

URBAN RE-GENERATION PROJECT
GOOD COMPANY PRACTICES



NOVAMONT S.P.A.

COMPANY CERTIFICATIONS		
SAFETY	QUALITY	ENVIRONMENTAL MANAGEMENT
UNI ISO 45001:2018	UNI EN ISO 9001:2015	ISO 14001:2015

ENERGY SAVING INITIATIVES	
Energy Management System ISO 50001	<p>Energy Policy Novamont has appointed an Energy Manager, with responsibility for conservation and effective use of the Group's energy.</p> <p>Energy goals and milestones: Maximising energy efficiency in all production processes directly under the Group's control.</p> <p>Organisational structure: The Group's Energy Manager is part of its Engineering department.</p> <p>Energy performance improvement action: Achievement of ISO 50001 certification testifying to energy management in line with international standards (future).</p>
Energy consumption reduction initiatives:	<p>At a Group level initiatives relate to:</p> <ol style="list-style-type: none"> 1. Manufacturing campaign optimisation. 2. Production process integration. 3. Application of Best Available Technologies (BAT) and, where possible, co- and tri-generation. <p>The various efficiency improvement solutions in use at the Mater-Biotech plant, a firm controlled 100% by Novamont, includes:</p> <ul style="list-style-type: none"> - a mechanical recompression system for the exploitation of all the otherwise dispersed thermal waste; - a co-generation plant for thermal energy and heat production; - a biodigester for energetically recovered biogas production. <p>The last two of these allowed the company to avoid emitting 20,771 t of Co₂e in 2020.</p> <p>At the Mater-Biopolymer plant, on the other hand, a trigeneration plant is being finalised which will enable the site's energy consumption to be reduced by around 15%.</p> <p>Novamont Terni, on the other hand, recovers energy from the thermal oxidation of 6,216 GJ of process liquid and gaseous effluents (2018 figures).</p>
Renewable Energy Sources	The Terni site is equipped with a photovoltaic plant with 10.5 kWp in power. On a Group level

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	<p>feasibility studies relating to the installation of further photovoltaic plants and an electrical mobility system are underway. This latter will also encompass the Terni site. In July 2020 the Mater-Biotech firm finalised upgrading work at its biodigestion plant to convert the biogas produced into biomethane and release it directly into the grid, thus contributing to renewable energy source dissemination.</p> <p>All the electricity bought by Novamont comes from renewable energy sources and has been certified via Guarantees of Origin (GO) since 2010. This avoids greenhouse gas emissions and other pollutants and fosters the development of renewable sources.</p> <p>Appropriate achievement and cancellation of GOs is subject to third party tests and leads on to Zero Emission Electricity certification.</p> <p>In 2020 Novamont Terni avoided emitting 10,949 t of Co2e into the atmosphere thanks to its GO.</p>
Water consumption reduction initiatives	<ul style="list-style-type: none"> - implementation of cutting-system water recycling (Mater-Bi granules). - internal recovery and reuse of cooling tower drainage water.

ENVIRONMENTAL SUSTAINABILITY AND GREENHOUSE GAS REDUCTION INITIATIVES	
Global sustainable development goals	
Global goal formalisation	<p>Novamont's mission: Developing materials and products from renewable sources via integrated chemistry and agriculture, activating locally integrated bio-refineries and supplying low environmental impact solutions guaranteeing efficient use of resources right across their life cycle, with all the social, economic and environmental system benefits that go with this.</p> <p>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 firm in legal terms. At the same time Novamont also obtained B Corporation certification issued to firms by B Lab (an American non-profit body) on the basis of assessments testifying to high social, environmental and economic performance. B Corps together form a global movement of firms whose goal is to disseminate a more evolved form of business.</p>
Environmental policy document	<p>The Novamont Group issued an updated Quality, Environment and Safety (QES) Policy in 2020. This policy applies to all the group's firms and confirms</p>

