

2021 IMPACT REPORT

2022



2021 IMPACT REPORT



CONTENTS

- 1 **Novamont:** the circular bioeconomy for territorial regeneration
- 2 **Framework** of Benefit Corporations
- 3 **Novamont** articles of association
- 4 **The first** common benefit purpose
- 5 **The second** common benefit purpose
- 6 **The third** common benefit purpose
- 7 **The fourth** common benefit purpose
- 8 **The fifth** common benefit purpose
- 9 **The common** benefit within the organisation
- 10 **Impact** Assessment

1.



THE 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 was precisely the integration of chemistry and agriculture with low environmental impacts that underlies 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 build bridges between 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 systemic 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 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, these offer 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, seeking to **transform, regenerate** and **contribute**.



Its main product is **Mater-Bi**, the innovative family of biodegradable and compostable bioplastics developed to provide solutions to specific environmental problems, combining product quality and performance with an efficient use of resources. Mater-Bi, is highly renewable with a far smaller carbon footprint than other products present on the market; it is biodegradable and compostable in home and industrial composting and is biodegradable in soil according to the principal European and American standards: UNI EN 13432, EN 17033 and ASTM 6400.

The main application sectors are separate waste collection, large-scale retail distribution, foodservice ware, packaging and agriculture, for more sustainable food and to increase the opportunities for the reuse and regeneration of soils.

Thanks to the plants and technologies made available, Mater-Bi products can also be chemically recycled, thereby fostering the use of waste to recover high value-added raw materials, as well as mechanically, helping reduce the consumption of virgin raw materials. The high performing multi-material applications of Mater-Bi and paper can also be recycled in the paper stream.

In Novamont's circular bioeconomy logic, Mater-Bi is not merely the brand name assigned to the first, original, biodegradable and compostable product taken to an industrial level, but rather it is increasingly the symbol of the knowledge economy, continuously evolving, interdisciplinary and systemic, with the regeneration of natural resources at the very heart.

As well as bioplastics, Novamont develops and manufactures a series of other bioproducts designed as tailored solutions in sensitive sectors for health and the environment:

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



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 **1,400 patents** and **patent applications**. With turnover of **EUR 414 million**, in 2021 Novamont invested **EUR 50 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 450 training activities have been held since 1996).

With around **650 employees**, the Novamont Group has its headquarters in Novara, production plants in Terni (Umbria Region), Adria (Veneto Region), Patrica (Lazio Region), the Matrica joint venture with Eni Versalis in Porto Torres (Sardinia Region) and research and development laboratories in Novara, Terni and Piana di Monte Verna (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.

TURNOVER 2021

414 M€

INVESTMENTS 2021

50 M€

EMPLOYEES

~650

20% of people dedicated to research

RESEARCH AND INNOVATION FACILITIES

3 research center
3 technological hub

TECHNOLOGIES

5 world's first technologies

PATENTS AND PATENT APPLICATIONS

~1400

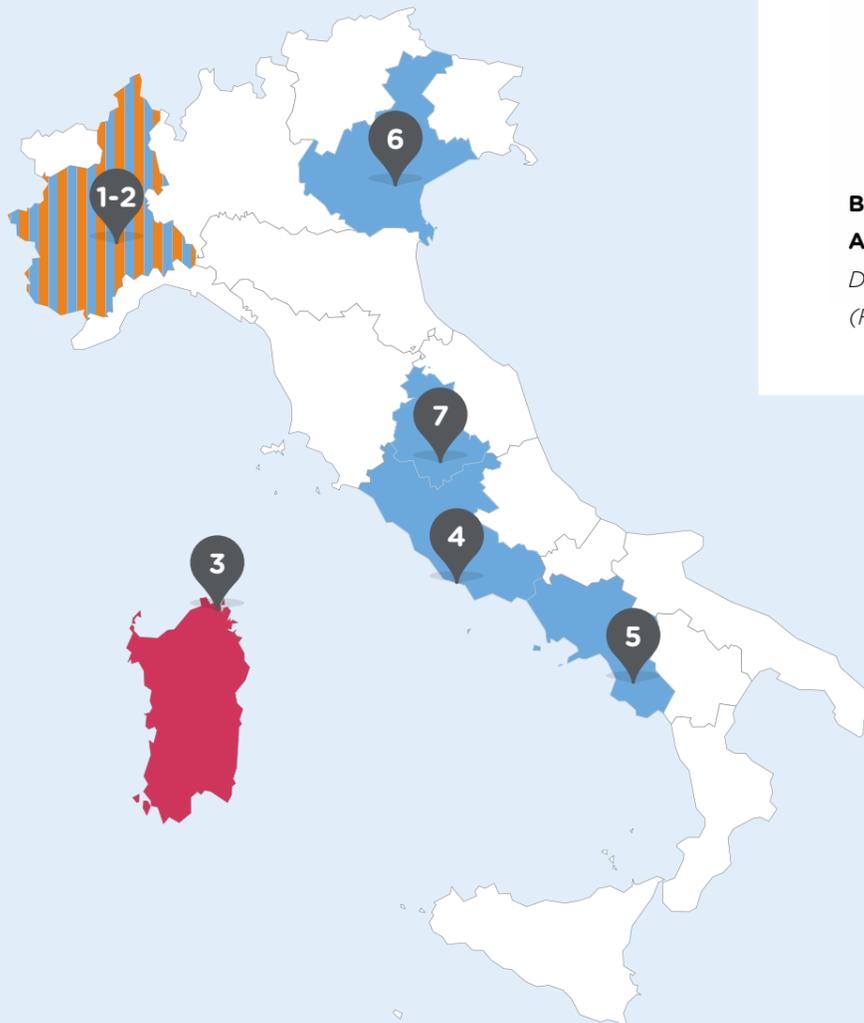
TRAINING ACTIVITIES

~450
from 1996 to present

Novamont group in the world

The integrated biorefinery and our network

1 NOVAMONT  
 Headquarter and research center
 Technology hub
 Novara - Piedmont



2 MATER-AGRO 
 Distribution of bioproducts
 for agricultural use
 Novara - Piedmont

3 MATRICA 
 Chemical Intermediates
 from renewable resources
 (pelargonic acid
 and azelaic acid)
 Porto Torres (SS) - Sardinia

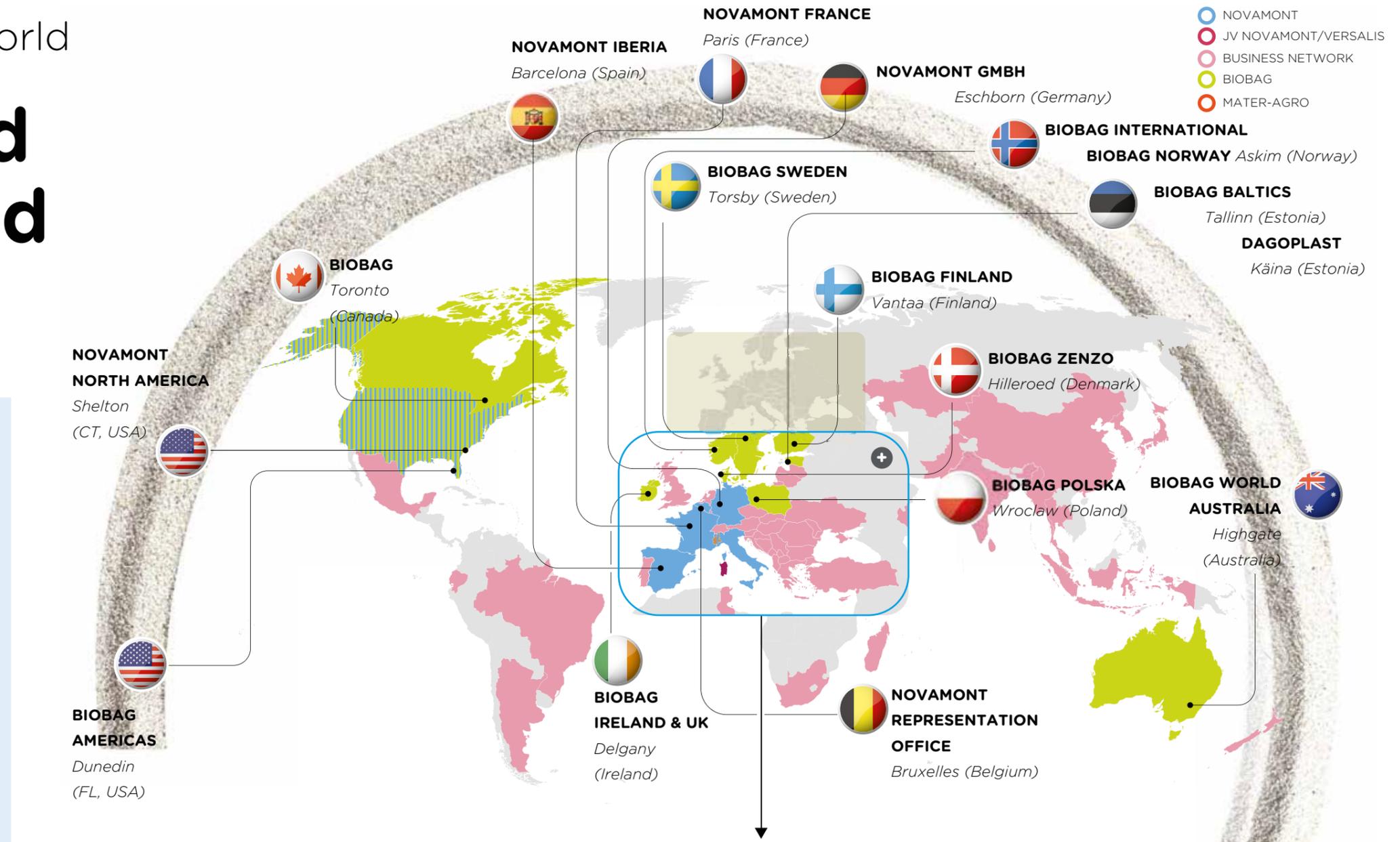
4 MATER-BIOPOLYMER 
 Biopolyesters Origo-Bi,
 Mater-Bi, THF
 Patrica (FR) - Lazio

