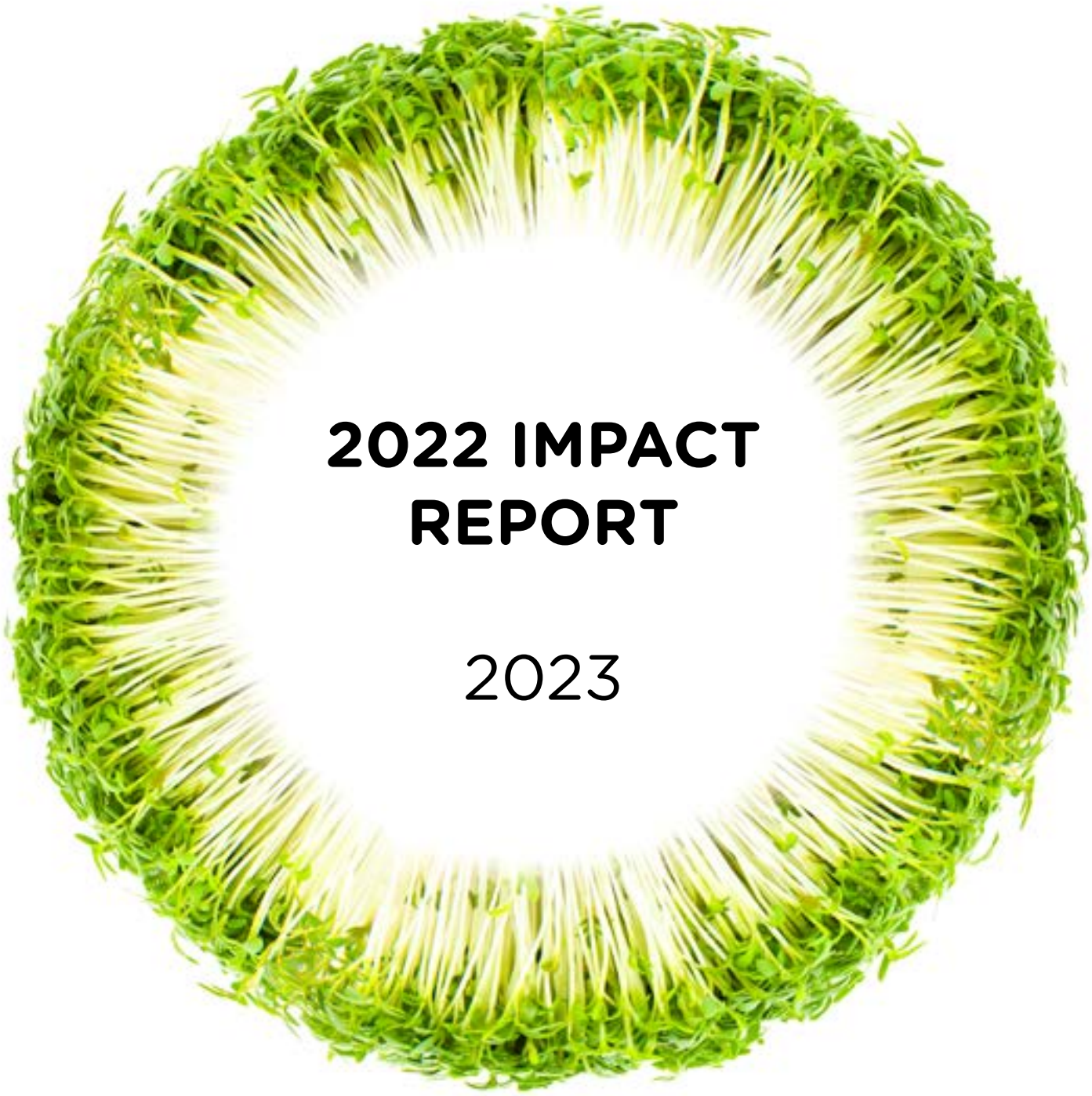


2022 IMPACT REPORT

2023

NOVAMONT

2022 IMPACT REPORT

NOVAMONT

Index

"Decoupling economic development from the use of resources, learning to do more with less, is of fundamental importance to mitigate, and unfortunately no longer prevent, the catastrophic and irreversible effects of the current linear economy model. For this, simply implementing an ESG strategy within the company's purpose, mission and vision is not enough, it is also important to drive entire supply chains towards higher and higher environmental standards. In particular, in order to accelerate the transition, it is fundamental to build bridges between the past and the future, helping traditional enterprises to take advantage of the innovations of bioeconomy and circular economy, and to become a catalyst for development of challenging and innovative sectors, being active part of the change".

Catia Bastioli – Chief Executive Officer of Novamont

1

Reading guide

This document is the third impact report drawn up by Novamont, a Benefit Corporation since 2020, to transparently and comprehensively report on its activities aimed at achieving the purposes of common benefit, 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 positive impact in the territories, on people and on the environment the most.

This impact is measured through a series of indicators that were defined by Novamont the year it achieved the Benefit Corporation status (2020), devised to remain constant over the years in order to ensure comparability over time, but allowing for possible revisions that may become necessary with a view to continuous improvement.

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 non-profit organization B Lab, which is used by the company to measure, improve and report on all its economic, environmental and social impacts. Using this tool Novamont exceeded the threshold of excellence by 80 points, assessed by B Lab's Standard Trust on a scale from 0 to 200, and was therefore recognised as a certified B Corp in July 2020, with a score of 104, while adopting an internal improvement plan.

2

Novamont: a model of circular bioeconomy for territorial regeneration

Created in 1990, Novamont is an industrial company rooted in the **Montedison Materials Science** school at a time when the group included both the chemical and agricultural-industrial segments. Indeed, 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 low-impact biodegradable products but also to the creation of a circular bioeconomy demonstrator with products used as catalysts of a model change, taking a **"do more with less"** approach.

Today, Novamont is a Benefit Corporation and a certified B-Corp. It is an international leader in the bioplastics sector and in the development of bio-based bioproducts and biochemicals, designed to regenerate the ecosystems. Its development model aims to connect different sectors through collaboration 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 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 bioeconomy based on redesigning the way in which materials and applications are produced, consumed and disposed of and encouraging virtuous local value chain. This first and foremost means rethinking production sites using innovative technology, starting with deindustrialised areas, without additional land take, by companies motivated not just by profit but which see the value in regenerating local areas and the social fabric. Within these sites, Novamont develops renewable, biodegradable and compostable products with multiple uses at the end of their lives; right from the outset, this offers an opportunity to launch development projects with partners sharing the urgent need to redesign applications and integrated value chains with a view to ensuring the efficiency of resources.

The main product is **Mater-Bi**, the innovative family of biodegradable and compostable bioplastics developed to provide solutions to specific environmental problems, and at the same time ensuring high product quality and performance[1]. Mater-Bi is always 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. Mater-Bi does not release microplastics into the environment, has no eco-toxic effects and biodegrades even at low temperatures.

According to Novamont's circular bioeconomy, 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 sources.

The main application sectors are waste collection, large-scale distribution, foodserviceware, packaging and agriculture. When it is adequate and preferable, products made of Mater-Bi can also be chemically or mechanically recycled, making it possible to recover precious raw materials. 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 develops and produces a series of different bioproducts thought as tailor-made solutions in environmentally and health-sensitive sectors:

- biodegradable cosmetic ingredients (Celus-Bi)
- bio-based, rapidly biodegradable biolubricants and dielectric fluids (Matrol-Bi)
- phytosanitary products made with pelargonic acid (Ager-Bi)

It also produces a number of intermediates. Research and innovation have always driven development at Novamont, which now has a wide range of skills and specialisations, with equipment ranging from laboratory activities to innovative pilot plants.

Thanks to major investments totalling more than EUR 800 million, over the years Novamont has developed five proprietary technologies for the production of bioplastics and bioproducts, creating synergies between different areas of study: bioplastics, biotechnology, agronomics and organic chemistry. Today it holds a portfolio of around 1,500 patents and patent applications, and has a new proprietary technology packet ready to be scaled-up.

With turnover of EUR 426 million, in 2022 Novamont invested EUR 25 million in research and development activities, with approximately 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 (around 470 training activities have been held since 1996).

In 2022 Novamont founded Officine Novamont, the new corporate Academy, an important place to exchange amongst the Group knowledge, values and specific skills, virtually and physically. The platform aims at strengthening the group's identity and culture through the definition and dissemination of 'Novamont values and behaviours', to promote continuous training through the organisation of courses and meetings aimed at the growth of people's distinctive skills (technical and non-technical) and behaviours, and finally to develop innovation projects with shared value with strategic partners, in order to consolidate and enrich the company's know-how. At the same time, Novamont started a process of reviewing and strengthening its organisational macro-structure, in order to make it more flexible and integrated and to meet the challenges of an increasingly uncertain and complex competitive environment.

