbios share capital Nb. outstanding shares**	**Share capital - ordinary shares**	**Share and Contribution premium**	**Consolidated reserves**	**Retained earnings**	**Profit or loss for the period**	**Total equity**
AT DECEMBER 31, 2021	**11,179,472**	**7,826**	**146,337**	**(10,604)**	**(600)**	**3,780**	**146,739**
Appropriation of income/ (loss) for the past fiscal year	-	-	-	-	3,780	(3,780)	-
Net income/ (loss) for the period	-	-	-	-	-	(27,741)	(27,741)
Other items of comprehensive income	-	-	-	-	120	-	120
Comprehensive income/(loss)	**-**	**-**	**-**	**-**	**120**	**(27,741)**	**(27,621)**
Capital increase net of transaction costs	63,194	44	-	-	-	-	44
Change in treasury shares	-	-	-	7	-	-	7
Entries into consolidation scope	-	-	-	-	-	-	-
Issue of BSA EIB loan	-	-	-	4,179	-	-	4,179
Share-based payments	-	-	630	1,455	-	-	2,085
Other movements	-	-	-	(520)	526	-	6
AT DECEMBER 31, 2022	**11,242,666**	**7,870**	**146,967**	**(5,482)**	**3,827**	**(27,741)**	**125,441**
Appropriation of income/ (loss) for the past fiscal year	-	-	-	-	(27,741)	27,741	-
Net income/ (loss) for the period	-	-	-	-	-	(27,224)	(27,224)
Other items of comprehensive income	-	-	-	-	(3)	-	(3)
Comprehensive income/(loss)	**-**	**-**	**-**	**-**	**(3)**	**(27,224)**	**(27,227)**
Capital increase net of transaction costs	5,594,546	3,916	129,602	-	-	-	133,518
Change in treasury shares	-	-	-	26	-	-	26
Entries into consolidation scope	-	-	-	-	-	-	-
Issue of BSA EIB loan	-	-	-	-	-	-	-
Share-based payments	-	-	-	2,556	-	-	2,556
Other movements	-	-	-	-	-	-	-
AT DECEMBER 31, 2023	**16,837,212**	**11,786**	**276,569**	**(2,900)**	**(23,918)**	**(27,224)**	**234,314**

5.1.5 CONSOLIDATED CASH FLOW STATEMENT

Consolidated cash flow statement (In thousands of euros)	**Notes**	**12/31/2023**	**12/31/2022**
Cash flow from operating activities			
Net income/ (loss) for the period		**(27,224)**	**(27,741)**
(-) Elimination of amortization and depreciation of fixed assets and right-of-use assets	5	6,375	5,289
(-) Gains or losses on asset disposals	5	237	140
(-) Employee provisions and benefits	23	20	(30)
(-) Cost of share-based payments	13	2,556	1,455
(-) Financial income	20	(1,655)	1,640
(-) Other items with no impact on cash and cash equivalents		-	-
(-) Share of profit (loss) of equity affiliates		-	-
(-) Income and expenses related to the change in consolidation method		-	-
Cash flow from operations before cost of net financial debt and taxes		**(19,691)**	**(19,247)**
(-) Change in working capital requirements		(2,898)	(2,574)
Tax paid		-	-
Cash flow from operating activities		**(22,589)**	**(21,820)**
Cash flow from investing activities			
Acquisition of property, plant and equipment and intangible assets	5	(24,311)	(10,426)
Capitalized development costs	5	(2,487)	(1,287)
Disposal of fixed assets	5	2	6
Acquisition of Carbiolice shares		-	-
Acquisition of financial assets	6	(396)	(604)
Decrease in financial assets	6	83	87
Change in scope		-	-
Changes in fixed asset liabilities	9	4,718	2,897
Cash flow from investing activities		**(22,391)**	**(9,327)**
Cash flow from financing activities			
Capital increase	12	133,518	674
Treasury shares	12	26	6
Issuance of loans and financial liabilities	15	5,633	30,000
Repayments of loans and financial liabilities	15	(3,291)	(1,108)
Payment of lease liabilities	5.5	(1,468)	(1,591)
Net financial interest paid	15	(1,944)	(1,235)
Other financial income and expenses	20	3,773	-
Cash flow from financing activities		**136,246**	**26,747**
Change in cash position		**91,265**	**(4,399)**
Cash and cash equivalents at beginning of period	11	100,556	104,956
Cash and cash equivalents at end of period	11	191,821	100,557
Change in cash position		**91,265**	**(4,398)**

5.1.6 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Unless otherwise indicated, the amounts mentioned in this note are in thousands of euros, except for data relating to shares. Certain amounts may be rounded in the calculation of the financial information contained in the consolidated financial statements. As a result, the totals in some tables may not add up exactly to the sum of the previous figures.

NOTE 1 • BUSINESS AND HIGHLIGHTS

Carbios' consolidated financial statements were approved by the Board of Directors on April 10, 2024 and authorized for publication.

The Company and its business

Carbios ("the Company") is an innovative green chemistry company, developing cutting-edge technologies for the recovery of plastic waste and the production of biopolymers.

The Company was created in April 2011 as a société par actions simplifiée (simplified joint stock company) and became a société anonyme (public limited company) on February 20, 2013. The Company's shares have been listed on the Euronext Growth Paris market since December 19, 2013.

The group formed by Carbios, Carbiolice and Carbios 54 is hereinafter referred to as the "Group."

The first financial statements prepared by the Group in accordance with International Financial Reporting Standards (IFRS) were at December 31, 2021, with a transition date of January 1, 2020.

Registered office address:

Cataroux site

8 rue de la Grolière

63100 Clermont-Ferrand, France

Trade and Companies Register number: 531 530 228 - R.C.S. Clermont-Ferrand

Highlights of the fiscal year

The key events for the fiscal year were as follows:

- On July 11, 2023, Carbios announced the success of its capital increase with preferential subscription rights maintained for a gross amount of approximately €141 million. The costs of the capital increase are deducted directly from the issue premium, which will bring the total amount after deduction to €133 million.
- Carbios announced on October 26, 2023 that it had obtained the building and operating permit in accordance with the schedule announced for the world's first PET biorecycling plant in Longlaville.
- Carbios, leader and coordinator of the project, announced in May 2023 the granting of a total of €11.4 million by the State as part of the OPTI-ZYME project of France 2030 operated by ADEME, of which €8.2 million directly for Carbios (€3.2 million in subsidies and €5 million in repayable advances) and €3.2 million for its academic partners INRAE, INSA and CNRS (via the mixed service units TWB and TBI Research Center). This financing, which consists of subsidies and repayable advances, will be paid in several tranches over the duration of this project, including an initial tranche of 15%, the equivalent of €1.2 million, received by CARBIOS on December 5, 2023.

Consequences of the conflict in Ukraine

Since the beginning of the conflict in Ukraine, the Company has not, as of the date of publication of this document, encountered any difficulties in pursuing its activities or its planned investments. To date, the Company has no direct or indirect relations with Ukraine or Russia, and the Company has managed to limit any delays directly related to this crisis in the industrial and commercial deployment of its technologies.

However, if this crisis were to continue and/or generate lasting economic consequences, the Company could have difficulties in containing the adverse effects of these measures and, in particular, the increase in the cost as well as the extension to the lead times of supplies of certain materials, equipment and products necessary for the construction of its Reference Unit. This extension of lead times and the increase in prices could delay the construction of the first industrial and commercial unit using the PET recycling technology developed by the Company. In addition, the negative impact of this conflict on the financial markets and potentially on the Company's share price could intensify if the conflict continues.

In view of the current situation between Russia and Ukraine, the Company specifies that its economic and balance sheet exposure to these two countries is not significant. In 2023, Carbios did not record any expenses with suppliers based in Russia and Ukraine.

Going concern

The going concern assumption is used insofar as the financial resources available to the Group enable it to continue its activity over a period of more than 12 months. The management of the ongoing developments until the final marketing stage (including the complete construction of the PET biorecycling plant) or even the application of the Group's processes to other markets may require new financing to be sought from institutional entities or industrial partners.

Events after the reporting period

On March 5, 2024, the Company announced that CARBIOS Active, its enzymatic solution for the biodegradation of PLA, is included in the inventory of food contact substances (FCS) of the US Food and Drug Administration (FDA) with the food contact notification (FCN) 2325, in force since February 29, 2024. Thanks to this step, CARBIOS Active can be used to manufacture food contact packaging in the United States (rigid and flexible packaging, and other applications).

On February 14, 2024, the Company announced that it had acquired the land (in Longlaville) from Indorama Ventures that will host the first PET biorecycling plant in the world.

On April 3, 2024, the Company announced the successful launch of its first employee shareholding plan for all Group employees who are members of the employee savings plan in France. This employee shareholding plan, launched on February 12, 2024, was subscribed by 123 employees, i.e. 88.49% of the employees concerned and thus made it possible to involve employees in the Group's development and performance. It contributes to bringing the employee shareholding of Carbios, within the meaning of Article L. 225-102 of the French Commercial Code, to around 0.08% of the share capital. The plan included a unilateral contribution corresponding to approximately 48 shares for each of the eligible employees. In total, a little more than €59,400 was subscribed by employees through the FCPE CARBIOS, which will invest them in CARBIOS shares, after adding the corresponding contribution of the Company for approximately €53,700 and the unilateral contribution of the latter for approximately €110,600, in the context of:

- a reserved capital increase for a nominal amount of €5,892.60, corresponding to the issue of 8,418 new CARBIOS shares with a nominal value of €0.70 each, and,
- the acquisition of 4,823 existing CARBIOS treasury shares.

As a result, the Company's share capital was increased by €5,892.60 and thus went from €11,786,048.40 to €11,791,941.

NOTE 2 • SEGMENT INFORMATION

Accounting principles

According to IFRS 8, an operating segment is a component of a company:

- that engages in activities likely to generate income and incur expenses;
- for which the operating results are regularly monitored by the main operational decision-maker;
- for which separate financial information is available.

Management considers that the Group's only operating segment is research and development, on enzymatic recycling processes and on biodegradation processes, with the ultimate aim of bringing them to an industrial scale and marketing them. The Group benefits from significant R&D synergies, which should continue to increase across all activities following the full consolidation of Carbiolice in the 2021 fiscal year and the creation of Carbios 54 in 2022. All of the Group's activities and assets are located in France.

NOTE 3 • ACCOUNTING PRINCIPLES AND METHODS

Principles applied in the preparation of the financial statements

Declaration of compliance

Pursuant to European Regulation 16/06/2002 of July 19, 2002, the Group's consolidated financial statements have been prepared in accordance with IFRS as published by the International Accounting Standards Board (IASB) and adopted by the European Union at the date the financial statements were approved by the Board of Directors, which are applicable as of December 31, 2023.

All the texts adopted by the European Union are available on the European Commission website, incorporating international accounting standards (IAS and IFRS) and interpretations of the Interpretation Committees (IFRS Interpretations Committee, or IFRS IC, and Standing Interpretations Committee, or SIC). These are available on the European Commission website:

https://ec.europa.eu/info/business-economy-euro/accounting-and-taxes/annual-accounts_en

The accounting principles and methods set out below have been applied consistently to all periods presented in the consolidated financial statements, after taking into account the new standards and interpretations.

The first financial statements prepared by the Group in accordance with IFRS were at December 31, 2021, with a transition date of January 1, 2020. As a reminder, in accordance with the provisions of IFRS 1 "First-time adoption of International Financial Reporting Standards," the Group retrospectively applied all standards at the transition date with the exception of the following standards:

- In accordance with the IFRS 1 exemption relating to government loans, the Group elected to apply IFRS 9 and IAS 20 prospectively from the transition date to repayable advances and interest-free loans contracted prior to the date of transition.
- With regard to IAS 19 "Employee Benefits," it chose to recognize all cumulative actuarial gains and losses in shareholders' equity at the date of transition to IFRS.
- In accordance with the IFRS 1 exemption relating to share-based compensation plans falling within the scope of IFRS 2, the Group has not restated the BSA and BSPCE plans, which correspond to vested rights at the transition date.
- As part of the accounting for its leases under IFRS 16, the Group has chosen to apply the following exemptions provided for by IFRS 1:
  - Application of the definition of leases under IFRS 16 to existing leases at the transition date, based on the facts and circumstances existing at that date;
  - Valuation using the full retrospective method, which involves an assessment of the lease liability at the transition date as if IFRS 16 had always been applied. This has an impact on the Group's consolidated reserves;
  - No restatement of contracts with a residual term of less than 12 months at the transition date;
  - No restatement of leases of low-value assets (less than €5,000);
  - Use of the knowledge acquired a posteriori to determine the term of a lease that contains extension or termination options.

Principles applied in the preparation of the financial statements

The Group's consolidated financial statements have been prepared in accordance with the historical cost principle, with the exception of items measured at fair value, as mentioned in the notes to the financial statements.

Changes in accounting basis

The following main new standards, amendments to standards and interpretations have been published by the International Accounting Standards Board (IASB) and adopted by the European Union at the date of preparation of the financial statements. They are mandatory for the 2023 fiscal year.

Standard / Interpretation	Expected application date by the IASB (fiscal years beginning on or after)	Expected EU application date (at the latest for fiscal years beginning on or after)
IFRS 17 - Insurance contracts - and amendments - First-time adoption and comparative information	01/01/2023	01/01/2023
Amendment to IAS 1 - Presentation of financial statements - Disclosure of accounting policies	01/01/2023	01/01/2023
Amendment to IAS 8 - Accounting policies, changes in accounting estimates and errors - Definition of accounting estimates	01/01/2023	01/01/2023
Amendment to IAS 12 - Deferred tax related to assets and liabilities arising from a single transaction	01/01/2023	01/01/2023
Amendments to IAS 12 Income Taxes - International Tax Reform - Pillar 2	01/01/2023	01/01/2023

The adoption of the other mandatory new standards / amendments / interpretations listed above had no impact on the Group's consolidated financial statements.

• Standards and interpretations applicable after the period ended December 31, 2023

In addition, the Group has not anticipated the application of any standards, interpretations, amendments or revisions that have not yet been adopted by the European Union or whose application is not mandatory in the context of the preparation of its consolidated financial statements opened on January 1, 2023

Standard / Interpretation	Expected application date by the IASB (fiscal years beginning on or after)	Expected EU application date (at the latest for fiscal years beginning on or after)
Amendment to IAS 1 - Presentation of financial statements - Classification of liabilities as current or non-current / Non-current liabilities with covenants	01/01/2024	01/01/2024
Amendment to IFRS 16 - Lease liability in a sale and leaseback	01/01/2024	01/01/2024
Amendment to IAS 7 and IFRS 7 - Reverse Factoring - Supply chain financing arrangements	01/01/2024	N.C.*
Amendments to IAS 21 - Lack of exchangeability	01/01/2025	N.C.*

These interpretations and amendments are not expected to have a material impact on the Group's consolidated financial statements. In addition, the Group's annual consolidated financial statements do not take into account the draft standards and interpretations which are only in the form of exposure drafts by the IASB and IFRIC at the closing date.

Use of estimates and judgments

As part of the preparation of the financial statements in accordance with IFRS, the Group has made judgments and estimates that could affect the amounts presented for assets and liabilities at the date of preparation of the financial statements, and the amounts presented in respect of income and expenses for the period.

These estimates are made by the Group's management on the basis of the going concern assumption based on the information available at the time these judgments and estimates were made. These estimates are evaluated on an ongoing basis and are based on past experience and various other factors considered reasonable that form the basis for assessing the carrying amount of assets and liabilities. Estimates may be revised if the circumstances on which they are based change or as new information becomes available. Actual results may differ materially from these estimates if assumptions or conditions change.

Significant estimates or judgments made by the Group relate in particular to the following items:

- Note 13 – Share-based payments – IFRS 2 – valuation of share subscription warrants and founders' warrants granted to employees, executives and members of the Board of Directors
- Note 5.1 – Capitalization of development costs – IAS 38 – application of capitalization criteria.
- Note 5.5 – Right of use of lease purchases and leases – IFRS 16 – discount rate.
- Note 15 – Treatment of repayable advances and interest-free loans – IFRS 9 – discount rate and loan terms.
- Note 5.4 – Impairment tests – IAS 36 – procedures for performing impairment tests on assets.
- Note 21 – Deferred Taxes – IAS 12 – procedures for recognizing deferred tax assets.

The estimates used by the Group to prepare the financial statements include the consideration of risks caused by climate change, whether physical, regulatory, or related to customer expectations and sector commitments. Due to its current research and development activity, the Group has little direct or indirect industrial activity. In this context, the effects of these long-term changes are not significant at this stage of development.

Consolidation scope and methods

Accounting principle

According to IFRS 10, subsidiaries are all entities over which the Group has exclusive control. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement in the entity and has the ability to affect those returns through its power over the entity.

Subsidiaries are consolidated using the full consolidation method from the date on which the Group acquires control. They are deconsolidated from the date on which control ceases to be exercised.

According to IAS 28, the Company's interests in a joint venture are accounted for using the equity method. They are initially recognized at cost, which includes transaction costs. After initial recognition, the Company's financial statements include the Company's share in the income and other comprehensive income of the equity-accounted investee until the date on which the joint control ends. Gains arising from transactions with equity-method associates are eliminated by the counterparty of equity-accounted securities to the extent of the Company's interests in the company. Losses are eliminated in the same way as gains, but only to the extent that they do not represent an impairment loss.

As of its creation in June 2022, Carbios 54, wholly owned by Carbios, entered the scope of consolidation. The Carbios Group has also held 100% of Carbiolice since June 3, 2021.

On June 3, 2021, Carbios acquired the entire stake in Carbiolice of the Bpifrance SPI fund. The latter represented 37.29% of the share capital of Carbiolice, i.e. 11 million shares. This transaction increased Carbios' stake in Carbiolice from 62.71% to 100% and enabled Carbios to take control of Carbiolice. As this transaction led to the takeover of Carbiolice by the Company, it was determined that the transaction falls within the scope of IFRS 3 - Business Combinations. Prior to this last transaction, Carbios was not in a position of control over Carbiolice for governance reasons, in particular related to restrictions on decisions on strategic activities under the Shareholders' Agreement. As such, Carbios' stake in Carbiolice is accounted for using the equity method until the effective takeover on June 3, 2021.

Consequently, the scope of consolidation is as follows:

	12/31/2023		12/31/2022	
	Percentage holding	**Consolidation method**	**Percentage holding**	**Consolidation method**
Carbios	Parent company (from a legal point of view)		Parent company (from a legal point of view)	
Carbiolice	100%	Full consolidation (1)	100%	Full consolidation (1)
Carbios 54	100%	Full consolidation (2)	100%	Full consolidation (2)

(1) From the takeover on 06/04/2021 - previously accounted as an equity affiliate.
(2) SASU created in the RCS Val de Briey and integrated into the scope from 06/08/2022

Information relating to the takeover of Carbiolice during the 2021 fiscal year

Acquisition price

Acquisition price (in thousands of euros)	06/04/2021
Acquisition price paid (37.29% share)	17,871
Fair value of non-controlling interests (62.71%) (1)	30,039
Loss related to unfavorable portion of pre-existing contracts (2)	(1,693)
Acquisition price (100%)	**46,217**

The acquisition price used for the purchase price allocation exercise thus amounts to €46,217 thousand. This amount notably includes:
(1) the revaluation of the stake of the 62.71% previously held
(2) the loss relating to the unfavorable portion of pre-existing contracts (see note below on reacquired rights)

Carbiolice purchase price allocation

Masterbatch Technology:

As part of its development strategy, the Company acquired on June 3, 2021, the remaining 37.29% of the share capital of Carbiolice from the SPI fund, whose management company is Bpifrance Investissement.

Since the creation of Carbiolice in 2016, the close collaboration between the Company and the SPI fund has enabled the development of the Carbios Active technology, an innovation aimed at plastics and PLA packaging applications which, by their nature, cannot be recycled. Carbios Active is an enzymatic additive that makes plant-based plastics compostable. Plastics containing Carbios Active are assimilated to biowaste, composted and transformed into compost in less than 200 days.

This solution makes it possible to combat the accumulation of plastic waste in the environment and becomes an effective lever for the deployment of an efficient solution for sorting biowaste at source.

Technology license - Rights reacquired:

According to IFRS 3, as part of a business combination, an acquiring company may record a right that it previously granted to the acquired company. The exclusive license agreement on French territory between Carbios and Carbiolice constitutes a pre-existing relationship giving the right to the recognition of an asset with reacquired rights.

This technology, which, in 2016, was the subject of an exclusive license in France from Carbiolice, is used in the form of an enzymatic additive called Carbios Active. This is easily integrated into conventional plastic and packaging manufacturing processes.

The value that represents the off-market portion of the contract corresponds to the unfavorable or favorable part of the contract for the purchaser. In the event that the terms represent a favorable or unfavorable situation for the buyer, the latter must recognize a profit or loss in respect of the contract. Such recognition leads to the recognition of an upward or downward adjustment of the acquisition price to be considered as part of the purchase price allocation exercise. In view of the terms of the contract, it appears that the latter is unfavorable for the Company. The value of the unfavorable portion of the license agreement amounts to €1,693 thousand (see below - Impacts of the change in scope).

Statement of financial position at the acquisition date and description of the assets Identified by the purchase price allocation (PPA - Purchase Price Allocation) exercise

The net assets acquired from Carbiolice are detailed below:

Purchase price allocation (in thousands of euros)	**06/04/2021**
Intangible assets	22,505
Masterbatch technology	*9,813*
Technology license (rights reacquired)	*12,503*
Other intangible assets	*189*
Property, plant and equipment	1,294
Financial assets	17
Total non-current assets	**23,817**
Trade receivables & other current assets	727
Cash and cash equivalents	7,057
Total current assets	**7,784**
TOTAL ASSETS	**31,601**
Non-current provisions	53
Current and non-current borrowings and financial liabilities	3,806
Deferred tax liabilities	1,694
Total non-current liabilities	**5,554**
Trade payables	321
Other current liabilities	92
Total current liabilities	**413**
TOTAL LIABILITIES AND EQUITY	**5,967**
NET ASSETS ACQUIRED	**25,634**
GOODWILL	**20,583**
ACQUISITION COST	**46,217**

The 12-month period during which the amounts allocated to the identifiable assets and liabilities acquired and to goodwill are subject to change will end on June 3, 2022, with no changes.

Presentation currency

The Group's financial statements are prepared in euros (EUR).

Assessment of the effects of climate change

In view of:
- the nature of the Group's activities and its geographical presence in France;
- the commitments made by the Group in the environmental field, in particular with regard to its process for depolymerizing plastic waste into PET through its enzymatic recycling process.

The Group has not identified any significant effects for the 2023 fiscal year.

In particular:
- its commitments are not material as of December 31, 2023, and no liability is recognized in this respect in the consolidated statement of financial position;
- no provision for environmental risks and charges is included in the consolidated statement of financial position at December 31, 2023;
- in 2023, the Group did not identify any significant effects of the commitments made in this area on the value of its tangible assets. In particular, its production facilities under development take into consideration the Group's environmental commitments from the design stage.

NOTE 4 • RISK MANAGEMENT

Carbios may be exposed to different types of financial risk: market risk, credit risk and liquidity risk. Where applicable, the Group uses simple measures proportionate to its size to minimize the potentially adverse effects of these risks on financial performance.

Carbios' policy is not to subscribe to financial instruments for speculative purposes.

Market risk

INTEREST RATE RISK

The Group has no significant exposure to interest rate risk, as no floating-rate debt has been subscribed.

CREDIT RISK

Credit risk is the risk of financial loss for the Group in the event that a customer or counterparty to a financial instrument fails to meet its contractual obligations. The carrying amounts of financial assets represent the maximum exposure to credit risk.

Cash and cash equivalents

The Group's cash and cash equivalents are held with banking counterparties and leading financial institutions. The Group considers that its cash and cash equivalents present a very low credit risk in view of the external credit ratings of its counterparties.

Trade receivables and contract assets

The Group is limited in its exposure to credit risk related to trade receivables. At December 31, 2023, no impairment of receivables had been written off or impaired with actual losses ("credit-impaired").

Liquidity risk

Liquidity risk is the risk to which the Group is exposed when it experiences difficulties in meeting its obligations relating to financial liabilities that will be settled by remitting cash or other financial assets. The Group's objective in managing liquidity risk is to ensure, to the extent possible, that it will have sufficient liquidity to honor its liabilities when they fall due under normal or "stressed" conditions, without incurring unacceptable losses or damaging the Group's reputation.

The residual contractual maturities of financial liabilities at the closing date are detailed in Notes 9 and 15. The amounts expressed in gross data and not discounted, include contractual interest payments.

NOTE 5 • PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS

5.1 Intangible assets

Accounting principles

RESEARCH AND DEVELOPMENT EXPENSES

Research costs are expensed as incurred. Costs incurred on development projects are recognized as intangible assets when the following criteria are met:

- it is technically possible to complete the intangible asset so that it is available for use or sale;
- management plans to complete, use or sell the intangible asset;
- there is a possibility of using or selling the intangible asset;
- it can be demonstrated that the intangible asset will generate probable future economic benefits;
- adequate technical, financial and other resources necessary to complete the development, use or sale of the intangible asset are available; and
- the expenses attributable to the intangible asset during its development can be measured reliably.

Otherwise, the costs are expensed as incurred. After initial recognition, development expenses are recognized at cost less accumulated depreciation and impairment losses.

The Group's capitalized development costs relate to the PET technology. The development costs incurred for the PET technology are capitalized from September 30, 2021, the date of commissioning of the Carbios demonstration plant, thus making it possible to cumulatively achieve the six activation criteria mentioned above.

PATENTS & SOFTWARE

In accordance with IAS 38 criteria, costs related to the acquisition of software patents and licenses are recognized as assets on the basis of the costs incurred to acquire and use the software in question.

The expenses for filing patents or industrial property rights acquired during the fiscal year have been capitalized and are amortized from the beginning of their utilization and over the duration of use of the patents. Additional costs and subsequent extensions on capitalized patents are amortized over the remaining term for the application to which they relate.

GOODWILL

In the event of an acquisition, the assets and liabilities assumed from the subsidiary are recognized at their fair value, and the goodwill or residual difference represents the difference between the acquisition cost of the securities and the Group's share in the measurement of the fair value of the assets and liabilities identified. The standard provides for a period of twelve months after the acquisition date to identify the assets and liabilities assumed from the acquiree that are not recognized at the time of the initial recognition of the business combination and to retroactively modify the values initially allocated. The measurement of the purchase price ("consideration transferred" in IFRS 3R), including, where applicable, the estimated fair value of the earn-out payments and conditional compensation ("contingent consideration" in IFRS 3R), must be finalized within twelve months of the acquisition. In accordance with IFRS 3R, any adjustments to the purchase price beyond the twelve month period are recognized in the income statement. Direct costs related to the acquisition are recognized as expenses for the period.

The goodwill recognized is the result of the takeover of Carbiolice by the Company in June 2021.

MASTERBATCH TECHNOLOGY

Since the creation of Carbiolice in 2016, the work done has enabled the industrial development of a unique solution: the creation of a new generation of PLA-based plastics that are 100% compostable under universal conditions (industrial, domestic composting or methanization). This innovation solves one of the main problems posed by the end-of-life of plastics: the pollution of our environment. This process developed by Carbiolice consists of introducing enzymes into plastic materials to make them 100% biodegradable.

In accordance with the recommendations of IFRS 3, this asset is an integral part of the net assets acquired from Carbiolice by the Company when it took control in June 2021, and must be valued using the royalty and reconstitution costs method.

TECHNOLOGY LICENSE

According to IFRS 3, as part of a business combination, an acquiring company may record a right that it previously granted to the acquired company. The exclusive license agreement on French territory between Carbios and Carbiolice constitutes a pre-existing relationship giving the right to the recognition of an asset with reacquired rights.

In accordance with the recommendations of IFRS 3, this asset held by Carbiolice, and an integral part of the net assets acquired from Carbiolice by the Company when it took control in June 2021, must be valued based on the expected cash flows for the holder of the assets of this contract over the remaining term of the contract, without taking into account the possibility of renewal of the contract.

DEPRECIATION AND AMORTIZATION EXPENSE

Depreciation and amortization is calculated on a straight-line basis over the estimated useful lives of the assets. The estimated useful lives for the current period and the comparative period are as follows:

The depreciation and amortization methods, durations of use and residual values are reviewed at each closing date and adjusted, if necessary.

The technology license and the Masterbatch technology are amortized from June 4, 2021, the date of the takeover of Carbiolice, and the recognition of these assets following the purchase price allocation exercise. They are amortized over the remaining life of the patents underlying these technologies.

Development costs relating to the PET technology were not amortized in the 2023 fiscal year. They will be amortized as soon as they are ready for use.

Depreciation and amortization is calculated on a straight-line basis over the estimated useful lives of the assets. The estimated useful lives for the current period and the comparative period are as follows:

Items	Depr./amort. period
Software, website	1 year - straight-line
Patents	10 years - straight-line
Technology license - rights reacquired	13 years - straight-line
Masterbatch technology	13 years - straight-line

The depreciation and amortization methods, durations of use and residual values are reviewed at each closing date and adjusted, if necessary.

SUBSEQUENT IMPAIRMENT TESTS

The goodwill is not amortized but is subject to an impairment test as soon as there is an indication of impairment and at least once a year in accordance with the procedures described in Note "Impairment Tests" below.

Statement of intangible assets

Intangible assets break down as follows:

Intangible assets (in thousands of euros)	12/31/2022	Change in scope	Increase	Decrease	Reclassification	12/31/2023
Goodwill	20,583	-	-	-	-	20,583
PET technology - assets under construction	980	-	714	-	-	1,694
Masterbatch technology	9,813	-	-	-	-	9,813
Concessions, patents and similar rights	3,023	-	683	(26)		3,681
Technology license (rights reacquired)	12,503	-	-	-	-	12,503
Software	66	-	163	-	-	229
Other intangible assets in progress	0	-	0	-	-	-
Advances and advance payments on intangible assets	3	-	-	-	-	3
TOTAL GROSS VALUES	**46,972**	**-**	**1,560**	**(26)**	**-**	**48,506**
Goodwill	-	-	-	-	-	-
PET technology - assets under construction	-	-	-	-	-	-
Masterbatch technology	(1,167)	-	(741)	-	-	(1,908)
Concessions, patents and similar rights	(1,215)	-	(405)	26	-	(1,594)
Technology license (rights reacquired)	(1,487)	-	(944)	-	-	(2,431)
Software	(63)	-	(53)	-	-	(116)
Other intangible assets in progress	-	-	-	-	-	-
Advances and advance payments on intangible assets	-	-	-	-	-	-
TOTAL DEPRECIATION AND AMORTIZATION	**(3,932)**	**-**	**(2,142)**	**26**	**-**	**(6,049)**
Goodwill	20,583	-	-	-	-	20,583
PET technology - assets under construction	980	-	714	-	-	1,694
Masterbatch technology	8,326	-	(741)	-	320	7,905
Concessions, patents and similar rights	1,808	-	279	-	-	2,087
Technology license (rights reacquired)	11,336	-	(944)	-	(320)	10,072
Software	3	-	110	-	-	112
Other intangible assets in progress	0	-	0	-	-	-
Advances and advance payments on intangible assets	3	-	-	-	-	3
TOTAL NET VALUES	**43,040**	**-**	**(583)**	**-**	**-**	**42,457**

For the 2023 fiscal year, the Group is continuing to develop the industrial demonstration plant for the PET project. As a result, additional development costs related to the project were capitalized. The Group also filed patents during the fiscal year.

Intangible assets (in thousands of euros)	12/31/2021	Change in scope	Increase	Decrease	Reclassification	12/31/2022
Goodwill	20,583	-	-	-	-	20,583
PET technology - assets under construction	409	-	571	-	-	980
Masterbatch technology	9,813	-	-	-	-	9,813
Concessions, patents and similar rights	2,330	-	794	(107)	6	3,023
Technology license (rights reacquired)	12,503	-	-	-	-	12,503
Software	68	-		(2)		66
Other intangible assets in progress	4	-	-	-	(5)	0
Advances and advance payments on intangible assets	1	-	4	-	(1)	3
TOTAL GROSS VALUES	**45,712**	**-**	**1,369**	**(109)**	**-**	**46,972**
Goodwill	-	-	-	-	-	-
PET technology - assets under construction	-	-	-	-	-	-
Masterbatch technology	(426)	-	(741)	-	-	(1,167)
Concessions, patents and similar rights	(913)	-	(350)	48	-	(1,215)
Technology license (rights reacquired)	(543)	-	(944)	-	-	(1,487)
Software	(58)	-	(7)	2	-	(63)
Other intangible assets in progress	-	-	-	-	-	-
Advances and advance payments on intangible assets	-	-	-	-	-	-
TOTAL DEPRECIATION AND AMORTIZATION	**(1,941)**	**-**	**(2,042)**	**50**	**-**	**(3,932)**
Goodwill	20,583	-	-	-	-	20,583
PET technology - assets under construction	409	-	571	-	-	980
Masterbatch technology	9,387	-	(1,061)	-	-	8,326
Concessions, patents and similar rights	1,416	-	445	(59)	6	1,808
Technology license (rights reacquired)	11,960	-	(624)	-	-	11,336
Software	10	-	(7)	-	-	3
Other intangible assets in progress	4	-	-	-	(5)	0
Advances and advance payments on intangible assets	1	-	4	-	(1)	3
TOTAL NET VALUES	**43,771**	**-**	**(673)**	**(59)**	**-**	**43,040**

For fiscal year 2022, the increase in intangible assets is mainly due to the Company's continued patent filing policy and the capitalization of the Company's industrial demonstration plant development costs for the PET project.

5.2 Property, plant and equipment

Accounting principles

Property, plant and equipment are measured at acquisition cost less accumulated depreciation and accumulated impairment losses.
The gain or loss on disposal of property, plant and equipment is recognized in net income.
Depreciation is calculated on a straight-line basis over the estimated useful life.
The estimated useful lives for the current period and the comparative period are as follows:

Items	Depr./amort. period
Fixtures and fittings	7 to 10 years - straight-line
Laboratory fittings and equipment	5 to 10 years - straight-line
Office and IT hardware	3 to 5 years - straight-line
Furniture	3 to 7 years - straight-line

Depreciation methods, useful lives and residual values are reviewed at each closing date and adjusted, if necessary.

Statement of property, plant and equipment

Property, plant and equipment can be broken down as follows:

Property, plant and equipment (in thousands of euros)	**12/31/2022**	**Change in scope**	**Increase**	**Decrease (2)**	**Reclassification (3)**	**12/31/2023**
Buildings	82	-	-	(82)	-	-
Technical installations, equipment and tooling	4,265	-	58	(390)	-	3,933
Transport equipment	7	-	-	-	-	7
Office equipment	900	-	192	(122)	-	970
Other property, plant and equipment	17,451	-	4,611	(5)	8,077	30,134
Property, plant and equipment under construction	6,642	-	152	-	(6,540)	254
Carbios 54 plant - assets under construction (1)	2,095	-	20,947	-	-	23,042
Advances and advance payments on property, plant and equipment	-	-	-	-	-	-
GROSS VALUES	**31,442**	**-**	**25,959**	**(598)**	**1,537**	**58,341**
Buildings	(80)	-	-	80	-	0
Technical installations, equipment and tooling	(3,136)	-	(179)	154	-	(3,161)
Transport equipment	(5)	-	(10)	-	-	(15)
Office equipment	(539)	-	(156)	120	-	(575)
Other property, plant and equipment	(2,719)	-	(2,462)	5	(216)	(5,392)
Property, plant and equipment under construction	-	-	-	-	-	-
Carbios 54 plant - assets under construction	-	-	-	-	-	-
Advances and advance payments on property, plant and equipment	-	-	-	-	-	-
TOTAL DEPRECIATION AND AMORTIZATION	**(6,479)**	**-**	**(2,807)**	**359**	**(216)**	**(9,143)**
Buildings	2	-	-	(2)	-	0
Technical installations, equipment and tooling	1,130	-	58	(236)	-	772
Transport equipment	2	-	(10)	-	-	(8)
Office equipment	361	-	36	(2)	-	396
Other property, plant and equipment	14,732	-	2,148	-	7,861	24,742
Property, plant and equipment under construction	6,642	-	152	-	(6,540)	254
Carbios 54 plant - assets under construction (1)	2,095	-	20,947	-	-	23,042
Advances and advance payments on property, plant and equipment	-	-	-	-	-	-
TOTAL NET VALUES	**24,964**	**-**	**23,331**	**(239)**	**1,321**	**49,200**

(1) Of which €720 thousand in borrowing costs capitalized in the 2023 fiscal year (IAS 23 - non-monetary item)
(2) Including €237 thousand in scrapping (non-monetary transaction)
(3) Including €1,321 thousand in right-of-use assets reclassified as property, plant and equipment (see Note 5.5)

During the 2023 fiscal year, the Company made investments worth €26 million, mainly attributable to the project to build the first PET biorecycling plant through Carbios 54 as well as to the continuation of investments in its industrial demonstration plant. Property, plant and equipment also includes lease-back operations related to the industrial demonstration plant. At December 31, 2023, the operation covered €4.3 million of equipment amortized over a period of 10 years, in addition to the €1.5 million for the previous fiscal year. In addition, the Company invested nearly €2.1 million in the renovation of the building that housed the production line of its subsidiary Carbiolice, on the Cataroux site in Clermont-Ferrand.

Property, plant and equipment (in thousands of euros)	**12/31/2021**	**Change in scope**	**Increase**	**Decrease**	**Reclassification**	**12/31/2022**
Buildings	82	-	-	-	-	82
Technical installations, equipment and tooling	4,094	-	109	-	62	4,265
Transport equipment	7	-		-	-	7
Office equipment	621	-	279	-	-	900
Other property, plant and equipment	10,467	-	5,296	(244)	1,932	17,451
Property, plant and equipment under construction	6,033	-	2,564	-	(1,954)	6,642
Carbios 54 plant - assets under construction (1)	-	-	2,095	-	-	2,095
Advances and advance payments on property, plant and equipment	40	-	-	-	(40)	-
GROSS VALUES	**21,344**	**-**	**10,344**	**(244)**	**0**	**31,442**
Buildings	(76)	-	(4)	-	-	(80)
Technical installations, equipment and tooling	(2,938)	-	(198)	-	-	(3,136)
Transport equipment	(13)	-	(1)	-	9	(5)
Office equipment	(429)	-	(113)	-	3	(539)
Other property, plant and equipment	(1,422)	-	(1,441)	156	(13)	(2,719)
Property, plant and equipment under construction	-	-	-	-	-	-
Carbios 54 plant - assets under construction	-	-	-	-	-	-
Advances and advance payments on property, plant and equipment	-	-	-	-	-	-
TOTAL DEPRECIATION AND AMORTIZATION	**(4,878)**	**-**	**(1,757)**	**156**	**-**	**(6,479)**
Buildings	6	-	(4)	-	-	2
Technical installations, equipment and tooling	1,156	-	(89)	-	62	1,130
Transport equipment	(6)	-	(1)	-	9	2
Office equipment	192	-	166	-	3	361
Other property, plant and equipment	9,045	-	3,856	(88)	1,919	14,732
Property, plant and equipment under construction	6,033	-	2,564	-	(1,954)	6,642
Carbios 54 plant - assets under construction (1)	-	-	2,095	-	-	2,095
Advances and advance payments on property, plant and equipment	40	-	-	-	(40)	-
TOTAL NET VALUES	**16,466**	**-**	**8,587**	**(88)**	**0**	**24,964**

For the 2022 fiscal year, the Group had made investments in fixed assets, which are mainly attributable to its demonstration plant on the Cataroux industrial site in Clermont-Ferrand. The Group had also begun construction of its first PET biorecycling plant through Carbios 54.

5.3 Assets under construction

Accounting principles

Property, plant and equipment under construction consists of the costs relating to certain equipment of the Company's industrial demonstration plant and the project to build the first PET biorecycling plant through Carbios 54. This equipment will be reclassified to a property, plant and equipment account upon receipt of full invoices and the effective commissioning of the items.

5.4 Impairment tests

Accounting principles

GOODWILL

The goodwill was recognized in respect of the 2021 fiscal year as part of the takeover of Carbiolice and the purchase price allocation exercise. The 12-month period during which the amounts allocated to the identifiable assets and liabilities acquired and to goodwill are subject to change will end on June 3, 2022, with no changes.