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

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

7 NOVAMONT  
 Mater-Bi,
 Origo-Bi, Matrol-Bi,
 new monomers
 Research Center
 Technological hub
 Terni - Umbria

-  HEADQUARTER
-  RESEARCH CENTER
-  PRODUCTION
-  DISTRIBUTION



-  NOVAMONT
-  JV NOVAMONT/VERSALIS
-  BUSINESS NETWORK
-  BIOBAG
-  MATER-AGRO



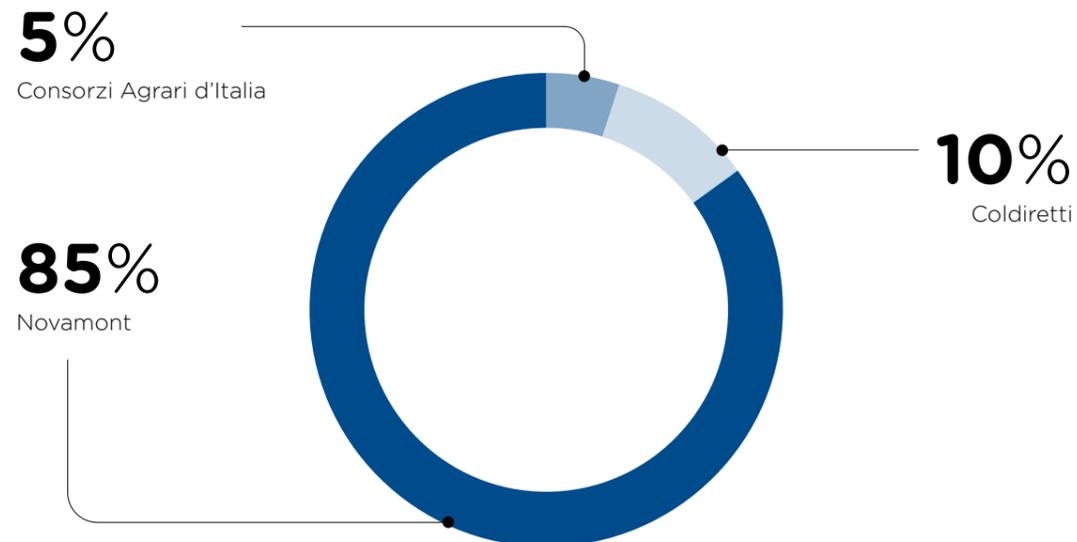
BIOBAG INTERNATIONAL

In 2021, with the goal of creating new alliances with international stakeholders and innovative projects aimed at improving separate collection of bio-waste 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 applications with headquarters in Askim (Norway), a production plant in Dagö (Estonia) and which is operative in another 9 countries worldwide.



MATER-AGRO

In addition, in September 2021, during the G20 agriculture meeting in Florence, Novamont teamed up with Coldiretti to create Mater-Agro, a newco



intending to promote a new joint agriculture and industry innovation model, helping farmers maintain good crop yields through the use of low-impact bioproducts and biomaterials.

NOVAMONT AMONGST THE 'BEST FOR THE WORLD' 2021 B CORPS

In **July 2021**, Novamont was entitled **'B Corp Best for the World™'** by way of recognition of its exemplary environmental performance.

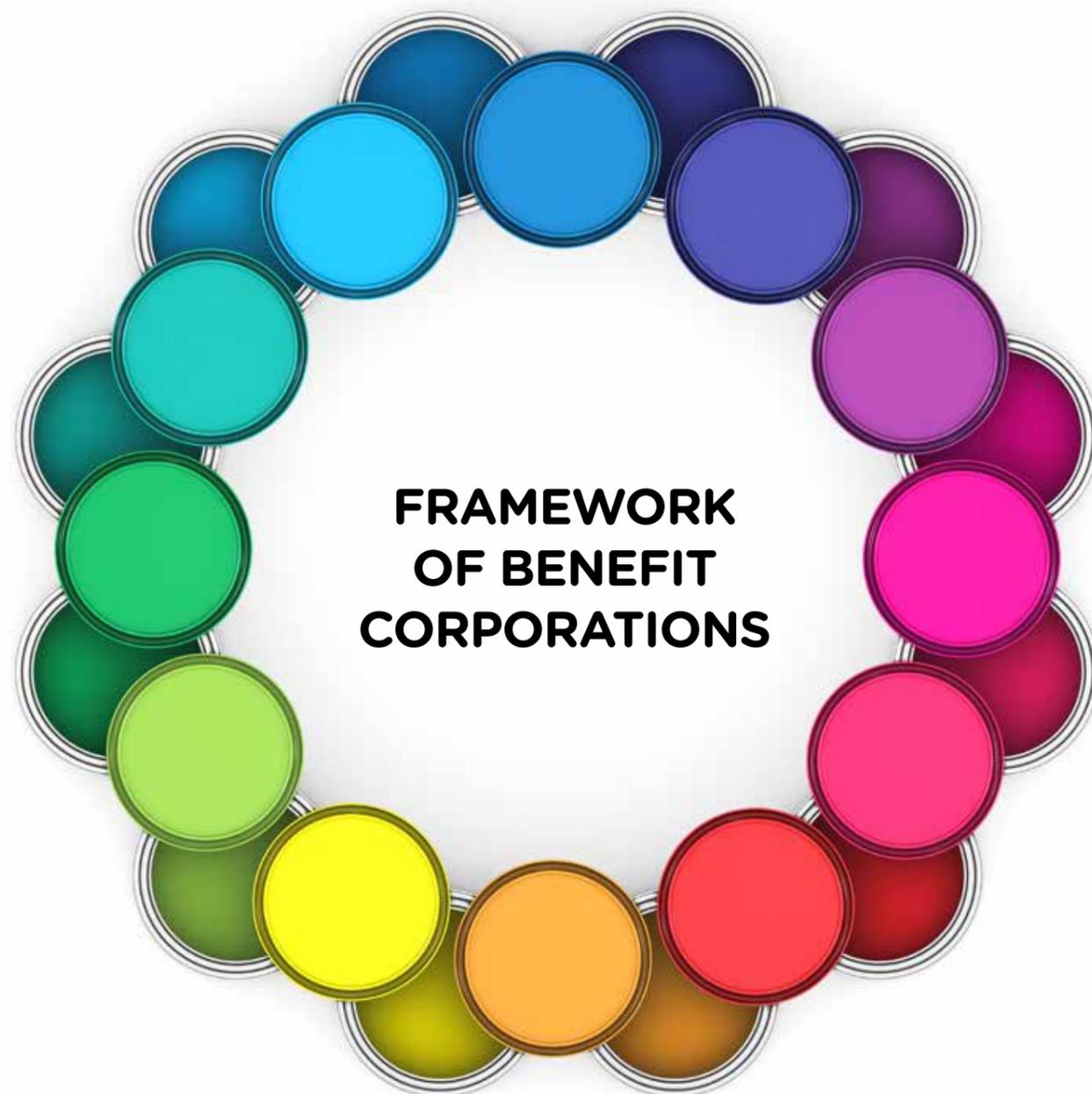
The score obtained by the company in its reference group (companies with more than 250 employees) is in fact amongst the top **5%** of scores achieved by B Corps worldwide.



The company stood out in particular for its positive impact on the environment and for having achieved the highest sustainability standards in the field, thanks to its circular bioeconomy model and good practices.



2.



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

In **January 2016** Italy 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 **1,000 benefit corporations in Italy**.

BENEFIT CORPORATIONS HAVE TWO FUNDAMENTAL CHARACTERISTICS:

A MEASURE 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 140,000 companies that use its tools in 77 countries and across 153 sectors. 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®). Novamont exceeded this threshold and qualified as a Certified B Corp, joining the movement that today numbers 140 Italian companies and over 4,600 worldwide.

B PROTECT THE MISSION: they pay specific attention to all those with an interest in the company's corporate object, whether shareholders or stakeholders.

In pursuing their corporate activities, in addition to focusing on profits Benefit corporations 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 objectives 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.