With around 650 employees, the Novamont Group has its headquarters in Novara, production plants in Terni, Adria (province of Rovigo), Patrica (province of Frosinone), the Matrìca joint venture with Eni Versalis in Porto Torres (province of Sassari, Sardinia Region) and research and development laboratories in Novara, Terni 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 biowaste and composting systems in North America, the Scandinavian countries, Eastern Europe and Australia, it acquired BioBag International, world leader in the development, production and sale of certified compostable and biodegradable items with headquarters in Askim (Norway), a production plant in Dagö (Estonia) and which is operative in another 9 countries worldwide. Novamont teamed up with Coldiretti to create Mater-Agro, a new company (85% Novamont, 10% Coldiretti and 5% Consorzi Agrari d'Italia) intending to promote a new joint agriculture and industry innovation model, helping farmers maintain good crop production through the use of low-impact bioproducts and biomaterials.

In 2020, together with the University of Bologna, Coldiretti and Politecnico di Torino, Novamont funded the Re Soil Foundation, to merge scientific, technological, environmental and humanistic skills to become a reference for the numerous Italian businesses, organisations and entities that deal with the topic of soil.

TURNOVER

426 M€

INVESTMENTS

25 M€

EMPLOYEES

~650

20% of employees involved in R & D

RESEARCH AND INNOVATION SITES

3 research centres

3 technological sites

TECHNOLOGIES

5 first in the world

ACTIVE PATENTS AND PATENT APPLICATIONS

~1500

TRAINING ACTIVITIES

~470

from 1996 to today

[1] Mater-Bi products are characterised by a reduced carbon footprint compared to equivalent (compostable) fossil-based materials (source: Taxonomy disclosure chapter in the 2022 NFS).

NOVAMONT AMONGST THE "BEST FOR THE WORLD" 2022 B CORPS

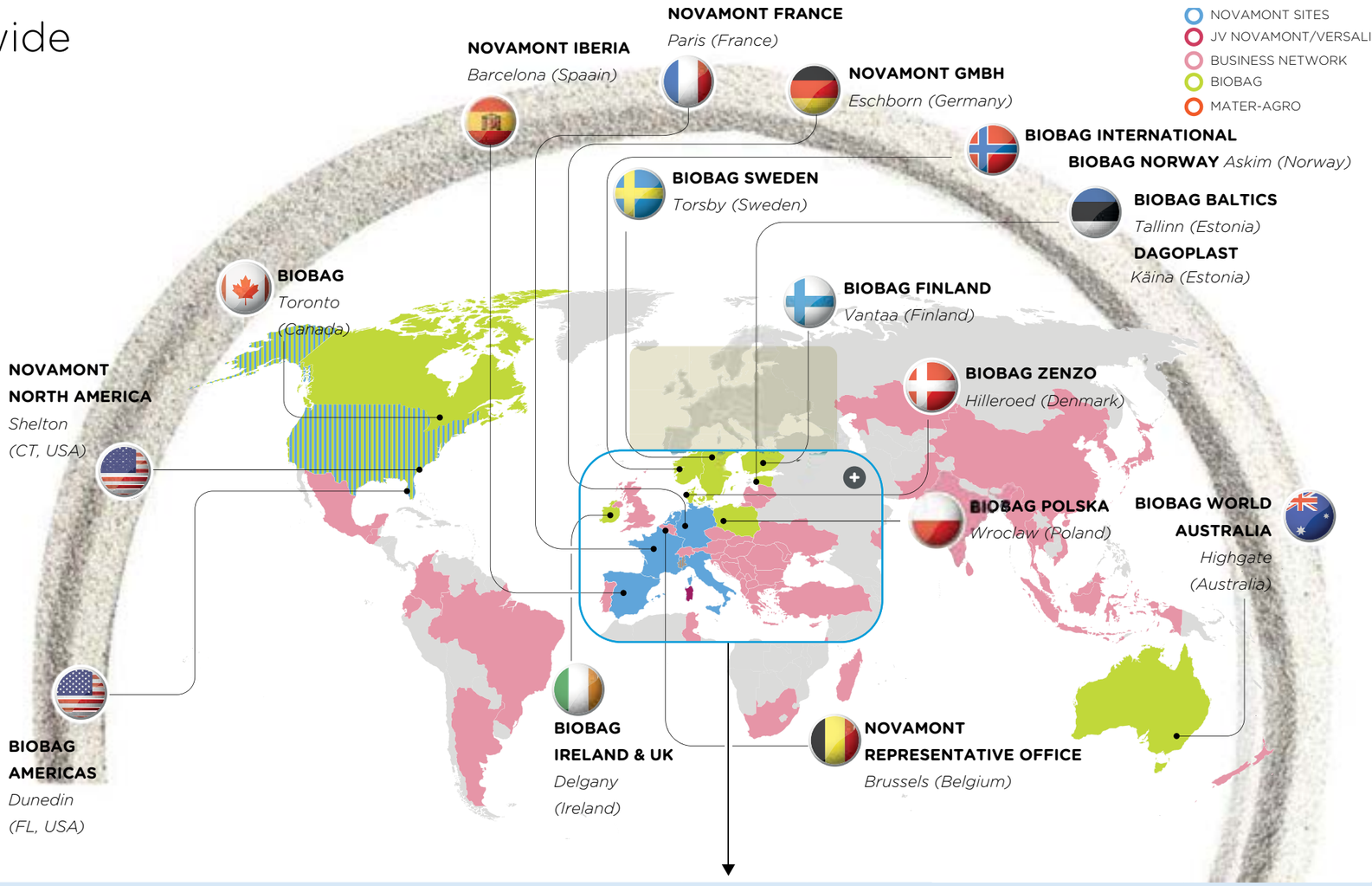
In July 2022, Novamont was named “B Corp Best for the World™” by way of recognition of its exemplary environmental performance.
Assessed through the B Impact Assessment, in the Environment impact area Novamont scored in the top 5% in its reference group, i.e. companies with more than 250 employees. In particular, Novamont is the only company in the 'Chemicals & chemical products' category and first in terms of score in Italy and Europe and second at a global level.

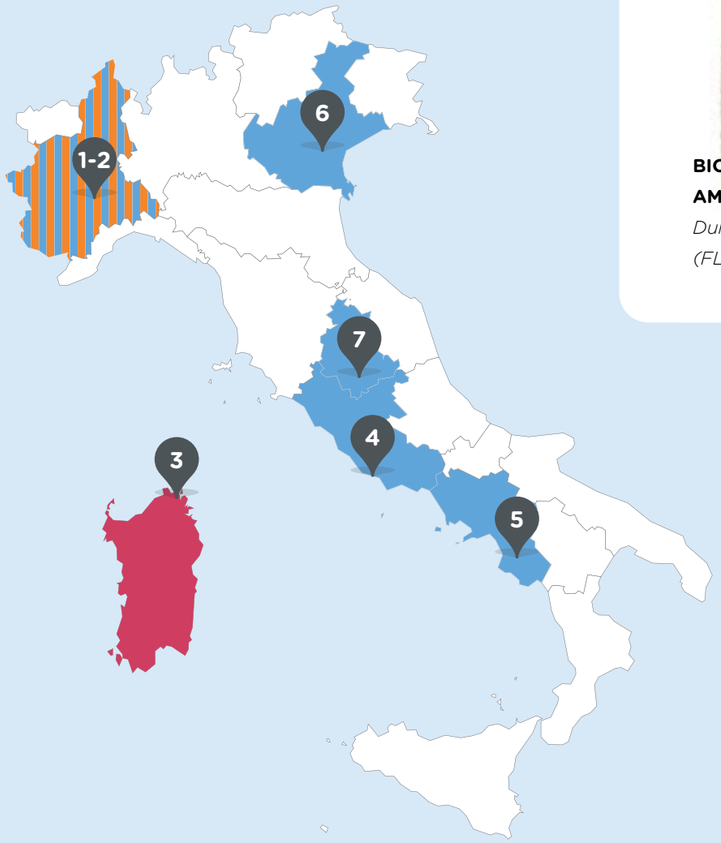
NOVAMONT WINS THE 2022 “OSCAR DI BILANCIO” (REPORTS OSCAR) IN THE “BENEFIT CORPORATIONS” CATEGORY

In November 2022, Novamont was awarded the “Oscar di Bilancio” (Reports Oscar) in the Benefit Corporations Category.
The prestigious award, promoted by FERPI, Borsa Italiana and Università Bocconi, was awarded because “Novamont, a Benefit Corporation since 2020 and certified by B Corp, shows a cutting-edge strategic management approach to sustainability issues. The company, pursuing its aims of common benefit related to its economic activity, represents an international example of an innovative model of circular bioeconomy for the regeneration of territories, complemented by good practices and clear positive impacts on the environment, so that it can achieve high standards of sustainability. The Sustainability Report, which is the 14th, covers the entire scope of the group, coherent with the economic data and the Consolidated Financial Statements”.

