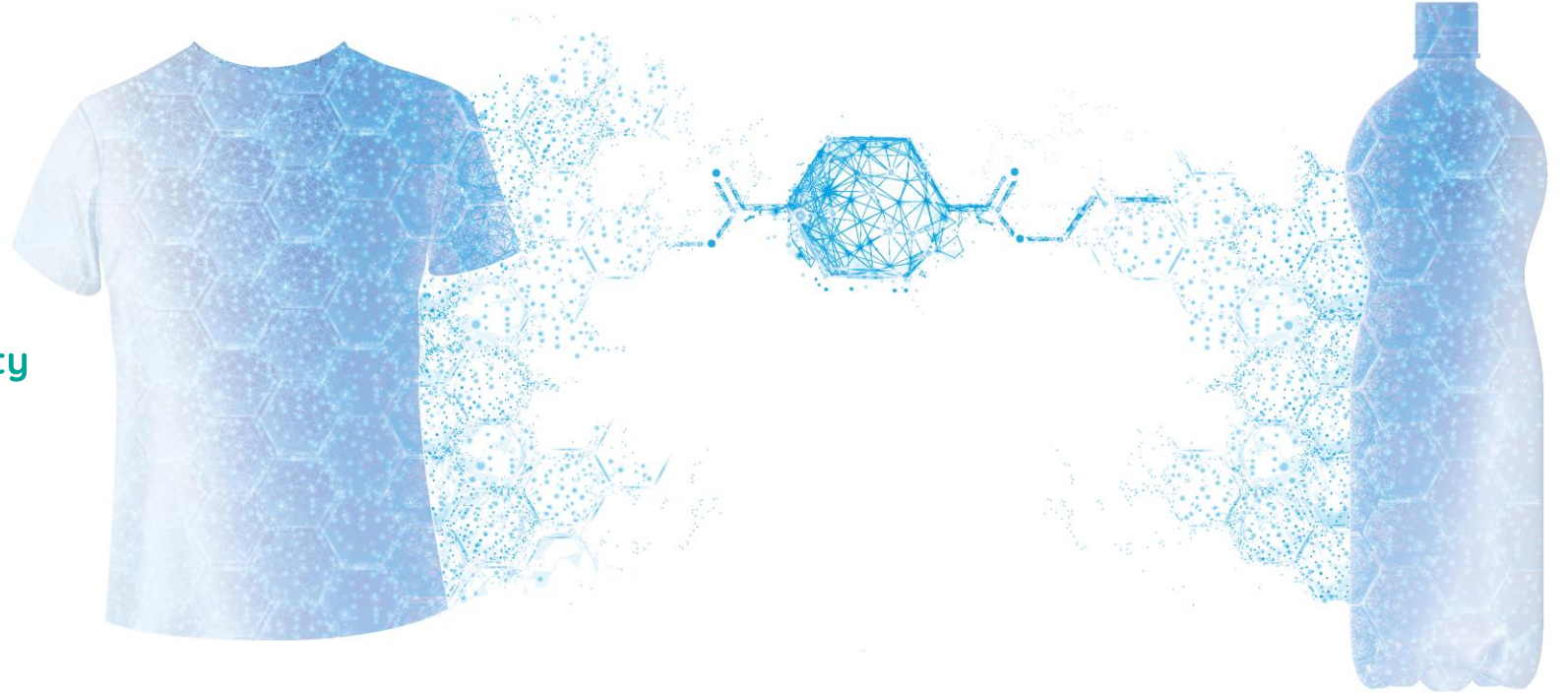




CARBIOS

Biotechnology **powering**
plastic and textile **circularity**

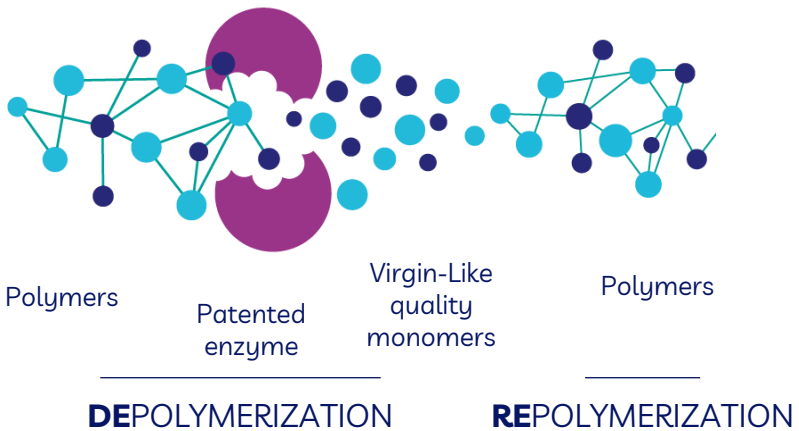
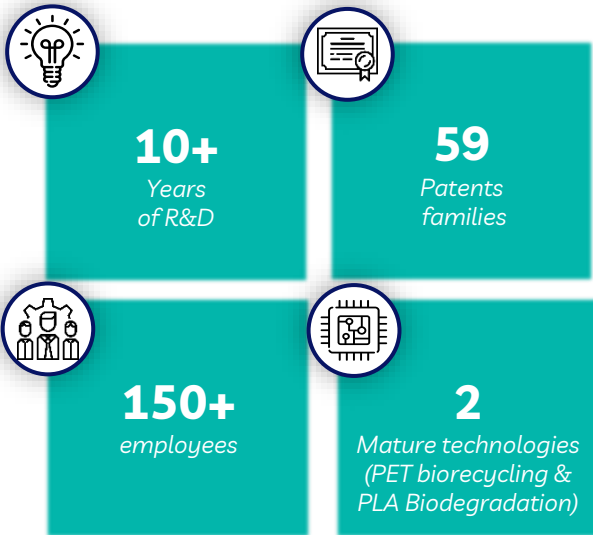


