



SUSTAINABILITY REPORT 2024



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About us

LU-VE Group is the third largest operator in the world and second largest in Europe specialising in the design and manufacture of highly engineered air heat exchangers and high-efficiency cooling systems for commercial, industrial and technological applications.

Companies are first and foremost women, men and ideas.

People with long experience, young people with creativity and enthusiasm, specialists with the highest academic qualifications, are united by passion for their work and a vision of a better, more advanced, balanced and aware world.

Iginio Liberali, founder of LU-VE





People, plants, offices and turnover

20 Plants

ITALY

Alonte (Vicenza)
Flumignano di Talmassons (UD)*
Mel (Belluno)
Limana (Belluno)
Travacò Siccomario (PV)
Uboldo (Varese)*
Villa Santina (Udine)

CHINA

Tianmen (Hubei)

FINLAND

Vantaa (Uusimaa)

INDIA

Bhiwadi (Rajasthan)
Sarole (Pune dis., Maharashtra)

POLAND

Gliwice (Slesia)*

CZECH REPUBLIC

Novosedly (South Moravia)

RUSSIA

Lipetsk

SWEDEN

Asarum (Karlshamn)

USA

Jacksonville (Texas)*

(* *two plants*)

35 Sales Offices

Turnover (2024)
EUR 589.1 million

Employees (2024)
approximately 4,000



56%

Turnover from sustainable products, with natural refrigerants and/or high-efficiency motors



-15%

Greenhouse gas emissions (Scope 1 + Scope 2)* compared to 2022



87%

People evaluated in the Performance Management Program

** Scope 1 emissions directly originating from the company*

Scope 2 indirect emissions resulting from the consumption of purchased energy



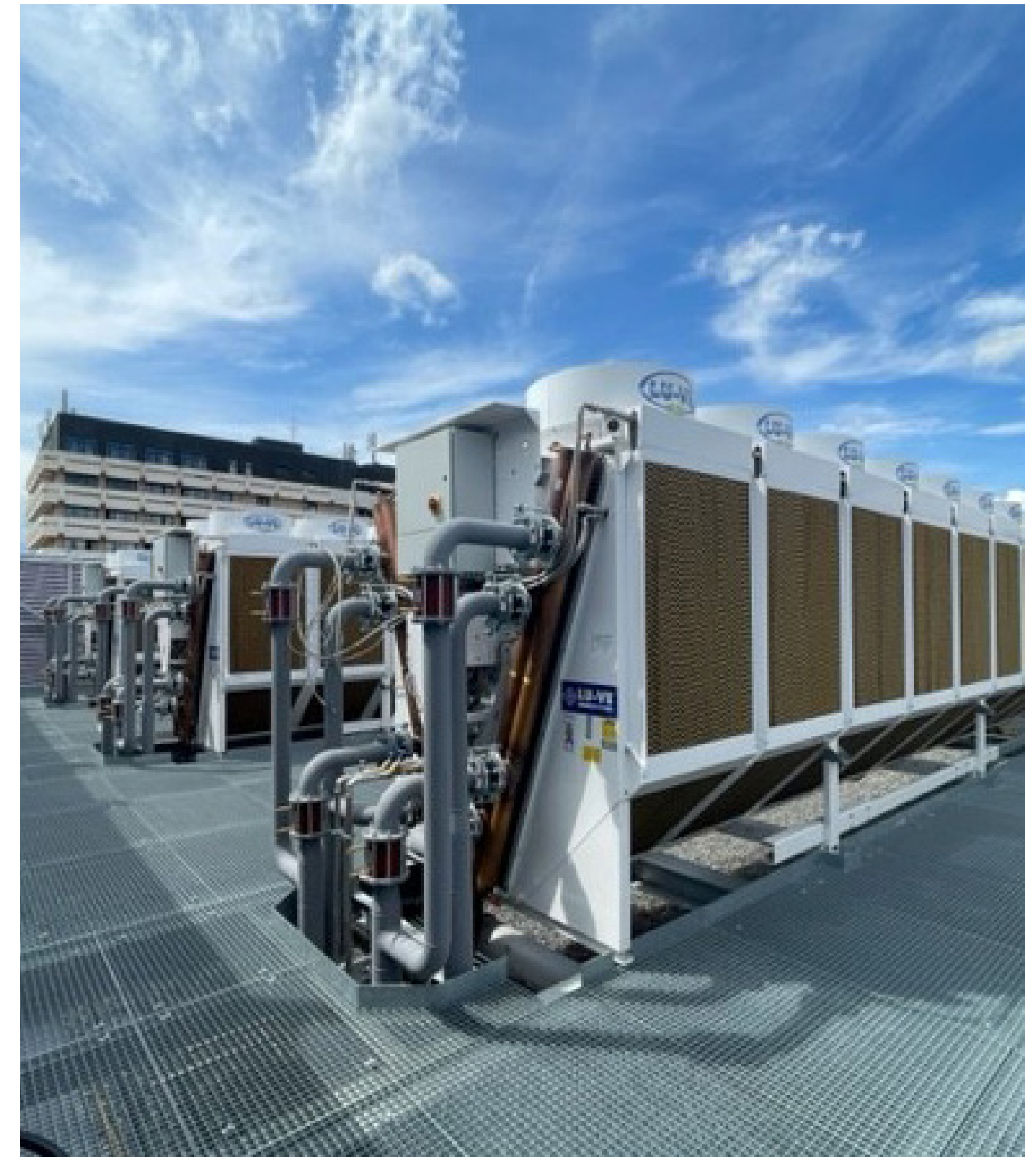
Our ecosystem: products, applications and commitment to improvement

Applications	LU-VE Group Commitment
Commercial and industrial refrigeration	Food safety A proper cold chain ensures safe and properly stored food and reduces food waste
Air conditioning	Climate well-being Indoor climate comfort in buildings is an important element of people's health and well-being and quality of life
Process cooling	Energy efficiency Maximising the energy efficiency of factories, buildings and systems is crucial for protecting the planet, reducing environmental impact and improving businesses' competitiveness.
Other applications	Digital transformation Cloud computing, data centers, artificial intelligence: operational and efficient data centers, also thanks to cooling systems with LU-VE products, are essential to the global digital transformation process

Heat exchangers

Air cooled equipment

Glass doors





Our strategy (1/2)

Our ESG strategy was included for the first time in the 2023-2025 Sustainability Plan, approved by the Board of Directors in February 2023.

In line with the Group's strategic priorities, a three-year action plan was outlined based on **four key elements**:



Sustainability integrated into the business plan

levers and targets are an integral part of the plan

State-of-the-art products

developing solutions designed for natural and high-efficiency refrigerants and promoting the positive impact of products by offering decarbonisation solutions

Climate neutrality

identifying greenhouse gas emission reduction actions and targets across its operations and along the value chain, in line with the Paris Agreements

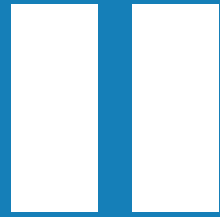
High engagement

adopting policies to promote the well-being of employees and enhancing diversity, ensuring a high level of people engagement.



Our strategy (2/2)

OBJECTIVES	POSITIONING	KEY INDICATORS	2022	2023	2024	TARGET 2024	TARGET 2025
Sustainability integrated into the business plan	LU-VE Group integrated sustainability levers and targets into the business plan	Turnover from sustainable products (% of total turnover)	50.7%	53.6%	56%	>54%	>56%
		Suppliers with completed Supplier Form (%)	57%	67%	70%	>69%	>71%
State-of-the-art products	Solutions with natural refrigerants and/or high-efficiency motors and promotion of the positive impact of our products in four areas: food security, climate well-being, energy efficiency, digital transformation	Suppliers audits (no.)	4	10	11	11	15
Climate neutrality	Actions and targets to reduce environmental impacts along the entire value chain, from sourcing to using products that increase market competitiveness	Reduction of Scope 1 and Scope 2 greenhouse gas emissions (% of 2022 baseline)	-	-6.39%	-15%	-10%	-19%
High engagement	LU-VE Group adopts strong policies to promote the well-being of workers and enhance diversity with the ultimate aim of ensuring their engagement and improving productivity	Employees evaluated in Performance Management (%)	-	74%	87%	>75%	>80%
		Accident frequency index	5.21	3.08	3.65	<4.14	<=3.25
		Accident severity index	0.20	0.09	0.12	<0.15	<=0.12



SUSTAINABILITY INTEGRATED INTO THE BUSINESS PLAN





LU-VE Sustainability Governance (1/2)

The Board of Directors defines the Company's and Group's strategies, and monitors their implementation.

