



# **LEADERSHIP WITH PASSION**

## **2021 Sustainability Report of LU-VE Group**

Consolidated non-financial statement pursuant to Italian Legislative Decree 254/2016







2021 was LU-VE Group's thirty-fifth year in business.

It was a very good year, and one in which we achieved our highest turnover ever: €492 million, +22.6% compared to 2020 and more than doubling net profit. The 2021 turnover was 50 times that of our first year of activity.

It is the result of constant growth, organically and through acquisitions, based on the professional values of an international working community that unites cultures in a blending process, focusing on the innovation of products and business processes.

Since our foundation, we have been pioneers in upholding the essential principles of environmental protection: lower energy consumption, the reduced use of refrigerant fluid, low noise levels, high levels of reliability over time and reduced use of space. These issues are increasingly topical today.

In 2021, we received numerous awards related to ESG issues such as environment, sustainability and workplace quality.

We are honoured by this and see it as a stimulus for further improvement.

Today we are an international group with our heart and mind firmly rooted in Italy, yet we have replicated our original model wherever we manufacture and operate, placing the work of the men and women who have made LU-VE Group's history at the very centre of our development.

Thank you to everyone who made all this possible.

  
**Iginio Liberali**  
Presidente LU-VE Group

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*"The future has an ancient heart"*

*(Carlo Levi – writer, painter and doctor)*



An underwater photograph with a deep blue and teal color palette. The water is filled with numerous small, bright bubbles and larger, more diffuse light patches, creating a shimmering, ethereal effect. In the upper left, a small, white, rectangular object, possibly a piece of equipment or a small boat, is visible against the darker background. The overall composition is abstract and serene, with light rays filtering through the water.

# ABOUT LU-VE GROUP



# ABOUT LU-VE GROUP



## 16 production facilities

in 9 countries



## 7 brands

of the Group



## 4 social impacts

generated by Group solutions

### In this section

The presentation of LU-VE Group solutions and their social and environmental value, as well as the governance model of sustainability and the sustainable development objectives. In the last section, the eligible economic activities according to the European Taxonomy, the loans received and other activities for the generation of long-term value are described.





”

## **Companies are first and foremost women, men and ideas**

People with extensive experience, young people endowed with creativity and enthusiasm, specialists of the highest academic level, united by a passion for their work and a vision of an advanced, better, balanced and conscious world.

**Iginio Liberali**, LU-VE Group President



## HEADQUARTERS

 UBOLDO (VA) - ITALY

## 16 PRODUCTION FACILITIES

 **ITALY**  
ALONTE (VICENZA)  
LIMANA (BELLUNO)  
TRAVACÒ SICCOMARIO (PAVIA)  
UBOLDO (VARESE) <sup>1</sup>


 **CHINA**  
TIANMEN (HUBEI)


 **FINLANDIA**  
VANTAA (UUSIMAA)

 **INDIA**  
BHIWADI (RAJASTHAN)  
SAROLE (PUNE DIST., MAHARASTRA)

 **POLAND**  
GLIWICE (SLESIA)<sup>2</sup>

 **CZECH REPUBLIC**  
NOVOSEDLY (SOUTH MORAVIA)

 **RUSSIA**  
LIPETSK

 **SWEDEN**  
ASARUM (KARLSHAMN)

 **USA**  
JACKSONVILLE (TEXAS)





## 32 SALES OFFICES

- AUSTRIA - VIENNA
- BELGIUM - UCCLE<sup>3</sup>
- CHINA - TIANMEN, CHANGSHU
- SOUTH COREA - SEOUL
- DENMARK - AARHUS<sup>3</sup>
- UNITED ARAB EMIRATES - DUBAI
- FRANCE - LYON
- GERMANY - STUTTGART
- INDIA - NEW DELHI, BHIWADI, SAROLE
- ITALY - ALONTE, LIMANA, UBOLDO, TRAVACÒ SICCOMARIO
- NORWAY - DRAMMEN<sup>3</sup>
- NETHERLANDS - BREDA
- POLAND- VARSAVIA, GLIWICE
- UNITED KINGDOM - LONDON, FAREHAM<sup>3</sup>
- CZECH REPUBLIC- NOVOSEDLY
- RUSSIA - MOSCOW, LIPETSK
- SPAIN - MADRID
- SWEDEN - ASARUM
- THAILAND - BANGKOK<sup>3</sup>
- USA - JACKSONVILLE (TX)
- VIETNAM - HO CHI MINH CITY<sup>3</sup>

<sup>1</sup> With references to the companies LU-VE Exchangers, LU-VE Digital (Software house) and Tecnair

<sup>2</sup> Two plants

<sup>3</sup> Representative offices

## 1.1 Make One (Sustainable) Company

**As a promoter of innovations in the field of industrial and commercial refrigeration and industrial air conditioning, LU-VE Group is the third largest global player and second largest in Europe in the air heat exchanger segment.**

Despite an uncertain context, also due to the consequences of the Covid-19 pandemic and related to delays in the delivery of materials and shipments, the Group showed strong resilience and readiness in managing critical issues in 2021, while still managing to grow thanks to the individual and collective commitment of all its employees and their passion.

Among the various actions taken, LU-VE Group confirmed and strengthened its leadership position

thanks to the choice and possibility of moving, replicating and implementing its production at different facilities, in order to better adapt to the changing needs imposed by the times and markets.

In conditions of necessity and emergency, also thanks to a significant organisational and management effort, the Group used the various facilities as backup for each other, when the main one normally dedicated to a specific application was overloaded or in lockdown.

The forward-looking organisation of this backup system in many cases prevented production stoppages, allowing important and often crucial projects to be completed. With reference to the Group's sustainability and growth path, the Make One (Sustainable) Company process continued, aimed at strengthening the spirit of collaboration and the promotion of a widespread culture among Group companies.



**“Sustainability is a modern tool for changing your company’s approach to business and is also a source of new opportunities to be seized.**

**The key aspect is to understand that together with constant, daily work focused on improve-ment, a strategic vision of our business’s role in sustainable development must be consolidated”.**

**Michele Faggioli, LU-VE Group COO**





With its headquarters in Uboldo in the province of Varese, Italy, the international LU-VE Group has 16 production facilities in nine different countries (Italy, China, Finland, India, Poland, Czech Republic, Sweden, Russia and the USA), with a network of sales companies

and representative offices in Europe, Asia, the Middle East and North America. The Group also includes a software house for the Information and Communication Technologies sector, which works on the development of product calculation software and digitalisation.





In early 2022, the Group completed a number of strategic transactions<sup>4</sup>.

**The Group announced a strategic agreement with Systemair AB** (a Swedish company listed on the Stockholm Stock Exchange), which envisages the sale of its entire stake in Tecnair LV S.p.A. As a result of this agreement, the Group and Systemair will be linked by a long-term global agreement to supply Systemair with heat exchangers and related products and will continue to develop cross-selling related to close control air conditioning units. The Group will continue to focus on “outdoor” air conditioning systems for data centres, a fast-growing sector in which the Group has achieved excellent results in recent years thanks to decisive technological development.

**The Group submitted a binding proposal for the purchase of a business unit of Italia Wanbao ACC** (WACC), located in Mel (Belluno, Italy), which is currently under extraordinary administration. The proposal includes the complete industrial reconversion of the activities in order to expand the production of static heat exchangers for refrigerated cabinets, air conditioning, chillers and heat pumps, already made by the Group at the Limana (Belluno) facility, registered office of the subsidiary SEST S.p.A., as well as in other Group facilities. The proposal was accepted by the Ministry of Economic Development and operational negotiations are ongoing.

**The Group signed a binding agreement for the acquisition of a 75% stake in Refrion S.r.l.**, with registered office in Flumignano (Udine, Italy). Refrion is an Italian company specialized in the production and marketing of air heat exchangers, with adiabatic technology, which allow for reductions in energy consumption, water and noise emissions.