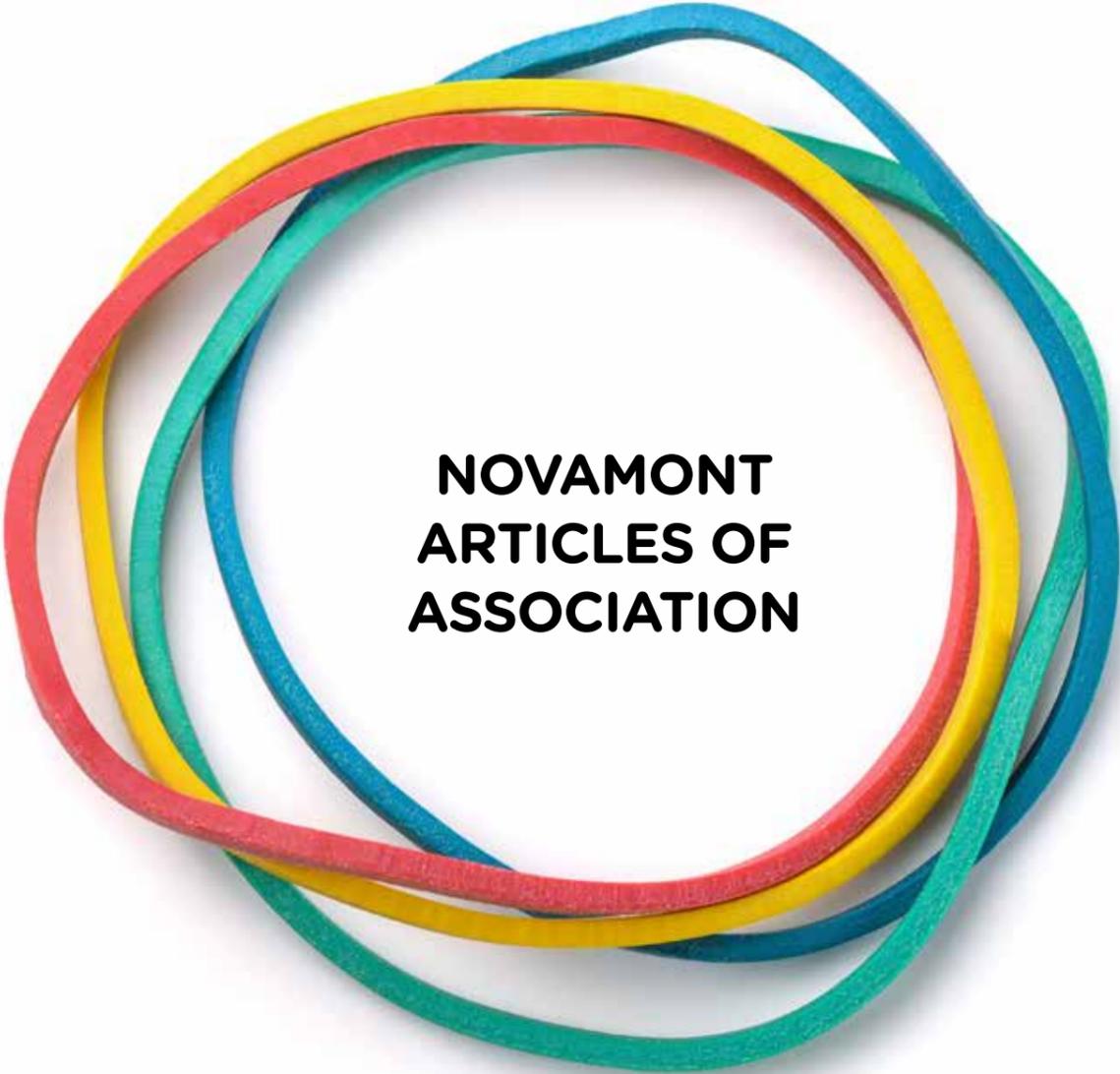


¹Law 208 of 28.12.2015, paragraphs 376-384

²See <http://bimpactassessment.net/>

³<http://www.societabenefit.net/>

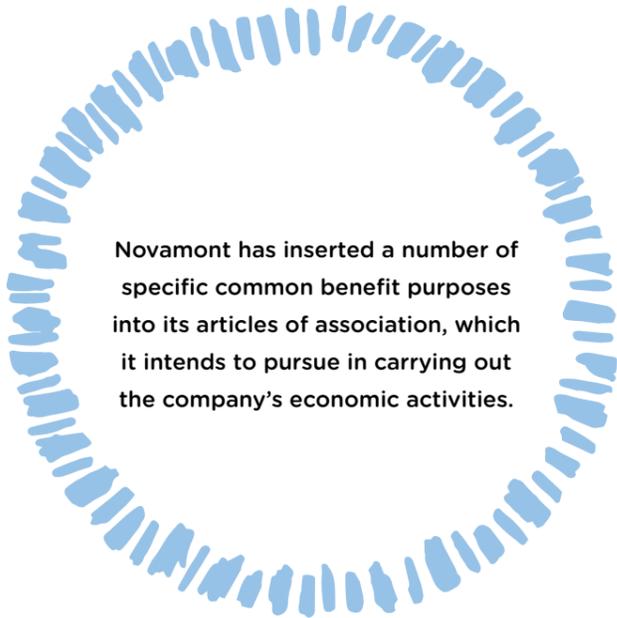
3.



NOVAMONT ARTICLES OF ASSOCIATION

“The regeneration of local areas has always been a fundamental part of our development model. Over the past 30 years we have worked hard to pursue this objective, against prevailing trends, by promoting a circular bioeconomy model that aims to preserve and revitalise the soil, maximising the recovery of organic material and developing innovative and sustainable products and production processes. More than ever, being a benefit corporation and a B Corp means looking at our business as a force for regeneration, rethinking the role of companies in society and going far beyond today’s profits, to guarantee transparency and value across local areas”.

Catia Bastioli - Chief Executive Officer of Novamont



Novamont has inserted a number of specific common benefit purposes into its articles of association, which it intends to pursue in carrying out the company’s economic activities.

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

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 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 object, 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 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.

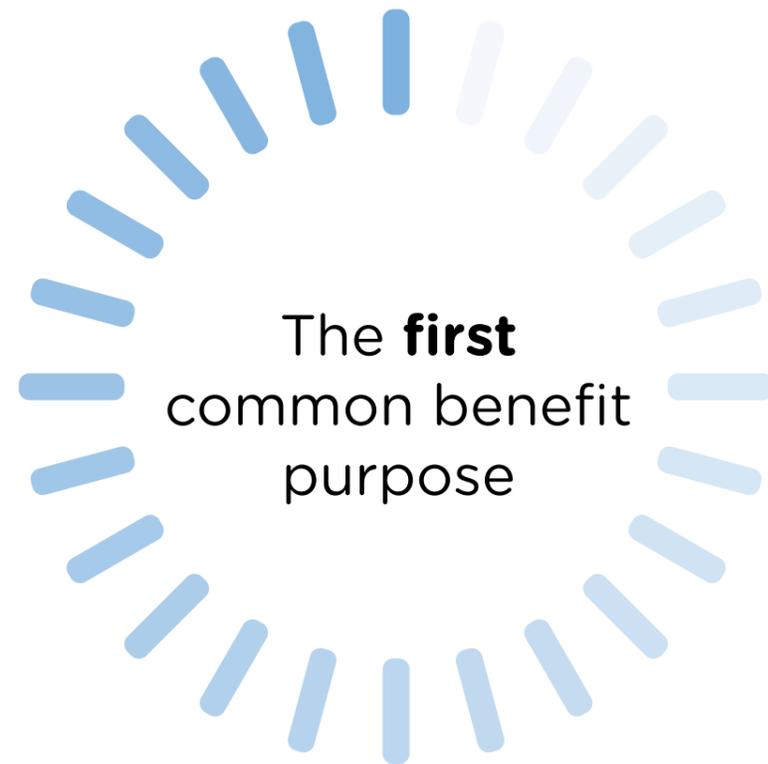
4

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 applications.

5

The contribution to 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 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. The construction of integrated industrial and agricultural value chains is one of the central 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 low input oil 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:

- create new production and income opportunities, thanks to agreements signed with farmers' associations, especially for areas of the country where there are marginal lands at risk of abandonment or where crops are being changed, thereby avoiding any competition with food crops;
- reduce the environmental impact on the soil and water by using innovative solutions such as biodegradable mulch film, phytosanitary products made with pelargonic acid to control infestations and biolubricants for agricultural machinery;
- enhance the value of 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 **Cometa** financed project⁴, through which Novamont has begun research and experimentation to extract flour from the cake of cardoon crops intended to improve the feed provided to chickens, young bovine animals and sheep.



Or indeed the **Terra Felix** project⁵ in Campania, whereby Novamont is committed to improving marginal lands seized from the criminal organisations, through dryland crops. And it was precisely Cometa and **Terra Felix** that in 2021 gave rise to the '**La Bioeconomia che si mangia**' (The Bioeconomy you eat) project, where the biomass recovered from the cardoon stem is used to grow king trumpet mushrooms in the greenhouses taken from organised crime. The mushrooms will then be assigned for large-scale retail distribution in compostable cardboard packaging coated with Mater-Bi film.



Territorial regeneration also means selecting disused or uncompetitive industrial sites and regenerating them using ‘flagship’ facilities and technologies, i.e., world’s first of their kind. These plants are not designed as white elephant, but as bioeconomy infrastructure, interconnected biorefineries integrated in the local areas.

This enables Novamont to help generate positive effects on employment and local economies, while at the same time reducing environmental impact, protecting virgin areas from land take and helping to reduce CO₂ emissions by increasing the energy efficiency of plants and making use of process by-products.

At the international level, Novamont is a partner in the **FoodLand** 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

- UGANDA

- ETHIOPIA

- KENYA

- TANZANIA

⁴Project financed by the Ministry of Education, Universities and Research (MIUR) in the 12 specialisation areas identified by the 2015-2020 Italian National Reform Programme (PNR). For more information, see https://www.novamont.com/public/Cometa/pieghevole_cometa_IT_06.pdf

⁵ For more information, see <http://www.terrafelix.eu/TF/index.php/terrafelix/agrigeneration>

⁶ Project financed under the scope of Horizon 2020, Grant Agreement 862802. For more information, see <https://foodland-africa.eu/project/>

Low-impact farming and protection of the landscape in pantelleria national park

In the autumn of 2020, Pantelleria staged the launch of a collaboration between Novamont, the National Parks Administrative Body and the Department of Agriculture, Food and Forest Sciences of the University of Palermo.

The goal was to promote the conservation of the agricultural landscape and biodiversity, to carry out research and innovation activities and to train agricultural workers on the use of sustainable raw materials, with seminars and workshops on sustainability in agriculture and the forestry sector. In 2021, in collaboration with local farmers, experiments continued 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 bush vines, Zibibbo and Donnafugata grapes.

In 2021, projects continued to optimise separate collection, with a circular economy perspective, and reduce the carbon footprint, with the treatment and reuse of organic waste to restore nutrients to the soil, thereby closing the carbon cycle.