2024 Half-Year Results Presentation

Company overview, 2024 Highlights

Carbios at a glance

TECHNOLOGY



STRONG NETWORK OF PARTNERSHIP

Commercial					
L'ORÉAL PUMA	PEPSICO patagonia	SUNTORY Nestlé Waters	adidas SALOMON	PVH	
Strategic Shareholders			Industrial		
L'OCCITANE EN PROVENCE L'ORÉAL	MICHELIN	DE SMET ENGINEERS & CONTRACTORS novonesis	selenis INDORAMA VENTURES		

3-ARMS OF BUSINESSES



PET
BIORECYCLING
LICENSING



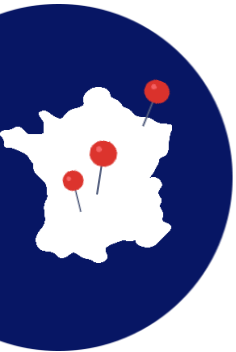
LONGLAVILLE
BIORECYCLING
PLANT



PLA
BIODEGRADATION

Ongoing Licencing LOIs





Our sites

Carbios, a French biotech with international growth strategy



Clermont-Ferrand

Headquarters
Laboratory
Pilot
Demonstration Plant



Toulouse

Research center

PopLaB



Longlaville

PET biorecycling plant
under construction

● 2024 Highlights

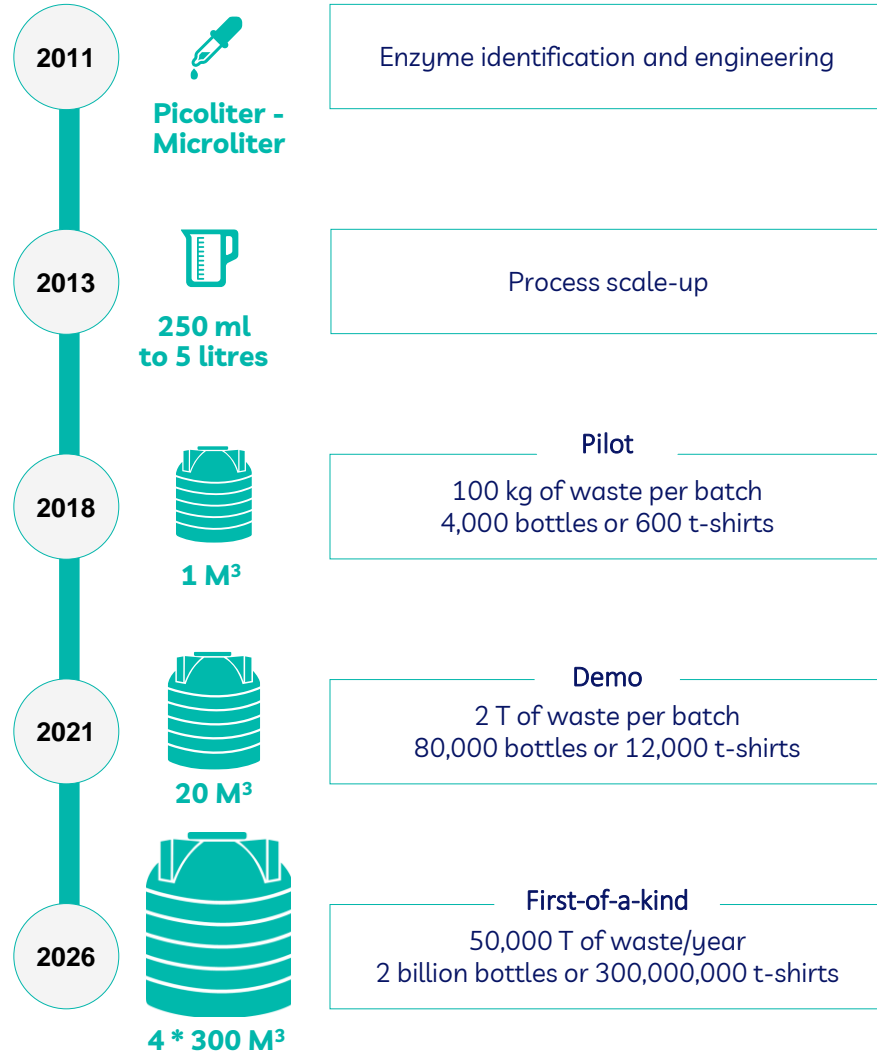


CARBIOS

Biotechnology **powering**
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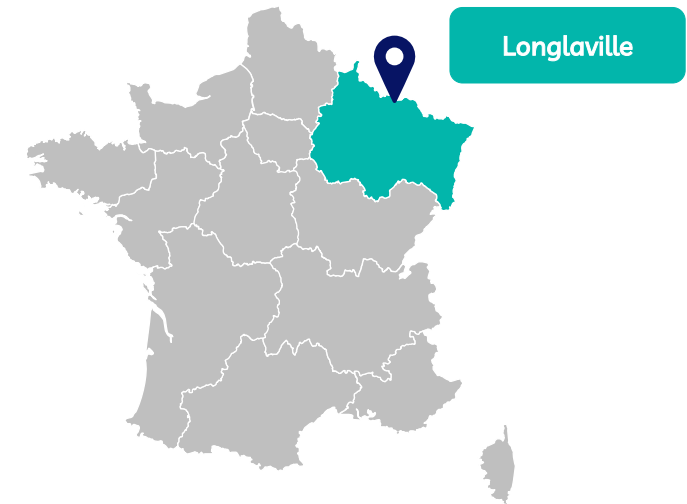
The world's first commercial scale PET biorecycling factory

From innovation to industrialisation

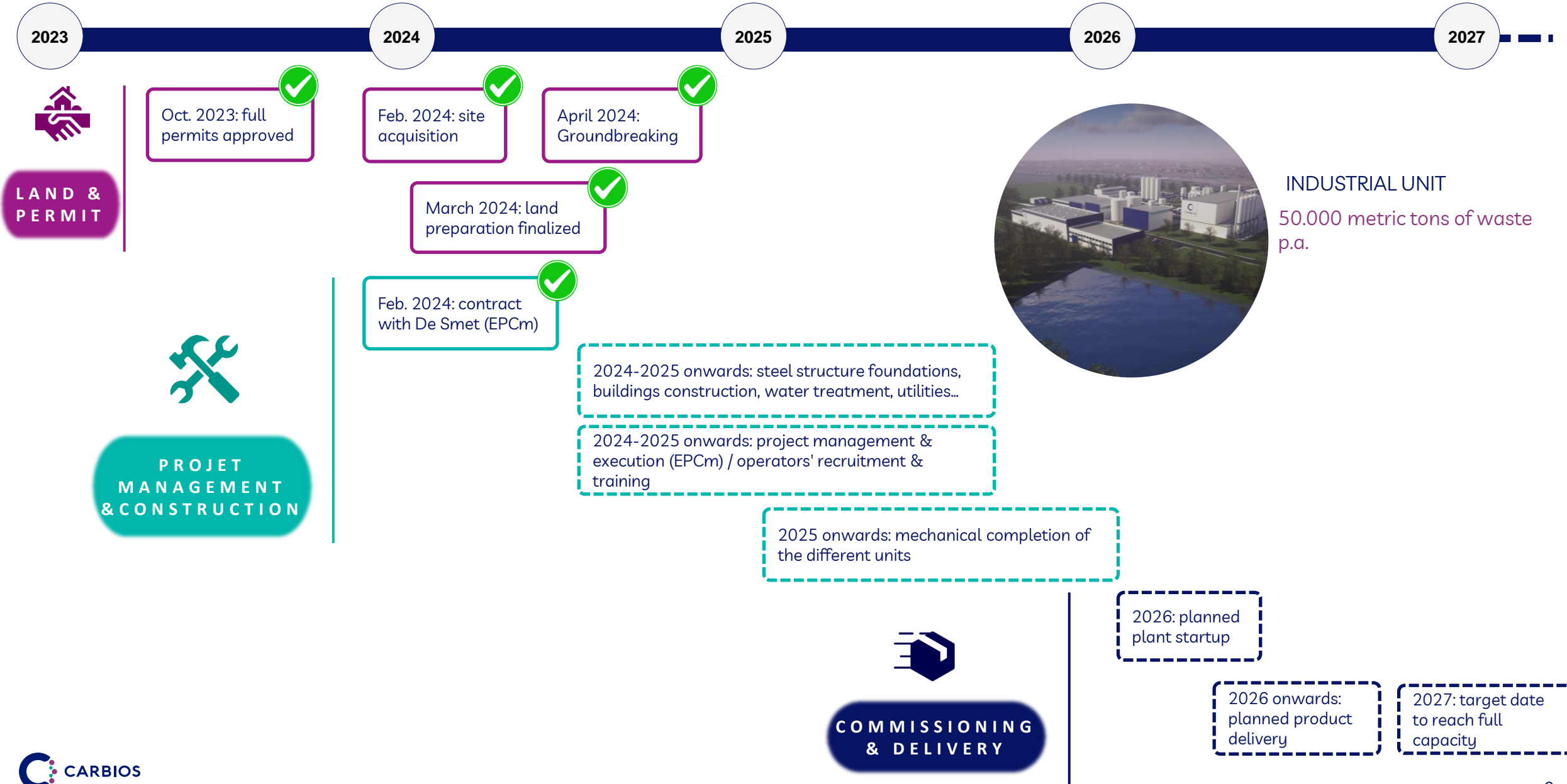


Overview of first-of-a-kind plant

Location	Longlaville, France
Processing capacity per annum	50,000 tons
Environmental & building permits	End-2023
EPCm partner	DE SMET ENGINEERING & CONTRACTORS
First delivery	2026