At the end of the fiscal year, an impairment test was carried out based on the following main assumptions:

- The business plan is projected over an eight-year horizon, to which must be added an additional so-called "normative" year and takes into account obtaining Food Contact approval in the United States.
- A terminal value calculated on a normal cash flow basis using an EBITDA margin rate of 30.5%, similar to the rate of comparable mature companies.
- Discount rate (WACC) used of 13% (compared to 13.5% last year), consisting of: (i) a WACC excluding the additional forecast risk premium, and (ii) an additional forecast risk premium, given the uncertainty of certain assumptions in the plan. This rate of 13% is corroborated by academic studies on high-growth companies in the marketing launch phase. The decrease in this rate is mainly due to the increase in its market capitalization.
- Tax rate: draft 2023 Finance Law, i.e. 25.8%.

The impairment tests performed at the end of fiscal year 2023 did not show any unrealized loss on goodwill.

In addition, sensitivity tests were carried out on certain key assumptions. A two-point increase in the discount rate combined with a decrease in the terminal value of the EBITDA margin to 22% had no impact on the result of the impairment test.

OTHER DEPRECIABLE ASSETS

Pursuant to IAS 36 - Impairment of assets, depreciated assets are tested for impairment when, due to special events or circumstances, the recoverability of their carrying amounts is uncertain. An impairment loss is recognized to the extent of the excess of the carrying amount over the recoverable amount of the asset. The recoverable amount of an asset is the higher of its fair value less disposal costs and its value in use. For non-financial assets that have suffered an impairment loss, the possible reversal of the impairment is reviewed at each annual or interim closing date.
No indication of impairment was identified in respect of the 2023 fiscal year.

5.5 Rights of use

Accounting principles

In accordance with IFRS 16, upon signing a contract, the Group determines whether it constitutes, or contains, a lease.

The contract is, or contains, a lease if it confers the right to control the use of an identified asset for a period in exchange for consideration. To assess whether a contract gives the right to control an identified asset throughout the useful life of the asset, the Group assesses whether: i) the contract involves the use of an identified asset, ii) the Group has the right to obtain substantially all of the economic benefits from the use of the asset throughout the period of use, and iii) the Group has the right to decide on the use of the asset.

The Group recognizes a lease asset and a lease liability on the date the leased asset is made available. The asset is initially measured at cost, i.e. the initial amount of the lease liability plus any lease payments already made at the start date of the contract, any initial direct costs incurred and an estimate of the costs of dismantling and removing the underlying asset or of restoring it or the site where it is located, less any lease incentive that may be received.

The asset is then amortized on a straight-line basis from the beginning to the end of the lease, unless the lease provides for a transfer to the Group of the ownership of the underlying asset at the end of the lease or if the cost of the asset takes into account the fact that the Group will exercise a purchase option. In this case, the asset will be amortized over the useful life of the underlying asset, determined on the same basis as that of the property, plant and equipment.

In addition, the value of the asset will be regularly revised downwards in the event of losses due to impairment and will be subject to adjustments for certain revaluations of the lease liability.

The lease liability is initially measured at the present value of the lease payments not yet paid at the start date of the contract. The discount rate used corresponds to the interest rate implicit in the contract or, if it cannot be easily determined, the Group's incremental borrowing rate.

The lease payments included in the measurement of the lease liability include the following items:

- fixed rents, including fixed rents in substance;
- variable rents indexed to an index or rate, initially measured on the basis of the index or rate in question at the start date of the contract;
- amounts payable under the residual value guarantee; and
- the exercise price of a purchase option that the Group is reasonably certain to exercise, the rents paid during the renewal period if the Group is reasonably certain to exercise an extension option and termination penalties for early termination of the lease, unless the Group is reasonably certain not to terminate the lease early;
- net of incentives granted by the lessor.

The lease liability is measured at amortized cost using the effective interest rate method. It is revalued in the event of a change in future rents due to a change in index or rate, in the event of a revaluation by the Group of the amount expected under the residual value guarantee, if the Group reviews its probability of exercising an option to purchase, extend or terminate, or in the event of a revision of a fixed rent in substance.

When the lease liability is revalued, an adjustment is made to the carrying amount of the right-of-use asset or is recognized in profit or loss, if the amount of the right-of-use asset has been reduced to zero.

Lastly, the Group has chosen not to recognize right-of-use assets and lease liabilities for short-term contracts with a lease term of 12 months or less, as well as leases of low-value assets (less than €5,000). These rents are, therefore, recognized as expenses. They represented €176 thousand for the 2023 fiscal year and €72 thousand in 2022.

In the event of renegotiation of a lease (amount of rent and/or term) that goes beyond the initial provisions of the contract, the contract amendments generally lead the lessee to recalculate the lease liability using a revised discount in exchange for a change in the right of use.

In the course of its business, the Group leases premises, vehicles and miscellaneous equipment.

With regard to real estate leases, a 9-year lease term has been used for the 3/6/9 commercial leases, taking into account the reasonably certain nature of the exercise of the realization and renewal options.

Vehicle leases have fixed rents and terms of approximately 3 years. In cases where the contracts provide for a purchase option, it has been assumed that the Group would not exercise them.

The lease and lease purchase terms used correspond to the terms of the various contracts, ranging from one to nine years.

Short-term exempt contracts are mainly temporary premises. Contracts exempted for low value mainly correspond to IT equipment.

Changes in right-of-use assets

Rights of use break down as follows:

Change in right-of-use assets (In thousands of euros)	**Premises**	**Technical installations, equipment & tooling**	**Vehicles**	**Total**
AT JANUARY 1, 2022	**5,800**	**944**	**245**	**6,989**
Change in scope	-	-	-	-
(-) Depreciation expense for the fiscal year	(778)	(566)	(151)	(1,495)
(+) Reversal of depreciation for the fiscal year	-	-	-	-
(+) Additions to “right-of-use” assets	177	1,583	246	2,007
(-) Disposals of “right-of-use” assets	(693)	-	(43)	(736)
AT DECEMBER 31, 2022	**4,506**	**1,962**	**297**	**6,765**
Change in scope	-	-	-	-
(-) Depreciation expense for the fiscal year	(965)	(314)	(172)	(1,450)
(+) Reversal of depreciation for the fiscal year	-	-	-	-
(+) Additions to “right-of-use” assets (1)	2,059	-	126	2,184
(-) Disposals of “right-of-use” assets	-	-	(2)	(2)
(-) Reclassification to property, plant and equipment (see Note 5.2)	-	(1,321)	-	(1,321)
AT DECEMBER 31, 2023	**5,600**	**327**	**248**	**6,175**

(1) Increase mainly related to the extension of the “O24” technical building

The corresponding liability breaks down as follows:

Change in lease liabilities (In thousands of euros)	**Current portion of lease liabilities**	**Non-current portion of lease liabilities**	**Total lease liabilities**
AT JANUARY 1, 2022	**1,256**	**5,358**	**6,613**
Change in scope	-	-	-
Non-monetary changes - New contracts	371	1,141	1,512
Non-monetary changes - Reclassifications and other impacts	1,098	(1,355)	(257)
Repayments lease liabilities	(1,379)	-	(1,379)
AT DECEMBER 31, 2022	**1,346**	**5,143**	**6,489**
Change in scope	-	-	-
Non-monetary changes - New contracts (1)	442	1,744	2,186
Non-monetary changes - Reclassifications and other impacts	1,196	(1,199)	(3)
Repayments lease liabilities	(1,468)	-	(1,468)
Reclassification as financial liabilities (see Note 15)	(285)	(1,049)	(1,334)
AT DECEMBER 31, 2023	**1,231**	**4,639**	**5,870**

(1) Increase mainly related to the extension of the “O24” technical building

NOTE 6 • NON-CURRENT FINANCIAL ASSETS

Financial assets break down as follows:

Financial assets (In thousands of euros)	12/31/2022	Change in scope	Increase	Decrease	Reclassification	12/31/2023
Financial assets	905	-	396	(83)	-	1,219
TOTAL GROSS VALUES	**905**	**-**	**396**	**(83)**	**-**	**1,219**
Financial assets	-	-	-	-	-	-
TOTAL DEPRECIATION AND AMORTIZATION	**-**	**-**	**-**	**-**	**-**	**-**
Financial assets	905	-	396	(83)	-	1,219
TOTAL NET VALUES	**905**	**-**	**396**	**(83)**	**-**	**1,219**

Financial assets (In thousands of euros)	12/31/2021	Change in scope	Increase	Decrease	Reclassification	12/31/2022
Financial assets	388	-	604	(87)	-	905
TOTAL GROSS VALUES	**388**	**-**	**604**	**(87)**	**-**	**905**
Financial assets	-	-	-	-	-	-
TOTAL DEPRECIATION AND AMORTIZATION	**-**	**-**	**-**	**-**	**-**	**-**
Financial assets	388	-	604	(87)	-	905
TOTAL NET VALUES	**388**	**-**	**604**	**(87)**	**-**	**905**

The Group's financial assets consist of:

- loans and receivables initially recognized at acquisition cost, then measured at amortized cost using the effective interest method;
- guarantee deposits and the liquidity contract.

Financial assets with a maturity of more than one year are classified as "non-current financial assets."

The classification and fair value of financial instruments is described in Note 10.

Liquidity contract

As part of the transactions relating to the liquidity agreement that the Company has entered into with an independent financial intermediary, the cash paid to the financial intermediary and not yet used is recognized in the "Liquidity agreement" account. It represented €563 thousand at December 31, 2022 and €512 thousand at December 31, 2023.

Deposits and guarantees

These represented €325 thousand at December 31, 2022 and €339 thousand at December 31, 2023.

NOTE 7 • INVENTORIES

Accounting principles

In accordance with IAS 2, inventories of raw materials are valued at their purchase cost.

For the 2023 fiscal year, inventories of raw materials (PET waste) were recorded for a total amount of €511 thousand. These inventories were not impaired at the end of the fiscal year (no inventories and no impairment at December 31, 2022).

NOTE 8 • TRADE RECEIVABLES AND OTHER CURRENT ASSETS

Accounting principles

Trade receivables and other current assets break down as follows:

Trade receivables & other current assets (In thousands of euros)	**12/31/2023**	**12/31/2022**
Trade receivables	6	57
Other current assets	10,621	7,670
Tax & social security receivables	*6,685*	*5,613*
Advance payments made on orders	*33*	*638*
Prepaid expenses	*311*	*283*
Other receivables (1)	*3,591*	*1,136*
OTHER CURRENT ASSETS	**10,627**	**7,727**

(1) At December 31, 2023, other receivables mainly consisted of a down payment of €3.3 million paid to the notary for the acquisition of the land in Longlaville, as well as receivables to suppliers for fixed assets of €0.1 million (against €0.5 million in receivables from suppliers for fixed assets at December 31, 2022).

The fair value classifications of financial instruments are described in Note 10.

NOTE 9 • TRADE PAYABLES AND OTHER CURRENT LIABILITIES

Accounting principles

Trade payables are initially recognized at their fair value, which generally corresponds to their nominal value.
The fair value of other current liabilities is assimilated to their value in the statement of financial position, given the very short payment terms.

Trade payables and other current liabilities (In thousands of euros)	**12/31/2023**	**12/31/2022**
Trade payables	4,829	4,021
Other current liabilities	11,888	7,408
Social security liabilities	*3,035*	*2,269*
Tax liabilities	*398*	*630*
Debts on fixed assets and related accounts	*7,390*	*3,673*
Other liabilities	*394*	*12*
Deferred income	*671*	*825*
TRADE PAYABLES AND OTHER CURRENT LIABILITIES	**16,716**	**11,429**

Other current liabilities at December 31, 2023

Other current liabilities concern:
- debt on fixed assets mainly concern the fixed assets of the Carbios 54 plant.
- social security liabilities, including balances due to the various funds at the closing date, as well as provisions for awards and bonuses, paid leave and related social security contributions;
- tax liabilities mainly include VAT liabilities;
- deferred income consists of the following items:
  - Deferred income related to restatements of repayable advances and interest-free loans in accordance with IFRS 9 for €628 thousand.
  - Other deferred income related to rebilling for €43 thousand.

Other current liabilities at December 31, 2022

Other current liabilities concern:
- social security liabilities, including balances due to the various funds at the closing date, as well as provisions for awards and bonuses, paid leave and related social security contributions;
- tax liabilities mainly include VAT liabilities;
- deferred income consists of the following items:
  - Deferred income related to subsidies for €241 thousand;
  - Other deferred income related to rebilling for €421 thousand;
  - Deferred income related to restatements of repayable advances and interest-free loans in accordance with IFRS 9 for €162 thousand.
  - Advances related to restatements of repayable advances and interest-free loans in accordance with IFRS 9 for €879 thousand.

The classification and fair value of financial instruments are described in Note 10.

Other non-current liabilities at December 31, 2023

Other non-current liabilities for a total amount of €449 thousand correspond to the non-current portion of income from advances related to the restatement of repayable advances and interest-free loans in accordance with IFRS 9, and deferred income.

NOTE 10 • CLASSIFICATION AND FAIR VALUE OF FINANCIAL INSTRUMENTS

Accounting principles

There are three categories of financial instruments according to the consequences that their characteristics have on their valuation method. This classification is used to set out some of the disclosures required by IFRS 7:

(1) level 1 category: only quoted prices on an active market for an identical instrument and without any adjustment;
(2) level 2 category: fair value determined from observable data, either directly (such as a price) or indirectly (i.e., calculated on the basis of another price), but other than a price quoted on an active market falling within level 1;
(3) level 3 category: fair value determined on the basis of unobservable market data.

The Group's assets and liabilities are valued as follows at the end of the fiscal years presented:

					12/31/2023		
Summary of financial assets and liabilities (In thousands of euros)	**Accounting category**	**Fair value hierarchy level**	**Total net carrying amount**	**Assets carried at amortized cost**	**Assets recognized at fair value through profit or loss**	**Liabilities carried at amortized cost**	**Fair value**
Financial assets			1,219	1,219	-	-	1,219
Trade receivables and related accounts	Amortized cost	Note 8	6	6	-	-	6
Other current assets	Amortized cost	Note 8	10,621	10,621	-	-	10,621
Cash and cash equivalents	Amortized cost	Note 11	191,821	191,821	-	-	191,821
TOTAL ASSETS			**203,667**	**203,667**	**-**	**-**	**203,667**
Current and non-current borrowings and financial liabilities	Amortized cost	Level 2 - Note 15	38,912	-	-	38,912	38,912
Other non-current liabilities	Amortized cost	Note 9	449	-	-	449	449
Non-current lease liabilities	Amortized cost	Note 5.5	4,639	-	-	4,639	4,639
Current borrowings and financial liabilities	Amortized cost	Level 2 - Note 15	3,838	-	-	3,838	3,838
Current lease liabilities	Amortized cost	Note 5.5	1,232	-	-	1,232	1,232
Trade payables and related accounts	Amortized cost	Note 9	4,829	-	-	4,829	4,829
Other current liabilities	Amortized cost	Note 9	11,888	-	-	11,888	11,888
TOTAL LIABILITIES			**65,786**	**-**	**-**	**65,786**	**65,786**

Summary of financial assets and liabilities (in thousands of euros)	12/31/2022 Accounting category	Fair value hierarchy level	Total net carrying amount	Assets carried at amortized cost	Assets recognized at fair value through profit or loss	Liabilities carried at amortized cost	Fair value
Financial assets			906	906	-	-	906
Trade receivables and related accounts	Amortized cost	Note 8	57	57	-	-	57
Other current assets	Amortized cost	Note 8	7,670	7,670	-	-	7,670
Cash and cash equivalents	Amortized cost	Note 11	100,557	100,557	-	-	100,557
TOTAL ASSETS			**109,190**	**109,190**	**-**	**-**	**109,190**
Current and non-current borrowings and financial liabilities	Amortized cost	Level 2 - Note 13	35,395	-	-	35,395	35,395
Other non-current liabilities	Amortized cost	Note 9	546	-	-	546	546
Non-current lease liabilities	Amortized cost	Note 5.5	5,142	-	-	5,142	5,142
Current borrowings and financial liabilities	Amortized cost	Level 2 - Note 13	2,782	-	-	2,782	2,782
Current lease liabilities	Amortized cost	Note 5.5	1,346	-	-	1,346	1,346
Trade payables and related accounts	Amortized cost	Note 9	4,021	-	-	4,021	4,021
Other current liabilities	Amortized cost	Note 9	7,408	-	-	7,408	7,408
TOTAL LIABILITIES			**56,641**	**-**	**-**	**56,641**	**56,641**

NOTE 11 • CASH AND CASH EQUIVALENTS

Cash and cash equivalents (In thousands of euros)	12/31/2023	12/31/2022
Bank accounts	19,284	55,433
Term deposits	172,537	45,124
Total cash and cash equivalents	**191,821**	**100,557**

Cash and cash equivalents consist of cash at bank, cash on hand and term deposits. They are held to meet short-term cash commitments, are readily convertible into a known amount of cash and are exposed to an insignificant risk of change in value.

For the purposes of the cash flow statement, net cash includes cash and cash equivalents as defined above.

NOTE 12 • EQUITY

Accounting principles

The classification in equity depends on the specific analysis of the characteristics of each instrument issued. The Company's ordinary shares are classified as equity instruments.
Incidental costs directly attributable to the issue of shares or stock options are recognized, net of tax, as a deduction from equity.

Liquidity contract

The portion of the contract that is invested in the Company's treasury shares is recognized as a deduction from the Company's equity at the acquisition cost.

The gain or loss on the sale of these treasury shares is also recognized directly in equity.

The cash reserve related to the liquidity contract is presented in "Non-current financial assets."

Share capital

	12/31/2023	12/31/2022
Share capital (in euros)	11,786,048.40	7,869,866.20
Number of ordinary shares outstanding	16,837,212	11,242,666
Nominal value (in euros)	€0.70	€0.70

Capital transactions carried out before the period and recognized during the period
N/A.

Capital transactions performed during the period

At its meeting on February 7, 2023, the Board of Directors noted:
- the creation of 4,000 new shares from the exercise of 4,000 BCE-2017-1, subscribed for €7.86 (€0.70 in par value and €7.16 in share premium);
- the creation of 1,600 new shares from the exercise of 1,600 BSA-2013-1, subscribed for €11.22 (€0.70 in par value and €10.52 in share premium).

At its meeting on April 5, 2023, the Board of Directors noted:
- the creation of 10,000 new shares from the exercise of 10,000 BCE-2017-1, subscribed for €7.86 (€0.70 in par value and €7.16 in share premium);
- the creation of 7,563 new shares from the exercise of 7,563 BCE-2020-2, subscribed for €7.76 (€0.70 in par value and €7.06 in share premium);
- the creation of 1,500 new shares from the exercise of 1,500 BCE-2020-3, subscribed for €7.76 (€0.70 in par value and €7.06 in share premium).

At its meeting on June 19, 2023, the Board of Directors noted:
- the creation of 4,000 new shares from the exercise of 4,000 BCE-2020-2, subscribed for €7.76 (€0.70 in par value and €7.06 in share premium);
- the creation of 7,188 new shares from the exercise of 7,188 BCE-2020-5, subscribed for €20.61 (€0.70 in par value and €19.91 in share premium).

Lastly, by a decision dated July 13, 2023, the Chief Executive Officer of the Company noted the definitive completion of the capital increase with preferential subscription rights maintained for a nominal amount of €3,891,086.50, increasing from €7,894,961.90 to €11,786,048.40, through the issue of 5,558,695 new ordinary shares at a unit price of €25.32 (including the issue premium).

As a result, as of December 31, 2023, the share capital amounting to €11,786,048.40 consisted of 16,837,212 ordinary shares, with a par value of €0.70 each, entirely subscribed and fully paid up.

Movements of securities	Number	Nominal value	Share capital
Securities at the beginning of the fiscal year	**11,242,666**	**€0.70**	**€7,869,866.20**
Capital reduction	-	-	-
Securities issued	5,594,546	€0.70	€3,916,182.20
Securities redeemed or canceled	-	-	-
Shares at year-end	**16,837,212**	**€0.70**	**€11,786,048.40**

Capital transactions carried out during the fiscal year ended December 31, 2022:

At its meeting of May 5, 2022, the Board of Directors noted the creation of 5,000 new shares resulting from the exercise of 5,000 BCE-2017-1 subscribed at a price of €7.86, i.e. €0.70 in par value and €7.16 in issue premium.

At its meeting on June 29, 2022, the Board of Directors noted:
- the creation of 1,253 new shares from the exercise of 1,253 BSA-2011-1, subscribed for €1.00, i.e. €0.70 in par value and €0.30 in issue premium;
- the creation of 1,548 new shares from the exercise of 1,548 BCE-2012-1, subscribed for €2.25, i.e. €0.70 in par value and €1.55 in issue premium;
- the creation of 20,083 new shares from the exercise of 20,083 BCE 2019-1, subscribed at a price of €5.29, i.e. a par value of €0.70 and an issue premium of €4.59, after respective exercise of 3,000 BCE-2019-1 on May 5, 2022, 1,000 BCE-2019-1 on May 6, 2022, 2,000 BCE-2019-1 on May 10, 2022, 2,000 BCE-2019-1 on May 11, 2022, 2,000 BCE-2019-1 on May 13, 2022, 2,000 BCE-2019-1 on May 17, 2022, 2,000 BCE-2019-1 on May 18, 2022, 2,000 BCE-2019-1 on May 20, 2022, 2,083 BCE-2019-1 on May 23, 2022 and 2,000 BCE-2019-1 on June 13, 2022.

At its meeting on September 29, 2022, the Board of Directors noted:
- the creation of 5,000 new shares from the exercise of 5,000 BCE-2017-1, subscribed for €7.86, i.e. €0.70 in par value and €7.16 in issue premium, after respective exercise of 746 BCE-2017-1 on July 6, 2022, 661 BCE-2017-1 on July 11, 2022 and 3,593 BCE-2017-1 on July 18, 2022;
- the creation of 5,000 new shares from the exercise of 5,000 BCE-2020-3, subscribed for €7.76 (€0.70 in par value and €7.06 in issue premium);
- the creation of 12,563 new shares from the exercise of 12,563 BCE-2020-7, subscribed at a price of €30.29, i.e. a par value of €0.70 and an issue premium of €29.59, after the respective exercise of 31 BCE-2020-7 on July 21, 2022, 4,969 BCE-2020-7 on July 22, 2022, 53 BCE-2020-7 on August 15, 2022, 2,510 BCE-2020-7 on August 16, 2022 and 5,000 BCE-2020-7 on August 17, 2022; and
- the creation of 6,747 new shares from the exercise of 6,747 BSA-2012-2, subscribed for €2.25, i.e. €0.70 in par value and €1.55 in issue premium;

At its meeting of December 13, 2022, the Board of Directors noted the creation of 6,000 new shares resulting from the exercise of 6,000 BCE-2017-1 subscribed at a price of €7.86, i.e. €0.70 in par value and €7.16 in issue premium.
As a result, as of December 31, 2022, the share capital amounting to €7,869,866.20 consisted of 11,242,666 ordinary shares, with a par value of €0.70 each, entirely subscribed and fully paid up.

Share capital composition:

At December 31, 2023, the 16,837,212 shares comprising the share capital were distributed as follows:

Shareholders	Number of shares	% ownership	Number of voting rights	% of voting rights
BOLD Business Opportunities for L'Oréal Development	943,211	5.60%	943,211	5.59%
Copernicus Wealth Management S.A.(1)	654,271	3.89%	654,271	3.88%
Michelin Ventures	519,742	3.09%	519,742	3.08%
L'Occitane Group	392,852	2.33%	392,852	2.33%
Funds managed by Truffle Capital	176,565	1.05%	176,565	1.05%
Management and directors	3,001	0.02%	3,001	0.02%
Treasury shares	17,320	0.10%	-	0.00%
Free float	14,130,250	83.92%	14,184,327	84.06%
TOTAL	**16,837,212**	**100.00%**	**16,873,969**	**100.00%**

By collective decision of shareholders on February 20, 2013, it was decided to allocate a double voting right to all fully paid-up shares documented to have been held in registered form in the name of the same shareholder for at least two years.

As of December 31, 2023, 54,077 registered shares included in the free float met these criteria.

Issue premiums

In accordance with the decision made by the sole partner followed by the collective decision of the shareholders and, finally, by the Board of Directors based on the delegation of the Shareholders' Meeting, the issue premiums paid as part of the capital increases were recorded under "Liabilities" on the statement of financial position in a special "Issue premium" account, to which the former and new shareholders' rights shall be applicable.

Capital issue costs are recognized in the statement of financial position as a deduction from the issue premium.

At December 31, 2023, the issue premiums paid after deducting capital increase costs amounted to €276,566 075.

Operations (in euros)	Operation date	Issue premiums	Direct costs charged	Exercise of BSA/ BCE against payment (1)	Total issue premium	BSA
At December 31, 2022		**€156,851,530.75**	**€(9,927,390.25)**	**€39,803.32**	**€146,963,943.82**	**€3,318.08**
BCE-2017-1	01/13/2023	€14,320.00			€14,320.00	
BCE-2017-1	01/13/2023	€14,320.00			€14,320.00	
BSA-2013-1	01/23/2023	€16,838.40		€348.80	€17,187.20	€(348.80)
BCE-2017-1	02/03/2023	€14,320.00			€14,320.00	
BCE-2017-1	02/06/2023	€14,320.00			€14,320.00	
BCE-2020-3	02/09/2023	€10,589.01			€10,589.01	
BCE-2017-1	02/20/2023	€14,320.00			€14,320.00	
BCE-2017-1	02/28/2023	€42.96			€42.96	
BCE-2017-1	03/01/2023	€14,277.04			€14,277.04	
BCE-2017-1	03/02/2023	€14,320.00			€14,320.00	
BCE-2020-2	03/06/2023	€11,033.75			€11,033.75	
BCE-2020-2	03/14/2023	€14,118.68			€14,118.68	
BCE-2020-2	03/28/2023	€14,118.68			€14,118.68	
BCE-2020-2	03/30/2023	€14,118.68			€14,118.68	
BCE-2020-2	06/01/2023	€14,118.68			€14,118.68	
BCE-2020-5	06/02/2023	€39,810.00			€39,810.00	
BCE-2020-2	06/02/2023	€14,118.68			€14,118.68	
BCE-2020-5	06/06/2023	€39,810.00			€39,810.00	
BCE-2020-5	06/08/2023	€23,647.14			€23,647.14	
BCE-2020-5	06/13/2023	€39,810.00			€39,810.00	
Capital increase	07/13/2023	€136,855,070.90	€(7,605,660.70)		€129,249,410.20	
At 12/31/2023		**€294,058,973.35**	**€(17,533,050.95)**	**€40,152.12**	**€276,566,074.52**	**€2,969.28**

(1) At 12/31/2022 the amounts of this item came from the exercise of:

- *28,841 BSAs acquired for €0.22 per share, i.e. €6,341.82;*
- *3,759 BSAs acquired for €0.10 per share, i.e. €375.90;*
- *19,200 BSAs acquired for €0.85 per share, i.e. €16,320;*
- *9,600 BSAs acquired for €0.59 per share, i.e. €5,664;*
- *acquisition of the BSA plan by Kepler Cheuvreux: €500.*

These amounts, together with the additional €2,790.40 paid at the subscription of 12,800 BSA warrants acquired for €0.22 (which have now expired) and the additional €8,160.00 paid upon subscription of 9,600 vested BSA warrants for €0.85 (which have now expired), initially recorded under "warrants," were included in the issue premium when the expiry of the said warrants was recognized.

As a reminder, the direct costs associated with the listing of the Company on the Euronext Growth Paris market that took place in 2013 amounted to €1,196,108. The expenses relating to the fundraising carried out in 2019 amounted to €770,395 and those relating to the transactions carried out in 2020 to €1,957,332 and, finally, those for the share capital increase in 2021 to €6,003,554.

For the 2023 fiscal year, the direct costs of the capital increase charged to the issue premium amounted to €7,605,661.

The "Issue premiums" item recorded under "Liabilities" on the statement of financial position also includes the sums received at the time of the subscription of the share subscription warrants (see Note 21.1 below), i.e. €2,969 at December 31, 2023 and €3,318 at December 31, 2022.

Capital management

The Group's policy is to maintain a sufficient financial base to preserve the confidence of investors and creditors and to support the Company's future growth.

Following the IPO of the Company on EURONEXT GROWTH, the Company entered into a liquidity contract in order to limit the intra-day volatility of the Company's shares.

Under this agreement, 4,047 treasury shares representing €103 thousand were recognized as a deduction from equity at December 31, 2023 (3,729 shares representing €132 thousand were recognized at December 31, 2022).

Cash paid to the intermediary and not yet used is recognized as non-current financial assets and represented €512 thousand at December 31, 2023 (€563 thousand at December 31, 2022).

In December 2023, the Company announced the launch of an employee shareholding plan with the upcoming creation of an FCPE, and at the same time launched a share buyback program with this in mind. At December 31, 2023, the Company held 13,273 shares intended for the implementation of employee shareholding transactions reserved for members of a company savings plan.

Dividends

The Group did not pay any dividends for the fiscal years presented.

NOTE 13 • SHARE-BASED PAYMENTS

Accounting principles

The Company has set up several equity-settled compensation plans in the form of share subscription warrants ("BSA"), free preference share allocation plans ("AGAP") and founders' warrants ("BSPCE" or "BCE") allocated to employees and directors.

In accordance with IFRS 2, the grant-date fair value of equity-settled share-based payments is recognized as an expense with a corresponding increase in equity over the vesting period of the awards.

For plans whose vesting is not linked to the achievement of a market performance condition, the valuation model used is that of Black & Scholes.

For plans whose vesting is linked to the achievement of a market performance condition, Monte Carlo simulations were carried out in order to project the Carbios share price and thus estimate the fair value of the options.

The valuation methods used to estimate the fair value of the options are described below:

- the maturity of plans with only a presence condition was estimated by tranche by considering an exercise half-life (corresponding to the mid-period between the vesting date of the tranche and the plan's end-of-life date). That of plans with performance conditions was estimated based on the most likely date of the achievement of each performance condition for the vesting date, plus the remaining half-life of the exercise;
- for plans granted prior to 2019, the expected volatility was determined on the basis of a panel of comparable listed companies in the sector, over a period equivalent to the expected duration of the option. For plans granted after 2019, the expected volatility was determined on the basis of the Carbios price history restated for values deemed not representative of future volatility.

13.1 Share subscription warrants (BSAs)

The table below shows the status of the BSAs issued since the creation of the Company that were still outstanding at December 31, 2023, as well as additional information regarding their status as of that date.

	BSA EIB
Date of Shareholders' Meeting	Decision of the Shareholders' Meeting of 02/02/2022
Number of shares that may be subscribed or purchased (1)	318,158
Warrant exercise start date	05/27/2022
Expiration date	05/26/2030
Price of subscription or purchase of warrant	0.01
Warrant exercise method	The subscription must be recognized by a subscription form which must be given to the Company.
Exercise price (in euros)	€40 for 50% of the BSA EIB €38.89 for 50% of the BSA EIB
Number of shares subscribed at December 31, 2023	0
Cumulative number of subscription or purchase warrants canceled or null and void	0
Share subscription warrants that may be exercised at December 31, 2023	296,928

(1) Subscription price determined on the basis of a report prepared and delivered by an independent expert.

At its meeting of February 3, 2022, the Board of Directors implemented the delegation granted by the Combined Shareholders' Meeting of February 2, 2022 to decide to issue, with cancellation of preferential subscription rights, 296,928 share subscription warrants (BSA), giving the right to subscribe for 296,928 new ordinary Company shares for the benefit of the EIB. The Chairman recalled that under the loan agreement of €30 million signed with the EIB, the Company has committed, under the terms of a share subscription warrants agreement drafted in English (Subscription Agreement for Warrants in the Capital of Carbios S.A.) on December 20, 2021 (the "Issue Agreement"), to issue 296,928 share subscription warrants ("BSA") to the EIB. These share subscription warrants (BSA) would represent 2.5% of the Company's diluted share capital, and could be exercised for a period of eight years from their issue at a price corresponding to:

- €40 for 50% of the BSAs to be issued; and
- an amount equal to the volume-weighted average of the last three trading days preceding the fifth day preceding the signing of the contract relating to the issuance of the share subscription warrants (BSAs), i.e. €38.8861 for the remaining 50% of the BSAs.

During the 2023 fiscal year, CARBIOS did not issue any new BSA equity warrants.

During the 2023 fiscal year, 1,600 BSA-2013-1 were exercised.

As of December 31, 2023, 296,928 BSAs giving rights to 318,158 shares were still exercisable.

13.2 Founder share subscription warrants (BSPCEs)

The table below shows the status of BSPCEs issued since the creation of the Company that were still outstanding at December 31, 2023, as well as additional information regarding their status at that date.

When subscribing to the BSPCE plan, the beneficiary will not have to pay a subscription price to the Company. As soon as the BSPCEs are exercised, the Company will recognize the capital increase (account 101 "Capital") and an issue premium (account 1041 "Issue premium", for the difference between the exercise price and the par value of the share).

If BSPCE has lapsed, no accounting entry will be required.

	BCE 2015-2	BCE-2020-3	BCE-2020-6
Date of Shareholders' Meeting	Shareholders' Meeting of 06/24/2015	Shareholders' meeting of 06/19/2019	Shareholders' meeting of 06/18/2020
Date of Board of Directors' meeting	Decision of the Board of Directors of 06/24/2015	Decision of the Board of Directors of 03/12/2020	Decision of the Board of Directors of 07/09/2020
Total number of shares that may be subscribed or purchased, of which the number that may be subscribed or purchased	16,073	45,592	30,806
Warrant exercise start date	06/24/2016	03/12/2020	07/09/2020
Expiration date	06/24/2025	03/12/2030	07/09/2030
Price of subscription or purchase of warrant	Free	Free	Free
Warrant exercise method	Possibility of exercising a number x of warrants per complete monthly period beginning on 06/24/2015, and for the first time from 06/24/2016, calculated according to the following rule: x = (total nb of BCEs 2015-2 allocated to the beneficiary * nb. of months since 06/24/2015)/48.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise one fourth of the BSPCEs allocated. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise one fourth of the BSPCEs allocated. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share. For the other 14,000 warrants: possibility of exercising y warrants where y = (number of warrants not yet exercisable) * % determined by the performance of the Carbios share price.
Exercise price (in euros)	12.4581	7.75934	20.6050
Number of shares subscribed at December 31, 2023	16,000	6,500	0
Cumulative number of subscription or purchase warrants canceled or null and void	0	0	0
Share subscription warrants that may be exercised at December 31, 2023	15,000	39,750	28,750

(1) In a decision dated August 4, 2023, the Chief Executive Officer of the Company decided to adjust the securities already issued by the Company in accordance with Article L 228-99 of the French Commercial Code, and consequently decided to increase by 45,812 additional shares the number of shares that may be subscribed by holders on exercise of the 640,686 BSPCEs and to subject them to the terms of their respective plan regulations.

	BCE-2021-1, BCE-2021-3 to BCE-2021-5 and BCE-2021-7 to BCE-2021-14	BCE 2021-16	BCE 2021-17	BCE-2022-1 to BCE-2022-2
Date of Shareholders' Meeting	Shareholders' Meeting of 06/18/2020	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/22/2022
Date of Board of Directors' meeting	Decision of the Board of Directors of 01/15/2021	Decision of the Board of Directors of 11/05/2021	Decision of the Board of Directors of 11/05/2021	Decision of the Board of Directors of 06/29/2022
Total number of shares that may be subscribed or purchased(1), of which the number that may be subscribed or purchased by:	61,703	39,362	6,847	201,726
Emmanuel LADENT	-	39,362	-	148,151
Warrant exercise start date	01/15/2022	12/01/2022	11/05/2022	06/29/2025
Expiration date	01/15/2032	12/01/2032	11/05/2032	06/29/2032
Price of subscription or purchase of warrant	Free	Free	Free	Free
Warrant exercise method	Possibility of exercising a number x of warrants per full monthly period, and for the first time from 01/15/2022, calculated according to the following rule: x = total number of BCE-2021 granted to the beneficiaries * (number of months since 01/15/2021)/48. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share.	For the first 18,367 warrants: possibility of exercising x warrants per full monthly period beginning on 12/01/2021, and for the first time from 12/01/2022, calculated according to the following rule: x = 18,367 * (number of months since 12/01/2021)/48. The remaining 18,368 warrants are subject to four performance conditions to be exercised. Each condition met gives the right to exercise 5,510 warrants, 6,429 warrants, 2,755 warrants and 3,677 warrants, respectively. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share.	Possibility of exercising a number x of warrants per full monthly period, and for the first time from 11/05/2022, calculated according to the following rule: x = total number of BCE-2021 granted to the beneficiaries * (number of months since 11/05/2021)/48.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.
Exercise price (in euros)	44.5049	37.7340	39.7863	30.1316
Number of shares subscribed at December 31, 2023	0	0	0	0
Cumulative number of subscription or purchase warrants canceled or null and void	27,414	0	0	0
Share subscription warrants that may be exercised at December 31, 2023	57,586	36,735	6,390	188,265(2)

(1) In a decision dated August 4, 2023, the Chief Executive Officer of the Company decided to adjust the securities already issued by the Company in accordance with Article L 228-99 of the French Commercial Code, and consequently decided to increase by 45,812 additional shares the number of shares that may be subscribed by holders on exercise of the 640,686 BSPCEs and to subject them to the terms of their respective plan regulations.

(2) May be exercised from June 29, 2025.

	BCE-2022-4	BCE-2022-5 to BCE-2022-6 and BCE-2022-13 to BCE-2022-14	BCE-2022-7 to BCE-2022-11	BCE-2022-12
Date of Shareholders' Meeting	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/19/2019	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/22/2022
Date of Board of Directors' meeting	Decision of the Board of Directors of 09/29/2022	Decision of the Board of Directors of 12/13/2022	Decision of the Board of Directors of 12/13/2022	Decision of the Board of Directors of 12/13/2022
Total number of shares that may be subscribed or purchased, of which the number that may be subscribed or purchased by(1):	53,575	111,503	88,307	34,004
Emmanuel LADENT	-	-	2,168	34,004
Warrant exercise start date	09/29/2025	12/13/2025	12/13/2025	12/13/2025
Expiration date	09/29/2032	12/13/2032	12/13/2032	12/13/2032
Price of subscription or purchase of warrant	Free	Free	Free	Free
Warrant exercise method	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.
Exercise price (in euros)	26.59321	33.27455	33.27455	33.27455
Number of shares subscribed at December 31, 2023	0	0	0	0
Cumulative number of subscription or purchase warrants canceled or null and void	0	0	0	0
Share subscription warrants that may be exercised at December 31, 2023	50,000(2)	104,062(3)	82,413(3)	31,735(3)

(1) In a decision dated August 4, 2023, the Chief Executive Officer of the Company decided to adjust the securities already issued by the Company in accordance with Article L 228-99 of the French Commercial Code, and consequently decided to increase by 45,812 additional shares the number of shares that may be subscribed by holders on exercise of the 640,686 BSPCEs and to subject them to the terms of their respective plan regulations.

(2) May be exercised from September 29, 2025.

(3) May be exercised from December 13, 2025.

During the fiscal year 2022, BSPCE issues were carried out:

- At its meeting of June 29, 2022, the Board of Directors, acting under a delegation of authority granted by the Combined Shareholders' Meeting of June 22, 2022 (Seventeenth Resolution), decided to issue and award 188,265 BSPCEs (of which 138,265 BCE 2022-1 and 50,000 BCE 2022-2), giving the right to subscribe to 188,265 ordinary shares with a par value of €0.70, at a unit price equal to the weighted average by volume of the last twenty trading days preceding the grant date of the warrants, i.e. a price of €30.1316.
- At its meeting of September 29, 2022, the Board of Directors, acting under a delegation of authority granted by the Combined Shareholders' Meeting of June 18, 2020 (Thirteenth Resolution), decided to issue and award 59,600 BSPCEs (of which 9,600 BCE 2022-3 and 50,000 BCE 2022-4), giving the right to subscribe to 59,600 ordinary shares with a par value of €0.70, at a unit price equal to the weighted average by volume of the last twenty trading days preceding the grant date of the warrants, i.e. a price of €26.59321.
- At its meeting of December 13, 2022, the Board of Directors, acting under a delegation of authority granted by the Combined Shareholders' Meeting of June 19, 2019 (Fifteenth Resolution), decided to issue and award 104,062 BSPCEs (of which 50,000 BCE 2022-5, 50,000 BCE 2022-6, 1,662 BCE 2022-13 and 2,400 BCE 2022-14), giving the right to subscribe to 104,062 ordinary shares with a par value of €0.70, at a unit price equal to the weighted average by volume of the last twenty trading days preceding the grant date of the warrants, i.e. a price of €33.27455.
- At its meeting of December 13, 2022, the Board of Directors, acting under a delegation of authority granted by the Combined Shareholders' Meeting of June 18, 2020 (Thirteenth Resolution), decided to issue and award 82,413 BSPCEs (of which 25,000 BCE 2022-7, 25,000 BCE 2022-8, 20,000 BCE 2022-9, 2,023 BCE 2022-10 and 10,390 BCE 2022-11), giving the right to subscribe to 82,413 ordinary shares with a par value of €0.70, at a unit price equal to the weighted average by volume of the last twenty trading days preceding the grant date of the warrants, i.e. a price of €33.27455.
- Finally, at its meeting of December 13, 2022, the Board of Directors, acting under a delegation of authority granted by the Combined Shareholders' Meeting of June 22, 2022 (Seventeenth Resolution), decided to issue and award 31,735 BSPCEs (of which 31,735 BCE 2022-12), giving the right to subscribe to 31,735 ordinary shares with a par value of €0.70, at a unit price equal to the weighted average by volume of the last twenty trading days preceding the grant date of the warrants, i.e. a price of €33.27455.