The Novamont Group worldwide

Our network





1 NOVAMONT
Headquarters and research centre
Technological hub
Novara - Piemonte

2 MATER-AGRO
Products distribution for agricultural purposes
Novara - Piemonte

3 MATRÌCA
Production of pelargonic acid and azelaic acid from renewable sources
Porto Torres (SS) - Sardegna

4 NOVAMONT
Biopolyesters production Origo-Bi, Mater-Bi, THF
Patrica (FR) - Lazio

5 NOVAMONT
R&D centre for industrial biotechnology Technological Hub
Piana di Monte Verna (CE) - Campania

6 MATER-BIOTECH
1,4 bio-BDO
Adria (RO) - Veneto

7 NOVAMONT
Production of Mater-Bi, Origo-Bi, Matrol-Bi, new monomers - Research centre - Technological Hub
Terni - Umbria

DIRECTION
R & D
PRODUCTION
DISTRIBUTION

3

Novamont, Benefit Corporation, articles of association

Novamont has included a number of specific common benefit purposes into its articles of association, which, as a Benefit Corporation, 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 accelerate the cultural and operating evolution towards economic, environmental and social sustainability. The transition involves the 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 Corporation, 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 purposes 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 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.
4. the preservation 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.
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

the REGENERATION OF LOCAL AREAS, including through the redevelopment of disused production sites, avoiding the use of virgin soil

SDGs

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, 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 the sustainable use of biomass.

To this end, Novamont promotes value-chain projects targeted at various local areas based on their specific characteristics, starting with experimentation of unconventional dry land crops with low environmental impact and reduced water consumption, which, by implementing specific agricultural protocols, can help make lands fertile again.

These projects aim to:

- 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
- creating new productive and income-generating opportunities through agreements with farmers' associations, especially for areas of the country where there is marginal land at risk of abandonment or areas undergoing productive reconversion, thus avoiding competition with food production
- giving value to the landscape

This sustainable approach to agriculture has not just led to bio-based biochemicals and bio-intermediaries for biorefineries but also food and animal feed products and renewable energy, thanks to the cascading use of biomass and protein flour derived from the extraction of seed oil.

One example of these activities is the collaboration with the TerraFelix[2] cooperative in Campania, where Novamont is involved in the valorisation of marginal lands confiscated from mafia organisations through aridocultures. At the international level, Novamont is a partner in the FoodLand[3] project, which seeks to help strengthen agricultural biodiversity and different types of food, thereby promoting healthy eating to combat the main forms of malnutrition in six African countries: Tunisia, Morocco, Ethiopia, Uganda, Kenya and Tanzania.

Territorial regeneration also means selecting disused or uncompetitive industrial sites and regenerating them using world-leading facilities and technologies. This enables 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.

[2] For more information, see https://www.terrafelix.it/

[3] Project financed under t he scope of Horizon 2020, Grant Agreement 862802. For more information, see https://foodland-africa.eu/project/

SOME IMPACT STORIES

Low-impact farming and protection of the landscape in Pantelleria National Park

In 2020, the Pantelleria Island National Park, the Department of Agricultural, Food and Forestry Sciences of the University of Palermo and Novamont signed a a memorandum of understanding for activities to be carried out within the Pantelleria National Park to test the use of natural techniques and products for the transition to sustainable agriculture. The objectives of the collaboration are the promotion and conservation of the agricultural landscape and biodiversity, the design of low environmental impact systems and the experimentation of innovative agronomic practices with the aim of reducing water and energy consumption and waste production.

But also carrying out research and innovation activities, and training workers in the agricultural sectors on the use of sustainable raw materials, with seminars workshops on the topic of sustainability, on sustainability in agriculture and in the forestry sector. The project entails a collaboration with local farmers on the use of Mater-Bi biodegradable mulch film in newly-planted vineyards and the coverage of greenhouses used for drying grapes for Passito wine. Great success was also enjoyed in the testing of phytosanitary products made with pelargonic acid, offering an ideal alternative to substances whose use is increasingly being debated. Biodegrading quickly in the soil and virtually insoluble in water, these phytosanitary products have also been tested with a view to using them in pest control in head-trained pantesca bush vines, and excellences such as Donnafugata wine maker.
There are also plans for activities to optimise separate waste collection, from the perspective of the circular economy, and reduce the carbon footprint, with the treatment and reuse of organic waste to restore nutrients to the soil, thereby closing the carbon cycle.

In 2022, the case study of the Island of Pantelleria was presented by our CEO Catia Bastioli at Vinitaly, the international wine and spirits exhibition, a reference event for the sector.

Sustainable development of agricultural supply chains in Mozambique

Novamont also operates in Africa through cooperation with NGOs and the Italian Agency for Development Cooperation (AICS), with the aim of preserving and restoring soil vitality by promoting sustainable and regenerative agriculture, through the dissemination of good practices aimed at restoring organic matter. The project 'Sustainable Development of the Fruit, Rice and Tobacco Supply Chains through the Promotion of Biodegradable Mulching' (AID012313/01/7) started in Mozambique in cooperation with local research and development partners such as IIAM - Institute of Agricultural Research in Mozambique, aims to contribute to sustainable development from a production, economic and environmental perspective by promoting the use of climate-smart agriculture technology. Specifically, the project includes activities for the introduction of Mater-Bi mulch films that can guarantee higher production per hectare, better product quality, reduced use of phytosanitary products, chemical inputs and irrigation water. The main expected results are job creation, increased income for small producers who will make use of the new technology, and an increase in the number of people with access to climate-smart agriculture technologies through the national public and private rural extension network.

A sustainable agri-voltaic experience in an arid Mediterranean area: the collaboration between Novamont and Enel Green Power in Greece

In January 2022, Novamont, in collaboration with Enel Green Power (EGP) and the University of Naples Federico II, launched an experiment in Greece, in Kourtesi, a rural village in the south of the country, of multiple land use through the integration of electricity production with photovoltaic panels and agricultural production of thyme, oregano, rosemary and Greek mountain tea.

The medicinal plants tested were planted in an existing classical EGP planting, both under the panels and in the corridors. Proximity sensors, together with information from a satellite, made it possible for the plants to be monitored and to grow, under the supervision of Novamont and the University of Naples Federico II. At the same time, thistle and safflower plants, industrial crops with a circular economy approach of interest to Novamont, were planted in a marginal area next to the photovoltaic field. The purpose of this second attempt was to use the marginal land often found in plant areas.

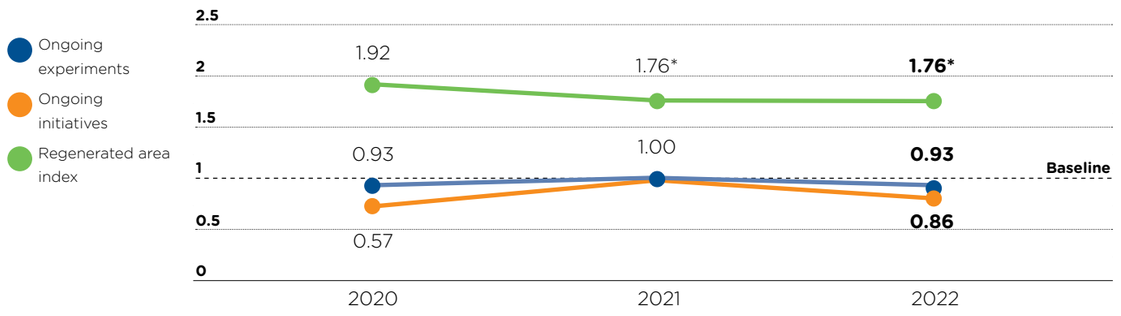
The project presentation received an award at the World Conference for Photovoltaic Energy Conversion (Wcpec-8), held in Milan in September 2022.

ACTION (SDGs: 2, 8, 9)	KPI	commitment 2022[4]	result 2022	commitment 2023
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	26	28
Sustainable agriculture projects aimed at economic, social and environmental regeneration in specific areas	no. ongoing initiatives	7	6	7
Reactivation of disused or uncompetitive industrial and research sites to avoid land take in 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)[5]	Index of regenerated area ≥ 50%	88%	Index of regenerated area ≥ 50%

[4] Goals set by the Group in 2020, the year in which it acquired the status of Benefit Corporation and when the impact KPIs were defined.