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	<p>its commitment to quality, environment, health and safety management which guarantees corporate responsibility, legal compliance, environmental awareness, greater sustainability and client satisfaction.</p> <p>In its pursuit of all the commitments set out in its Quality, Environment and Safety Policy, the Novamont group has chosen to adopt an Integrated Quality, Environment, Health and Safety Management System (SGI). This system encompasses all the procedures, processes and resources needed to develop, implement, monitor and revise the goals and targets designed to reduce the potential risk factors bound up with the aspects referred to above with a view to ongoing improvement.</p> <p>The following departments took part in drawing up the plan:</p> <ul style="list-style-type: none"> - Product Ecology; - Environmental Communication (ECOPEC); - Quality, Environment and Safety; - Engineering; - Logistics and Purchasing; - General Group Operations Management; - Agro Development; - Research and Development. <p>In 2020 the Group's Sustainability was drawn up and a Sustainability Committee set up to manage all sustainable business development aspects synergically.</p>
<p>Changes determined by sustainability strategies:</p>	<ul style="list-style-type: none"> - In its business model: the firm has always followed the principles now set out in its bioeconomics concept. Its renewable and recyclable products bring the circular economy model to fruition. <p>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.</p> <p>In company processes:</p> <ul style="list-style-type: none"> - adoption of environmentally friendly vehicles for the corporate fleet (<i>implemented</i>); - distance working systems (teleconferencing, homeworking, etc.) (<i>implemented</i>); - promotion of car pooling, use of bicycles and public transport, etc.; - changes to packaging from an environmental perspective (<i>implemented</i>).

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Purchases and supplies	
Primary raw materials used and provenance	The principal raw materials used in the production cycle are: - starch and sugars - organic compounds in the carbohydrates class; - simple monomer molecules equipped with functional groups such as to enable them to combine recursively with other molecules (identical to them or reactively complementary to them) to form macromolecules. Most raw materials are sourced in Europe.
Environmental criteria in supplier selection	Novamont has launched a structured sustainability performance assessment and monitoring process for its suppliers on the basis of the EcoVadis platform: https://ecovadis.com/ . Specifically the Ecovadis assessment methodology is based on international standards and analyses 21 sustainability criteria grouped together in four macro areas: ethical, environmental, working practices and human rights and sustainable purchasing. The project was launched in 2020 and the first results of the assessment (available from 2021) will be integrated into the group's supplier procurement and auditing processes.
Promotion of action to get suppliers involved on environmental themes	All suppliers assessed using the Ecovadis platform are sent a report highlighting the strengths and weaknesses of their sustainability practices. In this way firms can implement targeted improvement action on their Corporate Social Responsibility (CSR) profiles. This sets in motion a virtuous dialogue and discussion process between Novamont and its suppliers who are stimulated to move their businesses in the direction of greater attention to the demands of future generations.
Adoption of raw material reduction initiatives	With the primary objective of reducing the quantities of raw materials brought into the production cycle, the firm has implemented a production yield maximisation policy which encompasses recovering and making use of process waste.
Sustainable purchase policy for travel	A videoconferencing system has been in place for many years but it has not yet been formalised into a policy.
Sustainable purchase policy for consumables	N/A
Sustainable purchase policy for food and drink	N/A
Production	
Green services/products	100% of the firm's overall turnover comes from the sale of 'green' products.

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<p>Product innovations designed to replace dangerous chemical substances</p>	<p>Novamont constantly monitors legal evolutions regarding chemical substances and is attentive to increased consumer awareness of food packaging safety and sustainability. For this reason certain especially critical substances in terms of intrinsic hazard or as the subject of debate regarding their safety are not used for Mater-Bi production. These include:</p> <ul style="list-style-type: none"> - phthalate family plasticizers; - chlorurate, 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.
<p>Adoption of production process environmental certification trajectories</p>	<p>The firm has pursued a range of certification trajectories:</p> <ul style="list-style-type: none"> - Environmental Product Declaration (or EDP) pursuant to ISO 14025 standards (type III environmental labelling) - a certified environmental product statement which supplies information on the product's environmental impact calculated using the Life Cycle Assessment (LCA) methodology . - 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 UE: 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 - extends sustainable management to categories not strictly bound up with biofuel, such as fodder, foods, chemical products and solid biomass. - Product Life Cycle Assessment (LCA). Life cycle analysis is a structured and internationally

