IMPACT REPORT

FEBRUARY 2025

NOVAMONT
A Versalis Company

2024
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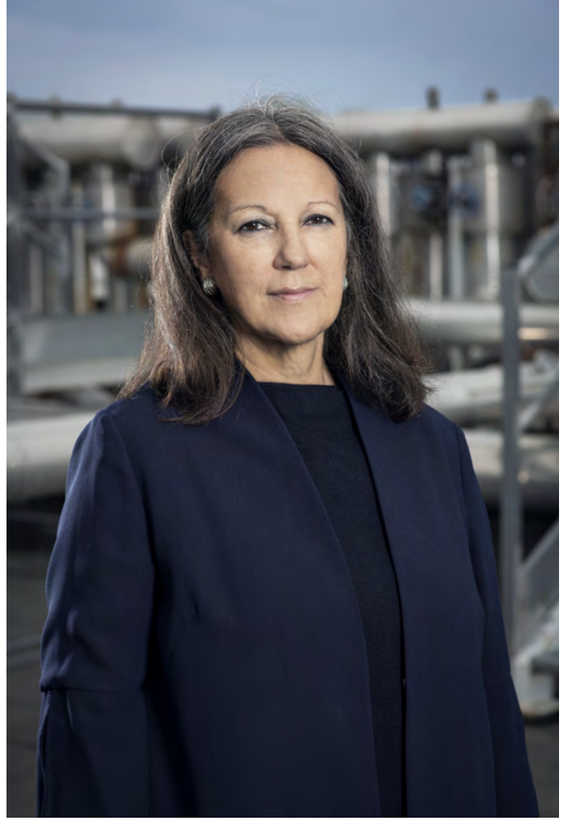
A Versalis Company



“In the past thirty years we have been operating exclusively in the bioproducts field and building integrated biorefineries for bioproducts, fundamental infrastructures for the development of circular bioeconomy. We pay attention to the production, the use and the end-of-life of products, starting from our commitment to soil regeneration, integrated supply chains, application of new technologies to give value to waste and by-products, promoting local projects. Today, we are a Benefit Company and a B Corp that has chosen by statute to act as a regenerative force, guaranteeing more transparency and driving entire supply chains towards the creation of ever higher environmental standards, and, together, becoming active part of change. Convinced that this is the right recipe for a more sustainable transition, we will continue to go beyond profits, creating systems that have a positive impact on society and continuing to apply high standards for us and for our stakeholders.”

Catia Bastioli – Chief Executive Officer of Novamont

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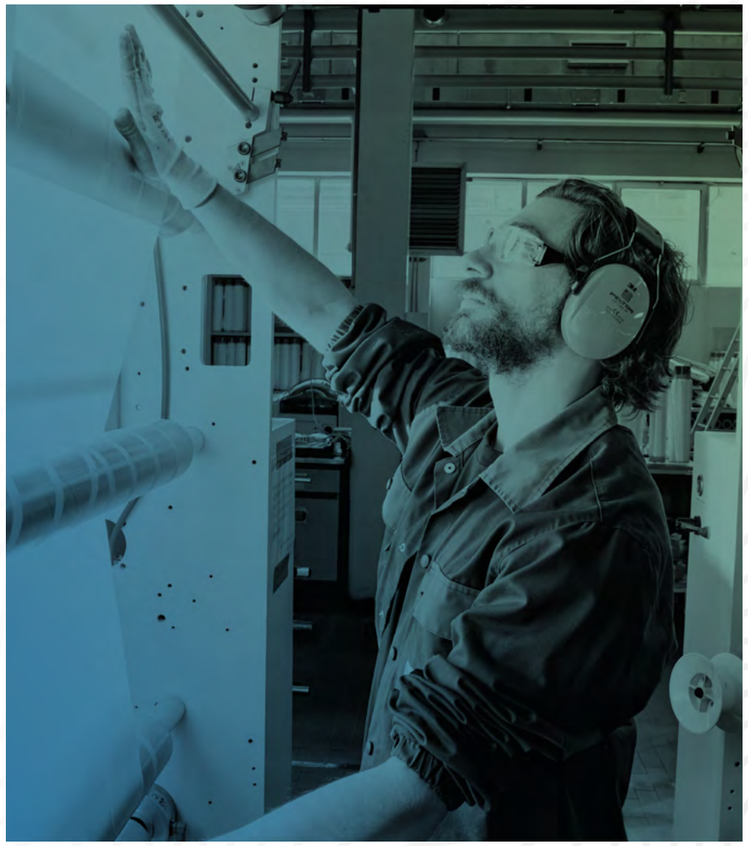
Reading guide



This document is the fifth impact report drawn up by Novamont, part of Versalis (Eni), a Benefit Company since 2020, to transparently report on its activities aimed at achieving the common benefit purposes, both in terms of actions carried out and plans and commitments for the future.

Each common benefit purpose stated in the company articles of association has a dedicated chapter, describing in detail how the company pursues such purposes and the projects and collaborations that, in the year of reporting, contributed to generating a more positive impact in the territories, on people and to reduce the impact on the environment the most.
This impact is measured through a series of Key Performance Indicators (KPIs) that were defined by Novamont the year it achieved the Benefit Company status (2020), devised to remain constant over the years in order to ensure comparability over time, but allowing for necessary revisions with a view to continuous improvement and transparency[1]. Each indicator is connected to the objectives that the company aims to achieve in the following term.
After what mentioned above, a further section describes how Novamont pursues common benefit beyond the five impact areas defined in the articles of association, with particular reference to the development of the organisation and its people.

The final part of the document details the score achieved by Novamont based on the third-party international standard B Impact Assessment (BIA), developed by the American independent non-profit B Lab, which is used by the company to measure, improve and report on all its economic and social impacts and to reduce the environmental ones. Applying this tool, Novamont exceeded the excellence threshold of 80 points and was therefore recognised as a certified B Corp in July 2020, with a score of 104 points out of 200, and again in February 2024, when the first certification expired, with a score of 118.8[2].

In 2024, Novamont updated the way it calculates certain indicators as a result of the evolution of its corporate structure. In particular, the scope of parameters reported in this Report includes, only Novamont S.p.A., as Benefit Corporation. In order to represent coherently the KPIs trend over time, whenever necessary there was an update of the graphs of “Normalised KPI trends according to baseline value”, referring to the same scope, therefore excluding all the subsidiaries[3].

[1] e.g. See the indicator “Decarbonization potential index” in chapt. 7 - The fourth common benefit purpose.

[2] https://www.bcorporation.net/en-us/find-a-b-corp/company/novamont/

[3] See page 31 - Regenerated area index and page 48 - R&I investments % of turnover.

2

Novamont: a model of circular bioeconomy for territorial regeneration

Founded in 1990, Novamont is an industrial company and finds its roots in the Montedison Materials Science school at a time when the group included both the chemical and agricultural-industrial segments. It is precisely the integration of chemistry and agriculture at the basis of the ambitious research project that, back in 1996, gave rise to an independent start-up, committed not only to developing biodegradable products but also to the creation of a circular bioeconomy demonstrator with products used as catalysts of a cultural change. Today, Novamont is a Benefit Company and a certified B Corp, among the international players in the field of biodegradable and compostable bioplastics and in the development of chemicals and polymers derived in whole or in part from biomass. In 2023 Novamont was wholly acquired by Versalis, Eni's chemical company, committed in a transformation journey towards a more sustainable and circular chemistry and towards more specialised products. This acquisition is part of Eni's energy transition path, which identifies the bio-based chemicals sector as one of the main levers. Novamont, an integral part of Versalis's Biochemistry Business Unit, will be able to count on the development of its biorefineries network and new synergies, enhancing what has already been built, and putting in place projects for total upstream and downstream integration.

Novamont's development model aims to connect different sectors and to collaborate with all actors in the value chain: from agriculture to research, from industry to the waste sector, from local institutions to civil society. The goal is to create, through pilot projects, demonstrators that focus on the specific characteristics of local areas, to continuously monitor performance in order to measure the extent of environmental, economic and social impact at a local level.
Guided by these principles, Novamont promotes a circular approach to the bioeconomy based on redesigning the way in which the materials and applications are produced, consumed and disposed of and encouraging the creation of virtuous local value chain.

With this in mind, over the years Novamont has developed biorefineries for bioproducts through innovative technologies, starting from disused or no longer competitive plants, minimising land consumption and promoting the regeneration of territories and the social fabric.
Thanks to its biorefineries for bioproducts, Novamont has developed, and continues to develop, a range of increasingly more renewable solutions, that are also biodegradable and compostable with multiple uses at the end of their lives; right from the outset, these offer an opportunity to launch development projects with partners sharing the need to redesign applications and integrated value chains with a view to ensuring a higher efficiency of resources.

Its main product range is Mater-Bi, the innovative family of biodegradable and compostable bioplastics developed to contribute to cope with specific environmental problems, and at the same time ensuring high product quality and performance.
Mater-Bi is biodegradable and compostable in home and industrial composting and is biodegradable in soil according to the main international standards: UNI EN 13432, EN 17033 and ASTM 6400. In accordance with norms in the field, Mater-Bi does not release persistent microplastics into the environment, has no eco-toxic effects and biodegrades even at low temperatures.

According to Novamont's circular bioeconomy approach, Mater-Bi is not only the first biodegradable and compostable bioplastics brought to industrial level, but a product that is constantly evolving towards increasing sustainability and circularity, thanks to the development of technologies for more and more efficient use of raw materials from renewable vegetable sources.

The main application sectors are organic waste collection, large-scale distribution, food services, packaging and agriculture. High-performance multi-material packaging made of Mater-Bi and paper can be recycled in both the paper and organic waste streams.
In addition to bioplastics, Novamont also produces a range of bio-based bioproducts, devised to contribute to deal with topics connected to environmentally sensible sectors:

- biodegradable cosmetic ingredients (Celus-Bi)
- biolubricants and dielectric fluids, readily[4] biodegradable (Matrol-Bi)
- Pelargonic acid-based phytosanitary products (Ager-Bi)

[4] In accordance with OECD Guideline 301B.

Research and innovation have always been the driving force behind Novamont's development, which today offers a wide range of skills and specialisations, with equipment ranging from laboratory scale to innovative pilot plants. Over the years Novamont has developed 13 proprietary technologies for the production of bioplastics and bioproducts, creating synergies between different areas of study: the Bioplastics area, the Biotechnology area, the Agronomy area and the Organic Chemistry area. In addition, there are 7 proprietary technologies under development at different levels, from the pilot stage onwards. Today, Novamont's portfolio includes 137 patent families and approximately 1,600 of patents and patents applications.

2024 TURNOVER NOVAMONT S.P.A.

265 M€

INVESTMENTS IN R&I ACTIVITIES IN 2024 NOVAMONT S.P.A.

15.5 M€

PEOPLE

499

20% People dedicated to R&I

RESEARCH AND INNOVATION STRUCTURE

2 Research centres

3 Technology hubs

TECHNOLOGY

13 industrialised proprietary technologies

PATENTS AND PATENT APPLICATIONS

About **1600**

TRAINING ACTIVITIES SINCE 1996 TO DATE

489

With turnover of 265 million euros, in 2024 Novamont invested 15.5 million euros in research and development activities, with over 20% of its staff involved in R&D.

Novamont regularly organises training programmes for young researchers and experts, in partnership with schools, universities and research centres (489 training activities have been held since 1996).
Moreover, in 2022, the company founded Officine Novamont, an important place to exchange, amongst the group, knowledge values and specific skills, virtually and physically. Such initiative aims to strengthen the group's identity and culture through the definition and dissemination of "Novamont values", to promote the growth of people's distinctive skills (technical and non-technical), and finally to develop innovation projects with shared value with strategic partners, in order to consolidate and enrich the company's know-how.

Novamont has its headquarters in Novara, production plants and technology hubs in Terni, Adria (province of Rovigo), Patrica (province of Frosinone), the Matrìca joint venture with Versalis in Porto Torres (province of Sassari, Sardinia Region) and research and development laboratories in Novara and Piana di Monte Verna (province of Caserta, Campania Region). It has offices in Germany, France, Spain and the United States. It has its own distributors in over 40 countries in all continents.

In 2021, with the goal of creating new alliances with international stakeholders and creating innovative projects aimed at improving separate collection of bio-waste and composting systems in North America, the Scandinavian countries, Eastern Europe and Australia, Novamont acquired BioBag International, a player in the development, production and sale of certified compostable and biodegradable applications with headquarters in Askim (Norway), a production plant in Dagö (Estonia) and is operative in 8 more countries worldwide. Novamont also founded Mater-Agro, a company (85% Novamont, 10% Coldiretti and 5% Consorzi Agrari d'Italia) with the aim to promote a new model of participatory innovation between agriculture and industry, helping farmers to maintain good crop yields through the use of low-impact bioproducts (Ager-Bi), and bioplastics (mulching films) with low environmental impact.

In 2020, together with the University of Bologna, Coldiretti and the Polytechnic University of Turin, Novamont also created Re Soil Foundation, with the aim of connecting scientific, technological, environmental and humanistic knowledge and becoming a meeting point for the various Italian and European realities dedicated to the soil issue.

There are 482 Novamont employees, plus 15 collaborators and 2 trainees and 136 BioBag employees, making a total of 635 people.

MATER-BI

Mater-Bi is the family of biodegradable and compostable plastics developed wholly or in part from biomass of plant origin[5]. The different grades of the Mater-Bi family differ in technical characteristics and bio-based content[6] depending on the intended application area. Thanks to these characteristics, Mater-Bi optimises the management of organic waste, reduces the environmental impact and contributes to the development of virtuous systems, with significant advantages throughout the production, use and end-of-life cycle. Mater-Bi products have a third-party verified environmental profile[7], are recyclable through organic recycling (in addition to other forms of chemical and mechanical recycling), do not accumulate in the environment, as they are biodegradable in the soil, and allow for the redesign of different applications to decouple development and exhaustible fossil sources use. According to Novamont's circular bioeconomy, Mater-Bi is a product that is continually evolving towards greater sustainability and circularity, thanks to the development of technologies for a greater and more efficient use of renewable raw materials of plant origin. As a matter of fact, Novamont is constantly looking for solutions that make it possible to reduce the use of fossil resources in Mater-Bi[8], in favour of increasing amounts of raw materials from biomass, in order to reduce further its carbon footprint.

[5] Claims on the biological content of Novamont's Mater-Bi grades are based on the measurement and verification of biogenic carbon as a percentage of total carbon, carried out according to EN 16640:2017 (using radiocarbon methods).

[6] Currently the average bio-based content in Mater-Bi is approximately 40% for mulching films; for products aimed at injection moulding such content is over 60%, and - in some specific applications - it can even reach 100%. For instance, for the application "bags for food, such as fruit and vegetables" Novamont is able to offer to the Italian market solutions with a bio-based content of more than 60%.

[7] Mater-Bi was the first material to achieve the eLabel! certification, the multi-label promoted by the Kyoto Club to certify the environmental excellence and innovation of products and services, providing transparent information in terms of both quality and quantity and allowing the consumer an autonomous and immediate evaluation.
The eLabel! certification certifies the environmental performance and degree of innovation of Mater-Bi on the basis of unambiguous and objective information: the content of renewable raw materials, their sustainability, greenhouse gas emissions, recovery methods and finally biodegradability in nature, in case of uncontrolled release.

[8] Some Mater-Bi components, fundamental to achieve adequate functional properties for each application, are not currently available on sale in their renewable version. Only the conventional version, i.e. from fossil sources, is available.

A B CORPORATION CERTIFIED BENEFIT COMPANY

Starting in 2020, Novamont has also chosen to measure its performance in terms of its impact on society and the environment through the B Impact Assessment (BIA), the framework developed by the independent American non-profit organization B Lab and used by more than 150,000 companies worldwide[9]. Such framework integrates and enriches the set of non-financial measurement and reporting tools with which Novamont communicates to internal and external stakeholders the commitments, strategy, management methods and results of the company's activities, declined in their threefold economic, environmental and social aspects. These include the GRI Sustainability Reporting Standards and the UN Global Compact principles, which have been the foundation of the Sustainability Report drawn up every year since 2008.

Using the BIA[10], Novamont passed the 80-point threshold, verified by the B Lab Standard Trust on a scale of 0 to 200, and was therefore recognised as a certified B Corp in July 2020, with a score of 104, joining a global movement that now counts more than 9,400 companies operating in 160 sectors in 105 countries around the world[11].

For two years in a row, in 2021 and 2022, Novamont was also named "B Corp Best for the World™" in the "Environment" impact category, in recognition of its exemplary environmental performance. The score obtained in the reference class ("companies with more than 250 employees") was in the top 5% of the highest scores achieved by B Corporations worldwide. The initiative was discontinued in 2023 by B Lab, which announced future evolutions of its programmes and campaigns[12].

Following its three-year B Corporation certification, Novamont adopted an internal improvement plan. In 2023, Novamont decided to embark on the recertification process, which also involved the BioBag group, acquired in 2021, evaluated with a separate BIA. The process was successfully concluded in February 2024, with a score of 128 for Novamont's BIA and 86.3 for BioBag's BIA (overall score: 118.8).

[9] https://www.bcorporation.net/

[10] For further information see chapter 10 "Impact Assessment"

[11] https://www.bcorporation.net/

[12] https://bcorporation.eu/best-for-the-world/

TERRIFIC: THE LAUNCH OF A NEW EUROPEAN FLAGSHIP PROJECT, COORDINATED BY NOVAMONT

The development of innovative bio-based, biodegradable and compostable products made - in whole or in part - from biomass, building integrated supply chains that connect stakeholders from different sectors, is at the core of Novamont's development model.

This model finds perfect exemplification in the European project TERRIFIC, coordinated by Novamont, which aims to demonstrate the effectiveness of bio-based solutions for the packaging sector, improving performance, circularity, and efficient use of resources throughout the entire value chain.
TERRIFIC[13], launched in 2024, is one of the four flagship projects funded in 2024 by the Circular Bio-based Europe Joint Undertaking (CBE), the public-private partnership between the European Union and the Bio-based Industries Consortium (BIC), which supports the development of the European bio-based industry.

The initiative, funded with over 16 million Euro, is dedicated to the development and demonstration of eight innovative solutions that use renewable raw materials for the packaging sector, starting from the use and valorisation of by-products from agro-industrial supply chains. The products that will be developed in the project include bio-based and biodegradable films laminated on cellulose or paper, as well as rigid and flexible thermoplastic biomaterials.
The project involves the participation of 19 partners (research centres, companies, enterprises, and large-scale organized distribution) from 9 European countries.

[13] For more information, see: https://terrificproject.eu/

NOVAMONT AND VOLUNTARY NON-FINANCIAL REPORTING

Novamont has a long track record of voluntary non-financial reporting: in fact, it has been publishing its own Sustainability Report since 2008 and on an annual basis, through a process of continuous improvement and in accordance with the most recent regulatory reporting developments[14] and international reporting guidelines (for example GRI Standards).

Since 2024, Novamont has also been included in the voluntary non-financial reporting of Versalis (i.e., Versalis For 2023). Thanks to this inclusion, it is possible to delve deeper into the role of Novamont within Versalis, whose strategy is also strongly oriented towards specialising its portfolio through chemicals from renewable raw materials.