[5] The field of application of this indicator is all Group offices and plants located in Italy and abroad, where the company goes about its business.

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



*The value of the regenerated area index (shown in green) started to decrease in 2021 due to the acquisition of BioBag International with a production plant in Estonia.

5

The **second** common benefit purpose

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

SDGs

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:

providing a valuable soil conditioner that can improve crop health, minimising pesticide and fertiliser inputs, and helping decarbonise the atmosphere

preventing organic waste from being landfilled, a practice starting at the end of 2023[6]

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. For example, a new research and experimentation project was launched in 2022 to identify new strategies applicable to the OFMSW (Organic Fraction of Municipal Solid Waste) and plastics supply chain in order to improve its efficiency through actions aimed at recovering new resources. In particular, trials were undertaken to verify the possibility of selecting and recovering bioplastics artefacts present in the waste plastic stream by means of optical sorting, to determine the quality/quantity present and to evaluate possible reuses of the selected material.

The close collaboration with local authorities, multi-utilities and the Consorzio Italiano Compostatori (Italian consortium of composters) has been essential in developing examples of excellence that are ready to be expanded and disseminated. Also thanks to this model, Italy is now the first in Europe for organic waste recycling:

47%

Of organic waste collected

Opposite to the

16%

European average[7]

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

[7] Zero Waste Europe and BioBased Industries Consortium, Bio-waste generation in the EU: Current capture levels and future potential, 2020.

Among the most significant projects supported by Novamont, it is worth mentioning RePopp[8], 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 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%**

Despite the critical issues linked to the health emergency, both projects were continued in 2022, showing that they were able not only to improve the quantity and quality of the organic waste collected, but also to help reducing waste production at source, through awareness-raising campaigns and initiatives against food waste.

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 City, etc. These are cases where low-impact collection systems are combined with increasingly high quality standards. Developments in recent years include several initiatives launched in Romania, Serbia 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 to 35,000 tonnes in 2024 (in 2021 it was already 15,000). For this purpose, the municipality distributes compostable bags to citizens free of charge, together with vented waste bins for household collection.

Novamont also supports the development of good practices in the management of organic waste at large events, with the aim of contributing to the achievement of sustainability goals. A relevant example in 2022 is 'Terra Madre Salone del Gusto', the largest international event dedicated to food and food policies, promoted by Slow Food, held in Turin's Parco Dora from 22 to 26 September. Novamont contributed, together with its partner Eco dalle città, to manning the 30 ecological islands distributed around the event site, spreading environmentally correct behaviour and concretely promoting waste collection.

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

SOME IMPACT STORIES

The sustainability process of the monumental complex of the Sacro Convento in Assisi

In 2017, the General Custody of the Sacred Convent of Assisi signed a memorandum of understanding at the Ministry of the Environment with ARPA Umbria and Sisifo srl Società Benefit, aimed at implementing a unified systemic sustainability project for the monumental complex, with the main objectives of reducing the environmental, social and economic impact of the complex, declining the related sustainability principles and strategies in order to make it replicable, and involving pilgrims and visitors in a path of environmental awareness.

The project, with Novamont as main partner since the initial phase, has obtained the patronage of the Ministry of the Environment's Department for Integral Human Development, the Ministry of Cultural Heritage and Activities, the Umbria Region and the City of Assisi. Since 2022, the project has been managed directly by the Community of Friars Minor Conventual of the Sacro Convento in Assisi. After four years of management, the sustainability report containing the main results has been published.

During this process, all inflows and outflows of materials, water, energy, finance and information were analysed and incorporated into a sustainability plan. A sustainability policy was drafted for the replicability of the project and awareness-raising actions were carried out for all visitors.

These actions made it possible to achieve several benefits: reduction of packaging and increased levels of internal separate waste collection, recovery of organic residues for composting for internal use, reduction of energy consumption and supply from renewable sources, reduction of water consumption, reducing harmful emissions into the atmosphere, raising awareness of environmental issues and increasing sustainable purchasing on an economic, social and environmental level.

Among the various actions, some 200 waste separation points were installed inside the facility, as well as an organic waste composting point (to which approximately 7,300 kg/year of organic residue was allocated), which allowed for an increase in the percentage of waste collection sorting (from 48% to 70%, resulting in a reduction in CO_2 and approximately 7,740 kg/year) over the course of the project. Moreover, disposable foodserviceware made of biodegradable and compostable material were used during the events[9].

[9] For further information: https://www.sisifo.eu/progetti/fra-sole-assisi/

“Un sacco et(n)ico” project

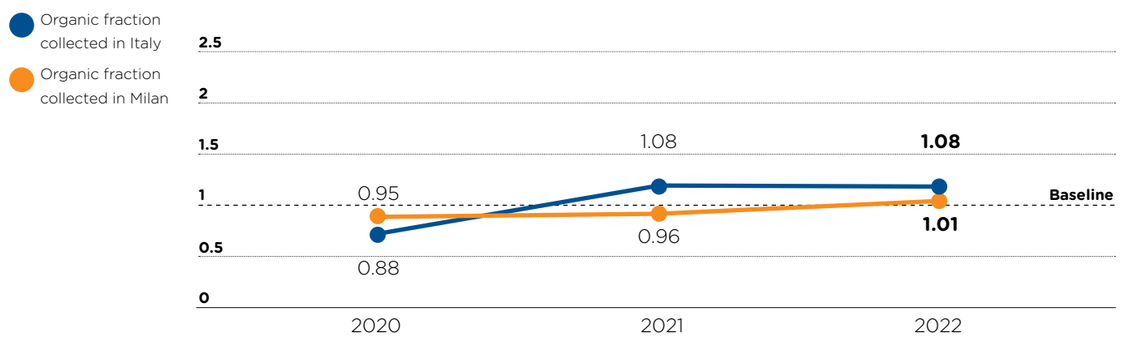
As part of the ongoing cooperation with local administrations to achieve high standards of separate collection, Novamont has supported the creation of 'Un sacco et(n)ico' project, co-financed by Fondazione Cariplo 2020 Plastic Challenge tender and completed in 2022.
The project involved a number of ethnic catering activities in the cities of Milan, Bergamo and Brescia, and was based on the use of a linguistic-cultural mediation approach, aimed at improving the quality of waste collection from this type of activity, including the promotion of compostable products in contexts where it was not possible to use washable/reusable alternatives. Part of the project was also the support in the correct interpretation of the contents of the European SUP Directive on the reduction of single-use plastics, in particular for take-away and home delivery services.
Participating in the project were the association ESTà - as lead partner -, the Department of Languages, Literatures, Cultures and Mediations of the University of Milan, the associations Ruah and Embassy of Local Democracy in Zavidovic (active in Bergamo and Brescia respectively) and the companies Amsa and Aprica, which are responsible for waste collection in the three cities involved.
“Un sacco et(n)ico” was an experiment that applied linguistic and cultural mediation to the field of sustainability, starting from the awareness that it is not a self explanatory idea nor an obvious practice, but it has to be included in the linguistic and cultural context.
The importance is shown not only by the results obtained, but also by the numbers of restaurants involved: more than 300 restaurants were contacted and informed about the project topics (200 in Milan, 60 in Bergamo, 70 in Brescia); 58 restaurants thoroughly trained (37 in Milan, 9 in Bergamo, 12 in Brescia); 49 restaurants were then checked for the result of the training (32 in Milan, 7 in Bergamo and 10 in Brescia).
Among the most notable results, the use of traditional single-use plastic food service has decreased (69% of restaurants have either eliminated a single-use plastic product or replaced it with a compostable or durable product, and 49% of restaurants have replaced at least one single-use traditional plastic product with a compostable one). The quality of separate waste collection has improved, in particular the number of restaurants that do not have dedicated bins for the different fractions (a prerequisite for good separate waste collection) and the number of mistakes made in all fractions have decreased.
To make it possible for this successful experience to be repeated in other territories, in the end, the partners drew up an operational guidance document[10].

[10] For further information: https://www.sisifo.eu/progetti/fra-sole-assisi/

ACTION (SDGs: 11, 12, 13, 15)	KPI	commitment 2022[11]	result 2022	commitment 2023
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	96 kg/capita/year	95 kg/capita/year

[11] Goals set by the Group in 2020, the year in which it acquired the status of Benefit Corporation and when the impact KPIs were defined.

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



6

The **third** common benefit purpose

The PRESERVATION 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.

SDGs

HOW THE COMPANY PURSUES THIS PURPOSE:

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

33%
of the world's soil is degraded[12].