The Control and Risk Committee oversees sustainability processes and activities.

The Sustainability Steering Committee. It was created in 2022 to share the progress of the Group's sustainability performance and discuss strategic lines of action. The Chief Strategic Development Officer, the Chief Executive Officer, the Group General Manager, the Chief Financial Officer, the Investor Relator and the Sustainability Office permanently sit there.

In 2022, the Sustainability Steering Committee defined a set of actions to be implemented in the period from 2023 to 2025, which were formalised in the **Sustainability Plan** approved by the BoD in February 2023.

The Sustainability Office (operational since 2021) reports directly to the CSDO, with the aim of ensuring detailed management of

projects at international level.

The Supervisory Body is set up and functioning pursuant to Italian Legislative Decree no. 231/2001.

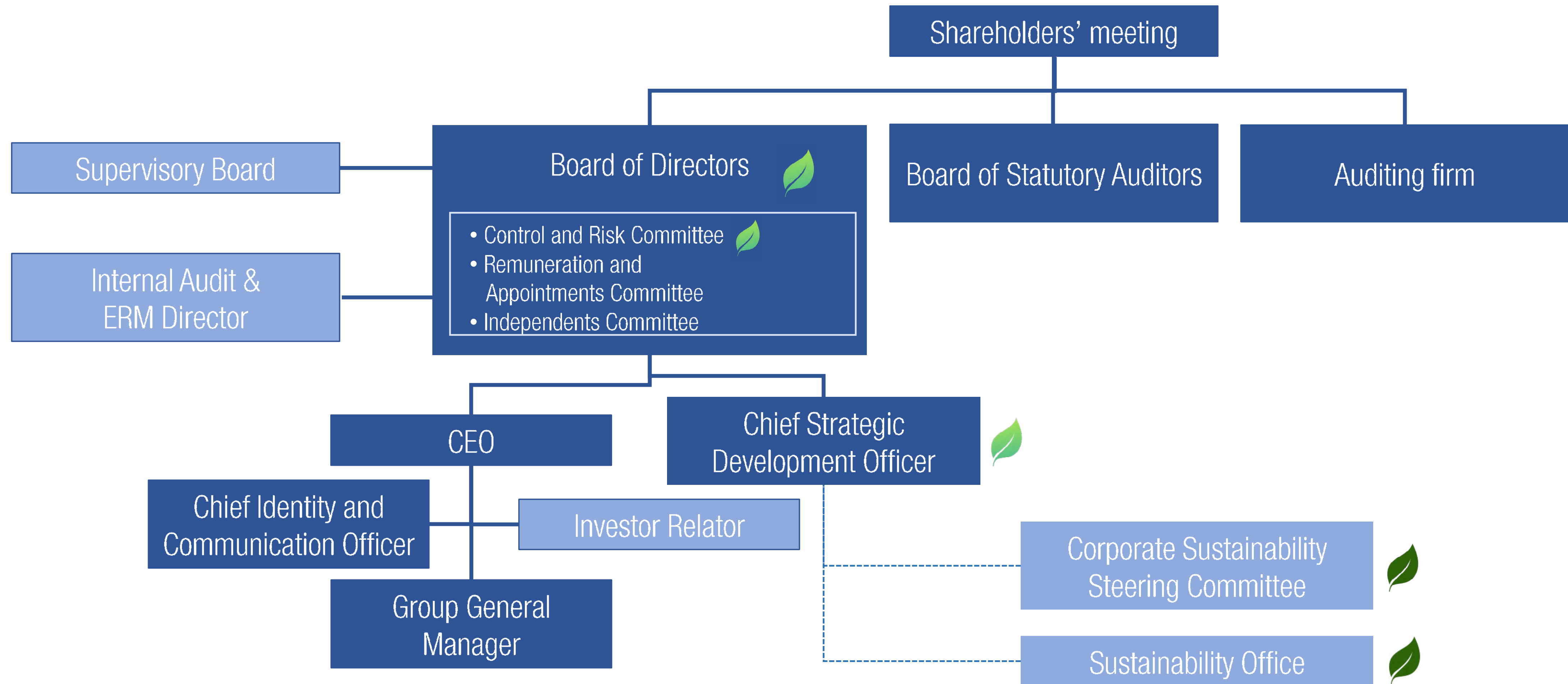
The Internal Audit is responsible for ensuring that the internal control and risk management system is operational and adequate.

The progress of sustainability policies and strategies is reviewed by the relevant committees and incentivised through the Remuneration Policy.

At a specific meeting in December 2024, LU-VE also explained the main impacts, risks and opportunities underlying the Group's sustainability strategies to the Unitary workplace union structure (RSU).



LU-VE Sustainability Governance (2/2)



LEGENDA

 Specific sustainability responsibilities

 Dedicated to sustainability



In 2024, increase in turnover from sustainable products

Over time, the refrigeration sector has identified increasingly sustainable natural refrigerants such as carbon dioxide (CO₂), ammonia (NH₃), propane (R290) and water (H₂O), which are characterised by low Global Warming Potential (GWP) and Ozone Depletion Potential (ODP) values.

GWP is an indicator that quantifies the impact of a greenhouse gas on global warming. The ODP indicates the ability of a substance to damage the atmospheric ozone layer.

One of the targets of the Sustainability Plan is to increase turnover from products that use natural refrigerants and/or high energy-efficient motors, i.e. with a lower emission impact (with reference to the Scope 3 category 11 missions of the GHG Protocol).

The target includes:

>54% revenues from sales of products using natural refrigerants and/or high energy-efficient motors by the end of 2024;

>56% revenues from sales of products using natural refrigerants and/or high energy-efficient motors by the end of 2025.

At the end of 2024, the target of >54% was achieved, reaching 56%

Fans with high-efficiency motors (electronic “EC” motors) represent one of the main innovations of recent years and mark an important step towards achieving ventilated heat exchangers with improved efficiency and minimal energy consumption for ventilation.



