



– Press Release –

CARBIOS: 2018 Annual Results

- **World’s first PET-bottles made with 100% biorecycled plastic waste**
 - **Signed co-development agreement with NOVOZYMES**
 - **Signed letter of intent with KEM ONE**
- **Industrial structuring of CARBIOLICE prior to the commercial launch of EVANESTO® in 2020**
 - **Cash position of €5.1 million as of December 31, 2018**

Clermont-Ferrand, France, April 08, 2019 (06:45 AM CEST) – CARBIOS (Euronext Growth Paris: ALCRB), a company pioneering new, bioindustrial solutions to reinvent the lifecycle of plastic and textile polymers, today announced its operating and financial results for 2018. The financial statements as of December 31, 2018 were approved by the Company’s Board of Directors at their meeting on April 4, 2019.

Jean-Claude Lumaret, CEO of CARBIOS, said, “*In 2018, we made major technical and scientific strides, which made it possible to plan to take our biorecycling technology to the industrial demonstration stage at KEM ONE’s site in Saint-Fons (69). Structuring developments have also reinforced our ambitions for CARBIOLICE. Through a strengthened business plan and the signature of a co-development agreement with NOVOZYMES, the world leader in enzyme production, CARBIOLICE plans to commercialize the first products using the enzymatic biodegradation technology, designed by CARBIOS, as early as 2020.*”

2018 Income Statement:

(in thousand euros)	December 31, 2017 (12 months)	December 31, 2018 (12 months)
Operating revenues	983	1 083
Operating expenses	5 635	5 323
Operating income	(4 652)	(4 240)
Financial income	24	(25)
Current income before tax	(4 628)	(4 265)
Extraordinary profit (loss)	(11)	(37)
Income tax (research tax credit)	(702)	(1 191)
Net income (loss)	(3 936)	(3 110)

For the full-year of 2018, the operating revenues stood at €1,083,000 versus €983,000 for the previous financial year. As the Company’s business is still focused on developing its innovative processes, most of its operating income comes from subsidies and services.

During 2018, CARBIOS received €94,000 in grants from Bpifrance (program ISI) and ADEME. The Company has also renewed its research service agreement with its subsidiary CARBIOLICE until 2021, and has brought its total amount to €2,500,000, of which €724,000 has been invoiced in 2018.

Due to sustained development policy supporting operational activities and the ongoing improvement of the Company's PET plastic and polyester fibers biorecycling technology, operating expenses stood at €5.323 million for 2018, of which 58% was dedicated to R&D, as opposed to €5.635 million in 2017.

The difference in the consumption rate of resources allocated to R&D is mainly due to an increase in external R&D charges eligible to Tax Credit Research and by the Company's developments, especially through the launch of its CE-PET¹ project which aims to accelerate the industrialisation of its PET plastics and fibers biorecycling technology.

As a result, the operating loss in 2018 settles at €4.240 million and the net loss at €3.110 million, after considering the research tax credit of €1.191 million.

BALANCE SHEET:

ASSETS (in thousand euros)	2017	2018
Intangible assets	565	691
Tangible assets	1 106	971
Financial assets	9 679	10 802
Fixed Assets	11 350	12 464
Inventory	14	15
Receivables	1 455	1 478
Cash and marketable securities	7 547	5 149
Prepaid expenses	155	38
Current Assets	9 171	6 680
Deferred financing costs	0	6
TOTAL ASSETS	20 521	19 149

LIABILITIES (in thousand euros)	2017	2018
Share Capital	3 200	3 260
Additional paid-in-capital	18 588	19 129
Retained earnings	(3 319)	(7 256)
Investment subsidies	17	15
Current year profit (loss)	(3 936)	(3 110)
Shareholders' equity	14 550	12 038
Conditional advances	3 707	3 707
Loans	339	1 866
Trade payables and related accounts	1 432	1 061
Other liabilities	492	477
Payables	2 264	3 404
TOTAL LIABILITIES	20 521	19 149

The increase in fixed assets is primarily due to the €1.100 million subscription to the capital increase of the subsidiary CARBIOLICE².