Roadmap to production in 2026



Milestones already achieved



Acquisition of the land from Indorama Ventures



EPCm contracting with De Smet (detailed design of the plant, assistance in the procurement process and management of the construction)



Land preparation (earthwork) achieved



Soil depollution activities finalized



Water retention reservoir completed



Purchase of the process equipment done on budget



EPC contracting for utility units (Dalkia) and for the treatment of aqueous waste (Saur).



First equipment delivery and « Factory acceptance tests » of 15 High Voltage Switchgears (Schneider Electric)







Second wave of recruitment achieved (process, automation, QHSE and HR engineers)



Feedstock secured for more than 80% of plant capacity

Feedstock supplier partnerships

Company	Segment	Volumes up to (tons/a)
 CITEO	Waste	>5.000 (could reach 10,000)
 Landbell Group	Waste	15.000
 HÜNDGEN ENTSORGUNG	Waste	15.000
 TOMRA	Textile	Undisclosed
 Nouvelles Fibres Textiles	Textile	Undisclosed

Feedstock competitive advantage - utilizes cheapest waste

Conventional recycling feedstock – High demand



Clear bottles

Not primary source of feedstock for Carbios



Coloured bottles

Not primary source of feedstock for Carbios

Carbios' favored feedstock – Low demand



Food packaging trays mono/multilayer

30% of post-consumer trays disposed of in France already secured from the non-profit company CITEO



Conventional recycling residues (fines)

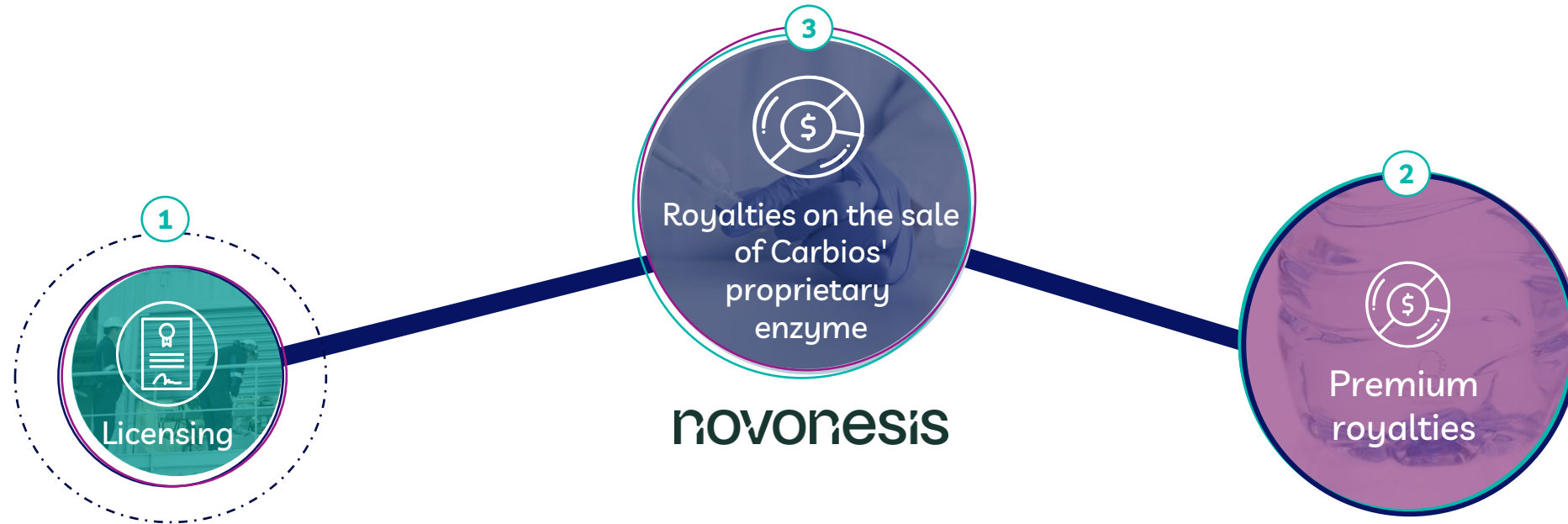
Can easily be processed by Carbios and would avoid incineration