The regeneration of the terni chemical plant

In July 2021, together with the Bernardini Group, Ceplast and Mirachrome, Novamont successfully concluded its purchase of the Terni chemical complex owned by Basell. The aim was to relaunch the pole, boosting the bioeconomy segment and local economic development through maintaining the site's industrial and production purpose while developing and expanding the respective production activities.



The Terni plant

covers

50

thousand square metres

over

120

employees

total production capacity of

110

thousand tonnes



The Terni plant, which covers 50 thousand square metres and has more than 120 employees, boasts total production capacity of 110 thousand tonnes and skills in reactive extrusion technologies, oil treatment and the synthesis of polymers on a pilot level. In 2021, it was also rewarded under the scope of the Urban Re-Generation project promoted by Confindustria Umbria and supported by the Cassa di Risparmio di Terni e Narni Foundation. Specifically, the plant was named **Best Performer 2020** for the excellence of the results achieved and environmental sustainability projects developed.

ACTION (SDGs: 2, 8, 9)

KPI

	2021 ⁷ COMMITMENT	2021 RESULTS	2022 COMMITMENT
Implement 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	28	28	28
Sustainable agriculture projects aimed at economic, social and environmental regeneration in specific areas	7	7	7
Reactivation of disused or uncompetitive industrial and research sites to avoid land take in building new sites	Index of regenerated area ≥ 50%	88%	Index of regenerated area ≥ 50%

no. ongoing experiments

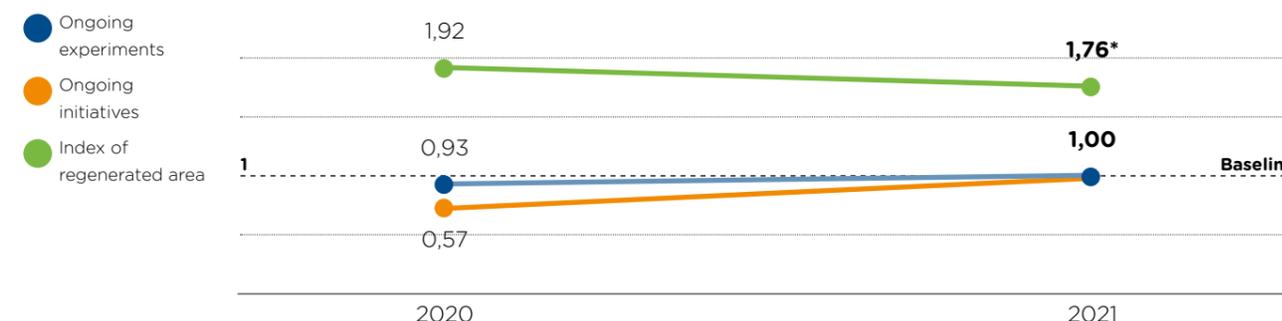
no. ongoing initiatives

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)⁸

The figure below shows the trends in the KPIs identified to describe the first common benefit purpose. The absolute values of the KPIs of each year (at present 2020 and 2021) have been normalised for the threshold or baseline value defined in 2020, shown in the figure by the dashed line corresponding to the value 1. This allows for the monitoring of the impact indicators' performance over time. The baseline values coincide with the 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. These values remain constant over the years so as to guarantee comparability over time. Novamont does not, however, exclude the possibility that they may be revised in the future with a view to assuring continuous improvement.

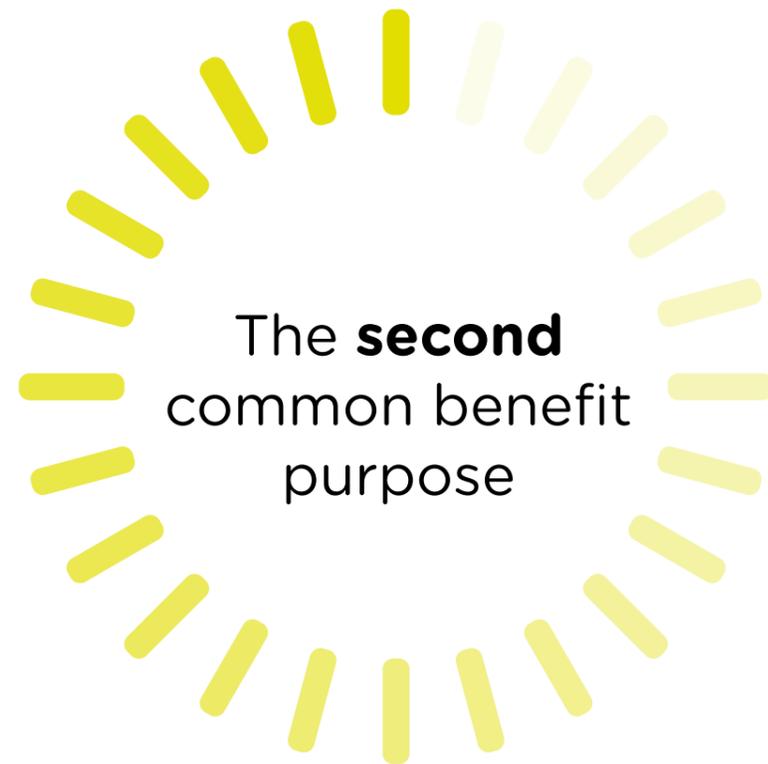
⁷Goals set by the Group in 2020, the year in which it acquired the status of benefit corporation and when the impact KPIs were defined.

⁸The field of application of this indicator is all Group offices and plants located in Italy and abroad, where the company goes about its business



*Notes: the value of the regenerated area index (shown in green) declined in 2021 due to the acquisition of BioBag International, with a production plant in Estonia.

5.



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

SDGs



HOW THE COMPANY PURSUES THIS PURPOSE:

By applying the circular bioeconomy approach, if municipal solid waste and sludge are suitably treated they become a source of organic

matter, as compost, representing an important solution to two types of problems:

- on the one hand, providing valuable soil improvers that can improve crop health, minimising the use of pesticides and fertilisers and helping decarbonise the atmosphere,
- preventing organic waste from ending up in landfill, which will be prohibited in Europe from the end of 2023⁹.

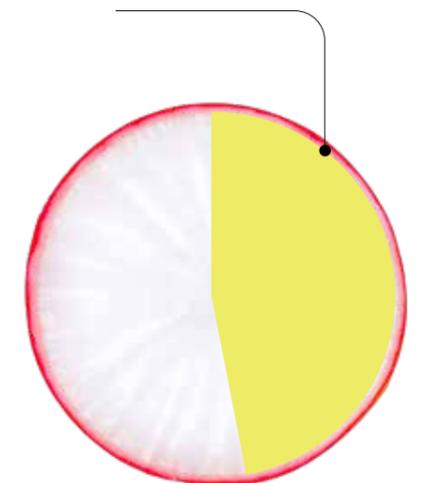
In this context, **compostability** in certain applications not only avoids possible contamination of organic waste, but also provides protection against pollution of other recycling streams, such as plastic and paper, with food residues.

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 bioplastic 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.

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.

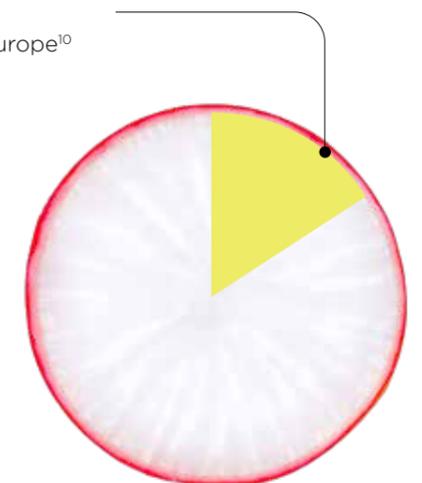
Thanks also to this model, Italy is currently the European leader in organic waste recycling, collecting 47% of organic waste compared with an average of 16% across the continent¹⁰.

47%
organic waste



compared with

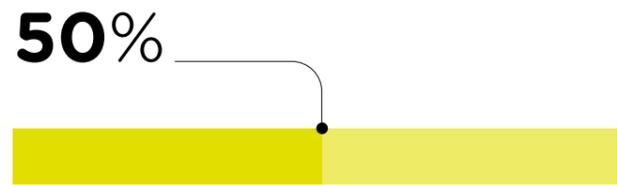
16%
average across Europe¹⁰



⁹COM(2020) 98 final, A new Circular Economy Action Plan For a cleaner and more competitive Europe.

¹⁰Zero 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, 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



Despite the critical issues linked to the health emergency, both projects were continued in 2021, 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 heart of the projects started by Novamont internationally, with the implementation of successful programmes throughout the world, such as the development of separate collection systems for organic waste using biodegradable and compostable bags in such cities as Milan, Paris, Barcelona, Monaco, Copenhagen and

New York. Among the most interesting developments seen in recent years, it is worth noting various initiatives in Romania, Serbia and Mozambique, which aim to promote pilot projects to spread separate collection systems for organic waste nationally, as well as the collaboration with the industrial partner Silvex in Portugal, aimed at testing the performance of bioplastic bags in local composting plants and to provide training and information at various levels.

Another notable initiative is the Praxistest Bio-Beutel project, pursued from March 2021 to October 2021 in Bavaria, aiming to introduce compostable fruit and vegetable bags at certain points of sale in the German supermarket chains EDEKA and REWE in the Bavarian city of Straubing. The final report of the project presented by C.A.R.M.E.N. e.V. (the association for the promotion of renewable resources and renewable energy in Bavaria) has shown how consumers are in favour of compostable bags, appreciating their use both for the transportation of fruit and vegetables and the collection of organic waste.

The analyses performed on organic waste and compost produced in the Straubing composting plant has also revealed on the one hand, a low level of organic waste contamination and on the other, that more than 80% is collected in bags, most of which are compostable. Their use for collecting food waste has therefore also had a positive impact on compost quality. Its potential has led to its inclusion by the Sachverständigenrat Bioökonomie Bayern (the Bavarian committee of bioeconomy experts) among the case studies for the Action Plan for the Bavarian Bioeconomy.