During the 2022 fiscal year, 1,548 BCE 2012-1, 20,083 BCE 2019-1, 16,000 BCE 2017-1, 5,000 BCE 2020-3 and 12,563 BCE 2020-7 were exercised.

During the 2022 fiscal year, 69,375 BCE 2020-1, 6,856 BCE 2021-2, 10,711 BCE 2021-6, 7,917 BCE 2019-1, 83,437 BCE 2020-7, 34,687 BCE 2020-2 and 21,562 BCE 2020-5 were declared null and void.

At December 31, 2022, 674,937 BSPCEs giving rights to 674,937 shares were still exercisable.

During the 2023 fiscal year, CARBIOS did not issue any new BSPCE founders' warrants.

During the 2023 fiscal year, 14,000 BSPCE-2017-1, 11,563 BSPCE-2020-2, 1,500 BSPCE-2020-3, and 7,188 BSPCE-2020-5 were exercised.

At December 31, 2023, 640,686 BSPCEs giving rights to 686,498 shares were still exercisable.

13.3 Free Allocation of Preference Shares ("AGAP")

On September 27, 2023, the Board of Directors decided to set up a free share allocation plan ("AGA") for the benefit of some of its employees and corporate officers with a vesting period of three years and allocated 84,150 free shares.

There is no lock-up period attached to the free shares definitively acquired.

All free share plans give entitlement to the delivery of Carbios shares.

The free share allocation plans in force at December 31, 2023 are as follows:

	2023-1 Plan	2023-2 Plan
Date of the Shareholders' Meeting that authorized the allocation of free shares	June 22, 2023	June 22, 2023
Grant date	September 27, 2023	October 16, 2023
Vesting period	3 years	3 years
Retention period	-	-
Total number of free shares allocated	74,150	10,000
Of which subject to performance conditions	74,150	10,000
Of which allocated to corporate officers	12,000 (1)	-
Number of shares vested in 2023	-	-
Number of shares canceled at December 31, 2023	-	-

(1) Mr. Emmanuel Ladent, Chief Executive Officer of the Company

13.4 Breakdown of expense recognized in accordance with IFRS 2 during the periods presented

	12/31/2023				12/31/2022			
(In thousands of euros) Type	Probabilized cost of the plan to date	Cumulative expense at the beginning of the period	Expense for the period	Cumulative expense to date	Probabilized cost of the plan to date	Cumulative expense at the beginning of the period	Expense for the period	Cumulative expense to date
BCE 2015-2	175	175	-	175	175	175	-	175
BCE 2020	1,997	1,445	287	1,732	1,997	1,113	333	1,445
BCE 2021	1,930	1,581	234	1,815	1,930	926	655	1,581
BCE 2022	6,634	460	1,873	2,334	6,634	-	460	460
AGAP 2023	1,853	-	161	161	-	-	-	-
Total	**12,589**	**3,662**	**2,556**	**6,217**	**10,736**	**2,214**	**1,447**	**3,662**

NOTE 14 • PROVISIONS

Accounting principles

A provision is recognized when the Company has a legal or constructive obligation at the closing date that results from a past event that will probably result in an outflow of resources and the amount of which can be reliably estimated.

The amount recognized as a provision corresponds to the best estimate of the expenditure required to settle the present obligation at the closing date.

Apart from provisions for pension commitments (see Note 23), no provision has been recognized.

NOTE 15 • BORROWINGS AND FINANCIAL LIABILITIES

Accounting principles

Unless otherwise indicated, borrowings and financial liabilities are recognized, after their initial recognition at fair value, at amortized cost calculated using the effective interest rate in accordance with IFRS 9.

The portion of borrowings at less than one year is presented under "Current borrowings."

Borrowings and current and non-current financial liabilities (Amounts in thousands of euros)	**12/31/2023**	**12/31/2022**
Loans from credit institutions	33,350	29,841
Conditional advances	5,563	5,553
Lease liabilities [1]	4,639	5,142
Current and non-current borrowings and financial liabilities	**43,551**	**40,537**
Loans from credit institutions	2,680	1,943
Conditional advances	1,157	838
Lease liabilities [1]	1,232	1,346
Current borrowings and financial liabilities	**5,069**	**4,128**
Total Borrowings and Financial liabilities	**48,620**	**44,665**

(1) Information on lease liabilities is discussed in Note 5.5 "Right of use."

The classification and fair value of financial instruments are described in Note 10.

15.1 Loans from credit institutions

(in thousands of euros)	**Fixed/ floating rate**	**Nominal interest rate**	**EIR**	**Initial nominal amount**	**Remaining nominal amount**	**Year of maturity**	**12/31/2023**	**12/31/2022**
(1) Bpifrance Innovation loan	Fixed	3.2%	3.2%	1,500	750	2025	750	1,050
(1) Bpifrance Innovation loan	Fixed	4.5%	4.5%	1,500	1,050	2026	1,050	1,350
(2) State-guaranteed loan (SGL) [a]	Fixed	0.6%	1.2% - 3%	1,000	750	2026	750	966
(3) EIB loan	Fixed	5%	8.8%	30,000	30,000	2030	26,484	25,717
(4) TZ Bpifrance loan [a]	Fixed	0%	3%	500	200	2025	193	286
(4) TZ Bpifrance loan [a]	Fixed	0%	3%	250	163	2027	154	199
(4) TZ Bpifrance loan [a]	Fixed	0%	3%	250	163	2027	154	199
(5) CEPAL loan	Fixed	1.1%	1.1%	177	51	2024	51	87
(5) CEPAL loan	Fixed	2.1%	2.1%	334	163	2026	163	230
(6) CEPAL SGL [a]	Fixed	0.7%	1.1% - 3%	950	598	2026	584	807
(6) Bpifrance SGL [a]	Fixed	2.2%	2.2% - 3%	950	653	2026	645	876
(7) Financial liability related to the lease-back - Batch 1	Fixed	N/A	3.9%	1,534	1,065	2027	1,065	-
(7) Financial liability related to the lease-back - Batch 2	Fixed	N/A	7.1%	4,256	3,954	2028	3,954	-
Accrued interest	N/A	N/A	N/A	N/A	N/A	N/A	31	16
TOTAL							**36,030**	**31,783**

(a) In the EIR column, the first rate represents the effective interest rate, while the second rate reflects the market interest rates at the time of issue, in accordance with IAS 20. The difference between the two rates is a subsidy recognized in profit or loss.

Details of Loans from credit institutions

(1) BPIFRANCE INNOVATION LOANS

Two innovation loans were granted by Bpifrance in 2018 and 2019 for a total amount of €3,000 thousand. The two loans provide for a payment deferral of 2 years, and annual straight-line repayment over the following 5 years, i.e. repayments at constant capital of €75 thousand. The total nominal amount outstanding was €1,800 thousand at closing.

They bear interest at 3.21% and 4.45% respectively and were subject to a guarantee deposit of €75 thousand, each recognized in financial assets.

(2) STATE-GUARANTEED LOAN (SGL)

On August 31, 2020, receipt of a loan guaranteed by the French State in the amount of €1,000 thousand for a period of 12 months. On June 26, 2021, the Company decided to extend the PGE for an additional 5 years.

The PGE bears interest at the rate of 0.25% and will be repaid in 8 equal and consecutive half-yearly installments of principal of €125 thousand from 2023.

(3) EIB LOAN

In June 2022, CARBIOS received the loan of €30 million granted by the European Investment Bank (EIB) to the Company, as announced on December 20, 2021. Supported by the European Commission's InnovFin energy demonstration program, the contract provides for annual repayments at constant capital, from June 29, 2025 to June 29, 2030.

As a reminder, the objective of this type of financing is to support innovative projects with high potential, developed by companies aiming to achieve major changes in line with the EU's climate objectives and contributing to the leadership of European industry in the development of sustainable technologies. This loan of €30 million, disbursed in a single tranche by the EIB, carries a fixed annual interest of 5%, with a maturity of 8 years and an annual repayment at constant capital to begin in 2025. This agreement is supplemented by a warrant issuance agreement where Carbios will issue 2.5% of the fully diluted share capital in warrants to the benefit of the EIB, of which 1.25% with an exercise price of €40 per share, and 1.25% with an exercise price of €38.8861 per share, corresponding to the volume-weighted average of the trading price of an ordinary share of the Company over the last three (3) trading days preceding the fifth day prior to the signing date. The creation and issue of these EIB share subscription warrants, and therefore the disbursement of the loan of €30 million, were subject to a vote by Carbios' extraordinary shareholders' meeting of February 2, 2022 of a delegation of authority to the Board of Directors, and a decision of the Company's Board of Directors using this delegation of authority.

Moreover, after analysis of the plan and its characteristics, given that these are instruments with a fixed parity, (1 BSA for 1 Ordinary Share with a fixed exercise price) where the issuer has the unconditional right not to ever pay cash, such as a preferred dividend or a repurchase obligation (in the context of a put/call), the share subscription warrants issued are qualified as equity instruments.

Instruments should, therefore, be valued on the issue date and not subsequently revalued at each reporting date.

The calculation of the fair value is as follows:

Plan features	BSA BEI-1	BSA BEI-2
Grant date	05/27/2022	05/27/2022
Plan end-of-life date	06/29/2030	06/29/2030
Vesting date	Immediately, at the grant date	Immediately, at the grant date
Start date of exercise period	From the disbursement date, i.e., 06/29/2022	From the disbursement date, i.e., 06/29/2022
Number of options granted	148,464	148,464
Exercise price	€40.00	€38.8861
Price of the underlying	€34.12	€34.12
Estimated maturity	8.09 years	8.09 years
Volatility	39.35%	39.35%
Dividend rate	0.00%	0.00%
Risk-free rate	1.258%	1.258%
Subscription price	€0.01	€0.01
Fair value	€13.9	€14.18
Total expenses	€2,064 thousand	€2,105 thousand

As the instruments are classified as equity, the fair value is not intended to be updated at the next closing dates.

The total fair value of the following instruments is to be taken as a deduction from the total debt which will be recognized at amortized cost:

In thousands of euros	TOTAL
BSA EIB-1	2,064
BSA EIB-2	2,105
Total	**4,169**

(4) INTEREST-FREE LOANS

Subscription of three interest-free loans for a total amount of €1,000 thousand with BPI France. These loans were received in 2018 for €500 thousand and then in 2019 for €500 thousand. They entered into the scope of consolidation with the takeover of Carbiolice in June 2021.

(5) INVESTMENT LOANS

Subscription of two investment loans with CEPAL for €177 thousand and €334 thousand respectively. The amounts were received in 2019 and 2020 respectively. These loans bear interest at a rate of 1%. They entered into the scope of consolidation with the takeover of Carbiolice in June 2021.

(6) CEPAL AND BPI STATE-GUARANTEED LOANS (SGL)

Subscription of two State-guaranteed loans (PGE) in 2020 in the amount of €950 thousand each. The first one bears interest at the rate of 1.09% with a two-year grace period. The second bears interest at a rate of 2.09% with a two-year grace period. They entered into the scope of consolidation with the takeover of Carbiolice in June 2021.

(7) FINANCIAL LIABILITIES RELATED TO THE LEASE-BACK - BATCH 1 AND BATCH 2

During the 2022 and 2023 fiscal years, the Company continued its investments in the industrial demonstration plant. These investments were subject to two lease-back transactions. At December 31, 2023, the financing covered €4.3 million of equipment (batch 2), thus adding to the €1.5 million (batch 1) financed during the previous fiscal year.

Change in cash flows on loans

Current portion (in thousands of euros)	(1) Bpifrance Innovation loan	(1) Bpifrance Innovation loan	(2) State-guaranteed loan (SGL)	(3) EIB loan	(4) TZ Bpifrance loan	(4) TZ Bpifrance loan	(4) TZ Bpifrance loan	(5) CEPAL loan	(5) CEPAL loan	(6) CEPAL State-guaranteed loan	(6) Bpifrance State-guaranteed loan	(7) Financial liability related to the lease-back - Batch 1	(7) Financial liability related to the lease-back - Batch 2	Total
At January 1, 2022	**300**	**225**	**33**	**-**	**99**	**41**	**41**	**35**	**68**	**132**	**67**	**-**	**-**	**1,041**
Change in scope	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash flows - receipt of new debts	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash flows - repayment of debts	(300)	(150)	-	-	(100)	(37)	(37)	(36)	(65)	(117)	(59)	-	-	(901)
Non-monetary changes	300	225	206	347	94	40	40	37	66	208	223	-	-	1,787
At December 31, 2022	**300**	**300**	**240**	**347**	**93**	**45**	**45**	**36**	**68**	**223**	**231**	**-**	**-**	**1,927**
Change in scope	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash flows - receipt of new debts	-	-	-	-	-	-	-	-	-	-	-	-	802	802
Cash flows - repayment of debts	(300)	(300)	(250)	-	(100)	(50)	(50)	(36)	(66)	(236)	(238)	(323)	(359)	(2,308)
Non-monetary changes	300	300	252	(347)	101	51	51	36	66	242	239	335	316	1,944
Reclassification of lease liabilities as financial liabilities (Note 5.5)	-	-	-	-	-	-	-	-	-	-	-	285	-	285
At December 31, 2023	**300**	**300**	**242**	**-**	**93**	**46**	**46**	**36**	**68**	**229**	**233**	**297**	**760**	**2,650**

Non-current portion (in thousands of euros)	(1) Bpifrance Innovation loan	(1) Bpifrance Innovation loan	(2) State-guaranteed loan (SGL)	(3) EIB loan	(4) TZ Bpifrance loan	(4) TZ Bpifrance loan	(4) TZ Bpifrance loan	(5) CEPAL loan	(5) CEPAL loan	(6) CEPAL State-guaranteed loan	(6) Bpifrance State-guaranteed loan	(7) Financial liability related to the lease-back - Batch 1	(7) Financial liability related to the lease-back - Batch 2	Total
At January 1, 2022	**1,050**	**1,275**	**936**	**-**	**277**	**189**	**189**	**87**	**230**	**778**	**860**	**-**	**-**	**5,872**
Change in scope	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash flows - receipt of new debts	-	-	-	30,000	-	-	-	-	-	-	-	-	-	30,000
Cash flows - repayment of debts	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-monetary changes	(300)	(225)	(210)	(4,629)	(84)	(34)	(34)	(36)	(69)	(194)	(215)	-	-	(6,031)
At December 31, 2022	**750**	**1,050**	**726**	**25,371**	**194**	**154**	**154**	**51**	**161**	**584**	**645**	**-**	**-**	**29,840**
Change in scope	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash flows - receipt of new debts	-	-	-	-	-	-	-	-	-	-	-	-	3,454	3,454
Cash flows - repayment of debts	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-monetary changes	(300)	(300)	(219)	1,114	(94)	(46)	(46)	(36)	(66)	(229)	(233)	(281)	(259)	(994)
Reclassification of lease liabilities as financial liabilities (Note 5.5)	-	-	-	-	-	-	-	-	-	-	-	1,049	-	1,049
At December 31, 2023	**450**	**750**	**508**	**26,484**	**100**	**108**	**108**	**15**	**95**	**355**	**412**	**768**	**3,194**	**33,349**

15.2 Repayable advance

Accounting principles

The Group benefits from public subsidies granted in the form of subsidies or conditional advances.

They were recognized in accordance with IAS 20 Accounting for Government subsidies. As these financial advances are granted at interest rates below the market rate, they are remeasured in accordance with IFRS 9 at amortized cost. The treatment is as follows:

- the initial difference between the advance received and its amortized cost is a subsidy recognized in the income statement in accordance with IAS 20;
- the financial cost of repayable advances calculated at the effective interest rate is then recorded in financial expenses.

If the project benefiting from the repayable advance fails, the repayable advance is generally canceled.

Repayable advances (in thousands of euros)	**Fixed/ floating rate**	**Nominal interest rate**	**EIR**	**Initial nominal amount**	**Remaining nominal amount**	**Year of maturity**	**12/31/2023**	**12/31/2022**
(1) Bpifrance - THANAPLAST™ - Cond. adv. [(a)]	Fixed	2.7%	1.5% - 3%	3,707	3,707	2031	3,648	3,671
(2) ADEME - CE-PET - Repayable adv. & Cond. adv. [(a)]	Fixed	0.7%	0.8% - 3%	3,102	2,327	2026	2,261	2,433
(3) ADEME - OPTI-ZYME -Repayable adv. & Cond. adv. [(a)]	Fixed	4.1%	3.8% - 4.8%	756	756	2028	726	-
(4) Bpifrance - Innovation grant Repayable adv. [(a)]	/	N/A	0.5% - 3%	400	84	2024	84	230
(5) ADI BPI Repayable adv. [(a)]	/	N/A	0.5% -3%	265	0	2023	-	57
TOTAL							**6,719**	**6,393**

(a) In the EIR column, the first rate represents the effective interest rate, while the second rate reflects the market interest rates at the time of issue, in accordance with IAS 20. The difference between the two rates is a subsidy recognized in profit or loss.

Detail of repayable advances and subsidies by project

(1) BPIFRANCE GRANT (FORMERLY KNOWN AS OSEO-ISI): THANAPLAST™

• Subsidy
The Thanaplast™ project has been closed since June 30, 2017.

• Repayable advance
In the event of a successful research program, the Company is committed to reimbursing the repayable advance to Bpifrance for an amount of €4,525 thousand, according to the payment schedule below, upon achieving a cumulative income generated by the utilization of the products resulting from the Thanaplast™ project of €10 million.

Year 1* on June 30 at the latest	€300,000
Year 2 on June 30 at the latest	€500,000
Year 3 on June 30 at the latest	€800,000
Year 4 on June 30 at the latest	€975,000
Year 5 on June 30 at the latest	€1,950,000

** Following the crossing of the €10,000 thousand income threshold.*

According to the Company's forecasts, this threshold is not expected to be reached before 2026.

In addition, as soon as the reimbursement of the repayable advance has been completed in accordance with the above payment schedule, the agreement stipulates that the Company shall pay a bonus equal to 4% of revenue generated by the utilization of the products, if this exceeds a cumulative amount of €100,000 thousand. This additional payment is, however, subject to a time limit (applicable only for a period of five consecutive years from the date of the end of the reimbursement of the advance), and an amount cap (ceiling of €7,100 thousand).

(2) ADEME GRANT: CE-PET PROJECT

On April 8, 2019, the Company obtained a grant from ADEME for the CE-PET project, composed of repayable advances totaling €3,102 thousand and subsidies of €1,034 thousand spread over a 48-month period from 2018 to 2022. The grants were released according to the project's progress and the submission of reports regarding the completion of each key stage stipulated in the framework agreement signed with ADEME. The agreement provides for a total grant rate of 60% that is applied to total eligible expenditures and used for each key stage, 25% of which is a subsidy and 75% a repayable advance (with conditions).

At December 31, 2023, the Company has completed all work on the project. Since its creation, the Company has received:

(In euros)	1st payment	2nd payment	3rd payment	4th payment	5th payment	Total
Date of payment	06/07/2019	10/21/2019	06/30/2020	12/06/2021	04/17/2023	
Subsidy	€155,100	€206,800	€258,500	€206,800	€206,800	€1,034,000
Repayable advance	€465,300	€620,400	€775,500	€620,400	€620,400	€3,102,000
TOTAL	**€620,400**	**€827,200**	**€1,034,000**	**€827,200**	**€827,200**	**€4,136,000**

• Subsidy
The subsidy rate therefore amounts to 15% of the Industrial Research and Experimental Development expenses incurred by the Company in the context of the CE-PET project.
Eligible expenses incurred between January 31, 2018, the start date of eligibility, and December 31, 2022 are higher than the expenses provided for in the agreement signed with ADEME and make the entire amount of the subsidy to be received eligible.
Following the validation of key step 4 and more generally the success of the project by ADEME at the end of 2022, the Company received the expected balance of the grant of €207 thousand on April 17, 2023 and thus received the entire program subsidies, i.e. €1,034 thousand.

• Repayable advance
The Company received €3,102 thousand in respect of the ADEME conditional advances, i.e. the total amount provided for in the agreement following the recognition of the complete success of the project.
The repayment of this amount is scheduled in four annual installments of €802 thousand, including €776 thousand in capital and €27 thousand in interest. The first payment was made on December 29, 2023. And the outstanding capital therefore amounts to €2,327 thousand at December 31, 2023.

(3) ADEME GRANT: OPTI-ZYME PROJECT

At the end of 2022, the Company obtained a grant from ADEME for the OPTI-ZYME project, composed of repayable advances totaling €5,043 thousand and subsidies of €3,119 thousand spread over a 48-month period from 2023 to 2026. The grants were released according to the project's progress and the submission of reports regarding the completion of each key stage stipulated in the framework agreement signed with ADEME. The agreement provides for a total grant rate of 62.97% of eligible expenses of which 75% that is applied to industrial research expenses and 50% to experimental development expenses with a breakdown of 38.21% in subsidies and 61.79% in repayable advances (with conditions).

The contract agreement stipulates that the completion of each key stage (KS) and the associated conditions provide entitlement to the following payments, capped based on a maximum % of cumulative grants:

(In euros)	KS1 (50%)	KS2 (30%)	KS3 (0%)	KS4 (20%)	Total
Planned payment year	**2023**	**2024**	**2025**	**2026**	
Subsidy	€1,559,238	€935,543	€0	€623,695	€3,118,476
Repayable advance	€2,521,538	€1,512,923	€0	€1,008,615	€5,043,076
TOTAL	**€4,080,776**	**€2,448,466**	**€0**	**€1,632,310**	**€8,161,552**

As of December 31, 2023, had received:

(In euros)	1st payment	Total
Date of payment	12/04/2023	
Subsidy	€467,771	€467,771
Repayable advance	€756,462	€756,462
TOTAL	**€1,224,233**	**€1,224,233**

The amount received corresponds to an advance of 15% of the total amount of the grant.

• Subsidy

The subsidy rate therefore amounts to 28.66% of the Industrial Research expenses and 19.11% of the Experimental Development expenses incurred by the Company in the context of the OPTI-ZYME project.
Eligible expenses incurred since January 1, 2023, the start date of eligibility, and December 31, 2023 generate a theoretical subsidy in excess of the amount received. To date, the Company has received €468 thousand in ADEME subsidies since the start of the program (see table above). Nevertheless, given the uncertainty at closing as to the validation of key stage 1, the amount of subsidy to be received was not provisioned out of prudence.

• Repayable advance

The amount that Carbios owes ADEME for repayment of the amount of the Repayable Advance Paid (hereinafter the "Total Amount Payable") shall be equal to the total of the following two amounts:
- an "Ms1 Amount" which depends on the achievement of a threshold of Cumulated Certified Income excluding tax associated with the marketing of the 1st Generation enzymatic recycling process (operating licenses and/or depolymerization enzymes and/or related services),
- an "Ms2 Amount" which depends on the achievement of a threshold of Cumulated Certified Income excluding tax associated with the marketing of the 2d Generation enzymatic recycling process (operating licenses and/or depolymerization enzymes and/or related services).

Repayment of the Ms1 Amount

a) Determination of the Ms1 Amount

The Rate R1 is set at 4.06%.

The Beneficiary shall repay ADEME an amount whose Discounted Value using Rate R1 is equal to 80% of the Discounted Value using Rate R1 of the amount of the Repayable Advance Paid (hereinafter “Ms1 Amount”).

b) Repayment terms for the Ms1 Amount

The Ms1 Amount is due when the following two events have occurred (hereinafter the “Ms1 Generating Event”):

- the achievement of a Cumulative Certified Income excluding tax of a minimum amount set at €150 million (or any other currency),
- the Term of the Investment Phase.

However, if the Ms1 Generating Event has not yet occurred at the end of the Fiscal Year taking place three (3) years after the occurrence of the Term of the Investment Phase, the Beneficiary will be released from any obligation to repay the Ms1 Amount. In this case, the Agreement will be terminated, without further formality, provided, however, that the Beneficiary has otherwise fulfilled all of its obligations to ADEME, as defined in the Agreement.

Repayment of the Ms1 Amount shall be made in two (2) annual installments of the same amount.

The first installment shall be paid six (6) months after the end of the Beneficiary’s Fiscal Year in which the Ms1 Generating Event is recorded.

The following withdrawals will be made annually, one (1) year after the previous one

c) Early repayment of the Ms1 Amount

Upon the achievement of an Income Excluding Tax of at least one (1) euro (or any other currency), and after the Term of the Investment Phase, the Beneficiary will be able to repay in advance and in a single payment, the Ms1 Amount, less any sums it would have already paid in respect of this amount.

The Beneficiary must inform ADEME in writing of its intention to make use of this option of early repayment of the Ms1 Amount. ADEME will then debit the amount due from a period of two (2) months following receipt of the Beneficiary’s request.

Repayment of the Ms2 Amount

a) Determination of the Ms2 Amount

The Rate R1 is set at 4.06%.

The Beneficiary shall repay ADEME an amount whose Discounted Value using Rate R2 is equal to 20% of the Discounted Value using Rate R2 of the amount of the Repayable Advance Paid (hereinafter “Ms2 Amount”).

b) Repayment terms for the Ms2 Amount

The Ms2 Amount is due when the following two events have occurred (hereinafter the “Ms2 Generating Event”):

- the achievement of a Cumulative Certified Income excluding tax of a minimum amount set at €150 million (or any other currency),
- the Term of the Investment Phase.

However, if the Ms2 Generating Event has not yet occurred at the end of the Fiscal Year taking place six (6) years after the occurrence of the Term of the Investment Phase, the Beneficiary will be released from any obligation to repay the Ms2 Amount. In this case, the Agreement will be terminated, without further formality, provided, however, that the Beneficiary has otherwise fulfilled all of its obligations to ADEME, as defined in the Agreement.

Repayment of the Ms2 Amount shall be made in two (2) annual installments of the same amount.

The first installment shall be paid six (6) months after the end of the Beneficiary’s Fiscal Year in which the Ms2 Generating Event is recorded.

The following withdrawals will be made annually, one (1) year after the previous one.

c) Early repayment of the Ms2 Amount

Upon the achievement of an Income Excluding Tax of at least one (1) euro (or any other currency), and after the Term of the Investment Phase, the Beneficiary will be able to repay in advance and a single payment, the Ms2 Amount, less any sums it would have already paid in respect of this amount.

The Beneficiary must inform ADEME in writing of its intention to make use of this option of early repayment of the Ms2 Amount. ADEME will then debit the amount due from a period of two (2) months following receipt of the Beneficiary’s request.

The Company received €757 thousand from ADEME, but this debt remains subject to the achievement of the income thresholds set out above and is therefore recognized as quasi-equity.

(4) BPIFRANCE - INNOVATION GRANT (DOS0060297)

This repayable advance entered into the scope of consolidation with the takeover of Carbiolice in June 2021.

A repayable advance obtained from Bpifrance to finance an innovation project for a total amount of €500 thousand, of which €400 thousand paid in November 2017 and the balance of €100 thousand in October 2018. The acknowledgment of program success will make it eligible for the repayment of the full amount. With an initial repayment period of 5 years with deferral and a deferral of maturities of 6 months following the COVID-19 government provisions, the quarterly repayments began on March 31, 2019 and will end on June 30, 2024. At December 31, 2021, the remaining amount to be repaid was €350 thousand;

The last part of the advance was repaid in the 2023 fiscal year.

(5) ADI BPI

The Company obtained a recoverable advance of €265 thousand from Bpifrance for an innovation project, of which €215 thousand was paid out in 2017 and the balance of €50 thousand in December 2018. Repayments began in 2019. The acknowledgment of program success will make it eligible for the repayment of the full amount. If the program fails, the Company may file a statement of failure and thus reduce the total amount repayable, set at a minimum of €106 thousand. The Company settled the last repayment on June 30, 2023.

Change in cash flows on repayable advances

Current portion (in thousands of euros)	**(1) Bpifrance - THANAPLAST™ (Cond. adv.)**	**(2) ADEME - CE-PET (Repayable adv. & Cond. adv.)**	**(3) ADEME - OPTI-ZYME (Repayable adv. & Cond. adv.)**	**(4) Bpifrance - Innovation grant (Repayable adv.)**	**(5) ADI BPI (Repayable adv.)**	**Total**
At January 1, 2022	**58**	**74**	**-**	**96**	**108**	**336**
Change in scope	-	-	-	-	-	-
Cash flows - receipt of new debts	-	-	-	-	-	-
Cash flows - repayment of debts	-	-	-	(97)	(115)	(212)
Non-monetary changes	2	502	-	58	153	714
At December 31, 2022	**60**	**576**	**-**	**57**	**146**	**838**
Change in scope	-	-	-	-	-	-
Cash flows - receipt of new debts	-	-	-	-	-	-
Cash flows - repayment of debts	-	(776)	-	(57)	(150)	(982)
Non-monetary changes	(60)	958	-	-	88	987
At December 31, 2023	**-**	**759**	**-**	**0**	**84**	**843**

Non-current portion (in thousands of euros)	**(1) Bpifrance - THANAPLAST™ (Cond. adv.)**	**(2) ADEME - CE-PET (Repayable adv. & Cond. adv.)**	**(3) ADEME - OPTI-ZYME (Repayable adv. & Cond. adv.)**	**(4) Bpifrance - Innovation grant (Repayable adv.)**	**(5) ADI BPI (Repayable adv.)**	**Total**
At January 1, 2022	**3,500**	**2,286**	**-**	**55**	**229**	**6,070**
Change in scope	-	-	-	-	-	-
Cash flows - receipt of new debts	-	-	-	-	-	-
Cash flows - repayment of debts	-	-	-	-	-	-
Non-monetary changes	112	(428)	-	(55)	(145)	(515)
At December 31, 2022	**3,612**	**1,858**	**-**	**-**	**84**	**5,555**
Change in scope	-	-	-	-	-	-
Cash flows - receipt of new debts	-	620	756	-	-	1,377
Cash flows - repayment of debts	-	-	-	-	-	-
Non-monetary changes	36	(977)	(30)	-	(84)	(1,055)
At December 31, 2023	**3,648**	**1,502**	**726**	**-**	**0**	**5,876**

15.3 Other projects funded solely by subsidies

LIFE AID: LIFE CYCLE OF PET

On October 25, 2021, the Company obtained aid consisting exclusively of subsidies for a total amount of €3,300 thousand for the LIFE CYCLE OF PET project from the European Agency of Climate and the Environment, of which €600 thousand concerns investment expenses and €2,700 thousand operating expenses. The program includes the participation of Deloitte and T.EN Zimmer GmbH, whose total share represents €80 thousand. Carbios is the project coordinator.

The total amount of expenses to be incurred by Carbios under the project amounts to €8,880 thousand, of which €8,343 thousand is eligible. Carbios' share of the subsidy is €2,620 thousand (€2,700 thousand - €80 thousand), i.e. a financing rate of 36.26% of total estimated costs and a subsidy rate of 38.59% of eligible expenses. Capital expenditure is 100% financed, i.e. €600 thousand.

The payments are planned as follows:

- 1st pre-financing of 40% within 30 days following the signature of the contract, i.e. €1,320 thousand collected on November 5, 2021, of which €32 thousand to partners and €1,288 thousand to CARBIOS;

- 2nd pre-financing of 40% subject to having used 100% of the pre-financing deposit previously paid, i.e. €1,320 thousand collected on August 8, 2023, of which €32 thousand goes to partners and €1,288 thousand to CARBIOS;

- the balance of 20% at the end of the project.

The expenses incurred since the start of the program were calculated on the basis of actual expenses, i.e. an amount of €6,535 thousand. The corresponding theoretical operating subsidy amounts to €2,040 thousand (€6,535 thousand x 31.21%, rate applicable to operating expenses).

For the 2023 fiscal year, the Group received a grant for a total amount of €1,320 thousand. This grant amount was used to finance operating expenses, and an amount of €963 thousand was recognized in the income statement. An amount of €357 thousand was also recognized, as a deduction from the fixed asset, corresponding to capitalized development costs. This portion of the subsidy will be recognized in the income statement at the same rate as the depreciation of the underlying asset. In the previous fiscal year, €243 thousand had already been recognized as a deduction from the fixed asset.

OTHER PUBLIC AND PRIVATE GRANTS OBTAINED

The Company also obtained:

- a subsidy from the Auvergne Region (FIAD) of €397 thousand, of which €181 thousand was paid in 2013 and the balance of €216 thousand was paid in November 2015. The remaining portion of the investment subsidy associated with the acquisition of the Setup Performance patent is recorded in income at the rate that the patent is amortized;

- a subsidy from the European Commission for the WhiteCycle project, led by Michelin (lead partner), starting on July 1, 2022, for a period of 48 months, with an amount of eligible expenses for Carbios of €805 thousand (total project of €9 million), and for which the Company will be able to obtain a subsidy of up to €563 thousand (out of the €7 million allocated to the complete project). In this respect, the Company received an advance of €272 thousand (48.3%). As of December 31, 2023, the Company had incurred only €31 thousand in expenses, i.e. a theoretical subsidy of €22 thousand. The difference, i.e. €251 thousand, was recognized as deferred income;

- a subsidy from the European Commission for a collaborative R&D project named PRESERVE, for a total amount of €8,000 thousand, of which €331 thousand for Carbiolice. The project began on January 1, 2021 for a period of 48 months, with eligible expenses of €331 thousand and a subsidy rate of 100%. The project provides for the payment of two pre-financing payments of €136 thousand, then interim payments according to the actual expenses incurred, and finally the balance. As such, Carbiolice received the first pre-financing in the amount of €136 thousand. As the expenses incurred at December 31, 2023 exceeded the €331 thousand, which should enable the full subsidy to be obtained, accrued income was therefore recognized in the amount of: €331 thousand - €136 thousand = €195 thousand; and

- a subsidy obtained from the European Commission in the total amount of €8,340 thousand, of which €86 thousand for Carbiolice, to finance the collaborative R&D project named SISTERS. The project began on November 1, 2021 for a period of 54 months, with eligible expenses amounting to €123 thousand and a subsidy rate of 70%. The project provides for the payment of two pre-financing payments of €21 thousand, then interim payments according to the actual expenses incurred, and finally the balance. As such, Carbiolice received the first two pre-financing payments as well as an additional payment for a total amount of €44 thousand. The expenses incurred at December 31, 2023 amounted to €13 thousand and do not justify the receipt of all the grant. Deferred income was therefore recognized for an amount of: €44 thousand - €10 thousand = €34 thousand.

NOTE 16 • INCOME

Accounting principles

The principle of IFRS 15 "Revenue from Contracts with Customers" is based on the transfer of control of goods and services to the customer.

The standard defines a general approach for revenue recognition in five stages:

- step 1: Contract identification;
- step 2: Identification of "performance obligations" within the contract. "Performance obligations" serve as a unit of account for revenue recognition;
- step 3: Evaluation of the contract price;
- step 4: Allocation of the contract price to each "performance obligation";
- step 5: Recognition of revenue when the "performance obligation" is satisfied, either on a given date or on a percentage-of-completion basis.

For the 2023 and 2022 fiscal years, the income recognized concerns:

- on the one hand, feasibility studies, tests and research services with a performance obligation: income is recognized when the study report is submitted; and

- on the other hand, deliveries of raw materials and Masterbatch samples to various customers: income is recognized upon delivery.

NOTE 17 • BREAKDOWN OF INCOME AND EXPENSES BY FUNCTION

Accounting principles

The Group presents its income statement by function in the following categories:

- research and development expenses;
- sales and marketing expenses;
- general and administrative expenses;
- other operating income and expenses.

The research tax credit and other operating subsidies are presented as a deduction from the expenses to which they are related.

In addition, the Company entered into contracts with its subsidiary Carbiolice (before the takeover and the transition to full consolidation) and industrial partners for various re-invoicing and research services. This income is analyzed as contributions to the Company's expenses. They do not fall within the definition of income (see Note 16) insofar as they do not involve any performance obligation. Carbios recognizes as expenses the costs that these rebillings are intended to offset. All these income items are identified in the details below under "Other rebillings."

17.1 Research and development expenses

Research and development (In thousands of euros)	12/31/2023	12/31/2022
Raw materials and consumables	(1,152)	(1,142)
Studies and research	(3,200)	(3,778)
Subcontracting	(12)	(11)
Employee expenses	(6,735)	(5,206)
Maintenance and repairs	(661)	(382)
Depreciation, amortization and impairment	(5,522)	(4,703)
Others	(1,548)	(3,835)
RESEARCH AND DEVELOPMENT EXPENSES	**(18,830)**	**(19,057)**
Research tax credit	2,685	2,720
Subsidies	1,769	1,461
Other rebillings	931	595
SUBSIDIES AND OTHER INCOME FROM ACTIVITIES	**5,385**	**4,776**
CAPITALIZATION OF DEVELOPMENT COSTS	**2,487**	**1,287**
RESEARCH AND DEVELOPMENT EXPENSES	**(10,958)**	**(12,993)**

For the 2023 fiscal year

- Research and development costs amounted to €18,830 thousand. The slight decrease in expenses is mainly due to the launch of the OPTI-ZYME project financed by ADEME, where the Group's academic partners are financed directly through the said project. In addition, due to the progress of the plant construction project, engineering expenses are no longer recognized as expenses, but directly capitalized in the fixed asset account. Finally, it should be noted that to carry out its R&D and industrial projects, the company is continuing to strengthen its teams, which explains the significant increase in personnel expenses in 2023.
- Subsidies and other income from the Group's activity amounted to €5,385 thousand in the 2023 fiscal year. The balance is mainly composed of the amount of the tax research credit ("CIR") to be received for €2,543 thousand for Carbios, and €672 thousand for Carbiolice, as well as grant received during the year with the launch of the OPTI-ZYME project financed by ADEME. It should be noted that the total amount of the CIR is reduced by €521 thousand due to capitalization as a fixed asset.
- Finally, the Group continued to capitalize Development costs related to the Company's PET enzymatic recycling project for €2,487 thousand in 2023.

For the year 2022:

- concerning "Research and Development costs," the Group incurred €19,057 thousand in expenses, in line with its industrialization goals. The very significant increase in R&D expenses is mainly related to the work undertaken following the installation of the industrial demonstration plant, the various studies (including engineering) for the construction of the Company's PET biorecycling plant, and lastly, Carbiolice's R&D expenses (for the full year in 2022). The main changes are due to the continued use of external services, mainly as part of the PET biorecycling plant project;
- concerning "Subsidies and other income from operations," the Group recorded €4,776 thousand, partially offsetting its R&D expenses. This item includes research tax credits of €2,538 thousand for Carbios and €655 thousand for Carbiolice for the 2022 fiscal year (as opposed to respectively €2,265 thousand and €721 thousand in 2021, these amounts having been received in 2022);
- finally, the Group has capitalized €1,287 thousand in "Development costs" related to the Company's PET enzymatic recycling project.

17.2 Sales and marketing expenses

Sales and marketing expenses (In thousands of euros)	**12/31/2023**	**12/31/2022**
Purchases and supplies not held in inventories	(66)	(13)
Employee expenses	(3,427)	(3,068)
Rental expenses	4	1
Maintenance and repairs	(5)	(4)
Consulting fees	(1,932)	(1,437)
Advertising	(105)	(36)
Transport, Travel	(247)	(149)
Depreciation, amortization and impairment	(62)	(48)
Other rebillings	31	381
SALES AND MARKETING EXPENSES	**(5,809)**	**(4,373)**

For the 2023 fiscal year, sales and marketing expenses amounted to €5,809 thousand compared to €4,373 thousand at 12/31/2022. The increase in these expenses is mainly due to the efforts made by the Company to target the market and sell its licenses in the near future. The Group is also continuing its structuring work with a reinforcement of its teams in order to be able to achieve its development objectives and target an international market.

Sales and marketing expenses amounted to €4,373 thousand for the 2022 fiscal year compared to €1,976 thousand in 2021. This increase of €2,397 thousand is mainly due, on the one hand, to the full consolidation of Carbiolice over a full year (expenses taken into account from June 4, 2021 for the 2021 fiscal year) and, on the other, the Group's sales teams to support the acceleration of its developments and be able to meet market expectations by offering an effective and widely available recycling solution.