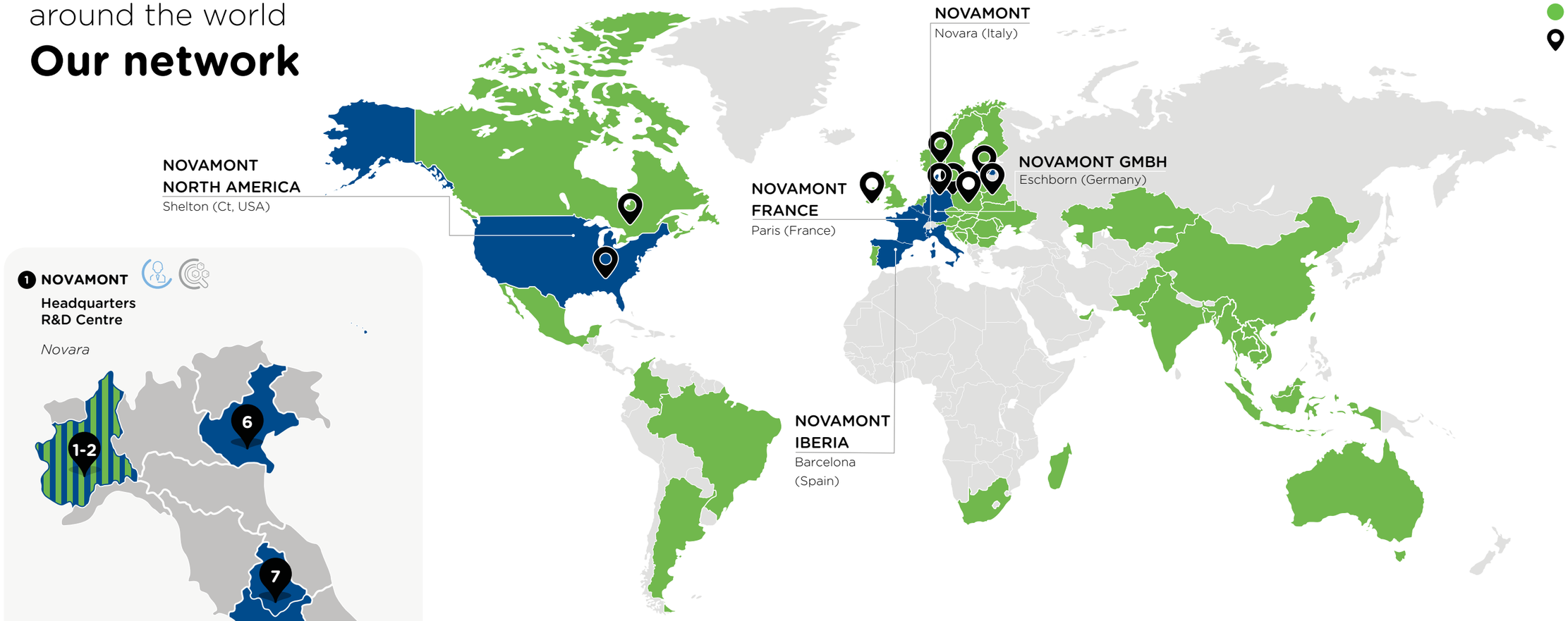
In addition, also for 2025 Novamont carried out, with reference to the 2024 financial year figures, an analysis of its activities in order to assess their suitability with what is defined as "sustainable" by the European Taxonomy for Sustainable Finance[15]. From this analysis, it emerged that 97.7% of the eligible revenue associated with the production of plastics in primary form (activity 3.17 of the Taxonomy) is aligned with the sustainability criteria provided, and that the eligible revenue associated with the production of biomethane (activity 4.13 of the Taxonomy) is 100% aligned with the sustainability criteria provided.

[14] Between 2019 and 2022, the company voluntarily chose to prepare the Sustainability Report in accordance with the requirements of Legislative Decree 254/2016 regarding the disclosure of non-financial information, implementing the European Directive 2014/95/EU. This report is known as the Consolidated Voluntary Non-Financial Statement, or "NFS."

[15] EU Regulation 2020/852 and related delegated acts.

The Novamont group
around the world

Our network



2 MATER-AGRO
Distribution of products for agricultural purposes
Novara

3 MATRÌCA
Perlargonic acid and azelaic acid, C5-C9 diacids, Heavy tails
Porto Torres (SS)

4 NOVAMONT
Origo-Bi biopolyesters
Mater-Bi bioplastics
Bio-THF from the recovering of 1.4 bioBDO
Patrica (FR)

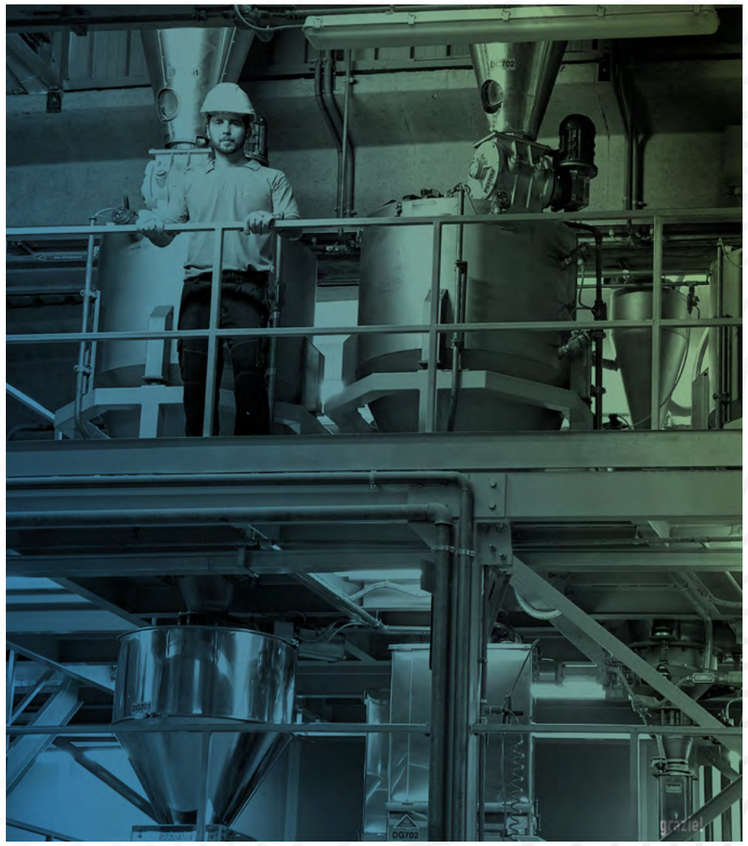
5 NOVAMONT
R&D centre
Piana di Monte Verna (CE)

6 NOVAMONT
1.4 bioBDO
Advanced biomethane
Adria (RO)

7 NOVAMONT
Origo-Bi biopolyesters
Mater-Bi bioplastics
Matrol-Bi
New monomers
Terni

HEADQUARTERS
R&D
PRODUCTION
DISTRIBUTION
TECHNOLOGICAL HUB

Novamont, Benefit Company articles of association



Novamont has included a number of specific common benefit purposes into its articles of association, which, as a Benefit Company, it intends to pursue when carrying out the company's economic activities.

Extract from Novamont Articles of Association, Article 2 - Subject:

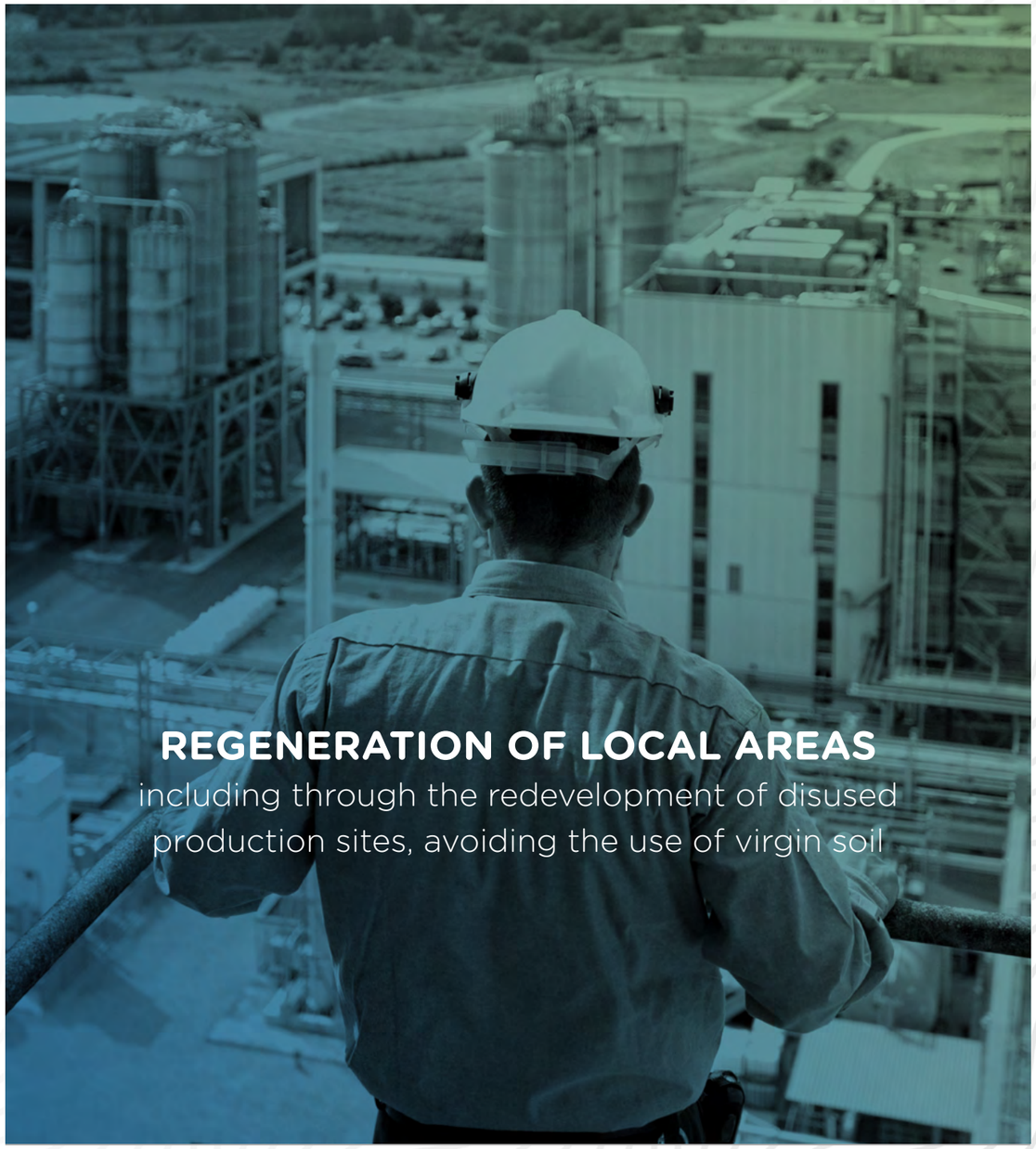
Novamont wants to support the transition from a product economy to a system-based economy and to accelerate the cultural and operating evolution towards economic, environmental and social sustainability. The transition involves society as a whole and is based upon improving the local area and collaborating with a range of interdependent parties, to create lasting and systemic prosperity.
As a Benefit Company, in order to achieve its corporate objective, Novamont pursues common benefit purposes, operating in a responsible, sustainable and transparent manner in relation to people, communities, local areas, the environment, social and cultural assets and activities, entities and associations and other stakeholders.
[...]

The company pursues the following specific common benefit purpose through a bioeconomy model that involves:

1. The regeneration of local areas, including through the redevelopment of disused production sites, avoiding the use of virgin soil.
2. The promotion of a circular model that maximises the recovery of organic matter using increasingly sustainable systems for the collection and treatment of biowaste to produce quality compost and organic matter.
3. The conservation and regeneration of soil vitality and health; to achieve this it develops and produces biodegradable and compostable products of plant origin, designed as solutions to specific problems, such as pollution by plastic and other persistent pollutants, closely connected to water and soil quality, and promotes sustainable agricultural practices that improve soil fertility and restore its organic matter.
4. The development of innovative and sustainable production processes that help decarbonising the economy along with research and innovation to transform waste and by-products into new applications.
5. the contribution to creating a virtuous network of alliances with local stakeholders and different industry sectors, as well as the expansion of the culture and knowledge of the circular bioeconomy, promoting training activities in collaboration with public and private-sector partners and educational and awareness-raising initiatives around sustainable development.

4

The **first** common benefit purpose



How the company pursues this purpose:

For Novamont, territorial regeneration means having a positive impact, returning value to communities, not just through economic but also social and environmental development[16], creating jobs, promoting multidisciplinary projects in the field, revitalising less-developed marginal areas and transforming uncompetitive or abandoned industrial and research sites. Building integrated industrial and agricultural value chains is one of the core elements of the model to promote an effective use of different types of biomass.

For this, Novamont promotes value chain projects that are targeted at the different local areas according to their specificities. This involves both the use of by-products from various production chains, multiplying valorisation opportunities, and the experimentation with unconventional dry land crops, which has a reduced environmental impact due to low water consumption. Through specific agronomic protocols, these practices can help restore soil fertility.

These projects aim to:

creating new productive and income-generating opportunities for farmers, deploying the agreements that have been signed with their associations, especially for areas of the country where there is marginal land at risk of abandonment or areas undergoing productive reconversion.

reducing the environmental impact on soil and water through the use of innovative solutions such as biodegradable mulch films, pelargonic acid-based phytosanitary products for weed control and biolubricants for agricultural machinery

giving value to the landscape

This more sustainable approach to agriculture not only produces biochemicals and biointermediates of renewable origin from biorefineries for the production of bioproducts, but also food and animal feed products as well as renewable energy from what is left over, thanks to the cascading use of biomass.

[16] For further information please see the paragraph “Environmental impacts” in Novamont’s 2023 Sustainability Report.

One example of these activities is the collaboration with the Terra Felix[17] cooperative in the Campania region, where Novamont is involved in the valorisation of marginal lands confiscated from mafia organisations through aridocultures. Internationally, Novamont is active in Africa with several projects aimed at promoting more sustainable and regenerative agriculture through the dissemination of good practices. In Mozambique, Novamont, in close collaboration with the Agricultural Research Institute of Mozambique (IIAM) and as part of a project by the Italian Agency for Development Cooperation (AICS), has carried out experimental activities related to the introduction of Mater-Bi mulching and the bioherbicide Ager-Bi. These activities have achieved positive results both technically and socially, and have been well received by end users. In particular, the project has enabled the creation of 12 jobs, the reduction of water demand (by approximately 25%) and agricultural inputs (by approximately 50%), and access to climate-smart agriculture technologies has been extended to 150 farmers.
The project concluded in 2023, and now Novamont, together with Versalis International, is completing the registration of Ager-Bi for the development of the tobacco supply chain. Similar activities have been conducted in Zimbabwe, where Novamont has initiated official trials under the supervision of the Kutsaga Tobacco Research Board for the registration of the Ager-Bi product. Novamont is also seeking accreditation with the Tobacco Industry & Marketing Board (TIMB) through field trials authorized by the Ministry of Agriculture of Zimbabwe, involving both large and small farmers.

Additionally, activities related to the memorandum of understanding on the tobacco supply chain continue. This memorandum was developed with the National Tobacco Organization, the Italian Tobacco Producers Organization, Coldiretti, and Philip Morris International to verify the use of natural techniques and products for greater sustainability of the supply chain through the use of biodegradable products. In Italy, the work that began in 2019 has continued for the development of agronomic technical protocols related to the use of Ager-Bi Gold Supersecco in the phytoregulation of tobacco. In Brazil, starting from 2022, a collaboration with Philip Morris International was initiated to test the use of Ager-Bi in the phytoregulation of tobacco.

Again with the logic of regenerating territories, a collaboration was started with Laterlite, the first expanded clay producer in Italy, to test the possibility of converting quarry areas into land dedicated to the production of crops to be used in the production of bioproducts, such as cardoon.

Within the scope of EU funded research projects, the topic of territorial regeneration is expressed through the promotion of more sustainable agricultural practices aimed at cultivating crops suitable for bio-based production. The Carina[18] project focuses on more sustainable and diversified agricultural systems, including two new oilseed crops, carinata and camelina, which can grow almost anywhere in Europe and North Africa. These crops provide multiple raw materials for the bioeconomy, with the potential to utilize both the oil and the protein cake. The Brilian[19] project aims to promote an innovative, cooperative, and sustainable production model for rural areas in collaboration with cooperatives, farms, raw material processors, and industry. In particular, it focuses on the cultivation and use of model crops in a circular economy logic for the three pilot areas: potato in Spain, thistle, sunflower, and safflower in Italy, and rapeseed in Denmark.

Territorial regeneration also means selecting disused or uncompetitive industrial sites and regenerating them using world-leading facilities and technologies. This makes it possible for Novamont to help generate positive impacts on employment and local economies, while at the same time reducing environmental impact, protecting virgin areas from land take and helping to reduce primary power consumption and CO_2 emissions by increasing the energy efficiency of plants and making use of process by-products. The Urban Re-Generation project, promoted by Confindustria Umbria and supported by Fondazione Cassa di Risparmio di Terni e Narni, aims to enhance the Terni area in terms of more sustainable development. It seeks to drive the creation of an Industrial District of Sustainability, Circular Economy, and Urban Regeneration Launched in 2019, the Novamont plant in Terni joined the initiative immediately, and in 2021 was recognised as a “Best Performer” for the excellence of its achievements and projects developed in the field of environmental sustainability during the previous year. In 2023, the network of companies involved in the project obtained ISO 37101 certification - Sustainable Communities - Management System for Sustainable Development, which focuses on promoting more sustainable development of the local community. This certification involves the implementation of a series of corporate activities and initiatives, both on an environmental and social level. In October 2024, the audit for maintaining ISO 37101 certification was successfully completed, and the document “Policy for Sustainable Development” was updated and included in the dedicated section of Novamont’s website.

[17] For further information see the impact story on page 28.

[18] For more information, see: https://www.carina-project.eu/

[19] For more information, see: https://brilian.eu/

[20] https://www.novamont.com/sostenibilita-238

Some impact stories

Cultivating Responsibility and Alternatives in Agriculture: the collaboration with Terra Felix at the Carinola prison

Over the years, Novamont has established an increasingly structured collaboration with the Social Cooperative "Terra Felix," an organization that aims to pursue the interests of the local community by focusing on the social integration of citizens. This is particularly true for projects related to the promotion of more sustainable and regenerative agronomic practices and the use of products that do not accumulate in the soil, such as mulching films and biodegradable phitosanitary products based on pelargonic acid.

This context includes the social economy project CREA – Cultivating Responsibility and Alternatives in Agriculture, launched in 2024 within the "G. B. Novelli" Penitentiary Institute in Carinola (CE), which had been abandoned for over 15 years. Through the involvement of social cooperatives and local agricultural companies with extensive experience in quality cultivation, regenerative agriculture and circular bioeconomy solutions have been activated to redevelop a plot of approximately 6.5 hectares. Following the assignment, in February 2024, the land was converted to organic farming. Open-field cultivation of seasonal products (baby watermelons and pumpkins) and the Teano chickpea, a Slow Food Presidium, was initiated. This was achieved using biodegradable mulch film made of Mater-Bi.

The project is completed with a drying laboratory and a greenhouse used for mushroom cultivation on blocks made from cardoon biomass. Educational pathways are also planned to welcome school groups, families, and others interested in improving their knowledge of regenerative agriculture.

