CIRCULAR BUSINESS

ENERGY

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INNOVATION





OUR VISION FOR ENVIRONMENT

"r Manni Grou

offered to customers.

We recover steel and rock wool waste to produce new raw material, use products with a high recycled content and study the life cycle of our systems with great attention to their environmental performance.

We specialise in **integrated management of renewable sources**, proactively contributing to our **decarbonisation** journey. We also aim to offer the expertise gained from our experience to the entire supply chain involved.

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WE CONSTANTLY MONITOR OUR CURRENT AND POTENTIAL ENVIRONMENTAL IMPACTS, STRIVING TO MINIMISE THEM WHERE THEY EXIST.

The Materiality Analysis highlighted that our stakeholders consider the following environmental issues to be relevant:





WASTI

Water is not one of Manni Group's Material Topics, as water consumption is for civil and fire-fighting purposes only, as the production processes do not require any water resources.

Manni Group does not have production sites in or near protected areas or areas of high biodiversity value, so biodiversity is also not a Material Topic for our organisation. *Emissions means greenhouse gas (GHG) emissions, as the Group's activities do not result in emissions of ozone-depleting substances, nitrogen oxides (NOX) or sulphur oxides (SOX).



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A DISTINGUISHING FEATURE OF THE GROUP'S ACTIVITIES IS THE CIRCULARITY OF THE PRODUCTS USED. INDEED, ALL STEEL AND ROCKWOOL WASTE IS RECOVERED TO CREATE NEW RAW MATERIAL.

We are committed to purchasing materials that meet precise standards in terms of **the percentage of recycled** content. Our focus in this area not only provides added value to our stakeholders, but it also allows us to obtain international sustainable construction certifications, which state that the origin of the material used must be tracked and disclosed, something which is also required in public procurement under the European Union's Green Public Procurement plan.

55%

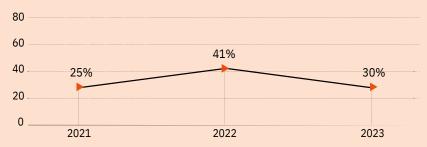
minimum percentage of recycled content in steel purchased by the Group in 2023*



Minimum content of recycled steel (Steel BU)



Minimum content of recycled steel (Panels BU)



Minimum content of recycled rockwool (Panels BU)



Minimum content of recycled chemicals (Panels BU)



INNOVATION

WASTE MANAGEMENT

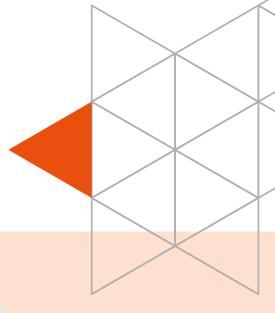
The issue of waste processing is dealt with through the information contained in a specific management system procedure, which governs assignment of roles, responsibilities and specialist external consultants.

Following the procedure ensures compliance with legal requirements. Further monitoring is ensured by periodic internal and external audits. Through a range of activities we strive to adopt a circular economy model, in which waste becomes a new resource.

- Scrap and metal powders, which account for more than 85% of the total waste from the Group's production processes, are recovered through three different processes depending on the stage at which they are generated.
- ► Steel scrap at the beginning of the process is recovered and returned to the cycle for making new metal raw materials at the foundry.
- The iron is removed from the metal powders produced during cutting, separating the ferrous parts from the polyurethane parts. The polyurethane foam resulting from this process is compacted before being disposed of. This allows the volume of waste to be reduced by about 1/3.
- Lastly, the sandwich panel offcuts are delivered to an external organisation that physically separates the sheet metal from the insulation.

- Rockwool offcuts are partly recovered and resold as a by-product. In 2023, approximately 300 tonnes were recovered.
- ▶ IBC tanks used to contain hazardous. chemicals, such as catalysts used in the production of polyurethane foam, are sent for re-use, i.e. they are returned, cleaned, and put back on the market for further use.

Manni Energy is a member of the ECOEM Consortium as a producer. Membership guarantees that the collection, removal, treatment, recycling of WEEE (waste electrical and electronic equipment), batteries and accumulators and photovoltaic modules is performed in accordance with the procedures set out in the Technical Specifications published by the GSE (Italian body in charge of promoting renewable electricity generation) and the subsequent Ministerial Decree 49/2014.