17.3 General and administrative expenses

General and administrative expenses (In thousands of euros)	**12/31/2023**	**12/31/2022**
Travel expenses and missions	(353)	(777)
Fees	(3,192)	(3,016)
Insurance	(167)	(86)
Taxes and duties	(161)	(151)
Employee expenses	(5,918)	(3,763)
Depreciation, amortization and impairment	(791)	(548)
Others	(1,553)	(465)
GENERAL AND ADMINISTRATIVE EXPENSES	**(12,134)**	**(8,807)**

General and administrative expenses amounted to €12,134 thousand for the 2023 fiscal year compared to €8,807 thousand the previous fiscal year. Carbios continues to structure itself, in particular with the construction of the plant, which explains the increase in general expenses, more specifically in personnel expenses. Fees are also up in 2023, illustrating the use of external consultants to move forward and structure itself on various topics (recruitment, QHSE, or IT).

Other general and administrative expenses mainly correspond to external services.

General and administrative expenses amounted to €8,807 thousand for the 2022 fiscal year compared to €6,251 thousand in 2021. This increase of €2,556 thousand is mainly due to the increase in consulting services and fees.

NOTE 18 • RELATED PARTIES

Executive compensation

The compensation recognized as expenses for the main executives, corresponding to the members of the Board of Directors and the Executive Management, is as follows:

Executive compensation (In thousands of euros)	**12/31/2023**	**12/31/2022**
Short-term employee benefits	879	1,294
Post-employment benefits	1	9
Share-based payments	407	392
TOTAL EXECUTIVE COMPENSATION	**1,287**	**1,695**

Compensation recognized as expenses for the Company's main executives includes their salaries and bonuses, benefits in kind and directors' fees. In addition, compensation includes post-employment benefits (Note 23) as well as share-based compensation (Note 13).

Compensation of directors

On December 31, 2023, in respect of their participation in the meetings of the Board of Directors and the various Committees and Commissions in 2023, CARBIOS paid compensation to the members of the Board of Directors in the amount of €239 thousand (excluding social security contributions). Over the full year, the average attendance rate of directors at Board of Directors meetings was 95%.

Agreements with related parties

Affiliate	Transaction completion date	Nature of transaction	Amount
Carbiolice (company 99.99% owned by the Company as of the date of this document)	August 30, 2016 Amendment dated June 28, 2018	Licensing and sublicensing of patent and know-how licenses	The contract states that Carbios will receive a lump-sum royalty of €8 million and a variable royalty on revenue resulting from the use by Carbiolice of the technology licensed. No variable royalties were recognized in respect of 2023.
	September 17, 2018	Letter of agreement for service provision rebilling	Rebilling of services performed by service providers on behalf of Carbios and Carbiolice. This resulted in income of €182 thousand being recognized in 2023.
	January 25, 2023	Current account advance agreement	Advance to Carbiolice to finance its activity. This advance amounted to €4,720 thousand at 12/31/2023. No income was recognized in this respect.
	January 1, 2023	Service agreement	The agreement provides for the payment of monthly compensation of €50 thousand for services rendered by Carbios staff. In addition, the agreement provides for the free use of Carbios premises. In this respect, income of €600 thousand was recognized in 2023.

Carbios 54 (company 100% owned by the Company as of the date of this document)	July 1, 2022	Employee secondment agreement	Rebilling of Carbios staff working as part of the Reference Unit project on behalf of Carbios 54. This resulted in income of €1,891 thousand being recognized, in 2023.
	September 1, 2022	Employee secondment agreement	
	January 1, 2023	Service agreement	The agreement provides for the payment of monthly compensation of €10 thousand for services rendered by Carbios staff. In addition, the agreement provides for the provision of Carbios premises free of charge. In this respect, income of €120 thousand was recognized in 2023.
	July 1, 2022	Cash management agreement	The cash management agreement provides for the free management of Carbios 54's cash flows for cash optimization purposes, with interest being paid as compensation. This resulted in financial income (interest) of €647 thousand being recognized, in 2023. In addition, income of €181 thousand was recognized for the re-billing of invoices to Carbios 54.
Michelin (company holding 3.09% of the Company's share capital as of the date of this document)	April 13, 2021	Leasing contract	The contract provides for the provision of premises and utilities for the B80 building. In this respect, expenses of €499 thousand were recognized in 2023.
	April 13, 2021 Amendments dated September 14, 2021, July 1, 2022 and November 30, 2022	Leasing contract	The contract provides for the provision of premises and utilities for the so-called O24 building. In this respect, expenses of €695 thousand were recognized in 2023.
L'Oréal (company holding 5.60% of the Company's share capital as of the date of this document)	July 1, 2021	Research services agreement	The contracts provide for the financial contribution for participation in the various works of the Consortium as well as compensation for the research work carried out. This resulted in income of €348 thousand being recognized in 2023 in respect of these contracts.
	October 3, 2017	Consortium agreement	
Kamergy, company represented by Vincent KAMEL, director	November 28, 2023	Consulting contract	The contract provides for the performance of a marketing consulting mission. In this respect, an expense of €4 thousand was recognized in 2023.

NOTE 19 • STATUTORY AUDITORS' FEES

Statutory auditors' fees (Amounts in thousands of euros excl. tax)	12/31/2023 PWC	12/31/2022 PWC
Statutory audit	88	100
Other services and due diligence directly related to the Statutory Auditors' assignment	-	-
Services other than certification of financial statements (1)	197	79
SUB-TOTAL	**285**	**179**
Other services rendered		
- Tax	-	-
- Others	-	-
SUB-TOTAL	**-**	**-**
TOTAL	**285**	**179**

(1) of which €125,500 relating to services other than the certification of financial statements (SACC) in the legal texts and €71,400 relating to other SACCs

NOTE 20 • NET FINANCIAL INCOME

Accounting principles

Financial income includes:
• expenses related to the Company's financing: interest paid and accretion of repayable advances and financial liabilities;
• income related to interest on term deposits and the capitalization contract;
• income related to repayable advances.

Net financial income/(expenses) (In thousands of euros)	12/31/2023	12/31/2022
Foreign exchange gains	3	1
Other financial income	3,781	133
FINANCIAL INCOME	**3,784**	**134**
Cost of borrowing	(2,118)	(1,724)
Monetary interest expenses (1)	*(1,644)*	*(1,224)*
Non-monetary interest expenses (EIR)	*(1,030)*	*(325)*
Interest expense on lease liabilities	*(155)*	*(171)*
Interest expense on employee benefit obligations IAS 19	*(10)*	*(4)*
Gross cost of borrowing	*(2,838)*	*(1,724)*
Capitalization of borrowing costs (2)	*721*	-
Net cost of borrowing	*(2,118)*	*(1,724)*
Other financial expenses	(11)	(49)
FINANCIAL EXPENSES	**(2,129)**	**(1,774)**
NET FINANCIAL INCOME/(EXPENSES)	**1,655**	**(1,640)**

(1) Net financial interest paid amounted to €1,944 thousand at December 31, 2023 (including €300 thousand in accrued interest).
(2) Capitalization of borrowing costs related to the PET biorecycling plant (IAS 23 Borrowing costs - non-monetary item) - See note 5.2

The Company's financial income consists of interest on money-market investments and term account deposits. All available cash is placed in risk-free money market products. The significant increase in financial income is mainly due to the increase in liquidity following the capital increase during the fiscal year.

Financial expenses come from interest expenses on loans and repayable advances.

NOTE 21 • INCOME TAX

Accounting principles

Tax assets and liabilities due in respect of the fiscal year and prior years are measured at the amount expected to be recovered or paid to the tax authorities. The tax rates and tax rules applied to determine these amounts are those adopted or substantially adopted at the closing date.

The income tax expense for the fiscal year includes current tax payable and deferred tax. Tax is recognized in the income statement, unless it is related to items recognized in "Other comprehensive income" or directly in equity. In this case, the tax is also recognized in "Other comprehensive income" or directly in equity, respectively.

Current taxes

Current tax is calculated on the basis of tax regulations enacted or substantively enacted at the closing date in the countries where the Company's subsidiaries operate and generate taxable profits.

Deferred taxes

Deferred taxes are recognized according to the balance sheet approach of the liability method, for all temporary differences between the carrying amount of assets and liabilities and their tax bases. The valuation of deferred tax assets and liabilities is based on the way in which the Group expects their repayment using the tax rates that have been enacted or substantively enacted at the closing date.

In accordance with IAS 12, deferred tax assets and liabilities are not discounted.

The main temporary differences are related to tax losses carried forward.

Deferred tax assets are recognized for unused tax loss carryforwards to the extent that taxable temporary differences are available, and beyond that, when it is probable that the Company will have future taxable profits on which these unused tax losses may be allocated. The determination of the amount of deferred tax assets that may be recognized requires Management to make estimates both on the period of consumption of tax loss carryforwards, and on the level of future taxable profits, with regard to tax management strategies.

Deferred tax liabilities are recognized for all temporary taxable differences, except if the Group is able to control the date on which the temporary difference will reverse and it is probable that the temporary difference will not reverse in a foreseeable future.

The deferred tax calculations carried out on Carbios, Carbiolice and Carbios 54 show a deferred tax asset position of €496 thousand. These amounts were not recognized.

Deferred tax liabilities recognized as part of the Carbiolice purchase price allocation exercise:

For Carbiolice, deferred tax liabilities were recognized as follows in connection with the purchase price allocation exercise:

Recognition of deferred tax liabilities (In thousands of euros)	**12/31/2023**	**12/31/2022**
Tax losses	1,960	2,242
Right-of-use assets	6	11
Provision - employee benefits	3	5
DEFERRED TAX ASSETS	**1,969**	**2,258**
Intangible assets	(3,662)	(3,952)
DEFERRED TAX LIABILITIES	**(3,662)**	**(3,952)**
DEFERRED TAX LIABILITIES RECOGNIZED	**(1,693)**	**(1,693)**

Tax rate and tax loss carryforwards

The income tax rate applicable to the Group is the rate currently in force in France, i.e., 25%.

The Group has tax losses that can be carried forward indefinitely in France. At December 31, 2023, they amounted to:

- €99,596 thousand for Carbios;
- €32,612 thousand for Carbiolice;
- €5,749 thousand for Carbios 54.

The Company recorded tax losses in the 2023 fiscal year. As the recoverability of these tax losses is not considered probable over the coming periods due to the uncertainties inherent to the Group's business, no deferred tax assets were recognized in this respect at December 31, 2023.

For the 2022 fiscal year, Carbiolice recorded tax losses. As the recoverability of these tax losses is not considered probable over the coming periods due to the uncertainties inherent in the business, Carbiolice has recognized deferred tax assets up to the cap on the use of tax losses carried forward as part of the purchase price allocation exercise. At December 31, 2022, the amount of tax losses relating to unrecognized deferred tax assets amounted to €17,243 thousand.

Reconciliation of theoretical and effective tax

Tax proof (In thousands of euros)	**12/31/2023**	**12/31/2022**
INCOME/(EXPENSES) BEFORE TAXES	**(27,224)**	**(27,741)**
Current tax rate	25.0%	25.0%
THEORETICAL TAX AT THE CURRENT RATE	**6,806**	**6,935**
Research tax credit (CIR)	801	798
Permanent differences (1)	1,869	(26)
Non-capitalized tax loss	(8,340)	(6,781)
Deferred tax assets not capitalized	(497)	(562)
Impact of share-based payments	(639)	(364)
INCOME TAX	**(0)**	**0**
Effective tax rate	0.00%	0.00%

(1) The permanent differences are mainly composed of the costs of the capital increase, for €1.9 million.

Tax credits correspond to the research tax credit (CIR), non-taxable income, recognized as a deduction from research and development expenses (see Note 17.1 "Research and development expenses").

NOTE 22 • EARNINGS PER SHARE

Accounting principles

Basic earnings per share are calculated by dividing the earnings attributable to equity holders of the Company's shares by the weighted average number of shares outstanding during the period.

Diluted earnings per share are determined by adjusting the income attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding for the effects of all potentially dilutive ordinary shares.

If an anti-dilutive effect is generated by taking into account the instruments giving entitlement to deferred capital (BSA, BSPCE) for the calculation of the diluted earnings per share, these instruments are not taken into account.

Earnings per share	12/31/2023	12/31/2022
Weighted average number of shares outstanding	13,874,560	11,242,666
Number of diluted shares	14,963,366	12,216,129
Net income for the period - attributable to shareholders of the parent company (in thousands of euros)	(27,224)	(27,741)
BASIC EARNINGS PER SHARE (€/SHARE)	**(1.96)**	**(2.47)**
DILUTED EARNINGS PER SHARE (€/SHARE)	**(1.96)**	**(2.47)**

For the 2023 fiscal year, diluted earnings per share are identical to basic earnings per share. Potentially dilutive shares for the 2023 fiscal year (1,088,806 shares - 296,928 from BSAs, 686,498 from BSPCEs and 84,150 from AGAP) were excluded from the calculation of diluted earnings per share, as these shares had an anti-dilutive effect due to the reported losses.

The Group's companies have not distributed any dividends or other income (Art. 243 bis of the French General Tax Code) during the last three fiscal years.

NOTE 23 • EMPLOYEE BENEFIT OBLIGATIONS

Accounting principles

Defined benefit plans

The Group's defined benefit plans correspond to retirement benefits paid to employees in France.

The Group's obligation under this plan is recognized as a liability and measured using an actuarial method that takes into account the employee turnover rate, their life expectancy, the employee progression rate and a discount rate. The calculation is based on the projected unit credit method with final salary.

The cost of services is recognized in personnel expenses and includes:

(1) the cost of services rendered during the period;

(2) the cost of past services resulting from the amendment or reduction of the plan (fully recognized in profit or loss for the period in which it occurred); and

(3) gains and losses resulting from liquidations.

The interest expense, corresponding to the effect of unwinding the discount on commitments, is recognized in financial expenses.

Revaluations of the liability (actuarial difference) are recognized in other items that cannot be reclassified to comprehensive income.

Defined contribution plans

The contributions to be paid to a defined contribution plan are recognized as expenses when the corresponding service is rendered. Prepaid contributions are recognized as assets to the extent that a cash repayment or a reduction in future payments is possible. This is the general social security pension scheme and supplementary schemes.

The main actuarial assumptions used to measure retirement benefits are as follows:

Actuarial assumptions	12/31/2023	12/31/2022
Retirement age	65 years	63 years
Collective bargaining agreement	Chemicals: Industry	
Discount rate	3.60%	3.75%
Mortality table	INSEE 2016-2018	INSEE 2016-2018
Rate of salary increases	3.00%	3.00%
Turnover rate	18 to 29 years old from 6.22% to 2.77% 30 to 39 years old from 2.77% to 2.18% 40 to 49 years from 2.04% to 0.15% 50 to 54 years old 0.1% 55 to 64 years old 0.05% Over 65 years old 0%	
Social security contribution rate		
Carbios	42%	45%
Carbios 54	40%	N/A
Carbiolice	39%	40%

The provision for retirement commitments changed as follows:

In thousands of euros	Pension commitment
At January 1, 2022	**278**
Change in scope	-
Cost of services rendered	23
Interest expense	4
Actuarial gains or losses	-120
At December 31, 2022	**184**
Change in scope	-
Cost of services rendered	20
Interest expense	10
Actuarial gains or losses	3
At December 31, 2023	**216**

The pension obligation, at December 31, 2023, was subject to sensitivity tests concerning the discount rate and the rate of salary increase. The impacts on the commitment are as follows:

In thousands of euros	Change in the discount rate	Change in the salary increase rate
Impact on the commitment with an increase of +0.25%	(10)	11
Impact on the commitment with a decrease of -0.25%	11	(10)

NOTE 24 • OFF-BALANCE SHEET COMMITMENTS

Risk hedging set up for the benefit of funders

The two Bpifrance loans are covered by life insurance policies - PTIA underwritten for Alain MARTY (50%) and, initially, Martin STEPHAN (50%). Following the departure of the latter, the contract is being transferred to Stéphane FERREIRA. The term of loans provides for a 2-year deferred repayment and annual straight-line repayment over the following 5 years.

A guarantee of €303 thousand was also put in place by Bpifrance as part of the lease-back contract to counter-guarantee part of the refinancing by the banks.

Other commitments

Due to the impact of IFRS 16, the off-balance sheet commitments existing at December 31, 2023 and December 31, 2022 are not considered to be significant.

5.2 STATUTORY AUDITORS' AUDIT REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS OF CARBIOS S.A. PREPARED IN ACCORDANCE WITH IFRS AS ADOPTED BY THE EUROPEAN UNION

Fiscal year ended December 31, 2023

To the Shareholders' Meeting,

Opinion

Pursuant to the mission entrusted to us by your Shareholders' Meeting, we have audited the consolidated financial statements of Carbios for the fiscal year ended December 31, 2023, as appended to this report.

We certify that the consolidated financial statements are, in accordance with IFRS as adopted by the European Union, regular and fair and give a true and fair view of the results of operations for the past fiscal year as well as of the financial position and assets, at the end of the fiscal year, of the group consisting of the persons and entities included in the consolidation.

Basis of opinion

Audit guidelines

We conducted our audit in accordance with the professional standards applicable in France. We believe that the information we have collected is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are indicated in the section "Statutory Auditors' responsibilities with regard to the audit of the consolidated financial statements" in this report.

Independence

We carried out our audit in compliance with the rules of independence provided for by the French Commercial Code and by the Statutory Auditors' Code of Ethics for the period from January 1, 2023 to the date of issue of our report.

Justification for the assessments

In application of the provisions of Articles L. 821-53 and R. 821-180 of the French Commercial Code relating to the justification of our assessments, we bring to your attention the following assessments, which, in our professional judgment, were the most important for the audit of the consolidated financial statements for the fiscal year.

The assessments made come within the context of the audit of the consolidated financial statements taken as a whole and the formation of our opinion expressed above. We do not express an opinion on the elements of these consolidated financial statements taken separately.

Accounting estimates

The goodwill resulting from the takeover of Carbiolice, the net amount of which appears in the consolidated statement of financial position December 31, 2023 and stands at €20,583 thousand, is tested for impairment as soon as an indication of impairment appears and at least annually, in accordance with the procedures described in the paragraph "Subsequent impairment tests" in note 5.1 "Intangible assets" and in the note 5.4 "Impairment tests" in the notes to the financial statements. We examined the methods used to implement the impairment test, verified the consistency of the assumptions used with the forecast data from the Carbiolice business plan, assessed the consistency and reasonable nature of the main assumptions selected (including the growth rate, EBITDA margin and discount rate) and verified that Note 5.4 provides appropriate information.

As part of our assessments, we verified the reasonableness of these estimates.

Specific checks

In accordance with professional standards applicable in France, we have also performed the specific verifications required by laws and regulations of the information relating to the Group provided in the Board of Directors management report.

We have no matters to report as to its fair presentation and consistency with the consolidated financial statements.

Responsibilities of management and the people comprising the corporate governance with regard to the consolidated financial statements

The management team is responsible for preparing consolidated financial statements that present a true and fair view in accordance with IFRS, as adopted by the European Union, and to implement the internal control that it deems necessary for preparing consolidated financial statements that do not include material misstatements, whether due to fraud or error.

When preparing the consolidated financial statements, it is the responsibility of management to assess the company's ability to continue as a going concern, to present in these financial statements, where applicable, the necessary information relating to the going concern and to apply the going concern accounting convention, unless it is planned to liquidate the company or cease operations.

The consolidated financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors with regard to the audit of the consolidated financial statements

It is our responsibility to prepare a report on the consolidated financial statements. Our aim is to obtain the reasonable assurance that the consolidated financial statements taken as a whole do not include material misstatements. Reasonable assurance corresponds to a high level of assurance, but does not guarantee that an audit conducted in accordance with professional standards will systematically detect all material misstatements. Misstatements may come from fraud or result from errors and are considered as material when we can reasonably expect that they may, taken individually or cumulatively, influence the economic decisions that users of the financial statements may make based on the financial statements.

As stipulated in Article L. 821-55 of the French Commercial Code, our certification task for the financial statements does not consist of guaranteeing the viability or quality of your company.

As part of an audit conducted in accordance with the professional standards applicable in France, the Statutory Auditor exercises his/her professional judgment throughout this audit.

Moreover:

- he/she identifies and assesses the risks that the consolidated financial statements include material misstatements, either from fraud or resulting from errors, defines and implements audit procedures to address these risks and collects the elements that he/she considers sufficient and appropriate on which to base his/her opinion. The risk of non-detection of a material misstatement from fraud is higher than for a material misstatement resulting from an error, as fraud may involve collusion, falsification, voluntary omission, false declaration or circumvention of internal control;

- he/she takes note of the relevant internal control for the audit in order to define the appropriate audit procedures and not to express an opinion on the effectiveness of the internal control;

- he/she assesses the appropriate nature of the selected accounting methods and the reasonable nature of the accounting estimates made by management, as well as the information about them provided in the consolidated financial statements;

- he/she assesses the appropriate nature of management's application of the going concern convention and, depending on the elements collected, whether or not a material uncertainty or circumstances exist that are likely to call into question the company's ability to continue its operations. This assessment is based on the elements collected up to the date of his/her report, it being recalled that subsequent circumstances or events may call into question the going concern. If he/she concludes that a material uncertainty exists, he/she draws the readers' attention to the information provided in the consolidated financial statements on the subject of this uncertainty or, if this information is not provided or is not relevant, he/she formulates a certification with reserves or refuses the certification;

- he/she assesses the presentation of the consolidated financial statements as a whole and assesses whether the consolidated financial statements reflect the underlying operations and events so as to provide a true and fair view.

- concerning the financial information of the persons or entities included in the scope of consolidation, he/she collects the elements that he/she considers sufficient and appropriate to express an opinion on the consolidated financial statements. He/she is responsible for the management, supervision and performance of the audit of the consolidated financial statements as well as the opinion expressed thereon.

Lyon, April 19, 2024

The Statutory Auditor

PricewaterhouseCoopers Audit

Gonzague Van Royen

5.3 ANNUAL SEPARATE FINANCIAL STATEMENTS

5.3.1 STATEMENT OF FINANCIAL POSITION

ASSETS

	12/31/2023			12/31/2023
Audited separate financial statements – French standards (In thousands of euros)	**Gross**	**Depreciation and Amortization**	**Net**	**Net**
FIXED ASSETS				
Intangible assets	**7,084**	**1,714**	**5,370**	**3,376**
Concessions, patents, licenses, software	3,509	1,714	1,795	1,681
Other intangible assets	3,576	-	3,576	1,696
Property, plant and equipment	**25,234**	**4,914**	**20,320**	**21,651**
Other property, plant and equipment	25,001	4,914	20,087	15,030
Property, plant and equipment under construction	233	-	233	6,621
Advances on assets under construction	-	-	-	-
Financial assets	**67,258**	**-**	**67,258**	**43,183**
Equity interests	38,381	-	38,381	38,382
Receivables related to equity investments	27,560	-	27,560	3,785
Other non-current financial assets	1,316	-	1,316	1,017
TOTAL FIXED ASSETS	**99,576**	**6,628**	**92,948**	**68,211**
CURRENT ASSETS				
Laboratory raw material inventories	-		-	52
Receivables	2,730		2,730	419
State receivables	4,256		4,256	3,548
Subsidies receivable	64		64	207
Other receivables	3,389		3,389	1,218
Subscribed capital - called up, not paid up	3		3	233
Cash, cash equivalents and marketable securities	191,266		191,266	101,041
Prepaid expenses	352		352	183
TOTAL CURRENT ASSETS	**202,060**	-	**202,060**	**106,900**
Expense to be spread over the loan	413		413	448
OVERALL TOTAL	**302,050**	**6,628**	**295,422**	**175,559**

LIABILITIES

Audited separate financial statements – French standards (In thousands of euros)	Note	12/31/2023	12/31/2022
EQUITY	12		
Share capital		11,786	7,870
Issue, merger and contribution premiums		276,569	146,967
Retained earnings		(28,263)	(11,136)
Investment subsidies	13	604	249
Profit and loss for the period		(15,917)	(17,127)
TOTAL EQUITY		**244,779**	**126,823**
OTHER EQUITY CAPITAL			
CONDITIONAL ADVANCES	**13**	**4,464**	**3,707**
PROVISIONS FOR CONTINGENCIES AND CHARGES			
PROVISIONS FOR EXPENSES	**6**	**384**	**292**
DEBT			
Loans	13	34,904	35,974
Bank overdrafts	11	-	750
Trade and other payables	8	4,787	4,534
Tax and social liabilities	8	3,115	2,680
Other liabilities	8	2,534	180
Deferred income	8	455	618
TOTAL LIABILITIES		**45,795**	**44,736**
OVERALL TOTAL		**295,422**	**175,559**

5.3.2 INCOME STATEMENT

Audited separate financial statements – French standards (In thousands of euros)	Note	France	Exports	12/31/2023	12/31/2022
Sales of goods				-	-
Production sold, goods				-	-
Production sold, services		1,212	534	1,747	1,227
Net revenue	**14**	**1,212**	**534**	**1,747**	**1,227**
Stored production				-	-
Capitalized production	5			1,637	1,287
Operating subsidy	13			1,616	989
Reversals of depreciation, amortization and provisions, expense transfers				2,444	3,297
Other income				2	0
Total operating revenues	**14**			**7,446**	**6,800**
Purchases of goods				-	-
Inventory change (goods)				-	-
Purchases of raw materials and other supplies				343	273
Inventory change (raw materials and supplies)				52	42
Other purchases and external expenses				13,309	13,595
Taxes and similar payments				124	138
Salaries and wages				8,500	6,580
Social security contributions				3,367	2,510
Depreciation of fixed assets	5			2,587	1,910
Provisions for fixed assets	5			-	-
Provisions on current assets	5			-	-
Provisions for contingencies and charges	5			-	-
Other expenses				255	191
Total operating expenses	**15**			**28,537**	**25,240**
OPERATING INCOME (LOSS)				**(21,091)**	**(18,440)**

Audited separate financial statements – French standards (In thousands of euros)	Note	France	Exports	12/31/2023	12/31/2022
Profit allocated or loss transferred				-	-
Loss incurred or profit transferred				-	-
Financial income from investments				647	-
Income from other securities and fixed asset receivables				-	-
Other interest and similar income				3,778	133
Reversals of provisions and expense transfers				2	-
Positive exchange rate differences				2	1
Net income on sales of marketable securities				-	-
Total financial income				**4,430**	**134**
Depreciation, amortization and provisions	5			58	293
Interest and similar expenses				1,615	897
Negative exchange rate differences				8	4
Net expenses on sales of marketable securities				-	-
Total financial expenses				**1,681**	**1,194**
FINANCIAL INCOME	19			**2,748**	**(1,060)**
CURRENT INCOME BEFORE TAXES				**(18,343)**	**(19,500)**
Extraordinary income on management transactions				-	10
Extraordinary income on equity transactions				4,279	1,577
Reversals of provisions and expense transfers				-	-
Total extraordinary income				**4,279**	**1,588**
Extraordinary expenses on management transactions				23	6
Extraordinary expenses on capital transactions				4,358	1,746
Extraordinary depreciation and provisions	5			-	-
Total extraordinary expenses				**4,381**	**1,752**
EXTRAORDINARY GAIN OR LOSS	20			**(102)**	**(165)**
Employee profit-sharing				-	-
Income tax	21			(2,528)	(2,538)
TOTAL INCOME				**16,155**	**8,521**
TOTAL EXPENSES				**32,072**	**25,648**
PROFIT OR LOSS				**(15,917)**	**(17,127)**

5.3.3 CASH FLOW STATEMENT

Audited separate financial statements – French standards (In thousands of euros)	**12/31/2023**	**12/31/2022**
CASH FLOW FROM OPERATING ACTIVITIES		
Profit and loss for the period	(15,917)	(17,127)
Depreciation, amortization and impairment (including investment subsidies)	2,674	2,201
Gains or losses on asset disposals	2	141
Changes in working capital requirements	(26,275)	1,732
Net cash absorbed by operations	**(39,516)**	**(13,053)**
CASH FLOW FROM INVESTING ACTIVITIES		
Acquisitions of fixed assets	(7,456)	(11,639)
Acquisition of non-current financial assets	(391)	(4,368)
Disposals of fixed assets	4,277	1,575
Changes in fixed asset liabilities	(314)	(2,289)
Net cash from (absorbed by) investments	**(3,884)**	**(16,721)**
CASH FLOW FROM FINANCING ACTIVITIES		
Net proceeds from the issuance of shares and BSAs	133,518	670
Inflows from loans	0	30,000
Reimbursement of loans	(1,661)	(548)
Expense to be spread over the loan	35	(434)
Inflows from repayable advances and investment subsidies	1,733	243
Net cash from financing activities	**133,625**	**29,931**
Change in cash and cash equivalents	**90,226**	**157**
Cash and cash equivalents at the beginning of the period	**101,041**	**100,884**
CASH AND CASH EQUIVALENTS AT END OF PERIOD	**191,266**	**101,041**

5.3.4 NOTES TO THE ANNUAL FINANCIAL STATEMENTS

NOTE 1 • THE COMPANY

Carbios ("the Company") is an innovative green chemistry company, developing cutting-edge technologies for the recovery of plastic waste and the production of biopolymers.

The Company was created in April 2011 as a société par actions simplifiée (simplified joint stock company) and became a société anonyme (public limited company) on February 20, 2013.

The Company's shares have been listed on the Euronext Growth Paris market since December 19, 2013. Euronext Growth is an organized multilateral trading system that does not require the application of IFRS. The accounting principles applied in the statutory financial statements are those generally accepted in France. These financial statements cover the fiscal year ended December 31, 2023, it being the Company's twelfth accounting period.

NOTE 2 • HIGHLIGHTS OF THE YEAR

With new patent applications filed during the fiscal year, the intellectual property portfolio of Carbios and Carbiolice at the end of 2023 included 58 patent families (including one under an exclusive worldwide license with the CNRS and University of Poitiers), representing 398 patents filed across the world's key regions and covering the Company's areas of development (biodiversity, enzymatic recycling process, biodegradable plastic production process and bioproduction).

The key events for 2023 were as follows:

- On July 11, 2023, Carbios announced the success of its capital increase with preferential subscription rights maintained for a gross amount of approximately €141 million. The costs of the capital increase are deducted directly from the issue premium, which will bring the total amount after deduction to €133 million.
- Carbios announced on October 26, 2023 that it had obtained the building and operating permit in accordance with the schedule announced for the world's first PET biorecycling plant in Longlaville.
- Carbios, leader and coordinator of the project, announced in May 2023 the granting of a total of €11.4 million by the State as part of the OPTI-ZYME project of France 2030 operated by ADEME, of which €8.2 million directly for Carbios (€3.2 million in subsidies and €5 million in repayable advances) and €3.2 million for its academic partners INRAE, INSA and CNRS (via the mixed service units TWB and TBI Research Center). This financing, which consists of subsidies and repayable advances, will be paid in several tranches over the duration of this project, including an initial tranche of 15%, the equivalent of €1.2 million, received by CARBIOS on December 5, 2023.
- The Company advanced €4.7 million to its subsidiary Carbiolice, mainly to finance its current expenses and €22.2 million to its subsidiary Carbios 54, as part of the project to build the PET biorecycling plant at the Longlaville site.

Consequences of the conflict in Ukraine

Since the beginning of the conflict in Ukraine, the Company has not, as of the date of publication of this document, encountered any difficulties in pursuing its activities or its planned investments. To date, the Company has no direct or indirect relations with Ukraine or Russia, and the Company has managed to limit any delays directly related to this crisis in the industrial and commercial deployment of its technologies.

However, if this crisis were to continue and/or generate lasting economic consequences, the Company could have difficulties in containing the adverse effects of these measures and, in particular, the increase in the cost as well as the extension to the lead times of supplies of certain materials, equipment and products necessary for the construction of its Reference Unit. This extension of lead times and the increase in prices could delay the construction of the first industrial and commercial unit using the PET recycling technology developed by the Company. In addition, the negative impact of this conflict on the financial markets and potentially on the Company's share price could intensify if the conflict continues.

In view of the current situation between Russia and Ukraine, the Company specifies that its economic and balance sheet exposure to these two countries is not significant. In 2022, Carbios did not record any expenses with suppliers based in Russia and Ukraine.

Going concern

The going concern assumption is used to the extent that the financial resources of the Company enable it to continue its Research and Development work for at least the next 12 months. Nevertheless, the management of the ongoing developments until the final marketing stage (including the complete construction of the PET biorecycling plant) or even the application of Carbios processes to other markets may require new financing to be sought from institutional entities or industrial partners.

NOTE 3 • EVENTS AFTER THE REPORTING PERIOD

On March 5, 2024, the Company announced that CARBIOS Active, its enzymatic solution for the biodegradation of PLA, is included in the inventory of food contact substances (FCS) of the US Food and Drug Administration (FDA) with the food contact notification (FCN) 2325, in force since February 29, 2024. Thanks to this step, CARBIOS Active can be used to manufacture food contact packaging in the United States (rigid and flexible packaging, and other applications).

On February 14, 2024, the Company announced that it had acquired the land (in Longlaville) from Indorama Ventures that will host the first PET biorecycling plant in the world.

On April 3, 2024, the Company announced the successful launch of its first employee shareholding plan for all Group employees who are members of the employee savings plan in France. This employee shareholding plan, launched on February 12, 2024, was subscribed by 123 employees, i.e. 88.49% of the employees concerned and thus made it possible to involve employees in the Group's development and performance. It contributes to bringing the employee shareholding of Carbios, within the meaning of Article L. 225-102 of the French Commercial Code, to around 0.08% of the share capital. The plan included a unilateral contribution corresponding to approximately 48 shares for each of the eligible employees. In total, a little more than €59,400 was subscribed by employees through the FCPE CARBIOS, which will invest them in CARBIOS shares, after adding the corresponding contribution of the Company for approximately €53,700 and the unilateral contribution of the latter for approximately €110,600, in the context of:

- a reserved capital increase for a nominal amount of €5,892.60, corresponding to the issue of 8,418 new CARBIOS shares with a nominal value of €0.70 each, and,
- the acquisition of 4,823 existing CARBIOS treasury shares.

As a result, the Company's share capital was increased by €5,892.60 and thus went from €11,786,048.40 to €11,791,941.

NOTE 4 • ACCOUNTING PRINCIPLES AND METHODS

General principles and conventions

The financial statements for the fiscal year ended were prepared and presented in accordance with the accounting rules in compliance with the principles set out in Articles 121-1 to 121-5 et seq. of the French General Accounting Plan.

The general accounting conventions have been applied in compliance with the principle of prudence, in accordance with the basic assumptions: going concern, consistency of accounting methods from one fiscal year to the next, independence of fiscal years and in accordance with the general rules for preparing and presenting annual financial statements.

The basic method used to measure the items recorded in the accounts is the historical cost method.

The accounting conventions have been applied in accordance with the provisions of the French Commercial Code, the accounting decree of November 29, 1983, as well as the ANC regulation 2014-03 and the ANC regulation 2018-07 relating to the rewriting of the French General Accounting Plan applicable to the closing of fiscal years.

Consistency of methods

The valuation methods used for this fiscal year were unchanged compared to the previous fiscal year.

The information communicated below is an integral part of the 2023 financial statements, which were approved on April 10, 2024 by the Board of Directors.

Financial information is accordingly compared to that of the Company's eleventh fiscal year, ended on December 31, 2022, for a period of 12 months.

NOTE 5 • INTANGIBLE ASSETS, PROPERTY, PLANT AND EQUIPMENT AND FINANCIAL ASSETS

The movements with an impact on fixed assets were the following:

2023 fiscal year (In euros)	**At the beginning of the period 01/01/2023**	**Increase**	**Decrease**	**At the end of the period 12/31/2023**
FIXED ASSETS				
INTANGIBLE ASSETS	**4,591,029**	**2,493,417**	**-**	**7,084,445**
Software, website	25,641	39,968	-	65,609
Patents	2,649,802	572,486	-	3,222,288
Patents licensed	219,773	1,164	-	220,937
Pending patents	-	13,349	-	13,349
Development costs	1,695,813	1,866,450	-	3,562,263
PROPERTY, PLANT AND EQUIPMENT	**24,663,088**	**7,366,924**	**6,796,198**	**25,233,814**
Fixtures and fittings	13,761,832	4,162,733	3,024	17,921,541
Laboratory fittings and equipment	3,550,785	2,641,936	-	6,192,721
Office and IT hardware	461,126	234,892	121,874	574,144
Furniture	268,198	44,405	-	312,603
Assets under construction	6,621,148	282,958	6,671,300	232,806
Advance payments made	-	-	-	-
FINANCIAL ASSETS	**43,185,385**	**24,167,062**	**94,517**	**67,257,931**
Equity interests	38,381,461	-	-	38,381,461
Receivables related to equity investments	3,784,740	23,775,733	-	27,560,473
Guarantees and security deposits	324,561	29,850	15,300	339,111
Liquidity contract	563,062	-	51,120	511,941
Treasury shares	131,561	361,480	28,097	464,944
TOTAL	**72,439,501**	**34,027,404**	**6,890,715**	**99,576,190**

The methods and terms of depreciation and amortization of assets are the following:

2023 fiscal year (In euros)	**Depr./amort. period**	**At the beginning of the period 01/01/2023**	**Increase**	**Decrease**	**At the end of the period 12/31/2023**
DEPRECIATION, AMORTIZATION AND PROVISIONS					
INTANGIBLE ASSETS					
Software, website	1 year	25,641	8,552	-	34,193
Patents	10 years	1,067,352	455,518	-	1,522,870
Patents licensed	10 years	121,586	35,420	-	157,006
PROPERTY, PLANT AND EQUIPMENT					
Fixtures and fittings	7 to 10 years	1,224,820	1,379,751	-	2,604,571
Laboratory fittings and equipment	5 to 20 years	1,401,535	480,346	-	1,881,881
Office and IT hardware	3 to 5 years	298,939	107,042	120,056	285,925
Furniture	3 to 7 years	86,367	55,102	-	141,469
FINANCIAL ASSETS					
Treasury shares		2,432	-	2,432	-
TOTAL		**4,228,672**	**2,521,730**	**122,488**	**6,627,914**

Movements during the fiscal year affecting expenses spread over several fiscal years (in euros)	**At opening 01/01/2023**	**Increase**	**Decrease**	**At closing 12/31/2023**
Expenses to be spread over several years	447,777	30,616	65,126	413,267

Development costs

These are development expenses for "PET recycling" project capitalized following the commissioning of the Cataroux site and the inauguration of the industrial demonstration plant on September 30, 2021 and the "PULSE" project, which consists of the implementation of an ERP for the Carbios group.

The expenses incurred have been recorded as fixed assets, as the project meets the criteria for capitalization.

Capitalized expenses during the fiscal year amounted to €1,842 thousand and consisted of:

"PET Recycling" project: €1,578 thousand

- Employee expenses: €938 thousand
- Patents: €245 thousand
- Raw materials and supplies: €245 thousand
- R&D subcontracting and consultants: €150 thousand

This asset is scheduled to be commissioned when the expected economic benefits are consumed, i.e. at the validation of the so-called FEL3 phase.

"PULSE" project: €264 thousand
- Employee expenses: €59 thousand
- Consultants: €204 thousand

Intangible assets

Intangible assets are valued at their acquisition cost and are amortized on a straight-line basis over the duration of their utilization by the Company. The amortization period for the patents held by the Company is estimated at 10 years, corresponding to the period stipulated for consumption and the economic benefits expected from the industrial property portfolio of the Company.

The licensed patents are capitalized over a 10-year period. The acquisition costs of these patents correspond to the fixed and variable license fees in the signed exclusive licensing agreement.

The expenses for filing patents or industrial property rights acquired during the fiscal year have been capitalized and are amortized from the beginning of their utilization. Additional expenses and later extensions on capitalized patents are amortized (as well as licensed patents) over the remaining period for the application to which they are connected.

The type of expenses for research undertaken by the Company during the fiscal year results in their being recorded entirely as operating expenses.

Impairment is recognized when the current value of an asset is lower than the net carrying amount. In addition, the Company conducts an annual review of its patent portfolio and discards any patents that are not retained.

Property, plant and equipment

Property, plant and equipment are valued at their acquisition cost or their production cost by the Company, taking into account the expenses required for the preparation of these goods for use and after deduction of commercial discounts, rebates and reductions of payments received.

Assets are depreciated on a straight-line basis depending on the actual period of utilization of the asset.

Depreciation periods are between 3 and 20 years depending on the type and lifespan of the assets in question.

Impairment is recognized when the current value of an asset is lower than the net carrying amount.