Novamont and the partnerships to promote regenerative agriculture

The development of more sustainable agricultural practices that allow for the regeneration and preservation of territories is at the heart of Novamont's development model.

Among the tools to achieve this goal is Ager-Bi, a family of professional phytosanitary products for agriculture based on pelargonic acid – a molecule naturally found in the environment, biodegradable in water, sediments, and soil – developed by Novamont through the integration of innovative patented technologies. Today, Ager-Bi is at the Center of numerous projects aimed at reducing environmental impact on soil and water (thanks to its characteristic of being "readily biodegradable") and enhancing the landscape.

In 2024, Novamont, with the support of Coldiretti, successfully registered Ager-Bi Gold Supersecco in Italy. This is the first product in the Ager-Bi family available on the market, featuring a high concentration of pelargonic acid, 100% derived from renewable plant sources.

In recent years, numerous efficacy trials have been conducted for various uses of this product, involving leading entities committed to more sustainable agriculture: companies (Donnafugata, IBF Servizi, Philip Morris International), associations (Consorzio Conegliano Valdobbiadene Prosecco Superiore DOCG, ONT Organizzazione Nazionale Tabacco, OPIT Organizzazione Produttori Italiani Tabacco), institutional bodies (Parco Nazionale di Pantelleria), and non-profit organizations (Legambiente, Symbola).

Regarding vine cultivation, since January 1, 2019, the use of glyphosate has been banned in the Conegliano Valdobbiadene Prosecco DOCG production area. Novamont's formulations have been identified as valid replacements. A memorandum of understanding was signed with Symbola and the Consorzio Valdobbiadene Prosecco Superiore DOCG to identify technical means with reduced environmental impact for vine cultivation.

Regarding tobacco, in 2019, Novamont signed a memorandum of understanding with Coldiretti, ONT/OPIT, and Philip Morris International. The shared goal was to work together towards greater sustainability in the value chain, achieving interesting results in terms of both effectiveness and sustainability, thanks to the characteristics of the products used.

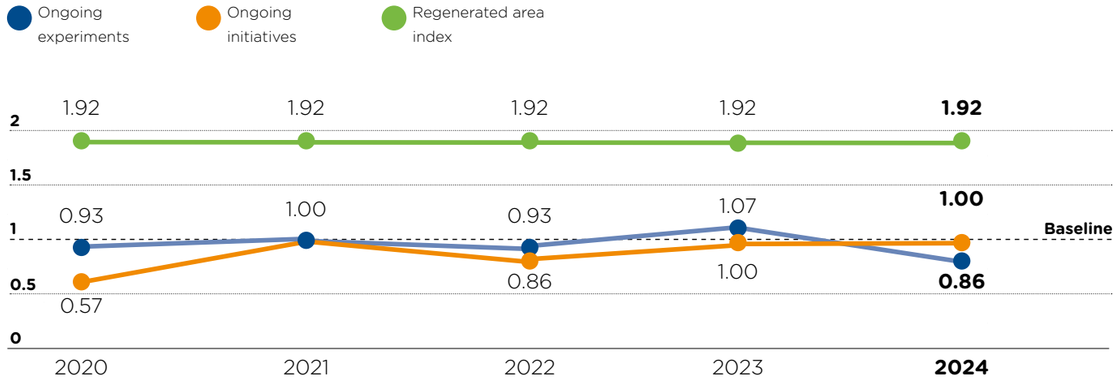
Novamont has also worked intensively in various areas of Italy on hazelnut cultivation with the aim of improving the sustainability of the supply chain. In particular, successful demonstration trials were conducted on the Loacker family property, with the collaboration of the company's team of agronomists, to consolidate the technique and transfer know-how to the companies involved in the value chain.

Another experiment involved the IGP rocket, which has become one of the flagship products of the Piana del Sele. Its nutritional characteristics are the result of cutting-edge cultivation methods that respect tradition and the environment.

The results of these experiments were the subject of a conference dedicated to good agricultural practices organised by Novamont and Coldiretti as part of Ecomondo 2024, the leading European event dedicated to innovation in the circular economy.

ACTION	KPI	commitment 2024[21]	result 2024	commitment 2025
Implementing innovative and unconventional agro-industrial value chains that respect local areas, in collaboration with the agricultural sector (farmers and farmers' associations) and with universities and research centres	no. ongoing experiments	28	24	28
Sustainable agriculture projects aimed at economic, social and environmental regeneration in specific areas	no. ongoing initiatives	7	7	7
Reactivation of disused or uncompetitive industrial and research sites to avoid land take when building new sites	Index of regenerated area (ratio of the area occupied by buildings and/or facilities on pre-existing buildings/ infrastructure compared with the total area occupied by buildings/facilities)[22]	Index of regenerated area ≥ 50%	96%	Index of regenerated area ≥ 50%

Trend of KPIs normalised according to their baseline value (targets defined in the year when Benefit Company status was achieved - 2020)



Notes:
As mentioned in the "Reading Guide" on page 9, in 2024 Novamont updated the calculation methods for the "Regenerated Area Index" due to the evolution of its company structure. Therefore, the scope of this indicator includes only Novamont S.p.A., as a Benefit Company. To provide a consistent representation of the KPI trend over time, the graph has been updated to refer to the same scope, consequently excluding subsidiaries.

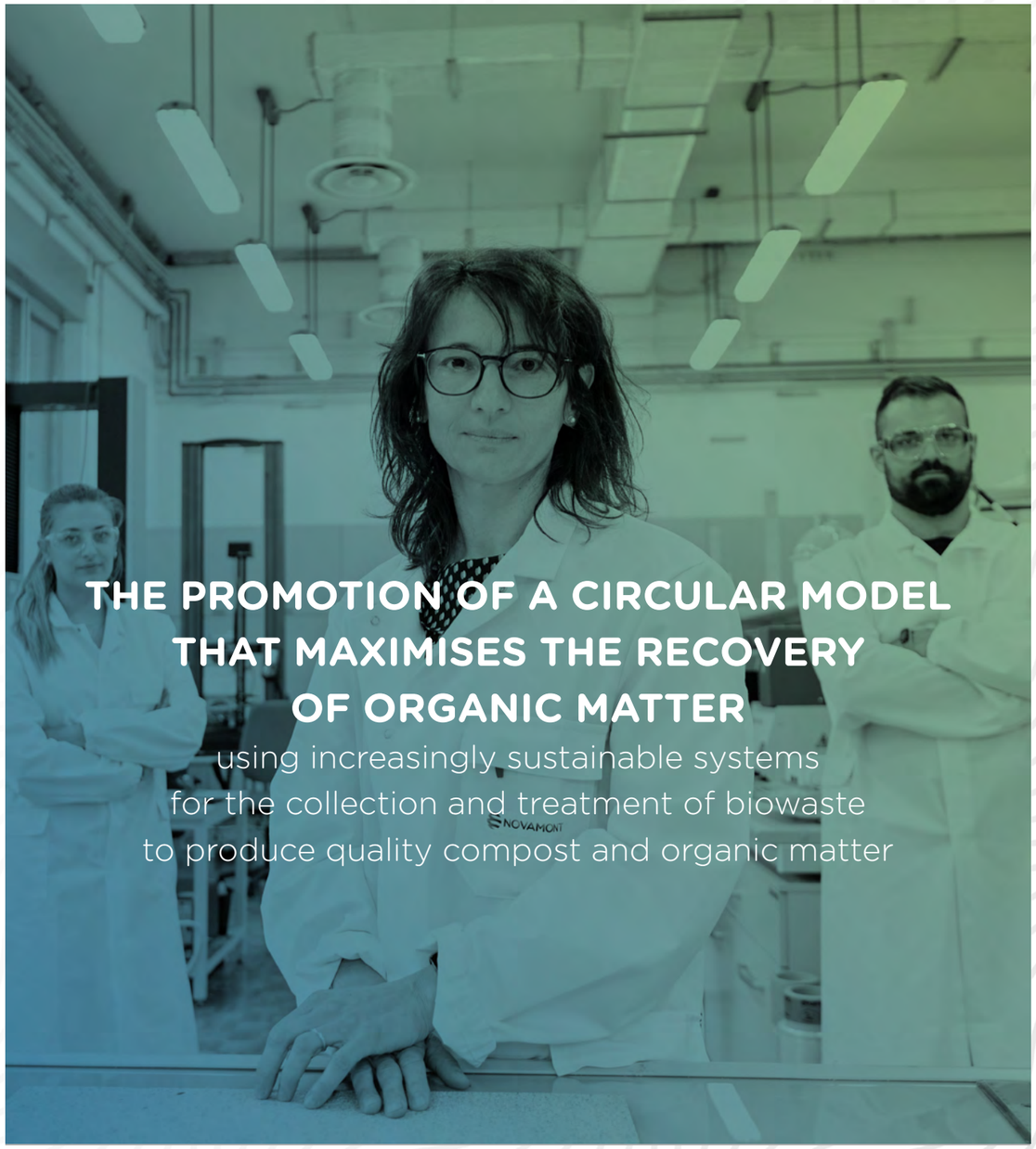
In 2024, the number of ongoing experiments recorded a slight decrease in absolute value. This is due to Novamont's decision to progressively rationalize resources allocated to collaborations aimed at activating innovative agro-industrial supply chains, focusing on those considered most relevant in terms of environmental and social impact.

[21] Goals set by Novamont in 2020, the year in which it acquired the status of Benefit Company and when the impact KPIs were defined.

[22] The scope of the indicator includes all Novamont S.p.A. sites and plants in Italy.

5

The **second** common benefit purpose



How the company pursues this purpose:

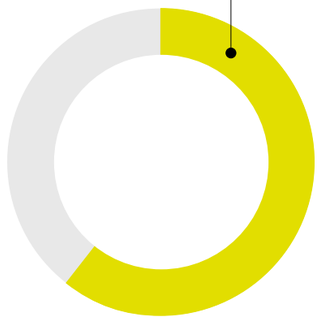
In the logic of the circular bioeconomy, municipal organic waste and sludge, if properly treated, are a source of organic matter, i.e. compost, and represent an important solution to two orders of problems:

- To provide a valuable soil amendment capable of improving crop health, minimizing the input of pesticides and fertilizers
- preventing organic waste from being landfilled, a practice banned at the end of 2023[23].

Attention to the separate collection of organic waste is increasingly growing also outside of Europe: for example, in 2024, it became mandatory in all five districts of New York. Since October, residents of Manhattan, Staten Island, and the Bronx are also required to separate food and garden waste, as is already done in Queens and Brooklyn. In this context, compostability in certain applications not only avoids possible contamination of organic waste, but also provides protection against pollution of other recycling streams, such as plastic and paper with food residues.

For these reasons, Novamont has always worked hard to promote and develop programmes to facilitate the collection of organic waste and transform it into quality compost, by using compostable bioplastics, and has also undertaken national and international research and development projects on the study and monitoring of organic waste and projects involving ecodesign and bioplastics interception systems, including initiatives to combine different recycling technologies, such as composting, chemical recycling and mechanical recycling and to develop paper-backed packaging, which can be disposed of in both collection flows.

60.7%
Organic recycling of compostable bioplastics

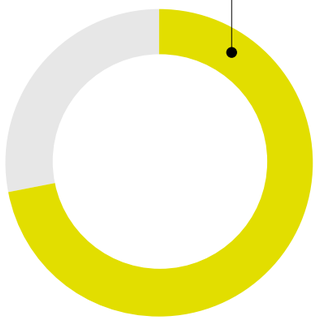


[23] COM(2020)98 final, A new Circular Economy Action Plan For a cleaner and more competitive Europe.

In this context, the work carried out by the Italian consortium Biorepack, the first European extended producer responsibility (EPR) system dedicated to biodegradable and compostable plastic packaging, is fundamental.

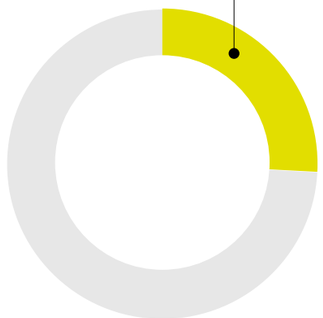
As emerged in June 2024 at the event organized by Assobioplastiche, Consorzio Biorepack and CIC (Italian consortium of composters), the organic recycling of compostable bioplastics reached 56.9% of the consumption in 2023, surpassing the goals set for 2030. There are more than 4,600 municipalities affiliated with the consortium, serving 43.6 million inhabitants (almost 10 points more compared to 2022). Affiliated local authorities were granted financial compensation of EUR 9.4 million. There are also many communication activities designed and implemented with the aim of informing, educating and involving citizens and the entire chain of stakeholders on the correct separate collection of compostable packaging, on the recognisability of these products and on the value of organic recycling, in the more general context of the circular economy and towards a greater sustainability. The close collaboration with local authorities, multi-utilities and the Consorzio Italiano Compostatori has been essential in developing examples of excellence that are ready to be developed and expanded. Also thanks to this model, Italy is currently the European leader in organic waste recycling, collecting 72% of organic waste compared with an average of 26% across Europe. The European data, although with ample room for growth, shows an improvement compared to the 2020 survey (the European average was stuck at 16%)[24]. Among the most significant projects from the past supported by Novamont, it is worth mentioning RePopp[25], the separate waste collection project launched in 2016 in the municipality of Turin with the aim of increasing separate waste collection of organic matter through the use of bioplastics in the Porta Palazzo market, and the project launched in 2012 as part of the Milan Food Policy, whereby Novamont supported the municipality's transition to being a point of reference on a European level for separate waste collection, exceeding the threshold of 50%.

72%
of organic waste collected in Italy



Opposite to the

26%
European average



[24] Zero Waste Europe and BioBased Industries Consortium, Bio-waste generation in the EU: Current capture levels and future potential, second edition 2024.

[25] For further information: https://www.ecodallecitta.it/torino-a-porta-palazzo-salvati-e-ridistribuiti-353-000-kg-di-frutta-e-verdura-con-repopp/

Both projects showed that they were able not only to improve the quantity and quality of the organic waste collected (Milan is one of the most virtuous cities in Europe for organic waste collected, with 101kg/inhabitant/year), but also to help reducing waste production at source, through awareness-raising campaigns and initiatives against food waste. In this context, Novamont also supports the development of best practices in the management of organic waste at large events.

The Italian model is also at the basis of the projects launched by Novamont at international level, with the activation of successful virtuous cases all over the world, such as the development of separate collection systems for organic waste through the use of biodegradable and compostable bags in Milan, Paris, Barcelona, Munich, Copenhagen, New York, etc.
Developments in recent years include several initiatives launched in Hungary, Slovakia, Poland and Mozambique, aimed at promoting pilot projects for the dissemination of separate organic waste collection systems at national level, as well as the collaboration with industrial partner Silvex in Portugal, aimed at testing the behaviour of bioplastics bags in local composting plants and providing training and information at several levels. Regarding relevant cases of municipalities committed to the use of compostable, highly renewable bags for the collection of organic waste, significant, for example, is the path taken by Copenhagen, which started separate collection of organic waste in 2017, with the aim of increasing its quantity and quality and to reach the amount of 35,000 tonnes collected a year. For this purpose, the municipality distributes compostable bags in Mater-Bi to citizens free of charge, together with vented waste bins for household compost collection.

Novamont continues to monitor the developments and results of these collaborations initiated over the years with local administrations at both Italian and international levels.
It organises study tours for foreign stakeholders, aimed at showing the excellence of the Italian model of separate collection and treatment of municipal waste, with a special focus on organic waste.

In 2024, in collaboration with the Bündnis Mikroplastikfrei alliance and the Austrian composters association (Kompost & Biogas Verband), a tour was organized in Northern Italy (Treviso and Milan) involving representatives from the Vienna administration and the Vereinigung öffentlicher Abfallwirtschaftsbetriebe (Austrian Association of Public Waste Management Companies). Novamont also collaborated in organizing additional tours throughout the year, involving delegations from South Africa, Portugal, and France.

Additionally, within the scope of EU funded research projects, the theme of promoting circular models is addressed both in the promotion of collection systems and in the valorisation of organic waste for the production of new inputs for bio-based production. The European project Frontsh1p[26] falls within the first scope, it aims to promote paths of decarbonisation and territorial regeneration in the Polish region of Łódź, through the demonstration of circular models and supporting the creation of a territorial cluster of initiatives to accelerate the transition towards a more sustainable economy, capable of providing concrete answers to the needs of the regions involved. In the second scope falls the Circular Biocarbon[27] project, which aims to create a first-of-its-kind biorefinery for bioproducts, designed to valorize the organic fraction of municipal solid waste and sewage sludge into value-added products, including bags for separate collection, mulching films, fertilizers, and biostimulants.

[26] For more information, see: https://frontsh1p.eu/

[27] For more information, see: https://circularbiocarbon.eu/

Some impact stories

Change your footprint, close the loop: citizens as actors for change

The role of citizens in choosing and correctly disposing of compostable products through organic waste collection is crucial to ensuring the development of effective processes. In this sense, it is important to develop positive communication that highlights the advantages and value of using compostable bags for organic waste collection, as well as the good quality of organic waste as a driving factor for improving the quantity and quality of collection of other waste fractions.

In this context, the collaboration initiated in 2024 with Legambiente, Unicoop Firenze, and Alia Servizi Ambientali aims to guide citizens through this process, providing insights into collection systems and treatment plants, making compost bags available, and preparing informational materials on how to carry out the collection and the benefits it can bring in terms of contribution to decarbonization and compost quality.
The collaboration, which will be developed throughout 2025, aims to materialize as an innovative value chain project, serving as a pioneer for new models across territories at the national level.

Mater-Bi: not only recycling of organic waste

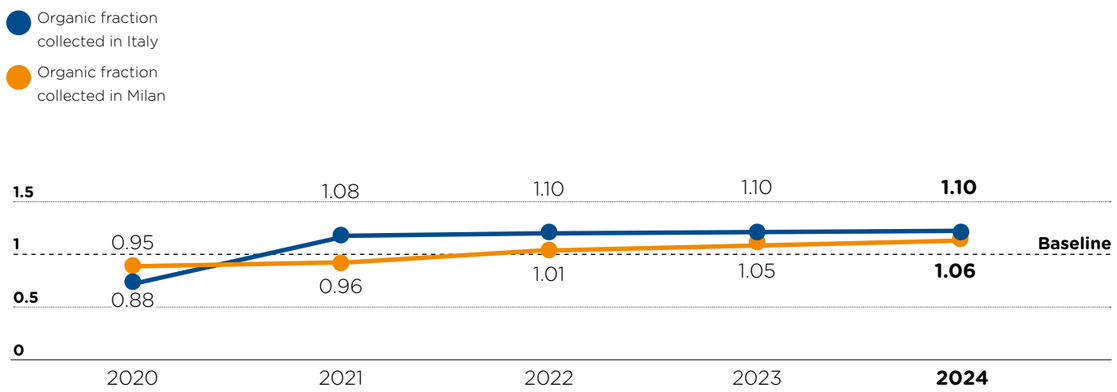
Mater-Bi, thanks to its biodegradability and compostability properties, is designed to optimize and simplify the management, collection, and treatment of organic waste. In order to maximize circularity and end-of-life management options, in line with waste reduction goals and certain community regulatory guidelines, Novamont is also working to identify additional recycling and recovery options for the material, from a mechanical and chemical perspective, in collaboration with partners and multi-utilities.