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

25%
of land is at high or very high risk of desertification in Southern, Central and Eastern Europe[13].

In order to address this phenomenon and help resolve real problems faced by the society, Novamont develops and produces low-impact biodegradable and compostable products that can close the carbon cycle. These include biodegradable and compostable bioplastics, but also bioherbicides, biolubricants and biodegradable ingredients for cosmetics. 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.

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.

Novamont also pursues the objective of preserving and restoring soil vitality by promoting 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.

By way of example, in 2022 the activities started with the signing, in 2020, of a memorandum of understanding between Novamont, the Symbola Foundation and the Valdobbiadene Prosecco Superiore DOCG Consortium for sustainable vineyard management based on the use of biodegradable mulching films and pelargonic acid as both a herbicide and a suckering agent continued.

In 2022, Novamont also continued to collaborate with the Alma Mater Studiorum - University of Bologna on projects including developing innovative technologies and solutions for the industrial production of biodegradable and compostable materials, bio-based chemicals and chemical intermediates, sustainable agriculture and studies of soil fertility and function, a topic on which an industrial doctorate has also now been launched.

Again in this context, this led in 2020 to the creation of the Re Soil Foundation, promoted by Novamont together with the University of Bologna, Coldiretti and the Polytechnic University of Turin, whose goal is to connect scientific, technological, environmental and humanistic knowledge to become a meeting point for the various Italian and European stakeholders focused on the soil. In 2022, the Foundation coordinated the launch of the first States General for Soil Health, held on 10 November during Ecomondo, with the collaboration of the National Coordination Group for the Bioeconomy (CNBBSV) of the Presidency of the Council of Ministers, CREA, ISPRA, Ecomondo Scientific Technical Committee, European Mission 'A Soil Deal for Europe', the event brought together the main national and international stakeholders and experts in order to elaborate a programmatic platform aimed at supporting the development of an Italian Soil Strategy. Furthermore, with the objective of creating 100 living labs and lighthouse farms for soil health proposed by the Mission 'A Soil Deal for Europe', the Foundation set up a multidisciplinary technical group that initiated the construction of the first network of 18 lighthouses and continued to promote educational activities through the educational kit for primary and lower secondary schools SOILAB and its interactive exhibit, presented at numerous events.

Finally, the activities of the company Mater-Agro (85% Novamont, 10% Coldiretti and 5% Consorzi Agrari d'Italia) launched in 2021 were consolidated in 2022. Completely dedicated to farmers, Mater-Agro has been conceived to promote a new participatory innovation model for agriculture and industry, helping land entrepreneurs to maintain good crop production applying sustainable agricultural solutions.

[12] 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.

[13] 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.

SOME IMPACT STORIES

Regenerative agriculture: the SOM model applied to thistle

Maintaining, restoring and improving the content of Soil Organic Matter (SOM[14]) in land through regenerative agricultural practices has extremely significant impacts on food safety and the mitigation of anthropogenic greenhouse gas emissions. In the Italian research project BIT3G (Third Generation Biorefinery Integrated at the Local Level to obtain high value-added bio-based chemicals and energy), financed by the Ministry of Education, Universities and Research (MIUR) as part of the SPRING National Technology Cluster for the bioeconomy, a SOM model has been developed and applied in collaboration with CREA. This model is a predictive tool to estimate the site-specific dynamics of the SOM based on pedoclimatic conditions and farming practices. The model was tested on experimental industrial thistle crops grown in the north-west of Sardinia according to two agricultural protocols: with and without applying compost. The data obtained from a recent simulation, which was written up a scientific journal,[15] confirmed the increase of the SOC in the land totalling on average approximately 1 tonne of SOC/ha*year, thereby confirming the regenerative effect linked to the introduction of the perennial thistle crop. As reported in a recent study[16], the thistle produces a dense mat of roots that can help reduce soil erosion, thereby providing important ecosystemic services.

[14] By convention, 58% of SOM consists of organic carbon (Soil Organic Carbon SOC).

[15] Lorenzo D'Avino, Claudia Di Bene, Roberta Farina e Francesco Razza, Introduction of Cardoon (Cynara cardunculusL.) in a Rainfed Rotation to Improve Soil Organic Carbon Stock in Marginal Lands, Agronomy, 2020.

[16] Rossi et. al., Soil reinforcement potential of cultivated cardoon (Cynara cardunculus L.): First data of root tensile strength and density, 2022.

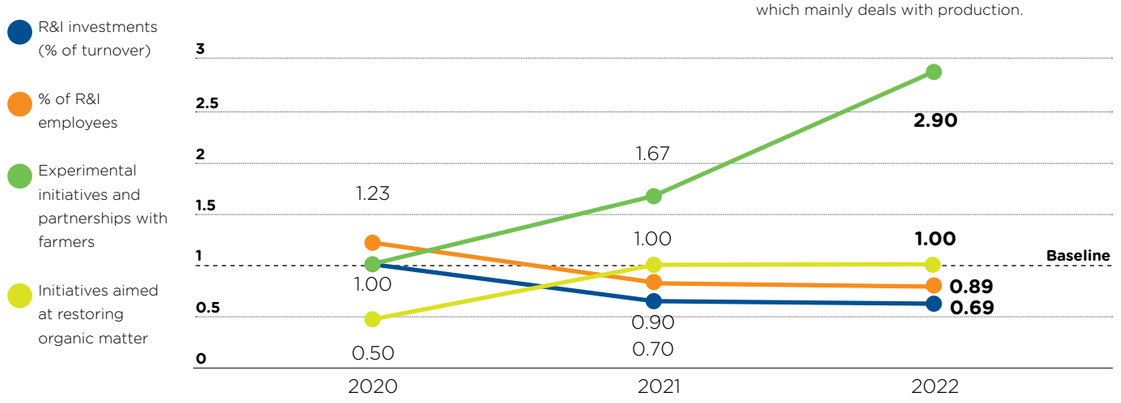
[17] Goals set by the Group in 2020, the year in which it acquired the status of Benefit Corporation and when the impact KPIs were defined.

ACTION (SDGs: 12, 15)	KPI	commitment 2022[17]	result 2022	commitment 2023
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	3.3%[18]	Keeping investments equal to 5% of turnover
	% of R&I employees	Around 20% of employees involved in R&I activities	~20%[19]	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	87 initiatives ongoing 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 matter	6	6	6

[18] The research costs incurred during the year by the Group in 2022 are unchanged on the amount of the previous years. The percentage has reduced compared to 2020 due to the significant increase in turnover.

[19] The absolute number of employees involved in R&I activities increased over the years. The percentage calculated out of the total number of Group employees has reduced since 2021 due to the acquisition of BioBag International, which mainly deals with production.

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



7

The **fourth** common benefit purpose

The DEVELOPMENT OF INNOVATIVE AND SUSTAINABLE PRODUCTION PROCESSES that help decarbonise the economy along with research and innovation to transform waste and by-products into new ones

SDGs

HOW THE COMPANY PURSUES THIS PURPOSE:

The climate crisis is causing impacts and phenomena of unprecedented scale and intensity and is increasingly exerting a more central influence on choices made by consumers and companies. Companies and financial institutions have a decisive role to play in the transition towards a low-carbon economy.

In this complex scenario, Novamont's commitment to decarbonising the economy encompasses all three areas into which emissions from industrial activities are classified:

Scope 1[20] 2[21] 3[22]

The main **Scope 3** greenhouse gas emissions (upstream and downstream) relate to the development of new materials with high levels of renewable content and innovative applications but also the implementation of new integrated processes that can make use of waste from other sectors and the use of alternative feedstocks with positive impacts on the overall circularity of systems.

For upstream processes, Novamont has brought to industrial scale, against considerable investment, a series of low-impact biopolyesters that are extremely interesting to bring sustainability to new application areas, and continued to invest in strengthening the integrated supply chain in all its parts, transforming the excellent results of research and engineering processes into further opportunities for the circular bioeconomy. An example of this is the development and transfer to pilot scale of a process for the use of second-generation sugars.

This is the approach taken in respect of the collaboration of Melinda, a research project into the use of waste from the processing of apples for the extraction of second-generation sugars, which will then be used for the bioplastics production process. 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.

Experiments conducted over the years have allowed to draw up a cultivation protocol, identifying the agronomic practices that farmers should adopt for sustainable and efficient production of crops which is also capable of generating carbon credits thanks to increased SOM. In addition, in relation to carbon sequestration, Novamont is considering how the experimental crops used to extract renewable raw materials used by the company can be included in existing protocols to generate carbon credits.

[20] 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.

[21] Indirect emissions of GHG from the generation of electricity, heat and steam imported and consumed by the organisation.