Total waste weight (tonnes)



Waste data is collected and monitored via digital forms and records, which are managed by HSE managers

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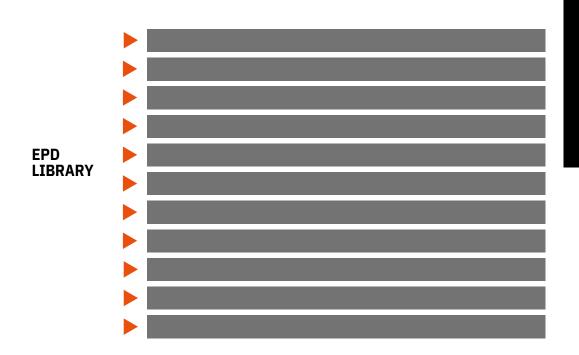
Environmental Product Declarations (EPDs) are documents that describe the environmental impacts of a product or service throughout its life cycle. EPDs allow credits to be earned for sustainable construction certifications, such as LEED or BREEAM, or for demonstrating the environmental parameters required by public procurement programmes, such as Minimum Environmental Criteria.

In order to enable designers to make the best choices to reduce the environmental impacts of buildings, in 2019 we produced

and published the first EPDs for Isopan SpA sandwich panels.

Thanks to the experience gained by Isopan's Italian sites, the project was extended to other solutions and production plants in Europe (Isopan Est, Isopan Deutschland, Isopan Ibérica) and Mexico (Isocindu).

Complying with the principles and requirements of the Product Category Rules (PCR), Life Cycle Assessment (LCA) studies were conducted and the subsidiaries obtained EPD certificates in 2023.





BIM LIBRARIES

BIM (Building Information Modelling) libraries are collections of digital objects used by planners, architects, engineers and construction professionals to create accurate three-dimensional models of buildings and analyse their environmental performance. Isopan solutions are published in Autodesk Revit.

In addition, in cooperation with ROCKWOOL, we have created a common space where our EPD-labelled rockwool sandwich boards can be viewed.

EPD PROCESS

With Isopan's expertise and Manni Energy's support, we are developing an internal management system for drafting EPDs, within the framework of the International EPD System. The dedicated team is currently working on standardising the LCA studies conducted and defining formats for future EPD documentation.

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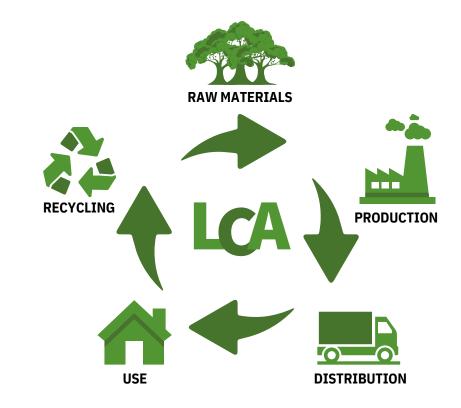


In 2023, we decided to subject Manni Green Tech's prefabricated Light Steel Frame construction solution to an LCA analysis in order to assess its **environmental impacts throughout its life cycle** and compare them with a construction system based on traditional brickwork.

The aims of the study were to:

- ➤ identify the main environmental impacts to single out areas for improvement
- determine the environmental benefits of adopting Light Steel Frame technology compared to a traditional construction system
- promote transparent, reliable and truthful communication aimed at helping customers make more informed purchasing choices

The results of the LCA study show that the LSF system has environmental advantages over the traditional system.



ISO 14021

In order to ensure compliance with the ever-increasing demands of the market, in December 2021 Isopan SpA obtained EN ISO 14021:2021 certification, which is updated annually.

The EN ISO 14021 standard "Environmental labels and declarations – Self-declared environmental claims" covers type II environmental labelling for disclosing the environmental impact of products. The certification covers most of the thermal and acoustic insulation solutions produced in the Italian factories. Notably, sandwich panels made of polyurethane insulation material and rockwool, which already have the CE marking, are covered by the certification.