As for mechanical recovery, Novamont is continuing the path started in 2023 aimed at testing the regeneration and valorisation of industrial processing by-products from partners using Mater-Bi for the production of bags. In this context, in 2024, experiments continued and the certification procedure for regenerated materials was initiated to ensure their biodegradability and compostability at the end of their life, with the aim of building an economically valuable value chain.
In addition to this, Novamont is developing various EU funded projects, in which several activities on the selection and mechanical and chemical recycling of bioplastics are being carried out. Specific examples are the Moebios, Prosper, and Rebiocycle projects, launched at the end of 2024, which also directly involve some Italian multi-utilities (A2A in Prosper and Iren in Rebiocycle).

ACTION	KPI	commitment 2024[28]	result 2024	commitment 2025
Development of separate collection of organic waste in Italy through systems involving the use of compostable bags	Organic waste collected in Italy (interception of food waste) kg/capita/year	80 kg/capita/year	88 kg/capita/year	80 kg/capita/year
Development and maintenance of best practice from Milan as the “champion of separate collection” through targeted communications campaigns and tools	Organic waste collected (interception of food waste) kg/capita/year	95 kg/capita/year	101 kg/capita/year	95 kg/capita/year

[28] Goals set by Novamont in 2020, the year in which it acquired the status of Benefit Company and when the impact KPIs were defined.

Trend of KPIs normalised according to their baseline value (targets defined in the year when Benefit Company status was achieved - 2020)



6

The **third** common benefit purpose

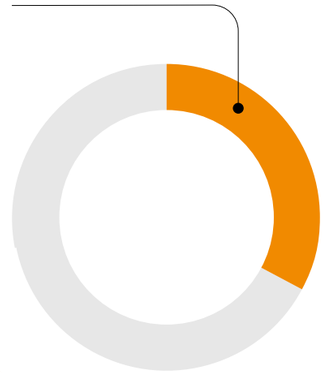
THE PROTECTION AND REGENERATION OF SOIL VITALITY AND HEALTH

to achieve this, it develops and produces biodegradable and compostable products of plant origin, designed as solutions to specific problems, such as pollution by plastic and other persistent pollutants, closely connected to water and soil quality, and promotes sustainable agricultural practices that improve soil fertility and restore its organic matter

How the company pursues this purpose:

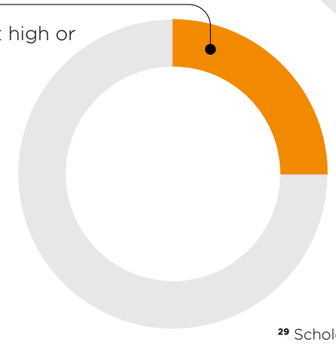
Soil is a non-renewable resource: it takes over 2,000 years to form 10 cm of soil[29] . Soil degradation therefore represents a threat to our life on earth.
As reported by the Food and Agricultural Organisation, today:

33%
of our global soils are degraded[30].



The soil of the Mediterranean area is being particularly and increasingly impacted by climate change and anthropic action. As reported by the European Mission “A Soil Deal for Europe”

25%
of soils in southern, central and eastern Europe is at high or very high risk of desertification[31].



At least 63% of EU soils are affected by degradation processes, and soil erosion amounts to 1 billion tons. At the Italian level, 47% of the soil shows some form of degradation, 80% of agricultural land is subject to erosion phenomena and 68% is in a high organic carbon deficit[33].
With the aim of reversing this phenomenon and contributing to solving real community problems, Novamont develops and produces, among other things, low-impact products capable of closing the carbon cycle thanks to their bio-based content and their biodegradability and compostability: bioplastics, but also phitosanitary products based on pelargonic acid, biolubricants, and biodegradable ingredients for cosmetics.

[29] Scholes R. J., Noble I. R., Storing Carbon on Land, Science, 2001.

[30] FAO, ITPS, Status of the World’s Soil Resources (SWSR) – Main Report. Food and Agriculture Organization of the United Nations and Intergovernmental Technical Panel on Soils, Rome, Italy, 2015.

[31] Mission Board for Soil health and food, Caring for soil is caring for life - Ensure 75% of soils are healthy by 2030 for food, people, nature and climate, Final Report of the Mission Board for Soil health and food, 2020.

[32] Joint Research Center, State of Soils in Europe, 2024.

[33] Re Soil Foundation, “Il suolo italiano ai tempi della crisi climatica”, 2023.

The identification and development of these solutions require a constant commitment to creating world-first innovations and technologies. As confirmation of the great successes achieved in this field, Novamont was involved in the "Italia dei Brevetti. Invenzioni e innovazioni di successo" ("Italy of Patents. Inventions and innovations of success") exhibition, organised by the Ministry of Enterprises and Made in Italy (MIMIT). The exhibition, which celebrated the 140th anniversary of the founding of the Italian Patent and Trademark Office, included among the over 100 industrial invention patents from the past and present, Novamont's patent for the catalytic cleavage of vegetable oils.

In order to maintain the health and fertility of the soil, biodegradability in soil is fundamental for all agricultural products with problems of accumulation and dispersal like herbicides, lubricants, seed additives, slow-release systems and agricultural mulch film. As for herbicides, 2024 saw the launch of the Ager-Bi family of phitosanitary products, obtained from 100% bio-based pelargonic acid, which ensure exceptional control of weeds and suckers in vines, olives, hazelnuts, and fruit trees, phytoregulation of tobacco, and pre-harvest desiccation of potatoes, alfalfa, and peanuts. The pelargonic acid used in the formulations of the Ager-Bi family is obtained from bio-based sources with innovative, low-impact technology (without the use of ozone), developed by Novamont and brought to industrial scale by Matrica (a joint venture between Novamont and Versalis) at the Porto Torres production site. In particular, the production process of the active substance used, starting from vegetable oils, ensures the possibility of achieving a molecule indistinguishable from the one existing in nature, characterized by 100% bio-based carbon[34]. The Natural Power Life project, coordinated by Versalis (Eni) and funded by the European Union's Life Programme, aims to develop, market, and commercialize two herbicides, both based on pelargonic acid obtained from vegetable oils: one for weed management in urban and industrial areas, and the other for agricultural activities.

Regarding mulching films, from a regulatory perspective is worth mentioning the publication of the delegated act on biodegradability criteria, which has sanctioned their inclusion in the EU Fertilising Products Regulation (FPR)[35] as "inorganic soil improver" due to their usage characteristics: on one hand, they improve soil temperature and humidity during their use, and on the other hand, once incorporated, they add organic carbon to the soil, which stimulates the microbial community.
Biodegradability in water is fundamental for products with problems of accumulation in sewage sludge and in water, as is the case with non-biodegradable additives in cosmetics and detergents.
Biodegradability in composting becomes essential for all applications in which the materials used have a high probability of being contaminated by food waste, and in which the absence of biodegradability would pollute organic waste, which would therefore end up in landfill. Examples of this include thin wall packaging, multilayer packaging, catering products and coffee capsules.

[34] For further details see the impact case study on page 29.

[35] EU Regulation 2019/1009.

Novamont also pursues the objective of preserving and restoring soil vitality by promoting a more sustainable and regenerative agriculture, making use of the most advanced monitoring, georeferencing and digitalisation technologies and disseminating good practices aimed at restoring organic matter, in cooperation with farmers and their associations but also with universities and research centres. Regenerative agriculture also makes a key contribution to decarbonisation, in particular through practices that promote the incorporation of carbon into the soil (carbon sink), such as carbon farming. Carbon farming represents an opportunity to innovate and promote production processes that already provide an important ecosystem service in the area of carbon absorption. Of particular relevance are practices related to the use of soil improvers produced by composting and anaerobic digestion. First and foremost, these practices guarantee the final outlet for the management of the organic fraction, the main component of municipal waste, returning carbon and fertility to the soil while simultaneously immobilising it. Maintaining, restoring and improving the content of Soil Organic Matter (SOM) in land through regenerative agricultural practices could have positive impacts on food safety and the mitigation of anthropogenic greenhouse gas emissions[36].

The topic of soil protection is also present in Novamont's EU funded research projects. The Midas[37] project aims to optimize specific industrial crops to tolerate water scarcity and mitigate desertification, while simultaneously improving biodiversity conservation in the Mediterranean and Central Europe. In B-Ferst[38] Novamont has developed an innovative and sustainable process for the production of biostimulant hydrolysed proteins from by-products coming from cardoon oil. Biostimulants, appropriately added to fertilizers produced by B-Ferst, have generated positive field results (e.g., on corn and sunflower), increasing agronomic yields (biomass produced) and reducing the total volume of fertilizer used, with positive effects on the soil. The Minagris[39] project aims to evaluate the impact of plastic debris in agricultural soils on biodiversity, plant productivity, and ecosystem services, providing tools and recommendations for sustainable use of plastics in agriculture at the farm and field level, to ensure safe and economically sustainable food systems in Europe. Finally, the National Biodiversity Future Center[40] is the first National Center for research and innovation dedicated to biodiversity, funded by the Ministry of University and Research (MUR) through European Union funds – NextGenerationEU. It is a coordination structure that, on one hand, gathers and enhances research efforts, and on the other hand, makes knowledge and technologies accessible to various actors operating in the territory. The aim is to identify suitable strategies to monitor, preserve, and enhance the biodiversity of species and habitats across various Italian territories, producing scientific knowledge and technological innovation that allow for combating biodiversity loss, supporting ecosystem resilience, monitoring endangered species, and restoring biological communities.

[36] An example is the project "Third Generation Biorefinery Integrated in the Territory to obtain high-value renewable chemicals and energy" (BIT3G), funded by the Ministry of Education, University and Research within SPRING – Sustainable Processes and Resources for Innovation and National Growth, the national technological cluster for Green Chemistry.

[37] For more information, see: https://www.midas-bioeconomy.eu/

[38] For more information, see: https://bferst.eu/

[39] For more information, see: https://minagris.eu/

[40] For more information, see: https://www.nbfc.it/

With the aim of connecting scientific, technological, environmental and humanistic knowledge in order to become a meeting point for the various Italian and European organisations dedicated to the issue of soil, in 2020 Novamont estabilished Re Soil Foundation together with the University of Bologna, Coldiretti and Turin Polytechnic. In 2024, the Foundation continued its consolidation, both in terms of governance and impact on society, through its participation in European projects, the strengthening of its relationship with schools and the organisation of relevant science outreach events. Among these, the third edition of the States General for Soil Health, held on November 7 during Ecomondo, with the collaboration of Coldiretti, the National Coordination Group for Bioeconomy (GCNB), and Ecomondo Scientific Committee. The morning session of the States General focused on the latest updates on the European regulatory framework dedicated to soil, carbon removal, and carbon farming, as well as the progress of the Mission "A Soil Deal for Europe" and the presentation of some best practices for soil regeneration. The afternoon session focused on the issues of Italian soil, the state of Italian regulations, and some best practices in regenerative agriculture. Also in 2024, the foundation continued its work of mapping "Lighthouse Farms" in Italy, with the aim of collecting and connecting successful case studies communicating the good agricultural, livestock, and forestry practices they implement in favour of healthy and functional soil. The mapping is available on the Re Soil Foundation website[41]. The goal is also to connect projects and actors dedicated at the national and European level, to amplify their impact and identify new ones, promoting soil protection through collaboration between different sectors.

[41] https://resoilfoundation.org/

Some impact stories

The experiment with Bayer Crop Science on twine and clips made of Mater-Bi for agricultural use

The development of partnerships with the agricultural sector is one of the key channels that allows Novamont to test and refine applications intended for field use and designed to preserve soil quality.

In 2024, the results of a one-year experimental study conducted in the Spanish greenhouses of Bayer Crop Science were collected. In this experiment, the use of twine and clips made of compostable bioplastic Mater-Bi was tested, showing how they help solve the end-of-life problem of agricultural crop waste products.

The Mater-Bi devices met all the requirements for tenacity, resistance, and flexibility throughout the entire cycle and under the most extreme climatic conditions. At the end of the cultivation, the devices were collected along with the plant waste and processed in an industrial composting facility, SACh (Servicios Ambientales Las Chozas - a company experienced in the management and treatment of agricultural waste with composting facilities), generating high-quality final compost. The new compostable devices, which have a carbon footprint certified by ISO 14067:2018, have thus contributed to simplifying and making the management of plant waste more efficient, allowing composting without the need for separation of plastic materials and avoiding the accidental accumulation of non-degradable plastic substances in the soil.

Compostable coffee capsules

Novamont's innovation in the field of compostable applications is always aimed at providing solutions to environmental problems, especially for applications in contact with organic matter. A specific example of this approach is the coffee capsule, a product whose packaging, if compostable, can be disposed of in the organic waste fraction along with its contents, the coffee grounds. This advantage is also recognized by the European Union within the Packaging Regulation (PPWR) definitively approved by the European Parliament in April 2024, which includes capsules among the applications for which member states can impose compostability within their regulations.

In 2024, Novamont presented new grades of Mater-Bi with which it will be possible to produce various types of compostable capsules, using three processing technologies and different levels of oxygen barrier to meet the different market needs: injection-moulded Mater-Bi capsules, thermoformed Mater-Bi capsules, and cellulose pulp capsules thermolaminated with Mater-Bi film (liner), also recyclable in domestic composting.

These products were also presented during the eleventh edition of Triestespresso Expo, the main B2B event dedicated to the global coffee industry. Novamont participated with a dedicated stand, and on October 25th, the workshop "Compostable Capsules: A Circular Future for Coffee" was held, organized by Biorepack, the national consortium for the organic recycling of biodegradable and compostable plastic packaging.

Soil health education

Novamont actively collaborates with stakeholders, networks, and platforms to promote dissemination events and initiatives aimed at spreading greater awareness, both at the territorial and institutional levels, regarding the value of soil, its issues, and possible solutions.
Among the most significant collaborations, for years the activities of Re Soil Foundation have stood out: a commitment carried out through specific initiatives and events aimed at spreading awareness and knowledge regarding soil issues.

Education, training, and projects involving students from elementary schools to university and post-doctoral levels on the topics of agricultural, forest, and urban soil, and its fundamental functions, therefore play a crucial role in the research and development strategy of Re Soil Foundation. In line with the European Mission "A Soil Deal for Europe", the organization launched a range of educational initiatives and opportunities for literacy and engagement in 2024, reaching a broad and diverse audience, including civil society, schools, and local communities, involving a total of 1,595 students and 221 teachers from 14 institutions in 6 different provinces.

Additionally, the Foundation developed an interactive soil kit for high schools and civil society, in English and Italian, as part of the European ECHO project[42]. The kit includes 6 stages that, through interactive games, insights, and laboratory sheets, guide the user to discover the soil, the ecosystem services it offers, the factors that cause its degradation, and the best practices to preserve its health.

Finally, the Foundation has committed alongside the partners of the Horizon Europe PREPSOIL[43] project as the national representative for the competition aimed at valuing and rewarding the best examples of soil education, intended for Italian primary and secondary schools.

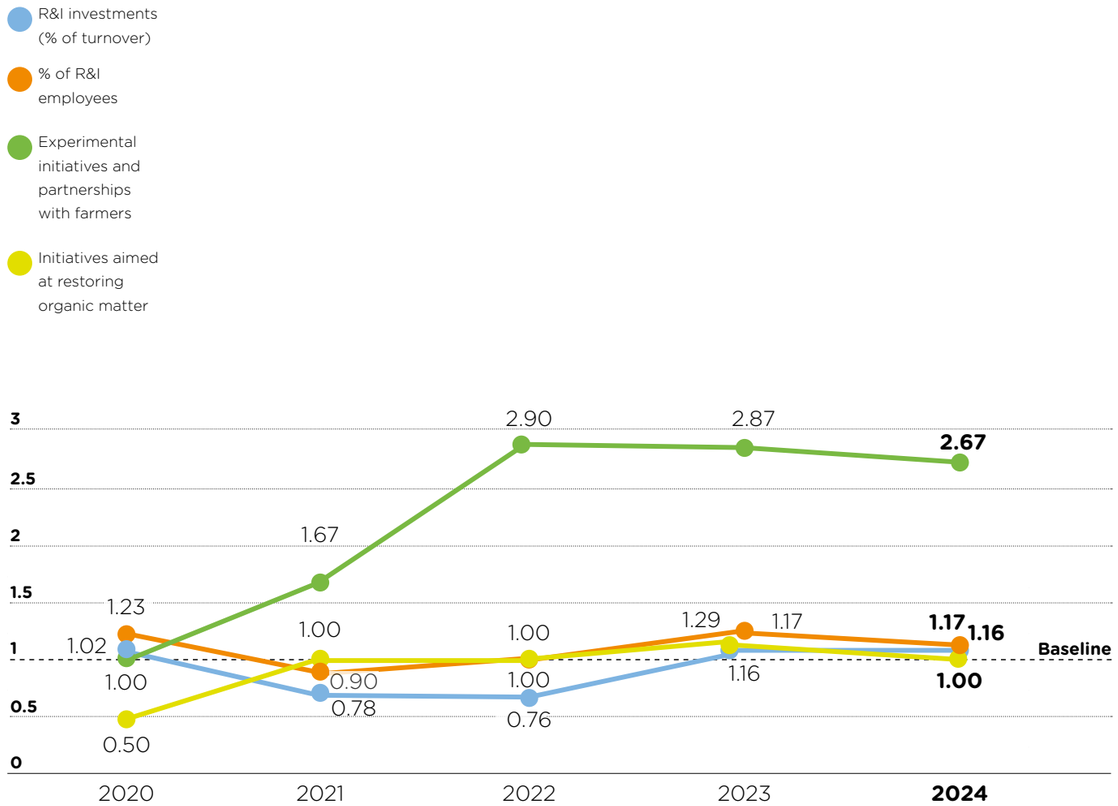
[42] https://echosoil.eu/

[43] https://prepsoil.eu/

ACTION	KPI	commitment 2024[44]	result 2024	commitment 2025
Continuous commitment to research and innovation and to the development of new biodegradable and compostable products of plant origin	R&I investments % of turnover	Keeping investments equal to 5% of turnover	5.8%	Keeping investments equal to 5% of turnover
	% of R&I employees	Around 20% of employees involved in R&I activities	23.5%	Around 20% of employees involved in R&I activities
Promotion of agricultural best practices to spread the use of mulch film that biodegrades in the soil	no. of ongoing experimental initiatives and partnerships with farmers	Maintaining around 30 active initiatives in Italy and abroad, representing different areas and crops	80 ongoing initiatives in Italy and abroad	Maintaining around 30 active initiatives in Italy and abroad, representing different areas and crops
Promotion of sustainable farming practices and methodologies for the analysis and restoration of organic matter (regenerative farming)	no. of ongoing initiatives aimed at restoring organic material	6	6	6

[44] Goals set by Novamont in 2020, the year in which it acquired the status of Benefit Company and when the impact KPIs were defined.

Trend of KPIs normalised according to their baseline value (targets defined in the year when Benefit Company status was achieved - 2020)



Notes:
As mentioned in the "Reading Guide" on page 9, in 2024 Novamont updated the calculation methods for the "Regenerated R&I investments (% of turnover)" due to the evolution of its company structure. Therefore, the scope of this indicator includes only Novamont S.p.A., as a Benefit Company. To provide a consistent representation of the KPI trend over time, the graph has been updated to refer to the same scope, consequently excluding subsidiaries.