Textile

Mandatory collection starting 2025 in the EU

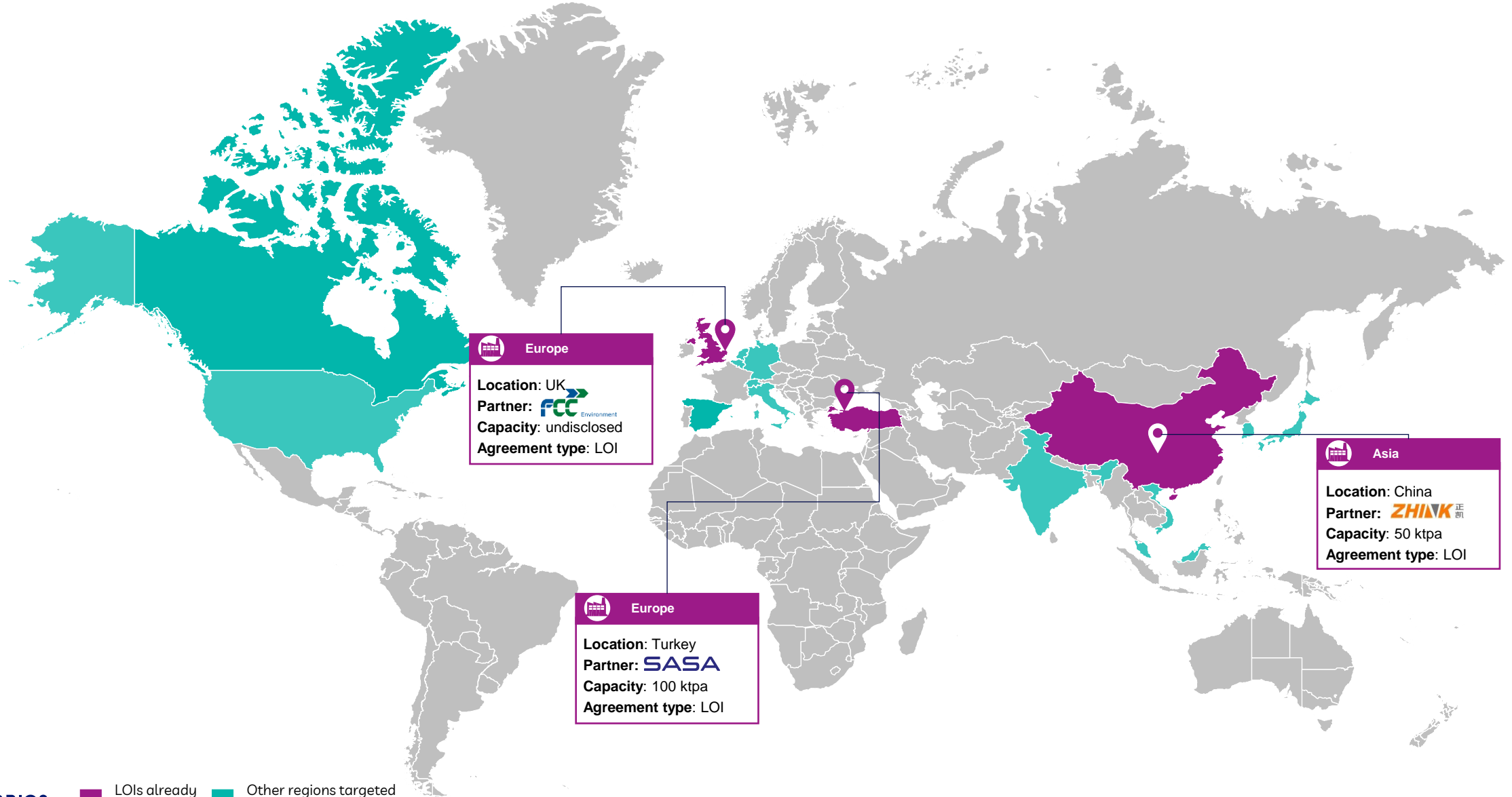
Technology licensing will generate revenue through fixed and recurring fees



Technology licensing revenue generation:

- 1 Fixed fee**
Upfront payments paid by the licensee based on the installed capacity
- 2 Recurring royalty fee – premium royalties**
recurring royalties based on the premium generated by manufacturers from the sale of Carbios biorecycled PET vs mechanical rPET
- 3 Enzymes consumables royalties**
royalties from the sale of Carbios' enzymes by Novonesis directly to manufacturers using Carbios' technology

Current licensing agreements under discussion





PET Producers

- Sustainable offer with highest value



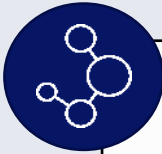
June 2024



CARBIOS and Zhink Group enter official discussions for long-term partnership to build PET biorecycling industrial capacities in China in view of first licensing agreement for 50k tons per year

- This partnership would allow Zhink Group to meet its leadership ambitions through increased recycled PET capacities and sustainable competitiveness by offering recycled PET from enzymatic recycling
- This agreement confirms strong traction for CARBIOS biorecycling technology in China, the world's leading PET producer
- Based in China, the future plant will depolymerize minimum 50k tons of PET waste per year, with potential to expand capacities, to serve regional and global packaging and textile markets

Emmanuel Ladent, CEO, CARBIOS (fifth from right) and Zhu GuoYang, President of Zhink Group (fourth from right) surrounded by their teams at Zhink Group's Headquarters in Hangzhou.



