

NOVAMONT SpA

COMPANY CERTIFICATIONS		
SAFETY	QUALITY	ENVIRONMENTAL
		MANAGEMENT
UNI ISO 45001:2018	UNI EN ISO 9001:2015	ISO 14001:2015
AIAB (Italian Organic Agriculture	E-label multi label!	ISO 14067
Association) Technical Means	ISCC PLUS	EN 13432
	ECOLABEL	

ENERGY SAVING INITIATIVES	
Energy Management System ISO 50001	Energy Policy: Novamont has appointed an Energy Manager, with responsibility for conservation and effective use of the Group's energy.
	Energy goals and milestones: Maximising energy efficiency in all production processes directly under the Group's control.
	Organisational structure: The Group's Energy Manager is part of its Engineering department.
	Energy performance improvement action: Achievement of ISO 50001 certification testifying to energy management in line with international standards (future).
Energy consumption reduction initiatives:	At a Group level initiatives relate to: 1. Manufacturing campaign optimisation. 2. Production process integration. 3. Application of Best Available Technologies (BAT) and, where possible, the use of co- and trigeneration. The various efficiency improvement solutions implemented at the Mater-Biotech plant (located in Bottrighe), a firm controlled 100% by Novamont, include: - A mechanical recompression system to exploit all thermal waste that would otherwise be dispersed. - A co-generation plant for generating electricity and heat for the production process, with an overall efficiency, to which energy efficiency certificates (i.e. white certificates) are associated, reaches 90%. In 2022, the co-generation plant resulted in a 22% reduction in the use of primary energy. - A biodigester for the generation of energetically recovered biogas; a high-tech plant, processing excess biomass from the fermentation process, production by-products, and sludge from the sewage treatment plant, generating biogas, which, as of July 2020, is fully converted to biomethane, thanks to the upgrading of the biodigestion plant.



There is also a mechanical recompression system for the exploitation of all thermal waste that would otherwise be lost. These solutions have made it possible for MAterBiotech to avoid (in 2022) the emission of 16,551 tons of CO2 equivalent. With reference to the Patrica production site, work was completed in 2022 on the construction of a trigeneration plant, which uses the methane combustion process to generate electricity, heat diathermic oil, steam and chilled water, which are in turn used in the plant's production processes

and the heating of the offices. The plant was commissioned in May, thus resulting in significant energy and environmental optimisations, with a reduction in the consumption of primary energy resources of about 12%.

In 2021, the Piana di Monte Verna research centre was fitted with new air-cooled refrigeration units equipped with inverters. Other energy efficiency measures carried out during the year included the gradual replacement of traditional lamps with LED lamps at the Terni and Novara sites. Novamont Terni, on the other hand, recovers energy from the thermal oxidation of liquid and gaseous wastes from the polymerization process amounting to 6,216 GJ (2018 figure).

Renewable Energy Sources

The Terni site is equipped with a 10.5 kWp photovoltaic system. At the Group level, feasibility analyses are currently being conducted on the installation of additional photovoltaic systems and the introduction of electric mobility systems. The latter will also be applied to the Terni site. In July 2020, Mater-Biotech (located in Bottrighe) completed the upgrading of its biodigestion plant, which enables it to convert the biogas produced into biomethane to be fed directly into the grid, contributing to the spread of renewable energy sources.

All the electricity bought by Novamont comes from renewable energy sources and has been certified via Guarantees of Origin (GO) since 2010. This avoids the emission of greenhouse gases and other pollutants and supports the development of renewable sources.

The correct purchase and cancellation of GOs is subject to third-party verification and preparatory to obtaining the "Zero Emission Electricity" certification.

Thanks to the purchase of Gos, in 2020 Novamont Terni avoided emitting 10,949 t of CO2e into the atmosphere; while in 2022, Novamont Terni, also through the purchase of GOs, avoided releasing



	6,380 t of CO2e into the atmosphere.
Water consumption reduction initiatives	-Implementation of the cutting system water
·	recirculation systems (Mater-Bi granule).
	- Internal recovery and reuse of water drained
	from cooling towers.