Assets under construction

The "Assets under construction" item consists mainly of the costs relating to the installation of the Company's industrial demonstration plant.

These assets are not amortized and will be reclassified to "property, plant and equipment" when they are brought into service.

Equity interests

1) Carbios acquired the share capital of Carbiolice (a simplified joint-stock company) when it was created on June 10, 2016 and later subscribed to several share capital increases of its subsidiary during the following fiscal years. As of December 31, 2023, Carbios owned 29,502,000 Carbiolice S.A.S. shares, representing a stake of 99.99100%. Equity interests are assessed at their acquisition value, i.e. €38,371,461. If this value exceeds the value in use, impairment is recognized for the difference.

The value in use is determined by reference to the impairment test, carried out by an external expert, and is based on the discounted cash flow method. To this end, the work is based on the Carbiolice Business Plan approved by its Board of Directors for which annual updates are also approved by the Board of Directors.

Assumptions used during the tests carried out for the annual closing:

- The business plan is projected over an eight-year horizon, to which must be added an additional so-called "normative" year and takes into account obtaining Food Contact approval in the United States.

- A terminal value calculated on a normal cash flow basis using an EBITDA margin rate of 30.5%, similar to the rate of comparable mature companies.

- Discount rate (WACC) used of 13% (compared to 13.5% last year), consisting of: (i) a WACC excluding the additional forecast risk premium, and (ii) an additional forecast risk premium, given the uncertainty of certain assumptions in the plan. This rate of 13% is corroborated by academic studies on high-growth companies in the marketing launch phase. The decrease in this rate is due to the more cautious modeling of future economic data.

- Tax rate: draft 2023 Finance Law, i.e. 25.8%.

The impairment tests performed at the end of fiscal year 2023 did not show any unrealized loss on the Carbiolice equity stake.

In addition, sensitivity tests were carried out on certain key assumptions. A two-point increase in the discount rate combined with a decrease in the terminal value of the EBITDA margin to 22% had no impact on the result of the impairment test.

2) Carbios subscribed to the share capital of the simplified joint-stock company Carbios 54 at its incorporation on May 30, 2022. As of December 31, 2023, Carbios owned 10,000 Carbios 54 S.A.S. shares, representing a stake of 100%. Equity interests are assessed at their acquisition value, i.e. €10,000. If this value exceeds the value in use, impairment is recognized for the difference.

At this stage, no impairment test has been carried out on the shares of Carbios 54.

Liquidity contract and treasury shares

The transactions connected to the liquidity contract that the Company signed with a financial intermediary are recognized in compliance with Opinion CU CNC No. 98-D and with CNCC Bulletin No. 137 – March 2005, namely:

- treasury shares held are recognized under "Other Non-Current Financial Assets." An impairment is recorded by reference to the average listed share price of the last month of the fiscal year if it is lower than the purchase price. To determine the income from disposal, the "First in, First out" method is used;
- on December 31, 2023, the Company held 17,320 Carbios shares, or a carrying amount of €465 thousand. The closing net asset value was €495 thousand. Since the net asset value was lower than the carrying amount, a provision in the amount of €2.4 thousand was reversed.
- Cash paid to the intermediary and not yet used is recognized under "Other financial assets" in the "Liquidity contract" account and represents €512 thousand.

NOTE 6 • PROVISIONS FOR CONTINGENCIES AND CHARGES

Any current obligation resulting from a past event of the Company towards a third party that may be estimated with sufficient reliability, and covering identified risks, is recognized as a provision.

At December 31, 2023, the Company had set aside a total of €351 thousand in financial provisions for the interest due on the debt related to the THANAPLAST™ project.

In addition, the Company has set aside a provision of €34 thousand for employer contributions that will be due under the free share allocation plan, which expires at the end of September 2026.

NOTE 7 • RECEIVABLES AND PREPAID EXPENSES

Statement of receivables

Receivables are valued at their nominal value. Where applicable, the receivables have been written down by means of a provision to take into account the recovery difficulties to which they were likely to give rise.

Statement of receivables at 12/31/2023 (In euros)	**Gross amount**	**At one year**	**More than one year**
Current assets & prepayments			
Customers	2,729,804	2,729,804	
Income tax(1)	3,215,706	3,215,706	
Value added tax(2)	1,040,353	1,040,353	
Other receivables(3)	3,455,795	3,455,795	
Prepaid expenses(4)	352,235	352,235	
TOTAL	**10,793,893**	**10,793,893**	

(1) The income tax receivable corresponds to the research tax credit (CIR) recognized for the 2023 calendar year for €2,543 thousand, as well as that of Carbiolice, a subsidiary of the Company, for an amount €672 thousand, following the implementation of the group tax consolidation option. In the absence of taxable income and due to the classification as a Community SME, this receivable is repayable the year following its recognition. At December 31, 2022, €2,522 thousand had been recorded for the 2022 research tax credit. This was repaid on July 5, 2023.

(2) The VAT receivable corresponds to reimbursement requests for the months of November and December 2023 (€319 thousand) as well as to non-recoverable VAT on services not paid at December 31, 2023, namely: VAT on fixed assets (€90 thousand), VAT on abs (€400 thousand), and intra-community VAT (€46 thousand).

(3) Other receivables include an amount of €3,250 thousand paid into an escrow account as part of the acquisition of the land in LONGLAVILLE from INDORAMA VENTURES, and €102 thousand of credit notes to be received.

(4) Prepaid expenses are ordinary operating expenses related to prior fiscal years.

Inventories

Inventories are valued at their acquisition cost using the weighted average cost method. When the present value at closing (market value for goods and value in use for raw materials) is lower than the carrying amount, an impairment loss is recognized for the amount of the difference. The valuation of the inventories at the end of the period did not reveal any impairment.

At December 31, 2023, the Company had not recognized any inventories. These amounted to €52 thousand in 2022.

NOTE 8 • MATURITY OF DEBT AND DEFERRED INCOME AT THE END OF THE PERIOD

Statement of debts at 12/31/2023 (In euros)	Total amount	From 0 to 1 year	From 1 to 5 years	More than 5 years
Regional and national funds	4,142,549	1,391,549	2,751,000	
EIB	30,008,333	8,333	20,000,000	10,000,000
State-guaranteed loan	753,251	253,251	500,000	
Partners' Current Accounts	672,460	672,460		
Suppliers	4,787,285	4,787,285		
Tax and social liabilities	3,115,243	3,115,243		
Other liabilities	1,861,558	1,861,558		
Deferred income	454,678	454,678		
TOTAL	**45,795,357**	**12,544,357**	**23,251,000**	**10,000,000**

Debts are recorded at their nominal redemption value and are not discounted.

The "Loans and debts" item includes:

- Public debt, consisting of the ADEME repayable advances (€2,327 thousand) obtained as part of the various research projects carried out by the Company until then, as well as the two loans subscribed from Bpifrance, of which €1,8 million remains due;
- Private debt. In this case, it consists exclusively of the loan of €1 million taken out with a banking institution as part of the Covid crisis and whose outstanding capital amounted to €750 thousand at December 31, 2023.
- A debt with the European Investment Bank in the amount of €30,000 thousand, the first repayment of which is scheduled for 2025.

Partners' Current Account debts include the €672 thousand research tax credit (CIR) of the company Carbiolice, which are centralized at the Company following the choice to switch to the group tax consolidation option, and which will have to be paid back to Carbiolice after receipt of the tax share.

Trade payables include outstanding operating invoices at closing for a total of €2,879 thousand, as well as invoices for capital items for a total of €520 thousand, and also to invoices not yet received related to both the operating cycle (€1,281 thousand) and the investment cycle (€107 thousand).

Social security liabilities consist of balances due to the various funds at the end of the period, provisions for premiums and bonuses, provisions for paid leave and related expenses.

The "Other liabilities" item is mainly composed of the balance due in the amount of €1,456 thousand, sent to its subsidiary Carbios 54 following an adjustment of the rebilling of the secondments of Carbios employees in the first half of 2023 and is offset by an invoice to be issued (€2,269 thousand).

NOTE 9 • ACCRUALS - ASSETS AND LIABILITIES

Accruals are shown on the statement of financial position for the fiscal year ended December 31, 2023 in the following amounts:

Statement of accruals (In euros)	Assets	Liabilities
Suppliers, amounts receivable and accrued invoices	102,094	1,387,983
Trade receivables, not yet invoiced	2,498,687	1,456,119
Personnel and social welfare organizations, accrued expenses	-	2,280,950
State, accrued expenses and accrued income	184,898	202,736
Subsidies receivable	63,754	-
Prepaid expenses	352,235	-
Deferred income	-	454,678
Accrued interest income and interest payable	2,260,726	-
Expense to be spread over the loan	413,267	-
TOTAL	**5,875,661**	**5,782,466**

NOTE 10 • CASH INSTRUMENTS

With the aim of optimizing returns on its available cash, the Company opened term deposit accounts for an overall amount of €172.5 million during the fiscal year, allowing it to benefit from attractive returns as well as guaranteed capital that is available at any time.

Thus, the Company has:

- €12.2 million in term accounts, renewable on a monthly basis by tacit agreement;
- €80 million maturing in November 2024; and
- €80.3 million maturing in December 2025.

They benefit from a progressive rate by tiers, and the funds remain available without conditions within 30 days. The interest resulting from these financial instruments generated income of €3,778 thousand, of which €2,261 thousand in accrued interest on term deposit accounts.

NOTE 11 • CASH AND CASH EQUIVALENTS

This item includes cash deposited in demand accounts as well as the accrued interest to be paid and cash balances. At December 31, 2023, the Company had €16,448 thousand in demand accounts.

In addition, in respect of marketable securities, the Company has BSAs from the company PK-MED for an amount of €20 thousand, for which no impairment is to be recognized at this stage.

NOTE 12 • EQUITY

STATEMENT OF CHANGES IN EQUITY

Audited separate financial statements French standards (In euros)	**Share capital**	**Issue premium**	**Subscription capital**	**Investment subsidies (net)**	**Profit or loss for the period**	**Retained earnings**	**Total due to shareholder**
12/31/2022	**7,869,866**	**146,963,944**	**3,318**	**249,375**	**(17,127,009)**	**(11,136,160)**	**126,823,334**
Allocation of earnings N-1					17,127,009	(17,127,009)	0
Increase/decrease in share capital and issue premium	3,916,182	129,602,131					133,518,313
Subscription of BSA/BCE			(349)				(349)
Quasi-equity				356,625			356,625
2023 results				(2,250)	(15,917,079)		(15,919,329)
12/31/2023	**11,786,048**	**276,566,075**	**2,970**	**603,750**	**(15,917,079)**	**(28,263,169)**	**244,778,594**

COMPOSITION OF SHARE CAPITAL

Share capital

Capital transactions carried out before the period and recognized during the period

N/A.

Capital transactions performed during the period

At its meeting on February 7, 2023, the Board of Directors noted:

- the creation of 4,000 new shares from the exercise of 4,000 BCE-2017-1, subscribed for €7.86 (€0.70 in par value and €7.16 in share premium);
- the creation of 1,600 new shares from the exercise of 1,600 BSA-2013-1, subscribed for €11.22 (€0.70 in par value and €10.52 in share premium);

At its meeting on April 5, 2023, the Board of Directors noted:

- the creation of 10,000 new shares from the exercise of 10,000 BCE-2017-1, subscribed for €7.86 (€0.70 in par value and €7.16 in share premium);
- the creation of 7,563 new shares from the exercise of 7,563 BCE-2020-2, subscribed for €7.76 (€0.70 in par value and €7.06 in share premium);
- the creation of 1,500 new shares from the exercise of 1,500 BCE-2020-3, subscribed for €7.76 (€0.70 in par value and €7.06 in share premium);

At its meeting on June 19, 2023, the Board of Directors noted:

- the creation of 4,000 new shares from the exercise of 4,000 BCE-2020-2, subscribed for €7.76 (€0.70 in par value and €7.06 in share premium);
- the creation of 7,188 new shares from the exercise of 7,188 BCE-2020-5, subscribed for €20.61 (€0.70 in par value and €19.91 in share premium);

Lastly, by decision dated July 13, 2023, the Chief Executive Officer of the Company noted the definitive completion of the capital increase with preferential subscription rights maintained for a nominal amount of €3,891,086.50, increasing from €7,894,961.90 to €11,786,048.40, through the issue of 5,558,695 new ordinary shares at a unit price of €25.32 (including the issue premium).

As a result, as of December 31, 2023, the share capital amounting to €11,786,048.40 consisted of 16,837,212 ordinary shares, with a par value of €0.70 each, entirely subscribed and fully paid up.

Movements of securities	Number	Nominal value	Share capital
Securities at the beginning of the fiscal year	**11,242,666**	**€0.70**	**€7,869,866.20**
Capital reduction	-	-	-
Securities issued	5,594,546	€0.70	€3,916,182.20
Securities redeemed or canceled	-	-	-
Shares at year-end	**16,837,212**	**€0.70**	**€11,786,048.40**

Issue premiums

In accordance with the decision made by the sole partner followed by the collective decision of the shareholders and, finally, by the Board of Directors based on the delegation of the Shareholders' Meeting, the issue premiums paid as part of the capital increases were recorded under "Liabilities" on the statement of financial position in a special "Issue premium" account, to which the former and new shareholders' rights shall be applicable.

In accordance with the reference method (ANC 2018-01), capital issue costs are recognized in the statement of financial position as a deduction from the issue premium.

At December 31, 2023, the issue premiums paid after deducting capital increase costs amounted to €276,566,074.52.

Transaction	Transaction date	Issue premiums	Direct costs charged	Exercise of BSA/ BCE against payment (1)	Total issue premium	BSA
At 12/31/2022		**€156,851,530.75**	**€(9,927,390.25)**	**€39,803.32**	**€146,963,943.82**	**€3,318.08**
BCE-2017-1	01/13/2023	€14,320.00			€14,320.00	
BCE-2017-1	01/13/2023	€14,320.00			€14,320.00	
BSA-2013-1	01/23/2023	€16,838.40		€348.80	€17,187.20	€(348.80)
BCE-2017-1	02/03/2023	€14,320.00			€14,320.00	
BCE-2017-1	02/06/2023	€14,320.00			€14,320.00	
BCE-2020-3	02/09/2023	€10,589.01			€10,589.01	
BCE-2017-1	02/20/2023	€14,320.00			€14,320.00	
BCE-2017-1	02/28/2023	€42.96			€42.96	
BCE-2017-1	03/01/2023	€14,277.04			€14,277.04	
BCE-2017-1	03/02/2023	€14,320.00			€14,320.00	
BCE-2020-2	03/06/2023	€11,033.75			€11,033.75	
BCE-2020-2	03/14/2023	€14,118.68			€14,118.68	
BCE-2020-2	03/28/2023	€14,118.68			€14,118.68	
BCE-2020-2	03/30/2023	€14,118.68			€14,118.68	
BCE-2020-2	06/01/2023	€14,118.68			€14,118.68	
BCE-2020-5	06/02/2023	€39,810.00			€39,810.00	
BCE-2020-2	06/02/2023	€14,118.68			€14,118.68	
BCE-2020-5	06/06/2023	€39,810.00			€39,810.00	
BCE-2020-5	06/08/2023	€23,647.14			€23,647.14	
BCE-2020-5	06/13/2023	€39,810.00			€39,810.00	
Capital increase	07/13/2023	€136,855,070.90	€(7,605,660.70)		€129,249,410.20	
At 12/31/2023		**€294,058,973.35**	**€(17,533,050.95)**	**€40,152.12**	**€276,566,074.52**	**€2,969.28**

(1) At December 31, 2022 the amounts of this item came from the exercise of:

- *28,841 BSAs acquired for €0.22 per share, i.e. €6,341.82;*
- *3,759 BSAs acquired for €0.10 per share, i.e. €375.90;*
- *19,200 BSAs acquired for €0.85 per share, i.e. €16,320;*
- *9,600 BSAs acquired for €0.59 per share, i.e. €5,664;*
- *acquisition of the BSA plan by Kepler Cheuvreux: €500.*

These amounts, together with the additional €2,790.40 paid at the subscription of 12,800 BSA warrants acquired for €0.22 (which have now expired) and the additional €8,160.00 paid upon subscription of 9,600 vested BSA warrants for €0.85 (which have now expired), initially recorded under "warrants," were included in the issue premium when the expiry of the said warrants was recognized.

The costs inherent to the capital increase of July 13, 2023 amounted to €7,605,661 and was fully charged to the issue premium in the same way as previous fundraising.

As a reminder, the direct costs associated with the listing of the Company on the Euronext Growth Paris market that took place in 2013 amounted to €1,196,108. The expenses relating to the fundraising carried out in 2019 amounted to €770,395 and those relating to the transactions carried out in 2020 to €1,957,332 and, finally, those for the share capital increase in 2021 to €6,003,554.

The "Issue premiums" item recorded under "Liabilities" on the statement of financial position also includes the sums received at the time of the subscription of the BSAs (see Note Dilutive financial instruments below), or €2,969.28 at December 31, 2023.

Earnings per share

At December 31, 2023, net earnings per share, obtained by dividing the profit or loss for the fiscal year of -€15,917,079 by the number of shares, i.e. 16,837,212, amounted to -€0.95.

DISTRIBUTION OF SHARE CAPITAL

At December 31, 2023, the 16,837,212 shares comprising the share capital were distributed as follows:

Shareholders	Number of shares	% ownership	Number of voting rights	% of voting rights
BOLD Business Opportunities for L'Oréal Development	943,211	5.60%	943,211	5.59%
Copernicus Wealth Management S.A.	654,271	3.89%	654,271	3.88%
Michelin Ventures	519,742	3.09%	519,742	3.08%
L'Occitane Group	392,852	2.33%	392,852	2.33%
Funds managed by Truffle Capital	176,565	1.05%	176,565	1.05%
Management and directors	3,001	0.02%	3,001	0.02%
Treasury shares	17,320	0.10%	-	0.00%
Free float	14,130,250	83.92%	14,184,327	84.06%
TOTAL	**16,837,212**	**100.00%**	**16,873,969**	**100.00%**

By collective decision of shareholders on February 20, 2013, it was decided to allocate a double voting right to all fully paid-up shares documented to have been held in registered form in the name of the same shareholder for at least two years.

As of December 31, 2023, 54,077 registered shares included in the free float met these criteria.

DILUTIVE FINANCIAL INSTRUMENTS

Share subscription warrants (BSAs)

The table below shows the status of the BSAs issued since the creation of the Company that were still outstanding at December 31, 2023, as well as additional information regarding their status as of that date.

When subscribing to the BSA plan, the beneficiary may have to pay a subscription price to the Company. This amount will be recognized in the "Share subscription warrants" account (accounting stem 1045). As soon as the warrants are exercised, the Company will recognize the capital increase (account 101 "Capital") and an issue premium (account 1041 "Issue premium" for the difference between the exercise price and the par value of the share) and will clear the "Share subscription warrants" account to the "Issue premium" account.

In the event that warrants have lapsed, the amount initially recognized in the "Share subscription warrants" account will be transferred to the "Issue premium" account.

	BSA EIB
Date of Shareholders' Meeting	Decision of the Shareholders' Meeting of 02/02/2022
Number of shares that may be subscribed or purchased(1)	318,158
Warrant exercise start date	05/27/2022
Expiration date	05/26/2030
Price of subscription or purchase of warrant	0.01
Warrant exercise method	The subscription must be recognized by a subscription form which must be given to the Company.
Exercise price (in euros)	€40 for 50% of the BSA EIB €38.8861 for 50% of the BSA EIB
Number of shares subscribed at December 31, 2023	0
Cumulative number of subscription or purchase warrants canceled or null and void	0
Share subscription warrants that may be exercised at December 31, 2023	296,928

(1) By decision dated August 4, 2023, the Chief Executive Officer of the Company, after noting the definitive completion of the capital increase and amending the Company's bylaws on July 13, 2023, decided to proceed with the adjustment of the securities already issued by the Company in accordance with Article L. 228-99 of the French Commercial Code, and consequently decided to increase the number of shares that may be subscribed by the holder of BSA warrants by an additional 21,230 shares on the exercise of the 296,928 BSAs and to subject them to the terms of the BSA-EIB-1 and BSA-EIB-2 plan regulations.

At its meeting of February 3, 2022, the Board of Directors implemented the delegation granted by the Combined Shareholders' Meeting of February 2, 2022 to decide to issue, with cancellation of preferential subscription rights, 296,928 share subscription warrants (BSA), giving the right to subscribe for 296,928 new ordinary Company shares for the benefit of the EIB. The Chairman recalled that under the loan agreement of €30 million signed with the EIB, the Company has committed, under the terms of a share subscription warrants agreement drafted in English (Subscription Agreement for Warrants in the Capital of Carbios S.A.) on December 20, 2021 (the "Issue Agreement"), to issue 296,928 share subscription warrants ("BSA") to the EIB. These share subscription warrants (BSA) would represent 2.5% of the Company's diluted share capital, and could be exercised for a period of eight years from their issue at a price corresponding to:

- €40 for 50% of the BSAs to be issued; and
- an amount equal to the volume-weighted average of the last three trading days preceding the fifth day preceding the signing of the contract relating to the issuance of the share subscription warrants (BSAs), i.e. €38.8861 for the remaining 50% of the BSAs.

During the 2023 fiscal year, CARBIOS did not issue any new BSA equity warrants.

During the 2023 fiscal year, 1,600 BSA-2013-1 were exercised.

As of December 31, 2023, 296,928 BSAs giving rights to 318,158 shares were still exercisable.

Founder share subscription warrants (BSPCEs)

The table below shows the status of BSPCEs issued since the creation of the Company that were still outstanding at December 31, 2023, as well as additional information regarding their status at that date.

When subscribing to the BSPCE plan, the beneficiary will not have to pay a subscription price to the Company. As soon as the BSPCEs are exercised, the Company will recognize the capital increase (account 101 "Capital") and an issue premium (account 1041 "Issue premium", for the difference between the exercise price and the par value of the share).

If BSPCE has lapsed, no accounting entry will be required.

	BCE 2015-2	BCE-2020-3	BCE-2020-6
Date of Shareholders' Meeting	Shareholders' Meeting of 06/24/2015	Shareholders' meeting of 06/19/2019	Shareholders' meeting of 06/18/2020
Date of Board of Directors' meeting	Decision of the Board of Directors of 06/24/2015	Decision of the Board of Directors of 03/12/2020	Decision of the Board of Directors of 07/09/2020
Total number of shares that may be subscribed or purchased, of which the number that may be subscribed or purchased(1)	16,073	45,592	30,806
Warrant exercise start date	06/24/2016	03/12/2020	07/09/2020
Expiration date	06/24/2025	03/12/2030	07/09/2030
Price of subscription or purchase of warrant	Free	Free	Free
Warrant exercise method	Possibility of exercising a number x of warrants per complete monthly period beginning on 06/24/2015, and for the first time from 06/24/2016, calculated according to the following rule: x = (total nb of BCEs 2015-2 allocated to the beneficiary * nb. of months since 06/24/2015)/48.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise one fourth of the BSPCEs allocated. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise one fourth of the BSPCEs allocated. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share. For the other 14,000 warrants: possibility of exercising y warrants where y = (number of warrants not yet exercisable) * % determined by the performance of the Carbios share price.
Exercise price (in euros)	12.4581	7.75934	20.6050
Number of shares subscribed at December 31, 2023	16,000	6,500	0
Cumulative number of subscription or purchase warrants canceled or null and void	0	0	0
Share subscription warrants that may be exercised at December 31, 2023	15,000	39,750	28,750

(1) In a decision dated August 4, 2023, the Chief Executive Officer of the Company decided to adjust the securities already issued by the Company in accordance with Article L. 228-99 of the French Commercial Code, and consequently decided to increase by 45,812 additional shares the number of shares that may be subscribed by holders on exercise of the 640,686 BSPCEs and to subject them to the terms of their respective plan regulations.

	BCE-2021-1, BCE-2021-3 to BCE-2021-5 and BCE-2021-7 to BCE-2021-14	BCE 2021-16	BCE 2021-17	BCE-2022-1 to BCE-2022-2
Date of Shareholders' Meeting	Shareholders' Meeting of 06/18/2020	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/22/2022
Date of Board of Directors' meeting	Decision of the Board of Directors of 01/15/2021	Decision of the Board of Directors of 11/05/2021	Decision of the Board of Directors of 11/05/2021	Decision of the Board of Directors of 06/29/2022
Total number of shares that may be subscribed or purchased(1), of which the number that may be subscribed or purchased by:	61,703	39,362	6,847	201,726
Emmanuel LADENT	-	39,362	-	148,151
Warrant exercise start date	01/15/2022	12/01/2022	11/05/2022	06/29/2025
Expiration date	01/15/2032	12/01/2032	11/05/2032	06/29/2032
Price of subscription or purchase of warrant	Free	Free	Free	Free
Warrant exercise method	Possibility of exercising a number x of warrants per full monthly period, and for the first time from 01/15/2022, calculated according to the following rule: x = total number of BCE-2021 granted to the beneficiaries * (number of months since 01/15/2021)/48. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share.	For the first 18,367 warrants: possibility of exercising x warrants per full monthly period beginning on 12/01/2021, and for the first time from 12/01/2022, calculated according to the following rule: x = 18,367 * (number of months since 12/01/2021)/48. The remaining 18,368 warrants are subject to four performance conditions to be exercised. Each condition met gives the right to exercise 5,510 warrants, 6,429 warrants, 2,755 warrants and 3,677 warrants, respectively. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share.	Possibility of exercising a number x of warrants per full monthly period, and for the first time from 11/05/2022, calculated according to the following rule: x = total number of BCE-2021 granted to the beneficiaries * (number of months since 11/05/2021)/48.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.
Exercise price (in euros)	44.5049	37.7340	39.7863	30.1316
Number of shares subscribed at December 31, 2023	0	0	0	0
Cumulative number of subscription or purchase warrants canceled or null and void	27,414	0	0	0
Share subscription warrants that may be exercised at December 31, 2023	57,586	36,735	6,390	188,265(2)

(1) In a decision dated August 4, 2023, the Chief Executive Officer of the Company decided to adjust the securities already issued by the Company in accordance with Article L. 228-99 of the French Commercial Code, and consequently decided to increase by 45,812 additional shares the number of shares that may be subscribed by holders on exercise of the 640,686 BSPCEs and to subject them to the terms of their respective plan regulations.

(2) May be exercised from June 29, 2025.

	BCE-2022-4	BCE-2022-5 to BCE-2022-6 and BCE-2022-13 to BCE-2022-14	BCE-2022-7 to BCE-2022-11	BCE-2022-12
Date of Shareholders' Meeting	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/19/2019	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/22/2022
Date of Board of Directors' meeting	Decision of the Board of Directors of 09/29/2022	Decision of the Board of Directors of 12/13/2022	Decision of the Board of Directors of 12/13/2022	Decision of the Board of Directors of 12/13/2022
Total number of shares that may be subscribed or purchased, of which the number that may be subscribed or purchased by(1):	53,575	111,503	88,307	34,004
Emmanuel LADENT	-	-	2,168	34,004
Warrant exercise start date	09/29/2025	12/13/2025	12/13/2025	12/13/2025
Expiration date	09/29/2032	12/13/2032	12/13/2032	12/13/2032
Price of subscription or purchase of warrant	Free	Free	Free	Free
Warrant exercise method	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.
Exercise price (in euros)	26.59321	33.27455	33.27455	33.27455
Number of shares subscribed at December 31, 2023	0	0	0	0
Cumulative number of subscription or purchase warrants canceled or null and void	0	0	0	0
Share subscription warrants that may be exercised at December 31, 2023	50,000(2)	104,062(3)	82,413(3)	31,735(3)

(1) In a decision dated August 4, 2023, the Chief Executive Officer of the Company decided to adjust the securities already issued by the Company in accordance with Article L. 228-99 of the French Commercial Code, and consequently decided to increase by 45,812 additional shares the number of shares that may be subscribed by holders on exercise of the 640,686 BSPCEs and to subject them to the terms of their respective plan regulations.

(2) May be exercised from September 29, 2025.

(3) May be exercised from December 13, 2025.

During the 2023 fiscal year, CARBIOS did not issue any new BSPCE founders' warrants.

During the 2023 fiscal year, 14,000 BSPCE-2017-1, 11,563 BSPCE-2020-2, 1,500 BSPCE-2020-3, and 7,188 BSPCE-2020-5 were exercised.

At December 31, 2023, 640,686 BSPCEs giving rights to 686,498 shares were still exercisable.

Free share allocation plans (AGA)

On September 27, 2023, the Board of Directors decided to set up a free share allocation plan ("AGA") for the benefit of some of its employees and corporate officers with a vesting period of three years and allocated 84,150 free shares.

There is no lock-up period attached to the free shares definitively acquired.

All free share plans give entitlement to the delivery of Carbios shares.

The free share allocation plans in force at December 31, 2023 are as follows:

Plan	2023-1 Plan	2023-2 Plan
Date of the Shareholders' Meeting that authorized the allocation of free shares	June 22, 2023	June 22, 2023
Grant date	September 27, 2023	October 16, 2023
Vesting period	3 years	3 years
Retention period	-	-
Total number of free shares allocated	74,150	10,000
Of which subject to performance conditions	74,150	10,000
Of which allocated to corporate officers	12,000(1)	
Number of shares vested in 2023	-	-
Number of shares canceled at December 31, 2023	-	-

(1) Mr. Emmanuel Ladent, Chief Executive Officer of the Company

NOTE 13 • BORROWINGS, CONDITIONAL ADVANCES AND SUBSIDIES

Loans

Denomination	Date	Rate	Duration	12/31/2022	New	Repayment	12/31/2023
Bpifrance Innovation loan	11/23/2018	3.21%	7.5 years	€1,050,000.00	€0.00	€300,000.00	€750,000.00
Bpifrance Innovation loan	11/20/2019	4.45%	7.5 years	€1,350,000.00	€0.00	€300,000.00	€1,050,000.00
State-guaranteed loan (Société Générale)	08/31/2020	0.25%	6 years	€1,000,000.00	€0.00	€250,000.00	€750,000.00
European Investment Bank	06/29/2022	5.00%	8 years	€30,000,000.00	€0.00	€0.00	€30,000,000.00
Accrued interest				€12,097.96	€11,584.15	€12,097.96	€11,584.15
TOTAL				**€33,412,097.96**	**€11,584.15**	**€862,097.96**	**€32,561,584.15**

The two Bpifrance loans were subject to guarantee deposit payments of €75 thousand each and are covered by life insurance policies – PTIA underwritten for Alain MARTY (50%) and Stéphane FERREIRA (50%). The term of loans provides for a 2-year deferred repayment and annual straight-line repayment over the following 5 years.

On August 31, 2020, collection of a state-guaranteed loan for €1,000 thousand from a banking institution for a period of 12 months. In June 2021, the Company negotiated with its bank an additional deferral of one year, i.e. until August 24, 2022 and, thereafter, repayment of the loan over 4 years.

On June 29, 2022, the Company received a loan from the European Investment Bank for an amount of €30 million. The contract provides for an annual repayment at constant capital, from June 29, 2025 until June 29, 2030.

The loan issue expenses are recognized in "Expenses to be spread over several fiscal years" and are spread on a straight-line basis over the total contract term. The Company recognized €521,068 in this respect, with €413,267 remaining to be spread at December 31, 2023.

Repayable advances granted by public entities

The portion of advances received from public entities for the financing of the Company's Research and Development activities, and whose repayment is conditional is presented in "Liabilities" under the heading of other equity capital "Conditional advances."

Denomination	Date	12/31/2022	New	Repayment	12/31/2023
(1) Bpifrance - THANAPLAST™ (Cond. adv.)	12/19/2012	€3,707,214.00			€3,707,214.00
(2) ADEME - CE-PET (Repayable adv. & Cond. adv.)	04/08/2019	€2,481,600.00	€620,400.00	€775,500.00	€2,326,500.00
(3) ADEME - OPTI-ZYME (Repayable adv. & Cond. adv.)	12/04/2023	€0.00	€756,462.00		€756,462.00
(4) ADI BPI (Repayable adv.)	06/13/2017	€57,500.00		€57,500.00	€0.00
Accrued interest		€22,324.20		€6,275.74	€16,048.46
TOTAL		**€6,268,638.20**	**€1,376,862.00**	**€839,275.74**	**€6,806,224.46**

Subsidies received

Subsidies received are recorded as soon as the corresponding receivable becomes certain, taking into account the conditions assigned to the awarding of the grant.

Operational subsidies are recorded under "Current income," taking into account, where applicable, the pace of the corresponding expenses in such a way as to comply with the principle of the matching of expenses with the income of the fiscal year.

Investment subsidies intended for the acquisition of fixed assets are initially recorded as equity, then are recognized as current income according to the pace of the depreciation applied to the corresponding fixed assets.

Detail of repayable advances and subsidies by project:

(1) Bpifrance grant (formerly known as OSEO-ISI): THANAPLAST™

• Subsidy
The Thanaplast™ project has been closed since June 30, 2017.

• Repayable advance
In the event of a successful research program, the Company is committed to reimbursing the repayable advance to Bpifrance for an amount of €4,525 thousand, according to the payment schedule below, upon achieving a cumulative income generated by the utilization of the products resulting from the Thanaplast™ project of €10 million.

Year 1* on June 30 at the latest	€300,000
Year 2 on June 30 at the latest	€500,000
Year 3 on June 30 at the latest	€800,000
Year 4 on June 30 at the latest	€975,000
Year 5 on June 30 at the latest	€1,950,000

** Following the crossing of the €10,000 thousand income threshold.*

As it is probable that this threshold will be reached, the Company has retroactively provisioned €351 thousand in respect of debt interest in its financial statements since 2018 of which €58 thousand in expense over the fiscal year.

In addition, as soon as the reimbursement of the repayable advance has been completed in accordance with the above payment schedule, the agreement stipulates that the Company shall pay a bonus equal to 4% of revenue generated by the utilization of the products, if this exceeds a cumulative amount of €100,000 thousand. This additional payment is, however, subject to a time limit (applicable only for a period of five consecutive years from the date of the end of the reimbursement of the advance), and an amount cap (ceiling of €7,100 thousand).

(2) ADEME grant: CE-PET project

On April 8, 2019, the Company obtained a grant from ADEME for the CE-PET project, composed of repayable advances totaling €3,102 thousand and subsidies of €1,034 thousand spread over a 48-month period from 2018 to 2022. The grants were released according to the project's progress and the submission of reports regarding the completion of each key stage stipulated in the framework agreement signed with ADEME. The agreement provides for a total grant rate of 60% that is applied to total eligible expenditures and used for each key stage, 25% of which is a subsidy and 75% a repayable advance (with conditions).

At December 31, 2023, the Company had completed the work for the fourth key stage. Since its creation, the Company has received:

(In euros)	1st payment	2nd payment	3rd payment	4th payment	5th payment	Total
Date of payment	**06/07/2019**	**10/21/2019**	**06/30/2020**	**12/06/2021**	**04/17/2023**	
Subsidy	€155,100	€206,800	€258,500	€206,800	€206,800	€1,034,000
Repayable advance	€465,300	€620,400	€775,500	€620,400	€620,400	€3,102,000
TOTAL	**€620,400**	**€827,200**	**€1,034,000**	**€827,200**	**€827,200**	**€4,136,000**

• Subsidy

The subsidy rate therefore amounts to 15% of the Industrial Research and Experimental Development expenses incurred by the Company in the context of the CE-PET project.

Eligible expenses incurred between January 31, 2018, the start date of eligibility, and December 31, 2022 are higher than the expenses provided for in the agreement signed with ADEME and make the entire amount of the subsidy to be received eligible.

Following the validation of key stage 4 and more generally the success of the project by ADEME at the end of 2022, the Company received the expected balance of the grant of €207 thousand on April 17, 2023 and thus received the entire program subsidy, i.e. €1,034 thousand.

• Repayable advance

The Company received €3,102 thousand in respect of the ADEME conditional advances, i.e. the total amount provided for in the agreement following the recognition of the complete success of the project.

The repayment of this amount is scheduled in four annual installments of €802,247, including €775,500 in capital and €26,747 in interest. The first payment was made on December 29, 2023. And the outstanding capital therefore amounts to €2,327 thousand at December 31, 2023.

(3) ADEME grant: OPTI-ZYME project

At the end of 2022, the Company obtained a grant from ADEME for the OPTI-ZYME project, composed of repayable advances totaling €5,043 thousand and subsidies of €3,119 thousand spread over a 48-month period from 2023 to 2026. The grants were released according to the project's progress and the submission of reports regarding the completion of each key stage stipulated in the framework agreement signed with ADEME. The agreement provides for a total grant rate of 62.97% of eligible expenses of which 75% that is applied to industrial research expenses and 50% to experimental development expenses with a breakdown of 38.21% in subsidies and 61.79% in repayable advances (with conditions).

The contract agreement stipulates that the completion of each key stage (KS) and the associated conditions provide entitlement to the following payments, capped based on a maximum % of cumulative grants:

(In euros)	KS1 (50%)	KS2 (30%)	KS3 (0%)	KS4 (20%)	Total
Planned payment year	**2023**	**2024**	**2025**	**2026**	
Subsidy	€1,559,238	€935,543	€0	€623,695	€3,118,476
Repayable advance	€2,521,538	€1,512,923	€0	€1,008,615	€5,043,076
TOTAL	**€4,080,776**	**€2,448,466**	**€0**	**€1,632,310**	**€8,161,552**

As of December 31, 2023, had received:

(In euros)	1st payment	Total
Date of payment	**12/04/2023**	
Subsidy	€467,771	€827,200
Repayable advance	€756,462	€2,481,600
TOTAL	**€1,224,233**	**€3,308,800**

The amount received corresponds to an advance of 15% of the total amount of the grant.

• Subsidy

The subsidy rate therefore amounts to 28.66% of the Industrial Research expenses and 19.11% of the Experimental Development expenses incurred by the Company in the context of the OPTI-ZYME project.

Eligible expenses incurred since January 1, 2023, the start date of eligibility, and December 31, 2023 generate a theoretical subsidy of €536 thousand. To date, the Company has received €468 thousand in ADEME subsidies since the start of the program (see table above). Nevertheless, given the uncertainty at closing as to the validation of key stage 1, the amount of subsidy to be received of €68 thousand was not provisioned out of prudence.

• Repayable advance

The amount that Carbios owes ADEME for repayment of the amount of the Repayable Advance Paid (hereinafter the "Total Amount Payable") shall be equal to the total of the following two amounts:

- an "Ms1 Amount" which depends on the achievement of a threshold of Cumulated Certified Income excluding tax associated with the marketing of the 1st Generation enzymatic recycling process (operating licenses and/or depolymerization enzymes and/or related services),
- an "Ms2 Amount" which depends on the achievement of a threshold of Cumulated Certified Income excluding tax associated with the marketing of the 2nd Generation enzymatic recycling process (operating licenses and/or depolymerization enzymes and/or related services).

Repayment of the Ms1 Amount

a) Determination of the Ms1 Amount

The Rate R1 is set at 4.06%.

The Beneficiary shall repay ADEME an amount whose Discounted Value using Rate R1 is equal to 80% of the Discounted Value using Rate R1 of the amount of the Repayable Advance Paid (hereinafter "Ms1 Amount").

b) Repayment terms for the Ms1 Amount

The Ms1 Amount is due when the following two events have occurred (hereinafter the "Ms1 Generating Event"):

- the achievement of a Cumulative Certified Income excluding tax of a minimum amount set at €150 million (or any other currency),
- the Term of the Investment Phase.

However, if the Ms1 Generating Event has not yet occurred at the end of the Fiscal Year taking place three (3) years after the occurrence of the Term of the Investment Phase, the Beneficiary will be released from any obligation to repay the Ms1 Amount. In this case, the Agreement will be terminated, without further formality, provided, however, that the Beneficiary has otherwise fulfilled all of its obligations to ADEME, as defined in the Agreement.

Repayment of the Ms1 Amount shall be made in two (2) annual installments of the same amount.

The first installment shall be paid six (6) months after the end of the Beneficiary's Fiscal Year in which the Ms1 Generating Event is recorded.

The following withdrawals will be made annually, one (1) year after the previous one

c) Early repayment of the Ms1 Amount

Upon the achievement of an Income Excluding Tax of at least one (1) euro (or any other currency), and after the Term of the Investment Phase, the Beneficiary will be able to repay in advance and in a single payment, the Ms1 Amount, less any sums it would have already paid in respect of this amount.

The Beneficiary must inform ADEME in writing of its intention to make use of this option of early repayment of the Ms1 Amount. ADEME will then debit the amount due from a period of two (2) months following receipt of the Beneficiary's request.

Repayment of the Ms2 Amount

a) Determination of the Ms2 Amount

The Rate R1 is set at 4.06%.