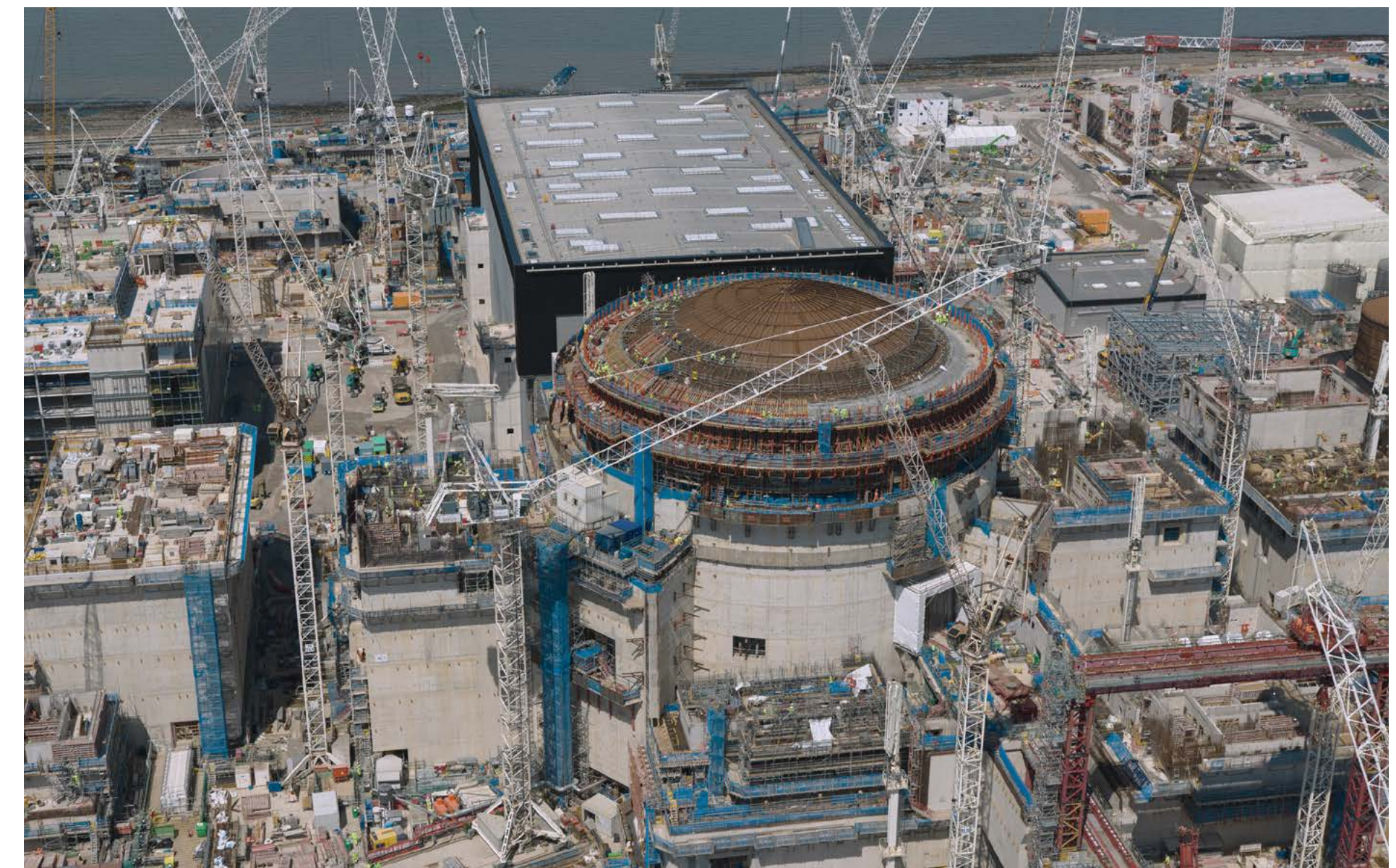
Solutions for decarbonisation and energy transition

LU-VE promotes solutions to support decarbonisation:

- **heat pumps** for domestic and industrial use, also contributing to the development of the new heat pump range for one of Europe's leading players in domestic heating applications;
- **wind turbine** cooling systems;
- high-voltage electrification systems to support European **electrification** plans, which are key for the **energy transition**;
- **charging stations for electric vehicles**, especially fast charging stations, which require a heat exchanger to cool the unit;
- **retrofitting of refrigerated counters that reduce energy** impacts at points of sale/supermarkets, through the installation of glass doors and LED lighting systems, starting in the European market.

This was made possible through the development of a dedicated service department in 2024.

In the area of decarbonisation solutions, an agreement has been signed to supply emergency generator cooling systems for the Hinkley Point C nuclear power station in Somerset, England.





European taxonomy: our environmentally sustainable activities

Regulation (EU) 2020/852 – EU Taxonomy Regulation of the European Commission established a unified classification system aimed at defining economic activities that can be considered environmentally sustainable. The objective of this system is to support the implementation of the European Green Deal and to direct investments that support the transition to a zero net carbon economy by 2050.

An economic activity can only be classified as environmentally sustainable (“eligible activity”) if it substantially contributes to at least one of the following six environmental objectives:

Climate change mitigation (CCM)

Climate change adaptation (CCA)

Sustainable use and protection of water and marine resources (WTR)

Transition to a circular economy (CE)

Pollution prevention and control (PPC)

Protection and restoration of biodiversity and ecosystems (BIO)

36%

% of turnover of LU-VE products and services eligible for the climate change objective

41%

CAPEX from products or services eligible for the climate change objective and the transition to a circular economy

36%

OPEX from products or services eligible for the climate change objective and the transition to a circular economy



Sustainability rating: transparent information for stakeholders

In order to ensure transparency and share detailed information on sustainability topics with customers and investors, LU-VE underwent an EcoVadis assessment and responded to the CDP Climate Change and CDP Water Security questionnaires for the first time in 2024.

CDP (Carbon Disclosure Project) is a global non-profit organisation that promotes the disclosure of environmental topics by companies, financial markets, cities, states and regions, with the aim of managing their impact.

In 2024, LU-VE Group was awarded the EcoVadis Bronze Medal for the third time. EcoVadis medals and badges are awarded to companies that have completed the assessment process and proven that they have a robust management system in place to address the sustainability criteria defined by the rating methodology.

Based on 21 sustainability criteria, the EcoVadis rating assessed the Group's policies, actions and results in four key areas: environment, labour and human rights, ethics and sustainable procurement. According to the latest Rate the Raters report, investors consider

EcoVadis to be one of the most reliable corporate sustainability rating companies.



Additional information from ECOVADIS.COM



Additional information from CDP.COM



Suppliers: targets and management methods

LU-VE has defined the following targets:

increase the number of suppliers audits: 15 new audits by the end of 2025;

increase the percentage of relevant suppliers who have signed the **Supplier Form:** >71% by 2025

LU-VE is diligently working on its supply chain for “Conflict Minerals”

In 2017, the European Union adopted Regulation (EU) 2017/821, which establishes obligations regarding supply chain due diligence for EU importers of tin, tantalum and tungsten, gold and their derivatives that originate in conflict or high-risk areas.

In the period covered by this report, the Group was not subject to the obligations defined by this regulatory framework, however, voluntarily, it choose to adopt responsible metal procurement policy, adopting an approach based on the OECD document “Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas”. During the reporting period, the Group has applied due diligence to the procurement of tin, tantalum, tungsten, gold and their derivatives (“3TG”), and cobalt and mica. The adopted procedure includes traceability management through the direct and periodic involvement of our suppliers to identify the risks associated with their sourcing in order to mitigate them.



Environmental and social certifications

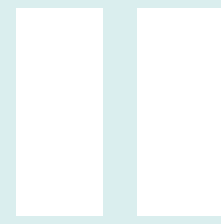
Organisational models that comply with international ISO standards are useful for monitoring the impact of activities and systematically promoting sustainable improvements.

In 2022, the plant in Bhiwadi (Rajasthan, India) obtained renewal of its Green Factory Building Gold certification from the Indian Green Building Council (IGBC). This certification recognises national excellence in waste management, water efficiency, reduction in the use of fossil fuels, energy efficiency and conservation of natural resources

The current certification will be valid until 2025.



PRODUCTION FACILITIES	ISO 9001	ISO 14001	ISO 45001	ISO 50001
	Organisation quality management	Environmental management	Occupational health and safety management	Energy management
ITALY				
Alonte (Vicenza)	🌀	🌀	🌀	
Flumignano di Talmassons (Udine) *Refrion Srl	🌀			
Flumignano di Talmassons (Udine) *R.M.S. Srl	🌀			
Limana (Belluno)	🌀	🌀	🌀	
Mel (Belluno)	🌀			
Travacò Siccomario (Pavia)	🌀	🌀	🌀	
Uboldo (Varese)	🌀	🌀		🌀
CHINA - Tianmen (Hubei)	🌀	🌀	🌀 NEW	
FINLAND - Vantaa (Uusimaa)	🌀	🌀		
INDIA				
Bhiwadi (Rajasthan)	🌀	🌀		
Sarole (Pune Dist., Maharashtra)	🌀	🌀	🌀	
POLAND - Gliwice (Slesia) 2 facilities	🌀			
CZECH REPUBLIC - Novosedly (Southern Moravia)	🌀	🌀		
RUSSIA - Lipetsk				
SWEDEN - Asarum (Karlshamn)	🌀			
USA - Jacksonville (Texas)	🌀			



STATE-OF-THE-ART PRODUCTS





EUROVENT: voluntary performance certification

For more than twenty years, LU-VE Group has been a voluntary member of the Eurovent certification programme, the European association for heating, ventilation, air conditioning, process cooling and food cold chain technology.

LU-VE Group has its products tested and checked by a recognised third party, such as Eurovent to:

- guarantee product performance for customers
- guarantee reliable solutions
- be transparent

Specifically, the “Eurovent Certified Performance” (ECP) certificate verifies the products compliance with specific standards related to the product performance in terms of power, air flow, energy consumption, sound emissions and construction specifications.