In accordance with its strategy, the Company added 5 new patent applications to its intellectual property portfolio in 2018 and continued the territorial extension and review procedure monitoring of licences acquired or submitted previously.

¹ Circular Economy PET

² See press release dated July 6, 2018

CARBIOS' equity totalled €12.038 million at year-end 2018 compared to €14.550 million at year-end 2017. This situation reflects the impact of the loss recorded in 2018.

During 2018, the Company received a €1.500 million innovation loan from Bpifrance and another €50,000 redeemable loan as a Grant for the Development of Innovation (ADI).

CASH FLOW:

Cash flow (in thousand euros)	2017	2018
Cash at start of year	3 987	7 547
Net cash generated by operations	(2 221)	(3 078)
Net cash from investments	(312)	(1 441)
Net cash from financing operations	6 092	2 122
Change in cash	3 560	(2 398)
Cash at year-end	7 547	5 149

Benefiting from the innovation loan payment made by Bpifrance and from €601,000 raised during the exercise, CARBIOS closed out with a cash position of €5.149 million at year-end 2018, enabling it to pursue current developments for the next 12 months. However, the Company will need additional funding to secure the demonstration stage of its PET plastics and fibers biorecycling technology.

2018 Highlights:

During the 2018 exercise, CARBIOS made significant scientific and technical strides, bringing its PET plastics and fibers biorecycling technology to the industrial demonstration stage. The highlights of 2018 were the following:

Research & Development

In January 2018³, CARBIOS announced that it had received a payment of €1,021,871 from Bpifrance following the **successful completion of the fifth and final key stage of the THANAPLAST™ project.**

In March 2018⁴, CARBIOS announced a new step forward in the development of its enzymatic depolymerization process rendering it applicable to **PET polyester fibers** from textile waste. CARBIOS opened a new major market by depolymerizing 100% PET textile waste fibers into their original monomers. Each year, 42 million tons of PET are produced for the fiber market⁵, compared to 16 million tons dedicated to plastic bottle production⁶.

In April 2018⁷, CARBIOS announced a major milestone in the optimization of its biorecycling process of post-consumer PET plastic bottles, making it possible to strengthen its economic competitiveness and accelerate its approach to the industrial demonstration stage. Work has been undertaken to optimize the enzyme used in CARBIOS' biorecycling process, with the support of the teams from Toulouse White Biotechnology (TWB), and in particular the Engineering Laboratory of Biological Systems and Processes (LISBP). A molecular modelling study has been carried out to analyse the relations between the 3D structure of the enzyme and its efficiency. This analysis has made it possible to set targets to achieve

³ See press release dated January 11, 2018

⁴ See press release dated March 12, 2018

⁵ : Source: IHS Markit 2018

⁶ Source: IHS Markit 2018

⁷ See press release dated April 12, 2018

a conversion speed that only CARBIOS can claim. Thus, the time of hydrolysis has been divided by three, **97% conversion being obtained after 24 hours of reaction**.

In July 2018⁸, CARBIOS announced new optimization results for its biorecycling process of post-consumer PET plastics: It had further reduced the duration of PET enzymatic hydrolysis by a third, reaching a conversion speed of **97% in only 16 hours**.

Post-closing, in February 2019⁹, CARBIOS announced it had successfully produced the **first PET bottles made with 100% recycled plastic waste** using the Company's breakthrough technology. By demonstrating that 100% Purified Terephthalic Acid (rPTA) coming from biorecycled plastic waste can produce PET bottles that match brand and customer requirements, this world-first proves the potential of the Company's technology to transform the transition towards a circular economy.