**LU-VE Group is keeping a careful watch on developments in the crisis between Russia and Ukraine**, which risks having significant repercussions on the global economy also as a result of sanctions already imposed or still being defined. The extreme geographical diversification of sales means that as at 31 December 2021, the Group’s exposure in this area is only around 8% in terms of turnover and 3% of net invested capital. As at 28 February 2022, the exposure in terms of order backlog was 5%.

## 1.1.1 The applications, solutions and social impacts

LU-VE Group operates in several market segments:

- **refrigeration** (commercial and industrial) for fresh product preservation, deep-freezing, processing, storage and logistics, ageing, refrigerator aisles and counters, dispensers, ice production, OEM;
- **process cooling for industrial and power generation applications:** air conditioning (civil, industrial and close control) for large civil and industrial facilities, data centres, hospitals, transportation, heat pumps, telecommunications;
- **glass doors and closing systems** for refrigerator aisles and displays;
- **IoT interactive TV mirrors** for special applications such as digital signage, lift cabins, hotel rooms.

The Group is placed within a highly strategic sector that aims to support and guarantee a correct cold chain in different types of contexts, applications and geographical areas.

LU-VE Group’s increasingly integrated commitment to issues of social and environmental responsibility is measured in four areas on which its activities have a positive impact:

- **food safety**
- **climate well-being**
- **energy efficiency**
- **digital transformation**

The Group has launched dedicated initiatives to explore these issues and raise awareness of possible new opportunities. On the subject of food safety, in 2021 the Group began collaboration with the “Food Sustainability Observatory”, an initiative of the “Digital Innovation Observatories” of the School of Management of the Milan Polytechnic Institute. The research intends to carry out analyses on the main innovations and best practices with the ultimate goal of supporting sustainable innovation, reducing food waste and enabling each player in the supply chain to make their own improvements to render the agri-food sector more sustainable.

The second figure highlights the economic value of the solutions, expressed in terms of impact on the Group’s total turnover in 2021.

<sup>4</sup> The acquisitions and terminations of 2022 are not reported in the list of the scope of the “2021 Non-Financial Statement”, but are mentioned qualitatively in this document and will be integrated into the change in the scope of the “2022 Non-Financial Statement”.

<sup>5</sup> It should be noted that LU-VE Group’s solutions, in addition to being classified as “heat exchangers”, “air cooled equipment”, “close control air conditioners” and “refrigerated glass doors”, also include the “other” category, accounting for 1.8% of total sales.





## HEAT EXCHANGERS



### HEAT EXCHANGERS FOR REFRIGERATION, AIR CONDITIONING, MOBILE AND DOMESTIC APPLICATIONS

Air cooled heat exchangers are components in which heat is transmitted between two fluids to remove heat from or transfer it to a specific environment. This type of exchanger is applied in more complex machinery made by third parties.

## CLOSE CONTROL AIR CONDITIONERS



### CLOSE CONTROL AIR-CONDITIONING FOR DATA CENTRES, OPERATING THEATRES, CLEAN ROOMS AND TELEPHONY

Close control air conditioning units are used in controlled atmosphere rooms such as operating theatres and clean rooms, and particularly delicate "technological" spaces such as data centres and server rooms. They guarantee strict control (with extremely tight tolerances) of temperature, humidity and air purity, and allow the remote signalling of any anomalies, malfunctions and alarms through specific electronic microprocessors.

51,4%



5,7%



## AIR COOLED EQUIPMENT



### EVAPORATORS, AIR CONDENSERS, CO2 GAS COOLERS, DRY COOLERS, INDUSTRIAL APPLICATIONS

Air cooled equipment consists of heat exchangers of various sizes and shapes paired with fans - electric or electronic - designed and sized to optimise heat exchange and, at the same time, reduce electricity consumption, and minimise refrigerant fluid volumes and the noise levels generated. Air cooled equipment (evaporators and condensers) may be installed, depending on the type, both inside refrigerated rooms and outside rooms to be cooled and/or conditioned. Each product is made according to the specific needs of the application and customer.



37,6%

3,5%

## GLASS DOORS



### GLASS DOORS AND CLOSING SYSTEMS FOR PROFESSIONAL, INDUSTRIAL AND DOMESTIC REFRIGERATION EQUIPMENT

Glass doors are installed in refrigerator aisles and displays, mainly in supermarkets or retail outlets, but also in other applications. They ensure temperature maintenance (negative or positive) inside the refrigerator sections and perfect visibility of the goods on display.



# OUR ECOSYSTEM: PRODUCTS, APPLICATIONS, IMPACTS

Heat exchangers

Air cooled  
equipment

Close control  
air conditioners

Commercial  
and industrial  
refrigeration



Air Conditioning



Process cooling

for industrial and power  
generation applications



Other applications



## LU-VE group commitment

### Glass doors



#### FOOD SAFETY

Today, some three billion people lack safe and healthy food. The development of sustainable and technologically advanced cold chains is essential for the processing, storage, preservation, distribution and, ultimately, the increased availability of safe food for ever larger segments of the population.

A proper cold chain ensures safe and properly stored food and reduces food waste.

59%\*



#### ENERGY EFFICIENCY

On average, air conditioning and cooling accounts for around 15% of electricity demand globally, with peaks of up to 50%. Mitigating the resulting environmental impacts involves improving energy efficiency standards by 50% by 2030.

Maximising the energy efficiency of factories, buildings and systems is crucial for protecting the planet, reducing environmental impact and improving businesses' competitiveness.

20%\*



#### CLIMATE WELL-BEING

The demand for air conditioning is growing internationally due to population growth, urbanisation rates and the demand for a better quality of life, especially in the warmer areas of the world.

Indoor climate comfort in buildings is an important element of people's health and well-being and quality of life

15%\*



#### DIGITAL TRANSFORMATION

The international digitalisation process also touches on cloud computing. This strong impetus implies an increasing focus on the energy consumption of data centres, which currently account for 1% of the world total in terms of environmental sustainability.

Operational and efficient data centres are a prerequisite for a country's digital transformation

6%\*



\* respect Group's total turnover in 2021





## Air Heat Exchangers



- Asarum, Sweden
- Alonte, Italy
- Vantaa, Finland
- Sarole, India



## Coils



- Uboldo, Italy



- Gliwice, Poland

- Tianmen, China



## Digital



- Novosedly, Czech Republic



- Limana, Italy



## Close Control AC



- Lipetsk, Russia



- Bhiwadi, India



## Doors, IoT Mirrors



- Jacksonville, TX, USA



- Travacò Siccomario, Italy



## 1.2 Sustainability

In 2021, LU-VE Group continued and strengthened the process of integrating sustainability into its corporate strategy with the aim of sharing a widespread culture, structuring the projects already underway accordingly, and directing the organisation itself and the new initiatives towards a renewed conception of corporate social responsibility.

### 1.2.1 The Sustainability Governance Model

The governance of LU-VE Group aims to maximise the value created for its shareholders and for all stakeholders. The aim is to ensure the full integrity and sustainability of its business. The Group's Board of Directors includes three members with specific expertise in sustainability issues.

<sup>6</sup> detailed information is contained in the 2021 Report on corporate governance and ownership structure

### The Group adopts a traditional governance model.

In 2017, at the time of listing on the MTA market, LU-VE Group adopted the Corporate Governance Code for Listed Companies, approved by the Corporate Governance Committee and promoted by Borsa Italiana S.p.A., ABI, Ania, Assogestioni, Assonime and Confindustria (most recently in the version approved in July 2018). In December 2020, the Company revoked its adoption of the Code of Conduct and resolved instead to adopt the newer version of the Corporate Governance Code, also approved by the Corporate Governance Committee, from 1 January 2021. Subsequently, the Board of Directors adopted other resolutions to implement the principles and recommendations of the new Corporate Governance Code<sup>6</sup>.