The Beneficiary shall repay ADEME an amount whose Discounted Value using Rate R2 is equal to 20% of the Discounted Value using Rate R2 of the amount of the Repayable Advance Paid (hereinafter "Ms2 Amount").

b) Repayment terms for the Ms2 Amount

The Ms2 Amount is due when the following two events have occurred (hereinafter the "Ms2 Generating Event"):

- the achievement of a Cumulative Certified Income excluding tax of a minimum amount set at €150 million (or any other currency),
- the Term of the Investment Phase.

However, if the Ms2 Generating Event has not yet occurred at the end of the Fiscal Year taking place six (6) years after the occurrence of the Term of the Investment Phase, the Beneficiary will be released from any obligation to repay the Ms2 Amount. In this case, the Agreement will be terminated, without further formality, provided, however, that the Beneficiary has otherwise fulfilled all of its obligations to ADEME, as defined in the Agreement.

Repayment of the Ms2 Amount shall be made in two (2) annual installments of the same amount.

The first installment shall be paid six (6) months after the end of the Beneficiary's Fiscal Year in which the Ms2 Generating Event is recorded.

The following withdrawals will be made annually, one (1) year after the previous one.

c) Early repayment of the Ms2 Amount

Upon the achievement of an Income Excluding Tax of at least one (1) euro (or any other currency), and after the Term of the Investment Phase, the Beneficiary will be able to repay in advance and a single payment, the Ms2 Amount, less any sums it would have already paid in respect of this amount.

The Beneficiary must inform ADEME in writing of its intention to make use of this option of early repayment of the Ms2 Amount. ADEME will then debit the amount due from a period of two (2) months following receipt of the Beneficiary's request.

The Company received €757 thousand from ADEME, but this debt remains subject to the achievement of the income thresholds set out above and is therefore recognized as quasi-equity.

(4) ADI BPI

The Company obtained a recoverable advance of €265 thousand from Bpifrance for an innovation project, of which €215 thousand was paid out in 2017 and the balance of €50 thousand in December 2018. Repayments began in 2019. The acknowledgment of program success will make it eligible for the repayment of the full amount. If the program fails, the Company may file a statement of failure and thus reduce the total amount repayable, set at a minimum of €106 thousand. The Company settled the last repayment on June 30, 2023.

LIFE aid: Life cycle of PET

On October 25, 2021, the Company obtained aid consisting exclusively of subsidies for a total amount of €3,300 thousand for the LIFE CYCLE OF PET project from the European Agency of Climate and the Environment, of which €600 thousand concerns investment expenses and €2,700 thousand operating expenses. The program includes the participation of Deloitte and T.EN Zimmer GmbH, whose total share represents €80 thousand. Carbios is the project coordinator.

The total amount of expenses to be incurred by Carbios under the project amounts to €8,880 thousand, of which €8,343 thousand is eligible. Carbios' share of the subsidy is €2,620 thousand (€2,700 thousand - €80 thousand), i.e. a financing rate of 36.26% of total estimated costs and a subsidy rate of 38.59% of eligible expenses. Capital expenditure is 100% financed, i.e. €600 thousand.

The payments are planned as follows:

- 1st pre-financing of 40% within 30 days following the signature of the contract, i.e. €1,320 thousand collected on November 5, 2021, of which €32 thousand to partners and €1,288 thousand to CARBIOS;
- 2nd pre-financing of 40% subject to having used 100% of the pre-financing deposit previously paid, i.e. €1,320 thousand collected on August 8, 2023, of which €32 thousand goes to partners and €1,288 thousand to CARBIOS;
- the balance of 20% at the end of the project.

The expenses incurred since the start of the program were calculated on the basis of actual expenses, i.e. an amount of €6,535 thousand. The corresponding theoretical subsidy amounts to €2,040 thousand (€6,535 thousand x 31.21%).

On the basis of the expenses incurred and the grant received, the Company recognized accrued income, equivalent to a current receivable for an amount of €64 thousand.

All capital expenditure, i.e. €600 thousand, was recognized in equity.

Other public and private grants obtained

The Company also obtained:

- a subsidy from the Auvergne Region (FIAD) of €397 thousand, of which €181 thousand was paid in 2013 and the balance of €216 thousand was paid in November 2015. The remaining portion of the investment subsidy associated with the acquisition of the Setup Performance patent is recorded in income at the rate that the patent is amortized;
- two Innovation Loans from Bpifrance for a total of €3,000 thousand at floating rates to finance the intangible expenses related to its desire to launch the industrialization process. After a period of 8 quarters of deferred amortization, repayments at constant capital of €75 thousand began on September 30, 2021 for the first loan and will begin with a one-year delay for the second, i.e. a total amount remaining due of €1,800 thousand at the closing date; and
- a subsidy from the European Commission for the WhiteCycle project, led by Michelin (lead partner), starting on July 1, 2022, for a period of 48 months, with an amount of eligible expenses for Carbios of €805 thousand (total project of €9 million), and for which the Company will be able to obtain a subsidy of up to €563 thousand (out of the €7 million allocated to the complete project). In this respect, the Company received an advance of €272 thousand (48.3%). As of December 31, 2023, the Company had incurred only €31 thousand in expenses, i.e. a theoretical subsidy of €22 thousand. The difference, i.e. €251 thousand, was recognized as deferred income.

NOTE 14 • INCOME AND OTHER OPERATING INCOME

Total operating income amounted to €7,446 thousand at December 31, 2023 and mainly consisted of income, other operating income and transfers of operating expenses in the amount of €2,445 thousand.

Income is recognized when goods or services are delivered by the Company. However, in the case of invoicing carried out in advance and for a given period (subscription that would be spread over two separate fiscal years, for example) the amount will be corrected at the closing date by deferred income (in proportion to the portion relating to the given fiscal year) in order to respect the principle of income recognition and that of independence of fiscal years.

Income: €1,747 thousand

Licensing and sub-licensing of patent and know-how licenses

The Company entered into a patent license and know-how agreement with S.A.S. Carbiolice on August 30, 2016 for a period running until the expiry of the last of the patents granted, and an amendment signed on June 28, 2018. Payment for this agreement is scheduled to take the form of an €8 million lump-sum royalty payment and variable royalties based on the revenue generated from Carbiolice's use of the licensed technology. No royalty income was recognized as of December 31, 2023, since the Carbiolice subsidiary did not make any sales in connection with this license.

Other contracts

In addition, the Company obtained €1,747 thousand from other contracts, including €720 thousand in respect of service agreements with its subsidiaries (see Note 17), and the rest of the income came from various contracts. services, including R&D services.

Other operating income: €5,699 thousand

R&D capitalization

The income recognized as part of the capitalization of R&D ("Capitalized production") amounted to €1,578 thousand at December 31, 2023. It included all the development costs of the industrial demonstration plant considered to be capitalized from September 30, 2021. From that date, all of the activation conditions were met. The previous stages of research and development (laboratory level) and management (pilot level) are considered as general research and not development.

Operating subsidy

As part of the OPTI-ZYME project, the Company recorded €468 thousand in operating subsidies received on December 4, 2023. The Company is slightly ahead of the expenses incurred on the project but no accrued income has been recognized as a precaution, pending the validation of key stage 1.

The LIFE project generated operating income of €1,126 thousand over the fiscal year, after recognition of accrued income calculated based on actual expenditure (see Note 13).

Other operating income

The Company recorded operating income of €2,445 thousand in respect of reversals of depreciation, amortization and provisions and transfers of expenses, mainly consisting of:

- The secondment of personnel for the benefit of its subsidiary CARBIOS 54, rebilled for a total of €1,890 thousand,
- Various expenses incurred on behalf of its subsidiaries and rebilled for €363 thousand.

NOTE 15 • OPERATING EXPENSES

The Company's operating expenses mainly consist of R&D costs and salaries. For the past two fiscal years, they break down as follows:

(In thousands of euros)	2023	2022
Other costs and external expenses		
External studies, subcontracting and scientific consultations	2,587	3,432
Consumables	395	315
Supplies	589	354
Rentals, maintenance and upkeep expenses	3,136	1,878
Expenses and fees related to industrial property	268	74
Fees	5,491	6,317
Business travel	650	614
Miscellaneous expenses	588	926
Total other expenses and external expenses	**13,704**	**13,910**
Taxes. Taxes and similar payments	124	138
Salaries and wages	8,500	6,580
Social security contributions	3,368	2,510
Depreciation of fixed assets	2,587	1,910
Other expenses	255	191
TOTAL OPERATING EXPENSES	**28,537**	**25,239**

In 2023, Carbios spent €28,537 thousand on operational activities (compared to €25,239 thousand in 2022), of which 52% concerned RDI (Research & Development and Industrialization).

Thus, 47% of operating expenses were devoted directly to research and development. In accordance with the Company's roadmap and priorities, this effort has mainly focused on the development of the enzymatic recycling process for PET plastics and fibers.

The decrease in external study, subcontracting and scientific consulting items is mainly due to the launch of the OPTI-ZYME project financed by ADEME, where the Group's academic partners are financed directly through the said project.

Fee expenses have decreased because the plant's engineering expenses are no longer recognized as expenses at Carbios in 2023. In 2022, approximately €3 million directly related to the PET biorecycling plant project linked to Carbios 54, a subsidiary created by the Company in 2022 to build and operate the PET biorecycling plant. Nevertheless, on a like-for-like basis, the Company sought its advice more (+€1.6 million) on many subjects (recruitment, QHSE, IT) in order to continue its development and structuring.

Lastly, personnel expenses (salaries and wages, and social security contributions) continue to increase significantly in line with the significant growth in the Company's headcount, in view of its structuring; this growth is expected to continue in 2024.

In general, R&D expenses include the expenses related to the following:

- external studies conducted in collaboration with the Company's academic partners and the outsourcing of a certain amount of technological work to its partners for the development of processes dedicated to the end-of-life of plastic materials;
- research personnel costs, including salaries, emoluments and social contributions, as well as environment expenses such as workstations and travel;
- scientific consultancy contracts with scientific experts and advisers who assist the Company in defining and supervising its R&D programs;
- expenses and fees related to industrial property; and
- the structural costs of the Company's R&D department.

No sumptuary expenditure was recorded for fiscal year 2023, and expenses not deductible from corporate income tax amounted to €117,510 for fiscal year 2023 (Article 223 quater and 39-4 of the French General Tax Code).

NOTE 16 • AVERAGE HEADCOUNT

	Average headcount in 2023	Average headcount in 2022
Managers	61	45
Supervisory staff and technicians	34	21
Employees	0	0
TOTAL	**95**	**66**

NOTE 17 • RELATED PARTIES

On December 31, 2023, in respect of their participation in the meetings of the Board of Directors and the various Committees and Commissions in 2023, CARBIOS paid (and provisioned) compensation to the members of the Board of Directors in the amount of €239 thousand (excluding social security contributions). Over the full year, the average attendance rate of directors at Board of Directors meetings was 95%.

Related parties	Nature of the relationship with the related party	Amounts of transactions with related parties (amounts due)
Emmanuel LADENT – Chief Executive Officer	Employment contract	Fixed compensation: €363,373 Annual variable bonus: €196,663 Exceptional bonus: €384,155 Benefits in kind: €14,871

No advances or loans were granted to them, and no other commitments were made on their behalf.

The following transactions were performed during the 2023 fiscal year with the subsidiary Carbiolice:

- licensing and sub-licensing of patents and know-how: See Note 14;
- rebilling of tests and regulatory matters, and service agreement (€697 thousand in operating income) Rebilling of fees related to regulatory issues according to the letters of agreement signed with Carbiolice for €97 thousand, as well as management services for €600 thousand;
- Other transactions: various rebilling of expenses incurred on behalf of CARBIOLICE for €86 thousand; and
- advance in the current account for a total amount of €4,720 thousand at December 31, 2023, which did not give rise to remuneration.

The following transactions were performed during the 2023 fiscal year with the subsidiary Carbios 54:

- advance through a cash management agreement for a total amount of €22,193 thousand at December 31, 2023, bearing interest at the maximum deductible rate of 5.57%, i.e. accrued income for CARBIOS of €647 thousand; and
- rebilling of expenses incurred as part of the project to create the PET biorecycling plant for €2,072 thousand. This notably includes personnel expenses as well as external services;
- Management services for the subsidiary for €120 thousand

NOTE 18 • STATUTORY AUDITORS' FEES

The total amount of Statutory Auditors' fees shown in the income statement for the fiscal year (French GAAP, Article 833-14/4) amounts to €187,725 and breaks down as follows:
- Fees related to the certification of the financial statements:
  - Statutory: €61,100
  - Consolidated: €71,400
- Services other than the certification of the financial statements (SACC) provided for by the legal texts: €125,500.

NOTE 19 • FINANCIAL INCOME

The Company's financial income consists of interest on money-market investments and term account deposits. All available cash is placed in risk-free money market products. The Company obtained two loans from Bpifrance for a total of €3,000 thousand at a rate of 3.03% for the first on November 23, 2018 and 4.34% for the second on November 20, 2019. A loan guaranteed by the State was released on August 31, 2020 at the rate of 0.25%. The conditional advances granted by Bpifrance and ADEME also bear interest at the respective discount rates of 2.67% and 0.84%, according to the conditions provided for in the contracts and detailed in Note 13. On June 29, 2022, the Company also contracted a loan of €30,000 thousand with the EIB at a rate of 5%.

(In thousands of euros)	2023	2022
Financial income	4,430	134
Financial expenses	1,681	1,194
FINANCIAL INCOME/(EXPENSES)	**2,748**	**(1,060)**

Financial income mainly comes from investments of available cash for €3,778 thousand as well as accrued interest on the CARBIOS 54 receivable for €647 thousand, calculated at the maximum deductible rate of 5.57%.

Financial expenses in 2023 consisted mainly of interest on the Bpifrance loans for €85 thousand, the State-guaranteed loan for €10 thousand and the EIB loan for €1,500 thousand. They also include interest on the ADEME debts for €212 thousand and OSEO Thanaplast. TM debts for €58 thousand.

NOTE 20 • EXTRAORDINARY GAIN OR LOSS

For the 2023 fiscal year, the extraordinary gain or loss was negative by €102 thousand, mainly composed of a loss on treasury shares of €79 thousand and late payment penalties of €19 thousand.

There was also a sale and leaseback transaction for an amount of €4,262 thousand relating to investments made on the industrial demonstration plant, which had no impact on extraordinary gain or loss since it did not generate any capital gains or losses.

NOTE 21 • INCOME TAX

Since the Company does not currently generate any profit, it does not have any income tax expenses. The amount recognized for corporate income tax consists solely of the research tax credit and amounted to €2,528 thousand for 2023.
The fiscal deficit carried forward for the fiscal year amounted to €25,885 thousand.
Since January 1, 2023, the Company has opted for the tax consolidation regime. Before tax consolidation, Carbios generated €73,712 thousand in tax losses; the Group's tax deficit amounted to €33,357 thousand at December 31, 2023.
The Company has not distributed any dividends or other income (Art. 243 bis of the French General Tax Code) during the last three fiscal years.

NOTE 22 • OFF-BALANCE SHEET COMMITMENTS

Commitments given

Retirement indemnity

The Company has not signed any specific agreement on pension commitments, which are therefore limited to the contractual retirement benefit.
No provisions for charges were recognized in respect of this fiscal year.
The retirement benefit is determined by applying a method that takes into account projected end-of-career salaries, employee turnover, life expectancy and the assumption of discounting expected payments.
The rights of employees to retirement indemnities were assessed at €161,658 at December 31, 2023.

This figure was calculated according to the following assumptions:

- voluntary retirement;
- retirement age: 64 years;
- turnover: slow;
- discount rate: 3.17%;
- increase in wages: 3%.

Risk hedging set up for the benefit of funders

The two Bpifrance loans are covered by life insurance policies - PTIA underwritten for Alain MARTY (50%) and, initially, Martin STEPHAN (50%). Following the departure of the latter, the contract is being transferred to Stéphane FERREIRA. The term of loans provides for a 2-year deferred repayment and annual straight-line repayment over the following 5 years.

A guarantee of €303 thousand was also put in place by Bpifrance as part of the lease-back contract to counter-guarantee part of the refinancing by the banks. In addition, a commitment was given to one of the banks on leasing equipment.

Leasing

The Company's commitments include the sale-leaseback financing of industrial equipment for a total of €6,404 thousand over a period of five years (see details of the table below), representing the financing of pilot equipment for €604 thousand, and also the entire budget allocated to the industrial demonstration plant, i.e. €5.8 million.

	Land	Buildings	Equipment and Tools	Others	Total
Initial values:			6,404,054		6,404,054
Depreciation:					
Previous aggregations			515,581		515,581
Provisions for the fiscal year			428,423		428,423
TOTAL			**944,005**		**944,005**
Fees paid:					
Previous aggregations			567,798		567,798
Fiscal year			882,748		882,748
TOTAL			**1,450,547**		**1,450,547**
Fees to be paid:					
at maximum 1 year			1,465,600		1,465,600
from over 1 year to less than 5 years			4,440,677		4,440,677
over 5 years					
TOTAL			**5,906,277**		**5,906,277**
Residual value:					
at maximum 1 year			3,226		3,226
from over 1 year to less than 5 years			60,814		60,814
over 5 years					
TOTAL			**64,041**		**64,041**

Letters of support to subsidiaries

The Company has issued letters of support to each of its subsidiaries, Carbiolice and Carbios 54, in order to materialize the financial support that it will be ready to provide to ensure the continuity as a going concern of the two companies for the next 12 months.

Commitments received

None.

NOTE 23 • SUBSIDIARIES AND EQUITY INTERESTS

Since fiscal year 2021, Carbios has been the consolidating company of the group, which it comprises with its subsidiaries Carbiolice and now Carbios 54.

(In euros)	S.A.S. Carbiolice	S.A.S. Carbios 54
Share capital	28,618,748	10,000
Reserves and carryforwards prior to the allocation of income	(23,303,622)	(3,282,875)
Portion of share capital owned (%)	100%	100%
Book value of securities held	38,371,461	10,000
Loans and advances granted by the Company and not yet repaid	4,047,540	22,840,473
Amount of guarantees given by the Company	-	-
Revenue excluding tax for the most recent fiscal year	25,044	-
Results (profit or loss for the most recent period ended)	(5,052,142)	(2,466,041)
Dividends received by the Company during the fiscal year	-	-
Comments	NA	NA

At the end of the period, the value in use of the Carbiolice equity interests exceeded their carrying amount. There are no provisions to be recorded at December 31, 2023. Since Carbios 54 is a newly created subsidiary, the value in use is aligned with the carrying amount of the shares.

Additional information is available in Note 5 of this document.

5.4 STATUTORY AUDITORS' REPORT ON THE ANNUAL FINANCIAL STATEMENTS

(Fiscal year ended December 31, 2023)

To the Shareholders' Meeting,

Opinion

Pursuant to the mission entrusted to us by your Shareholders' Meeting, we have audited the annual financial statements of Carbios for the fiscal year ended December 31, 2023, as appended to this report.

We certify that in accordance with French accounting principles, the annual financial statements are sincere and provide a true and fair view of the results of operations, financial position and assets of the company at the end of the fiscal year.

Basis of opinion

Audit guidelines

We conducted our audit in accordance with the professional standards applicable in France. We believe that the information we have collected is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are indicated in the section "Statutory Auditors' responsibilities with regard to the audit of the annual financial statements" in this report.

Independence

We carried out our audit in compliance with the rules of independence provided for by the French Commercial Code and by the Statutory Auditors' Code of Ethics for the period from January 1, 2023 to the date of issue of our report.

Justification for the assessments

In application of the provisions of Articles L. 821-53 and R. 821-180 of the French Commercial Code concerning the justification for our assessments, we would like to draw your attention to the following assessments, which, in our professional judgment, were the most material for the audit of the annual financial statements for the fiscal year.

The assessments made come within the context of the audit of the annual financial statements taken as a whole and the formation of our opinion expressed above. We do not express an opinion on the elements of these annual financial statements taken separately.

Accounting estimates

Equity interests, for which the net amount shown in the statement of financial position at December 31, 2023 was €38,382 thousand, mainly consisted of Carbiolice shares. They are valued at their acquisition cost and impaired on the basis of their value in use according to the methods described in Note 5 to the paragraph "Equity interests." On the basis of the information provided to us, our work consisted in assessing the consistency and justification of the data, assumptions and method on which these values in use are based; in particular, we checked the consistency of the cash flows used with the forecast data from the Carbiolice business plan validated by its Board of Directors and analyzed the sensitivity of the estimates to the various assumptions.

As part of our assessments, we verified the reasonableness of these estimates.

Specific checks

In accordance with professional standards applicable in France, we have also performed the specific verifications required by law and regulations.

Information provided in the management report and in the other documents on the financial position and the annual financial statements addressed to shareholders

We have no matters to report as to the fair presentation and the consistency with the annual financial statements of the information given in the management report of the Board of Directors and in the other documents on the financial position and the annual financial statements sent to the shareholders.

We attest to the fairness and consistency with the annual financial statements of the information relating to payment terms mentioned in Article D. 441-6 of the French Commercial Code.

Corporate governance information

We hereby confirm that the section of the Board of Directors' management report on corporate governance contains the information required by Article L. 225-37-4 of the French Commercial Code.

Other information

In accordance with the law, we have ensured that the various information relating to the identity of the holders of share capital or voting rights were communicated to you in the management report.

Responsibilities of management and the people comprising the corporate governance with regard to the annual financial statements

The management team is responsible for preparing annual financial statements that present a true and fair view in accordance with French accounting rules and principles and to implement the internal control that it deems necessary for preparing annual financial statements that do not include material misstatements, whether due to fraud or error.

When preparing the annual financial statements, it is the responsibility of management to assess the company's ability to continue as a going concern, to present in these financial statements, where applicable, the necessary information relating to the going concern and to apply the going concern accounting convention, unless it is planned to liquidate the company or cease operations.

The annual financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors with regard to the audit of the annual financial statements

It is our responsibility to prepare a report on the annual financial statements. Our aim is to obtain the reasonable assurance that the annual financial statements taken as a whole do not include material misstatements. Reasonable assurance corresponds to a high level of assurance, but does not guarantee that an audit conducted in accordance with professional standards will systematically detect all material misstatements. Misstatements may come from fraud or result from errors and are considered as material when we can reasonably expect that they may, taken individually or cumulatively, influence the economic decisions that users of the financial statements may make based on the financial statements.

As stipulated in Article L. 821-55 of the French Commercial Code, our certification task for the financial statements does not consist of guaranteeing the viability or quality of your company.

As part of an audit conducted in accordance with the professional standards applicable in France, the Statutory Auditor exercises his/her professional judgment throughout this audit. Moreover:

- he/she identifies and assesses the risks that the annual financial statements include material misstatements, either from fraud or resulting from errors, defines and implements audit procedures to address these risks and collects the elements that he/she considers sufficient and appropriate on which to base his/her opinion. The risk of non-detection of a material misstatement from fraud is higher than for a material misstatement resulting from an error, as fraud may involve collusion, falsification, voluntary omission, false declaration or circumvention of internal control;

- he/she takes note of the relevant internal control for the audit in order to define the appropriate audit procedures and not to express an opinion on the effectiveness of the internal control;

- he/she assesses the appropriate nature of the selected accounting methods and the reasonable nature of the accounting estimates made by management, as well as the information about them provided in the annual financial statements;

- he/she assesses the appropriate nature of management's application of the going concern convention and, depending on the elements collected, whether or not a material uncertainty or circumstances exist that are likely to call into question the company's ability to continue its operations. This assessment is based on the elements collected up to the date of his/her report, it being recalled that subsequent circumstances or events may call into question the going concern. If he/she concludes that a material uncertainty exists, he/she draws the readers' attention to the information provided in the annual financial statements on the subject of this uncertainty or, if this information is not provided or is not relevant, he/she formulates a certification with reserves or refuses the certification;

- he/she assesses the presentation of the annual financial statements as a whole and assesses whether the annual financial statements reflect the underlying operations and events so as to provide a true and fair view.

Lyon, April 19, 2024

The Statutory Auditor

PricewaterhouseCoopers Audit

Gonzague Van Royen


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6. SHARE CAPITAL AND SHAREHOLDING STRUCTURE

6.1 SHAREHOLDING STRUCTURE

6.1.1 DISTRIBUTION OF SHARE CAPITAL

6.1.1.1 Distribution of share capital over the last three fiscal years

	Capital as of 12/31/2023			Capital as of 12/31/2022			Capital as of 12/31/2021		
Shareholders	**Number of shares**	**% of share capital**	**% of voting rights**	**Number of shares**	**% of share capital**	**% of voting rights**	**Number of shares**	**% of share capital**	**% of voting rights**
Truffle Capital Funds	176,565	1.05%	1.05%	46,511	0.41%	0.41%	46,511	0.42%	0.42%
Directors(1)	3,001	0.02%	0.02%	15,646	0.14%	0.14%	15,804	0.14%	0.14%
Copernicus Wealth Management S.A.(2)	654,271	3.88%	3.87%	658,392	5.86%	5.86%	658,392	5.89%	5.88%
Business Opportunities for L'Oréal Development (BOLD)	943,211	5.60%	5.59%	660,248	5.87%	5.87%	660,248	5.91%	5.90%
Michelin Ventures	519,742	3.09%	3.08%	486,400	4.33%	4.33%	486,400	4.35%	4.35%
L'Occitane Group	392,852	2.33%	2.33%	263,157	2.34%	2.32%	263,157	2.35%	2.35%
Treasury shares	17,320	0.10%	N/A	3,729	0.03%	N/A	3,648	0.03%	N/A
Free float	14,130,137	83.92%	84.06%	9,108,583	81.02%	81.18%	9,045,712	80.91%	80.89%
TOTAL	**16,837,212**	**100.0%**	**100.0%**	**11,242,666**	**100.0%**	**100.0%**	**11,179,472**	**100.0%**	**100.0%**

(1) The "directors" line of the table does not take into account holdings of BOLD or Michelin Ventures. Specific lines are dedicated to these directors. BOLD, Business Opportunity for L'Oréal Development, represented by Laurent SCHMITT and Michelin Ventures, represented by Nicolas SEEBOTH, have been members of the Board of Directors since June 23, 2021.

(2) Shares held by funds and/or individuals with Copernicus Wealth Management SA as their management company.

To the best of its knowledge, the Company does not have any collateral on a significant portion of its capital.

6.1.1.2 Breakdown of share capital at the date of this Universal Registration Document

The table below indicates the breakdown of Carbios' share capital and voting rights, to the best of the Company's knowledge, at April 10, 2024 as well as the breakdown of share capital if all the financial instruments issued or to be issued giving access to the capital were to be exercised:

	Existing share capital					Breakdown of share capital in the event of the exercise of all financial instruments giving access to the share capital(3)				
Shareholders	**Number of shares**	**% of share capital**	**Theoretical number of voting rights**	**Number of voting rights exercisable**	**% of voting rights exercisable**	**Number of shares**	**% of share capital**	**Theoretical number of voting rights**	**Number of voting rights exercisable**	**% of voting rights exercisable**
BOLD	943,211	5.60%	943,211	943,211	5.60%	943,211	5.27%	943,211	943,211	5.27%
Copernicus Wealth Management S.A.(1)	654,271	3.88%	654,271	654,271	3.88%	654,271	3.66%	654,271	654,271	3.66%
Michelin Ventures	519,742	3.09%	519,742	519,742	3.08%	519,742	2.91%	519,742	519,742	2.91%
L'Occitane Group	392,852	2.33%	392,852	392,852	2.33%	392,852	2.20%	392,852	392,852	2.20%
Truffle Capital Funds	176,565	1.05%	176,565	176,565	1.05%	176,565	0.99%	176,565	176,565	0.99%
EIB	0	0.00%	0	0	0.00%	318,158	1.78%	318,158	318,158	1.78%
Directors(2)	3,001	0.02%	3,001	3,001	0.02%	238,686	1.33%	238,686	238,686	1.33%
Treasury shares	38,085	0.23%	38,085	N/A	N/A	38,085	0.21%	38,085	N/A	N/A
Free float	14,117,903	83.81%	14,159,059	14,159,059	84.04%	14,599,291	81.65%	14,640,447	14,640,447	81.86%
Total	**16,845,630**	**100.00%**	**16,886,786**	**16,848,701**	**100.00%**	**17,880,861**	**100.00%**	**17,922,017**	**17,883,932**	**100.00%**

(1) Shares held by funds and/or individuals with Copernicus Wealth Management SA as their management company.
(2) The "directors" line of the table does not take into account holdings of BOLD or Michelin Ventures. Specific lines are dedicated to these directors. BOLD, Business Opportunity for L'Oréal Development, represented by Laurent SCHMITT and Michelin Ventures, represented by Nicolas SEEBOTH, have been members of the Board of Directors since June 23, 2021.
(3) Taking into account the various BSA, BSPCE and AGA plans.

Carbios' main shareholders include:

- Business Opportunities for L'Oréal Development (BOLD), a venture capital fund created by L'Oréal to support the development of innovative start-ups with high growth potential by purchasing minority stakes in their share capital and providing them with expertise, networks and mentoring;
- Copernicus Wealth Management, a manager of private and public investment funds. It is based in Switzerland and recognized by the local supervisory body FINMA, the CSSF in Luxembourg and the CBI in Ireland. Through the investment vehicles it manages, Copernicus Wealth Management favors investments in innovative companies with high growth potential that can improve social well-being and address important issues such as the environment;
- the Michelin Ventures Fund, created by Michelin and launched in 2018 to give concrete expression to Michelin's Open Innovation approach. The purpose of this fund is to invest in high-tech materials that include sustainable development, new experiences and digital solutions that improve the mobility of goods and people. The purpose of the fund is to promote safer, more pleasant and environmentally responsible mobility;
- L'Occitane International S.A. (Switzerland), a wholly-owned subsidiary of L'Occitane International SA (LOI) and head office of L'Occitane Group, a retailer of cosmetic well-being products based on natural and organic ingredients, which has more than 3,000 points of sale in 90 countries; and
- Truffle Capital, a major independent player in the European private equity market. Truffle Capital aims to build and support high-potential companies developing breakthrough technologies in two business sectors: Life Sciences and Information Technologies. Today, Truffle Capital manages more than €700 million in vehicles for natural persons (FCPIs, management mandates and holdings) as well as institutional funds (FPCIs), and has built a solid portfolio of rapidly growing innovative companies.

Dilution generated by the exercise of various BSA and BCE plans, and the acquisition of AGAP, based on the number of shares as at the date of this Universal Registration Document

- 590,686 BCEs. If all of these BCEs were exercised, they would give rights to 632,923 new shares.
- 296,928 BSAs. If all of these BSA were exercised, they would give rights to 318,158 new shares.
- 84,150 AGAP. If all of the AGAP were acquired in exchange for new shares, they would give rights to 84,150 new shares.

	Existing securities	In the event of exercising BCEs	In the event of exercising BSAs	In the event of acquisition of AGAP	In the event of exercising BSAs and BCEs and acquisition of AGAP
Number of shares	16,845,630	632,923	318,158	84,150	1,035,231
Total number of shares after exercising warrants		17,478,553	17,163,788	16,929,780	17,880,861
Dilution (on an undiluted basis)		3.76%	1.89%	0.50%	6.15%

6.1.2 DOUBLE VOTING RIGHTS

Double voting rights compared to the percentage of share capital they represent are granted to all fully paid-up shares, for which proof is provided of registration in the name of the same shareholder for at least two years.

At the date of this Universal Registration Document, on April 10, 2024, among the shareholders, the registered shareholders included in the free float hold double voting rights for 41,156 of their shares.

At the date of this Universal Registration Document, 41,156 Company shares carried double voting rights. These shares represent 0.24% of the share capital and 0.49% of exercisable voting rights.

6.1.3 CONTROL OF THE ISSUER

Given the capitalization table and the table showing the breakdown of voting rights set out in section 6.1.1 above, it is clear that capital and voting rights are distributed in such a way that no shareholder holds either a majority of securities or votes, or a minority that could block certain decisions.

The Company believes, therefore, that there is no risk that control be exercised in an abusive manner by any of its shareholders. It should be noted that 7 of the 11 directors on the Company's Board of Directors are independent, that the positions of Chairman and Chief Executive Officer are separate within the Company and that the latter has put in place statutory committees (Scientific Committee and Audit Committee) and non-statutory committees (Intellectual Property Committee, Compensation and Appointments Committee, Strategy Committee, CSR Committee), as described earlier in sections 4.1.5.2.1 and 4.1.5.2.2 of this Universal Registration Document.

The Company has not taken any other measures to ensure that control is not exercised in an abusive manner.

6.2 STOCK MARKET DATA

The Company's shares have been listed on the Euronext Growth Paris market since December 19, 2013.

6.2.1 GENERAL INFORMATION

Number of shares listed as at 12/31/2023	16,837,212
Highest price over one year (in 2023)	€40.00
Lowest price over one year (in 2023)	€19.90
Year's average daily volume[1] (in 2023)	55,771 shares
ISIN	FR0011648716
Stock market indices	Euronext Growth All-share, Euronext Growth Bpifrance Innovation, Euronext Tech Croissance, Euronext Tech Leaders, CAC PME, Enternext PEA PME 150 and Euronext Tech leaders

6.2.2 CHANGE IN SHARE PRICE SINCE JANUARY 1, 2024

Price per share (in euros)

	Highest	**Lowest**
2023	**40.00**	**19.90**
January	37.40	31.20
February	36.76	32.89
March	36.69	28.84
April	34.21	27.46
May	30.65	26.59
June	40.00	29.85
July	35.20	25.85
August	26.55	23.00
September	25.80	21.05
October	24.30	19.90
November	23.30	20.10
December	28.55	21.70
2024	**28.85**	**20.85**
January	28.85	22.30
February	25.50	20.85
March	26.95	24.00

6.3 DIVIDEND POLICY

The Company declares that it has no dividend policy in place.

6.4 DIVIDEND DISTRIBUTIONS OVER THE LAST THREE FISCAL YEARS

None of the Group's companies distributed dividends during the last three fiscal years.

[1] Average daily volume traded on Euronext (58% share), OTC (21% share) and Other (21% share)

6.5 OTHER INFORMATION ON SHARE CAPITAL

6.5.1 SHARE CAPITAL

6.5.1.1 Amount of share capital

At the date of this Universal Registration Document, the Company's share capital stood at €11,791,941.00 divided into 16,845,630 ordinary shares with a par value of €0.70 each, all in the same class, fully subscribed and fully paid up.

To the best of its knowledge, the Company does not have any collateral on a significant portion of its capital.

6.5.1.2 Non-equity shares

At the date of this Universal Registration Document, there are no non-equity shares.

6.5.1.3 Treasury stock

The Company concluded a liquidity agreement with Oddo BHF and Natixis on June 12, 2020, taking effect on July 1, 2020 in the evening, for a period of 12 months and renewable by tacit agreement. The purpose of this agreement is to favor the liquidity of transactions and the price stability of Carbios shares without hindering the regular functioning of the market.

We inform you that on December 31, 2023, the following resources were allocated to the liquidity account:

- number of shares: 4,047 securities;
- cash balance of the liquidity account: €511,941.48;
- carrying amount of the shares: €103,464.37

During the 2nd half of 2023, the following total was traded:

Purchase	171,327 shares	€6,190,402.48	3,593 transactions
Sale	169,885 shares	€6,142,236.81	3,622 transactions

Please note that, when the agreement was drafted with Oddo BHF and Natixis, the following funds were included in the dedicated liquidity account:

- 2,048 shares transferred from the former liquidity agreement;
- €151,529.34 in cash transferred from the former liquidity agreement.

In addition, the Company entrusted ODDO BHF with a mandate valid from December 21, 2023 to February 28, 2024 at the latest, relating to the acquisition on its behalf of Carbios shares up to a total limit of €1 million and €38 per share, for the implementation of stock option plans, free share allocation plans, employee shareholding transactions reserved for members of a company savings plan, in accordance with the legal provisions in force, or allocation of shares to employees and/or executive corporate officers of the Company and its related companies.
The reader is invited to refer to section 6.4.3 of this Universal Registration Document.

6.5.1.4 Potential share capital

The table below summarizes all of the BSA and BSPCE issued as well as all AGA allocated by the Company for the benefit of its corporate officers, employees and consultants, and not exercised as at the date of this Universal Registration Document:

Holders	BCE-2015	BCE-2020	BCE-2021	BCE-2022	BSA-2022	AGA-2023
Emmanuel LADENT	-	-	36,735	172,023	-	12,000
Other employees	15,000	68,500	63,976	234,452	-	72,150
Others	-	-	-	-	296,928	-
TOTAL	**15,000**	**68,500**	**100,711**	**406,475**	**296,928**	**84,150**

The table below summarizes all the shares that would result from the exercise of the BSA and BSPCE issued as well as all of the AGA allocated by the Company for the benefit of its corporate officers, employees and consultants and not exercised at the date of this Universal Registration Document:

At the date of this Universal Registration Document, the various BSA, BSPCE and AGA plans allow the subscription of new ordinary shares, potentially representing a total of 1,035,231 shares to be issued, i.e. a dilution of 6.15% on an undiluted basis (amounting at the date of this Universal Registration Document to 16,845,630 shares) and 5.79% on a diluted basis.

Details of the various allocation plans are set out in section 6.4.2 of this Universal Registration Document.

Holders	BCE-2015	BCE-2020	BCE-2021	BCE-2022	BSA-2022	AGA-2023
Emmanuel LADENT	0	0	39,362	184,323	0	12,000
Other employees	16,073	73,398	68,550	251,217	0	72,150
Others	0	0	0	0	318,158	0
TOTAL	**16,073**	**73,398**	**107,912**	**435,540**	**318,158**	**84,150**

6.5.1.5 Unissued authorized share capital

The table below presents the various current financial delegations granted to the Board of Directors by the Combined Shareholders' Meeting of the Company:

Purpose of the resolution	Resolution	Period of validity and expiration date	Issue price	Ceiling (maximum nominal amount in euros)	Implementation of delegations of authority/proxies during the 2023 fiscal year
Delegation of authority to the Board of Directors to decide on either the issuance, with preferential subscription rights maintained, of shares and/or securities giving access, immediately or in the future, to the share capital or giving rights to debt securities, or the incorporation into the share capital of profits, reserves or share premiums *(Resolution expired at the date of this Universal Registration Document)*	GM of June 22, 2022 Eleventh resolution	26 months Until August 21, 2024	-	Nominal amount of capital increases: €3,906,000 Nominal amount of securities representing debt: €223,000,000[1]	Implemented by the Board of Directors at its meeting of June 20, 2023 and by decision of the Chief Executive Officer on July 11, 2023 for a capital increase of a nominal amount of €3,891,086.50
Authorization to the Board of Directors, for the purpose of increasing, up to a limit of 15%, the number of securities issued in accordance with the provisions of Article L. 225-135-1 of the French Commercial Code, in the event of the implementation of the delegation of authority referred to in the previous resolution with preferential subscription rights maintained *(Resolution expired at the date of this Universal Registration Document)*	GM of June 22, 2022 Twelfth resolution	26 months (it being specified that this authorization shall be implemented within thirty (30) days of the close of the subscriptions for each capital increase determined under the previous resolution).	-	Nominal amount of capital increases: €3,906,000 Nominal amount of securities representing debt: €223,000,000[1]	Implemented by the Board of Directors at its meeting of June 20, 2023 and by decision of the Chief Executive Officer on July 11, 2023 for a capital increase of a nominal amount of €3,891,086.50
Authorization granted to the Board of Directors for the purchase by the Company of its own shares in accordance with Article L. 22-10-62 of the French Commercial Code	GM of June 22, 2023 Fifteenth resolution	18 months Until December 21, 2024	-	10% of the share capital	Implementation of the liquidity agreement (see 6.4.1.3) and the share buyback program (see 6.4.2.)
Authorization to the Board of Directors to reduce the Company's share capital by means of canceling shares	GM of June 22, 2023 Twenty-fourth resolution	18 months Until December 21, 2024	-	10% of the share capital per period of 24 months	None.