Polyester Producers

- Sustainable offer with highest value

Dr. M. Kemal Öz, General Manager, SASA:

“As a leading producer of polyester, it’s our duty to pave the way in terms of sustainability and environmental responsibility. SASA needs to be a part of the recycling business and our partnership with CARBIOS reinforces our commitment to innovation to advance a circular economy for textiles.”

PRESS RELEASE

August 2024



SASA

CARBIOS and SASA enter discussions for license of 100k ton/year PET biorecycling facility in Turkey

Clermont-Ferrand (France) and Adana (Turkey), Thursday 1 August 2024 (6pm CEST). CARBIOS, (Euronext Growth Paris : ALCRB), a pioneer in the development and industrialization of biological technologies to reinvent the life cycle of plastic and textiles, and SASA, one of the world’s leading manufacturers of polyester, fiber, filament yarn, polyester-based polymers, specialty polymers and intermediates, have signed a Letter of Intent (LOI) to cooperate through SASA’s potential acquisition of a license for CARBIOS’ unique PET biorecycling technology. This licensing agreement would allow SASA to construct and operate an enzymatic depolymerization plant in Adana, Turkey, with a capacity of 100,000 tons per year of prepared PET waste, and would give access to a circular recycling technology, enabling the production of polyester pellets, fibers and textiles from various waste sources, including polyester textile waste. With CARBIOS’ biorecycling technology, SASA would diversify its offering to meet the growing global demand for sustainable materials in the textile industry, primarily catering to the European market.

SASA and CARBIOS’ partnership : a boost for European recycled polyester production



Waste management companies

- Downstream integration
- Feedstock valorization

Steve Longdon, CEO, FCC Environment UK:

“ We are keen to explore with CARBIOS what contribution this technology could make to the UK circular economy and to examine further its place in the UK waste hierarchy from a firm evidence base.”

PRESS RELEASE

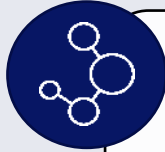
August 2024



CARBIOS and FCC Environment announce joint project to establish UK-based PET biorecycling facility using CARBIOS' licensed technology

Clermont-Ferrand (France) and Doncaster, England (UK), Tuesday 6 August 2024 (06.45 CEST). CARBIOS, (Euronext Growth Paris : ALCRB), a pioneer in the development and industrialization of biological technologies to reinvent the life cycle of plastic and textiles, and FCC Environment UK (“FCC”), one of the UK’s leading recycling and waste management companies, have signed a Letter of Intent (LOI) to jointly study the implementation of a UK-based plant using CARBIOS’ PET biorecycling licensed technology. CARBIOS’ biorecycling technology is key to supporting **FCC’s continuing goal of contributing to the circular economy** by exploring new processes and technologies to produce recycled PET (r-PET) from PET plastic and textiles. For CARBIOS, this LOI **confirms interest from the waste management sector**, in addition to plastic producers, and would mean a foothold for its technology in the UK.

[FCC’s continuing contribution to the UK circular economy](#)



PETG Producers

- Sustainable offer for cosmetic markets and healthcare

Eduardo Santos, Head of Corporate Strategy at Selenis: *“By combining our 65 years of expertise with CARBIOS’ pioneering biorecycling technology that ensures high-quality monomers for the production of virgin-like PETG, we are advancing in the development of sustainable materials to meet the growing demand for environmentally responsible solutions in the cosmetic and healthcare sectors.*”

PRESS RELEASE

September 2024



CARBIOS and Selenis announce strategic partnership to produce PETG issued from CARBIOS’ biorecycling technology for Cosmetic and Healthcare markets

Clermont-Ferrand (France), Tuesday 24 September 2024 (6pm CEST). - [CARBIOS](#), (Euronext Growth Paris : ALCRB), a pioneer in the development and industrialization of biological technologies to reinvent the life cycle of plastic and textiles, and [SELENIS](#), a leading supplier of high-quality specialty polyester solutions, have signed a Letter of Intent (LOI) to cooperate in the production of PETG¹. By leveraging CARBIOS’ unique enzymatic depolymerization technology and Selenis’ expertise in polymerization, the companies aim to develop a premium, sustainable PETG material made from PET waste for the Cosmetic and Healthcare packaging sectors across Europe and the U.S. This partnership follows a two-year collaboration between the two companies and represents a significant advancement in the plastic recycling industry.