Partnerships and industrial developments

In November 2018¹⁰, the Company announced the **signature of a Letter of Intent (LOI) with KEM ONE** for an implementation project, in the French Chemical Valley, of an industrial demonstration plant to secure the value of its breakthrough technology. Under the terms of this 6-month agreement, CARBIOS will study the construction of its demonstration plant on KEM ONE's industrial site in Saint-Fons (France). KEM ONE will make its best efforts to mobilize all stakeholders and assist CARBIOS in defining the conditions for the provision of land, main utilities and required services, and in its procedures involving public authorities.

Post-closing, in January 2019¹¹, CARBIOS and CARBIOLICE announced the execution of a **joint development agreement with the world-leading enzymes producer NOVOZYMES**, within the frame of the enzymatic biodegradation technology licensed by CARBIOS to CARBIOLICE in 2016. Under the terms of this multi-year agreement, NOVOZYMES will upscale and produce CARBIOS' proprietary enzymes. NOVOZYMES commits to become the long-term exclusive supplier of plastics degrading enzymes to CARBIOLICE, a subsidiary to CARBIOS. This collaboration is fully in line with the industrial roll-out objective of the enzymatic biodegradation technology designed and developed by CARBIOS. The commercial launch of this technology, which is expected to start in 2020, should generate first royalty payments to CARBIOS.

CARBIOLICE

In July 2018¹², CARBIOS announced the accelerated development of its subsidiary CARBIOLICE and a **new funding of €3.35 million from its partners**, of which €1.1 million was brought by CARBIOS. This second financing came along with the structuration of the industrial production unit and the reinforcement of commercial and technical means in anticipation of the market launch in 2020 of its new product **EVANESTO®** that aims to make single-use plastic 100% compostable and biodegradable.

During the 2018 exercise, CARBIOLICE, a subsidiary of CARBIOS held at 56.23%, maintained its sales on the Biolice® range, allowing its clients to commercialize products in compliance with the requirements of the French Energy Transition Law. Through a service research agreement which started on February 15, 2017 and extended for two years by an amendment concluded on December 10, 2018, until February 15, 2021, CARBIOS assists CARBIOLICE in the development of biosourced and biodegradable products based on its enzymatic biodegradation technology, particularly for bags, mulch films and

⁸ See press release dated July 19, 2018

⁹ See press release dated February 29, 2019

¹⁰ See press release dated November 28, 2018

¹¹ See press release dated January 29, 2019

¹² See press release dated July 6, 2018

packaging applications worldwide. As of December 31, 2018, the operating income of this contract corresponds to €724,000.

In addition, an amendment to the license agreement dated June 28, 2018 extended the scope of the initial license to new patent families, products and applications (packaging and disposable tableware), against the payment to CARBIOS of an additional lump sum subject to a defined turnover reached by CARBIOLICE.

Financing

Post-closing, in January 2019¹³, CARBIOS and Toulouse White Biotechnology (TWB) announced **€7.5 million of funding from the Investments for the Future Program operated by ADEME** to support, over a period of 39 months, the scale-up of the Company's industrial and commercial PET plastics and fibers biorecycling project. This funding, which comes in the form of grants and conditional advances, will be paid in several instalments. CARBIOS, coordinator and lead manager of the project, will oversee the acceleration of the industrialization of its PET plastics and fibers technology, and will be able to receive up to €4.1 million. The terms and conditions of these contracts to be concluded between CARBIOS and TWB in the framework of this project will be governed by the rules defined by the TWB consortium agreement, which is expected to be signed in 2019.

During the 2018 exercise, CARBIOS received €545,000 payments from the equity line financing set with Kepler Cheuvreux¹⁴ on March 28, 2017 for a term of two years, until March 28, 2019.

Board of Directors

In December 2018¹⁵, **Ian Hudson was appointed Chairman of CARBIOS' Board of Directors**. Hudson, who has been a Board member of the Board since 2016, succeeded Jean Falgoux and took his new position on January 1st, 2019. An Oxford University graduate, Ian Hudson worked more than 17 years at Dupont de Nemours, where he held several leading positions within the Company.