The slight decline in the promotion of best agricultural practices for the use of biodegradable soil mulching films, observable in the last two years, is due to the fact that several products have transitioned from being research and experimental subjects to commercial applications. In such cases, the experimental activity has therefore evolved into a commercial relationship with agricultural companies and is not tracked within the KPI perimeter "# of experimental initiatives and partnerships with farmers in progress".

The **fourth** common benefit purpose

How the company pursues this purpose:

Circular economy can contribute to mitigating climate change by promoting strategies that involve resource reuse, maximizing energy efficiency and using renewable energy sources (such as biomethane derived from plant sources and waste), reducing waste, and promoting more sustainable consumption models.

Since its inception, Novamont has conceived bioproducts as catalysts for the transition to a regenerative and circular economy model, which focuses on soil protection and uses raw materials compatible with natural systems, leveraging existing abandoned or deindustrialization-risk production sites and developing new technologies for the production of raw materials from biomass. Novamont's commitment to reducing greenhouse gases[45] is also reflected in the three areas in which industrial activity emissions are classified:

[45] See 2023 Novamont Sustainability Report, page. 39 and following. (www.novamont.com)

Scope 1	Scope 2	Scope 3
Direct emissions of GHG from installations within the confines of the organisation due to the use of fossil fuels and the atmospheric emission of any greenhouse gases.	Indirect GHG emissions from the generation of electricity, heat and steam imported and consumed by the organisation.	Indirect emissions due to the company's activities, upstream and downstream in the value chain.

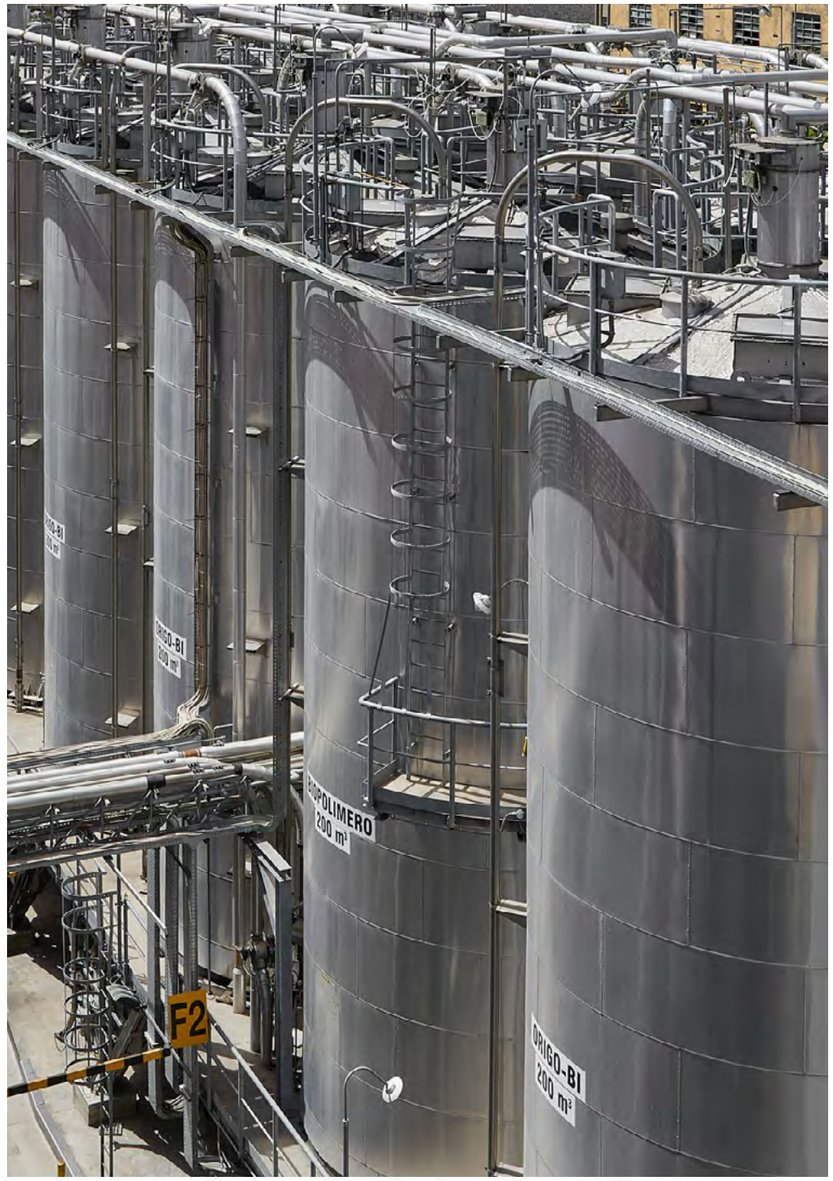
To reduce Scope 1 emissions Novamont focuses on different solutions including modernising and replacing plants with new high-efficiency plants that consume less energy and run on biofuel (where this can be supplied continuously in sufficient quantities and on acceptable technical and financial terms), based on best available techniques. In this regard, an internal working group on energy decarbonisation coordinated by the Chief Operating Officer was set up in 2023. In 2024, the group met several times to discuss all aspects related to energy management and the techno-economic analysis of possible interventions to mitigate Scope 1 emissions.

Shifting the focus to processes directly controlled by Novamont, a high-efficiency cogeneration unit was installed at the Bottrighe site for the combined production of electricity and thermal energy for the production process. Its overall efficiency reaches approximately 90%, and in 2024, it allowed for a 22.7%[46] reduction in the use of primary energy compared to a reference scenario involving separate procurement of electricity and heat. The surplus electricity is sold to the national grid. Then there is the anaerobic digestion plant (biodigester) that treats the processing waste resulting from the fermentation process (spent cells), generating biogas, which in turn is treated (through an upgrading process) to produce advanced biomethane that is fed directly into the grid, contributing to the spread of renewable energy carriers. The purification unit for 1.4 bio-butanediol also features a mechanical compression system to make use of all wasted heat which would otherwise be lost.

At the Terni plant, a burner operates where the liquid and gas waste yielded by the polymerisation process is thermally oxidised, thereby avoiding their disposal. The heat recovered from the combustion process is then used for production and to heat the environments.

In the Patrica plant, in 2022 a trigeneration plant has been activated. This uses the methane combustion process for the production of electricity, steam and cooled water, and for heating diathermic oil, which are used in the plant production processes and for the heating in the offices.

In 2023, with the aim of further increasing the energy efficiency of the facilities, new energy efficiency projects were also launched. At the Patrica site, the objective was to recover heat (low and medium temperature) through the installation of heat exchangers in the polymerisation processes in order to bring the incoming fluid into thermal contact with the outgoing fluid, thus bringing about the pre-heating of the incoming 1,4-butanediol and the pre-cooling of the outgoing 1,4-butanediol, with a consequent reduction in the thermal energy requirement and the cooling contribution from the cooling tower water. In 2024, this efficiency intervention allowed for a saving of 183 toe of primary energy.



At the Bottrighe site, the impellers inside the fermenters were replaced with impellers with optimised geometry. New blades with a different profile result in lower power consumption for the same volume, in relation to the previous set up.

In addition, a low-pressure steam recovery system was completed in 2024, which uses thermocompression to bring steam back to a higher pressure, resulting in a reduction in natural gas consumption.
At the Terni site in 2024, the replacement (started in 2023) of the reducer for another compounding line (the second) continued in order to improve the reduction ratio, thereby increasing motor efficiency and decreasing specific electrical power.

For Scope 2 emissions the main mitigation intervention is the purchase of electricity from 100% renewable sources, certified by GOs Guarantees of origin, from wind and solar energy, a commitment adopted in 2010 which contributes to the development of renewable energy sources while simultaneously reducing emissions of greenhouse gases and other pollutants[47].

The main areas of intervention regarding Scope 3 greenhouse gas emissions (upstream and downstream) are related to the development of new materials with an increasing content of renewable raw materials and innovative applications, the development of new integrated processes capable of enhancing the waste from other supply chains, and the use of alternative feedstocks with positive impacts on the overall circularity of systems. Scope 3 emissions also include the development of innovative agro-industrial value chains, based on agricultural raw materials that enhance the value of local characteristics and biodiversity and ensure the efficient use of resources. Novamont conducts wide-ranging research in this sector, in collaboration with the academic world and the leading research centres, from evaluating agronomic aspects and genetic enhancements to optimising the mechanisation of farming activities, extracting active compounds, oils, protein flours and sugars. This also includes the activities developed within the research projects funded by the European Union. In particular, the Vivaldi[48] project proposes an integrated solution for converting biogenic CO_2 into value-added organic acids, thanks to innovative processes in the electrochemical conversion of CO_2 and bioprocess engineering.

[46] Value obtained (to be confirmed) as per Annex III to Ministerial Decree of 4 August 2011.

[47] For more information see 2023 Novamont Sustainability Report, p. 100.

[48] For more information, see: https://www.vivaldi-h2020.eu/

The Co2SMOS[49] project aims to develop a series of innovative and cost-competitive technologies to support biobased industries in converting their biogenic CO_2 emissions into value-added chemicals, which can be directly used for the production of more sustainable bioproducts.

Also within the scope of Scope 3 is the qualification of raw materials based on different categories of environmental impact throughout their entire life cycle. The procurement of services and goods is oriented, where possible, towards materials with lower greenhouse gas emissions compared to the average or representative market data.

However, as described at the beginning of this chapter, it should not be forgotten that Novamont's greatest contribution to decarbonization is represented by the development of an innovative business model based on research and technological innovation, which has made it possible to bring the production of highly interesting monomers such as 1,4 bio-butanediol (Bottrighe plant), azelaic acid, and pelargonic acid (Matrica plant in JV with Versalis) completely from renewable sources to an industrial scale. Novamont has brought to industrial scale a series of biopolyesters with an increasing content of renewable plant-based raw materials and has continued to invest in strengthening the integrated value chain in all its parts, transforming the excellent results of research and engineering processes into further opportunities for circular bioeconomy (see also the description of the new KPI related to the decarbonization potential index).

All this has taken place in a context that, as already highlighted in the 2023 Impact Report, remains very complicated. The phenomena triggered by the outbreak of the war in Ukraine in 2022 led to a further aggravation of the economic, geopolitical, and social situation, with high prices of renewable raw materials and inflation weighing on purchasing power. In the absence of mitigation measures and the enhancement of the emission reduction potential of bioproducts, the import of fossil-based products continues to be very impactful. This has prompted even virtuous market players to go back from their more sustainable choices, replacing products with a higher renewable raw material content with products with a higher fossil component.

[49] For more information, see: https://co2smos.eu/

DECARBONIZATION POTENTIAL INDEX (DPI)

To describe its performance in the context of the fourth common benefit objective, one of the metrics adopted by Novamont in previous Impact Reports was the "decarbonization index", expressed in tons of CO_2e avoided and/or offset per ton of useful product. This index corresponded to Novamont's commitment to reducing and/or mitigating greenhouse gases through energy efficiency measures, energy recovery from waste, the use of electricity from renewable sources, and direct and/or indirect emission offsetting. The higher this index, the greater the amount of greenhouse gases that were avoided/offset per unit of useful product output.

Starting from 2024, Novamont decided to rethink this index from an evolutionary perspective, going beyond processes under its direct control and identifying a metric that is more representative of its contribution to decarbonization, because it is based on Life Cycle Assessment: the Decarbonization Potential Index (DPI).

This index is determined as the difference between the "cradle to grave" carbon footprint (verified by a third party) of Novamont's products (primary form plastics) and that of the 100% fossil benchmark (non-EU origin PBAT). In this way, Novamont's commitment to developing more innovative products with increasing shares of renewability is better represented.

Decarbonization potential index is calculated as follows:

DPI = **Novamont products GHG savings/Novamont scope 1 GHG**

In the numerator, the potential savings in terms of tons of CO_2e resulting from the 1:1 replacement of non-EU PBAT with Mater-Bi and Origo-Bi products sold by Novamont in the reference year are reported, while the denominator reports Novamont's direct greenhouse gas (GHG) emissions, also expressed in tons of CO_2e and related to the reference year. The output value thus provides an indication of the extent of potential greenhouse gas savings, calculated considering the entire life cycle of the products, compared to Novamont's direct emissions. The higher this index, the greater the relevance of the savings compared to these emissions.

Some impact stories

Regenerative turnover

=

ICF x Turnover

Regenerative Turnover (circularity)

The transition from a linear economy model to a circular model is a historic challenge. Novamont has built a great deal, working to create an integrated value chain both upstream and downstream, favouring the efficient use of resources, building five world-leading plants for the production of bioproducts, at a time of offshoring and deindustrialisation. These are integrated biorefineries that use plant-based raw materials, enabling Italy to become the proving ground for a true circular bioeconomy case study. The biodegradable products, like bioplastics, pelargonic acid-based phytosanitary products, biolubricants and ingredients for cosmetics, have been designed to make it possible to solve serious problems relating to the accumulation of pollutants in soil, water, sludge and compost and to maximise the recovery of organic waste, as well as to increase the recovery of waste through compostability. A metric was devised for this area which makes it possible to measure the contribution to the circular bioeconomy. In particular, the circular (or regenerative) material flows have been linked to the economic value generated by Novamont thanks to implementation of a circularity indicator called the “regenerative turnover”.

Regenerative turnover is defined as the Index of Circular Flows (ICF) multiplied by Novamont S.p.A.’s turnover. in relation to the accounting year in question.

The Index of Circular Flows quantifies the regenerative flows of materials and energy as inputs and outputs of the organisation.
Incoming circular flows are renewable (of plant origin or recycled) raw materials and energy from renewable sources,or recovered from process waste, while waste (as an output) sent for recycling, recovery or regeneration, recovered sub-products and end products that are certified compostable and biodegradable are outgoing circular flows. Linear flows are all non-regenerative flows, such as energy from fossil fuels, non-renewable raw materials and waste sent to landfill.
Regenerative turnover therefore represents the percentage of turnover linked to a company’s circularity. The greater the regenerative turnover, the better a company’s capacity to generate revenue from its circular products or activities.

ISO 14067 certification: innovation at the service of supply chain sustainability

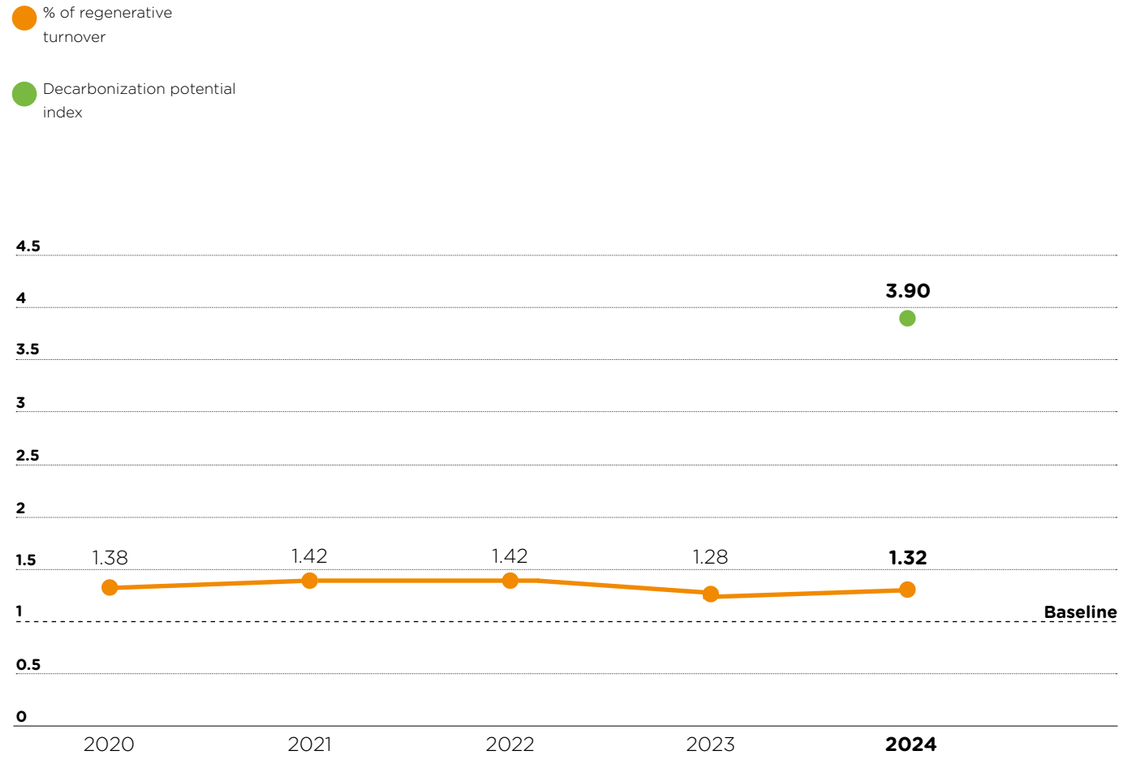
Novamont is among the first companies in the industry to have achieved ISO 14067: 2018 Systematic Approach certification. The standard sets out the principles, requirements and guidelines for quantifying and declaring the carbon footprint, understood as environmental impact, in accordance with international standards for life cycle assessment LCA (ISO 14040 and ISO 14044). The declaration of the carbon footprint of products is therefore qualified in a standardised, third-party verified manner and is a rigorous tool for planning, verifying and quantifying progress on the emission reduction pathway of products. In 2023, Novamont decided to initiate an environmental qualification process for Mater-Bi products along the value chain with its Premium Partners[50]. This resulted in the development, together with the Deloitte Climate & Sustainability team, of a tool that allows the calculation of the carbon footprint of these products in accordance with the ISO 14067 standard (product carbon footprint), effectively contributing to the use and dissemination of eco-design tools that also meet the high ESG reporting standards introduced by the European Union, such as the CSRD. In November 2024, this tool was positively verified by the certification body Certiquality in accordance with international standards ISO 14040 and ISO 14044.

[50] For further details on the Mater-Bi Premium Partner Agreement, see page 63.

ACTION	KPI	commitment 2024[51]	result 2024	commitment 2025
Maximisation of the circularity of systems by using renewable energy and raw materials, the use of sub-products and production of compostable/ biodegradable materials that can be recovered through organic recycling	% of turnover that is regener-ative	At least 50% of turnover should be regenerative (i.e. IFC > 0.5)	66%	At least 50% of turnover should be regenerative (i.e. IFC > 0.5)
Development of sustainable products with a progressive increase in renewability and lower greenhouse gas emissions	Decarbonization potential index (DPI)	Decarbonization potential index (DPI) > 2	7.8	Decarbonization potential index (DPI) > 2

[51] In the case of the KPI "% of revenue that is regenerative", these are objectives that Novamont set for itself in 2020, the year it achieved Benefit Company status and defined impact KPIs. In the case of the KPI "Decarbonization Potential Index", these are objectives defined in 2024, following the revision of the previous KPI from an evolutionary perspective.