We are a member of the Singapore Green Building Council (SGBC), a non-profit organisation set up with the aim of creating partnerships between the public and private sectors to promote innovative industrial solutions in the construction industry.

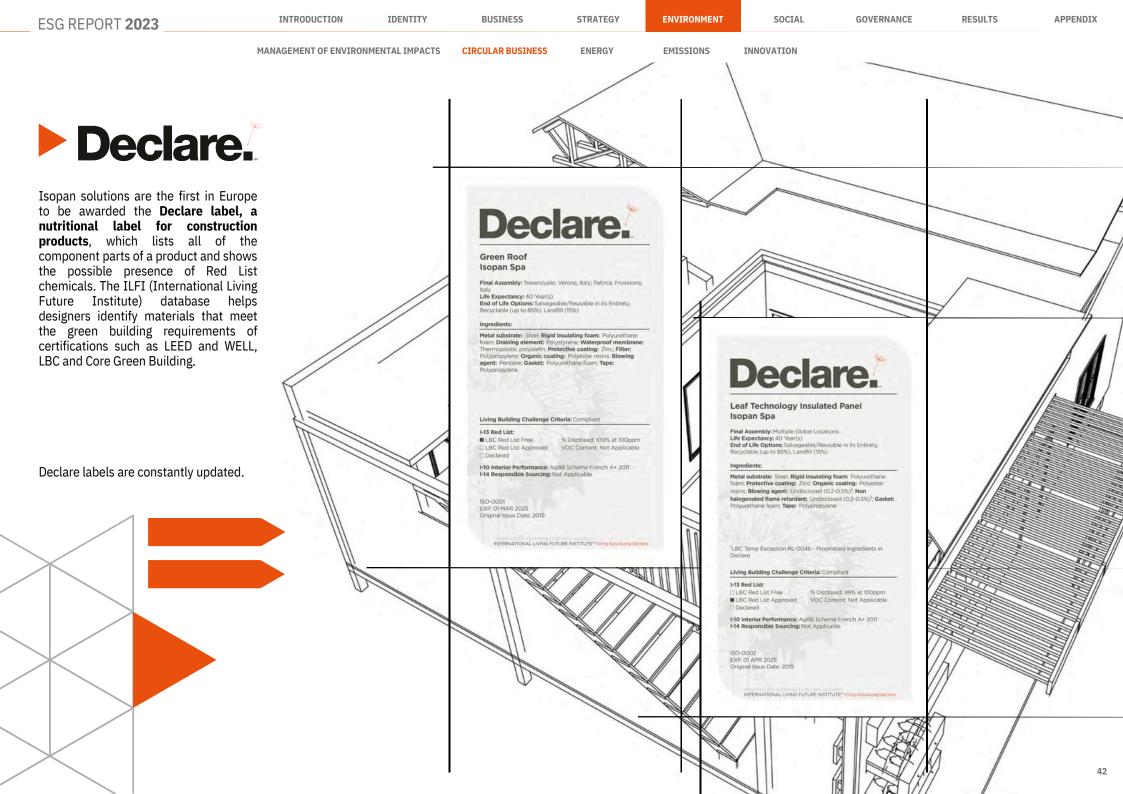
Through a local certification and labelling scheme, the organisation evaluates green building products that stand out significantly for being safer, healthier, more efficient and more sustainable.

The list also includes Isofire Wall, an Isopan sandwich panel with a rockwool insulation layer that provides resistance and protection in the event of fire.









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WE ARE CONTRIBUTING TO THE DECARBONISATION OF THE ENERGY SYSTEM BY DEVELOPING RENEWABLE ENERGY SOURCES, ENERGY EFFICIENCY AND MONITORING.

We constantly strive to develop innovative products and services aimed at improving energy efficiency and reducing environmental impact.

Manni Energy, the Group's company dedicated to energy and environmental transition processes, aims to **promote the use of energy from renewable sources**, the adoption of rational and efficient energy consumption techniques, and the development of innovative and conscious energy management tools for buildings.

The Energy Transition division provides consultancy services for Energy & Carbon Management, Energy Efficiency, consumption monitoring systems and IoT systems.