Cortina 2021: alpine world ski championships in the hallmark of sustainability

To mark the 2021 Alpine World Ski Championships held in Cortina d'Ampezzo (BL), Novamont has teamed up with partners Ecozema, ILIP and IMB to help achieve the sustainability goals set for the whole event through the supply of compostable disposable tableware. After use, these items were disposed of at the organic waste separate waste collection points overseen by volunteers for process control and thereafter processed in the composting plant of Maserot di Santa Giustina (BL). This system has made it possible to reduce one of the environmental problems linked to the organisation of major events, namely the excessive production of unsorted waste linked primarily to the catering industry, showing the added value offered by compostable tableware in closed cycle contexts with a great affluence of visitors.

The Championship Organisation Committee has chosen to make this event a reference model for the forthcoming major winter events on social and environmental sustainability, applying ambitious, innovative guiding parameters: from purchases made according to green criteria, sustainable or locally-sourced food and drinks, separate waste collection and the offsetting of direct CO2 emissions with agriculture and reforestation projects through to technical and reporting aspects like the adoption of international standards ISO 20121:2012 and ISO 14064-1:2019, sustainability certification by independent bodies and reporting to stakeholders with numerical indicators.



PROMOTION OF THE CIRCULAR BIOECONOMY IN SERBIA

In 2020, Novamont signed a collaboration protocol with the Serbian government, which as part of the initiatives taken following the start of the EU accession process, is working to harmonise its own laws on environmental protection with European legislation. The project will directly involve Contarina, an Italian multi-utility which manages environmental services in the province of Treviso and seeks to launch new agricultural-industrial development and environmental protection models.

More specifically:

- during the early stages, a pilot integrated waste management project is expected to be developed in the municipality of Gornji Milanovac, with the aim of optimising management of municipal solid waste, maximising efficiency and minimising environmental impacts

- as well as making the city of Gornji Milanovac a virtuous example of waste management that can then be replicated elsewhere in the country.



ACTION (SDGs: 2, 8, 9)

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/inhabitant/ year

	2021 ¹ COMMITMENT	2021 RESULTS	2022 COMMITMENT
Development of separate collection of organic waste in Italy through systems involving the use of compostable bags	80 kg/inhabitant/year	86 kg/inhabitant/year	80 kg/inhabitant/year
Development and maintenance of best practice in Milan as the 'champion of separate collection' through targeted communications campaigns and tools	95 kg/inhabitant/year	91 kg/inhabitant/year	95 kg/inhabitant/year

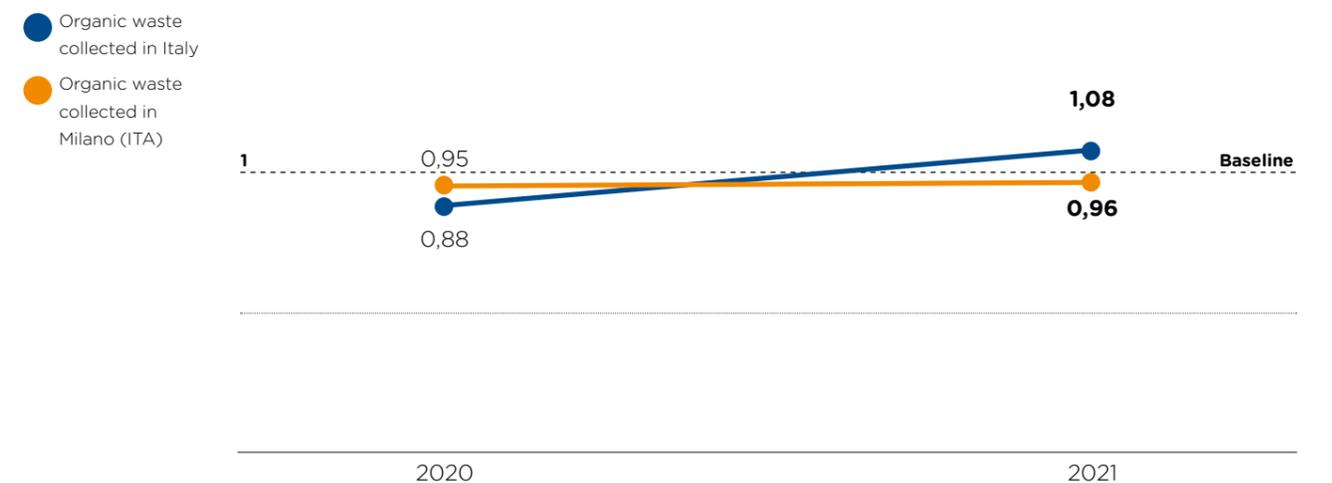
Development and maintenance of best practice in Milan as the 'champion of separate collection' through targeted communications campaigns and tools

Organic waste collected (interception of food waste) kg/inhabitant/ year

¹Goals set by the Group in 2020, the year in which it acquired the status of benefit corporation and when the impact KPIs were defined.

The figure below shows the trends in the KPIs identified to describe the second common benefit purpose. The absolute values of the KPIs of each year (at present 2020 and 2021) have been normalised for the threshold or baseline value defined in 2020, shown in the figure by the dashed line corresponding to the value 1. This allows for the monitoring of the impact indicators' performance over time.

The baseline values coincide with the 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. These values remain constant over the years so as to guarantee comparability over time. Novamont does not, however, exclude the possibility that they may be revised in the future with a view to assuring continuous improvement.



6.



THE PRESERVATION AND REGENERATION

of soil vitality and health. To achieve this novamont 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 it. Soil degradation therefore represents a threat to our life

on earth. As reported by the Food and Agriculture Organisation, at present

the **33%** of the world's soil is degraded¹.



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',

the **25%** of land is at high or very high risk of desertification in Southern, Central and Eastern Europe².



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 goal of preserving and revitalising the soil by promoting sustainable, regenerative agriculture by spreading good practices aimed at restoring organic matter, in collaboration with farmers and farmers' associations but also with universities and research centres and takes part in research and innovation projects aiming to solve the problem of microplastics in the soil.



One example in this sense is provided by the BIODOM project launched in Guadelupe and Réunion in collaboration with local research and development partners and farmers of the Overseas departments and regions of France. Coordinated by the Comité Français des Plastiques Agricoles (CPA - French Committee for Plastics in Agriculture), the project is participated in by Novamont together with the Barbier Group and Basf.

As part of the trials started in 2019 and concluded in 2021, the soil biodegradable mulch film has been tested successfully on pineapple and tomato crops. One particularly interesting aspect is the fact that even after completion of the project, the farmers decided to organise themselves to continue the experience, replacing their traditional film with soil biodegradable mulch film.

In 2021, 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 been launched.

Again, in this context, in 2020 Novamont, together with the University of Bologna, Coldiretti and the Polytechnic University of Turin, promoted the creation of Re Soil Foundation, 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.

¹²FAO, 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.

¹³Mission 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.

Mater-Agro: a new innovation model for industry and agriculture

On 16 September 2021, at the G20 agriculture meeting in Florence, Novamont and Coldiretti presented Mater-Agro, a new company dedicated entirely to farmers, who also make up part of the shareholders. Mater-Agro has been conceived to promote a new participatory innovation model for agriculture and industry, helping land entrepreneurs to maintain good crop yields applying sustainable agricultural solutions.

The innovations finalised by Novamont and marketed by Mater-Agro include soil biodegradable mulch film, phytosanitary products made with pelargonic acid and biolubricants for agricultural machinery.

Through the new company, protocols will also be designed to regenerate polluted, unstable soils and those at risk of desertification. An 'experimental farm' will then be developed to train farmers and researchers on the transformation of degraded areas into centres of innovation and development for efficient, sustainable crop management and to address the new challenges posed by climate change. This is a unique, innovative experiment in terms of its form, the products developed, the sustainable farming practices and the integrated systems applied for the first time in Italy, consolidating the long-term partnership between Novamont and Coldiretti that began over 10 years ago in the experimental fields of central Italy.



Regenerative agriculture: the SOM model for cardoon

Maintaining, restoring and improving the content of Soil Organic Matter (SOM¹⁴) 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 Consiglio per la Ricerca in Agricoltura - CREA (Council for Agricultural Research). 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 cardoon 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 journal¹⁵, 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 cardoon crop. As reported in a recent study¹⁶, the cardoon produces a dense mat of roots that can help reduce soil erosion, thereby providing important ecosystem services.



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

¹⁵Lorenzo 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.

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

¹⁷Goals set by the Group in 2020, the year in which it acquired the status of benefit corporation and when the impact KPIs were defined.