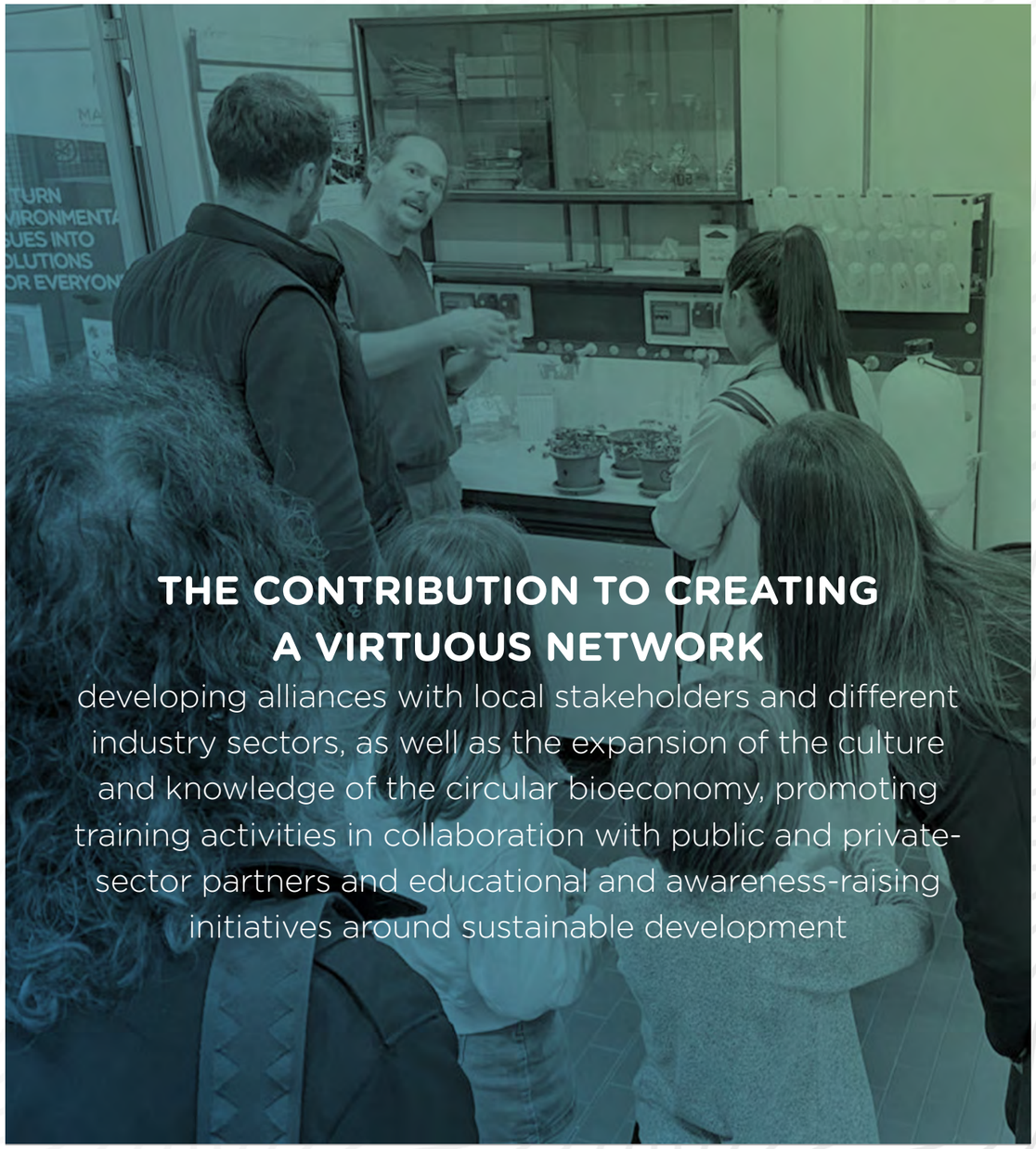
Trend of normalized KPIs based on the baseline value[52]



[52] In the case of the KPI "% of revenue that is regenerative", the baseline corresponds to the objective that Novamont set for itself in 2020, the year it acquired Benefit Company status. In the case of the KPI "Decarbonization Potential Index", the baseline is the objective defined in 2024, following the revision of the previous KPI from an evolutionary perspective.

8

The **fifth** common benefit purpose



THE CONTRIBUTION TO CREATING A VIRTUOUS NETWORK

developing alliances with local stakeholders and different industry sectors, as well as the expansion of the culture and knowledge of the circular bioeconomy, promoting training activities in collaboration with public and private-sector partners and educational and awareness-raising initiatives around sustainable development

How the company pursues this purpose:

The circular bioeconomy is a highly multidisciplinary sector, which requires great individual and collective effort. It is essential to create alliances and strategic partnerships with actors along the value chain and with local areas and communities, not just to share the different information and experiment with new solutions with a pioneering and constructive spirit, but above all to contribute to the creation of a shared culture on topics relating to the circular bioeconomy.

In 2024, the Novamont Study Center, in synergy with Versalis and Eni, undertook a sustainability stakeholder mapping activity, which allowed the collection of useful information from various company functions and locations on the types of stakeholders, their orientation towards Novamont, and their degree of influence. This work has led to the mapping of over 300 Novamont stakeholders, divided into 12 geographical areas in Italy and abroad, which will be updated annually thanks to the active involvement of various company teams.

Novamont actively participates in the most important networks and institutional initiatives that are considered points of reference for the circular economy and the bioeconomy both nationally and internationally. It is a founding member of the Bio-Based Industries Joint Undertaking - BBI JU, today the Circular Bio-based Europe - CBE[53], the partnership that succeeded the BBI JU in new European programmes to pave the way to achieving the European Green Deal objectives and climate neutrality. Also at an international level, it is a partner of the Ellen MacArthur Foundation, one of the largest foundations, whose mission is to accelerate the transition to a circular economy[54].

With reference to sustainability and climate change, both of which are closely connected to the circular bioeconomy, Novamont joined the UN Global Compact, the largest strategic corporate citizenship initiative in the world to promote a more sustainable global economy. In 2024, Novamont was also awarded a platinum medal in sustainability practices by EcoVadis, placing it in the top 1% of companies in its sector[55]. EcoVadis assesses performance on the basis of 21 sustainability criteria grouped into four areas: Environment, Labour and Human Rights, Ethics and Sustainable Procurement, and aims to examine the quality of a company's sustainability management system through its policies, actions and achievements.

In 2024 Novamont was confirmed platinum medal in sustainability practices by EcoVadis

Novamont ranks among the top 1% of companies in its sector

[53] Regulation no. 2021/2085 of the European Council, of 19 November 2021.

[54] https://www.ellenmacarthurfoundation.org/

[55] Manufacture of basic chemicals, fertilizers and nitrogen compounds, plastics and synthetic rubber in primary forms.

At a national level, for years, Novamont has worked alongside the Symbola Foundation, which was created to unite and support companies, communities and think tanks that focus on sustainability, innovation and beauty, employing its expertise in the drafting of the Green Italy Report. Novamont is also a member of the ICESP platform, a "network of networks" that aims to create a national focal point on the circular economy which the Italian system seeks to represent in Europe. The company is also part of the Circular Economy Network, an Italian network created with the aim of supporting the transition towards the circular economy and which each year produces a report on the industry's status in Italy.

With the goal of making Italy one of the global centres of excellence of the sustainable and circular bioeconomy, in which it is easy to invest, conduct research and do business, in 2014 Novamont promoted the foundation of the SPRING Italian Cluster for the Circular Bioeconomy, to raise the profile of local areas by forming connections between regions, universities, research centres, associations and industry and by developing multidisciplinary innovation projects. The Cluster is chaired by the CEO of Novamont and brings together 175 actors, number that has increased from 150 last year, representing all those realities that in different ways operate in the field of the circular bioeconomy: large industrial players, SMEs, universities, and all the main Italian public research organisations operating in the biomass processing and harvesting sector. They are joined by numerous actors in the field of technology transfer and environmental communication.

Another front on which Novamont is firmly committed is advocacy and awareness-raising for the protection and regeneration of the soil, developed in synergy with the Re Soil Foundation[56], involved in numerous dedicated events and initiatives.

The creation of synergies and partnerships along the value chain is key to Novamont's business model, whose cornerstones are research and shared innovation. As a matter of fact, Novamont participates in many research projects in partnership with the leading Italian and international companies in the field of the bioeconomy and the circular economy, including universities, research centres and technology parks, but also the world of industry, agricultural transformation and waste processing as well as brand owners, institutions and the voluntary sector.

In 2024, 18 new Research and Development Projects were submitted for regional, national and EU funding: Nine have been approved and one is still pending results. During the year, ten new projects were started, including TERRIFIC[57], the flagship project coordinated by Novamont, and six were successfully completed, making a total of 36 active projects during the year. The completed projects have led to significant developments in some areas of great interest for Novamont's research, such as the valorisation of sugars from waste for the production of 1,4 bio-butanediol, and the valorisation of the cake from oilseed aridocultures such as cardoon and safflower for the production of biostimulants. Novamont also assists its partners throughout the country and in all Italian regions in developing new applications and in diversifying their business, offering a service which includes technical support, assistance with certification activities, communications campaigns and access to new experimental materials. At the same time, for Novamont these partners represent a veritable proving ground in which to perfect formulations and test new applications in an industrial setting and in which the knowledge acquired immediately becomes a shared asset.

18

New research and development projects

Launched in 2024

Over the years Novamont has developed increasingly strong partnerships with its customers, by establishing a dedicated Premium Partners programme, i.e. direct customers who have signed an agreement to use Mater-Bi in all compostable applications produced within their companies. Mater-Bi Premium Partners have access to process and product innovations, new certifications, environmental reporting systems, market survey results, trade fair events and communication and promotion activities. The first tool made available to Mater-Bi Premium Partners have been the system for reporting the environmental impacts of the entire production[58] and the system that Novamont is developing for product traceability based on chain of custody (blockchain). Additionally, Officine Novamont, in collaboration with the commercial and marketing teams, have dedicated a training course to sustainability and environmental impact topics.

In 2024 the collaboration with Amazon continued, a partnership aimed at testing the use of Mater-Bi packaging in the markets of Italy and Spain, which is part of the company's broader strategy to reduce the environmental impact of its packaging[59].

2024 also saw the start of a collaboration with Aspiag Service, the dealer of the Despar brand for Triveneto, Emilia-Romagna, and Lombardy, with 255 direct stores and 306 affiliates that will provide their customers with 40 million compostable shoppers produced by partners licensed by Novamont's Mater-Bi brand, made with 50% raw material from renewable sources.
Collaborations with public administrations, multi-utility companies and the waste treatment sector in general have been essential to define best practice in organic waste management, setting an example for the rest of Europe and giving rise to important research and innovation projects. Internationally, Novamont works with the Witzenhausen Institut, which since 1990 has held meetings in Kassel (Germany) for stakeholders from industry, public administrations and the scientific world to discuss new approaches to how to increase waste recovery rates.

[56] For further details about Re Soil Foundation activities see page 44 and page 47.

[57] For further information, see page 18.

[58] For further information, see page 57.

[59] For more information see the next impact story.

With the aim of enhancing the role of the industry in generating concrete impacts in the territory, according to a Corporate Political Responsibility approach - that is, the idea of expanding the concept of Corporate Social Responsibility by extending the commitment of companies in the environmental, social, and economic fields to the public sphere - Novamont collaborates with local administrations, sharing its knowledge and contributing to the development of shared projects.
Finally, NGOs and the voluntary sector provide a vital connection with civil society. This enables us to foster a participatory scientific approach based on field experiments, working collectively on local projects able to catalyse a wide range of initiatives. For instance, Novamont has been working for years with Legambiente to raise awareness about technological innovations to promote sustainability, supporting a great many initiatives on circular economy topics like, Goletta Verde and Goletta dei Laghi[60] in addition to the above mentioned "Change your footprint, close the loop[61]".

Within the third sector, Novamont also supports a number of local entities in the Novara area. In 2022, Novamont started a collaboration, which continued then in 2024, with Gerico, a Novara-based Cooperative Social Enterprise, focussing on pathways for the re-employment of people in difficulty and disadvantaged situations. As part of the Christmas festivities, the company chooses to support the Comunità di Sant'Egidio Piemonte, and in particular the "Christmas Lunches" initiative dedicated to people in need.

Given its belief that scientific and economic-humanistic knowledge must always evolve side by side to find a new balance between the development and use of resources and the importance of quality education with a holistic approach, over the years Novamont has put in place several doctorates and research grants in collaboration with the leading universities[62] and has provided its expertise for training activities aimed at all targets. From this perspective Novamont promotes connections between the world of industry and the economy and that of training the new generations, through the support of schools and universities in defining teaching courses and by organising guided tours and open days for students, teachers and citizens. In this context, in 2024 Novamont joined the Piemonte Fabbriche Aperte[63] project, an initiative promoted by the Region to showcase local companies and their propensity for technological innovation "live". Moreover, Novamont devised "Alla scoperta del Mater-Bi" (Discovering Mater-Bi), a touring educational project for younger children featuring interactive games, multimedia experiences and creative workshops. "Alla scoperta del Mater-Bi", includes a web platform, a travelling multimedia interactive exhibition, science and creative handicraft workshops, teaching materials, publications, games and comics. The aim is to raise awareness and offer an interactive experience of the world of bioplastics and their life cycle through workshops and games. It also endeavours to show children, young people and their families how, through our everyday actions, we can all make a valuable contribution to the environment.

[60] For more information see the next impact story.

[61] For further information, see page 37.

[62] In particular it refers to university of chemical sciences, biological sciences, engineering, agricultural sciences.

[63] For more information see the next impact story.

Some impact stories

Amazon innovation through compostable packaging

Since 2022, Novamont and Amazon have initiated a collaboration aimed at developing innovative solutions to improve resource efficiency and circularity in the packaging sector.
One of the pilot projects initiated by Amazon as part of the collaboration involves experimenting in Spain, in Valencia, with the use of innovative bio-based, biodegradable, and compostable bags for the home delivery of Amazon Fresh grocery orders and the collection of used bags to be recovered through recycling.
In this pilot project, customers are first invited to reuse the bags, and at the end of their useful life, to return them to the courier for mechanical recycling, or alternatively to use them to dispose of organic waste in local or domestic collection systems to obtain quality compost, as the materials are certified to be compostable both industrially and domestically.

Novamont and Amazon are testing new models for collecting these bags from customers and recycling them, using advanced technologies that allow old bags to be transformed into new ones.
More generally, Novamont and Amazon are also developing and testing advanced solutions for Mater-Bi packaging in other areas to validate the performance of this type of material in various applications, such as coffee capsules, yoghurt cups, and food trays as part of the TERRIFIC project, coordinated by Novamont and funded by CBE JU[64].
The experimentation started with a player like Amazon, which reaches millions of people worldwide, is a great opportunity to showcase Mater-Bi packaging solutions, test their effectiveness, and explore multiple recycling options with a view to resource regeneration and certified environmental performance.

As part of this collaboration, on November 25th, Novamont participated in the event organized at the Amazon Operations Innovation Lab in Vercelli, which opened its doors to representatives of the packaging sector and journalists on the occasion of the visit of the Minister of Environment and Energy Security, Pichetto Fratin.

[64] For further information, see page 18.

The collaboration with Legambiente to monitor water quality

Novamont supports Legambiente's campaigns, Goletta Verde and Goletta dei Laghi, two boats that every summer monitor the health of Italian seas and lakes, respectively, denouncing abuses and illegalities and promoting good territorial management practices.
Thanks to the analyses carried out by Goletta Verde technicians, every year Legambiente reports the situations at greatest risk of marine pollution, resulting from the lack or inadequacy of purification systems. Another important goal of Goletta Verde is scientific research on marine litter.

In recent years, Legambiente has conducted unique studies: monitoring floating waste, characterizing plastic waste for recyclability, and a preliminary study on the presence of microplastics in the waters of smaller islands.
A mission shared with Goletta dei Laghi, the parallel campaign dedicated to the protection of lake ecosystems: focusing on suspicious discharges as well as the issue of microplastics, to which Legambiente has dedicated a specific investigation.
The results of the analyses[65] have not been encouraging: the sea and lakes of the Peninsula suffer from issues related to poor purification, illegal discharges, pollution, and also the acceleration of the climate crisis, which, particularly with intense rains, has put purification systems under pressure. The result is that out of 394 points sampled between June, July, and early August by Goletta Verde and Goletta dei Laghi 2024 of Legambiente in 19 regions, 36% were judged overall "beyond the limit" with 101 points receiving the judgement of "Highly Polluted" and "Polluted".

[65] For more information, see https://www.legambiente.it/comunicati-stampa/bilancio-goletta-verde-goletta-dei-laghi/#:-:text=Il%20risultato%20%C3%A8%20che%20su,e%2039%20di%20%E2%80%9CInquinato%E2%80%9D.

The edutainment project on Carbon Footprint in collaboration with Unicoop Firenze

As part of the projects developed by Novamont in the large-scale retail sector is the collaboration with Unicoop Firenze, the first Italian retailer to introduce biodegradable and compostable Mater-Bi shopping bags in its 103 stores in 2009. Since 2012, the collaboration has also extended to bioplastic bags and gloves for the fruit and vegetable department, initially with an experiment in four stores in the province of Siena, followed by Poggibonsi and Tavarnelle Val di Pesa, and starting from February 2014, all stores in Florence and the remaining ones scattered throughout Tuscany. Since 2017, Unicoop Firenze has reaffirmed its commitment to environmental sustainability by adopting solutions made with fourth-generation Mater-Bi, which has a high content of renewable plant-based raw materials (now reaching 60%). These practices have resulted in an estimated CO_2 emissions savings of 25,000 tons between 2009 and 2022[66].

In 2024, in addition to the already mentioned "Change your footprint, close the loop[67]," the collaboration expanded to the theme of education, developing "Change your footprint! Choose lightness", an itinerant edutainment format focused on the theme of carbon footprint, which is part of Novamont's educational project "Discovering Mater-Bi."
The format has been featured at several important exhibitions in Italy, thus reaching students, families, and consumers on various occasions. The first event of the initiative took place during MIDA, the International Handicrafts Trade Fair in Florence. During the three-day event, more than 1500 visitors to the interactive area created by Novamont in collaboration with Ecofficina had the opportunity to discover the carbon footprint of Mater-Bi bags through 10 educational play stations, 6 interactive games, and various infographics. From October 30th to November 3rd, the format made a stop at Lucca Comics & Games 2024, the international festival dedicated to comics, animation, games, and video games. It involved over 2800 in-person participants, who had the opportunity to discover the impact of their habits and daily actions on the climate, delving into what each person can do to reduce the amount of carbon dioxide emitted into the atmosphere due to our lifestyles.

[66] The study was conducted by Novamont and Studio Fieschi, through a Life Cycle Assessment (LCA) approach - life cycle assessment from "cradle to grave" - whereby the authors calculated the CO_2 savings as the difference between the greenhouse gas emissions of conventional shopping bags- which include the material production and end-of-life phases - and the corresponding greenhouse gas emissions of Mater-Bi shopping bags. The transformation of the material and the distribution of the final product were excluded from the calculation because they were considered equivalent for both systems.

[67] For further information, see page 37.

“Fabbriche Aperte Piemonte”: Novamont headquarters in Novara opened doors to welcome the local community

On October 25th and 26th, the initiative “Fabbriche Aperte Piemonte – Inside the heart of industrial Piedmont, to discover the value of those who create value”, took place. Promoted by the Region, it aimed to showcase companies and their propensity for technological innovation “live”. This event, which involved 137 companies and nearly 10,000 accredited visitors, offered the public the opportunity to visit research centres and industrial facilities in the area, exceptionally open for the occasion.