Purpose of the resolution	Resolution	Period of validity and expiration date	Issue price	Ceiling (maximum nominal amount in euros)	Implementation of delegations of authority/proxies during the 2023 fiscal year
Delegation of authority to the Board of Directors to decide on either the issuance, with preferential subscription rights maintained, of shares and/or securities giving access, immediately or in the future, to the share capital or giving rights to debt securities, or the incorporation into the share capital of profits, reserves or share premiums	GM of June 22, 2023 Sixteenth resolution	26 months Until August 21, 2025	-	Nominal amount of capital increases: €3,935,000 Nominal amount of securities representing debt: €223,000,000(2)	None.
Authorization to the Board of Directors, for the purpose of increasing, up to a limit of 15%, the number of securities issued in accordance with the provisions of Article L. 225-135-1 of the French Commercial Code, in the event of the implementation of the delegation of authority referred to in the previous resolution with preferential subscription rights maintained	GM of June 22, 2023 Seventeenth Resolution	26 months (it being specified that this authorization shall be implemented within thirty (30) days of the close of the subscriptions for each capital increase determined under the previous resolution).	Same price as the initial issue	Nominal amount of capital increases: €3,935,000 Nominal amount of securities representing debt: €223,000,000(2)	None.
Delegation of authority to the Board of Directors to decide on the issuance of shares and/or securities giving access, immediately or in the future, to the share capital or giving rights to debt securities, with cancellation of preferential subscription rights without naming beneficiaries and by public offering	GM of June 22, 2023 Eighteenth Resolution	26 months Until August 21, 2025	At least equal to the volume-weighted average of the last five trading sessions prior to setting the issue price for new shares, reduced, as the case may be, by a maximum discount of 10%, after correction of this average in the event of any difference in dividend entitlement dates.	Nominal amount of capital increases: €787,000 and increased to €1,570,000 in the event of priority rights for shareholders Nominal amount of securities representing debt: €45,000,000(3)	None.
Delegation of authority to be granted to the Board of Directors to decide on the issuance of shares and/or securities giving access, immediately or in the future, to the share capital or giving rights to debt securities, by way of an offer referred to in Article L. 411-2 1° of the French Monetary and Financial Code and up to a limit of 10% of the share capital, with cancellation of preferential subscription rights without naming beneficiaries	GM of June 22, 2023 Nineteenth Resolution	26 months Until August 21, 2025	At least equal to the volume-weighted average of the last five trading sessions prior to setting the issue price for new shares, reduced, as the case may be, by a maximum discount of 10%, after correction of this average in the event of any difference in dividend entitlement dates.	Nominal amount of capital increases: €787,000 and increased to €1,570,000 in the event of priority rights for shareholders Nominal amount of securities representing debt: €45,000,000(3)	None.

Purpose of the resolution	Resolution	Period of validity and expiration date	Issue price	Ceiling (maximum nominal amount in euros)	Implementation of delegations of authority/proxies during the 2023 fiscal year
Delegation of authority to the Board of Directors to decide on the issuance of shares and/or securities giving access, immediately or in the future, to the share capital or giving rights to debt securities, with cancellation of preferential subscription rights for the benefit of categories of beneficiaries(4)	GM of June 22, 2023 Twentieth Resolution	18 months Until December 21, 2024	At least equal to the volume-weighted average of the last five trading sessions prior to setting the issue price for new shares, reduced, as the case may be, by a maximum discount of 10%, after correction of this average in the event of any difference in dividend entitlement dates.	Nominal amount of capital increases: €787,000 and increased to €1,570,000 in the event of priority rights for shareholders Nominal amount of securities representing debt: €45,000,000(3)	None.
Authorization to the Board of Directors, for the purpose of increasing, up to a limit of 15%, the number of securities issued in accordance with the provisions of Article L. 225-135-1 of the French Commercial Code, in the event of the implementation of the delegations of authority referred to in the three previous resolutions with cancellation of preferential subscription rights	GM of June 22, 2023 Twenty-first Resolution	within fifteen (15) days of the closing of the subscription of each capital increase decided under one of the three previous resolutions	Same price as the initial issue	Nominal amount of capital increases: €787,000 and increased to €1,570,000 in the event of priority rights for shareholders Nominal amount of securities representing debt: €45,000,000(3)	None.
Authorization granted to the Board of Directors to allocate free shares	GM of June 22, 2023 Twenty-second Resolution	38 months Until August 21, 2026	-	0.5% of the share capital and a maximum of 12,000 shares for the beneficiary corporate officers(4)	Implementation by the Board of Directors at its meeting of September 27, 2023 for the free allocation of 84,150 Company shares
Delegation of powers to the Board of Directors to decide on a capital increase in cash reserved for employees who are members of a company savings plan in accordance with the provisions of articles L. 225-129-6 of the French Commercial Code and L. 3332-18 et seq. of the French Labor Code, with cancellation of preferential subscription rights reserved for the benefit of Company employees	GM of June 22, 2023 Twenty-third Resolution	26 months Until August 21, 2025	The issue price will be set by the Board of Directors in accordance with the provisions of article L. 3332-19 or L. 3332-20 of the French Labor Code.	Maximum nominal amount of capital increases: 0.05% of the share capital	Implementation by the Board of Directors at its meeting of December 20, 2023 (see 6.4.2.4)

(1) These amounts may be reduced accordingly by the amount of capital increases carried out or authorized by the Board of Directors on the basis of the 11 th to 16 th resolutions of the Shareholders' Meeting of June 22, 2022.

(2) These amounts may be reduced accordingly by the amount of capital increases carried out or authorized by the Board of Directors on the basis of the 16 th to 21st resolutions of the Shareholders' Meeting of June 22, 2023.

(3) These amounts may be reduced accordingly by the amount of capital increases carried out or authorized by the Board of Directors on the basis of the 16 th to 21st resolutions of the Shareholders' Meeting of June 22, 2023. In addition, the implementation of one of these resolutions for a nominal amount of €789,496.19 would prevent the implementation of another of the three resolutions concerned.

(4) The cumulative number of BSPCE and BSA issued and not exercised for the benefit of directors, consultants or employees of the Company and the total number of free shares allocated during the vesting period must not exceed 10% of the share capital.

6.5.1.6 Table of changes in share capital

The table below presents the changes in the Company's share capital since its creation.

Date	Nature of the transaction	Nominal value per share	Issue premium per share	Number of shares issued/ canceled	Total number of shares	Share capital after transaction
Bylaws	Creation	€1.00	-	500,000	500,000	€500,000.00
01/17/2012	Increase	€1.00	-	300,000	800,000	€800,000.00
05/10/2012	Increase	€1.00	-	700,000	1,500,000	€1,500,000.00
07/09/2012	Increase	€1.00	€1.25	577,780	2,077,780	€2,077,780.00
09/28/2012	Increase	€1.00	€1.25	75,555	2,153,335	€2,153,335.00
12/04/2012	Increase	€1.00	€1.25	533,332	2,686,667	€2,686,667.00
02/20/2013	Decrease	€0.70	-	-	2,686,667	€1,880,666.90
12/13/2013	Increase	€0.70	€6.315	116,647	2,803,314	€1,962,319.80
12/13/2013	Increase	€0.70	€13.33	934,959	3,738,273	€2,616,791.10
01/13/2014	Increase	€0.70	€13.33	11,400	3,749,673	€2,624,771.10
03/04/2015	Increase	€0.70	€1.55	3,500	3,753,173	€2,627,221.10
03/04/2015	Increase	€0.70	€0.30	5,000	3,758,173	€2,630,721.10
03/22/2016	Increase	€0.70	€0.30	30,000	3,788,173	€2,651,721.10
03/22/2016	Increase	€0.70	€1.55	10,000	3,798,173	€2,658,721.10
03/21/2017	Increase	€0.70	€0.30	7,614	3,805,787	€2,664,050.90
03/21/2017	Increase	€0.70	€1.55	29,000	3,834,787	€2,684,350.90
07/21/2017	Increase	€0.70	€7.05	466,182	4,300,969	€3,010,678.30
09/19/2017	Increase	€0.70	€5.30	20,000	4,320,969	€3,024,678.30
09/19/2017	Increase	€0.70	€5.50	15,000	4,335,969	€3,035,178.30
09/19/2017	Increase	€0.70	€5.90	15,000	4,350,969	€3,045,678.30
09/19/2017	Increase	€0.70	€5.79	10,000	4,360,969	€3,052,678.30
09/19/2017	Increase	€0.70	€6.45	30,000	4,390,969	€3,073,678.30
09/19/2017	Increase	€0.70	€6.55	15,000	4,405,969	€3,084,178.30
09/19/2017	Increase	€0.70	€7.70	35,000	4,440,969	€3,108,324.10
09/19/2017	Increase	€0.70	€1.55	49,494	4,490,463	€3,143,678.30
09/19/2017	Increase	€0.70	€0.30	2,506	4,492,969	€3,145,078.30
11/20/2017	Increase	€0.70	€8.30	20,000	4,512,969	€3,159,078.30
11/20/2017	Increase	€0.70	€8.40	30,000	4,542,969	€3,180,078.30
11/20/2017	Increase	€0.70	€8.55	10,000	4,552,969	€3,187,078.30
11/20/2017	Increase	€0.70	€1.55	3,500	4,556,469	€3,189,528.30
12/12/2017	Increase	€0.70	€1.55	10,838	4,567,307	€3,197,114.90
03/27/2018	Increase	€0.70	€9.70	5,688	4,572,995	€3,201,096.50
05/03/2018	Increase	€0.70	€9.70	116	4,573,111	€3,201,177.70
06/27/2018	Increase	€0.70	€9.70	168	4,573,279	€3,201,295.30
09/20/2018	Increase	€0.70	€9.70	588	4,573,867	€3,201,706.90
09/20/2018	Increase	€0.70	€7.60	40,000	4,613,867	€3,229,706.90
12/06/2018	Increase	€0.70	€9.70	3,356	4,617,223	€3,232,056.10
12/06/2018	Increase	€0.70	€4.40	20,000	4,637,223	€3,246,056.10
12/06/2018	Increase	€0.70	€4.85	20,000	4,657,223	€3,260,056.10
06/28/2019	Increase	€0.70	€5.75	2,245,886	6,903,109	€4,832,176.30
12/04/2019	Increase	€0.70	€1.55	1,500	6,904,609	€4,833,226.30
06/17/2020	Increase	€0.70	€10.81	18,991	6,923,600	€4,846,520.00
06/17/2020	Increase	€0.70	€10.52	30,000	6,953,600	€4,867,520.00
07/22/2020	Increase	€0.70	€25.55	1,028,572	7,982,172	€5,587,520.40
10/09/2020	Increase	€0.70	€34.30	100,000	8,082,172	€5,657,520.40
01/15/2021	Increase	€0.70	€7.06	23,125	8,105,297	€5,673,707.90

Date	Nature of the transaction	Nominal value per share	Issue premium per share	Number of shares issued/ canceled	Total number of shares	Share capital after transaction
01/15/2021	Increase	€0.70	€11.75	9,600	8,114,897	€5,680,427.90
03/11/2021	Increase	€0.70	€11.75	11,000	8,125,897	€5,688,127.90
03/11/2021	Increase	€0.70	€19.91	14,375	8,140,272	€5,698,190.40
03/11/2021	Increase	€0.70	€7.58	9,600	8,149,872	€5,704,910.40
03/11/2021	Increase	€0.70	€11.76	9,600	8,159,472	€5,711,630.40
03/11/2021	Increase	€0.70	€11.76	5,000	8,164,472	€5,715,130.40
05/12/2021	Increase	€0.70	€37.30	3,000,000	11,164,472	€7,815,130.40
06/23/2021	RAN allocation	-	-	-	11,164,472	€7,815,130.40
11/05/2021	Increase	€0.70	€7.16	5,000	11,169,472	€7,818,630.40
11/05/2021	Increase	€0.70	€10.52	6,000	11,175,472	€7,822,830.40
12/16/2021	Increase	€0.70	€29.59	2,000	11,177,472	€7,824,230.40
04/05/2022	Increase	€0.70	€7.16	5,000	11,184,472	€7,829,130.40
05/05/2022	Increase	€0.70	€1.55	1,548	11,186,020	€7,830,214.00
05/05/2022	Increase	€0.70	€4.59999	1,000	11,187,020	€7,830,914.00
05/05/2022	Increase	€0.70	€4.59999	2,000	11,189,020	€7,832,314.00
05/06/2022	Increase	€0.70	€4.59999	1,000	11,190,020	€7,833,014.00
05/10/2022	Increase	€0.70	€4.59999	2,000	11,192,020	€7,834,414.00
05/11/2022	Increase	€0.70	€4.59999	2,000	11,194,020	€7,835,814.00
05/13/2022	Increase	€0.70	€4.59999	2,000	11,196,020	€7,837,214.00
05/17/2022	Increase	€0.70	€4.59999	2,000	11,198,020	€7,838,614.00
05/18/2022	Increase	€0.70	€4.59999	2,000	11,200,020	€7,840,014.00
05/20/2022	Increase	€0.70	€4.59999	2,000	11,202,020	€7,841,414.00
05/23/2022	Increase	€0.70	€4.59999	2,083	11,204,103	€7,842,872.10
06/07/2022	Increase	€0.70	€0.30	1,253	11,205,356	€7,843,749.20
06/13/2022	Increase	€0.70	€4.59999	2,000	11,207,356	€7,845,149.20
07/06/2022	Increase	€0.70	€7.16	746	11,207,356	€7,845,671.40
07/08/2022	Increase	€0.70	€7.06	5,000	11,208,102	€7,849,171.40
07/11/2022	Increase	€0.70	€7.16	661	11,213,102	€7,849,634.10
07/18/2022	Increase	€0.70	€7.16	3,593	11,213,763	€7,852,149.20
07/21/2022	Increase	€0.70	€29.5899	31	11,217,356	€7,852,170.90
07/22/2022	Increase	€0.70	€29.5899	4,969	11,217,387	€7,855,649.20
08/15/2022	Increase	€0.70	€29.5899	53	11,222,356	€7,855,686.30
08/16/2022	Increase	€0.70	€29.5899	2,510	11,222,409	€7,857,443.30
08/17/2022	Increase	€0.70	€29.5899	5,000	11,224,919	€7,860,943.30
09/09/2022	Increase	€0.70	€1.5500	6,747	11,229,919	€7,865,666.20
10/24/2022	Increase	€0.70	€7.16	2,000	11,238,666	€7,867,066.20
10/27/2022	Increase	€0.70	€7.16	2,000	11,240,666	€7,868,466.20
11/16/2022	Increase	€0.70	€7.16	2,000	11,242,666	€7,869,866.20
01/13/2023	Increase	€0.70	€7.16	2,000	11,244,666	€7,871,266.20
01/13/2023	Increase	€0.70	€7.16	2,000	11,246,666	€7,872,666.20
01/23/2023	Increase	€0.70	€10.5240	1,600	11,248,266	€7,873,786.20
02/03/2023	Increase	€0.70	€7.16	2,000	11,250,266	€7,875,186.20
02/06/2023	Increase	€0.70	€7.16	2,000	11,252,266	€7,876,586.20
02/09/2023	Increase	€0.70	€7.05934	1,500	11,253,766	€7,877,636.20
02/20/2023	Increase	€0.70	€7.16	2,000	11,255,766	€7,879,036.20
02/28/2023	Increase	€0.70	€7.16	6	11,255,772	€7,879,040.40
03/01/2023	Increase	€0.70	€7.16	1,994	11,257,766	€7,880,436.20
03/02/2023	Increase	€0.70	€7.16	2,000	11,259,766	€7,881,836.20
03/06/2023	Increase	€0.70	€7.05934	1,563	11,261,329	€7,882,930.30

03/14/2023	Increase	€0.70	€7.05934	2,000	11,263,329	€7,884,330.30
03/28/2023	Increase	€0.70	€7.05934	2,000	11,265,329	€7,885,730.30
03/30/2023	Increase	€0.70	€7.05934	2,000	11,267,329	€7,887,130.30
06/01/2023	Increase	€0.70	€7.05934	2,000	11,269,329	€7,888,530.30
06/02/2023	Increase	€0.70	€7.05934	2,000	11,271,329	€7,889,930.30
06/02/2023	Increase	€0.70	€19.905	2,000	11,273,329	€7,891,330.30
06/06/2023	Increase	€0.70	€19.905	2,000	11,275,329	€7,892,730.30
06/08/2023	Increase	€0.70	€19.905	1,188	11,276,517	€7,893,561.90
06/13/2023	Increase	€0.70	€19.905	2,000	11,278,517	€7,894,961.90
07/11/2023	Increase	€0.70	€24.62	5,558,695	16,837,212	€11,786,048.40
04/8/2024	Increase	€0.70	€16.56	8,418	16,845,630	€11,791,941.00

6.5.2 EQUITY INVESTMENTS AND SECURITIES GIVING ACCESS TO THE SHARE CAPITAL OF EXECUTIVE CORPORATE OFFICERS AND EMPLOYEES

At the date of this Universal Registration Document and to the best of the Company's knowledge:

- the employees[1] do not hold any shares in the Company but hold 431,928 BSPCE and 72,150 AGA; and
- the executive corporate officers hold 1,345 Company shares, 208,758 BSPCEs and 12,000 AGA.

At the date of this Universal Registration Document, the various BSA, BSPCE and AGA plans allow the subscription of new ordinary shares, potentially representing a total of 717,073 shares to be issued, i.e. a dilution of 4.26% on an undiluted basis (amounting at the date of this Universal Registration Document to 16,837,212 shares) and 4.08% on a diluted basis.

At the date of this Universal Registration Document, the various BSA, BSPCE and AGA plans allow the subscription of new ordinary shares, potentially representing a total of 1,035,231 shares to be issued, i.e. a dilution of 6.15% on an undiluted basis (amounting at the date of this Universal Registration Document to 16,845,630 shares) and 5.79% on a diluted basis.

6.5.2.1 Features of BSA plans

TABLE 8 OF APPENDIX 2 OF THE AMF POSITION-RECOMMENDATION NO. 2021-02: HISTORY OF SHARE SUBSCRIPTION OR PURCHASE ALLOCATIONS

	BSA EIB
Date of Shareholders' Meeting	Decision of the Shareholders' Meeting of 02/02/2022
Number of shares that may be subscribed or purchased(1)	318,158
Warrant exercise start date	05/27/2022
Expiration date	05/26/2030
Price of subscription or purchase of warrant	€0.01
Warrant exercise method	The subscription must be recognized by a subscription form which must be given to the Company.
Exercise price (in euros)	€40 for 50% of the BSA EIB €38.8861 for 50% of the BSA EIB
Number of shares subscribed at the date of this Universal Registration Document	0
Cumulative number of subscription or purchase warrants canceled or null and void	0
Share subscription warrants that may be exercised at the date of this Universal Registration Document	296,928

(1) By decision dated August 4, 2023, the Chief Executive Officer of the Company, after noting the definitive completion of the capital increase and amending the Company's bylaws on July 13, 2023, decided to proceed with the adjustment of the securities already issued by the Company in accordance with Article L. 228-99 of the French Commercial Code, and consequently decided to increase the number of shares that may be subscribed by the holder of BSA warrants by an additional 21,230 shares on the exercise of the 296,928 BSA and to subject them to the terms of the BSA-EIB-1 and BSA-EIB-2 plan regulations.

At the date of this Universal Registration Document, there were 296,928 BSA exercisable, granting rights to 318,158 shares.

[1] With the exception of Emmanuel LADENT, whose shares and securities are included in those of the executive corporate officers.

6.5.2.2 Features of BSPCE plans

TABLE 8 OF APPENDIX 2 OF THE AMF POSITION-RECOMMENDATION NO. 2021-02: HISTORY OF SHARE SUBSCRIPTION OR PURCHASE ALLOCATIONS

	BCE 2015-2	BCE-2020-3	BCE-2020-6
Date of Shareholders' Meeting	Shareholders' Meeting of 06/24/2015	Shareholders' meeting of 06/19/2019	Shareholders' meeting of 06/18/2020
Date of Board of Directors' meeting	Decision of the Board of Directors of 06/24/2015	Decision of the Board of Directors of 03/12/2020	Decision of the Board of Directors of 07/09/2020
Number of shares that may be subscribed or purchased(1)	16,073	45,592	30,806
Warrant exercise start date	06/24/2016	03/12/2020	07/09/2020
Expiration date	06/24/2025	03/12/2030	07/09/2030
Price of subscription or purchase of warrant	Free	Free	Free
Warrant exercise method	Possibility of exercising a number x of warrants per complete monthly period beginning on 06/24/2015, and for the first time from 06/24/2016, calculated according to the following rule: x = (total nb of BCEs 2015-2 allocated to the beneficiary * nb. of months since 06/24/2015)/48.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise one fourth of the BSPCEs allocated. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise one fourth of the BSPCEs allocated. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share. For the other 14,000 warrants: possibility of exercising y warrants where y = (number of warrants not yet exercisable) * % determined by the performance of the Carbios share price.
Exercise price (in euros)	12.4581	7.75934	20.6050
Number of shares subscribed at the date of this Universal Registration Document	16,000	6,500	0
Cumulative number of subscription or purchase warrants canceled or null and void	0	0	0
Share subscription warrants that may be exercised at the date of this Universal Registration Document	15,000	39,750	28,750

(1) In a decision dated August 4, 2023, the Chief Executive Officer of the Company decided to adjust the securities already issued by the Company in accordance with Article L. 228-99 of the French Commercial Code, and consequently decided to increase by 45,812 additional shares the number of shares that may be subscribed by holders on exercise of the 640,686 BSPCE and to subject them to the terms of their respective plan regulations.

	BCE-2021-1, BCE-2021-3 to BCE-2021-5 and BCE-2021-7 to BCE-2021-14	BCE 2021-16	BCE 2021-17	BCE-2022-1 to BCE-2022-2
Date of Shareholders' Meeting	Shareholders' Meeting of 06/18/2020	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/22/2022
Date of Board of Directors' meeting	Decision of the Board of Directors of 01/15/2021	Decision of the Board of Directors of 11/05/2021	Decision of the Board of Directors of 11/05/2021	Decision of the Board of Directors of 06/29/2022
Total number of shares that may be subscribed or purchased, of which the number that may be subscribed or purchased by: (1)	61,703	39,362	6,847	201,726
Emmanuel LADENT	-	39,362	-	148,151
Warrant exercise start date	01/15/2022	12/01/2022	11/05/2022	06/29/2025
Expiration date	01/15/2032	12/01/2032	11/05/2032	06/29/2032
Price of subscription or purchase of warrant	Free	Free	Free	Free
Warrant exercise method	Possibility of exercising a number x of warrants per full monthly period, and for the first time from 01/15/2022, calculated according to the following rule: x = total number of BCE-2021 granted to the beneficiaries * (number of months since 01/15/2021)/48. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share.	For the first 18,367 warrants: possibility of exercising x warrants per full monthly period beginning on 12/01/2021, and for the first time from 12/01/2022, calculated according to the following rule: x = 18,367 * (number of months since 12/01/2021)/48. The remaining 18,368 warrants are subject to four performance conditions to be exercised. Each condition met gives the right to exercise 5,510 warrants, 6,429 warrants, 2,755 warrants and 3,677 warrants, respectively. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share. In the event of acquisition of the entire Company by a manufacturer, an accelerated vesting is provided for according to the acquisition price per share.	Possibility of exercising a number x of warrants per full monthly period, and for the first time from 11/05/2022, calculated according to the following rule: x = total number of BCE-2021 granted to the beneficiaries * (number of months since 11/05/2021)/48.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.
Exercise price (in euros)	44.5049	37.7340	39.7863	30.1316
Number of shares subscribed at the date of this Universal Registration Document	0	0	0	0
Cumulative number of subscription or purchase warrants canceled or null and void	0	0	0	0
Share subscription warrants that may be exercised at the date of this Universal Registration Document	57,586	36,735	6,390	188,265(2)

(1) In a decision dated August 4, 2023, the Chief Executive Officer of the Company decided to adjust the securities already issued by the Company in accordance with Article L. 228-99 of the French Commercial Code, and consequently decided to increase by 45,812 additional shares the number of shares that may be subscribed by holders on exercise of the 640,686 BSPCE and to subject them to the terms of their respective plan regulations.

(2) May be exercised from June 29, 2025.

	BCE-2022-4	BCE-2022-5 to BCE-2022-6 and BCE-2022-13 to BCE-2022-14	BCE-2022-7 to BCE-2022-11	BCE-2022-12
Date of Shareholders' Meeting	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/19/2019	Shareholders' meeting of 06/18/2020	Shareholders' meeting of 06/22/2022
Date of Board of Directors' meeting	Decision of the Board of Directors of 09/29/2022	Decision of the Board of Directors of 12/13/2022	Decision of the Board of Directors of 12/13/2022	Decision of the Board of Directors of 12/13/2022
Total number of shares that may be subscribed or purchased, of which the number that may be subscribed or purchased by: (1)	53,575	111,503	88,307	34,004
Emmanuel LADENT	-	-	2,168	34,004
Warrant exercise start date	09/29/2025	12/13/2025	12/13/2025	12/13/2025
Expiration date	09/29/2032	12/13/2032	12/13/2032	12/13/2032
Price of subscription or purchase of warrant	Free	Free	Free	Free
Warrant exercise method	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.	To be exercised, these warrants must satisfy four performance conditions. Each condition met gives the right to exercise 40%, 20%, 20% and 20% of the warrants respectively.
Exercise price (in euros)	26.59321	33.27455	33.27455	33.27455
Number of shares subscribed at the date of this Universal Registration Document	0	0	0	0
Cumulative number of subscription or purchase warrants canceled or null and void	0	50,000	0	0
Share subscription warrants that may be exercised at the date of this Universal Registration Document	50,000(2)	54,062(3)	82,413(3)	31,735(3)

(1) In a decision dated August 4, 2023, the Chief Executive Officer of the Company decided to adjust the securities already issued by the Company in accordance with Article L. 228-99 of the French Commercial Code, and consequently decided to increase by 45,812 additional shares the number of shares that may be subscribed by holders on exercise of the 640,686 BSPCEs and to subject them to the terms of their respective plan regulations.

(2) May be exercised from September 29, 2025.

(3) May be exercised from December 13, 2025.

At the date of this Universal Registration Document, there were 590,686 BSPCEs exercisable, granting rights to 632,923 shares.

6.5.2.3 Free share allocations

On September 27, 2023, the Board of Directors decided to set up a free share allocation plan (“AGA”) for the benefit of some of its employees and corporate officers with a vesting period of three years and allocated 84,150 free Company shares.

The free share allocation plans in force at December 31, 2023 are as follows:

Plan	2023-1 Plan	2023-2 Plan
Date of the Shareholders’ Meeting that authorized the allocation of free shares	June 22, 2023	June 22, 2023
Grant date	September 27, 2023	October 16, 2023
Vesting period	3 years	3 years
Retention period	-	-
Total number of free shares allocated	74,150	10,000
Of which subject to performance conditions	74,150	10,000
Of which allocated to corporate officers	12,000[1]	-
Number of shares vested in 2023	-	-
Number of shares canceled at December 31, 2023	-	-

(1) Mr. Emmanuel Ladent, Chief Executive Officer of the Company.

6.5.2.4 Employee shareholding program

In accordance with the authorization granted by the twenty-third resolution of the Shareholders’ Meeting of June 22, 2023, the Board of Directors decided on December 22, 2023 to launch an employee shareholding plan, for the benefit of all employees who are members of the company savings plan.

Main terms of the transaction

- Beneficiaries of the offer: the beneficiaries are the employees and corporate officers of Carbios group companies located in France, who are members of a company savings plan (PEE).
- Subscription price: set on the basis of 70% of the reference price, corresponding to the average price of the Carbios share for the twenty trading sessions preceding the day of the Chief Executive Officer’s decision setting the price, i.e. €[•].
- Terms of subscription and holding: the shares will be subscribed through a company mutual fund (FCPE) under a so-called "traditional" subscription formula.
- Unavailability of FCPE units: the corresponding FCPE units must be held for a period of five years, except in the event of an early release provided for by Article R. 3334-22 of the French Labor Code.
- Exercise of voting rights: the voting rights attached to these shares will be exercised by the Supervisory Board of the FCPE.

This employee shareholding plan, launched on February 12, 2024 was subscribed by 123 employees, i.e. 88.49% of the employees concerned and thus made it possible to involve employees in the Group’s development and performance. It contributes to bringing the employee shareholding of Carbios, within the meaning of Article L. 225-102 of the French Commercial Code, to around 0.08% of the share capital. The plan included a unilateral contribution corresponding to approximately 48 shares for each of the eligible employees.

In total, a little more than €59,400 was subscribed by employees through the FCPE CARBIOS, which will invest them in CARBIOS shares, after adding the corresponding contribution of the Company for approximately €53,700 and the unilateral contribution of the latter for approximately €110,600, in the context of:

- a reserved capital increase for a nominal amount of €5,892.60, corresponding to the issue of 8,418 new CARBIOS shares with a nominal value of €0.70 each, and,
- the acquisition of 4,823 existing CARBIOS treasury shares.

As a result, the Company’s share capital was increased by €5,892.60 and thus went from €11,786,048.40 to €11,791,941.

6.5.3 SHARE BUYBACK PROGRAM

Program description

Set up in application of Articles 241-1 et seq. of the General Regulation of the Autorité des marchés financiers (the "AMF"), as well as European Regulation (EU) No. 596/2014 of April 16, 2014 on market abuse, the purpose of this description of the share buyback program is to indicate the objectives and terms of the Company's program to buy back its own shares that was authorized by the Combined Shareholders' Meeting of June 22, 2023 under the terms of its fifteenth resolution.

Securities concerned: ordinary shares.

Mnemonic code/ISIN code: ALCRB / ISIN FR0011648716

Authorization of the transaction: Shareholders' Meeting of June 22, 2023.

Maximum number of shares that may be purchased: 10% of the share capital on the date of the share buyback, as adjusted according to any transaction that may affect it.

It is specified that when the shares are acquired for the purpose of promoting the liquidity of the securities under the conditions defined by the General Regulations of the AMF, the number of shares taken into account for the calculation of the 10% limit provided for above corresponds to the number of shares purchased, less the number of shares resold during the term of the authorization. In addition, when shares are acquired by the Company with a view to their retention and subsequent use in payment or exchange in the context of a merger, spin-off or contribution, the number of shares may be acquired by the Company, may not exceed 5% of its share capital.

Objectives of share buybacks

- the implementation of stock option plans, free share allocation plans and employee shareholding transactions reserved for members of a company savings plan, in accordance with legal provisions in force, or allocation of shares to employees and/or executive corporate officers of the Company and related companies;

- the delivery of shares upon the exercise of rights attached to securities giving access to the Company's share capital;

- their use as part of any hedging transaction of the Company's commitments in respect of financial instruments relating in particular to changes in the price of the Company's shares;

- the holding of shares and their subsequent use in payment or exchange in the context of potential external growth transactions, mergers, spin-offs or contributions;

- the total or partial cancellation of the shares by reducing the share capital (in particular with a view to optimizing cash management, return on equity capital or earnings per share);

- share market making under a liquidity agreement entered into with an investment service provider, in accordance with the Code of Ethics recognized by the Autorité des Marchés Financiers;

- the implementation of any market practice that may be authorized by the AMF and, more generally, the completion of all transactions in accordance with the legal and regulatory provisions in force.

Maximum purchase price: €120, excluding fees and commissions and any adjustments to take account of capital transactions.

Maximum amount of funds available for the purposes of this program: €6,000,000, net of fees.

Duration of the program: from June 22, 2023 to December 21, 2024, i.e. 18 months from the Shareholders' Meeting of June 22, 2023.

The shares thus repurchased may be canceled, the Combined Shareholders' Meeting of June 22, 2023 having authorized the Board of Directors, under its twenty-fourth resolution, to reduce the share capital by way of cancellation of the treasury shares held following the implementation of the buyback program described above.

Prior to the implementation of the share buyback program authorized by the Shareholders' Meeting of June 22, 2023:

- Publication of a description of the share buyback program (effective and complete distribution by electronic means and posted on the Company's website).

During the buyback program:

- Publication of transactions at J+7 of the publishing on the Company's website (excluding transactions carried out under a liquidity agreement); and

- Monthly declarations by the Company to the AMF.

Every year

- Presentation of the results of the implementation of the buyback program and the use of the shares acquired in the Board of Directors' report to the Shareholders' Meeting.

Breakdown of shares held by objective as of December 31, 2023: at December 31, 2023, the Company held 4,047 shares intended for market marking in the secondary market or the liquidity of the Company's share through a liquidity agreement and 13,273 shares intended for the implementation of employee shareholding transactions reserved for members of a company savings plan.

Report on the implementation of the share buyback program		
Treasury shares held at December 31, 2023		17,320
Number of shares purchased under the liquidity agreement		390,673
Number of shares purchased outside the liquidity agreement		13,273
Number of shares sold under the liquidity agreement		390,355
Number of shares sold outside the liquidity agreement		0
% of share capital held as treasury shares		0.10%
Average purchase price		€29.20
Average sales price		€29.16
Number of shares subscribed in the Company's name at December 31, 2023	- of which liquidity agreement	4,047
	- of which implementation of stock option plans, free share allocation plans, employee shareholding transactions reserved for members of a company savings plan, in accordance with legal provisions in force, or allocation of shares to employees and/or executive corporate officers of the Company and related companies	13,273
	- of which shares acquired for payment or exchange as part of an external growth transaction	0
	- of which cancellation of shares	0
Value at closing price on December 31, 2023		€485,826.00
Nominal value		€0.70
Amount of trading fees		€722.97


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7. ADDITIONAL INFORMATION

7.1 INFORMATION ABOUT THE ISSUER

7.1.1 LEGAL AND COMMERCIAL NAME

The Company's name is Carbios.

7.1.2 REGISTRATION WITH THE TRADE AND COMPANIES REGISTER AND LEI

The Company is registered in the Trade and Company Register of Clermont-Ferrand under number 531 530 228. The Company is registered under legal entity identifier (LEI) 969500M2RCIWO4NO5F08.

7.1.3 DATE OF INCORPORATION AND LENGTH OF LIFE

The Company has been registered with the Commercial Court of Paris since April 5, 2011. Since the transfer of the registered office on November 19, 2012, the Company is registered with the Commercial Court of Clermont-Ferrand. The duration of the Company is fixed at 99 years from its registration in the Trade and Companies Register, i.e. until April 5, 2110, unless it is dissolved early or extended.

The accounts closing date is December 31 of each year.

7.1.4 REGISTERED OFFICE, LEGAL FORM, APPLICABLE LEGISLATION AND WEBSITE

Carbios is a société anonyme (public limited company) with a Board of Directors.

Its registered office is located at the Cataroux site - 8 rue de la Grolière - 63100 Clermont-Ferrand, France.

The Company is subject to French law and governed by its bylaws as well as the laws and regulations of the French Commercial Code for commercial companies.

The telephone number of the registered office is +33 (0)4 73 86 51 76.

The Company has a website: www.carbios.com

Please note that the information appearing on the website does not form part of the Universal Registration Document, unless such information is incorporated by reference in said document.

7.1.5 IMPORTANT EVENTS IN THE DEVELOPMENT OF THE BUSINESS

April 2011: Creation of Carbios S.A.S. by Holding Incubatrice Chimie Verte (a holding company that supports SMEs that develop breakthrough technologies in sectors with high industrial and social potential, advised by Truffle Capital).

September 2011 – February 2012: Creation of the innovative collaborative project Thanaplast™ for a total budget of €22 million over 5 years.

June 2012: OSEO-ISI grant agreement for the Thanaplast™ Project (€9.8 million in grants for an overall budget of €22 million, including €6.8 million in grants allocated to Carbios for €15 million from the Company's own funds).

July 2012: Launch of the Thanaplast™ project.

Announcement of €3.3 million in funds raised with Truffle Capital, with the payment of an initial tranche of €1.3 million.

December 2012: Payment by Truffle Capital of the second tranche of funds raised (€1.2 million).

Finalization of the OSEO-ISI validation process, signature of the financing agreement and payment of the first tranche for the Thanaplast™ program.

August 2013: Payment by Truffle Capital of the third tranche of funds raised in the form of convertible bonds (€800 thousand).

September 2013: Completion of key stage 1 of the Thanaplast™ program and receipt from Bpifrance of an initial tranche of €1.7 million.

December 2013: Initial public offering on the Euronext Growth Paris market, which raised nearly €13.1 million, not including the partial exercise of the over-allotment option in January 2014.

January 2014: Partial exercise of the over-allotment option, bringing the total number of shares offered as part of the Carbios initial public offering to 946,359 new shares.

December 2014: Completion of key stage 2 of the Thanaplast™ program and receipt from Bpifrance of a second tranche of €700 thousand.

November 2015: Completion of key stage 3 of the Thanaplast™ program and receipt from Bpifrance of a third tranche of €1.6 million.

September 2016: Operational launch of the Carbiolice joint venture, in partnership with Limagrain Ingrédients and the SPI fund operated by Bpifrance Investissement.

December 2016: Completion of key stage 4 of the Thanaplast™ program and receipt from Bpifrance of a fourth tranche of €443 thousand.

July 2017: Success of a reserved offer of new and existing shares for €4.2 million at a unit price of €7.75.

October 2017: L'Oréal and the Company sign an agreement to create a Consortium to industrialize Carbios technology for enzymatic plastic recycling.

December 2017: Completion of key stage 5 (the final stage) of the Thanaplast™ program and receipt from Bpifrance of the final tranche of €1,021 thousand.

January 2019: Carbios and TWB obtain €7.5 million in funding from the Programme d'investissement d'avenir ("Investments in the Future Program" - PIA) operated by the ADEME to accelerate industrialization of the enzymatic recycling of PET plastic and fiber waste.

January 2019: Carbios and Carbiolice enter into a joint development agreement with Novozymes for the production and supply of PLA degradation enzymes at industrial scale.

June 2019: Carbios successfully completes a capital increase of €14.5 million at a unit price of €6.45 per share.

January 2020: Carbios enters into another joint development agreement with Novozymes for the production and supply of PET degradation enzymes at industrial scale.

April 2020: Publication of an article co-authored by Carbios and TBI in the prestigious scientific journal Nature entitled: "An engineered PET-depolymerase to break down and recycle plastic bottles."

July 2020: Carbios successfully completes a capital increase of €27 million through a placement with qualified investors.

October 2020: Carbios acquires all of its 18.02% stake in Carbiolice from Limagrain Ingrédients.

November 2020: Carbios produces the first clear plastic bottles from enzymatically recycled textile waste.

April 2021: Carbios announces a project to build an industrial and commercial unit using its 100% PET recycling technology.

May 2021: As part of a Global Offer, Carbios carries out a capital increase of €114 million at a unit price of €38 per share.

June 2021: Carbios acquires the entire 37.29% stake in Carbiolice from the SPI fund.

September 2021: Carbios announces the operational start of its industrial demonstration plant using its PET enzymatic recycling technology.

November 2021: Carbios and its partners T. EN Zimmer GmbH and Deloitte obtain a subsidy of €3.3 million from the European Commission through the LIFE program.

December 2021: Carbios announces that it has obtained a loan of €30 million from the European Investment Bank.

February 2022: Carbios and Indorama Ventures announce their collaboration for the construction, in France, of a plant using Carbios' PET biorecycling technology.

April 2022: Appointment of Philippe Pouletty as Chairman of the Board of Directors of Carbios.

July 2022: Carbios, On, Patagonia, PUMA and Salomon join forces to advance the circularity of the textile industry.

January 2023: Carbios and Novozymes strengthen their collaboration through a strategic, exclusive and long-term partnership to ensure global leadership in PET biorecycling.

February 2023: PVH Corp group joins the Fiber-to-Fiber Consortium founded in July 2022 by Carbios, On, Patagonia, PUMA and Salomon.

July 2023: Carbios successfully completes a capital increase with preferential subscription rights maintained for an amount of approximately €141 million after the full exercise of the extension clause, the largest capital increase on Euronext Growth since 2015.

October 2023: Receipt of the building permit and the operating authorization allowing the start of construction work on the Longlaville plant

February 2024: Acquisition from Indorama Ventures of the land (in Longlaville) that will house the world's first PET biorecycling plant.

March 2024: Inclusion of CARBIOS Active, an enzymatic solution for the biodegradation of PLA, in the inventory of food contact substances (FCS) of the United States Food and Drug Administration (FDA) with the food contact notification (FCN).

7.2 ARTICLES OF INCORPORATION AND BYLAWS

The Company's bylaws were developed in accordance with the provisions applicable to a Société Anonyme (public limited company) under French law.

The main provisions described below are taken from the Company's bylaws in force as at the date of this Universal Registration Document.

7.2.1 ENTRY IN THE REGISTER AND CORPORATE PURPOSE (ARTICLE 4 OF THE BYLAWS)

The purpose of the Company is, directly or indirectly, in France as well as abroad:

- the exercise of any research, development, production, marketing activity in France and abroad relating to biotechnologies and, in particular, technologies, processes and products in the field of transformation of biomass and bioremediation;
- the exercise of any activity related to green chemistry, and in particular technologies, processes and products in the field of green chemistry;
- the acquisition, subscription, holding, management or disposal in any form whatsoever of all shares or securities in all French or foreign legal companies or entities, created or to be created, and more generally, the management of holdings in the Company's sector of activity;
- the direct or indirect holding of equity in any operations that may be related to any one of the above-mentioned purposes, or likely to promote them, by means of the creation of new companies, contributions or the subscription or purchase of securities or company rights, mergers, partnerships, equity holdings or other;
- and, more generally, any moveable or immoveable, industrial, commercial or financial transactions related, directly or indirectly, to this purpose or to any similar or connected purposes, or that may be useful for this purpose or may facilitate its realization. The Company intends to generate a positive and significant social, societal and environmental impact in the conduct of its activities.