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	<p>standardised method serving to quantify the potential impact of a product or service on the environment and human health from the starting point of resource consumption and emissions.</p> <ul style="list-style-type: none"> - Organizational Life Cycle Assessment (O-LCA) - uses a life cycle analysis to analyse input, output and the potential environmental impact of activities bound up with an organisation's product portfolio. - Social Life Cycle Assessment (S-LCA) - a method used to assess products' social and sociological aspects, both real and potential, negative and positive, across its whole life cycle.
Presence of a document communicating atmospheric emissions.	Yearly atmospheric emission communications to ARPA Umbria.
Participation in environmental innovation research projects.	<p>Via:</p> <ul style="list-style-type: none"> - European Union public funds for international, national and regional projects; - national public funds; - company funds.
Waste Management	
Recycling and appropriate waste management improvement initiatives.	<p>Our policy is oriented towards waste reduction and the recycling maximisation of products for whom landfill is to be considered a 'last resort' in accordance with national and European legislation. From this perspective we seek to prioritise purchases of raw materials transported in tankers, thus avoiding the use of packaging. Where possible the same policy is used for Mater-Bi transport.</p> <p>To incentivise recycling specific paper, plastic and organic waste bins have been located in offices. Reusable hand drying systems have also been introduced (at the Novara site).</p>
Waste processing and waste reduction initiatives	Pilot projects for the reuse of packaging materials are underway (wood pallets).
Environmental impact improvement targets	<p>To improve its environmental impact the firm prioritises:</p> <ul style="list-style-type: none"> - purchasing carbon neutral raw materials or those made with BATs (Best available technologies or techniques); - the use of electrical energy from renewable sources, increasing the renewability of its products (Mater-Bi).
Innovation and research	
Investment in innovation and research	Around 5% of profits are used for research and development. This includes staff costs, tool and

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	<p>equipment repayments, purchases of technological goods and services (e.g. materials used in laboratories) and patent costs.</p> <p>The management of the action/investment needed to pursue the firm's environmental objectives will be the task of various company departments such as:</p> <ul style="list-style-type: none"> - 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	<p>Initiatives taken by the firm to reduce atmospheric emissions include:</p> <ul style="list-style-type: none"> - purchasing 100% of its electrical energy from renewable sources; - energy efficiency work on sites; - purchasing carbon neutral raw materials.
Staff training	
Staff awareness raising and training designed to reduce environmental impact	Workshops are held at the firm, i.e. educational and information-giving and in-depth study seminars on environmental themes.
Client relations	
Marketing policies designed to highlight product sustainability.	<p>For public/client communications, product environmental information is stressed in specific documents and other tools including:</p> <ul style="list-style-type: none"> - the firm's webpage; - information sheets; - explanatory leaflets.
Relations with local government and the community	
Working together with the local council on community sustainability projects and initiatives.	<p>The firm views interaction with the community and the local area to be indispensable if changes are to take place in the reference development model, in a vision which focuses not only on products but also on promoting sustainability and good local practice.</p> <p>Activities thus prioritise local community development via direct community involvement and active participation.</p> <p>A concrete example is the Porta Palazzo RePopp market workforce promotion project sponsored by Turin city council, Novamont, Associazione Eco dalle Città, Amiat – Gruppo Iren and co-ordinated by Università di Scienze Gastronomiche in Pollenzo (UNISG). The project was launched in 2016 with a</p>

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	<p>view to setting in motion an effective organic waste and fruit and vegetable collection system at Turin's Porta Palazzo food market and was then adopted on a structural basis by the town council. The goal is to replicate this project in the Terni area via the Urban Re-Generation project.</p>
Participation in competitive tenders requiring environmental criteria	N/A
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	<p>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.</p>
Initiatives and activities in schools	<p>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</p>

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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. In particular, in the Biotech Academy educational trajectory Novamont is committed to activities ranging from educational programmes, lesson creation in certain modules and the organisation of visits and educational internships at the firm.