



**MATER-BIOPOLYMER** is a company headquartered in Patrica (FR) and part of the **NOVAMONT GROUP**, a pioneer and world leader in the bioplastics sector and in the development of bioproducts.

**MATER-BIOPOLYMER** is the group's society dedicated to the production of **ORIGO-BI**, biodegradable biopolyesters with an increasing content of raw materials of renewable origin, thanks to the upstream integration of proprietary technologies. The **ORIGO-BI** biopolyesters are an essential component of the process to produce the family of compostable bioplastics known as **MATER-BI**, with a continuous innovation of their technical and environmental performances.

**MATER-BIOPOLYMER**, in line with **NOVAMONT** strategy, which is based on the use of world-first technologies for the regeneration of no longer competitive sites, is a virtuous example of industrial development in terms of **regeneration of local areas**, continuous innovation and valorisation of pre-existing skills and infrastructures.

The plant is in fact a **converted PET** production plant. Thanks to **NOVAMONT's** innovative technologies and know-how, the various sections of the plant have been regenerated or replaced, becoming part of a new process which allows the use of renewable raw materials. Moreover facilities have been implemented to increase the sustainability and significantly reduce the emissions.

**MATER-BIOPOLYMER** is a highly efficient plant that is able to ensure compliance with the highest quality and safety requirements and is equipped with a complex system of utilities which contribute to **minimising costs and waste** through the recovery and **reuse of waste**.

In 2016 the construction of a distillation section for the wastewater resulting from the process was started. This allowed the recovery of the tetrahydrofuran (THF) that is generated during the polymerisation reaction. Once distilled, this **THF of renewable origin** is intended for the chemical and pharmaceutical industries.

The plant covers an area of 74,000 m<sup>2</sup>, has a production capacity of 100,000 tonnes per year, employs around 90 employees and works hand in hand with **NOVAMONT's** Research and Development department for a continuous improvement of the process, and to expand the range of products and applications, starting from the use of more and more renewable and local raw materials.

## RECONVERSION: FROM PLASTICS TO BIOPLASTICS

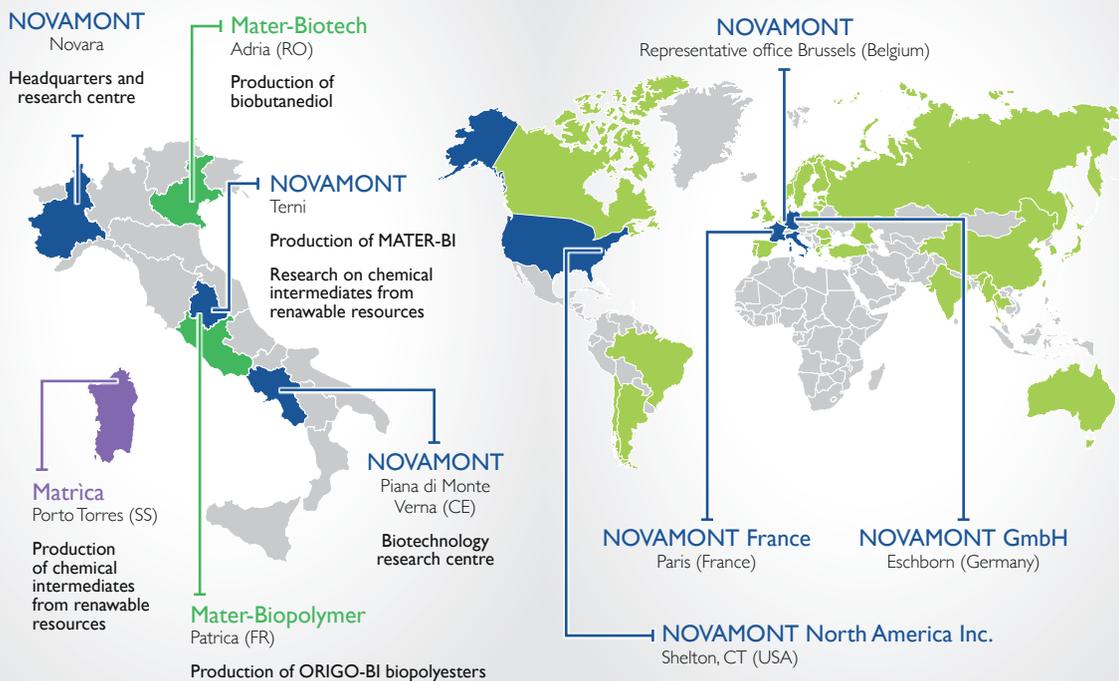
- 1990** – SIPET is set up through a JV between Shell and M&G Group
- 1992** – Launch of the 1st PET production line
- 1995** – Implementation of a 2nd PET production line
- 2000** – SIPET is acquired and becomes M&G Polimeri Italia
- 2009** – The plant is too small for the expanding PET market: a line is shut down
- A project is born to verify the feasibility of a reconversion using NOVAMONT technology
- 2010** – NOVAMONT decides to proceed with the conversion of the first line of the plant assuming a series of interventions and transitions in order to get to a continuous production of its biodegradable and compostable polyesters
- 2011** – Launch of the ORIGO-BI production and start of the process of continuous improvement, which has reached its final set in 2015
- 2014** – NOVAMONT acquires 78% of M&G Polimeri Italia
- 2017** – NOVAMONT acquires all of the M&G Polimeri Italia shares
- M&G ceases PET purchase and the second line remains inactive. Its conversion is decided
- 2018** – The conversion of the second PET line is completed and the production of ORIGO-BI is doubled

# NOVAMONT GROUP: WHERE WE ARE

## IN ITALY

- Seats
- Subsidiaries companies
- Business network
- JV Novamont/Versalis

## WORLDWIDE



We are the world's leading company in the sector of **bioplastics** and in the development of **bioproducts** obtained through the integration of chemistry, environment and agriculture.

**We are driven by innovation:** we invest in R&D activities and develop new proprietary technologies which allow us to constantly improve the performance and environmental profile of our products.

Our development model starts from local areas and creates **integrated biorefineries** by converting uncompetitive industrial sites, respecting the specific characteristics of the territories, in partnership with all the stakeholders in the value-chain.

Our approach is cultural as well as industrial, with the aim to **create jobs** and **competitiveness**, enhancing local skills and implementing training programmes at all levels.

### WHAT IS MATER-BI

**MATER-BI**, designed and developed by **NOVAMONT**, is an innovative range of bioplastics which uses vegetable feedstocks. Thanks to its **biodegradability** and **compostability** properties (EN 13432) it allows optimal **organic waste** management and contributes to the development of virtuous systems, with significant advantages throughout the entire production-consumption-disposal cycle.

**MATER-BI** grades are all certified according to European and international standards by accredited bodies.

**MATER-BI** products are not just products, but are created in order to **solve specific environmental problems**, such as the management of organic waste, and that of catering services or the pollution and degradation of agricultural soils, creating a virtuous system with economic and social benefits for the community.

### OUR 2017 IN NUMBERS

TURNOVER: > €195 million

> 600 people

4 production sites

8 compounding lines

4 world-first technologies

3 R&D centers

6% of turnover invested in R&D

24% of people dedicated to R&I

Approx. 1,000 patents

> 350 training activities since 1996



If recycled by composting, applications made of **MATER-BI** can return to the earth in the form of **compost**, a valuable soil improver bringing high agronomical benefits, thus ending their **life cycle** naturally and without producing waste.

[www.novamont.com](http://www.novamont.com)