The Renewables Division is responsible for operating the Group's 14 photovoltaic plants, which generated a total of 10.1 GWh in 2023:

- ≥ 2.6 GWh consumed by the Group's Italian plants
- > 7.5 GWh fed into the grid



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total electricity consumption from renewable sources

Sixty-nine per cent of the Group's electricity needs comes from renewable sources, of which 78% is from purchasing Guarantees of Origin, while the remaining 22% is produced by the photovoltaic plants installed on the production sites, which accounts for the 2.6 GWh mentioned above.

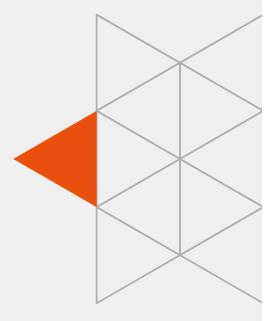
INNOVATION

► ENERGY MANAGEMENT

The Energy Management team is composed of specialist Energy Management Experts (EMEs) who are certified in civil and industrial fields and who, with the support of technicians, process data in order to **represent and interpret the consumption trends** of the Group companies for a range of purposes. The Energy Management activity is delivered through a number of services.

- Continuous analysis of energy consumption and generation/self-consumption from renewable energy plants, with regular reporting of use for management, administration and specific departments.
- Assistance in fulfilling regulatory energy obligations with reference to Italian Legislative Decree 102/2014, in particular the annual reporting savings required by Art. 7.
- ► In addition, the requirements regarding the mandatory appointment of the Energy Manager with reference to Law 10/91 are verified. Group companies are currently not obliged to make such an appointment.

- The analysis also involves the internal monitoring system (Maetrics), and provides more detail on internal consumption so that problems and operational improvements can be identified. There are currently more than 300 electricity meters on the Italian sites.
- Service for checking gas and energy invoices in order to identify and report invoicing issues.



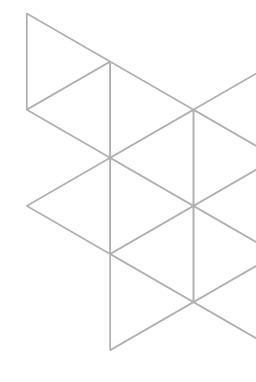
ENERGY EFFICIENCY

We believe in energy efficiency and its multiple benefits, with a view to decarbonisation, promoting renewable energy, reducing use of natural resources, economic growth and improving air quality.

Manni Energy constantly monitors the consumption of all Group plants to plan future energy efficiency improvements and assess the possibility of applying innovative technologies.

In 2023, installation of the photovoltaic plant in Isopan Ibérica (Tarragona) was completed. With a rated power of 540 kWp (theoretical maximum generable power), it will be able to produce approximately 745 MWh of electricity, 64% of which will be used by the plant machinery.

In order to fulfil the regulatory requirements of Italian Legislative Decree 102/2014, which stipulates that large companies must conduct an energy audit every four years, an energy audit was carried out at the Manni Sipre site in Mozzecane (VR) in 2023.



Possible improvements identified by Manni Energy's EGEs include:

- repowering and expansion of the photovoltaic plant
- installing inverters (motor modulation systems) on the extraction systems
- replacing boilers with heat pumps for space heating

Compared to the data reported in the ESG 2022 Report on energy efficiency measures, it is difficult to obtain monitoring data in order to verify the forecasts. Any reductions in consumption linked to efficiency improvement measures or increases linked to higher productivity cannot be associated with individual energy measures.

ONE OF THE MOST SIGNIFICANT **CHALLENGES FACING HUMANITY** IS THE FIGHT AGAINST CLIMATE CHANGE.

In 2016, with the support of our sister company Manni Energy, we initiated an ambitious plan to reduce our greenhouse gas (GHG) emissions.

We monitor and report Scope 1, Scope 2 and Scope 3 emissions internally within a GHG emission inventory in accordance with EN ISO 14064-1:2019, which is certified by a third party.