[22] Indirect emissions due to the company's activities. This category includes sources of emissions that are not under the company's direct control, but whose emissions are indirectly caused by the company's activities.

Finally, activities related to the topic of sustainable procurement and including, for example, the use of carbon-neutral raw materials in accordance with PAS 2060 also fall under Scope 3.

For **Scope 2** emissions the main mitigation intervention is the purchase of electricity from 100% renewable sources, a commitment adopted in 2010 which contributes to the development of renewable energy sources while simultaneously reducing emissions of greenhouse gases and other pollutants.

Finally, for the reduction of **Scope 1** emissions Novamont is constantly looking for energy efficiency solutions. To date, the Group has already installed a high-efficiency cogeneration plant and a biodigester at the Bottrighe site to degrade production by-products and convert them into an energy source, and in 2022 it started a new trigeneration plant at the Patrica plant (see in-depth discussion in the impact stories).

In addition to developing circular economy infrastructures in Italy (biomethane production) and maximising energy efficiency that help decarbonise the energy sector, Novamont has decided, starting in 2020, to offset Scope 1 emissions related to methane combustion - which account for about 99% of the Group's direct emissions - and other direct emissions through the purchase of high-quality certified carbon credits that support international carbon reduction projects.

SOME IMPACT STORIES

Plants energy efficiency

Increasing energy efficiency is one of the key objectives in developing the low environmental impact biorefineries promoted by Novamont.

Bottrighe is a virtuous example of this. The plant, which was created by converting a disused site, is a prime example of increasing energy efficiency, achieved by applying a series of measures and solutions designed to minimise waste and maximise energy recovery. In particular, there is a cogeneration plant for the production of electrical and thermal energy for the production process, whose overall efficiency reaches 90%.

Biomethane production plant at the Bottrighe plant.

The surplus electricity is sold to the national grid. In 2022 thanks to the cogeneration plant we were able to reduce the use of primary energy by 22%. 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 (upgraded) to produce advanced biomethane that is fed directly into the grid, contributing to the spread of renewable energy carriers. Finally, the purification unit for bio-BDO also features a mechanical compression system to make use of all waste heat which would otherwise be lost.

Instead, 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.

Energy Combustor at the Terni plant.

In the Patrica plant, in 2022 the work on the construction of the trigeneration plant have been completes. 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. The plant was commissioned in May, starting with important energy and environmental optimisations, with a consumption reduction of primary energy resources of 12%.

With a view to eliminating excess, superfluous consumption and achieve a greater optimisation of plants, the Piana di Monte Verna research centre has decided to replace the old refrigerating plant with a system using new air-condensed refrigerating units equipped with inverters. This not only complies with the new European regulations on fluorinated greenhouse gases (F-gases) but is also a high energy efficiency solution: the estimated energy savings as compared with the previous situation are appraisal 29 Mwh in electricity (which accounts for approximately 4% of 2022 plant electricity consumption).

Trigeneration plant at the Patrica plant.

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 bio-based products, 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, bioherbicides, 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 our contribution to the circular bioeconomy. In particular, the circular (or regenerative) material flows have been linked to the economic value generated by the group thanks to implementation of a circularity indicator called the 'regenerative turnover'.

Regenerative turnover is defined as the Index of Circular Flows (ICF) multiplied by turnover, both in relation to the accounting year in question[23].

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, 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.

Regenerative turnover

=

CFI* Turnover

[23] The calculation of CFIs does not include the Bio-Bag Group.

Embraced project: a circular model of integrated biorefinery starting from waste

2022 saw the conclusion of the European Embraced project, funded by the Bio-based Industries Undertaking (BBI-JU now CBE-JU) within the European research and innovation programme Horizon 2020.
Embraced, which involved 12 partners from the academia, the industry and the research, aimed at creating a demonstrative plant, the first of its kind, of integrated biorefinery, based on valorisation of the waste cellulosic fraction from absorbent products for the person (diapers, and incontinence products) to produce bio-based building blocks, polymers and fertilisers.
The project followed a circular economy approach, closing the cycle of raw materials and minimising the use of primary resources, and establishing virtuous models of cooperation between all the actors involved. Embraced has therefore contributed to the development of a replicable, circular, cost-effective and environmentally sustainable technology.
Outcomes and spin-offs of this important example of research and innovation for transforming waste and by-products from the supply chain into new products were presented at the 2022 edition of Ecomondo, Europe's leading trade fair for industrial and technological innovation in the circular economy. The event was attended by the Italian project partners, including Novamont, who presented the main results and activities. A showcase was also launched during the initiative, offering visitors the opportunity to experience first-hand the supply chains and applications developed[24].

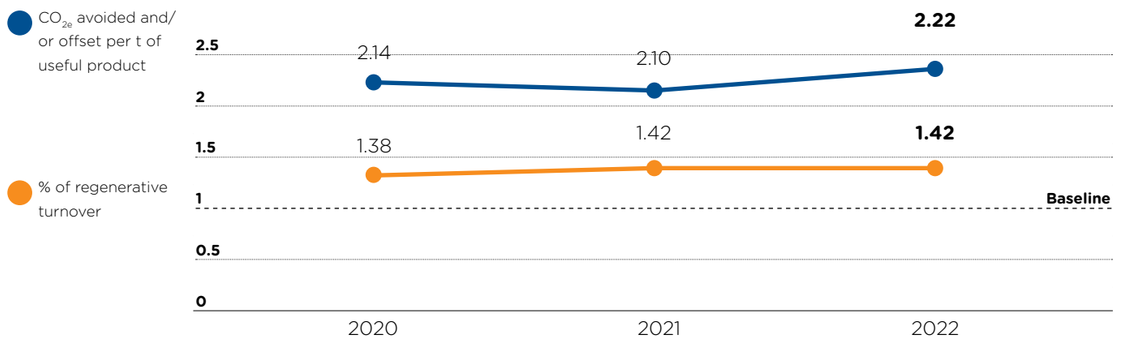
[24] For further information: https://www.embraced.eu/

ACTION (SDGs: 7, 9, 12, 13)	KPI	commitment 2022[25]	result 2022	commitment 2023
Avoidance and/or offsetting of greenhouse gas emissions thanks to energy efficiency and mitigation interventions[26]	CO_{2e} avoided and/or offset per t of useful product	CO_{2e} avoided and/or offset per t of useful product of at least 0.5	1.11%	CO_{2e} avoided and/or offset per t of useful product of at least 0.5
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 regenerative	At least 50% of turnover should be regenerative (i.e. IFC > 0.5)	71%	At least 50% of turnover should be regenerative (i.e. IFC > 0.5)

[25] Goals set by the Group in 2020, the year in which it acquired the status of Benefit Corporation and when the impact KPIs were defined.

[26] For the decarbonisation value created by Mater-Bi and Origo-Bi products, see box in the Non-Financial Statement 2022.

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



8

The **fifth** common benefit purpose

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

SDGs

HOW THE COMPANY PURSUES THIS PURSUES:

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 assimilate 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.

With this in mind, 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[27], the partnership that succeeds 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 McArthur Foundation, one of the largest foundations, whose mission is to accelerate the transition to a circular economy.

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 sustainable global economy.

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 also belongs to 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 also promotes 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.

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

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.
Another front on which the Group is firmly committed is advocacy and awareness-raising for the protection and regeneration of the soil, developed in synergy with the **Re Soil Foundation**, involved in numerous dedicated events and initiatives.
The creation of synergies and partnerships along the supply chain is then the key element of Novamont's business model, which makes research and participatory innovation its cornerstones, 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.

Novamont also assists its partners throughout Italy 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. An example of this is provided by the collaboration with **Pastificio Fontaneto,** a leading producer of high-quality artisanal fresh pasta, to **develop fully compostable packaging** for Plin ravioli and Piedmontese agnolotti. The innovation is the result of collaboration between Novamont, Gualapack, ILIP and Gruppo Poligrafico Tiberino and has achieved a very high technical performance complex in terms of oxygen and moisture barrier, mechanical strength, transparency, and industrial processing efficiency. Also in 2022 was the launch of the compostable **stick pack** for **Mix-Me**, a multivitamin and multimineral supplement powder, made of paper laminate and bioplastics film Mater-Bi. Another highly innovative application, which stems from DSM Nutritional Products' desire to offer a highly sustainable product without compromising product quality and stability, was made possible thanks to Novamont's synergy with Ticinoplast, SAES Coated Films and Gualapack. Collaborations with **Melinda** also continued in 2022. After the development of a bioplastics film that, together with the tray, stickers and labels, made the 4-fruit tray of the Melinda BIO line fully compostable, experimentation began on a new compostable bag made of Mater-Bi with good transparency and excellent resistance. Following a learning by doing idea, Melinda and Novamont have also started a research project on the use of apple processing waste from the Melinda chain to extract second-generation sugars for the production process of bioplastics.