Over the years, the Group has achieved significant recognition in a number of areas:

2000: LU-VE was the **first company in Europe** to obtain the new Eurovent “Certify All” certification for its entire range of condensers,

dry coolers and unit coolers;

2016: LU-VE is the first manufacturer for which Eurovent has certified that its heat exchangers for refrigeration have **never recorded a negative test result** during three different test cycles (between 2011 and 2015);

2020: LU-VE is one of the very first companies to obtain **Eurovent certification for CO₂** unit coolers (thermal performance, energy consumption and air flows), marketed under the LU-VE Exchangers and AIA LU-VE trademarks.

In October 2022, LU-VE Group was the first company in the Eurovent programme to obtain certification for CO₂ gas coolers for the LU-VE Exchangers and Alfa LU-VE brands.





Sustainable design in 2024 (1/2)

At LU-VE Group, design is guided by reduced energy consumption, reduced use of refrigerant, low noise levels, high reliability over time and compact dimensions.

In 2024, the Group conducted various activities.

Review of the new product development process

The Group initiated a review of the new product development process to optimise the flow of activities and enhance innovation capacity. As part of this review, a number of aspects were integrated to improve and track the level of circularity in the design of the Group's solutions.

The material efficiency indicator, expressed in kW/m², is intended to measure the heat exchange capacity per unit of finned surface area; the higher the number, the better the performance with reduced material consumption.

In addition, some specific activities were integrated, such as, in the concept identification phase, the initial assessment of the product's end-of-life and reusability, while in the technical feasibility analysis phase, the assessment of the use of recycled or recyclable materials and the level of reparability of the product to extend its life, with the aim of increasing product longevity and reducing waste generation, is required. The new process will be tested in early 2025.

New product development

The Group continued its activities to **reduce the use of raw materials while ensuring the same energy performance.**

With this in mind, the Group continued its industrialisation activities for smaller diameter pipes.

The transition of many products from the 9.52 mm and 7.94 mm pipe to the 5 mm one is leading to many gas coolers being more efficient and using less raw material.

Other activities in this regard are reductions in aluminium fin thicknesses as well as, for example, the use of mixed plastic/aluminium profiles in the glass door segment, which reduce use consumption



Sustainable design in 2024 (2/2)

continued from page 20

by reducing thermal bridges in refrigerated counters.

New technical solutions were launched on the market by the Group at Chillventa 2024. The 7 mm diameter ribbed aluminium pipe is an absolute novelty that offers high performance as well as weight reduction, which for the refrigerated transport sector, especially with the ongoing transition to electric vehicles, is a major competitive advantage.

Supply chain assessment: the Group has initiated pilot surveys of some aluminium and copper suppliers to start **mapping material content from recycling**, the availability of an environmental product label (EPD) and any carbon footprint.





R&D laboratories: state-of-the-art design (1/2)

LU-VE Group's design is conducted thanks to **four Research & Development ("R&D") laboratories** in Uboldo (Varese, Italy), Alonte (Vicenza, Italy), Fluminiano di Talmassons (Udine, Italy) and Vantaa (Finland).

The R&D laboratory in Uboldo is a state-of-the-art technology hub in Europe in terms of size and competence. It is one of the few in the world capable of conducting performance tests on appliances that use CO₂ as a refrigerant fluid.

The laboratory has an area dedicated to the thermodynamic design of heat exchangers: the heart of the Group's products.

A second section is reserved for experimental design, where medium and long-term research is conducted in collaboration with the Polytechnic Institute of Milan and other universities and scientific centres.

Lastly, the laboratory has an area specifically dedicated to CFD - Computational Fluid Dynamics, which studies and analyses fluid-dy-

namic phenomena and heat exchange processes.

The Group's R&D laboratories were the first in the sector to use this technology applied to the study of thermo-fluid dynamic processes in heat exchangers. The use of CFD codes applied to finned exchangers has enabled a better understanding of fluid-dynamic phenomena and heat transfer processes.

As a result, it has been possible to further increase the already very high exchange characteristics of the different geometries used, continuously renewing the layers of air in contact with the specialised fins and increasing the turbulence generated by the latter.

The greater uniformity of the air flow obtained thanks to the design of the air cooler fins allows less humidity to be deposited on the fin and therefore less ice formation, reducing defrosting cycles and consequently energy consumption. The results of the CFD analysis have been accurately confirmed by experimental tests. For design purposes, the laboratory uses software specially developed by the Group and calibrated using data from the laboratory.



R&D laboratories: state-of-the-art design (2/2)

The Refrion Climatic Chamber (R.C.C) in Flumignano di Talmassons is one of the largest climatic chambers in Europe and is the first laboratory dedicated to the performance testing of liquid coolers.

The R.C.C. is able to measure the performance of even the largest and most powerful air-cooled equipment, and it can be split crosswise to match the size of the unit under test.

A specific area is dedicated to prototype testing, supporting the R&D department. Measurements can be taken in the laboratory not only according to EN 1048, but above all under the exact operating and environmental conditions defined by the customer when sizing the unit.

By being able to monitor both the temperature and relative humidity of the air inside the chamber, it is also possible to test units not covered by the Eurovent certification programme, such as those equipped with adiabatic saturation systems.

The temperatures at the inlet and outlet of the liquid circulating in the equipment, the volumetric flow rate and the relative pressure drop are measured in the R.C.C. Electrical voltages and currents and the power factor are then measured.

It is then possible to accurately calculate the heat exchange power, electrical power consumption and energy efficiency index of the unit being tested.

Lastly, it is possible to measure the sound power level of the air-cooled equipment by means of an intensimetric probe according to EN 13487 and ISO 9614-1.





Collaborative innovation

Numerous collaborations with universities and other research institutions enable LU-VE Group to enhance its studies and innovation processes.

Since its foundation, the Group has collaborated or is currently collaborating with a total of around **30 Italian and international universities and research institutes** across three continents.

Since 1986, he has been working closely with the Polytechnic Institute of Milan.



2024 PROJECTS

TESSERE Project:

Development of innovative heat pumps financed by the Italian RRP in collaboration with the Polytechnic Institute of Milan

SMARTCO2 project:

Development of CO₂ heat pumps financed by the Danish government

NEXT GEN HC project:

Development of heat pumps for district heating financed by the Finnish government



CLIMATE NEUTRALITY





LU-VE towards climate neutrality

With reference to Scope 1 and Scope 2 emission reduction targets calculated through a market-based methodology, the Group has defined the following targets, considering the 2022 baseline (i.e. the last financial year prior to the 2023 - 2025 sustainability plan):

10% reduction for 2024
19% reduction for 2025

The 10% reduction target for 2024 was achieved, with an overall reduction of 15% compared to the 2022 baseline.

Covering the 2023-2025 three-year period, the above-mentioned reduction targets are an integral part of the Group's Sustainability Plan, defined for the years 2023-2025, drawn up by the Corporate Sustainability Steering Committee, reviewed by the Control and Risk

Committee and approved by the Parent Company's Board of Directors in February 2023.

These targets are part of a broader pathway that envisages a 42% reduction from the baseline by **2030**, taking into account the target of achieving climate neutrality by **2050**.

The specific Scope 1 and Scope 2 greenhouse gas emission reduction targets were defined in accordance with science-based targets, based on the tools made publicly available by the Science-based Targets Initiative, so that these targets are compatible with limiting global warming to 1.5 °C in line with the Paris Agreement

LU-VE Group is committed to developing a structured transition plan to reduce Scope 3* greenhouse gas emissions by the end of 2026.



Climate Change Actions (1/2)

Use of energy from renewable sources

In 2024, 46% of the total electric energy consumed by LU-VE came from renewable energy sources, produced by on-site photovoltaic plants or purchased with Guarantees of Origin.

Electric energy purchased from renewable sources certified through Guarantees of Origin amounted to 15,056 MWh, and accounted for 42% of the total electric energy consumed.

This reduced emissions by 7,674tCO_{2e}.

Guarantees of Origin were purchased for the entire consumption of electric energy from the national grid for the plants in Asarum (Sweden), Limana (Belluno, Italy), Novosedly (Czech Republic), Travacò Siccomario (Pavia, Italy) and Uboldo (Varese, Italy) as in previous years, and, from 2024, also for the plants in Alonte (Vicenza, Italy)

and Mel (Belluno, Italy).