SCOPE 1> category 1 direct emissions **SCOPE 2> category 2** indirect emissions from energy consumption SCOPE 3> categories 3, 4, 5 and 6 other indirect emissions from upstream and downstream activities of the organisation

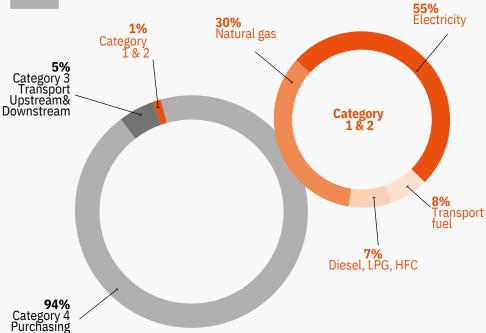


Carbon Footprint Italy

INNOVATION

In 2019 we were the first Italian company to be registered as an organisation in Carbon Footprint Italy (CFI), the Italian Carbon Management Programme Operator set up to properly report the amounts of GHG emissions from products and organisations. The results of the inventory can be consulted on the CFI register.





About 99% of the Group's total emissions are Scope 3, and for this reason we have planned a number of initiatives relating to logistics and the production of procured goods, in agreement with our suppliers.

Below is a graphical representation showing the breakdown of the Group's total emissions.

Category 1

The largest amount of direct emissions from Manni Group plants is related to consumption of natural gas, which is used for heating the buildings and offices, but also in production of Isopan insulating panels. To a lesser extent, consumption of LPG and fuels for moving goods and employees is noted.

Category 2

The Group's category 2 indirect emissions are solely the result of electricity consumption at the plants, which is necessary for the various activities.

Category 3

Of the category 3 emissions, an average portion of about 5% of the total GHG inventory is for transporting goods, both purchased and produced by the organisation.

Category 4

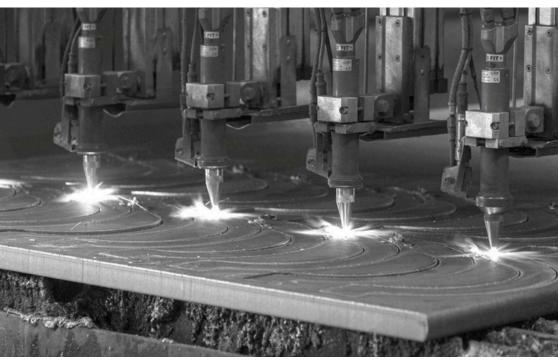
Ninety-four per cent of Manni Group's emissions are incorporated in the materials purchased to manufacture its products. The most representative raw materials in terms of emissions include the steel coils and chemical components used to make Isopan sandwich panels and the tonnes of structural steel and stainless steel processed in the Manni Sipre and Manni Inox plants.

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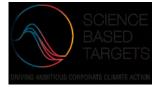
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OUR CONCRETE COMMITMENT

OUR COMMITMENT TOOK THE FORM OF SIGNING UP FOR THE GHG EMISSION REDUCTION TARGETS, GUIDELINES AND ASSESSMENT OF THE SCIENCE BASED TARGETS INITIATIVE



The Science Based Target initiative (SBTi), which was created as a result of the Paris Agreements between the United Nations Global Compact, Carbon Disclosure Project (CDP), World Resources Institute (WRI) and World Wide Fund for Nature (WWF). Its aim is to guide companies in planning emission reduction targets.

OUR SBTI TARGETS

- A 40% reduction in absolute Scope 1 and 2 GHG emissions by 2028 compared to base year 2016
 - Increasing the annual supply of renewable electricity to 92% by 2028

 An 18% reduction in Scope 3 GHG emissions per tonne of steel sold by 2028 compared to base year 2019
 - A 20% reduction in Scope 3 GHG emissions per cubic metre of insulating panel produced by 2028 compared to base year 2019

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Category 4 emissions

In 2022, an assessment was launched to adapt the goals to new, more ambitious targets and to be in line with the international scientific community's directives to limit the global temperature increase to below 1.5°C, compared to the pre-industrial era.

It is expected to be completed in 2024.

With reference to emissions and related targets, some of the initiatives being pursued by the various offices and departments within the Group are listed below.