PLA: commercialization of CARBIOS Active

Value proposition for PLA biodegradation



The technology has been included in the U.S. Food and Drug Administration (FDA) Inventory of Effective Food Contact Substances (March 2024)



It is BPI Certified by the Biodegradable Products Institute (BPI), North America's leading authority on compostable products and packaging. (March 2024)

CONVERTERS

ANSWER MARKET NEED

PLA PRODUCERS

SECURE END-OF-LIFE

BRAND OWNERS

SUSTAINABILITY GOALS
DIFFERENTIATION - BRAND POSITIONING
FIGHT PLASTIC POLLUTION

WASTE MANAGEMENT

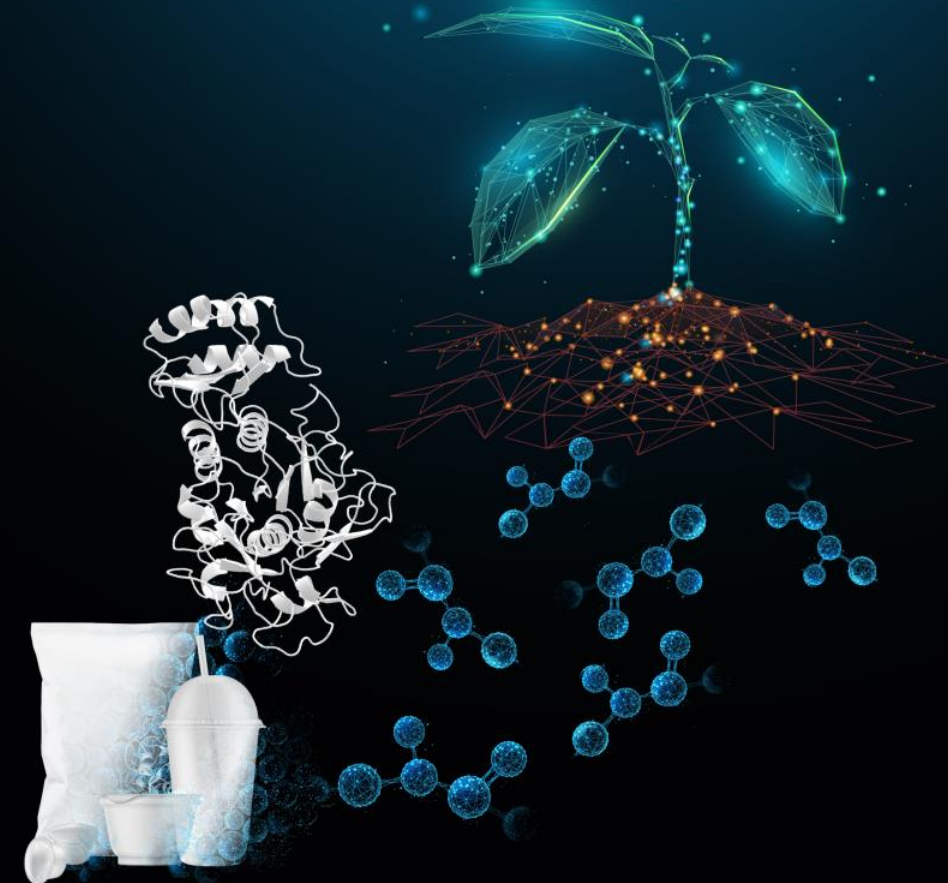
COMPOST QUALITY
INCREASE BIOGAS PRODUCTION
BACK TO SOIL
GUARANTEE FOR SAFE COMPOSTING

CONSUMERS

SORTING = CITIZEN COMMITMENT
GOOD BEHAVIOUR
FEEL LIKE CONTROLLING



In July 2024, CARBIOS published a new article entitled "*An engineered enzyme embedded into PLA to make self-biodegradable plastic*" in Nature, widely regarded as the most influential scientific journal



- Signing of master **supply agreement** of CARBIOS Active
- As part of this partnership, CARBIOS and Sleever® unveiled SEELCAP® ONEGO, the world's first Home Compost biodegradable tamper evident seal.
 - SEELCAP® ONEGO disintegrates completely in composting conditions, even at room temperature, in less than 6 months.

PRESS RELEASE



CARBIOS and Sleever® partner up to co-develop and bring to market first Home Compost biodegradable label-sleeves

Clermont-Ferrand (France), Thursday 19 September 2024 (6pm CEST). CARBIOS, (Euronext Growth Paris : ALCRB), a pioneer in the development and industrialization of biological technologies to reinvent the life cycle of plastic and textiles, and SLEEVEVER®, a French family-owned group International SME and innovative leader in heat-shrinkable label-sleeve technology, today announced the signing of an exclusive, long-term contract to jointly develop Home Compost biodegradable mono-oriented transverse shrink films.

This partnership includes a master supply agreement of CARBIOS Active, the enzymatic solution developed by CARBIOS for PLA biodegradation. CARBIOS Active is integrated directly into the transformation process to make these PLA-rich films Home Compost, while guaranteeing quality compost. These films will enable sleeves to be used in applications as diverse as labeling, wrapping and securing packaging for the luxury goods and mass retail markets, offering an eco-designed solution for packaging with no dedicated value chain.

SLEEVEVER® and CARBIOS, both driven by innovation and a strong commitment to sustainable packaging, put their expertise and know-how at the service of brands.