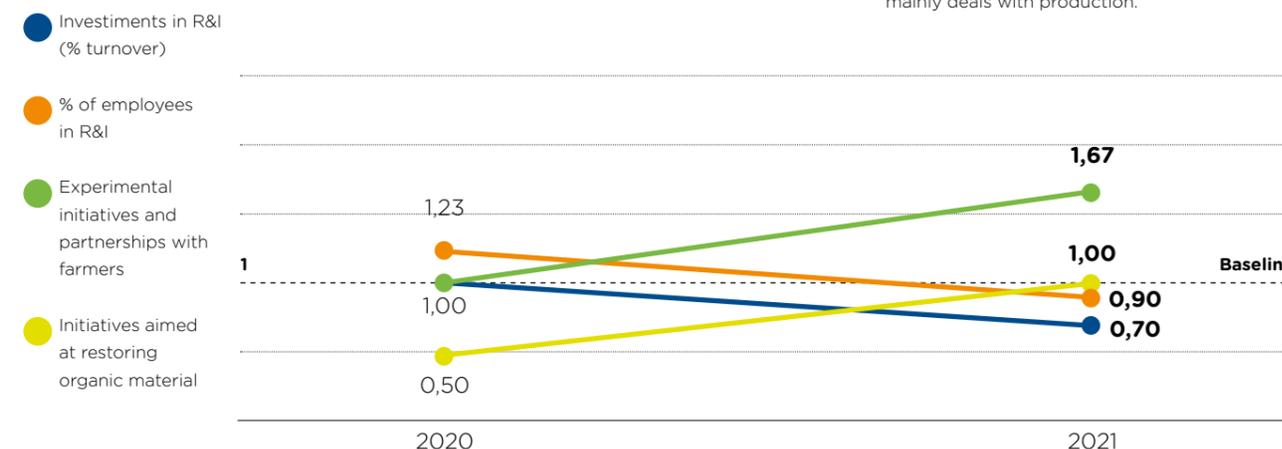
ACTION (SDGs: 12,15)	KPI	2021 ¹⁷ COMMITMENT	2021 RESULTS	2022 COMMITMENT
Continuous commitment to research and innovation and to the development of new biodegradable and compostable products of plant origin	R&I investments % of turnover	Maintenance of investments equal to 5% of turnover	3,5% ¹⁸	Maintenance of investments equal to 5% of turnover
	% of employees in R&I	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 biodegradable in soil mulch films	no. of ongoing experimental initiatives and partnerships with farmers	Maintaining around 30 initiatives in Italy and abroad, representing different areas and crops	50 initiatives ongoing in Italy and abroad	Maintaining around 30 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

The figure below shows the trends in the KPIs identified to describe the third common benefit purpose. The absolute values of the KPIs of each year (at present 2020 and 2021) have been normalised for the threshold or baseline value defined in 2020, shown in the figure by the dashed line corresponding to the value 1. This allows for the monitoring of the impact indicators' performance over time.

The baseline values coincide with the 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. These values remain constant over the years so as to guarantee comparability over time. Novamont does not, however, exclude the possibility that they may be revised in the future with a view to assuring continuous improvement.

¹⁸ The research costs incurred during the year by the Group in 2021 are unchanged on the amount of the previous year. The percentage has reduced on 2020 due to the significant increase in turnover.

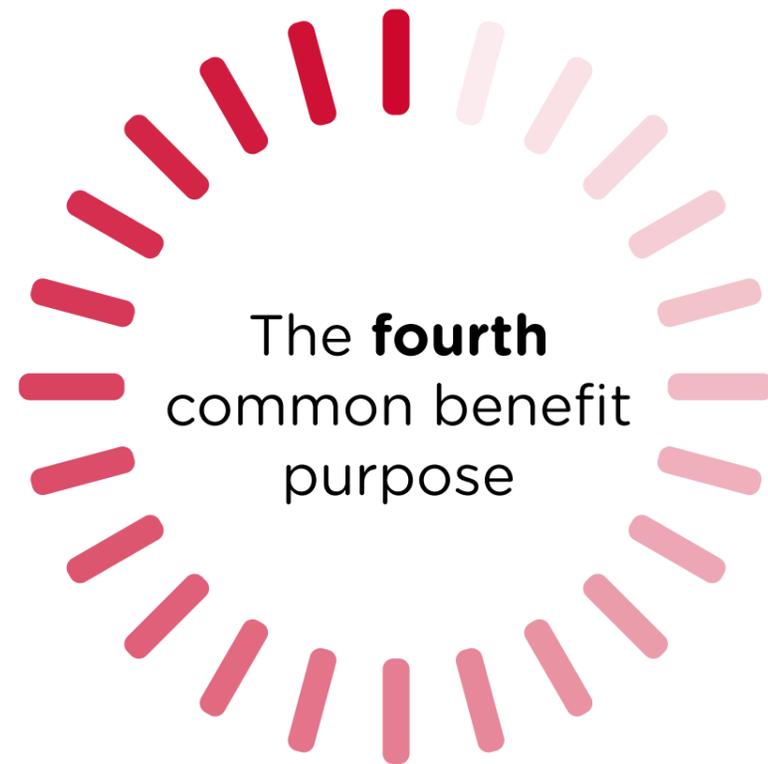
¹⁹ The absolute number of employees involved in R&I activities increased in 2021. The percentage calculated out of the total number of Group employees has reduced due to the acquisition of BioBag International, which mainly deals with production.



The percentage value of R&I costs with respect to turnover (in blue) reduced in 2021 due to the significant increase in turnover, with R&I costs instead unchanged on the previous year's amount.

The percentage of employees involved in R&I activities calculated out of the total number of Group employees (in orange) dropped in 2021 due to the acquisition of BioBag International, which mainly deals with production. The absolute number of employees involved in R&I activities instead increased in 2021.

7.



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 applications

SDGs



HOW THE COMPANY INTENDS TO PURSUE 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:

Scope 1 2 3

The actions under **Scope 3²⁰** (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 complex circularity of systems.

This is the approach taken in respect of the collaboration of Melinda, which also saw the launch of 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 bioplastic production process. Scope 3 also includes 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 Soil Organic Matter - SOM. In addition, again as regards 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. Finally, Scope 3 also includes sustainable purchases such as the use of carbon neutral raw materials.

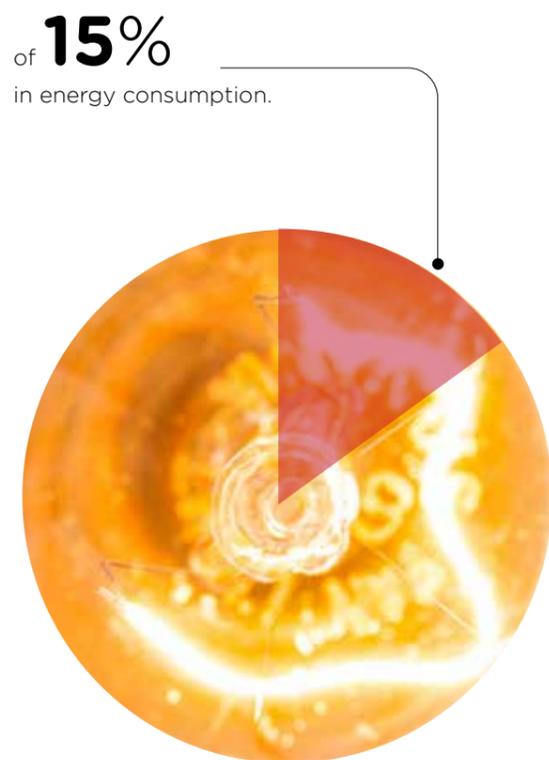


²⁰Direct emissions of GHG from installations within the confines of the organisation due to the use of fossil fuels and the atmospheric emission of any greenhouse gases.

● For **Scope 2²¹** emissions the main 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 **Scope 1²²** Novamont is constantly looking for energy efficiency solutions, which are coordinated and supported by the Group's Energy Manager, whose main tasks involve providing support: (i) for the planning and management of activities relating to energy, (ii) for the Group's strategic choices for renewable energy sources and (iii) for energy efficiency. To date the Group has already installed a high-efficiency cogeneration plant and a biodigester to degrade production sub-products and convert them into energy (further details in the impact stories) and a trigeneration plant is also being built which will enable a reduction

In addition to developing circular economy infrastructure in Italy and participating in the decarbonisation of the energy sector, Novamont decided that from 2020 onwards it would offset Scope 1 emissions relating to the combustion of methane that represents around



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

²²Indirect 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.

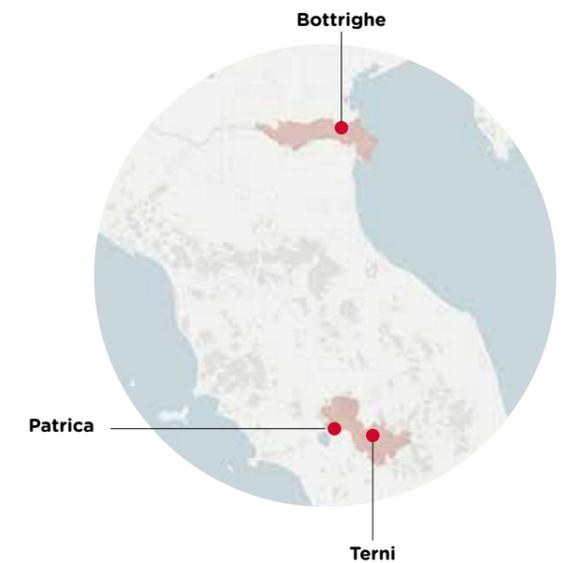
Plant energy efficiency

Increasing energy efficiency is one of the key objectives in developing the low environmental impact biorefineries promoted by Novamont. The energy intensity indicator (obtained by calculating the ratio of total energy consumption of the Group's Italian sites to the total quantity of Mater-Bi and other biochemicals produced by the Group during the reference year) declined by 24% on 2017. This important result is thanks to interventions aimed specifically at improving energy efficiency, the optimisation of production campaigns and the greater production capacity achieved by our sites than in the past.

Bottrighe plant represents a virtuous example. The plant, which was created by converting a disused site, is a champion of energy efficiency, achieved by applying a series of measures and solutions designed to minimise waste and maximise recovery of all waste energy. For example, the anaerobic digestion plant (biodigester) processes the waste deriving from the fermentation process (used cells), generating biogas, which in turn is used in a bifuel boiler to produce steam in the plant. The purification unit for bio-BDO also features a mechanical compression system to make use of all waste heat which would otherwise be lost. The upgrade of the biodigester plant allows for the conversion of all biogas produced into advanced biomethane²³ to be fed directly into the network, helping to spread renewable energy sources.

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.

SOME IMPACT STORIES



Biomethane production facility at the Bottrighe plant

²³This can be described as an advanced biofuel according to the Ministerial Decree of 14/11/2019 because of the biomethane produced.