The **Board of Directors (BoD)** is responsible for pursuing LU-VE Group's sustainable success. It provides strategic direction and evaluates the adequacy of the internal control and risk management system of LU-VE S.p.A. and LU-VE Group. With specific reference to non-financial information, the Board of Directors is also responsible for the approval of the non-financial statement. As early as 2020, the Board of Directors had already identified one member (Group COO) from among its members as the contact for sustainability issues. Furthermore, the Sustainability Office reporting directly to the COO was set up in 2021, with the aim of ensuring capillary management of projects at international level.

In line with the Corporate Governance Code, the **Control and Risk Committee** (formally tasked with responsibility for sustainability issues by the BoD at the beginning of 2019 and confirmed in 2021, in the specification of responsibilities according to the Regulation of the BoD and Internal Board Committees, adopted by the Board of Directors and Committees of LU-VE S.p.A.) ensures that the periodic financial and non-financial information is able to suitably and correctly represent the business model, the company's strategies, the impact of its business activities and the performance achieved, and lastly examines the content of periodic non-financial information which is relevant for the purposes of the internal control and risk management system.

The **Internal Audit** Manager is responsible for verifying that the internal control and risk management system is functioning and adequate. The **Supervisory Board** was established and operates pursuant to Italian Legislative Decree 231/2001.

It should also be noted that the **Crisis Committee** (known as the "Coronavirus Crisis Unit") set up by the Group's top management in March 2020 as a measure to counter the Covid-19 pandemic remained active in 2021. The Committee is responsible for decisions and actions to prevent the spread of the virus within the Group companies and to ensure the safe conduct of operations. The Committee meets on a weekly basis or according to specific needs. The following members form the Committee:

- CEOs of LU-VE S.p.A.;
- executives tasked with Group responsibilities;
- a number of production company managers (Poland, Russia and the Czech Republic in particular);
- facility managers and Health and Safety Officers of the Italian companies belonging to the Group;
- manager of the Group's Internal Audit function.

Participation in the Crisis Committee was also open to the directors and statutory auditors of LU-VE S.p.A., as well as the President of the company's Supervisory Board. With regard to the Group's operating companies not included in the Committee, the CEOs were entrusted with the task of providing updates on the evolution of the pandemic.



## A policy for gender diversity

LU-VE Group has formally expressed its intention to ensure adequate levels of diversity among Corporate Body members since 2020, and thus guarantee the best composition and fairness in the Group's Bodies.

The gender diversity policies approved by the Board of Directors at the beginning of 2020 have the following main objectives:

- enrich discussion (a prerequisite for a well-considered and informed decision) through the different skills of the various members;
- enable a better understanding of stakeholders' needs and demands;
- reduce the risk of validating component opinions.

Based on the awareness that diversity and belonging are two key aspects for a multi-national company such as LU-VE Group, the policies it has adopted lay down specific criteria and goals with regard to the composition of the Board of Statutory Auditors and the Board of Directors. The Board of Directors, supported by the Remuneration and Appointments Committee, is responsible for the application of these policies.

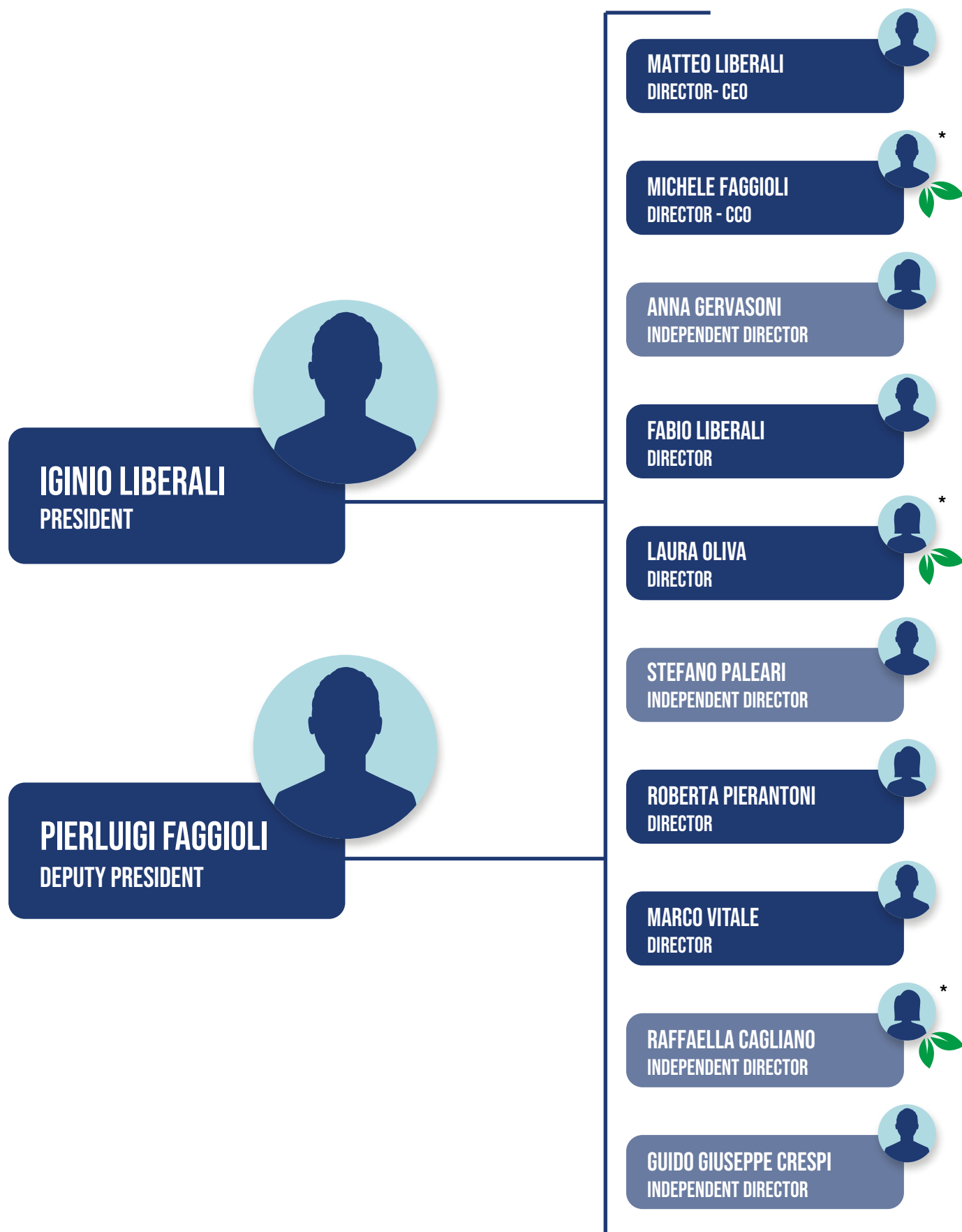








As at 31 December 2021, the Board of Directors was composed of 12 members, of which 4 were women.



\* Sustainability experts

In addition to the parent company LU-VE S.p.A., the subsidiaries SEST S.p.A. and Tecnair LV S.p.A. have an **Organisation, Management and Control Model** (pursuant to Italian Leg. Decree 231/2001, updated in 2019 and approved in March 2020), to prevent and combat the risk of the commission of the offences laid out in the Decree, including the risks of the commission of offences against individuals, environmental crimes and offences of corruption.

The adoption and dissemination of the Model, supported by the constant monitoring of activities, allow the companies to rely on rules and control instruments to prevent and promptly react to the possible commission of offences.