7.2.2 PROVISIONS OF THE COMPANY'S BYLAWS, A CHARTER OR REGULATIONS CONCERNING THE MEMBERS OF THE BOARD OF DIRECTORS AND EXECUTIVE MANAGEMENT

7.2.2.1 Board of Directors (Articles 13 to 16 and 18 of the bylaws)

Board of Directors (Article 13 of the bylaws)

The Company is governed by a Board of Directors composed of a minimum of three (3) members and a maximum of eighteen (18) members, subject to the exemptions provided by law in the event of a merger.

Appointment and dismissal of directors (Article 14.1 of the bylaws)

Throughout the life of the Company, the directors are appointed by the Ordinary Shareholder's Meeting. However, in the event of a merger or spin-off, they may be appointed by the Extraordinary Shareholders' Meeting. The directors' term of office is four (4) years. It ends at the close of the Ordinary Shareholders' Meeting convened to approve the financial statements for the fiscal year just ended and held during the year in which said director's term of office expires.

Any exiting director is eligible for reappointment provided he/she meets the conditions of this Article.

Directors may be dismissed and replaced at any time by the Ordinary Shareholders' Meeting.

Natural persons over the age of eighty-five (85) years may not be directors; when they come to exceed this age during a term in office, they shall automatically be deemed to have resigned at the next Shareholders' Meeting. Any appointment made in breach of the above provisions shall be null and void, with the exception of those which may be made on an interim basis.

Any natural person appointed as a director shall, at the time of their appointment and throughout their term of office, comply with the legal requirements concerning the number of directorships that a natural person can hold in joint stock companies with their registered office in mainland France, save as otherwise provided for by law.

A Company employee may only be appointed director if his or her employment contract corresponds to a genuine job. The number of directors tied to the Company by an employment contract may not exceed one-third of the number of directors in office.

Legal entity director (Article 14.2 of the bylaws)

Directors may be natural persons or legal entities. In the latter case, upon appointment, the legal entity is required to designate a permanent representative who is subject to the same terms and conditions and who incurs the same civil and legal liabilities as if he/she were a director in his/her own name, without prejudice to the joint and several liability of the legal entity he/she represents. The permanent representative of a legal entity appointed as director is subject to the same age conditions that apply to directors who are natural persons.

The term of office of the permanent representative appointed by the legal entity shall be the same as that of the legal entity he/she represents.

If the legal entity revokes the term of its permanent representative, it must notify the Company of this revocation without delay, by registered letter, also providing the identity of its new permanent representative. The same applies in the event of the death or resignation of the permanent representative.

Designation of the permanent representative as well as the termination of his/her term of office are subject to the same formalities of disclosure as if he/she were a director in his/her own name.

Vacancy, death, resignation (Article 14.3 of the bylaws)

In the event of vacancy due to death or resignation of one or several directors, the Board of Directors may make appointments on an interim basis between two Shareholders' Meetings.

When the number of directors has fallen below the minimum legal requirement, the remaining directors must immediately convene an Ordinary Shareholders' Meeting to make up the required number of Board members.

Temporary appointments made by the Board are subject to ratification at the first Ordinary Shareholders' Meeting thereafter. Failing ratification, resolutions adopted and acts performed by the Board at an earlier date nonetheless remain valid.

Chairman of the Board of Directors (Article 15.1 of the bylaws)

The Board of Directors elects from among its members a Chairman who is, in order for the nomination to be valid, a natural person. The Board of Directors determines his/her compensation.

The Chairman of the Board of Directors organizes and directs the Board's work, on which he/she reports to the Shareholders' Meeting. He/she oversees the proper functioning of the Company's governance bodies and ensures, in particular, that directors are capable of fulfilling their mission.

In order to exercise his/her duties, the Chairman of the Board of Directors must be less than eighty-five (85) years old. Should this age limit be reached while holding such position, the Chairman of the Board of Directors shall be deemed to have automatically resigned and a new Chairman shall be appointed under the conditions provided for in this Article.

The Chairman is appointed for a term that may not exceed his/her term of office as director. He/she may be re-elected.

The Board of Directors may remove him/her at any time.

In the event of temporary impediment or the death of the Chairman, the Board of Directors may delegate the duties of Chairman to a director.

In the event of temporary impediment, this delegation is granted for a limited duration; it is renewable. In the event of death, it is valid until the election of a new Chairman.

Board of Directors' meetings (Article 15.2 of the bylaws)

The Board of Directors meets as often as required in the Company's interest, at the request of the Chairman or two directors.

When it has not met for more than two (2) months, at least one-third of the members of the Board of Directors may request the Chairman to convene the Board for a predetermined agenda.

The Chief Executive Officer may also request the Chairman to convene the Board of Directors for a predetermined agenda.

The Chairman is bound by the requests that are addressed to him/her by virtue of the two preceding subparagraphs. The meetings may be convened by any means, even orally.

The Board meets at the Company's registered office or at any other place (in France or abroad) designated in the notice of meeting, under the chairmanship of its Chairman or, in case of impediment, a member appointed by the Board to chair the meeting.

The meetings are chaired by the Chairman of the Board of Directors. In case of impediment of the Chairman, at each session, the Board appoints a session Chairman from among its members present.

The Board may appoint a Secretary at each session, even from outside of its members. An attendance register shall be kept and signed by the directors participating in the Board meeting.

Directors, as well as any person convened to meetings of the Board of Directors, shall exercise discretion with respect to information of a confidential nature and presented as such by the Chairman.

Quorum and majority (Article 15.3 of the bylaws)

The Board may deliberate validly only if at least half of the directors are present or deemed present, subject to arrangements introduced by internal rules in the event of recourse to videoconferencing or other means of telecommunication.

Unless otherwise stipulated by these bylaws, and subject to arrangements introduced in the event of recourse to videoconferencing or other means of telecommunication, decisions are reached by a majority vote of members present or represented, or deemed present.

For calculating the quorum and majority, directors who attend a Board meeting by means of video conferencing or other means of telecommunication within the terms defined in the internal rules of the Board of Directors are deemed present. However, actual presence or presence through representation shall be necessary for any deliberations of the Board concerning the approval of the annual and consolidated financial statements, as well as for approval of the management report and the Group's management report and for decisions related to removal of the Chairman of the Board of Directors, the Chief Executive Officer and the Deputy Chief Executive Officer.

Furthermore, half of the directors in office may oppose holding a meeting of the Board of Directors by means of videoconferencing or telecommunication. This opposition must be notified in the manner and within the time periods that shall be determined in the internal rules and/or those laid down by legal or regulatory provisions.

Representation (Article 15.4 of the bylaws)

Any director may grant proxy, in writing, to another director to represent him/her at a session of the Board of Directors.

Each director may hold only one proxy per meeting by virtue of the foregoing paragraph.

These provisions are applicable to the permanent representative of a legal entity director.

Powers of the Board of Directors (Article 16 of the bylaws)

The Board of Directors determines the Company's business strategy and oversees its implementation.

With the exception of powers expressly assigned to the Shareholders' Meetings and within the limits of the corporate purpose, the Board of Directors handles all matters pertaining to the proper running of the Company and settles matters of concern through its deliberations.

In this context, the Board of Directors undertakes to take into consideration (i) the social, societal and environmental consequences of its decisions on all the Company's stakeholders, and (ii) the consequences of its decisions on the environment.

In its relationships with third parties, the Company shall be bound even by acts of the Board of Directors that do not fall within the scope of its corporate purpose, unless it can prove that the third party knew that the act exceeded this purpose or that it could not have been unaware given the circumstances; disclosure of the bylaws shall not of itself be sufficient proof thereof.

The Board of Directors carries out any checks and verifications that it deems appropriate.

Each director must receive the information necessary for carrying out his/her duties and may obtain from Executive Management any documents that he/she deems useful.

The Board may decide to create committees with a consultative role, particularly Strategy, Audit and Compensation Committees, as well as a Scientific Committee whose members, chosen from the Board of Directors or from outside the Company, shall have an advisory function and shall report to the Board of Directors.

Compensation (Article 18 of the bylaws)

The Shareholders' Meeting may grant to directors, as compensation for their work, a fixed annual sum in respect of directors' fees, as determined by the Shareholders' Meeting, without being bound by previous decisions. This amount shall be charged to operating expenses.

The Board of Directors shall freely allocate to its members the overall sum granted to directors as attendance fees; it may, in particular, allocate to directors who are members of advisory committees a share that is greater than that of other directors.

The Board of Directors may allocate special compensation for tasks or mandates entrusted to directors.

The Board of Directors may authorize reimbursement of travel and related expenses and expenses incurred by directors in the interest of the Company.

7.2.2.2 Non-voting directors (Article 15.6 of the bylaws)

Throughout the life of the Company, the Ordinary Shareholders' Meeting may appoint non-voting directors chosen from among the shareholders or outside them.

The number of non-voting directors may not exceed three (3).

The non-voting directors are appointed for a term of one (1) year. Their duties end at the end of the Ordinary Shareholders' Meeting called to approve the financial statements for the previous fiscal year and held during the year in which their duties expire.

Any exiting non-voting director is eligible for reappointment provided he/she meets the conditions of this Article.

Non-voting directors may be dismissed and replaced at any time by the Ordinary Shareholders' Meeting, without any compensation being due to them. The functions of non-voting directors also end by death or incapacity of non-voting directors who are natural persons, or by dissolution or judicial reorganization for non-voting directors that are legal entities, or by resignation.

Directors may be natural persons or legal entities. In the latter case, upon appointment, the legal entity is required to designate a permanent representative who is subject to the same terms and conditions and who incurs the same civil and legal liabilities as if he/she were a non-voting director in his/her own name, without prejudice to the joint and several liability of the legal entity he/she represents.

The non-voting directors are responsible for ensuring the strict application of the bylaws and presenting their observations to Board of Directors meetings. The non-voting directors perform a general and permanent advisory and supervisory role for the Company. However, they may not, under any circumstances, interfere in the management of the Company, or generally take the place of its legal bodies.

In the performance of their duties, the non-voting directors may, in particular:

- report observations to the Board of Directors;
- ask to be informed, at the registered office of the Company, of all corporate books, registers and documents;
- request and collect all information useful for their work from the Company's general management and Statutory Auditors;
- be required, at the request of the Board of Directors, to present a report on a specific issue to the Shareholders' Meeting.

The non-voting directors must be convened to each meeting of the Board of Directors in the same way as the directors. Non-voting directors will be entitled to receive the same level of information as the directors.

The non-voting directors shall only have advisory powers, individually or collectively, and shall not have voting rights on the Board.

Failure to convene a meeting or to transmit documents prior to the meeting of the Board of Directors to the non-voting director(s) may in no case constitute grounds for nullifying the decisions taken by the Board of Directors.

7.2.2.3 Executive Management (Article 17 of the bylaws)

Organizational principle (Article 17.1 of the bylaws)

In accordance with legal provisions, either the Chairman of the Board of Directors or another individual appointed by the Board of Directors and bearing the title of Chief Executive Officer is responsible for the Executive Management of the Company.

The choice between these two methods of Executive Management is made by the Board of Directors, which must inform the shareholders and third parties accordingly, in accordance with regulatory requirements.

The Board's decision concerning the Executive Management model is taken by a majority vote of the directors present or represented, subject to the special provisions of Article 15.3 above in the event of the directors' participation in the Board meeting by videoconferencing or any other means of telecommunication.

A change in the Executive Management model does not entail a modification of the bylaws.

When the Chairman of the Board of Directors is responsible for the Company's Executive Management, the following provisions relating to the Chief Executive Officer apply to him/her.

Executive Management – Chief Executive Officer (Article 17.2 of the bylaws)

Depending on the decision made by the Board of Directors, in accordance with the provisions set out above, the Company's Executive Management is either discharged by the Chairman of the Board of Directors, or by a natural person (who may or may not be a director or a shareholder) appointed by the Board of Directors and bearing the title of Chief Executive Officer.

When the Board of Directors opts for the separation of the duties of Chairman of the Board of Directors and Chief Executive Officer, it appoints the Chief Executive Officer, sets the duration of his/her term of office, determines his/her compensation and, where relevant, the limits to his/her powers.

No one may be appointed Chief Executive Officer if he/she is over eighty-five (85) years old. Moreover, if a Chief Executive Officer in office comes to exceed that age, he/she shall be deemed to have automatically resigned.

The Chief Executive Officer may be removed at any time by the Board of Directors. When the Chief Executive Officer is not the Chairman of the Board of Directors, his/her removal may give rise to damages if it is unjustified.

The Chief Executive Officer has the widest powers to act in the Company's name in all circumstances. He/she exercises these powers within the limits of the corporate purpose and subject to the powers expressly granted by law to Shareholders' Meetings and the Board of Directors.

He/she represents the Company in its relations with third parties. The Company is bound by the actions of the Chief Executive Officer even if they are outside the Company's corporate purpose, unless the Company can prove that the third party was aware that the action was outside the Company's corporate purpose, or that the third party could not be unaware of this in view of the circumstances. Publication of the bylaws does not, of itself, constitute such proof.

Deputy Chief Executive Officers

On the proposal of the Chief Executive Officer, whether this office is held by the Chairman of the Board of Directors or by another person, the Board of Directors may appoint one or more natural persons as Deputy Chief Executive Officer(s), who may or may not be Board members or shareholders, to assist the Chief Executive Officer. The number of Deputy Chief Executive Officers is limited to five (5). If a Deputy Chief Executive Officer is a Board member, his/her term of office cannot exceed that of his/her directorship.

No one may be appointed Deputy Chief Executive Officer if he/she is over eighty-five (85) years old. Should a Deputy Chief Executive Officer come to exceed that age while in office, he/she will be deemed to have automatically resigned.

Deputy Chief Executive Officers may be removed at any time by the Board of Directors, on recommendation of the Chief Executive Officer. Their removal without just cause may give rise to the payment of damages.

By agreement with the Chief Executive Officer, the Board of Directors determines the scope and duration of the powers granted to the Deputy Chief Executive Officers. Deputy Chief Executive Officers have the same powers with respect to third parties as the Chief Executive Officer.

Should the Chief Executive Officer cease to perform his/her duties, or be prevented from doing so, unless decided otherwise by the Board of Directors, the Deputy Chief Executive Officers shall remain in office and will retain their powers until the new Chief Executive Officer is appointed.

The Board of Directors determines the Deputy Chief Executive Officers' compensation.

Delegation of powers (Article 17.3 of the bylaws)

The Board of Directors may entrust persons, whether they are Board members or not, with permanent or temporary duties, as it sees fit, delegate powers to them and set their compensation as it deems appropriate.

7.2.3 EXISTING SHARE CLASSES (ARTICLES 10 AND 11 OF THE BYLAWS)

7.2.3.1 Form of shares (Article 10 of the bylaws)

Shares are issued in registered or bearer form, at the shareholder's discretion, with the exception of securities that must necessarily be created in registered form pursuant to laws and regulations in force; this is particularly true for shares issued for cash until they are fully paid up.

Any holder of securities that are part of an issue including both bearer shares and registered shares has the possibility of converting these securities to the other form.

Registered shares give rise to registration in an individual account under the conditions and according to the terms provided for in the laws and regulations in force. These individual accounts may be pure registered accounts or administered registered accounts, at the shareholder's discretion.

Bearer shares give rise to registration in an account held by an authorized financial intermediary.

For the purposes of identifying the holders of bearer shares, the Company has the right to request at any time, at its own expense, from the central custodian that manages the Company's securities issue account, the name or company name, nationality, year of birth or year of incorporation and address of the security holders, as well as the quantity of securities held by each of them, and where appropriate, any restrictions that may apply to the securities. This information is gathered by the central custodian and then communicated to the Company under conditions laid down by applicable laws and regulations.

7.2.3.2 Transfer of shares (Article 11.1 of the bylaws)

Shares are freely transferable from their issuance in the manner prescribed by law. They remain transferable after dissolution of the Company and until the close of liquidation proceedings.

They are registered in an account and may be transferred by account transfer in accordance with the terms and conditions provided for by law and applicable regulations.

The provisions of this Article are generally applicable to all securities issued by the Company.

7.2.3.3 Rights and obligations attached to shares (Article 11.2 of the bylaws)

1– Each share entitles the holder to a net share of profits, corporate assets or liquidation surplus proportionate to the percentage of capital it represents.

It entitles the holder to participate, under the conditions laid down by law and these bylaws, in Shareholders' Meetings and to vote on resolutions.

2– Shareholders' liabilities do not exceed the amount of their initial investment. The rights and obligations attached to a share follow ownership of the share regardless of the holder.

Ownership of a share automatically entails acceptance of the bylaws and decisions of the Shareholders' Meeting.

3– Each time that it is necessary to possess several shares to exercise any right, in case of exchange, grouping, allocation of shares, capital increase or decrease, merger or any corporate operation, the owners of isolated shares, or of a number below that required, may only exercise those rights on the condition that they personally see to the pooling and, where appropriate, the purchase or sale of the necessary number of shares.

7.2.3.4 Indivisibility of shares – Bare ownership – Usufruct (Article 11.4 of the bylaws)

1) Shares are indivisible with regard to the Company. Co-owners of undivided shares are represented at Shareholders' Meetings by one of them or by a single representative. In case of disagreement, the representative shall be appointed by a court upon the request of the most diligent co-owner.

2) The right to vote belongs to the usufructuary in Ordinary Shareholders' Meetings and to the bare owner in Extraordinary Shareholders' Meetings. Nevertheless, shareholders may agree to any other distribution for exercising voting rights at Shareholders' Meetings. The Company shall be informed of this agreement by registered letter and shall be bound to respect it for all meetings which convene following expiration of a one-month period after mailing of the letter.

The right to vote is exercised by the owner of pledged securities.

7.2.4 CONDITIONS FOR AMENDING THE RIGHTS OF SHAREHOLDERS

Company bylaws do not provide for any particular rules that derogate from ordinary corporate law.

7.2.5 SHAREHOLDERS' MEETINGS (ARTICLES 22 TO 29 OF THE BYLAWS)

7.2.5.1 Quorum and majority (Article 22 of the bylaws)

Shareholders' Meetings deliberate under the conditions set by law.

The Ordinary Shareholders' Meeting makes all decisions other than those which, by law and these bylaws, fall within the exclusive competence of an Extraordinary Shareholders' Meeting. It can only conduct business validly at first notice if the shareholders present or represented hold at least one-fifth of the shares with voting rights. Upon second notice, no quorum is required. The meeting issues decisions by a simple majority vote of shareholders present or represented. The votes expressed do not include those attached to shares for which the shareholder has not taken part in the vote, has abstained or has returned a blank or invalid vote.

The Extraordinary Shareholders' Meeting is vested with sole competence to amend any provisions of the bylaws. It can only conduct business validly if the shareholders present or represented, on first notice, hold at least one-quarter, and on second notice, one-fifth of the shares with voting rights. Failing this latter quorum, the second meeting may be postponed to a date no later than two months from the date of the meeting originally convened. The meeting issues decisions by a two-thirds vote of shareholders present or represented. The votes expressed do not include those attached to shares for which the shareholder has not taken part in the vote, has abstained or has returned a blank or invalid vote.

In the event of the use of videoconferencing or other means of telecommunication permitted by law under conditions laid down in Article 23 below, shareholders who attend the meeting by videoconferencing or by means of telecommunication are deemed present for the purposes of calculating a quorum and majority.

7.2.5.2 Notice of meeting (Article 23 of the bylaws)

Shareholders' Meetings are convened either by the Board of Directors, by the Statutory Auditors or by a representative designated by a court under terms and conditions provided for by law.

Meetings are held at the Company's registered office or at any other place designated in the notice of meeting.

When company shares are admitted for trading on a regulated market or if its shares are not all registered shares, the Company is required to publish a notice of meeting in the Bulletin des Annonces Légales Obligatoires (Bulletin of Mandatory Legal Announcements - BALO) at least thirty-five (35) days before any Shareholders' Meeting.

Convocation of Shareholders' Meetings takes place by publication in a newspaper empowered to publish legal notices in the administrative district (département) of the Company's registered office and, furthermore, in the Bulletin des Annonces Légales et Obligatoires (Bulletin of Mandatory Legal Announcements - BALO).

Nevertheless, the notices provided for in the previous subparagraph may be replaced by an invitation, at the Company's expense, in a simple letter or registered letter addressed to each shareholder. This invitation may also be transmitted by means of electronic telecommunication implemented under applicable regulatory conditions.

Any shareholder may also, if decided by the Board at the time the meeting is convened, attend and vote by videoconferencing or other means of telecommunications that allows them to be identified, under the conditions and in accordance with the provisions laid down by applicable laws and regulations.

Any meeting improperly convened may be deemed invalid. Nevertheless, an action for invalidity shall be inadmissible where all shareholders were present or represented.

7.2.5.3 Agenda of the meeting (Article 24 of the bylaws)

The agenda of meetings is decided by the author of the notice of meeting.

Nevertheless, one or more shareholders representing at least 5% of the share capital (or a group of shareholders meeting legal conditions) may request, under conditions provided for by law, that draft resolutions be placed on the agenda. The request shall be accompanied by the text of the draft resolutions, which may include a short explanation of the purpose.

These draft resolutions, which must be brought to the attention of shareholders, shall be included on the agenda and submitted to the vote of the meeting.

The meeting may not deliberate on an issue that is not included on the agenda. Nevertheless, it may, in any circumstances, remove one or more directors and move to replace them.

The meeting agenda may not be modified on the second convening.

When the meeting is called to deliberate on changes to the business or legal organization of the Company on which the Works Council has been consulted in accordance with Article L. 2323-6 of the French Labor Code, the opinion of the Council is provided to the meeting.

7.2.5.4 Admission (Article 25 of the bylaws)

Any shareholder may personally attend Shareholders' Meetings in person, by proxy or by correspondence, irrespective of the form they take.

Shareholders shall be entitled to attend Shareholders' Meetings:

- for registered shares, by their registration in a registered share account held by the Company, on the second business day prior to the meeting at midnight, Paris time;
- for bearer shares, by their recording in the bearer share accounts held by an authorized intermediary, on the second business day prior to the meeting at midnight, Paris time.

The registration of shares in bearer share accounts held by an authorized intermediary shall be ascertained by a shareholding certificate issued by the latter.

Shareholders whose shares are not fully paid up are not entitled to attend meetings.

7.2.5.5 Shareholder proxy and voting by correspondence (Article 26 of the bylaws)

Shareholder proxy

A shareholder may be represented by another shareholder, a spouse, a civil partner or any other person, natural or legal, of his/her choice.

Any shareholder may receive powers from other shareholders to represent them at a Shareholders' Meeting, without any restrictions other than those resulting from statutory provisions setting the maximum number of votes that any one person may have in both his/her own name and as a proxy.

Vote by correspondence

Once the notice of meeting is issued, a voting by correspondence form and enclosures may be given or sent, at the Company's expense, to any shareholder who requests such documents in writing.

The Company must comply with any request filed or received at the registered office no later than six (6) days before the date of the meeting.

7.2.5.6 Officiating committee of the meeting (Article 27 of the bylaws)

Shareholders' Meetings are chaired by the Chairman of the Board of Directors or, in his/her absence, by a director appointed by the Board for this purpose. Failing that, the meeting itself elects its Chairman.

In the event of convocation by the Statutory Auditors, a court officer or by liquidators, the meeting is chaired by the person or one of the people who convened the meeting.

Tellers for the meeting are the two members of the aforementioned meeting who hold the greatest number of votes and who accept the role.

The Shareholders' Meeting Committee appoints a Secretary, who may be chosen from outside the shareholders.

7.2.5.7 Minutes of deliberations (Article 28 of the bylaws)

Deliberations of Shareholders' Meetings are recorded in minutes drafted by members of the committee and signed by them.

They include the date and place of the meeting, the mode of convening, the agenda, the composition of the committee, the number of shares participating in the vote and the quorum reached, documents and reports submitted to the meeting, a summary of the discussions, the text of resolutions put to a vote and the results of the voting.

The minutes are entered into a special register held at the registered office under regulatory conditions.

If, for lack of a required quorum, a meeting cannot properly deliberate, this shall be recorded by the committee in the minutes of the aforementioned meeting.

7.2.5.8 Shareholders' right to information and oversight (Article 29 of the bylaws)

Prior to each Shareholders' Meeting, the Board of Directors must make the necessary documents available to shareholders to enable them to reach a well-founded decision and make an informed judgment about management and the Company's business activities.

Following the communications referred to above, any shareholder is entitled to ask, in accordance with legal and regulatory requirements, written questions to which the Board of Directors shall be bound to answer during the Shareholders' Meeting.

All shareholders have the right at any period to obtain the documents that the Board of Directors is required, as the case may be, to make available to them at the registered office, or to send to them, in accordance with applicable laws and regulations.

7.2.6 PROVISIONS IMPACTING A CHANGE OF CONTROL

The Company's bylaws do not contain any provisions that could have the effect of delaying, deferring or preventing a change in its control.

7.2.7 THRESHOLD CROSSINGS (ARTICLE 11.3 OF THE BYLAWS)

Any natural or legal person, acting alone or in concert, within the meaning of Article L. 233-10 of the French Commercial Code, who holds or ceases to hold a number of shares representing a fraction equal to 5%, 10%, 15%, 20%, 25%, 30%, 33.33%, 50%, 66.66%, 90% or 95% of the share capital or voting rights, is required to inform the Company at the latest before the close of trading on the fourth trading day following the day on which the aforementioned shareholding threshold is crossed, specifying the number of shares and voting rights held. The person required to supply this information shall specify the number of shares that he/she holds giving future access to the share capital, as well as the attached voting rights, along with any other information required by law. In addition, if the 10%, 15%, 20% and 25% thresholds are crossed, the person required to provide the information provided for above must attach a statement of intent to their declaration of crossing of thresholds in addition to the aforementioned details.

In addition, any natural or legal person, acting alone or in concert, who holds or ceases to hold a number of shares representing a fraction equal to 50% or 95% of the share capital or voting rights is required to inform the Autorité des Marchés Financiers at the latest before the close of trading on the fourth trading day following the day on which the aforementioned shareholding threshold is crossed, under the conditions set by the general regulations of the Autorité des Marchés Financiers.

If they have not been declared in accordance with the above conditions, shares exceeding the fraction that should have been declared are deprived of voting rights under the conditions provided for by the French Commercial Code.

7.2.8 CHANGE IN SHARE CAPITAL (ARTICLE 7 OF THE BYLAWS)

1) The share capital may be increased by any means and under any terms and conditions provided for by law.

   The Extraordinary Shareholders' Meeting is the sole body authorized to decide, based on a report by the Board of Directors, on a capital increase.

   Shareholders have, in proportion to the amount of their shares, a preferential subscription right for shares issued for cash as part of a capital increase, a right that they may waive on an individual basis. The Ordinary Shareholders' Meeting may decide to cancel this preferential subscription right under conditions established by law.

2) A capital reduction may be authorized or decided by the Extraordinary Shareholders' Meeting; in no case may it undermine the equality of the shareholders.

   The reduction of capital to an amount below the legal minimum may only be decided under the condition precedent of a capital increase intended to bring capital to at least the legal minimum, unless the Company is transformed into another form that does not require a capital amount exceeding the share capital after its reduction.

   Failing that, any interested party may ask the courts to dissolve the Company. Dissolution may not be declared if, on the day the Court rules on the merits, the situation has been rectified.

7.2.9 DIVIDEND RIGHTS (ARTICLE 32 OF THE BYLAWS)

If the financial statements for the fiscal year approved by the Shareholders' Meeting show a distributable profit as defined by law, the Shareholders' Meeting shall decide whether to appropriate it to one or more reserve accounts, of which it controls the appropriation or use, to appropriate it to retained earnings, or to distribute it.

The Shareholders' Meeting may allow shareholders the option to receive all or part of dividends or interim dividends distributed in either cash or shares, in accordance with the law.

Any losses are carried forward after the approval of the financial statements by the Shareholders' Meeting as retained losses to be offset against future retained earnings until they are fully compensated.

Each shareholder receives a share of the profits or contributes to the losses in proportion to his/her share in the capital.

7.3 PERSON RESPONSIBLE

Person responsible

Emmanuel LADENT
Chief Executive Officer
Cataroux site
8 rue de la Grolière
63100 Clermont-Ferrand, France
Tel: +33 (0)4 73 86 51 76

Declaration by the person responsible for the Universal Registration Document

I hereby certify that the information contained in this Universal Registration Document is, to the best of my knowledge, consistent with the facts and does not contain any omission likely to alter its scope.

I certify that, to the best of my knowledge, the financial statements have been prepared in accordance with applicable accounting standards and provide a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and of all the companies included in the consolidation, and that the management report, whose information is referenced in the cross-reference table available in section 7.7.1, presents a true and fair picture of the business development, profit or loss, and financial position of the Company and of all the companies included in the consolidation, and describes the principal risks and uncertainties that they face.

In Clermont-Ferrand, on April 19, 2024
Emmanuel LADENT
Chief Executive Officer

7.4 PERSONS RESPONSIBLE FOR AUDITING THE FINANCIAL STATEMENTS

7.4.1 STATUTORY AUDITORS

Principal Statutory Auditors

PricewaterhouseCoopers Audit

Represented by Gonzague Van Royen

63, rue de Villiers – 92200 Neuilly Sur Seine, FRANCE

Appointed at the founding of the Company on April 5, 2011. The Combined General Meeting of June 20, 2024 decided to renew the term of office of the Principal Statutory Auditor for a period of six fiscal years expiring at the close of the annual Ordinary Shareholders' Meeting to be held during 2029 that will be convened to approve the financial statements for the fiscal year ending December 31, 2028.

PricewaterhouseCoopers Audit is a member of the Compagnie Régionale des Commissaires aux Comptes of Versailles.

7.4.2 STATUTORY AUDITORS WHO HAVE RESIGNED OR BEEN DISMISSED

None.

7.5 DECLARATION OF APPROVAL FROM THE COMPETENT AUTHORITY

This Universal Registration Document has been filed with the Autorité des Marchés Financiers, as the competent authority under (EU) Regulation No. 2017/1129, without prior approval in accordance with Article 9 of said Regulation.

This Universal Registration Document may be used in support of a public offering of securities or the admission to trading of financial securities on a regulated market if it is approved by the Autorité des Marchés Financiers (AMF) and if it is supplemented by any amendments, a securities note and the summary note approved in accordance with (EU) Regulation No. 2017/1129.

7.6 DOCUMENTS AVAILABLE TO THE PUBLIC

During the period of validity of this Universal Registration Document, the following documents (or copies of these documents) may be consulted, on physical media, at the Company's registered office, Cataroux Site, 8 rue de la Grolière, 63100 Clermont-Ferrand, France:

- the Articles of Incorporation and Company bylaws;
- all reports, letters and other documents, historical financial information, appraisals and statements made by an expert at the request of the Company, of which a portion is included or referred to in this Universal Registration Document;
- the Company's historical financial information for each of the three fiscal years prior to publication of this Universal Registration Document.

Regulated information within the meaning of the AMF General Regulation shall be available on the Company's website (www.carbios.com).

7.7 CROSS-REFERENCE TABLES

7.7.1 CROSS-REFERENCE TABLE WITH THE INFORMATION REQUIRED IN THE ANNUAL FINANCIAL REPORT, THE MANAGEMENT REPORT ON THE SEPARATE FINANCIAL STATEMENTS, THE MANAGEMENT REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS AND THE CORPORATE GOVERNANCE REPORT

Annual report	Chapter/section of the Universal Registration Document
Separate financial statements	5.3
Consolidated financial statements	5.1
Management report on the separate financial statements	
Information on the Company's activity	Chapter 1; 2.4; 7.1.5
Risk factors	Chapter 3
Legal information and shareholding	1.1.3; 6.1; 6.4; 7.1; 7.2
Financial and tax information of the Company	2.3 to 2.4; 5.3; 6.3
Group social, societal and environmental information	1.1.4; 2.4.4.4
Management report on the consolidated financial statements	
Information on the Company's business activity	Chapter 1; 2.6; 7.1.5
Risk factors	Chapter 3
Legal information and shareholding	1.1.3; 6.1; 6.4; 7.1; 7.2
Group financial and tax information	2.1 to 2.3; 5.1; 6.3
Group social, societal and environmental information	1.1.4; 2.2.4.4
Corporate governance report	
Directors' terms of office and duties	4.1.1.1; 4.1.5.1; 4.1.5.4
Regulated agreements	4.4
Current delegations	6.4.1.5
Declaration of natural persons responsible for the annual report	7.3
Statutory Auditors' report on the separate financial statements	5.4
Statutory Auditors' audit report on the consolidated financial statements	5.2

7.7.2 CROSS-REFERENCE TABLE WITH THE INFORMATION REQUIRED BY ANNEXES 1 AND 2 OF COMMISSION DELEGATED REGULATION (EU) NO. 2019/980 OF MARCH 14, 2019

The following cross-reference table identifies the information required by Annexes 1 and 2 of the Commission Delegated Regulation (EU) No. 2019/980 of March 14, 2019 in accordance with the layout of the Universal Registration Document:

Annexes 1 and 2 of Delegated Regulation (EU) No. 2019/980	Chapter/section of the Universal Registration Document
1 Persons responsible, third-party information, experts' reports and competent authority approval	
1.1 Name and function of the person responsible	7.3
1.2 Declaration of the person responsible	7.3
1.3 Experts' declarations	N/A
1.4 Third-party information	N/A
1.5 Declaration of the competent authority	Page 1; 7.5
2 Statutory Auditors	
2.1 Principal Statutory Auditors	7.4.1
2.2 Statutory Auditors that resigned or were dismissed	7.4.2
3 Risk factors	Chapter 3
4 Information about the issuer	
4.1 Company name and business name of the issuer	7.1.1
4.2 Place of registration, registration number and LEI of the issuer	1.1.3; 7.1.2
4.3 Date of incorporation and length of life of the issuer	7.1.3
4.4 Registered office of the Company and legal form, applicable legislation, website and other	7.1.4
5 Business overview	
5.1 Main activities	1.1 to 1.6
5.1.1 Nature of operations carried out by the issuer	1.4; 1.5
5.1.2 New products and/or services	1.6
5.2 Main markets	1.2; 1.4.1; 1.5.1
5.3 Important events	5.3.4 (Note 2); 5.1.6 (Note 2); 7.1.5
5.4 Strategy and objectives	1.3
5.5 Extent of dependence	3.2.1.4; 3.2.5
5.6 Competitive position of the issuer	1.4.4; 1.5.4; 3.2.1.3
5.7 Investments	
5.7.1 Material investments	2.2.4.1; 2.4.4.1
5.7.2 Material investments in progress	2.2.4.2; 2.4.4.2
5.7.3 Joint ventures and significant shareholdings	2.4.4.3
5.7.4 Environmental impact of the use of property, plant and equipment	2.2.4.4; 2.4.4.3
6 Organizational structure	
6.1 Brief description of the Group	1.1.3
6.2 List of significant subsidiaries	2.4.4.3

Annexes 1 and 2 of Delegated Regulation (EU) No. 2019/980	Chapter/section of the Universal Registration Document
7 Review of the financial position and results	
7.1 Financial position	2.3
7.1.1 Changes in the issuer's results	2.3.3; 5.1; 5.3
7.1.2 Likely future development of the issuer's activities and its R&D activities	1.4.3; 1.5.3; 1.6
7.2 Operating income	2.3.2; 2.3.3.1; 5.3.4 (Note 14)
7.2.1 Key factors	2.3.1
7.2.2 Major changes	N/A
8 Cash and capital resources	2.4
8.1 Information concerning the issuer's capital	2.4.1
8.2 Cash flows of the issuer	2.4.2; 5.3.4 (Note 12); 5.1.6 (Note 12)
8.3 Financing needs and financing structure of the issuer	2.4.3
8.4 Restrictions on the use of the issuer's capital resources	N/A
8.5 Expected sources of funding	2.4.3
9 Regulatory environment	1.2.2; 3.2.6
10 Trend information	
10.1 Most significant trends Significant change in financial performance	2.5
10.2 Items that are reasonably likely to have a material effect on the prospects	2.6
11 Profit forecasts or estimates	2.6
12 Administrative, management and supervisory bodies and Executive Management	
12.1 Information concerning the members of the issuer's administrative and management bodies	4.1.1; 4.1.2
12.2 Conflicts of interest	4.1.4
13 Compensation and benefits	
13.1 Compensation and benefits paid	4.2
13.2 Total amount set aside to provide for pension, retirement or similar benefits	5.1.6 (Note 23)
14 Functioning of the administrative and executive bodies	
14.1 Duration of terms of office	4.1.5.1
14.2 Service contracts	4.1.5.1
14.3 Information concerning committees	4.1.5.2
14.4 Statement related to corporate governance	4.1.5.2.3
14.5 Implications of future changes in the composition of bodies	N/A
15 Employees	
15.1 Human Resources	1.1.4
15.2 Shareholdings and stock options	6.4.2
15.3 Any arrangements for involving the employees in the capital of the issuer	N/A
16 Major shareholders	
16.1 Distribution of share capital	5.3.4 (Note 12); 5.1.6 (Note 12); 6.1.1
16.2 Existence of different voting rights	6.1.2
16.3 Control of the issuer	6.1.3
16.4 Agreements resulting in a change of control	N/A
17 Related-party transactions	4.4.1

Annexes 1 and 2 of Delegated Regulation (EU) No. 2019/980	Chapter/section of the Universal Registration Document
18 Financial information concerning the Company's assets and liabilities, financial position and results	
18.1 Historical financial information	Chapter 5
18.1.1 Audited historical financial information	Chapter 5
18.1.2 Change of date of accounting basis	N/A
18.1.3 Accounting standards	preamble Chapter 2; 5.3.4 (Note 4); 5.1.6 (Note 3)
18.1.4 Change in accounting basis	N/A
18.1.5 Breakdown of audited financial information	5.1
18.1.6 Consolidated financial statements	5.1
18.1.7 Date of most recent financial information	5.1; 5.3
18.2 Interim and other financial information	N/A
18.3 Audit of historical annual financial information	5.2; 5.4
18.4 Pro forma financial information	N/A
18.5 Dividend policy	6.3
18.6 Legal and arbitration proceedings	3.3.3
18.7 Significant change in the issuer's financial position	N/A
19 Additional information	
19.1 Share capital	6.4.1
19.1.1 Amount of capital issued by class of shares	6.4.1.1
19.1.2 Non-equity shares	6.4.1.2
19.1.3 Treasury shares	6.4.1.3
19.1.4 Securities	5.3.4 (Note 12); 5.1.6 (Note 12); 6.4.1.4; 6.4.2
19.1.5 Rights of acquisition and/or any obligations	N/A
19.1.6 Options or agreements	N/A
19.1.7 History of share capital	6.4.1.6
19.2 Articles of Incorporation and bylaws	7.2
19.2.1 Entry in the register and corporate purpose	7.2.1
19.2.2 Rights and privileges of shares	7.2.3.3
19.2.3 Provisions impacting a change of control	7.2.6
20 Material contracts	2.7
21 Documents available	7.6

7.8 GLOSSARY

- **Biodegradation**
  The decomposition of materials into simple molecules (H_2O, CO_2, humus) through the enzymatic action initiated by microorganisms.

- **Bioprocess**
  Production process using microorganisms or enzymes.

- **Depolymerization**
  Degradation of a polymer into its constitutive monomers.

- **Enzyme**
  A protein that catalyzes, meaning that it increases the speed of the chemical reaction.

- **Enzymatic recycling**
  Enzymatic process of degrading a polymer into its constituent monomers followed by a conversion process, through the formation of chains, of a monomer, or a mixture of monomers, into a polymer.

- **Microorganism**
  Microscopic living organism (bacteria, fungus or yeast), meaning that it is invisible to the naked eye and can only be seen using a microscope.

- **Monomer**
  Molecule, a basic unit, which contributes to the formation of a polymer.

- **Polymer**
  Large molecule composed of the repetition, a large number of times, of one or several monomers.

- **Polymerization**
  Conversion process, through the formation of chains, of a monomer, or of a combination of monomers, into a polymer.

- **PLA – Polylactic Acid**
  Bio sourced and biodegradable plastic polymer according to standard EN13432 (industrial compost environment). Moreover, it is biocompatible.

- **PET – Polyethylene Terephthalate**
  Plastic polymer that is the predominant constituent of water bottles and some textile materials, such as polyester fibers.

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