The total renewable energy produced in 2024 by the Group's photovoltaic plants amounted to 1,547 MWh, and accounted for 4% of the total electric energy consumed.

This reduced emissions by 1,011tCO_{2e}.

Photovoltaic plants are located at the plants in Bhiwa (India), Limana (Belluno, Italy), Travacò Siccomario (Pavia, Italy), Uboldo (Varese, Italy) and Vantaa (Finland);





Climate change actions (2/2)

Energy efficiency: Energy consumption optimisation initiatives were implemented for production plants and offices. At the plant in Poland, energy recovery measures were implemented to heat and cool the production areas.

These measures saved more than 180 MWh, equal to 142 tCO_{2e} avoided.

At the plant in the Czech Republic, improvements were made to the lighting system that improved the brightness control system and reduced electric energy consumption by about 80MWh.

The Uboldo plant (Varese, Italy), which hosts the headquarters and is among the most energy-consuming plants, conducted its operations in full compliance with the ISO 50001 international energy management standard.

Starting from the second year of its 2025-2028 Business Plan, LU-VE Group allocated EUR 7 million to reduce Scope 1 and 2 emissions by investing in advanced production technologies with a reduced climate impact.





Carbon footprint (1/2)

In 2023, LU-VE Group adopted a dedicated monitoring system across all its production plants **with the aim of accurately monitoring its energy consumption and emissions' impacts and identifying areas for reduction**

Powered by local Operations and Controlling offices, the system enables monthly monitoring of energy consumption and evaluates point variations per month and incremental variations over time.

Relevant consumption is that attributable to greenhouse gas emissions (Scope 1 and Scope 2), for which the LU-VE Group has set reduction targets in line with science-based reduction methodologies (science-based targets).

In 2024, LU-VE Group reduced its emissions (Scope 1 and Scope 2 – market based) by 15% on the 2022 baseline, achieving the target set out in its sustainability plan.





Carbon footprint (2/2)

GREENHOUSE GAS EMISSIONS (in tCO _{2eq})	2024
Scope 1 greenhouse gas emissions	7,920
Scope 2 greenhouse gas emissions, Market-based methodology	12,695
Scope 2 greenhouse gas emissions, Location-based methodology	16,875
Scope 3 greenhouse gas emissions	2,478,379



GREENHOUSE GAS EMISSIONS (in tCO _{2eq})	Milestones and target years			
	Historical data 2024	2025	2030	% Delta 2024/2022
Scope 1 and Scope 2 GHG emissions				
Gross Scope 1 (tCO _{2eq}) and Scope 2 GHG emissions according to Market Based methodology (tCO _{2eq})	20,615	-19% (*)	-42% (*)	-15%
Gross Scope 1 (tCO _{2eq}) and Scope 2 GHG emissions according to Location Based methodology (tCO _{2eq})	24,795			
Total gross indirect GHG emissions (Scope 3) (tCO_{2eq})				
1. Purchased good and services	329,520			
2. Capital goods	10,987			
3. Fuel and energy-related Activities (not included in Scope 1 or Scope 2)	4,172			
4. Upstream transportation and distribution	7,562			
5. Waste generated in operations	800			
6. Business traveling	1,218			
7. Employee commuting	4,618			
8. Upstream leased assets	n/a			
9. Downstream transportation	12,584			
10. Processing of sold products	n/a			
11. Use of sold products	2,097,749			
12. End-of-life treatment of sold products	9,169			
13. Downstream leased assets	n/a			
14. Franchises	n/a			
15. Investments	-			
Total GHG emissions				
Total GHG emissions (according to market-based methodology) (tCO _{2eq})	2,498,994			
Total GHG emissions (according to location-based methodology) (tCO _{2eq})	2,503,174			



Production, energy consumption and mix




In 2024, the total energy consumption of the Group's manufacturing and commercial companies amounted to 79,105 MWh.

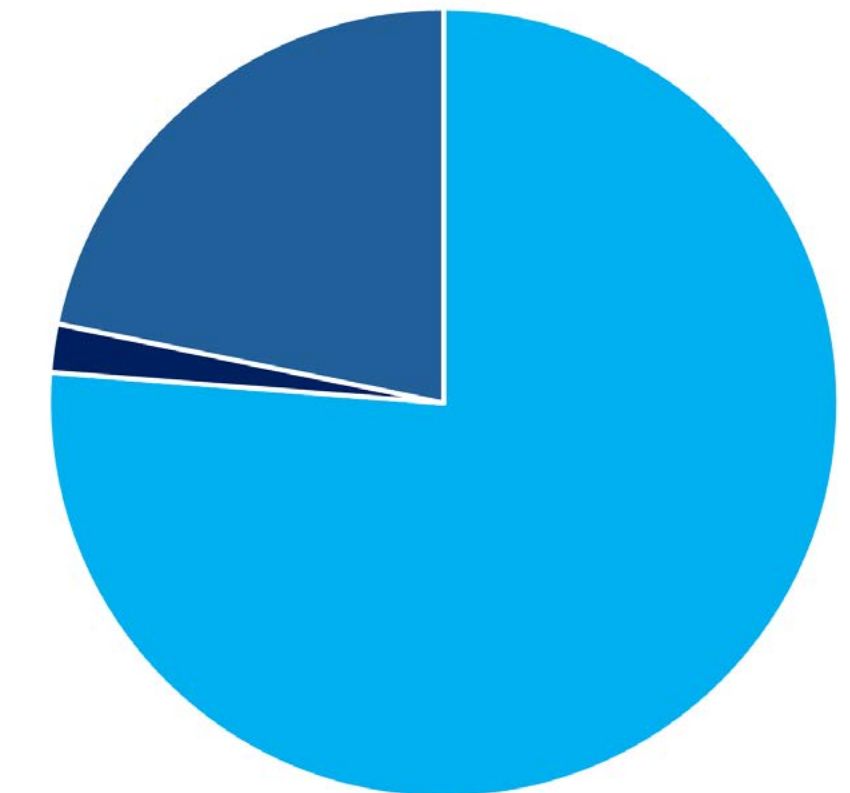
This consumption includes electric energy and fuels, used for heating premises, production processes and the company fleet.

LU-VE Group produces energy through its own photovoltaic systems, part of which is consumed to meet the energy needs of the plant, while the rest is sold to the national grid.




In 2024, 1,684 MWh of electric energy was produced.

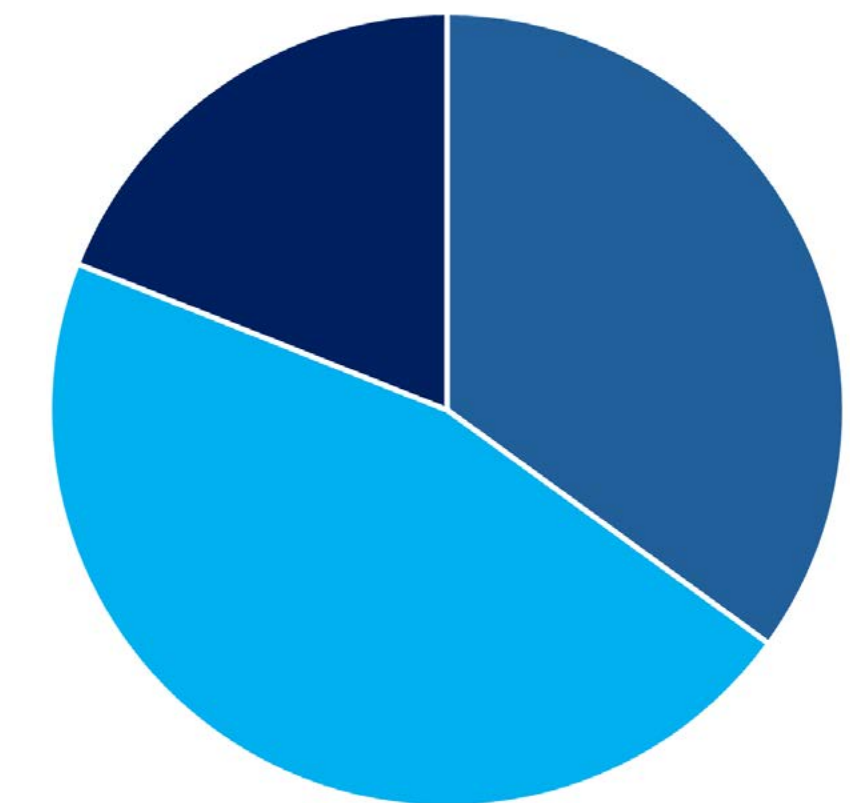
Energy consumption:

	Fossil sources	77%
	Nuclear sources	2%
	Renewable sources	22%



Details of energy consumption from fossil sources (77%):

	Electric energy and heat generated from fossil sources	35%
	Natural Gas	46%
	Oil and derivatives	19%



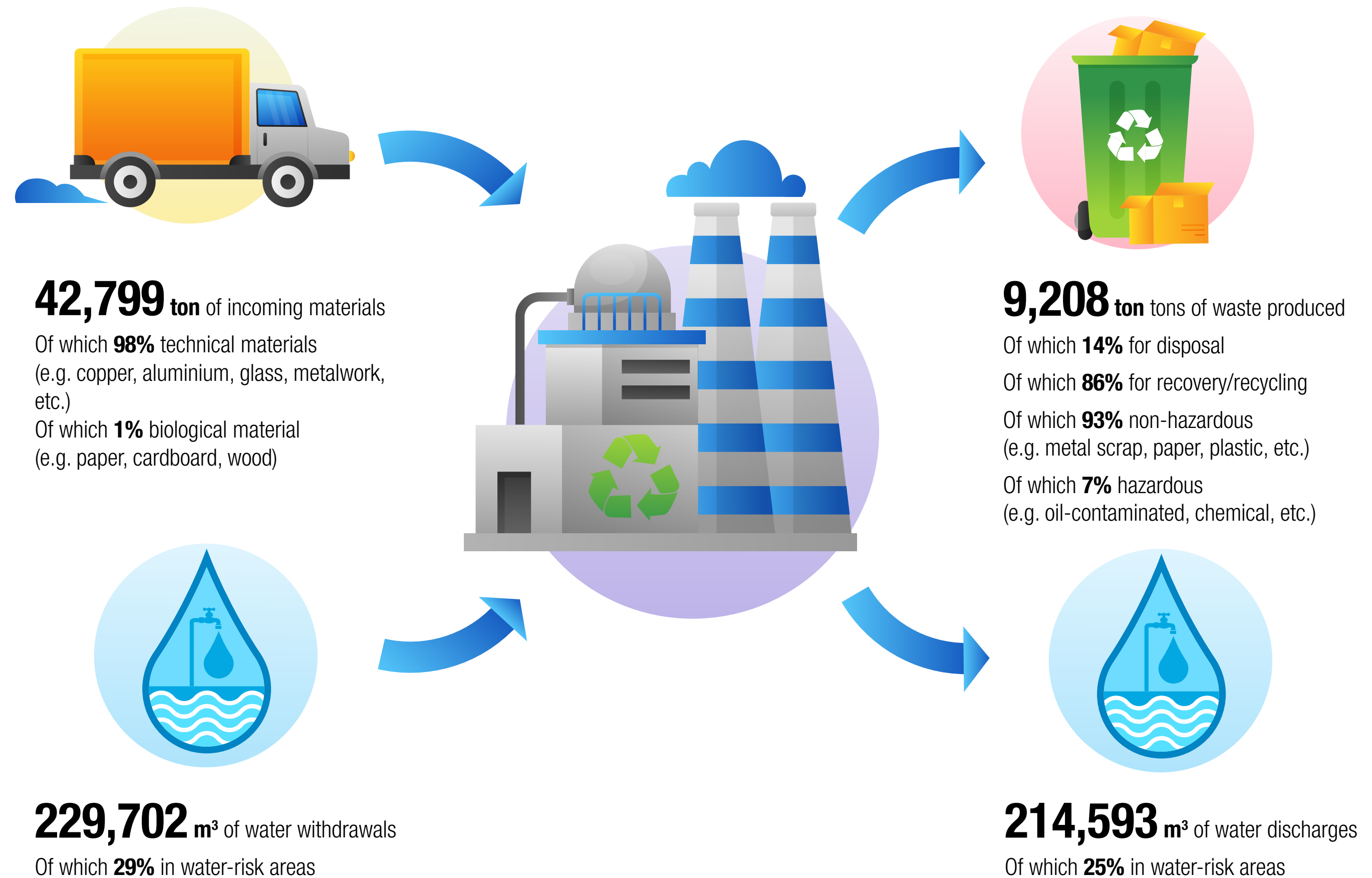


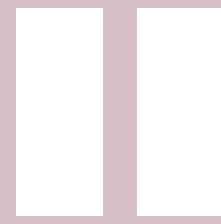
Water resources and resource inflows and outflows

LU-VE designs new products with the aim of reducing the use of raw materials while ensuring the same energy performance, thereby reducing the overall amount of technical materials used. At its plants, LU-VE monitors its water withdrawals and discharges, through locally defined resources, based on the nature of the production processes, the specific characteristics of the site and the environmental regulations applicable in the reference country.

The aim is to prevent potential negative impacts on the territory, such as the contamination of environmental matrices such as water and soil, or any other indirect impacts on the environment, as well as minimising the loss of material that could otherwise be recovered or reused

Local representatives at individual plants are responsible for monitoring and collecting waste data. Recovery methods are preferred, and if waste cannot be recovered due to its characteristics or type, it is sent for disposal.





HIGH ENGAGEMENT





The people of LU-VE Group (1/2)

The group employs approximately 4,000 people.
The employed workforce is broken down as follows: Italy 37%,
EU countries 38% and non-EU countries 25%.
Approximately 31% are women.

The Group's commitments to human rights are inspired by the United Nations Guiding Principles on Business and Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, and the OECD Guidelines for Multinational Enterprises.

The various needs of employees and cultures allow for the creation of corporate welfare “packages” specific to the various companies within the Group. Managed directly by individual HR Managers, the various “packages” are monitored by the Human Resources Department at Group level.
In addition to corporate welfare packages, the company supports employees and their families with special agreements for leisure activities and personal expenses.

LU-VE complies with current regulations on employee family-related leaves, aimed at promoting a work-life balance, communicating the amount of leave to which they are entitled and how they can take it. All of LU-VE Group employees are entitled to family leave.

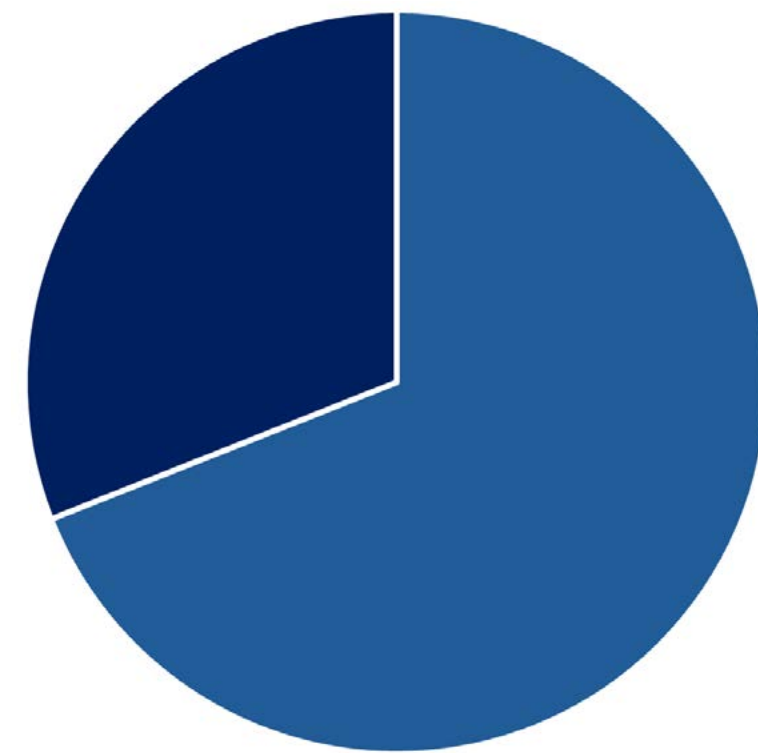
During 2024, overall 25% of all employees took family leave. Specifically, the percentage of male employees who took leave was 20% of all men, while the percentage of female employees who took leave was 36% of all women.