The Group has also had its own **Code of Ethics** since 2016, which has the purpose of affirming and disclosing the behavioural principles that guide the activities of LU-VE and all its subsidiaries. It is published in the Group's website. As well as complying with applicable regulations and the principles of transparency and responsibility towards the community, the Group is committed to protecting the health and safety as well as the rights of workers and to safeguarding the environment in every aspect. The Code of Ethics, which applies to employees and to all individuals who work to achieve the Group's objectives, include the following key themes: the respect and empowerment of people; integrity in the conduct of business; the rejection of corrupt practices or behaviour; and the respect for business ethics in terms of transparency, market fairness and fair competition.

**The principles of honesty, transparency, loyalty, integrity and fairness in business and commercial management are formalised in the Code of Ethics**, which is then referred to in the General Purchase Conditions and General Sale Conditions and distributed to all companies so that they can ensure its adoption and compliance by their employees and commercial partners. The Group intends to promote a common ethical culture and approach; for this reason, all recipients are entitled and required to understand and apply the Code of Ethics, as well as to report any gaps found or the need to proceed with any updates or adjustments.

The control principles laid out in the Organisation, Management and Control Model and in the Code of Ethics also apply, within the limits of the contractual relationship in force, to those whom, although not part of the company, operate on the mandate or on behalf of it or are in any event linked to the company by significant legal relationships, such

The **internal control and risk management system**, an integral part of the Governance model, is described in the "Guidelines on the Internal Control and Risk Management System of LU-VE S.p.A.", approved by the Board of Directors at the end of 2017 and revised, based on changes introduced by the Corporate Governance Code and changes in the Group's structure. The Group's risks are analysed on a yearly basis and the results are then described in the Report drawn up by the Director in charge of the Internal Control and Risk Management System and submitted to the Board of Directors. The Report also contains actions to mitigate the individual risks highlighted.

Based on the risk assessment, the Board of Directors approved the **"2020-2022 Internal audit plan"** in March 2020. The three-year plan is reconfirmed annually by the Board of Directors. This allows the Group to implement any amendments resulting from changes in the conditions/context that generated the three-year plan. As a result of the Covid-19 pandemic, there were some deviations from the original 2020 audit plan, which were incorporated into the 2021 audit plan. The latter, in turn, were different than initially established, both for the inclusion of audits in the 2020 audit plan, considered to be a priority for the Group, and due to the critical issues and restrictions that also impacted the working methods and activities of the various company departments during 2021.

With particular reference to **non-financial risks**, the analysis has been updated with reference to 2021, taking into consideration the main risks at global level, the phases of the value chain, the specific details of the manufacturing processes and the countries in which the Group is present.

Compared to the analysis conducted in 2020, the risk of insecurity and indeterminacy of supply availability has been made explicit, an aspect that has assumed significant importance in the global scenario, especially in the current year.

Non-financial risks were classified into different categories depending on the probability of occurrence and the potential impact. Most of the risks identified were assigned a low or negligible score, including for example the loss of sensitive data as a result of cyber attacks, consumer health and safety, and the recording of cases of non-compliance related to product labelling and marketing.



Moreover, the introduction of the **whistleblowing** system was already completed in 2020 for the Italian companies that have adopted the Model 231, in relation to the reporting of unlawful activities by those who become aware of them. In line with the national legislative framework, the system makes it possible to anonymously report any form or type of offence falling within the list of Leg. Decree 231/2001 offences to the company's Supervisory Board. In accordance with regulatory provisions in force in Poland, a similar whistleblowing system was adopted in 2021.

**There were no reports of unlawful activities in the whistleblowing system in 2021.**

In the reporting period, LU-VE Group **did not identify any cases of corruption, or legal actions for anti-competitive, anti-trust or monopolistic conduct.**

Furthermore, the Group **was not subject to any penalty or assessment of non-compliance** with environmental, social or economic laws or regulations and those regarding the communication of product information.

Of further note is that in the three-year period 2019-2021, LU-VE Group did not disburse any sum to directly or indirectly finance a party or political person.



### Non-financial reporting procedure

In addition, the Group procedure dedicated to Non-Financial Reporting was formalised in early 2021. This procedure is designed to formalise sustainability reporting roles and responsibilities and to strengthen the data collection and document approval process.

A second version of the procedure was subsequently published, in which the role of new key Group figures was made explicit, assigned to support the managers of the reporting process, coordinating sustainability and non-financial reporting activities among the various companies.



## 1.2.2 Stakeholder dialogue and engagement

The actions and decisions made address and at the same time incorporate the expectations and interests of stakeholders in relation to LU-VE Group.

The stakeholder mapping carried out with management for the first sustainability report was validated in 2021 following context analyses. The map takes into account all those who are able to influence LU-VE Group's

business, as well as those who have expectations of the company.

The Group's stakeholders, together with the main expectations and tools for listening and engagement, are listed in the table below. The details of the topics raised, the engagement frequency and the responses of LU-VE Group are elaborated in the specific sections of this document.

STAKEHOLDERS	MAIN EXPECTATIONS	MAIN FEEDBACK AND ENGAGEMENT TOOLS
<b>Shareholders and Investors</b>	<ul style="list-style-type: none"> <li>Management of the inside information of LU-VE S.p.A.</li> <li>Long-term economic and financial sustainability</li> <li>Profitability</li> </ul>	<ul style="list-style-type: none"> <li>Insider list</li> <li>One-to-one meeting</li> <li>Dedicated communications</li> <li>Press releases</li> <li>Website</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>Service improvement and development</li> <li>Energy-efficient solutions</li> <li>Capacity of product design to meet requirements</li> <li>Closeness of service</li> <li>Project customisation in the pre-sale phase</li> </ul>	<ul style="list-style-type: none"> <li>Customer satisfaction analysis</li> <li>Group Customer Care Service</li> <li>Website</li> <li>Social networks</li> </ul>
<b>Local communities</b>	<ul style="list-style-type: none"> <li>Contribution to the creation of value for the region</li> <li>Being transparent and providing information on business matters</li> <li>Sharing and disseminating capacities and skills</li> </ul>	<ul style="list-style-type: none"> <li>Website</li> <li>Social networks</li> <li>Press releases</li> </ul>
<b>Collaborators</b>	<ul style="list-style-type: none"> <li>Respect for workers' rights</li> <li>Contribution to individual well-being</li> <li>Protection of occupational health and safety</li> <li>Listening capacity</li> <li>Adequate training for skills development</li> </ul>	<ul style="list-style-type: none"> <li>Ideas mailbox</li> <li>Company intranet</li> <li>Dedicated training meetings</li> <li>Dedicated internal communications</li> <li>Questionnaire for employees</li> <li>International meetings on specific topics (e.g. HR meetings)</li> </ul>
<b>Regulatory entities and other associations</b>	<ul style="list-style-type: none"> <li>Maintenance of certifications obtained in terms of solution quality and safety, performance and consumption</li> </ul>	<ul style="list-style-type: none"> <li>Certification Audit</li> </ul>
<b>Suppliers and Trade associations</b>	<ul style="list-style-type: none"> <li>Being transparent and providing information on business matters</li> </ul>	<ul style="list-style-type: none"> <li>Dedicated meetings</li> <li>Annual Report and Non-Financial Statement</li> <li>Dedicated communications</li> <li>Supplier assessment questionnaires</li> </ul>
<b>Academic centres and universities</b>	<ul style="list-style-type: none"> <li>Exploiting mutual synergies</li> <li>Identifying innovative solutions and sharing know-how</li> </ul>	<ul style="list-style-type: none"> <li>Research partnership</li> <li>Training sessions</li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>Clear and prompt communications</li> <li>Being transparent and providing information on business matters</li> </ul>	<ul style="list-style-type: none"> <li>Website</li> <li>Social networks</li> <li>Press releases and dedicated Newsletters</li> </ul>



### 1.2.3 Sustainability strategy and materiality

The orientation towards sustainability coincides with the founding of the company in 1985. As stated by Iginio Liberali, President and founder of LU-VE Group: “Since our foundation, we have been pioneers in upholding the essential principles of environmental protection: lower energy consumption, the reduced use of refrigerant fluid, low noise levels, high levels of reliability over time and reduced use of space. Today we are an international group with our heart and mind firmly rooted in Italy, yet we have replicated our original model wherever we manufacture and operate, placing the work of the men and women who have made LU-VE’s history at the very centre of our development.”