From 2023, a multifunctional in-house team was set up with the aim of reducing the portion of CO₂ emissions that prevails over the total emissions. For this reason, the ESG department and the Procurement & Logistics department have started a thorough process to qualify and assess suppliers and their most environmentally and socially sustainable solutions. An internal management system and calculation model were set up to monitor and forecast emission **trends** with respect to the company's supplier base. A training programme for the Group's sales force will be crucial in raising customer awareness and identifying new markets that are sensitive to the use of more sustainable solutions in varying degrees.

CBAM

INNOVATION

In 2023, the EU introduced the Carbon Border Adjustment Mechanism (CBAM), an instrument to impose a fair price on carbon emitted during the production of carbon-intensive goods imported into the EU.

The intention is to encourage cleaner industrial production and help European industry achieve its decarbonisation targets.

The mechanism will be phased in gradually; there will be a transitional phase from 2023 to 2025, during which only certain aspects will be implemented. The CBAM will come into force fully from 2026.

As importers of steel and aluminium, in order to adapt to the EU regulation, we have set up a working team in which cross-disciplinary departments have an active role in this process.

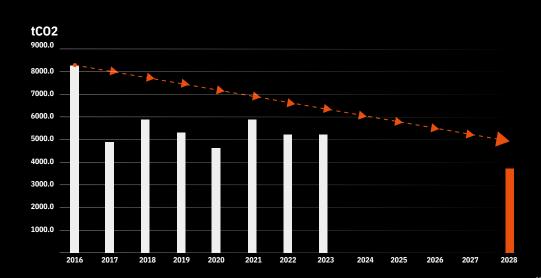
We are committed to reporting the emissions incorporated in products imported from non-EU countries.

Timely adaptation allowed us to respond correctly to the first deadline of 31/01/2024. We are continuing to work to be ready for the new regulatory deadlines.

Category 1 and 2 emissions

Although these emissions account for about in 2023) comes from the Group's own 1% of the Group's total emissions, we are photovoltaic plants. constantly investing in **decarbonisation** In other words, we almost completely offset projects and activities involving the ESG our impact on the grid, certifying with GOs department, Energy Management department that the Group offsets almost all the electricity and company contacts in the plants. Among the taken from Italian plants by generating almost initiatives, it is important to mention as much and feeding it back into the grid. The electrification of plant heating and movement search for a partner to cover the electricity of goods and people. With the aim of increasing the supply of electricity from renewable sources, since 2017 we have been purchasing Group's total Scope 1 and Scope 2 emissions Guarantees of Origin (GO) in quantities equal to (calculated using market-based logic) from the energy consumed by our Italian plants. the base year 2016 to today, and estimating Most GO generation (90% in 2022, 80%

consumption of foreign plants is ongoing. Below is a graph showing the trend for the emissions up to 2028.



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We are proponents of inclusive industrialisation that embraces partnerships, with the aim of increasing efficiency in the consumption of resources and reducing environmental impacts.

We continue to invest in scientific research, with the awareness that it can contribute to improving the entire supply chain.

We manufacture environmentally friendly products with reduced carbon emissions, using the most innovative materials for health and safety.

The Group's Research and Development (R&D) department, set up with the aim of strengthening synergies between the various

subsidiaries, constantly strives to develop and monitor innovation. The main areas of focus relate to off-site construction, the recycled content of materials, fire protection and earthquake-proofing.

Manni Group invests in innovation, while protecting its intellectual property related to product and process development through an ever-expanding patent portfolio.

"Innovation and research, the ability to network, to create culture on these issues, as well as the ability to tap the academic world that forms the designers of tomorrow, all on the underlying canvas of ESG criteria, are all factors that contribute to success in facing the new challenges of our constantly evolving society."

Marco Imperadori, Full Professor at the Politecnico di Milano

FORTELIA

Fortelia is an innovation created from a collaboration with the great academic minds from the **University of Trieste** and analysis by the **Politecnico di Milano**, which, combined with the expertise of Isopan's R&D department, have enabled a real technological shift away from the sandwich panel sector.

The panel has a specially shaped external corrugated profile, which makes the building envelope more resistant and is suitable for both roofs and walls. It is, in fact, a **new generation insulating panel** for all cladding solutions: flat roof, pitched roof, vertical cladding. The Isopan solution was launched on the market in 2023.