At the **Patrica** plant, on the other hand, work continued on developing a trigeneration plant, which exploits the methane combustion process to produce electricity, diathermic oil heating, steam and cooled water, in turn then used in the plant's production processes and to heat the offices. This intervention, which will draw to a close in 2022 with the commissioning of the plant, will yield major energy and environmental optimisations, reducing the consumption of energy resources by around 15%.



Trigeneration facility at the Patrica plant

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 108 Mwh in electricity (which accounts for 9% of 2021 site consumption).

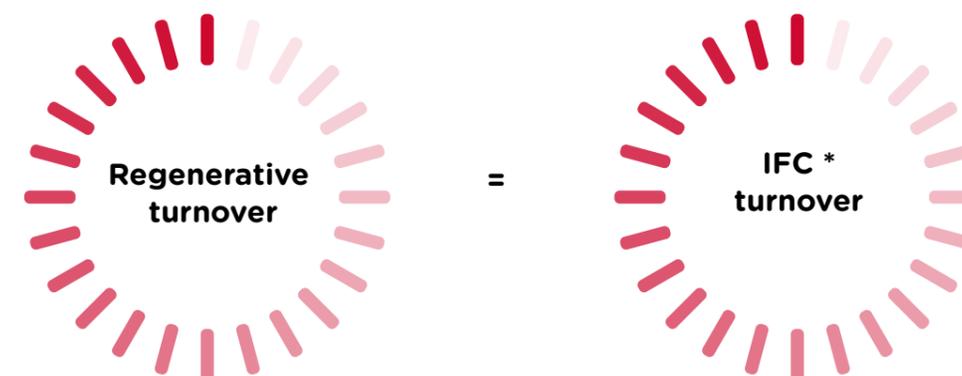


Cogeneration facility at the Bottrighe plant

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, phytosanitary products based on pelargonic acid, 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 respect of 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, 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.

In 2021, Novamont received a loan of EUR **100 million**, backed 80% by the green SACE guarantee and disbursed by Crédit Agricole Italia - also as agent bank - Banco BPM, Intesa Sanpaolo (IMI Corporate & Investment Banking Division) and UniCredit, with which to pursue its 2021/2025 investment plan. Amongst other aspects, disbursement of the loan also took into account the surpassing of a minimum threshold of the Index of Circular Flows (ICF), which measures the circularity of an organisation. This index is linked precisely to the company's regenerative turnover.

Projects for innovation and the use of waste

From the perspective of promoting circularity and waste reduction, Novamont has worked for years on innovative research projects aimed at making use of sub-products and waste, in collaboration with industrial companies and research bodies. The financed projects Scalibur²⁴, WaysTUP!²⁵ and Deep Purple²⁶ of which Novamont is a partner, for example, use waste on a demonstrative level, respectively sugars from OFMSW (Organic Fraction of Municipal Solid Waste), used oil and wastewater. The financed projects CO2SMOS²⁷ and Vivaldi²⁸ are also particularly important, aiming to transform the carbon emissions generated by bioindustries into valuable chemical substances that can be used directly as intermediates for bio-based products. The flagship project financed by the BBI-JTI-2020 Circular Biocarbon²⁹ is also particularly significant, coordinated by Urbaser and of which Novamont is a partner, together with the CAP Group; this aims to develop a one-of-a-kind biorefinery designed to optimise organic municipal solid waste, turning it into value-added products. The biorefinery will be managed for three years in Spain and Italy and in particular Novamont will be extracting PHAs from VFAs for the formulation of biodegradable and compostable bioplastics.



²⁴ Project financed under the scope of Horizon 2020, Grant Agreement 817788. For more information, see <https://scalibur.eu/>

²⁵ Project financed under the scope of Horizon 2020, Grant Agreement 818308. For more information, see <https://waystup.eu/>

²⁶ Project financed under the scope of Horizon 2020, Grant Agreement 837998. For more information, see <https://deep-purple.eu/>

²⁷ Project financed under the scope of Horizon 2020, Grant Agreement 101000790. For more information, see <https://co2smos.eu/>

²⁸ Project financed under the scope of Horizon 2020, Grant Agreement 10100044. For more information, see <https://www.vivaldi-h2020.eu/>

²⁹ Project financed under the scope of Horizon 2020, Grant Agreement 101023280. For more information, see <https://circularbiocarbon.eu/>

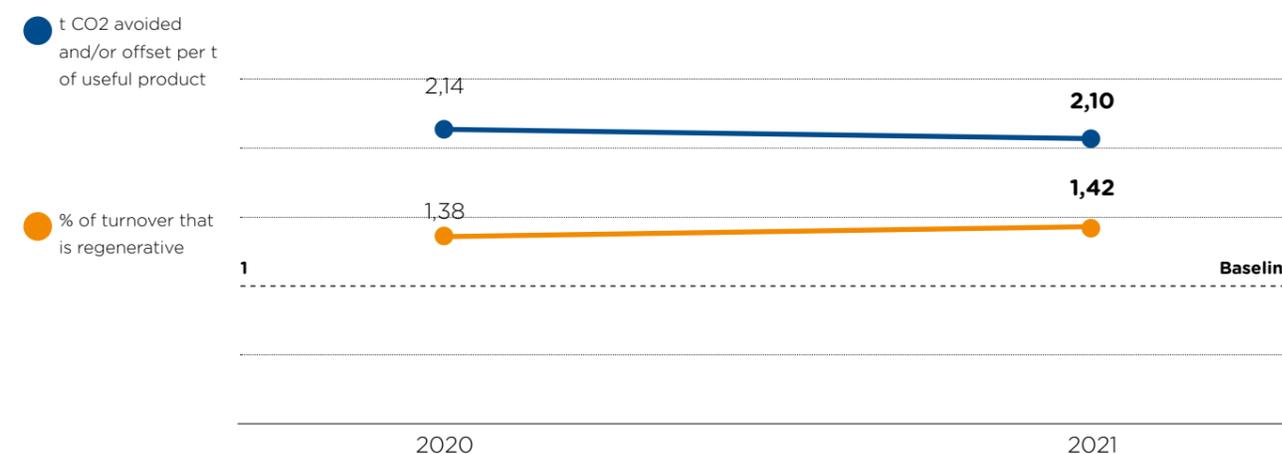
ACTIONS (SDGs: 7, 9, 12, 13)

ACTIONS (SDGs: 7, 9, 12, 13)	KPI	2021 ³⁰ COMMITMENT	2021 RESULTS	2022 COMMITMENT
Avoidance and/or offsetting of greenhouse gas emissions thanks to energy efficiency and mitigation interventions	t CO ₂ avoided and/or offset per t of useful product	t CO ₂ avoided and/or offset per t of useful product of at least 0.5	1,05	t CO ₂ 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)

The figure below shows the trends in the KPIs identified to describe the fourth common benefit purpose. The absolute values of the KPIs of each year (at present 2020 and 2021) have been normalised for the threshold or baseline value defined in 2020, shown in the figure by the dashed line corresponding to the value 1. This allows for the monitoring of the impact indicators' performance over time.

³⁰Goals set by the Group in 2020, the year in which it acquired the status of benefit corporation and when the impact KPIs were defined.

The baseline values coincide with the 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. These values remain constant over the years so as to guarantee comparability over time. Novamont does not, however, exclude the possibility that they may be revised in the future with a view to assuring continuous improvement.



8.



The **fifth**
common benefit
purpose

THE CONTRIBUTION

to a virtuous network of alliances with local stakeholders and different 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



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 - CBE³¹, 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 MacArthur 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, together with companies representing the most important Made in Italy production chains, it created the Alliance for the Circular Economy, patronised by the Ministry of the Environment and the Ministry of Economic Development, which aims to continue with political investment into the circular economy and involve SMEs in this new approach to industry and

entrepreneurship. 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 GreenItaly Report. Novamont also belongs to the Italian Circular Economy Stakeholders 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 net 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.



³¹Regulation 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 valorise 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 Re Soil Foundation, 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. In fact, it participates in many research projects in partnership with the leading Italian and international stakeholders 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 treatment as well as brand owners, institutions and the non-profit sector.

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 optimise 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 the collaboration with the Colussi Group, which decided to adopt compostable packaging both for its Misura product line (savory snacks and pasta) and for its Agnesi pasta range. More specifically, for snacks, an innovative, high-barrier, multi-material form of packaging has been introduced, made up of Mater-Bi and paper obtained from sustainable forestation certified by the Forest Stewardship Council (FSC). This compostable packaging has been made possible thanks to the combined work of Novamont, Saes, Sacchital, TicinoPlast and Ima, with the scientific contribution of the University of Gastronomic Sciences of Pollenzo. In 2021, moreover, the packaging developed for the Agnesi and Misura pasta was awarded the Packaging Oscar by the Istituto Italiano Imballaggio (Italian Packaging Institute) and the Consorzio nazionale Imballaggi - Conai (National Packaging Consortium), for both its physical and (above all) design transparency.



Another example is the collaboration with Icam that, in 2021, launched a new line of chocolate bars that uses paper laminated high-barrier Mater-Bi film, entirely compostable packaging developed in collaboration with Saes, Sacchital, Ticinoplast and IMA. In 2021, collaborations also continued with Fileni and Melinda, not only based on the use of compostable packs, respectively for the 'Fileni Antibiotic Free' and 'Melinda Bio' lines, but also on research and innovation alliances for the spread of circular, sustainable agriculture and valorisation of waste.



Partnerships with public authorities, multi-utilities and with the waste treatment 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 non-profit 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 Estate Sforzesca, Fondali Puliti, the Goletta Verde project, Appalti Verdi Ecomafia and Sicilia Munnizza Free. It should also be mentioned the work with Marevivo, an association that operates throughout Italy to defend the sea and that 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. For years now, Novamont has also stood alongside WWF Italy, promoting sustainable behaviour and lifestyles that respect the limits of the planet.