The Group is founded on the following pillars:

- creation of well-being for our people
- economic growth through the development of new technologies
- production and products in line with the principles of environmental protection and its safeguarding.

In order to make these principles more and more integrated into the company’s culture and business plan, LU-VE Group has launched a dedicated process called “**Sustainability Through People**”. The guiding principle is that sustainability must be achieved for people and with people.

LU-VE Group embarked on an increasingly structured process in 2021 to define its sustainability strategy by means of a dedicated project in which all managers at Group level and some members of the Board of Directors took part.

In the process of validating a vision incorporating all the challenges of global sustainability (from climate change to employee health and safety to energy efficiency), lecturers from the Polytechnic Institute of Milan also shared their expertise on various topics.

Consistent with the Group’s past and as a bridge to future opportunities, the project was structured on two parallel fronts: sharing the fundamental concepts of sustainability and the three dimensions of responsibility (economic, social and environmental), and formalising a sustainability vision and strategy as a competitive business lever and tool for generating value. As part of

the process, a number of areas and actions were also identified in relation to the relevant issues, which are reported in this document.

The Group’s vision is that of an “**advanced, better, balanced and conscious world**”, which is articulated as follows: “Through innovative products, we want to improve our places, reducing inequalities and raising awareness of the need for sustainable development”.

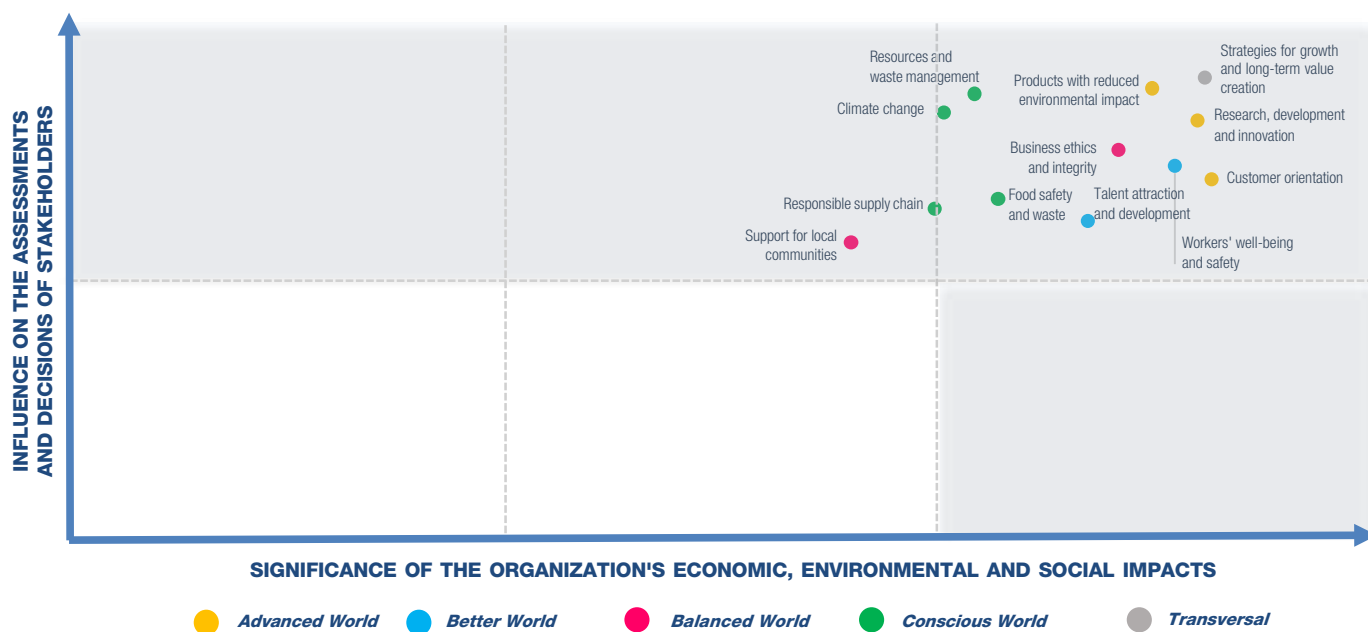
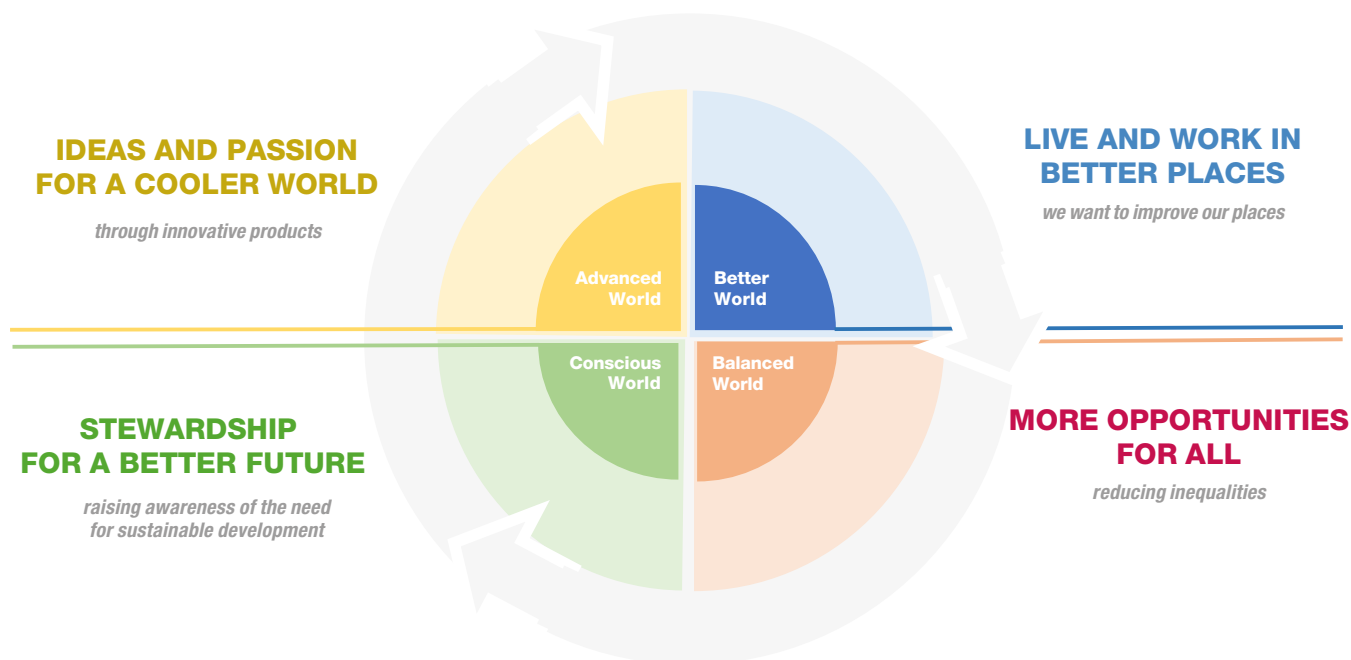
The materiality analysis was updated in 2021, considering:

- the point of view of top management in a series of dedicated workshops;
- stakeholder priorities, solicited through questionnaires and surveys for employees and clients by LU-VE Group or identified on the basis of requests from investors, suppliers and other business partners on LU-VE Group’s sustainability issues.

Following the materiality analysis update, some new material topics were included and are therefore subject to reporting, such as climate change, responsible supply chain, food safety and waste, support for local communities; while other topics underwent some terminological revisions. The full list of material topics, broken down by the area of vision to which they contribute, is given in the table below.