Novamont was among the participating companies, it opened the doors of its Novara facility to the local community on October 25th. During the morning, more than 30 visitors had the opportunity to explore the Research Centre’s laboratories through 4 guided tours, led by Novamont Researchers.

Participants were able to discover various research fields, from bioplastics to biotechnology, including organic chemistry, agronomy, and many others. Novamont enthusiastically participated in the initiative, aware of the important role of interaction and connections with the local area in promoting a culture of sustainability and spreading the circular bioeconomy model.

Cultivating sustainability skills: the training program by Officine Novamont dedicated to Mater-Bi Premium Partners

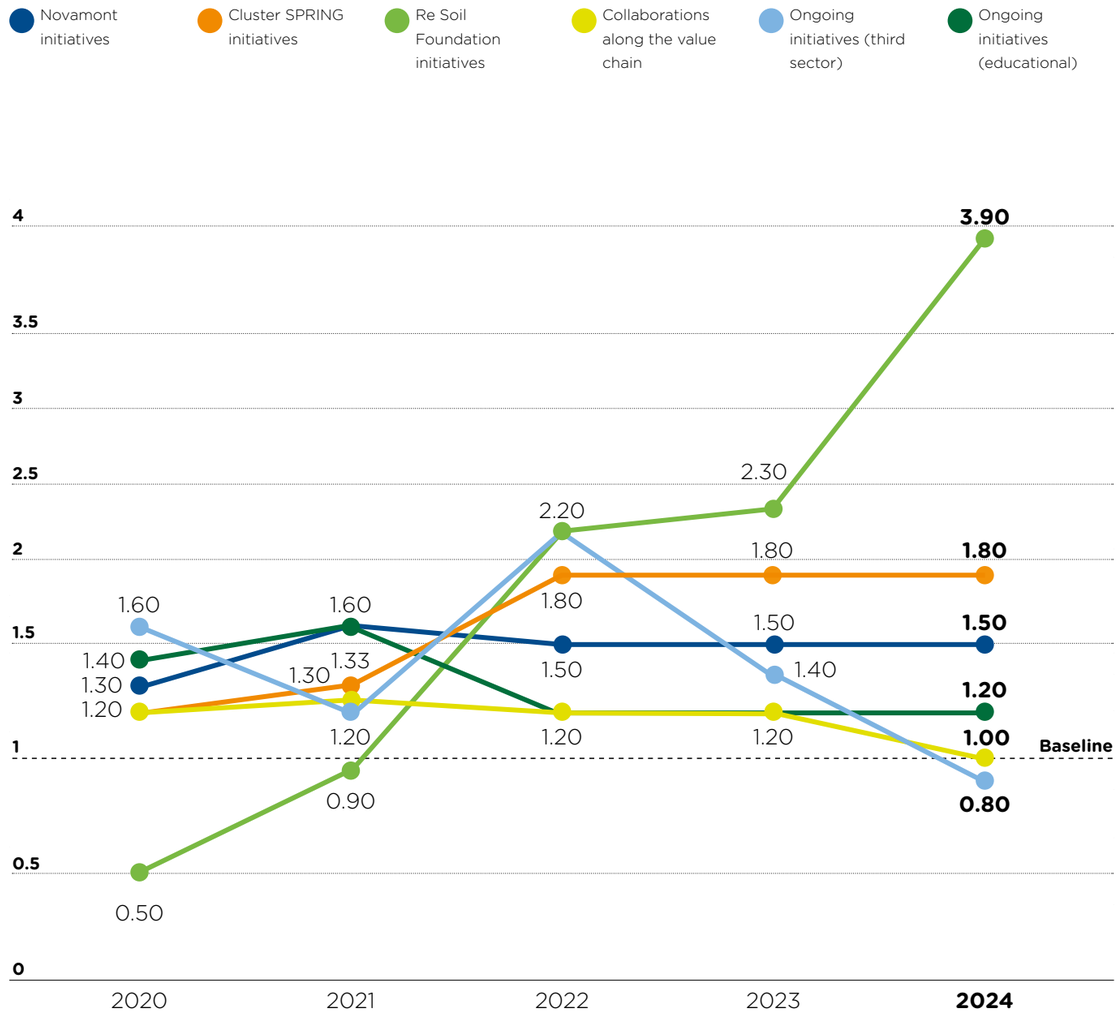
In 2024, the brand’s Premium Partners were involved in a training program dedicated to sustainability and environmental impact, designed by Officine Novamont in collaboration with the Marketing & Sales teams and ECOPEC (Ecology of Products and Environmental Communication). The aim of the initiative was to create a common culture and language on sustainability and environmental impact issues and to share with the companies involved, some useful tools to manage and communicate sustainability inside and outside the company.
The program was structured into 3 sessions, with the possibility to participate either in person or remotely, involving over 70 people. Specifically, the program saw representatives from 12 partner companies engaged in various classroom training sessions combined with site visits, to deepen their skills in the field with concrete examples of what they learned in the classroom.

Among the various topics covered were the basic concepts of the bioplastics sector, the tools of Life Cycle Thinking, and the crucial role of effective, truthful, and accurate environmental communication. The program also led participants to visit the Contarina S.p.A. facility, dedicated to the collection of organic waste and the production of compost and biomethane from organic waste, and the Novamont site in Patrica, where they experienced first-hand the Mater-Bi production process and the various applied technologies.

ACTION	KPI	commitment 2024[68]	result 2024	commitment 2025
Promotion of the circular bioeconomy model, focused on soil health through activities such as high-level partnerships, advocacy, participation in national and international initiatives and networks, implemented by Novamont, by the SPRING Cluster and by the Re Soil Foundation)	no. ongoing Novamont initiatives	Number of initiatives > 10	15	Number of initiatives > 10
	no. of SPRING Cluster initiatives and events	Number of initiatives > 15	27	Number of initiatives > 15
	no. Re Soil Foundation initiatives and events	Number of initiatives and events > 10	39	Number of initiatives and events > 10
Development of a business model based on connections with different sectors	no. ongoing collaborations along the whole value chain	Ongoing collaborations > 10	10	Ongoing collaborations > 10
Projects/collaborations with the voluntary sector and for the community	no. ongoing initiatives	Between 5 and 10 ongoing initiatives	4	Between 5 and 10 ongoing initiatives
Environmental training and educational activities	no. ongoing initiatives	Between 5 and 10 ongoing initiatives	6	Between 5 and 10 ongoing initiatives

[68] Goals set by Novamont in 2020, the year in which it acquired the status of Benefit Company and when the impact KPIs were defined.

Trend of KPIs normalised according to their baseline value (targets defined in the year when Benefit Company status was achieved - 2020)



Notes:
In 2024, the KPI related to the number of collaborations with the third sector recorded a significant decrease in absolute value, partly already observable in the previous year. This is due to Novamont's decision to progressively rationalize the resources allocated to these types of initiatives, focusing on those considered most relevant in terms of environmental and social impact. Additionally, Novamont has activated further channels and entities specializing in various topics (see, for example, the evolution of the KPI "# initiatives and events Re Soil Foundation").

Common benefits within the organisation

In 2024, Novamont adopted various measures to support people's quality of life and the balance between work and personal life.

Among the most concrete commitments in this regard was the adoption of a corporate welfare plan called "Flexible Benefit". By choosing to go beyond simple monetary compensation, the company implemented a welfare platform for converting part of the performance bonus into services and pension plans, with the aim of making the net value of the potentially allocable portion available to employees.

Regarding corporate welfare opportunities, Novamont was also included in the scope of Eni's "Employee Stock Ownership Plan". This plan, initially implemented for employees in Italy, will gradually be extended to foreign companies in 2025, in compliance with national legislations, with the aim of strengthening their sense of belonging to the company and participation in the growth of corporate value, in line with shareholders' interests. With this initiative, Eni aims to involve its employees by making them shareholders, thus allowing them to participate in Eni's reality in an increasingly integrated role. This will enhance active engagement towards achieving corporate goals and successes.

With the same mindset of development of the organisation and its people, in 2024 some activities that were already in place were continued and in some cases further developed, depending on the importance attached to them:

For all employees in Italy was assured continuity of the psychological counselling service, in order to provide emotional, cognitive and behavioural support to those working at Novamont. During the year, the service was enhanced by adding the role of a social worker alongside the clinical psychologist to meet any additional needs of the employees.

Remote working was reaffirmed as a structural organisational institution in 2024, confirming its important role not only in managing professional activities but also in people attraction and retention. Within the organisation most of employees and managers have the possibility to work remotely, except some specific operational roles.

The journey of improvement and increasing focus on Diversity & Inclusion (D&I) continued, it had begun in 2023 with the appointment of a Diversity, Equity & Inclusion Manager. In particular, the organisation initially focused its efforts on creating relationships and contacts with a network of virtuous companies that have implemented good practices, with the aim of also acquiring the necessary skills in the field. In the second part of the year, the company then focused on promoting tools, content and activities among employees aimed at raising awareness and informing the corporate population on these topics.

Works have continued on the Officine Novamont, the corporate creativity and innovation laboratory launched at the end of 2022 to strengthen group identity and culture and promote the growth of people's distinctive skills. After a period of set-up and initiation of works in 2023, Officine Novamont developed new content in 2024, exploring different topics and increasingly complementing the know-how of internal instructors with the expertise of external figures and the training resources provided by other entities in the sector. Among the topics that characterized 2024, for example, are Public Affairs and strategies for developing ideas and products and value-based sales.

The role of internal communication, addressed to employees in the Italian and foreign offices, was consolidated thanks to activities to strengthen dedicated corporate tools. In particular, the B-People intranet and its connected platforms, namely the Knowledge Base and the Officine Novamont area, have been constantly updated and expanded to create an increasingly welcoming and intuitive digital space, capable of ensuring the dissemination of information and materials of interest within the organisation, with a view to digitalization, sharing, transparency, and engagement.

Improvement projects for the work experience and employee sentiment continued, concerning, for example, corporate environments, such as the improvement of the company canteen space at the Novara headquarters.

PROMOTION OF HEALTH IN THE WORKPLACE: THE WHP INITIATIVE AT THE TERNI PLANT

The Novamont plant in Terni has voluntarily chosen to join the Workplace Health Promotion (WHP) program included in the National Prevention Plan to promote health in the workplace. The program, activated and coordinated locally by USL Umbria 1 and USL Umbria 2, serves as an important tool to raise employee awareness about adopting virtuous habits and behaviours to protect health, thus contributing to the improvement of health and well-being in the workplace. In particular, the plant promoted some practices in 2024 to competently and consciously adopt a healthier and more active lifestyle, especially focusing on actions and good practices related to nutrition and quitting smoking.

- The vending machines offer low-calorie foods, dried fruits, and products suitable for people with celiac disease. The non-alcoholic beverages are set to “zero sugar” to reduce sugar consumption.

- In the lounge areas employees can find free water dispensers, microwaves, and refrigerators. Information on HACCP hygiene standards is provided to ensure a safe environment.

- Twice a week, in three different places of the building, free seasonal fruit is distributed.

- To promote a smoke-free environment and support employees in reducing tobacco consumption, a smoking ban has been established in the workplace, both indoors and outdoors, including devices such as electronic cigarettes.

- During periodic check-ups, the occupational physician provides information to reduce smoking, monitors related data, and promotes validated tools that can help quit smoking.

- The occupational physician also plays a key role in promoting health in the workplace by providing personalized advice (minimal advice) to employees with risk factors for non-communicable chronic diseases (NCDs).

MANAGEMENT AND SHARING OF KNOWLEDGE WITHIN THE ORGANISATION

The ability for cross-functional and transversal design, specific to the circular bioeconomy sector, plays a fundamental role in building a cohesive system that fosters innovation and sustainability. To address the challenges of a rapidly evolving context, it is essential to promote active collaboration with the supply chain, universities, businesses, and local stakeholders, cultivating relationships and projects with a structured network. But it is also crucial to capitalize on all the information, skills, projects, and experiences carried out by people, acquired through interaction with the supply chain and other stakeholders, by sharing them and making them accessible throughout the organization.

It is from this need that in 2020 Novamont decided to equip itself with a Knowledge Base developed and managed by the company’s Study Center, which is continuously being implemented and updated. The platform is consistent with the objectives pursued within Eni’s Knowledge Management System (KMS), the organisation’s competency management system, which facilitates the transmission of skills, innovation, and the exchange of experiences at all levels.
Novamont’s Knowledge Base is configured as a space for collecting and sharing materials and information of interest to the company, coming from both internal and external sources, accessible to all employees and searchable with a search engine. It is part of a digital system of tools, serving as an internal reference point for the dissemination of documents and key technical knowledge for the organisation.

NOVAMONT FOR INCLUSION: THE AWARENESS-RAISING JOURNEY TO PROMOTE A D&I CULTURE IN SYNERGY WITH ENI

Aware of how increasingly necessary it is today to quickly adapt the company's structure and culture to a constantly evolving society and work environment that places greater emphasis on valuing differences and protecting vulnerabilities, in 2023 Novamont embarked on an internal journey of action and awareness on Diversity & Inclusion (D&I) issues, which continued in 2024 with renewed momentum and the implementation of several projects.
From an organizational and internal oversight perspective, after appointing a Diversity, Equity & Inclusion Manager in 2023, the new year saw the Shared Value and Impact Management team engaged in mapping best practices, also initiating opportunities for dialogue with Eni's D&I function, with a view to exchange and increasing integration for the realization of valuable projects.

An initiative that stands out among the shared ones, was the company event dedicated to employees of the Italian offices, organized in collaboration with Eni's Diversity & Inclusion teams and Versalis Communication. The meeting, which also saw the participation of Eni's Head of D&I and the CEO of Novamont, was an important opportunity to reflect on the value of Diversity & Inclusion within the organization and the synergies that can be created between Eni's entities in promoting and enhancing diversity.
To ensure continuous information and awareness, Novamont has created a dedicated space for D&I topics within the digital platform Officine Novamont on the company intranet, available in both Italian and English. This new section is designed to provide useful resources, articles on diversity and inclusion, and updates on the initiatives launched.
To further promote the culture of diversity and inclusion within the organization, a dedicated newsletter has also been created, available in both Italian and English. This tool aims to share research, insights, and reflections from key personalities in the field, facilitating the dissemination of knowledge, the sharing of ideas and best practices among employees, and encouraging open and informed discussion on these topics. Among the first topics explored during the year are inclusive language and ableism.
Finally, with the aim of enhancing internal competencies on these topics and increasing the impact on SDG 5 – Gender Equality of the United Nations 2030 Agenda, the company participated in the Target Gender Equality acceleration program promoted by the UN Global Compact. This program is designed to provide participating companies with knowledge, skills, and tools on gender equality, as well as important opportunities for networking and mutual exchange.

CULTURE, INNOVATION, DISTINCTIVE SKILLS: OFFICINE NOVAMONT DNA

In 2024, Officine Novamont reaffirmed itself as the meeting place, both virtual and physical, for knowledge, know-how, corporate values, and distinctive skills. A space where collaboration and creativity are considered elements of success for the company and where the culture of doing is once again central to understanding and facing the great challenges of the present.

The initiative is cross-functional to two business areas: Human Resources and Corporate Strategy Implementation & Engagement – the latter focused on enhancing innovation capabilities and developing strategic partnerships within the group and with external stakeholders.
Officine Novamont is coordinated by the Shared Value and Impact Management team, which falls under the Corporate Strategy Implementation & Engagement department. The strategic guidelines are approved by a board that also includes the HR department, the CEO and the Scientist Coordinator (a Senior Advisor with proven expertise in sustainability).

After a 2023 focused primarily on consolidating distinctive and transversal competencies, both environmental and otherwise, throughout the organisation, in 2024 Officine Novamont concentrated on specific paths dedicated to more targeted topics and audiences. A particular focus, for example, has been given to certain Research and Development topics, Public Affairs issues, value-based sales strategies, and tools useful for developing new ideas, technologies, and businesses that anticipate customer expectations.
Leveraging a digital platform available in both Italian and English, Officine Novamont has continued to host and make accessible the content and insights developed over time, such as materials dedicated to ICT security, the use of Office 365 tools, and the environmental skills central to the circular bioeconomy sector.

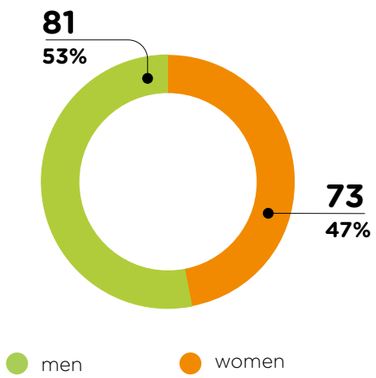
Once again opening up to an external audience, Officine Novamont, in collaboration with the Marketing and Commercial teams and ECOPEC (Ecology of Products and Environmental Communication), has designed a training course on sustainability and environmental impact aimed at representatives of the Premium Partners of the Mater-Bi[69] brand. Last but not least, they have been a key place for promoting culture and internal awareness initiatives on diversity and inclusion topics.

[69] See detail page 69.

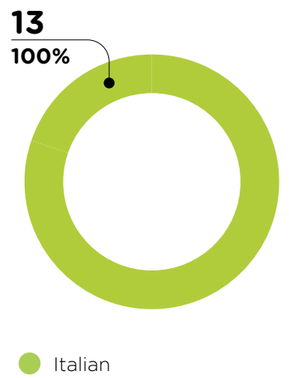
2024 OFFICINE NOVAMONT INTERNAL TRAINING KPI

13	Training courses delivered
68h30	hours of training delivered
154	recipients
1,832h30	hours of training received

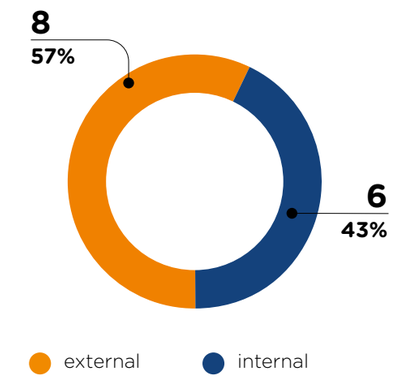
RECIPIENTS ACCORDING TO GENDER



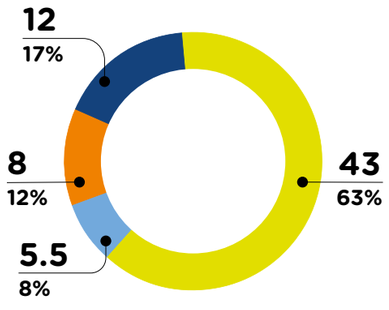
LANGUAGE



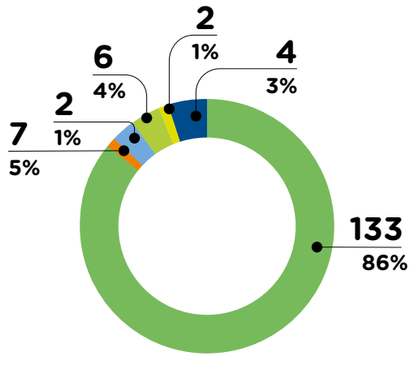
TEACHERS



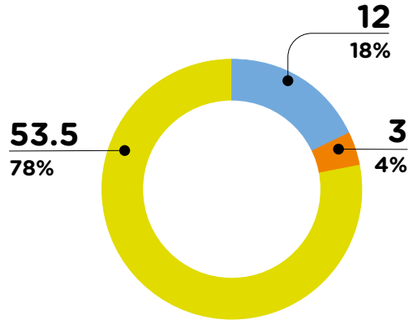
HOURS OF TRAINING DELIVERED PER MODE



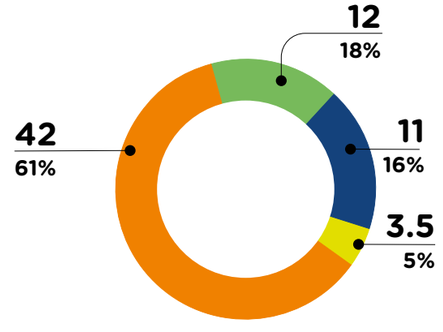
RECIPIENTS PER OFFICE



HOURS OF TRAINING DELIVERED PER OBJECTIVE



HOURS OF TRAINING DELIVERED PER TOPIC



Impact Assessment

To comply with its legal obligations as a Benefit Company and report on the company's general impact, Novamont uses the international third-party standard B Impact Assessment (BIA), developed by the non-profit B Lab. Using this tool to measure all its economic, environmental, and social impacts

Novamont was certified as a B Corp

Certified B Corporation

In July 2020
With a score of
104

In 2024
With a score of
118.8[70]

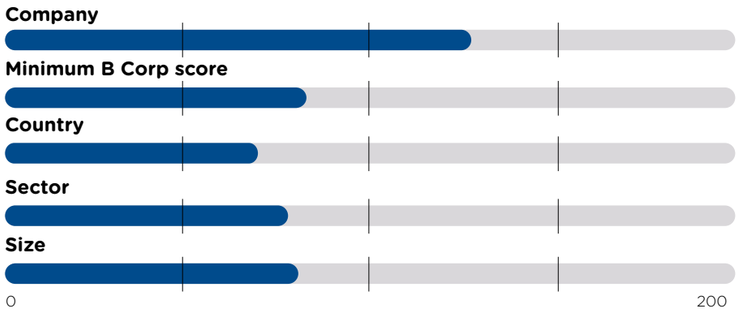
Please see the following pages for the impact reported in the year 2024:

[70] On a scale from 80 (minimum score that a company needs to be certified as B Corp) to 200.