STUDIES SHOW:

25% reduction in thickness

50% increase in load-bearing capacity

+50% increase in structural span



INNOVATION

ADDMIRA

Launched on the market in 2021, ADDMIRA is the largest range of products and solutions dedicated to architecture and building facade design.

With the sub-categories ADDCross, ADDVision and ADDWind, it brings together Isopan's incremental innovations in this area, continuing to enrich the portfolio of solutions while continuing to pay special attention to aestheticarchitectural aspects, without forgetting the focus on technical features such as:

- water tightness
- airtightness
- fire-retardant performance



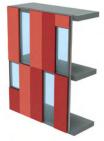


ADDMIRA2D

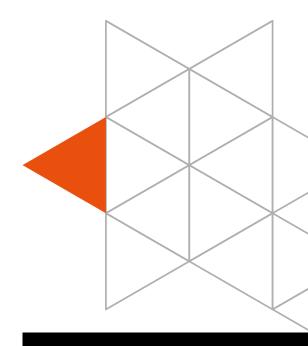
ADDMIRA2D is the certified prefabricated exterior wall system* designed by Manni Green Tech for modular envelope elements.

The innovative technology makes it suitable in both construction of new buildings and redevelopment of existing buildings. The Light Steel Frame and Isopan sandwich panels are pre-assembled in the factory and then transported to the construction site. The facade system is based on the concept of tailor-made engineering; the modules are customisable and calibrated to the specific needs of each project.





* According to the parameters of EN 13830 for curtain wall systems



FIRE SAFETY

The fire safety of insulation products is always a focus for our engineers.

Every year, Isopan products are tested and certified for safety and fire prevention. Performance is assessed according to strict international protocols: Factory Mutual (FM) 4471, 4880, 4881.

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Since 2018, Isopan has been taking part in the European StepUP project, with the aim of developing affordable solutions and technologies to make decarbonizing buildings a reliable, attractive and sustainable investment.

The new technologies include a Plug & Play Envelope system, a pre-assembled facade module aimed at redevelopment of existing buildings using the typical off-site

construction approach that involves certain times and costs, fast on-site installation and careful upstream design work.

The technologies developed were applied in 2023 in a pilot building in Hungary.





INNOVATION

(MANUFACTURING PROJECT)

From the growing need for innovative Construction 4.0 solutions, in 2022 we invested in a research project at the Be Factory technology hub in Rovereto, an industrial innovation hub for the green building, sustainable mobility and sports technology sectors. Settling in the district allows us on the one hand to continue the research and development of new building systems, and on the other hand to initiate partnerships to address common ESG problems and challenges.

The project involves identifying new construction solutions by layering innovative materials and an approach based on integrating the areas of energy and construction, in line with market requirements in terms of digitalisation. The aim of the research is to carry out an interdisciplinary study involving academic and industrial expertise, to identify an innovative construction solution with a focus on off-site solutions for the building envelope.

In addition to this, the laboratory's high-tech machinery gives researchers the opportunity to carry out tests to check the mechanical and technical properties of Manni Green Tech materials and solutions under development.

The project is financed under Law 6/1999 of the Autonomous Province of Trento, an incentive that supports companies investing in research and development activities.

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MANNI INOX

Manni Inox's processing will undergo a major change thanks to its collaboration with Neurality, a company that exploits artificial intelligence to allow organisations to automate visual inspections and ensure reliable and accurate analysis.

Improved production processes are the basis for innovation and will give our employees an increasingly safe working environment. The new machinery will be installed during 2024.



MANNI SIPRE

Manni Sipre's new 2024–2026 investment plan is based on the Group's four development drivers.

- INNOVATION: acquisition of new machinery will allow us to develop skills and extend the range of processing we offer customers.
- SUSTAINABLE DEVELOPMENT: all investments have the common goal of reducing environmental and social impacts with the same performance. Modern facilities will reduce energy consumption and be safer for workers.
- RESEARCH AND DEVELOPMENT: indispensable to be able to develop and patent systems and machinery to meet growing needs.
- PARTNERSHIPS: at the core of all investments is a great focus on relationships with other Group companies and the supply chain, which allows us to strengthen synergies in a win-win situation.