Finance



CARBIOS

Biotechnology **powering**
plastic and textile **circularity**



HY 2024 Consolidated statement of financial position (1/2)

Consolidated statement of financial position (in thousand euros)	June 30, 2024	December 31, 2023
ASSETS		
Goodwill	20,583	20,583
Intangible assets	21,256	21,874
Tangible assets ①	76,527	49,199
Right-of-use assets	5,510	6,175
Financial assets ②	9,235	1,219
Non-current assets	133,111	99,049
Trade receivables	19	6
Inventory ③	1,354	511
Other current assets ④	6,697	10,621
Current financial assets ⑤	20,388	-
Cash and cash equivalent	120,719	191,821
Current assets	149,178	202,960
Total assets	282,289	302,009

- ① **Tangible assets (+€27.3m)**
 - €27.7m investment at Carbios industrial plant.
- ② **Non-current financial assets (+€8m)**
 - €5m deposit to cover any additional depollution activities on site
 - Non current portion of term deposit accounts pledged to certain suppliers for the construction of the plant (+€3m).
- ③ **Inventory (+€0.8m)**
 - Supply of raw materials secured for the Longlaville plant.
- ④ **Other current and non-current assets (-€3.9m)**
 - Decrease mainly due to the use of the €3.3m advance paid at the end of the 2023 fiscal year for the acquisition of the Longlaville site in February 2024.
- ⑤ **Current financial assets (+€20.4m)**
 - Current portion of term deposit accounts pledged to certain suppliers for the construction of the plant.



HY 2024 Consolidated statement of financial position (2/2)

Consolidated statement of financial position (in thousand euros)	June 30, 2024	December 31, 2023
EQUITY AND LIABILITIES		
Share capital	11,792	11,786
Share and contribution premium	276,703	276,569
Consolidated reserves	(1,713)	(2,900)
Retained earnings	(51,144)	(23,917)
Net income – share attributable to equity holders of the parent company	(18,085)	(27,224)
Shareholders' equity ①	217,553	234,314
Provisions – Non-current portion	232	216
Loans and financial liabilities – Non-current portion ②	38,373	39,226
Lease liabilities – Non-current portion	4,176	4,639
Other liabilities – Non-current portion	425	449
Deferred tax liabilities	1,694	1,694
Non-current liabilities	44,901	46,224
Provisions - Current portion	-	-
Loans and financial liabilities – Current portion	3,452	3,524
Lease liabilities – Current portion	1,067	1,232
Trade payables ③	2,024	4,829
Other current liabilities	13,292	11,888
Current liabilities	19,835	21,472
Total liabilities and equity	282,289	302,009

① Shareholders' equity (-€16.7m)

- Beside the loss of the exercise (-€18m), the change in liabilities is mainly impacted by the employees warrants plans €1.5m.

② Loans and financial liabilities (+€0.9m)

- Decrease mainly due to the repayment of loans and repayable advances (-€1.7m), offset by the receipt of repayable advances (+€0.8m).

③ Trade payables and other liabilities (-1.4m)

- Trade payables fell by €2.8m (supplier payments were made in advance of June 30 closing date as part of the roll-out of the new ERP system). This decrease was partly offset by €1.4m increase in payables for fixed assets, linked to investments made at the Longlaville plant.



HY 2024 Consolidated statement of income

	6/30/2024 6 months	6/30/2023 6 months
Income ①	73	20
R&D expenses, net	(8,201)	(5,719)
<i>R&D expenses</i>	(11,771)	(9,438)
<i>Subsidies and other business income</i>	1,952	2,517
<i>Capitalized development expenses</i>	1,618	1,202
Sales and marketing expenses	(4,301)	(2,280)
General & administrative expenses	(7,578)	(5,290)
Other operating income and expenses	-	-
Operating income (loss) ②	(20,008)	(13,269)
Financial income	2,801	910
Financial expenses	(878)	(1,301)
Net financial income ③	1,923	(391)
Contribution of companies reported using the equity method	-	-
Income before taxes	(18,085)	(13,660)
Income tax	-	-
Net income or loss for the period	(18,085)	(13,660)

① Income

- Some of Carbios' contracts for the supply of goods and services do not fall within the definition of revenue under IFRS (notably consortium contracts and research collaboration contracts). These revenues are presented as a deduction from the charges incurred by Carbios.

② Operating income (-€6.7m)

- Increase in personnel costs of €3m (+43 FTEs) as a result of increased recruitment to support the Group's industrial and commercial development, including €1.6m dedicated to R&D (+25 FTEs) and €1m to the sales and marketing department (+7 FTEs).
- €2.7m increase in the cost of intermediary fees, mainly as a result of expenditure on the ERP project being reclassified as expenses in accordance with IFRS.

③ Financial income (+€1.9m)

- Improvement in the financial results, mainly due to the increase in the Company's financial income from interest on money market investments and term deposits of its cash and cash equivalents.



HY 2024 Consolidated cash-flow statement

<i>Consolidated cash flow statement</i> <i>(in thousand euros)</i>	June 30, 2024 (6 months)	June 30, 2023 (6 months)
Cash at beginning of the period	191,821	100,557
Cash flow from operating activities	(14,730)	(11,748)
Cash flow from investing activities	(55,935)	(9,503)
Cash flow from financing activities	(437)	(832)
<i>Change in cash position</i>	(71,102)	(22,082)
Cash at end of the period	120,719	78,475



Q&A