

# PolyBiotic Solutions secures funding for breakthrough in biodegradable plastics

**Eindhoven, March 3, 2026** – Affordable bioplastic that breaks down on its own once it ends up in nature. That is no longer a vision of the future. Netherlands-based PolyBiotic Solutions has successfully completed a €500,000 investment round to scale up its patented technology and prepare it for market application.

The investment was made by a consortium of partners with complementary expertise. [Value Factory Ventures](#) (NL, Ridderkerk) and [Rodenburg Biopolymers](#) (NL, Oosterhout NB) are joining as new shareholders. Existing shareholders [PJ Milieu](#) (NL, Nijkerk) and [MGS](#) (UK, Bury St Edmunds) are reinvesting and will remain closely involved.

## Bioplastic that is broken down by microbes

PolyBiotic Solutions is developing a new type of bioplastic that offers a fundamentally different solution to the problem of plastic pollution. The material contains a mixture of microbes (different strains of bacteria) that break down the plastic after use. The material is just as strong and reliable as conventional plastic. Once this type of bioplastic ends up in nature, for example in the soil or in water, the microbes become active and break down the material into harmless natural substances, such as minerals, water, and CO<sub>2</sub>. The use of these new bioplastics prevents environmental pollution of microplastics.

*"We have developed a bio-based material that behaves like normal plastic for as long as necessary, but is then actively broken down by microorganisms," says Machiel Resink, CEO of PolyBiotic Solutions. "This means we are not only tackling plastic pollution, but also the problem of microplastics. That makes our product a fundamentally different solution than existing bioplastics."*

Whereas many biodegradable plastics only break down under industrial composting conditions, PolyBiotic Solutions' technology has been developed to break down in a controlled manner even under natural conditions.

## Accelerating now: in geotechnology, construction, and non-food packaging

Polybiotic Solutions is currently scaling up from development to practical applications. With the arrival of new shareholders, the company expects to accelerate this step considerably, with a clear focus on sectors where (bio)plastics are already widely used, or could be used in the short term, such as geotechnology, construction, and non-food packaging.

**Value Factory Ventures** is providing strategic investment support for scaling up, strategy, and market introduction. *"We invest in technologies that have a real impact on the climate," says Jacco Zuijdweg of Value Factory. "PolyBiotic Solutions' solution is technically innovative and directly applicable in the geotechnology, agriculture, and non-food packaging sectors, where the plastic footprint is large. This could really be a game-changer."*

**Rodenburg Biopolymers** brings industrial and operational expertise to the table and will actively support the up-scaling of production and sales and application within existing production chains. *"What appeals to us is that this technology is not separate from industry, but rather ties in with existing production processes," says Thijs Rodenburg of Rodenburg Biopolymers. "That makes it possible to apply this innovation more quickly and on a larger scale."*

## Changes in management

With a view to the next phase of growth, Machiel Resink has been appointed as the new CEO of PolyBiotic Solutions. Together with the founder, he forms the management team.

Ray Tiemessen has stepped down from his operational role but remains involved as a shareholder and strategic advisor. *"From the outset, the goal was to develop plastic that does not remain in the environment," says Ray, founder of PolyBiotic Solutions. "With this investment and this team, the company is ready to make the leap from promise to practice."*

## Use of the investment

The capital raised will be used for further technical development and certifications. Together with industrial partners, work is being done on pilots and up-scaling towards commercial production.

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## **About PolyBiotic Solutions**

**PolyBiotic Solutions** develops innovative, bio-based polymers that actively biodegrade under natural conditions. By combining bioplastics with functional microorganisms, the company offers an alternative to conventional plastics that cause plastic pollution and microplastics. The technology is designed to ensure that materials are strong and reliable during initial use and then degrade in a controlled manner in nature. PolyBiotic Solutions focuses on applications in geotechnology, agriculture, and non-food packaging, among others, and is currently in the up-scaling phase towards market introduction.

<https://polybiotic-solutions.com>

## **About Value Factory**

**Value Factory Ventures** invests in groundbreaking startups in Agritech, Food, and Climate that develop disruptive deep tech solutions to achieve real impact. Within Climate, we focus on sustainable materials and construction innovation, among other things, so that sectors with a large CO<sub>2</sub> and raw material footprint can become more sustainable more quickly. By combining capital with hands-on support, we stimulate innovations that combat climate change, improve food security, and accelerate the transition to a circular economy, thereby achieving maximum impact together.

<https://valuefactory.vc>

## **About Rodenburg Biopolymers**

Rodenburg Biopolymers is a leading producer and developer of bio-based and compostable polymers for industrial applications. The company combines deep material expertise with many years of experience in production and scale-up. Rodenburg works closely with partners across the value chain to successfully bring sustainable innovations to market and integrate them into existing production processes.

<https://biopolymers.nl>

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