ENVIRONMENTAL SUSTAINABILI	TY AND GREENHOUSE GAS REDUCTION INITIATIVES
	stainable development goals
Global goal formalisation	Novamont's Mission: use chemicals creatively as a
	clean, regenerative force to create eco-design solutions
	that do not release persistent substances into the
	environment, can be recycled in various forms, and can
	return to the earth, closing the carbon cycle.
	They cooperate through alliances with everyone who shares their commitment. They aim to transform: plants that are no longer competitive into energy self-sustaining bioindustries, marginal lands into new fertile
	soil and sources of valuable raw materials, waste into new biomaterials and bioproducts, and communities into responsible players in the transition to sustainable
	living and growth.
	In 2020, Novamont modified its company status to formalise its desire to foster the wellbeing of the
	community, the local area and the environment it works in, making itself a Benefit Corporation in legal terms. At
	the same time, Novamont also obtained the B
	Corporation certification, issued to companies by B Lab
	(a US non-profit organisation), identifying a new legal
	form of the company, introduced in 2010 in the USA and
	subsequently adopted in Italy - the first country in the
	world other than the USA - with the law of 28 December
	2015. Companies that become benefit corporations undertake to:
	- incorporate common-benefit purposes in their articles
	of association in addition to profit objectives;
	- measure all its impacts and disclose them annually
	transparently and comprehensively through an Impact
	Report6, describing both the actions carried out and the
	plans and commitments for the future.
Environmental policy document	In 2020, Novamont issued its Sustainability Policy,
	which, in relation to research and innovation,
	formalises the Group's commitment to:
	Promote research and innovation for the
	transformation of waste and by-products of the supply chain into new products;
	 Adopt a management approach based on the Life Cycle Thinking (LCT) principle. Pursue actions to
	mitigate and improve the environmental and social
	profile of its activities and products through: (i) the
	choice or development of processes and facilities that
	reduce energy and material consumption, (ii) the use
	of renewable energy sources, (iii) careful design of
	products with an emphasis on environmental design



throughout the entire life cycle, and (iv) the purchase of more environmentally friendly products and raw materials (green procurement);

• Promote the creation of integrated knowledge networks through extended partnerships between companies, research centres, universities, associations, institutions and civil societies to accelerate the transition towards more sustainable production and consumption models. Furthermore, in confirming its commitment to managing quality, environmental impacts and occupational health and safety, in 2020 Novamont updated its Quality, Environment and Safety Policy (QASS), which requires

that the Company and its subsidiaries undertake, inter alia, to:

- Comply with the laws and regulations applicable to its activities and products and, when applicable, food safety standards and customer requirements; if no appropriate law or standard exists Novamont adopts and applies standards and methods that reflect its commitment to compliance with QASS requirements, the best available techniques and the Company's expectations;
- Develop, implement, measure, monitor, review and continuously improve its processes to ensure compliance with ISO 9001, ISO 14001, and ISO 45001 standards and Good Manufacturing Practices (GMP);
- Display a clear commitment from management to continuous improvement of QASS performance.

Changes determined by sustainability strategies:

- In its business model: the company has always adhered to the principles that are now part of the bioeconomy concept. Its renewable and recyclable products bring the circular economy model to fruition. This development model - which sees the bioeconomy as a local regeneration factor - is essentially based on three cornerstones: the reindustrialisation of brownfield sites, an integrated agriculture chain and products as solutions. In 2020, the company adopted the legal status of a Benefit Corporation.

In company processes:

- Adoption of environmentally friendly vehicles for the corporate fleet (*implemented*).
- Remote working systems (teleconferencing, remote working, etc.) (*implemented*).
- Promotion of car pooling, use of bicycles and public transport, etc..
- Changes to packaging from an environmental perspective (*implemented*).
- With the B Corp certification, the BIA framework was