The two axes of the matrix are:

- **Axis X:** Significance of economic, environmental and social impacts
- **Axis Y:** Influence of the assessments and decisions stakeholders





MATERIAL TOPIC	DESCRIPTION	SCOPE OF VISION
Strategies for growth and long-term value creation	Promoting growth strategies geared towards long-term value creation by maximising the positive value generated in identified impact areas such as energy efficiency, food safety, climate well-being and digital transformation	TRANSVERSAL
Research, development and innovation	Promoting sector technological progress by investing in research concerning innovative solutions, also in collaboration with highly qualified partners linked to the world of universities and research	ADVANCED WORLD
Products with reduced environmental impact	Designing and manufacturing products that minimise their overall environmental impact: solutions with reduced energy consumption, limited use of refrigerant charge, increased use of natural refrigerant fluids and reduced material	
Customer orientation	Making our customers excited about our excellent products and services, that meet their needs and the quality requirements defined at Group level, as well as supporting them throughout the product life cycle	
Talent attraction and development	Safeguarding and strengthening the know-how of our people through professional growth paths which make it possible to provide customers with a competent and professional service, while motivating personnel and promoting talent	BETTER WORLD
Workers' well-being and safety	Promoting the well-being of our people and providing them with a workplace where they can fulfil their potential and perform their tasks with passion and in safety	
Business ethics and integrity	Managing relationships marked by transparency with all Group stakeholders, ensuring compliance with regulations in force in terms of combating active and passive corruption and guaranteeing institutional communications and honest, truthful promotions based on factual information	BALANCED WORLD
Support for local communities	Supporting employees and their families and investing in the social and cultural development of local communities, as well as accelerating the journey towards an increasingly inclusive and meritocratic environment	
Climate change	Actively contributing to climate change mitigation by closely monitoring the climate-altering gas emissions generated and identifying action plans to reduce them	CONSCIOUS WORLD
Resource and waste management	Minimising the environmental impact of our production processes, enacting energy efficiency policies, reducing water consumption, the use of materials and the generation of waste	
Responsible supply chain	Promoting a responsible and sustainability-conscious supply chain and developing relationships of trust with partners	
Food safety and waste	Ensuring a proper cold chain, enabling people in all countries to benefit from safe and properly stored food, while also reducing food waste	

## 1.2.4 The Sustainable Development Goals

The Group has formalised its respect for the Sustainable Development Goals by defining the link between the priorities listed in the materiality matrix and the related impacts for achieving the goals.

The 2030 Agenda is the action programme signed in 2015 by the governments of the 193 member countries of the United Nations (UN) that supports organisations in implementing actions aimed at sustainable development. It defines **17 Sustainable Development Goals - SDGs** divided into 169 sub-goals or targets to be achieved by 2030.

LU-VE Group is committed to contributing to and following the guidelines of all 17 Goals of the Agenda. In particular, five have been identified for which more signi-

ficant results can be achieved according to the specific features of the business and the company's principles:

- **SDG 7** "Affordable and clean energy"
- **SDG 8** "Decent work and economic growth"
- **SDG 9** "Industry, innovation and infrastructure"
- **SDG 12** "Responsible consumption and production"
- **SDG 13** "Climate action"

The Group has thus outlined the correlation between the pillars of its sustainability strategy, materiality matrix and the Sustainable Development Goals.

The Group considers SDG 17, "Partnership for the Goals" to touch on all the pillars and sustainability issues, as cooperation between countries, institutions and businesses is strategic to the creation of a sustainable cold chain.





### 1.3 Generating value in the long term

The ability to innovate and develop cutting-edge technologies represents a key strategy in ensuring businesses' profitability and guaranteeing added value in the long term, to all its stakeholders. The principle underlying LU-VE Group's industrial philosophy is “**grey matter is our raw material**”. Thought, research and passion are the primary elements for developing innovative and sustainable ideas.

LU-VE Group supports long-term growth through investments in R&D. The research and development laboratories (over 3,235 m<sup>2</sup>) are among the largest in the sector in Europe and are the driving force behind the expansion of production capacity and commercial success in the market.

With reference to production capacity, during 2021 LU-VE Group completed the expansion of the facility in Bhiwadi (Rajasthan, India), which also made it possible to launch the plan to create backup production capacity for the European facilities that manufacture batteries. The project involves the relocation of some customers/product lines to reserve production capacities in Europe for higher value-added products, with higher levels of customisation and small/medium-sized production batches.

In March, the first lot of the new facility was completed in the United States (Jacksonville, Texas) and, right on schedule, production of the exchangers was launched in May, for which a multi-year agreement was signed in the prior months with an important Group client. In view of the delay caused by the pandemic in the development of growth plans in the country, it was decided to reschedule the expansion of the new facility.

During 2021, the rationalisation program continued for the range of air cooled equipment for commercial and industrial refrigeration, with the launch of new evaporator lines and with the creation of a shared platform for natural refrigerant fluid condensers.

In general, LU-VE Group continued the process it began during the most complicated moments of the pandemic to install backup production lines in the various plants in order to guarantee customers a higher level of flexibility and therefore of service.

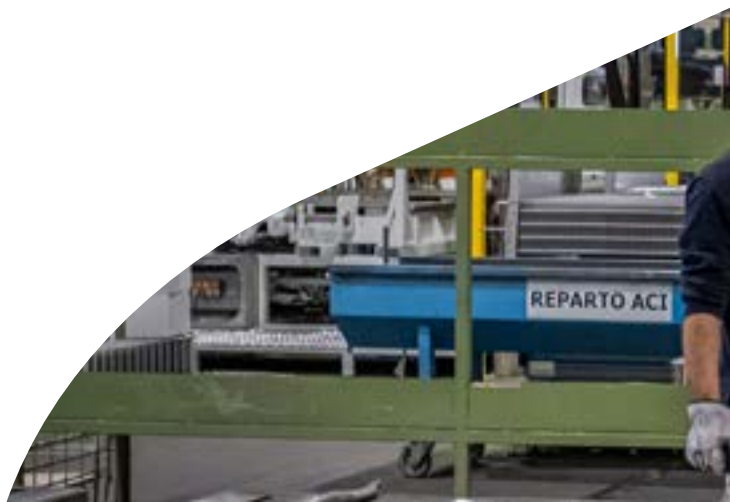
The project to expand the number of suppliers also continued, with the aim of both reducing geographical dependence on individual countries and being able to spread the purchase quotas over a larger number

of counterparties, thus reducing the impact of the shortage of production capacity that characterised 2021 (especially with reference to raw materials and electronic components).

The Group's international presence requires a well-structured system: separation of business responsibilities, targeted development by area of expertise, and efficiency and quality in meeting the needs of markets and customers. Economic and financial performance monitoring is managed by the Administration, Finance and Control Department, which also handles the definition of the budget, including the collection of information from the various companies and a subsequent phase of sharing it with the CEO and the COO, followed by approval by the Board of Directors of the parent company. Furthermore, the department regularly monitors the progress of the various Group companies to verify the budget information.

From a financial perspective, the Group has always maintained a high level of attention to the management of net working capital in order to minimise risk for investors, to have adequate and competitive production costs, to achieve the highest technological levels and the timeframes required by markets and customers. Due to the logistics problems already described, LUVE Group decided to invest more in inventories in 2021 (only raw materials and components, in order to exclude obsolescence risks) so as to be able to continue to serve the market with delivery times in line with expectations, as shown in the table below under Change in inventories. Overall, in 2021 the economic value generated by the Group increased by 35% compared to the previous year, from €404 million to **€546 million**.

With regard to the value distributed to the community, the difference between the 2021 value and the previous year's value takes into account an “extraordinary” contribution in 2020 of €300,000, which was specifically for healthcare personnel involved in the fight against Covid-19.



## DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED (€ THOUSANDS)

	2019	2020	2021
<b>Economic Value Generated</b>	<b>394,133</b>	<b>403,689</b>	<b>545,704</b>
Revenues and operating income	391,581	401,457	492,008
Financial income	2,062	2,232	1,766
Change in inventories	489	0	51,930
<b>Economic Value Distributed</b>	<b>356,578</b>	<b>364,590</b>	<b>498,910</b>
Operating costs	259,997	257,491	374,699
Value distributed to employees	83,361	91,684	106,683
Value distributed to capital providers	2,588	3,326	4,281
Value distributed to Public Administration	4,631	5,208	6,718
Value distributed to shareholders	5,944	6,521	6,466
Value distributed to the community	57	360	63
<b>Economic Value Retained</b>	<b>37,555</b>	<b>39,099</b>	<b>46,794</b>





### 1.3.1 Taxonomy of environmentally sustainable activities

With the aim of encouraging the implementation of the “Green Deal” and facilitating the orientation of investments towards environmentally sustainable economic activities, in 2020 the European Commission introduced the **Regulation (UE) 2020/852 – EU Taxonomy Regulation**, hereinafter also “Taxonomy” or “Regulation”. The “Taxonomy” establishes a unified classification system for the definition of economic activities that can be considered environmentally sustainable.

According to the Regulation, in order to be considered “environmentally sustainable”, an economic activity must:

- **Substantially contribute to the achievement of at least one of the six environmental objective** defined in Article 9 of the Regulation: climate change mitigation and adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, prevention and reduction of pollution, protection and restoration of biodiversity and ecosystems;
- **Do No Significant Harm (DNSH)** to any of the above environmental objectives;
- **Respect minimum social guarantees**, recognising the importance of international rights and standards;

- **Meet the technical screening criteria**<sup>7</sup> defined in the regulation for each type of activity. Identified on a scientific basis and specific to each of the objectives, these criteria describe the conditions to be met in order to make a substantial contribution to achieving the objectives.

The Regulation also introduces a new disclosure requirement for all companies falling within the scope of Italian Legislative Decree 254/2016, which are therefore required to prepare a Non-Financial Statement. In particular, pursuant to Articles 3 and 9 of the Regulation, starting from 2021 these companies are required to report information on turnover, capital expenditure (CAPEX) and operating expenditure (OPEX) for all activities **identified as taxonomy-eligible and taxonomy-non-eligible** with respect to the two climate change-related objectives.

Pursuant to Art. 10 of Delegated Regulation (EU) 2021/2178 of 6 July 2021, for the first year of the regulation's application, however, companies are not required to comply with the technical screening criteria, the “Do No Significant Harm” criterion and the minimum social guarantees. Therefore, for this first year of reporting, the information required by the reference regulation only concerns the percentage, compared to the total, of revenues, capital expenditure (CapEx) and operating expenditure (OpEx) attributable to economic activities that qualify as potentially sustainable (“eligible”) from an environmental point of view.

<sup>7</sup> Currently, the criteria for the technical screening of the first two objectives of the regulation have been defined by Delegated Regulation (EU) 2021/2139 of 4 June 2021: Climate Change Mitigation and Climate Change Adaptation.



## LU-VE Group's eligible activities

In line with regulatory requirements, and also having regard to the interpretative clarifications provided by the European Commission in the form of "Q&As" in December 2021 and February 2022, an analysis of the Group's activities was carried out with the aim of identifying eligible activities with respect to the first two objectives of the Taxonomy: climate change mitigation and adaptation. It should be noted that in carrying out the analysis and preparation activities of the disclosures relating to the Taxonomy, the company's Management adopted an overall prudential approach based on its understanding and interpretation, at the current state of knowledge, of the applicable regulatory requirements. In particular, with respect to the lists of economic activities contained in Annexes 1 and 2 of Delegated Regulation (EU) 2021/2139, the following economic activities were classified as eligible with respect to the "Climate Change Mitigation" objective:

- Products using CO<sub>2</sub> as a refrigerant fluid (activity 3.6);
- Products using other natural refrigerant fluids (hydrocarbons, ammonia, glycol water) (activity 3.6);
- Heat exchangers with high energy efficiency (activity 3.5);
- R&D team and laboratory (activity 9.2);
- Dedicated solutions for renewable energy production plants (activity 4.17);
- Transport by motorbikes, cars and light commercial vehicles (activity 6.5);
- Installation of renewable energy technologies (activity 7.6).

The accounting items to be associated with the KPIs were then identified, based on indications given in Annex 1 to Delegated Regulation (EU) 2021/2178.

The table below shows the turnover, CAPEX and OPEX KPIs, i.e. the percentages generated by "eligible" and "non-eligible" activities.

In particular, it should be noted that for the item turnover, the Group had already begun to assess the share of turnover relating to equipment using natural refrigerants (equal to 50.6% in 2020) as part of the financing required in previous years.

Keeping the calculation criteria in line with those applied in 2020, the percentage of exchangers with natural refrigerants in 2021 would have been 52.7%. In terms of investments, note the significant incidence of the production of machinery capable of using natural refrigerants.

KPI <sup>8</sup>	2021 TOTAL € THOUSANDS	2021 ELIGIBLE PORTION	2021 NON-ELIGIBLE PORTION
Turnover	492,008	47.3%	52.7%
CAPEX	33,531	39.2%	60.8%
OPEX	7,754	49.5%	50.5%

<sup>8</sup> Please refer to Annex I of Delegated Regulation (EU) 2021/2178 of 6 July 2021 for the definition of the individual parameters (Turnover, CAPEX and OPEX)

The Group also carried out an analysis of the KPI calculation methods relating to turnover, CAPEX and OPEX on the basis of the activities considered eligible for the purposes expressed by the Regulation itself, as prescribed by the aforementioned Delegated Regulations of Regulation (EU) 2020/852. Specifically:

- for the calculation of KPI turnover, the sum of revenues from the sale of products and the provision of services was taken into account in accordance with IAS 1 par. 82(a) and Directive 2013/34/EU which defines, as regards the denominator, “Net Turnover” as the revenues from the sale of products and the provision of services net of VAT, returns and other added taxes;;
- the **CAPEX KPI** takes into account the sum of all additions during the 2021 financial year to tangible and intangible elements of the balance sheet, including capitalised R&D assets and rights of use arising from IFRS 16;
- the **OPEX KPI** takes into account the sum of operating expenses associated with R&D, maintenance of production facilities, *day-to-day servicing of asset e short-term lease*.

A detailed breakdown of the KPIs required by the Regulation, broken down by “eligible” activity and their overall value is provided below.

In addition, eligible Capex was broadly allocated to the different activities in the Taxonomy on the basis of their associated eligible turnover percentages. Eligible Opex was allocated to assets on the basis of the percentage of eligible Capex associated with them.

It should be noted that the methods for determining and quantifying the indicators could change over the next few periods in relation to the expected publication of the technical reference regulations for the additional environmental objectives defined in Article 9 of the Regulation, as well as further developments in the interpretation of the regulations, which could therefore lead to substantial changes in the assessments and the process of calculating the KPIs for the next reporting year. Therefore, LU-VE Group reserves the right to update and modify, even substantially, the indicator calculation process and method in order to ensure their correct alignment with European legislation.

ELIGIBLE ACTIVITIES	TURNOVER	CAPEX	OPEX
3.6) Manufacture of other low carbon technologies	43.9%	31.8%	44.1%
3.5) Manufacture of energy efficiency equipment for buildings	3.3%	2.4%	3.3%
4.17) Cogeneration of heat/cool and power from solar energy	0.1%	0.0%	0.0%
6.5) Transport by motorbikes, passenger cars and commercial vehicles	0.0%	3.5%	0.0%
7.6) Installation, maintenance and repair of renewable energy technologies	0.0%	1.0%	1.4%
9.2) Close to market research, development and innovation	0.0%	0.5%	0.7%
<b>Total</b>	<b>47.3%</b>	<b>39.2%</b>	<b>49.6%</b>



### 1.3.2 Sustainable finance

The global move towards sustainable development and managing the effects of climate change is financially supported by several dedicated measures and programmes.