Partnerships with public authorities, multi-utilities and with the waste processing sector in general have been essential in establishing good practices for organic waste management which have made Italy an example in Europe, but also in generating research and innovation projects. Internationally, Novamont is in fact involved in the working groups at 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. At a national level, one of the most recent partnerships has been with **Iren** in order to reduce non-recyclable waste at source and fully implement the objectives of the circular bioeconomy, by developing specific projects for the optimised management of certified compostable items and packaging, to ensure they are suitably recovered and utilised together with the organic fraction of municipal solid waste.

Finally, NGOs and the voluntary sector play a key role in forming connections with civil society, to promote the citizen science approach, with experience in the field, sharing local projects capable of stimulating a whole range of initiatives. For years now, Novamont has been working with **Legambiente** to raise awareness about technological innovations to promote sustainability, supporting a great many initiatives on circular economy topics like, **Fondali Puliti, the Goletta Verde** project, **Appalti Verdi Ecomafia, Sicilia Munnizza Free, Forum Agroecologia Circolare**. We should also here mention the work with Terra Felix, aiming to regenerate areas in the south of Italy that have shown marked deterioration owing to pollution and the presence of organised crime. The **Terra Felix Social Cooperative** is an accelerator of cultural and social activities and projects with an environmental vocation; established in 2012 as a spin-off of Legambiente within the 'Ecomuseo Terra

Felix' project, it is active in the sectors of agrifood (eco-restoration and social agriculture), circular economy, social regeneration of confiscated property and edutainment.

Within the third sector, Novamont also supports a number of local entities in the Novara area. In 2022, it started a collaboration 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 collaboration, Novamont used the cooperative's premises for management workshops or team building activities, occasions in which the catering was provided by young people with disabilities. During winter holidays the company also chose to support the **Community of Sant'Egidio** Piemonte and in particular the '2022 Christmas Lunches' initiative, in light of the Community's opening in Novara of a new soup kitchen dedicated to the needy. Also in the Novara area, in 2022 Novamont supported **Novara Green**, a voluntary association that takes care of the city's decorum. More projects concerned the Seraphic Province of St Francis of Umbria, one of the over one hundred entities of the Order of Friars Minor spread throughout the world which is responsible for collecting the memory of Franciscan origins and evangelisation activities, and the association "**Uno chef per Elena e Pietro**", a free cooking, pastry and bread-making school.

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 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. Novamont also actively collaborates with various educational institutions, such as the **Istituto Tecnico Superiore di Terni,** in particular under the scope of the related Circular Economy Academy or the **Istituto Tecnico Superiore Viola di Rovigo**, to foster professional/training courses and scientific dissemination to train new professionals on the territory. Moreover, Novamont devised '**Discovering Mater-Bi**', a touring educational project for younger children featuring interactive games, multimedia experiences and creative workshops. For years, Novamont has worked with **the University of Gastronomic Sciences of Pollenzo and Slow Food**, providing lessons on the circular bioeconomy to university students from all over the world. Together with the University of Bologna, the University of Milano-Bicocca, the University of Naples Federico II, the University of Turin and other leading non-academic bodies, it created the **BioCirce Master's Programme**, now in its fifth cycle, the only Master's degree in Italy entirely devoted to the circular bioeconomy. Novamont has adhered to the "**Startupper tra I banchi di scuola**" initiative, the training proposed by the Startupper School Academy, the programme run by **Lazio Innova** to promote entrepreneurship in schools, aimed at stimulating business interests in secondary schools throughout the region of Lazio.

Novamont's contribution to education and training also includes support for projects and cultural resources for social inclusion with significant impacts on the local area. Guided by this approach, in 2022 Novamont provided financing to a number of local associations in Novara involved in promoting art, culture, awareness-raising and education. These include **Novara Jazz**[28], the international jazz music, electronics and visual arts projects festival, and **Circolo dei Lettori**, the association promoting meetings with writers and cultural figures, editorial presentations, initiatives for schools, courses, shows, live music concerts and children's laboratories.

In addition, Novamont supported 'Bellestorie[29]', a children's literature festival created and organised by the Lucrezia Tangorra Onlus Foundation, which brought some authors directly to Novara's secondary schools to meet students and talk about their works.

[28] For further information: https://www.novarajazz.org/

[29] For further information: https://bellestorie.fondazionelucreziatangorra.org/

SOME IMPACT STORIES

Terra Next

Over the years, Novamont has developed a highly interdisciplinary systemic approach to the circular bioeconomy, creating alliances and interconnections with stakeholders in the sector, and promoting cultural and knowledge growth on the topic also through training activities and projects co-created with other partners.

This context created Terra Next, the business accelerator programme for innovative startups and SMEs operating in the bioeconomy sector promoted by CDP Venture Capital and Intesa Sanpaolo Innovation Center in collaboration with Cariplo Factory. The programme is in fact designed to promote bioeconomy, in which the Made in Italy excels, and is aimed at developing entrepreneurial skills, while creating synergy with relevant companies that work in Italy in views of open innovation.

The three-year initiative envisages a 12-week acceleration course based in Naples each year, in which selected startups have the opportunity to grow through mentorship, training, networking and face-to-face meetings to improve their individual proposals from a technical, value proposition and go-to-market perspective.

Novamont, present in the Campania region with a Research and Development Centre dedicated to industrial biotechnologies and active in supply chain projects based on the experimentation of arid cultures in marginal soils and innovative solutions aimed at regenerating agricultural soils, has joined the initiative as a tech partner, offering its know-how for the development of the programmes of the selected projects, contributing to the creation of a regional ecosystem of innovation on the topics of soil health and the sustainable use of biomass[30].

[30] For further information: https://www.terranextaccelerator.com/

Dialoghi con la scienza (Dialogues with science)

With the aim of creating a moment of exchange with the local community in Novara, where the company has its roots, but above all to reflect together with citizens on the most pressing scientific issues, Novamont has organised, in collaboration with the Circolo dei Lettori (readers' club), the second edition of Dialogues with Science.

The 2022 festival included eight events, four of which were new at nòva, a centre for youth aggregation and cultural production well known in the local community located in the former Passalacqua barracks in Novara. This was the setting for the 'OFF' meetings, dedicated to young disseminators and activists, which preceded the Sunday events of the main festival, at the Faraggiana theatre.

Once again, the initiative invited citizens to reflect on today's challenges and the future of humanity: global warming, environmental crisis, pandemics and inequalities. Artistic director, for the second year running, is Telmo Pievani, a philosopher of biology and expert on the theory of evolution, who has invited scholars and experts on the various topics to the stage: Adrian Fartade, Giovanni Mori, Annalisa Corrado, Roberto Bragalone and Vincenzo Venuto, for Dialoghi OFF and Cecilia Sala, Chiara Lalli, Anna Meldolesi, Ilaria Capua, Federico Taddia and Elisa Palazzi, in the Faraggiana theatre.

At the conclusion of the last 'dialogue', Novamont CEO Catia Bastioli and the Mayor of Novara also presented the 'Manifesto for the Circular Bioeconomy', with the aim of laying the foundations to make the city a 'capital' of the circular bioeconomy and a hub of excellence for research and innovation in the sector, through territorial regeneration projects involving public administration, industry, universities, the third sector, the agricultural world and citizens[31].

[31] For further information: https://www.comune.novara.it/it/evento/dialoghi-con-la-scienza---tutto-a-connesso/40544

DISCOVERING MATER-BI

"Discovering Mater-Bi" is the integrated educational project (edutainment) developed by Novamont to introduce children, parents and young people to the world of bioplastics and their life cycle and to actively experience them through workshops and games, and to discover how each of us, through our daily actions, can make a valuable contribution to the environment. This project, launched in 2014, includes a web platform, a travelling multimedia interactive exhibition, science and creative handicraft workshops, teaching materials, publications, games and comics. The character guiding the discovery is Bia de Compostabilis, the mascot created by the illustrator Paolo Mottura of Mickey Mouse Magazine who takes the form of various packaging solutions and products made of Mater-Bi.

In 2022, the project was enriched by the collaboration with the University of Eastern Piedmont, which led to the development of a number of activities to transfer scientific knowledge on the specific topic of climate change to schools and families. These include the interactive and multimedia travelling exhibit MISSIONE 2050, which was created at the end of 2021 and then became part of the projects selected by the Ministry of Education on the 'ReGeneration School' platform[32], and the launch of the interactive and multimedia bookgame 'Back from the Future', in which the co-protagonists are professors and students of the degree course in Environmental Management and Sustainable Development at the University of Eastern Piedmont, whose interdisciplinary curriculum includes an integrated course entirely dedicated to the issue of climate change.