	and a standard for the second of the first of the second o
	adopted with the aim of fulfilling the obligations
	required of benefit companies by reporting on the
	impacts generated by the company and to have an aid
	for managing environmental issues.
	es and supplies
Primary raw materials used and their origin	The primary raw materials used in the production cycle
	are:
	- Starch and sugars - organic compounds in the
	carbohydrates class.
	- Monomers: a simple molecule with functional groups
	that enable it to be recursively combined with other
	molecules (either identical or complementary to it) to
	form macromolecules.
	For the majority in Europe (87% - 2022 figure).
Environmental criteria in supplier selection	Sustainable procurement involves integrating
	Corporate Social Responsibility principles into a
	company's procurement processes and decision
	making, and promoting these principles along the
	supply chain by adopting collaborative solutions with
	its suppliers to accelerate a widespread and continuous
	improvement process along the entire value chain.
	With the objective of reinforcing control of the supply
	chain and establishing increasingly virtuous business
	relationships with it, a three-year experimental project
	was launched in 2021 to launch a structured
	assessment and monitoring of the sustainability
	performance of our main suppliers with the support of
	EcoVadis, an independent international rating
	company that aims to improve companies'
	environmental and social practices by leveraging on
	their influence in global logistics chains. Eco-Vadis' core
	instrument is a collaborative platform that allows
	companies to monitor the sustainability practices of
	their suppliers, manage their risks and request the
	implementation of corrective actions when the need
	arises. The assessment method incorporates several
	international sustainability standards (Global Reporting
	Initiative, UN Global Compact, ISO 26000) and is based
	on 21 CSR criteria grouped into four categories: Ethics,
	Environment, Labour Practices and Human Rights and
	Sustainable Procurement.
Promotion of action to get suppliers involved on	All suppliers assessed using the Ecovadis platform are
environmental themes	sent a report highlighting the strengths and
City of microar aremes	weaknesses of their sustainability practices. This allows
	the company to implement targeted actions to
	improve its Corporate Social Responsibility (CSR)
	profile. This activates a virtuous exchange and dialogue
	between Novamont and its suppliers, who are
	encouraged to develop businesses that are increasingly
	attentive to the expectations of future generations.
	The percentage of suppliers qualified through the
	Ecovadis platform corresponds to 86% of the Group's
	· · · · · · · · · · · · · · · · · · ·
Adoption of your material reduction interesting	total expenditure on raw materials.
Adoption of raw material reduction initiatives	With the primary objective of reducing the amount of



	way, makariala yaad in tha maadyatian ayala tha
	raw materials used in the production cycle, the
	company has a policy of maximising production yields
	while also recycling and using process waste.
Sustainable purchase policy for travel	The travel policy is being updated, and it will promote
	the reduction of travel to reduce the environmental
	impact of travel (e.g. PREFER VIDEO CONFERENCE).
Sustainable purchase policy for consumables	N/A
Sustainable purchase policy for food and drink	N/A
, , ,	roduction
Green services/products	100% of the company's overall turnover comes from
Green services, produces	the sale of "green" products.
Product innovations designed to replace	Novamont constantly monitors changes in chemical
	-
dangerous chemical substances	regulations and is attentive to increased consumer
	awareness of the safety and sustainability of food
	packaging. Therefore, some substances that are critical
	due to their inherent hazards or because they are the
	subject of debate on their safety are not used in the
	production of Mater-Bi.
	These include:
	- phthalate family plasticizers;
	- clorurate, bromurate, fluorurate and perfluorurate
	substances;
	- derivatives from the transformation of animal parts;
	- substances classified as allergens in food labelling
	regulations;
	- latex;
	- bisphenol A and substances from the same family of
	chemicals.
Adoption of production process environmental	The company has pursued a range of certification
certification trajectories	trajectories:
	- Environmental Product Declaration (EDP) according to
	ISO 14025 (Type III environmental labels): certified
	environmental product statement, which provides the
	environmental impacts of products calculated through
	Life Cycle Assessment (LCA) method
	- Multi e-Label - promoted by Kyoto Club with the
	intention of combining the benefits of assessment
	intention Type I labelling (ISO 14024) with the ability to
	communicate the contents of one's declarations
	(environmental Type III communication).
	- EU Eco-label: European Union environmental quality
	mark for
	products and services which guarantee high
	performance standards together with reduced
	environmental impact across their whole life cycles.
	ISO 14067 - requisites and guidelines for PCF (Product
	Carbon Footprint) quantification and reporting based
	on international reference standards for LCA studies
	(ISO 14040 and ISO 14044).
	- ISCC Plus - allows sustainable management to be
	extended to non-biofuel categories such as feed, food,
	chemicals and solid biomass.
	- Product Life Cycle Assessment (LCA). Life cycle
	analysis is a structured and internationally