The right to family-related leave is promoted by company policies and contractual agreements with employees.

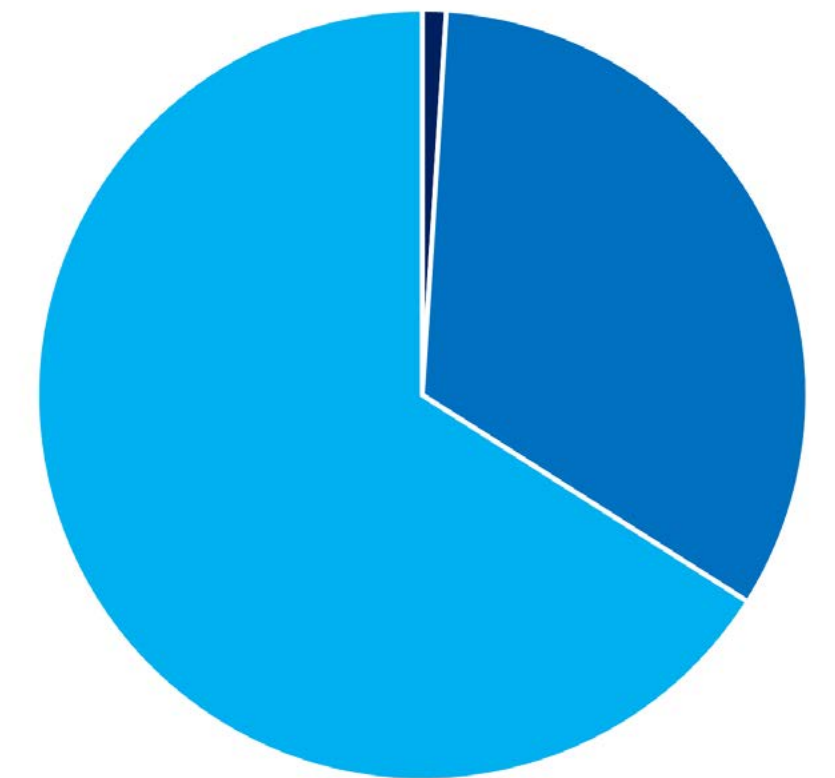


The people of LU-VE Group (2/2)

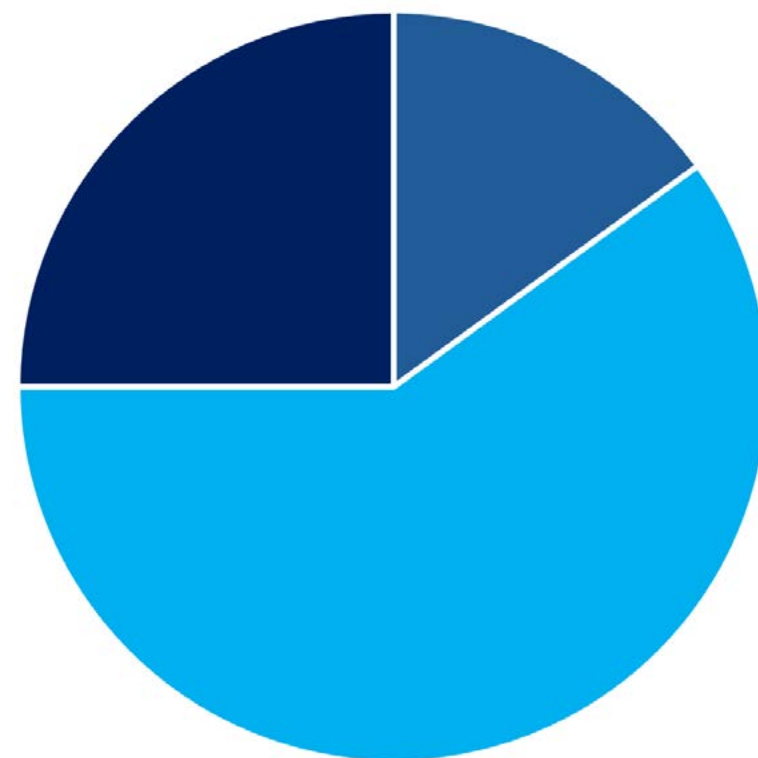
Men 69%
Women 31%



Blue-collar workers 66%
Middle managers and white-collar workers 33%
Executives 1%



Under 30 years of age 15%
Between 30 and 50 years of age 60%
Over 50 years of age 25%





Health and safety

With regard to health and safety, the Group has set a target to reduce accident indexes and minimise the negative impacts related to health and safety in the workplace.

The LU-VE Group also updates its targets annually on the basis of the results of previous years. In 2023, it defined the following targets, including both employees and collaborators, with reference to the financial year 2024:

- **accident frequency index less than 4.14;**
- **accident severity index less than 0.15.**

Both accident targets were met in the financial year 2024, with an accident frequency index of 3.65 and an accident severity index of 0.12.

NON-EMPLOYEE ACCIDENT INDICES AND DATA	2024
Total number of work-related injuries	7
Commuting accidents	-
Total number of high-consequence work-related injuries	-
Rate of work-related injuries	3.09
Rate of high-consequence work-related injuries	-
Severity rate	126.12
Hours worked	2,267,699
The number of fatalities as a result of work-related injuries and diseases	-

Since 2012, LU-VE Group has been using the “Training breaks” method to educate factory and office workers on occupational safety rules and procedures. During these short training sessions (15–30 minutes) employees analyse the risks related to their job, workplace, equipment and operating procedures.

This method has been recognised since 2018 as an innovative training methodology by the **National Health and Safety Commission of Federmeccanica-Assistal, Fiom-Fim-Uilm.**

EMPLOYEE ACCIDENT INDICES AND DATA	2024
Total number of work-related injuries	20
Commuting accidents	-
Total number of high-consequence work-related injuries	-
Days lost due to accidents at work	616
Rate of work-related injuries	3.82
Rate of high-consequence work-related injuries	-
Severity rate	117.81
Hours worked	5,228,938
The number of fatalities as a result of work-related injuries and diseases	-
Number of cases of recordable work-related diseases, subject to legal restrictions on the collection of data	-



Training and skills development

With regard to training and skills development, the Group has set a target to increase the percentage of employees engaged in the Performance Management to enhance the positive impact of performance appraisal, training and development of people in the organisation.

Specifically, the Group has defined the following targets for employee engagement in the Performance Management process, considering the 2022 baseline:

- at least **75%** of employees engaged (out of the total number of eligible employees) by 2024;
- at least **80%** of employees engaged (out of the total number of eligible employees) by 2025.

With regard to the 2024 performance, 87% of eligible employees were engaged, thus reaching the above-mentioned target.

During 2024, the following activities were carried out:

Definition of corporate training programmes at Group level (leadership, common technical and professional programme for functions, common e-learning platform);

Definition of the Group learning programme priorities;

Collection and support of training programmes at local company level.

AVERAGE HOURS OF TRAINING PER CAPITA BY GENDER OF EMPLOYEES	2024
Total	8.40
Men	9.02
Women	7.09

AVERAGE HOURS OF TRAINING PER CAPITA BY PROFESSIONAL CATEGORY OF EMPLOYEES	2024
Total	8.40
Executives	14.94
Middle managers and white-collar workers	15.49
Blue collar workers	5.19



Sustainability Ambassadors' Journey

During 2024, the “*Sustainability Ambassadors' Journey*” programme continued, an initiative launched globally in 2023 to increase sustainability culture in the LU-VE Group and accelerate sustainable change in the company.

From the various spontaneous applications received, a total of 80 employees were selected from the various Group companies and from different functions and company departments.

Training, discussion and dialogue covered five main areas: climate crisis, energy market, human rights, circular economy, and sustainability communication.

At the end of the first phase, the “Sustainability Ambassadors' Journey” continued with two main modules.

Through the *Climate Fresk Path*, employees can participate in intensive training to become Climate Fresk certified facilitators, with the aim to help their colleagues in workshops on climate change and the resulting social impacts.

By participating in the *Sustainability Lab*, employees joined working groups to generate ideas and proposals for sustainability projects to be developed in the company. Activities are ongoing.