Convinced 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 recognising 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 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 of Rovigo, to foster professional/training courses and scientific dissemination to train new professional on the territory.

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. From May to June, 'Alla scoperta del Mater-Bi' took part in the New Green School of Adro (BS), an environmental education project managed by Coop Cerchio Della Vita, which saw Novamont involved in a series of training meetings on bioplastics, as part of environmental teaching for nursery and first school teachers and in creative manual skills laboratories with children, involving Mater-Bi compostable tableware and bags. 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 'Stupper tra i banchi di scuola' initiative, the training proposed by the Stupper School Academy, a programme run by Lazio Innova to promote entrepreneurship in schools and stimulate business interests in secondary schools throughout the region of Lazio. With the aim to spread awareness of the capacity of fishing and aquaculture chain companies under the scope of the ecological transition, Novamont supported the preparation of 'L'Atlante Delle Buone Pratiche - Filiere Sostenibili Della Pesca e Dell'acquacoltura' (The Atlas of good Practices - Sustainable Fishing and Aquaculture Value Chains), conceived from an idea by Chimica Verde Bionet Association and shared with Legacoop Agroalimentare Dipartimento Pesca.

Novamont's contribution to education and training also includes support for cultural initiatives and social inclusion projects with significant impacts on the local area. Guided by this approach, in 2021 Novamont supported a number of local associations in Novara involved in promoting art, culture, awareness-raising and education. These include Nòva, centre of young gatherings and cultural production, Novara Jazz, 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.



COLLABORATIVE MATER-BIOTECH AND TERRITORY CO-DESIGN TABLE

In 2020, through the Bottrighe plant, Novamont embarked on a Responsible Business activity and interaction with local citizens and institutions, in collaboration with Sherpa Srl (the first spin-off of the Department of Political and Legal Sciences and International Studies of the University of Padua) with the aim of promoting initiatives that would help activate the perception of people in respect of the circular bioeconomy segment and support knowledge of innovation, quality and plant safety processes and activities. As part of this initiative, a questionnaire was organised and given out aiming to analyse the relationship between the community of Adria/Bottrighe and the plant. In addition, with the aim of maintaining constant dialogue with citizens and in order to make the most of points for improvement, a panel of citizens was created, made up of representatives of environmentalist associations, independent journalists, local teachers, municipal managers and technicians.



I dialoghi con la scienza (Dialogues with science)

With a view to creating an opportunity for an exchange with the territory in which Novamont has its roots, but above all to reflect together with the residents on the most urgent scientific topics, Novamont has teamed up with the Novara branch of the Circolo dei Lettori, to design 'Dialoghi con la Scienza' (Dialogues with Sciences), an event of five appointments organised by Telmo Pievani, philosopher of biology and expert in the theory of evolution, hosted by the Faraggiana Theatre of Novara. Guests include the lecturer of the University of Eastern Piedmont, Enrico Ferrero and the populariser of science Paola Catapano, who spoke about the role of physics in respect of climate change; Marco Malvadi, chemist, writer and author of 'Sei casi al BarLume' explained the importance of making sense of global averages, statistics, probabilities, scenarios, models, causes and effects; the lecturer at the University of Eastern Piedmont Cristina Meini and populariser of science Silvia Bencivelli, who addressed the matter of fake news and, finally, the CEO of Novamont Group, Catia Bastioli, who discussed the importance of reconstructing the relationship between man and nature to remedy the split that has been created over time between economy and society. During the last day, a joint commitment of the local stakeholders was also announced to adopt a design model based on the circular bioeconomy for the city of Novara.

The initiative was promoted by Novamont and Circolo dei Lettori Foundation and supported by the City of Novara, in collaboration with the University of Eastern Piedmont and Nuovo Teatro Faraggiana Foundation and sponsored by ATL - Turismo Provincia di Novara with the support of the media partner La Stampa.

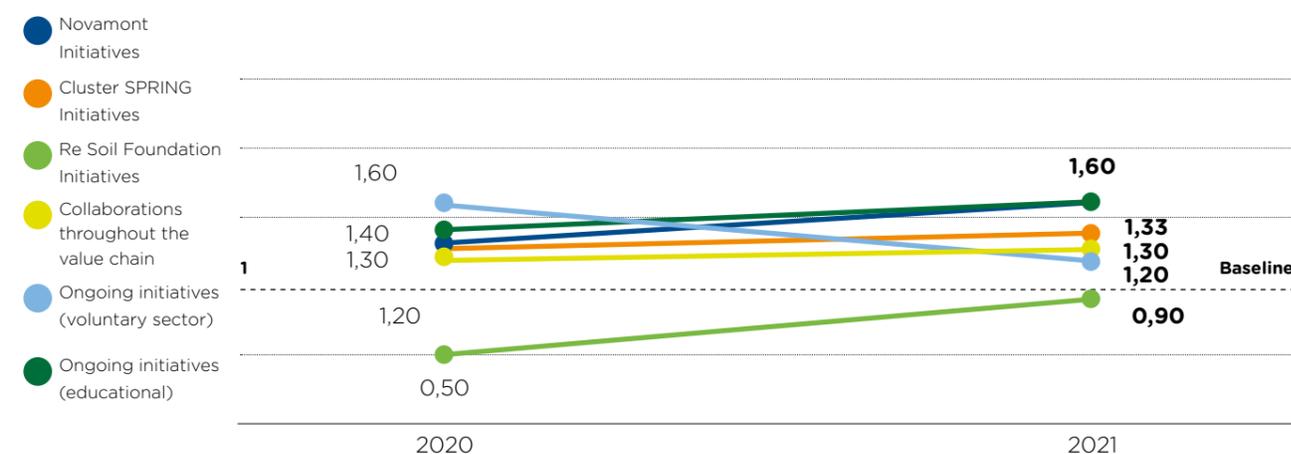


ACTIONS (SDGs: 16,17)

ACTIONS (SDGs: 16,17)	KPI	2021 ³² COMMITMENT	2021 RESULTS	2022 COMMITMENT
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 SPRING Cluster and by Re Soil Foundation	no. of ongoing Novamont initiatives	Number of initiatives > 10	16	Number of initiatives > 10
	no. of SPRING Cluster initiatives and events	Number of initiatives > 15	20	Number of initiatives > 15
	no. of Re Soil Foundation initiatives and events	Number of initiatives and events > 10	9	Number of initiatives and events > 10
Development of a business model based on connections between different sectors	no. of ongoing collaborations along the whole value chain	Ongoing collaborations > 10	13	Ongoing collaborations > 10
Projects/collaborations with the non-profit sector and for the community	no. of ongoing initiatives	Between 5 and 10 ongoing initiatives	6	Between 5 and 10 ongoing initiatives
Environmental training and educational activities	no. of ongoing initiatives	Between 5 and 10 ongoing initiatives	8	Between 5 and 10 ongoing initiatives

The figure below shows the trends in the KPIs identified to describe the fifth common benefit purpose. The absolute values of the KPIs of each year (at present 2020 and 2021) have been normalised for the threshold or baseline value defined in 2020, shown in the figure by the dashed line corresponding to the value 1. This allows for the monitoring of the impact indicators' performance over time. The baseline values coincide with the 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. These values remain constant over the years so as to guarantee comparability over time. Novamont does not, however, exclude the possibility that they may be revised in the future with a view to assuring continuous improvement.

³²Goals set by the Group in 2020, the year in which it acquired the status of benefit corporation and when the impact KPIs were defined.



9.



THE COMMON BENEFITS WITHIN THE ORGANISATION

In 2021, Novamont, as always, continued to develop and evolve the organisation and the people who form it.

THE FOLLOWING ARE SOME OF THE ACTIVITIES IMPLEMENTED.



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.

The company pursued the application of the performance management system: the process continues to entail an assessment of collaborators by managers, while at the same time allowing collaborators to manage their own self-assessments. The process was handled using a visualisation tool for a skills model structured on three axes: responsibilities of the role, technical knowledge and organisational behaviour. Afterwards, feedback meetings were held between managers and employees leading to development processes, including through support from mentors.



The company continued to work on the design of a Corporate Academy, aimed at spreading the values of the benefit corporation and B Corp through various tools, to reinforce and supplement all learning, development, inclusion and involvement initiatives for employees and channel all the energy necessary to ensure that Novamont can make a significant and relevant contribution to education through partnerships.

In 2021, internal communication for Group employees took on an increasingly central role, becoming a key tool by which to respond to the challenges faced, on the one hand as a result of a complex, diversified context in which the company population is split up into multiple sites in Italy and abroad and on the other, the pandemic and consequent adoption of solutions whereby employees worked from home. During the year, Novamont therefore decided to embark on certain important initiatives, focussed above all on optimising the company intranet as a privileged channel by which to internally assure the spread of messages, contents and materials of interest to employees, with a view to digitalisation, sharing, transparency and engagement.



10.



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 104³³.

With the update of data on 2020, Novamont obtained a new score of 120, which rose further in 2021 due to the implementation of a series of improvements. The following are details of the impact in 2021:

OVERALL B IMPACT SCORE



Your Company



B Corporation Certification Qualification



FOR FISCAL YEAR END DATE:
December 31st, 2021

	QUESTIONS ANSWERED	OVERALL SCORE
GOVERNANCE	33/33	17.7
WORKERS	55/55	28.5
COMMUNITY	60/60	13.9
ENVIRONMENT	106/106	68.3
CUSTOMERS	13/13	3.7

³³ The scope of the B Corp certification and subsequent monitoring activities (2021) based on the BIA do not include BioBag International and Mater-Agro, which joined Novamont Group in 2021.



Novamont SpA,
Benefit Company, B Corp certified
via G. Fauser, 8 - 28100 Novara