Presence of a document communicating	standardised method for quantifying the potential impacts on the environment and human health associated with a good or service based on its resource consumption and emissions. - Organizational Life Cycle Assessment (O-LCA): uses life cycle analysis to analyse the inputs, outputs and potential environmental impacts of activities that are associated with a company's product portfolio. - Social Life Cycle Assessment (S-LCA): is a method used to assess the social and sociological aspects of products, and their actual and potential, positive and negative impacts throughout the life cycle. - AIAB (Italian Organic Agriculture Association) Technical Means. Annual reporting to the Umbria Regional
atmospheric emissions	Environmental Protection Agency (ARPA Umbria) of direct emissions released into the atmosphere; Integrated Environmental Authorisation document.
Participation in environmental innovation research projects	Through: - European Union public funds for international, national and regional projects; - National public funds; - Company funds.
	Management
Recycling and appropriate waste management improvement initiatives.	The policy is focused on reducing waste and maximising the recycling of generated waste, in line with national and European legislation that considers landfilling as a "last resort". Accordingly, they seek to encourage the purchase of raw materials that are transported in tankers, thus avoiding the use of packaging. If possible, the same policy is also implemented for the transport of Mater-Bi. Dedicated containers for paper, plastic and organic waste have been placed in the offices to encourage recycling. Reusable hand drying systems have also been introduced (at the Novara site). Total waste production in 2022: 14,755 of which 7% is sent to landfill, while 93% is sent for recycling.
Waste processing and waste reduction initiatives	Pilot projects for the reuse of packaging materials are underway (wood pallets).
Environmental impact improvement targets	To improve its environmental impact, the company promotes: - The purchase of carbon neutral raw materials or materials made with BATs (Best available technologies or techniques). - The use of electrical energy from renewable sources, increasing the renewability of its products (Mater-Bi). The legal status of a Benefit Corporation was adopted in 2020, formalising the will to pursue common benefit purposes for the society, the territories and the environment in which it operates in its articles of



association. The term Benefit Company (or Benefit Corporation) identifies a new legal form for companies, introduced in 2010 in the USA and subsequently adopted in Italy - the first country in the world other than the USA - with the law of 28 December 2015. Companies that become benefit corporations undertake to: incorporate in its articles of association, in addition to profit objectives, common benefit objectives measuring its impacts and reporting them annually transparently and comprehensively through an Impact Report, describing both the actions carried out and the plans and commitments for the future. Concurrently with the transformation into a Benefit Corporation, the B Corp certification was obtained, thus becoming part of a global phenomenon established to promote and disseminate a business model that goes beyond the generation of profit for shareholders and aims to innovate and maximise the positive impact on the society, the environment and for all stakeholders. For the impact report see https://www.novamont.com/public/Bilancio%20di%20 sostenibilit%C3%A0/IMG%20box%20relazione%20impa tto.png Innovation and research Approximately 5% (2020 figure) 3.5% (2021 figure) is Investment in innovation and research spent on research and development activities. This includes staff costs, tool and equipment repayments, purchases of technological goods and services (e.g. materials used in laboratories) and patent costs. The management of the action/investment needed to pursue the company's environmental objectives will be the task of various company departments such as: - Research and Development. - Engineering. - Plastics Core Business General Management. - Agro. - New Business Development and Licenses. - Product Ecology. - Environmental Communication (ECOPEC). - Intellectual Property and Legal Affairs. - Strategic Planning and Institutional Communication. Direct atmospheric emissions reduction Initiatives implemented by the company to reduce initiatives atmospheric emissions include: - Purchasing 100% of its electrical energy from renewable sources. - Energy efficiency work on sites. - Purchasing carbon neutral raw materials. - Offsetting Scope 1 emissions.

Staff training



Staff awareness raising and training designed to reduce environmental impact

In-house workshops, i.e. study and in-depth seminars on environmental issues, of an educational and informative nature, were held. In 2022, the company's in-house communication instruments were further strengthened, targeting employees in the Italian and foreign offices.

In particular, the B-People intranet, created in 2020, was confirmed as the preferred channel to ensure the dissemination of information and materials of interest within the organisation, aiming for digitisation, sharing, transparency and engagement. In 2022, the content and functionality of B-People were updated and expanded to create an increasingly inclusive and intuitive "place".

The end of 2022 marked the launch of Officine Novamont, the new corporate Academy, an important virtual and physical meeting place for the knowledge, corporate values and distinctive skills of the Group's people. The platform aims to strengthen Group identity and culture by defining and disseminating "Novamont values and conduct", to promote continuous training through the organisation of courses and meetings focused on the development of distinctive skills (technical and non-technical) and the conduct of people, and finally to develop innovative projects with shared value with strategic partners, to consolidate and enrich corporate know-how.