Post-closing, in February 2019, **Godefroy Motte was appointed as a new member of the Company's Board of Directors**. A graduate from the "Ecole des Hautes Etudes Industrielles" with a Chemical Engineer degree and from the Advanced Management Program at Harvard University, Godefroy Motte joined Eastman Chemical Company in 1985, where he held several leadership positions at an international level during more than 30 years, before becoming Board member in 2011. Relevant to CARBIOS, he was the Operations Manager for the efficient start-up of a greenfield PET plant (120kt per year) in San Roque, Spain and the VP, EMEA Operations, for 17 manufacturing sites. Passionate about Specialty Chemicals, Biotech and Renewable Chemistry, Godefroy Motte helps innovative companies optimize their business portfolio, as well as create value-added partnerships with strategic and financial investors.

The strong industrial and international experience of Ian Hudson and Godefroy Motte is a major asset on which CARBIOS can rely to fully comply with the strategic stakes of the industrial deployment of its technologies.

Reinforcement of Intellectual Property rights

In 2018, CARBIOS' intellectual property portfolio gained **five new patent applications** and the Company gave up, due to the development of new enzymes which are more efficient and better suited

¹³ See press release dated January 10, 2019

¹⁴ See press release dated March 29, 2019

¹⁵ See press release dated December 14, 2019

to CARBIOS process, a family of patents for which CARBIOS has an exclusive license from the CNRS and Poitiers University. The new demands, filed in 2018, cover biodiversity associated with the biodegradation of PET, as well as the specific implementation of the recycling process designed and developed by the Company.

At year-end 2018, CARBIOS' portfolio included **29 patent families** (including one with world-exclusive license), representing 98 granted patents and pending applications covering 5 areas of development, namely: biodegradation, biorecycling, bioproduction, biodiversity and innovation. Within the 29 patent families held in CARBIOS portfolio, 7 patents have at least been delivered in one country or region (such as France, Europe, China, Japan, Canada and/or United States of America¹⁶). CARBIOS is now able to ensure its current and future industrial partners a strategic and competitive advantage on expansive markets.

About CARBIOS:

CARBIOS is a green chemistry company whose innovations provide solutions to the environmental and sustainable development issues manufacturers currently face. Since its founding in 2011, the company has developed two industrial-scale biological processes for the biological breakdown and recycling of polymers. These unique innovations help optimise the performance and life cycle of plastics and textiles by capitalizing on the properties of specially selected enzymes. CARBIOS's economic growth model is based on the industrial roll-out and sale of its products, enzymes, technologies and biological processes through direct licence agreements or joint ventures, to major players in the fields to whom they would most benefit. To that end, CARBIOS founded the joint venture CARBIOLICE in 2016, in partnership with Limagrain Céréales Ingrédients and the SPI fund, run by Bpifrance. This company, in which CARBIOS holds a controlling share, will market the first technology licensed by CARBIOS by producing enzyme pellets used in the production of biodegradable and bio-sourced plastics. Since its founding, CARBIOS has been backed by Truffle Capital, a European investment capital player. CARBIOS qualifies as an "Innovative Company" according to Bpifrance, which makes the company's shares eligible for inclusion in innovation-focused mutual funds (FCPIs). For more information, please visit: www.carbios.fr CARBIOS is also eligible for inclusion in SME share savings accounts (PEA-PMEs).

This press release does not constitute and cannot be regarded as constituting an offer to the public, an offer to sell or a subscription offer or as a solicitation to solicit a buy or sell order in any country.

Translation for information purposes only. In case of discrepancy between the French and the English version of this press release, the French version shall prevail.



CARBIOS

Benjamin Audebert
Investor Relations
contact@carbios.fr
+33 (0)4 73 86 51 76

Media Relations (Europe)

Alize RP
Caroline Carmagnol
carbios@alizerp.com
+33 (0)1 44 54 36 66

Media Relations (U.S.)

Rooney Partners
Kate L. Barrette
kbarrette@rooneyco.com
+1 212 223 0561

¹⁶ See press release date March 28, 2019