“Ermanno and Chiara Liberali” Scholarship

In 2024, the **“Ermanno and Chiara Liberali” Scholarship** reached its 23rd edition, continuing to provide financial support to the families of employees and working students, and helping the most deserving students at universities and secondary schools to fund their studies.

The scholarship includes calls for applications to reward academic excellence and to ensure equal opportunities for the children of LU-VE employees.

The rules for awarding the scholarships have been established in agreement with the Unitary workplace union structure (Rappresentanze Sindacali Unitarie, RSU) of the various plants.

The number of young people with access to the scholarship is increasing year on year. In 2024, a total of 98 scholarships were awarded across all offices in Italy and Poland, amounting to almost EUR 200,000.

The initiative also involved working students from Italian plants and LU-VE people in Poland. The initiative is expected to be gradually extended to other Group’s offices.

LU-VE has a long history of promoting education and training for younger generations.

A total of 569 scholarships have been awarded since the programme’s inception.

Since 2001, the Group has been awarding scholarships to support the education of employees’ children, in accordance with the wishes of LU-VE founder Iginio Liberali. He always recognised scholarships as a meritocratic tool that promotes equal opportunities for growth and training among young people.

“We have to think about young people and their education. I am well aware of the value of scholarships. Thanks to scholarships from Necchi in Pavia, where my father worked as a blue-collar worker, I was able to continue my education from middle school to university. When I founded LU-VE, one of the first decisions I made was to set up the ‘Ermanno and Chiara Liberali’ scholarship, named after my parents.”

Iginio Liberali, founder of LU-VE



Cooperativa ALFA: work as therapy (1/2)

Since 2006, LU-VE Group, at its plant in Uboldo (Varese, Italy), has been collaborating with Cooperativa Sociale Alfa in Lomazzo (Como, Italy) through the project “Come le scarpe nel frigorifero” [Like shoes in the fridge].

The aim is to encourage the inclusion of persons with disabilities and those from disadvantaged backgrounds into the working life. This collaboration is in line with the criteria set out for recruiting people registered with the employment services dedicated to persons with disabilities. In accordance with the principles of the ILO (International Labour Organization), full inclusion in the workplace allows companies to benefit from a diverse workforce and improve productivity and service.

At its site in Uboldo, the Cooperative carries out various activities, including space management and cleaning, raising awareness on waste sorting, small internal portering jobs, and providing advice on safety and ecology.

The Cooperative (in collaboration with the human resources department and the internal occupational health service of the

LU-VE Group) helps to manage situations of workplace hardship due to sudden disability.

LU-VE Group provides all means of transport for the internal handling of goods and equipment for working at height free of charge, as well as access to the canteen. It has also provided the cooperative with an internal office, changing rooms and a telephone line. Among other activities, the Group:

- also includes cooperative members in its internal training courses (e.g. forklift training, first aid, waste management);
- allows access to the company for local services operating for the job placement of persons with disabilities, social and health services, psychiatric services provided by hospitals, so that the process of integration into the workplace is transparent and monitored by public bodies;
- invites cooperative members to events organised by the company at Christmas or other anniversaries;
- allows cooperative members to use the company canteen free of charge and socialise with LU-VE personnel.



Cooperativa ALFA: work as therapy (2/2)

Since 2006, LU-VE has been collaborating with Cooperativa Sociale Alfa in Lomazzo (CO), which works to include persons with disabilities and those from disadvantaged backgrounds into the working life by using work as a form of therapy.

At the Uboldo plant, Cooperative workers carry out cleaning, gardening, logistics and environmental management tasks, thereby contributing to the functioning and quality of the corporate environment.

Since 2006, 129 members of Cooperativa Alfa have worked at the LU-VE plant in Uboldo. Of these, 68 have disabilities, including 55 with mental health conditions, 3 with physical disabilities, and 10 who are socially disadvantaged. The company has permanently employed 9 of these workers.

Currently, 28 people from the cooperative work at the LU-VE plant in Uboldo: 17 have mental health issues, 4 have civil disabilities, and 7 have no disabilities.



“The psychiatric patients who come to us are among the most disadvantaged in society: they are poor in economic terms, socially isolated, lacking in intellectual and cultural resources, and have poor prospects for the future. They come from poor families and often have other problems.

The real therapy is to be in a normal environment, to have a role, however minimal, to receive a monthly salary and to be considered a worker.

What LU-VE Group allows us to do is absolutely commendable. Alfa is trying hard, and the “boys” are committed. But above all, it is the company and the Liberali family who are allowing us to continue with an initiative that is hard to find in other factories”.

Antonio Gervasio,



LU-VE solidarity

In 2024, the LU-VE Group's commitment to the **Malaika Children's Friends** group home in Arusha, Tanzania, has yielded tangible results. The goal of establishing a well-functioning centre that is integrated into the local community and can finance itself through productive activities has been achieved. In 2024, the centre supported around ten young adults as they left the group home to begin their lives as active citizens.

Pienikulkija, which translates as “little pedestrian” in English, is a Finnish project aimed at ensuring the visibility and safety of primary school children during the difficult autumn and winter seasons in Finland. LU-VE Group has proudly sponsored reflective jackets with LED lights on the front for first-year children, to increase visibility. These vests are an important safety feature because they make children highly visible to motorists, helping to prevent accidents and improve road safety.

Ayamé the habit of hope. In 2024, LU-VE once again sponsored the trip of two young paediatricians from the Specialisation School of the Policlinico di Pavia [Pavia General Hospital] to the APPA centre in the village of Ayamè in Ivory Coast, which

takes in children aged between zero and six and meets the healthcare and accommodation needs of the local community. At the hospital, they faced various problems related to shortages of medicines, medical equipment and specialised personnel. Coming into direct contact with such a different reality broadened the perspective on the meaning of medical work and the importance of ensuring equal access to healthcare for all.

Demolition and reconstruction work of the municipal crèche “Il Girasole” in S. Agata sul Santerno (Ravenna), which was damaged during the 2023 floods, began at the end of 2024.

LU-VE contributed financially to this project.





LU-VE sports

2024 Marked LU-VE Group's fourth year of sponsoring the Venetian powerlifting team, the Vikings. During the year, the city of Druskininkai in Lithuania hosted the World Open Powerlifting Championships. One of the Vikings athletes, Sara Naldi, took part in this high-level competition and achieved extraordinary results. She won a specialty gold medal in the Squat, a specialty silver medal and set a new Italian record in the deadlift.

The CUS Pavia women's volleyball team has written a memorable chapter in the history of sport in Pavia. The team demonstrated great determination and skill in achieving their goal of securing a historic promotion to **Serie B2**. As proud sponsors of CUS Pavia, we celebrate this extraordinary achievement, which marks their return to Serie B2 after two decades.

We are proud to announce the results of our sponsorship of CUS Pavia in 2024. These include six 2024 regional titles in speed canoeing, a prestigious silver medal at the European Marathon Canoeing Championships, and second place in speed canoeing at the European U23 Championships in Bratislava. These and other important results

highlight the continued growth of CUS in terms of sporting achievements, number of members and structural investments. The women's volleyball team, **Cda Volley Talmassons** Fvg — which is also sponsored by LU-VE Refrion — achieved a historic season in 2024. For the first time in its history, the Friuli team has secured promotion to the **Women's Serie A1**, becoming the first volleyball club from Friuli Venezia Giulia to do so since the league was established in 1977.

Congratulations to the athletes on this significant victory.





2024 Awards and Integrated Annual Report

Also in 2024, LU-VE received several prestigious awards from leading Italian newspapers, including “Italy’s Climate Leaders 2024” from Corriere della Sera and “Leaders in Sustainability 2024” from Il Sole 24 Ore.

This document includes some of the most significant data reported in the Consolidated Sustainability Statement, prepared in compliance with Italian Legislative Decree 125/2024, issued to implement the Directive 2022/2464/EU (“Corporate Sustainability Reporting Directive”), to which we refer for a complete and accurate representation of the LU-VE Group’s performance and management of sustainability topics considered material.

The data and information provided in this document refer to the activities carried out by LU-VE Group in 2024 (from January to December 2024), when not specified otherwise.





LU-VE
GROUP
leadership with passion