Client relations

Marketing policies designed to highlight product sustainability.

For public/client communications, product environmental information is stressed in specific documents and other tools including:

- The company's website.
- Information datasheets.
- Explanatory leaflets.
- -Product Certification (ISO 14067, e-Label).
- -Brochures, informative documents.
- -Technical datasheets.
- -Environmental position.

Relations with local government and the community

Collaborating with local administrations on sustainability projects and initiatives for the community. The company considers interaction with the community and surrounding areas to be essential in order to change the development model, based on a vision that not only focuses on products but also on the promotion of sustainability and good practices in the area.

Numerous collaborations have been implemented regarding the optimal end-of-life management of products. Collaborations with public administrations, multi-utility companies and, in general, in the waste treatment sector have been crucial in creating good organic waste management practices that have made Italy an example for Europe, but also in generating real research and innovation projects. Also of particular importance is the promotion of joint activities to spread the use of compost, which is the result of the organic fraction recycling process, and to enhance the culture of composting, in collaboration with the Re Soil Foundation. The territorial regeneration projects developed with communities and local administrations



	throughout Italy (Pantelleria, Milan Bergamo, Brescia and Assisi) continue. PARTNERSHIPS AND COLLABORATIONS FOR THE REGENERATION OF TERRITORIES. The goal is to replicate this project in the Terni area via the Urban Re-Generation project.
Participation in competitive tenders requiring environmental criteria	The company participated in tenders where environmental selection criteria were very frequently required.
Access to public incentives for green process/product development	N/A
Membership of business associations and networks	Membership of Federchimica and Confindustria Umbria
Direct joint working with business networks and associations	Partnership with Assobioplastiche (national) and European Bioplastics (European) for methodological development, awareness raising and educational activities on the circular bioeconomics and sustainable development themes. Other partnerships have been set up with Cluster nazionale della Chimica Verde SPRING (Novamont is the president and founder of this national green chemicals cluster), Alleanza per Economia Circolare, Bio-based Industry Consortium, Bio-Based Industries Joint Undertaking, Circular Economy network and Piattaforma Italiana per L'Economia Circolare (ICESP). Novamont has also signed up to the WHP (Workplace Health Promotion) project. This programme will also be extended to other Group sites, including Terni. Therefore, Novamont is committed to initiating and promoting the development of partnerships and collaborations to stimulate networking between the Group and associations, research, companies, institutions and communities. These interactions are an essential element in changing the paradigm, allowing not only for the creation of a shared culture on circular bio-economy issues, but also for the sharing of territorial projects capable of mobilising a multitude of initiatives. Therefore, the Group's activities are designed to foster the development of communities through their direct involvement. In particular, Novamont collaborates with institutions and local entities to promote the development and protection of the territory, supporting the implementation of circular bioeconomy projects.
Initiatives and activities in schools	Novamont has taken a forefront role in promoting participatory dialogue with schools and universities in order to raise awareness of sustainability and good environmental practice among young people and help young people join the labour force and it has developed projects of shared interest for all age groups. The educational tools created thus take account of the awareness levels of those involved and include the Discovering Mater-Bi project for lower and



higher secondary school and university students and school visits to the Group's sites managed on the Scuola@Novamont channel. For the universities Novamont has set up a Master's in Bioeconomy in the Circular Economy (BIOCIRCE). A highly interdisciplinary approach has been developed over the years to a research and development field which increasingly demands cross disciplinary skills, with a great many partnerships with universities and research centres in a range of research sectors being set up. A further example of how the group develops synergies with the university system is its support for specific educational trajectories in which the group's expertise is made available to university students in laboratories for theses, research and internships. With similar aims, the Alternanza Scuola Lavoro project has continued and offers students the chance to gain an insight into specific working contexts, with school students being introduced to the world of work and given a few weeks on-the-job work experience.

In the Terni area Novamont works actively with Istituto Tecnico Superiore di Terni with a view to fostering the emergence of professionals with the specific skills needed to take on the bioeconomics challenge. Specifically, the Biotech Academy training programme engages Novamont in activities ranging from the design of the educational programme, the delivery of lectures on certain modules, and the organisation of company visits and internships.