2022 also saw the inclusion on the site of the new educational toolbox 'A scuola di sostenibilità[33]', dedicated to schools of all levels, which contains various tools to build your own educational path in the classroom including: interactive games, cartoon adventures, video tutorials and worksheets for creative workshops, a library of educational resources, infographics on biodegradability and compostability, and augmented reality on soil.

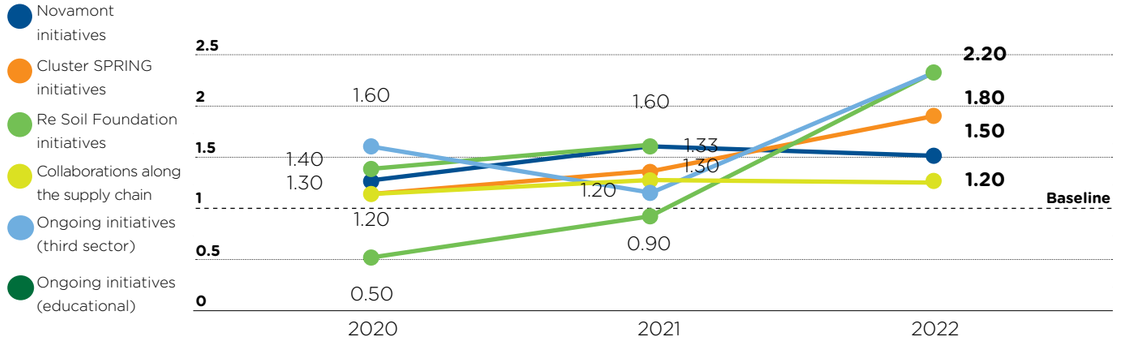
[32] https://www.istruzione.it/ri-generazione-scuola/index.html

[33] https://allascopertadelmaterbi.it/edu_school.pdf

ACTION (SDGs: 16, 17)	KPI	commitment 2022[34]	result 2022	commitment 2023
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	22	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	12	Ongoing collaborations > 10
Projects/collaborations with the voluntary sector and for the community	no. ongoing initiatives	Between 5 and 10 ongoing initiatives	11	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

[34] Goals set by the Group in 2020, the year in which it acquired the status of Benefit Corporation and when the impact KPIs were defined.

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



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The common benefits within the organisation

In 2022, Novamont Group underwent a significant revision of its organisational model, which was part of a change management plan that had already been initiated in previous years.
With the 'Novamont Future Ready' project, the focus was on improving the organisational structure by making it more capable of collaborating on common goals, enhancing interdisciplinarity and the distinctive skills of people. In particular, the overall organisational model and the structure of some strategic company areas were agreed upon and fine-tuned, areas for improvement in personnel management and development were highlighted, a unit dedicated to organisational development was created, with a Change Management Team to support the entire activity, and projects to improve the physical working environment were initiated to make it more engaging and motivating. At the same time, work was carried out to update the corporate vision and mission, as well as to identify the Group's founding values.

A number of existing activities have continued, because they have been considered of significant importance:

Continuity was assured of the psychological counselling service (for all employees in Italy), run by a specialised psychotherapy practice, in order to provide emotional, cognitive and behavioural support to those working at Novamont. Thus the aim was to continue to safeguard the well-being of employees at a particularly complex time in the European economic system, allowing them to express their feelings and views and giving them the possibility of examining them with professionals who were capable of providing in-depth and alternative readings of the experiences they reported. Undoubtedly, the war in Ukraine and its social consequences in Europe made it even more necessary to use this type of instrument, so that employees and their families could perceive a concrete proximity of Novamont to their possible doubts and potential fears.

The company continued the mentoring programme until its natural end with the end of the year; dozens of colleagues (both in mentor and mentee roles) participated in this project. The feedback the HR function received was overall positive. In addition, participants showed interest and motivation for further, more structured and continuous involvement in skills development logics of this kind, including more immersive, innovative and inclusive tools.

In 2022, the role of internal communication, addressed to employees in the Italian and foreign offices, was consolidated thanks to important activities to strengthen dedicated corporate tools. In particular, the B-People intranet, created in 2020, has reconfirmed itself as the privileged channel to ensure the dissemination, within the organisation, of information and materials of interest, with a view to digitisation, sharing, transparency and engagement. Contents and functionalities of B-People have been updated and expanded to create an increasingly inclusive and intuitive 'place', which also hosts the site dedicated to Officine Novamont.

Officine Novamont is the new corporate Academy, an important place to exchange amongst the group knowledge, values and specific skills, virtually and physically. The platform aims to strengthen the group's identity and culture through the definition and dissemination of 'Novamont values and behaviours', to promote continuous training through the organisation of courses and meetings aimed at the growth of people's distinctive skills (technical and non-technical) and behaviours, and finally to develop innovation projects with shared value with strategic partners, in order to consolidate and enrich the company's know-how. The name “Officine” (workshop) wants to highlight the group's culture of doing, and its “iter-active” processes. The Officine (like the building sites, laboratories and workshops where art was produced) were the centre of the creative energy of Humanism. This word also represents the centrality of man in all his aspects, including ethical ones, the concept of diversified quality as an antithesis to undifferentiated quantity, and the focus on community, meaning the transition from the self to us.

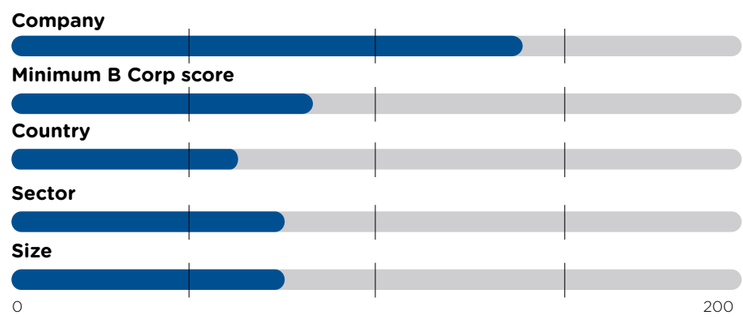
Impact Assessment

To comply with its legal obligations as a Benefit Corporation 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 exceeded the threshold of excellence of 80 points, assessed by B Lab's Standard Trust on a scale from 0 to 200, and was therefore recognised as a certified B Corp in July 2020, with a score of 104[35].
Over the years, the score has increased as a result of updated data and the implementation of a series of improvement actions, and is currently 136.5 (data as of 31/12/2022, the result of a self-assessment).
The following are details of the impact in 2022:

OVERALL RESULTS: B IMPACT SCORE

136.5

Fiscal year-end date 31 December 2022



	questions/answers	general score
GOVERNANCE Find out how the company can improve policies and practices relevant to its mission, ethics, accountability and transparency.	**33/33**	**18.5**
WORKERS Find out how the company can contribute to the financial, physical, professional and social well-being of its workers.	**55/55**	**28.8**
COMMUNITY Find out how the company can contribute to the economic and social well-being of the communities in which it operates.	**56/56**	**17.1**
ENVIRONMENT Find out how the company can improve its overall environmental management.	**106/106**	**68**
CUSTOMERS Find out how the company can improve the value it creates for its customers and direct consumers of its products and services.	**12/12**	**4.0**

[35] The scope of the B Corp certification and subsequent monitoring activities based on the BIA do not include BioBag International and Mater-Agro, which joined the Novamont Group in 2021.

Attachment

Attachment: Framework of Benefit Corporations

Differently to traditional companies, Benefit Corporations are the expression of a more up-to-date economic paradigm: beyond seeking profits, their corporate objective includes making a positive impact on society and on the biosphere.

In January 2016 Italy[36] introduced the legal structure of the Benefit Corporation 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 **2,000**
Benefit Corporations in Italy.

Benefit corporations have two fundamental characteristics:

a 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 Corporation concept in 2006 and is now the most robust and 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®)[37]. Novamont exceeded this threshold and qualified as a Certified B Corp, joining the movement that today numbers 200 Italian companies and over 6,000 worldwide.

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

In pursuing their corporate activities, in addition to focusing on profits Benefit Corporations[38] 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 Corporations seek to achieve these goals in a responsible, sustainable and transparent manner. Managers of Benefit Corporations must strike a balance between the interests of shareholders and the interests of society. To monitor their progress in achieving the purposes of common benefit, Benefit Corporations 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.

[36] Law 208 of 28.12.2015, paragraphs 376-384.
[37] See http://bimpactassessment.net/
[38] http://www.societabenefit.net/

NOVAMONT

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