NOVAMONT

OVERALL RESULTS: B IMPACT SCORE

126.2



Fiscal year-end date 31 December 2024

	questions/answers	General score
GOVERNANCE How the company can improve policies and practices relevant to its mission, ethics, accountability and transparency.	**28/28**	**13.9**
WORKERS How the company can contribute to the financial, physical, professional and social well-being of its workers.	**57/57**	**29.2**
COMMUNITY How the company can contribute to the economic and social well-being of the communities in which it operates.	**50/50**	**13.3**
ENVIRONMENT How the company can improve its overall environmental management.	**106/106**	**65.5**
CUSTOMERS How the company can improve the value it creates for its customers and direct consumers of its products and services.	**11/11**	**4.0**

BIOBAG

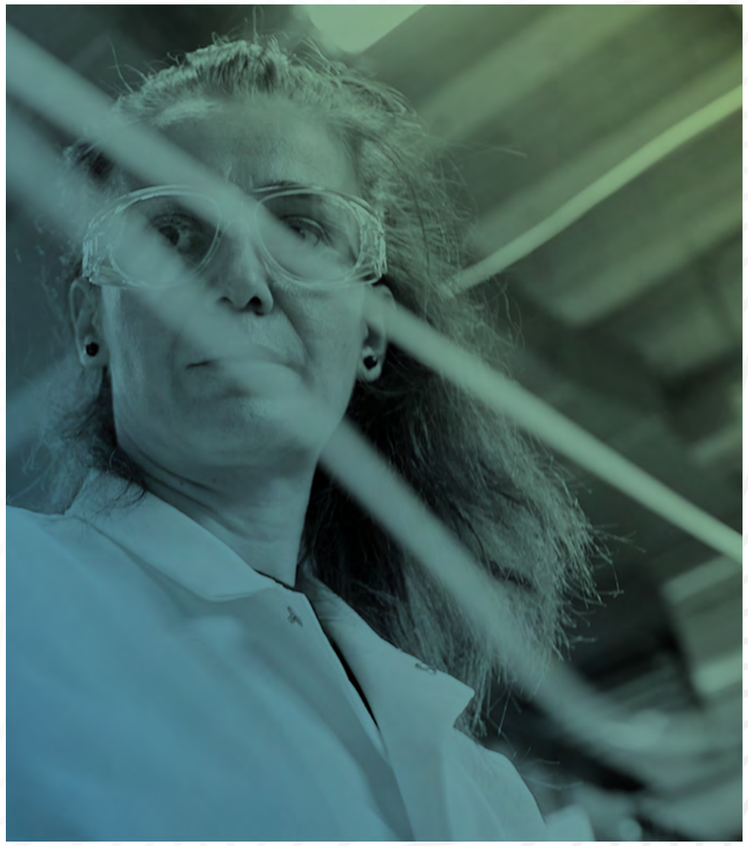
OVERALL RESULTS: B IMPACT SCORE

92.1

Fiscal year-end date 31 December 2024

	questions/answers	General score
GOVERNANCE How the company can improve policies and practices relevant to its mission, ethics, accountability and transparency.	**27/27**	**12.7**
WORKERS How the company can contribute to the financial, physical, professional and social well-being of its workers.	**55/55**	**24.9**
COMMUNITY How the company can contribute to the economic and social well-being of the communities in which it operates.	**43/43**	**12.6**
ENVIRONMENT How the company can improve its overall environmental management.	**90/90**	**38.0**
CUSTOMERS How the company can improve the value it creates for its customers and direct consumers of its products and services.	**12/12**	**3.7**

Attachment



Framework of Benefit Companies

Differently to traditional companies, Benefit Companies are the expression of a different economic paradigm: beyond seeking profits, their corporate objective includes making a positive impact on society and on the biosphere. In January 2016[71] Italy introduced the legal structure of the Benefit Company to allow business owners, managers, shareholders and investors to protect their company's mission and stand out from all other types of company on the market through an innovative and virtuous legal structure. There are currently over 4,300[72] Benefit Companies in Italy.

In pursuing their corporate activities, in addition to focusing on profits Benefit Companies[73] voluntarily pursue one or more common benefit purposes.

Common benefit means the pursuit of one or more positive impacts (which can also be achieved by reducing negative impacts) in relation to people, communities, local areas and the environment, social and cultural heritage and activities, entities and associations and other stakeholders. Benefit Companies seek to achieve these goals in a responsible, sustainable and transparent manner.

Managers of Benefit Companies must strike a balance between the interests of shareholders and the interests of society. To monitor their progress in achieving the objectives of common benefit, Benefit Companies appoint a management representative who is responsible for the company's impact and commit to report their own activities transparently and comprehensively through an annual impact report, which describes both the actions that have been taken and the plans and commitments for the future.

Benefit Companies have two fundamental characteristics:

Measuring what matters

they measure their own results in terms of the positive impact they have on society and on the environment with the same comprehensive, rigorous approach adopted for economic and financial results. Performance is measured using the B Impact Assessment (BIA), which was created as an integral component of the Benefit Company concept in 2006 and is now the most widespread measurement standard in the world, adopted by over 150,000 companies. Measuring the company's impact produces a number on a scale from 0 to 200 points which distinguishes "standard" companies from excellent ones, which have a score of over 80 (Certified B Corp®)[74]. Novamont exceeded this threshold and qualified as a Certified B Corp, joining the movement that today numbers 315 Italian companies and almost 9,500 worldwide[75].

Protecting the mission

they pay specific attention to all those with an interest in the company's corporate objective, whether shareholders or stakeholders.

[71] Law 208 of 28.12.2015, paragraphs 376- 384.

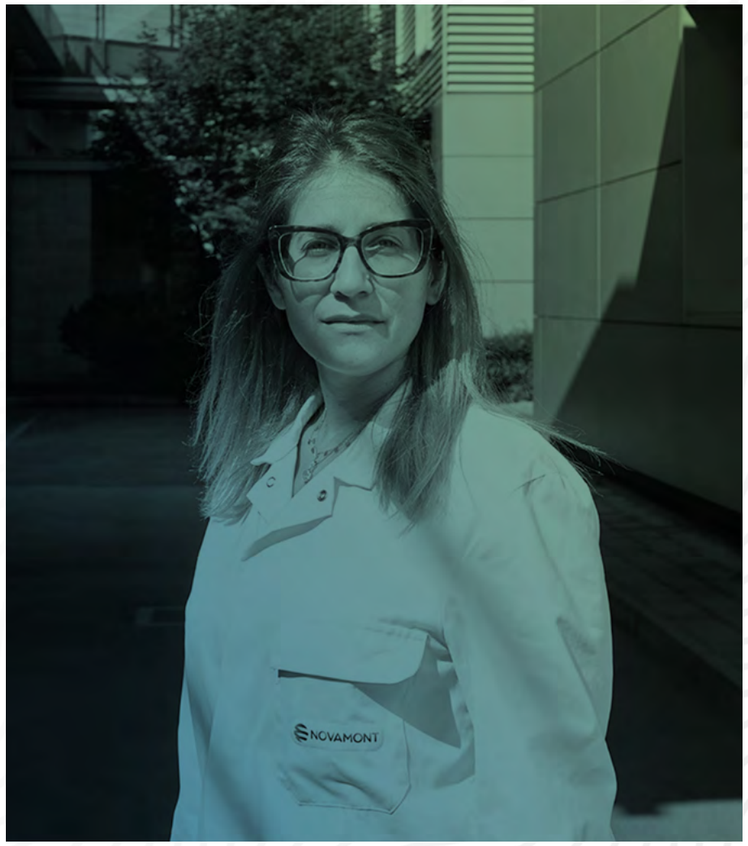
[72] National research on Benefit Companies available at this link: https://www.societabenefit.net/ricerca-nazionale-sulle-societa-benefit-2024/

[73] http://www.societabenefit.net/

[74] See http://bimpactassessment.net/

[75] https://bcorporation.eu/country_partner/italy-it/

Glossary



BIO-BASED

A substance or material derived in whole or in part from biomass, whose biological origin content is measured and verified using radiocarbon methods.

BIO-BASED CARBON

Biomass-derived carbon, as defined by the EN 16575 standard.

BIOCHEMICAL

Substances, meaning monomers and/or solvents, that are biodegradable and/or derived wholly or partly from biomass of plant origin.
Novamont monomers to date are obtained entirely from plant-derived biomass.

BIODIGESTER

A plant for the energy recovery of the organic fraction of domestic and industrial waste through the process of biomethanation of organic matter by anaerobic microorganisms leading to the formation of biogas.

BIODEGRADABILITY

Biodegradability is an intrinsic property as it refers to the innate potential for biodegradation, regardless of extrinsic properties, which on the other hand depend on the amount of material present and the shape of the material (e.g. size: thickness).

BIODEGRADATION

Biodegradation refers to a process that leads to the breakdown of an organic compound by microorganisms in the presence of oxygen into carbon dioxide, water, mineral salts and new biomass, or in the absence of oxygen into carbon dioxide, methane, mineral salts and new biomass.

BIOECONOMY

An economy that uses biological resources from the land and sea as inputs for energy, industrial (materials), food and feed production.

BIOGENIC EMISSIONS

Emissions that originate from natural processes and are therefore not among the climate balance altering factors caused directly by man: they must therefore be differentiated from direct CO_2 emissions of fossil origin.

BIOLUBRICANTS

Biodegradable lubricant that wholly or partially derives from plant-derived biomass.

BIOMASS

Material of biological origin, excluding material incorporated into geological formations or transformed into fossilised material and excluding peat.
The biomass used by Novamont is renewable and plant based.

BIOPLASTICS

Biodegradable and/or bio-based plastic.
A type of plastic is biodegradable if it is a nutrient substrate for at least one life form (in the case of biodegradation tests, a micro-organism) and under environmental conditions the life form can be active.

BIOPRODUCT

Biodegradable product and/or derived wholly or in part from renewable raw materials of plant origin. The term includes both finished products (bio-lubricants, phitosanitary products and cosmetic products) and raw materials and intermediates that are themselves subject to processing within the value chain (bioplastics and biochemicals).

BIOREFINERY FOR BIOPRODUCTS

An industrial activity that applies appropriate conversion technologies to biomass to transform it partly into fuel and partly into products such as food, materials, chemicals for the polymer industry, for cosmetics or for pharmaceutical industry, etc.

BYPRODUCT

A sub-product of the industrial production of other products. A substance or object resulting from a production process that does not have as a primary purpose the production of that item, may not be considered waste, but a by-product only if all the following conditions are met (Article 184/bis of Legislative Decree no. 152/2006): a) it is certain that the substance or object will be used again; b) the substance or object can be used directly without any further treatment other than normal industrial practice; c) the substance or object is produced as an integral part of a production process; d) the further use is lawful, i.e. the substance or object fulfils, for the specific use, all the relevant requirements concerning products and the protection of health and for and of the environment, and overall will not cause any negative effect on the environment or on the human health.

CARBON FOOTPRINT

The carbon footprint is a measure that expresses the total greenhouse gas emissions, usually expressed in kg or tonnes of CO_2 equivalent, associated directly or indirectly with the life cycle of a product, a service or the activities of a business.

CATERING

Large-scale preparation and delivery of complete meals for communities (e.g. company canteens, schools, hospitals, prisons, etc.).

CIRCULAR ECONOMY

A model in which all the value chain activities, are organised to use renewable resources or recycled materials system in which products maintain their function for as long as possible while minimising waste.

CO_2 and – CO_2 EQUIVALENT

Standard reference used to measure the impact of greenhouse gases on global warming (Global Warming Potential - GWP). The contribution of each gas is normalised to the contribution of one CO_2 molecule, used as the unit of measurement.

COMPOST

The result of the bio-oxidation and humification of a mixture of organic matter (e.g. pruning residues, kitchen waste, garden waste such as leaves and mown grass) by macro- and micro-organisms in the presence of oxygen.
Compost is used as a soil nutrient in agriculture.

COMPOSTABILITY

The ability of biodegradable, organic matter (i.e. plant cuttings, kitchen scraps, gardening waste, some types of bioplastics, etc.) to be turned into compost in composting plants.

COMPOSTING

Composting is an end-of-life process for compostable waste (Directive 2008/98/EC clarifies this concept). Controlled biological decomposition, in the presence of oxygen, of organic waste from which a humus-rich material called compost is formed. Composting involves a thermophilic phase and takes place on an industrial scale in special plants.

DOMESTIC COMPOSTING

Small-scale composting process operated by individuals for gardening purposes with the aim of producing compost for personal use from garden waste and occasionally kitchen waste.

GRADE (MATER-BI)

Referring to Mater-Bi, it indicates a specific type of material identified by a specific chemical composition and a unique product code. The trademark Mater-Bi® therefore denotes a set of material families consisting of different grades.

LARGE SCALE RETAIL TRADE

It represents the evolution of trade from retail to wholesale. It is made up of large structures or large groups (in some cases multinationals) with many facilities spread throughout the country, internationally or even worldwide.

LCA - LIFE CYCLE ASSESSMENT

Objective process of assessing the energy and environmental loads related to a process or activity, carried out by identifying the energy and materials used and the waste released into the environment. The assessment includes the entire life cycle of the process/activity/product, including extraction and processing of raw materials, manufacturing, transport, distribution, use, reuse, recycling and final disposal.

MARGINAL LANDS

Land on the farm not used for agricultural purposes, unproductive for economic, social or other reasons, located in areas with natural handicaps, in mountain areas or other areas but which could be used for agricultural purposes by means normally available to the farm. They are usually referred to by different terms: unused, degraded, underused, uncultivated, desolate and abandoned. Fallow land is excluded (land included in the crop rotation system but temporarily uncultivated, whether worked or not, and not providing any harvest for the duration of the crop year).

MONOMER

A chemical molecule with a low molecular mass with functional groups capable of reacting with itself or with other chemicals to form macromolecules, called polymer chains of a certain length, with a certain molecular weight distribution, which together we call polymers. For example, “styrene” is the monomer of “polystyrene”. Azelaic acid is one of the monomers used in the polymerisation process to produce a type of Mater-Bi.

MULCHING

An agronomic technique for weed control that consists of covering the soil, with the exception of the area of growth and development of the plant of interest, with an opaque material capable of retaining solar radiation, thus preventing weed growth.
The most common mulches are plastic films, bioplastic films, paper films, layers of straw, layers of bark.

OLEAGINOUS

Plant capable of producing and accumulating within itself (e.g. in fruits or seeds) fatty substances, which can be used for food and industrial purposes.

ORGANIC CARBON

Carbon found in those chemical compounds in which it is joined by covalent bonds to atoms of other elements (mainly hydrogen, oxygen, nitrogen). This definition excludes the carbon of carbon dioxide, carbonic acid and its salts, such as calcium carbonate.

ORGANIC FRACTION (OF WASTE)

Municipal waste fraction consisting of food and grass clippings or animal waste from domestic or industrial sources.

ORGANIC RECYCLING

Processing the organic waste fraction using microorganisms and under controlled conditions. The treatment can take place under aerobic or anaerobic conditions. In the case of aerobic treatment, the organic fraction of waste is treated in an industrial composting plant with free oxygen, producing biomass (compost), CO_2 and water. In anaerobic treatment, the organic fraction is degraded in an anaerobic digestion plant in the absence of free oxygen. The process leads to the production of biogas (containing CO_2 and CH_4 and can be used as biofuel to produce heat and electricity) and a sludge called “digestate”. Landfilling cannot be considered as a form of organic recycling.

PACKAGING

A product made from materials of any kind, designed to contain and protect certain goods, from raw materials to finished products, to enable their handling and delivery from the producer to the consumer or user, and to ensure their appearance.

PHITOSANITARY PRODUCTS

Product used to protect plants or plant products against all harmful organisms or to prevent their effects, to influence plant life processes, to preserve plant products, to destroy undesired plants or plant parts, to control or prevent undesired plant growth.

POLYESTER

Polymer with ester groups in the main chain. Polymer with ester groups in the main chain.

RENEWABLE (RESOURCE, RAW MATERIAL)

Resource (e.g. a raw material) that can be cultivated or regenerated naturally within a foreseeable time frame.

SEPARATE COLLECTION

Collecting and separating waste according to their type, i.e. Glass, plastic, paper, compost, metal, dry waste.

STAKEHOLDERS

Entities with whom an organisation has (direct or indirect) relations and who can therefore directly or indirectly influence its activities. These include, for example, customers, suppliers, lenders (banks and shareholders), employees, but also external interest groups, such as residents of areas surrounding the company or local interest groups.

STANDARDS

Usually a formal document that establishes uniform engineering or technical criteria, methods, processes and practices.

SUSTAINABLE DEVELOPMENT

Development that meets the needs of the present without compromising the ability of future generations to meet their needs (source: Standard EN 16575).

TECHNOLOGY HUB

Experimentation space, located at an industrial plant and based on innovative technologies, which, with a view to open innovation, acts as an attractor of new technologies (auxiliary and/or complementary to the main ones) for initial validation on an industrial scale.

WASTE MANAGEMENT

Waste management: in urban and industrial contexts, it means the set of technologies and methods for sorting, collecting, delivering and treating waste produced by human, industrial and domestic activities.

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