At European level, the NextGenerationEU instrument supports the creation of an increasingly green, digital, resilient Europe downstream of the coronavirus pandemic with more than €800 billion<sup>9</sup>. At the same time, the “Build Back Better Framework” was announced in the United States at the end of October 2021, with various measures to achieve climate targets, create millions of jobs and grow the economy. In particular, in this framework the US\$ 555 billion investment represents the largest specific investment in the American economy in clean energy through climate-smart practices<sup>10</sup>.

In this context, the incentive plans of banks and credit institutions in favour of green technologies are increasing accordingly.

During 2021, **the Group signed a number of loans that also envisaged the use of funds to achieve sustainability goals**. These instruments are made available to companies by financial institutions to support them in reconciling business development and

growth with enhanced sustainability performance.

The loans received are part of a broader Group strategy to strengthen the main innovations in the field of heat exchangers with low environmental impact, i.e., with natural refrigerant fluids, with zero or very low OPD (Ozone Depletion Potential) and GWP (Global Warming Potential).

During 2021, LU-VE Group also conducted a set of analyses, with the support of a dedicated data science company, with the aim of identifying specific indicators capable of clearly representing the impact in terms of sustainability of the various technological solutions adopted by LU-VE Group in the solutions it markets. These product-related indicators will provide investors and stakeholders with an increasingly clear measure of LU-VE Group's sustainability contribution on a global level. At the same time, increasingly precise indicators to measure progress in sustainability will allow LU-VE Group to access forms of financing with an increasingly competitive average cost of money.



#### CDP in support of sustainable growth

In 2021, CDP – **Cassa Depositi e Prestiti** financed LU-VE Group with **€30 million to support the Group's sustainable growth and internationalisation**.

Thanks to these resources, LU-VE Group will continue the investments envisaged in the business plan with a particular focus on growth in the domestic and foreign markets and on the search for cutting-edge and increasingly green solutions such as energy efficiency, sustainable growth and the production of low energy consumption exchangers.

Matteo Liberali, LU-VE Group CEO, declared: “The focus on sustainability has been one of our hallmarks since our foundation, researching and investing in environmentally-friendly solutions”.

Paolo Calcagnini, Deputy General Manager and Chief Business Officer of CDP, said: “This transaction confirms CDP's willingness to support companies that stand out for their continued sustainable growth and strong internationalisation. LU-VE Group is an example of Italian excellence that has been able to interpret these requirements well, embarking on a continuous path of innovation and growth for years that has made it the third largest manufacturer in the world in its sector.

<sup>9</sup> [https://ec.europa.eu/info/strategy/recovery-plan-europe\\_en](https://ec.europa.eu/info/strategy/recovery-plan-europe_en)

<sup>10</sup> <https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/28/president-biden-announces-the-build-back-better-framework/>



## “Green” loans

### Growth of natural refrigerants

In the last two years, LU-VE Group has signed a number of **loans totalling €83 million to support the growth of natural refrigerants.**

LU-VE Group signed a **€25 million loan** with Intesa Sanpaolo in 2020. The funding obtained by complying with the growth requirements for natural refrigerants has enabled the Group to pursue responsible growth plans and promote its project capacity, despite the difficult times affected by the ongoing pandemic.

In 2021, LU-VE Group signed two further medium-term “green” loans with Banco BPM, maturing in September 2026, for **€40 million and €18 million**, respectively. The sustainability target linked to the loan is to reduce the share of products with conventional HCFC refrigerants in total cooling system sales by at least 2% per year, in favour of environment-friendly alternative products using natural refrigerant fluids (such as CO<sub>2</sub>, ammonia, propane and water). Specifically, the €18 million loan is part of a larger financing package of €30 million for LU-VE Group and is part of the €5 billion “Sustainable Investments 2020-2023” credit pool made available by Banco BPM to deserving companies that promote the transition to a sustainable economy.

### Support of ESG programmes in companies

In 2021, LU-VE Group signed a new financial transaction **totalling €30 million to support ESG programmes in the company.**

The Intesa Sanpaolo S-Loan transaction supports corporate sustainability activities. The €30 million loan for LU-VE Group supports the purchase of electricity from renewable sources, support for non-profit organisations and support for professional staff from disadvantaged groups.









### 1.3.3 Tax strategy

In line with the principles set out in its Code of Ethics, LU-VE Group behaves according to values of honesty, legality and fairness, including when managing tax matters. In accordance with the principle according to which the contribution resulting from taxes paid is a key channel for contributing to the economic and social development of countries and communities, the Group constantly monitors compliance with all applicable tax regulations, acting responsibly in the jurisdictions in which it operates.

The Group's Administration and Finance department is responsible for managing tax matters. The Group has not defined a formal tax strategy or policy at Group level, and individual companies operate in compliance with local tax regulations. Local Finance Managers are responsible for tax compliance, which is overseen by the Group's Administration and Finance department.

Tax risks are analysed and handled in accordance with the overall Enterprise Risk Management business model. Corporate whistleblowing channels may also be used to report any critical issues relating to unethical or illegal conduct and to the organisation's integrity in tax matters.

To date, the Group has not received any requests from its stakeholders with regard to tax issues. Should any such requests be received, they will be dealt with by the company departments in charge of tax compliance. Relations with tax authorities are based on principles of fairness and compliance with the different regulations applied in the countries where the Group operates. It should be noted that the Group does not carry out tax advocacy activities.

Reporting by tax jurisdiction in the 2021 period is shown below<sup>11</sup>.



COUNTRY	COMPANY	P/C <sup>12</sup>	REVENUES VS THIRD PARTIES	REVENUES VS GROUP	WORKFORCE	PROPERTY, PLANT AND EQUIPMENT	PRE-TAX PROFIT (LOSS)	INCOME TAXES PAID	INCOME TAXES ACCRUED
			€/000	€/000	N	€/000	€/000	€/000	€/000
<b>Italy</b>	LU-VE S.p.A.	P							
	TECNAIR LV S.p.A.	P							
	SEST S.p.A.	P							
	THERMO GLASS DOOR S.p.A.	P							
	MANIFOLD S.r.l.	P							
	LUVEDIGITAL S.r.l.	P							
	AIR HEX ALONTE S.r.l.	P							
	SEST S.p.A.	P							
	<b>TOTAL Italy</b>		<b>165,003</b>	<b>53,725</b>	<b>1,217</b>	<b>64,809</b>	<b>13,175</b>	<b>2,533</b>	<b>(471)</b>
<b>Austria</b>	LU-VE Austria GmbH	C	<b>2</b>	<b>407</b>	<b>2</b>	<b>-</b>	<b>87</b>	<b>-</b>	<b>22</b>
<b>Finland</b>	FINCOIL LU-VE OY	P	<b>28,019</b>	<b>2,919</b>	<b>137</b>	<b>5,984</b>	<b>(455)</b>	<b>13</b>	<b>(120)</b>
<b>France</b>	LU-VE France S.a.r.l.	C	<b>17,902</b>	<b>354</b>	<b>10</b>	<b>345</b>	<b>600</b>	<b>188</b>	<b>163</b>
<b>Germany</b>	LU-VE Deutschland GmbH	C	<b>1,616</b>	<b>341</b>	<b>12</b>	<b>192</b>	<b>(419)</b>	<b>-</b>	<b>-</b>
<b>The Netherlands</b>	LU-VE Netherlands B.V.	C	<b>3,749</b>	<b>928</b>	<b>11</b>	<b>338</b>	<b>(89)</b>	<b>-</b>	<b>5</b>
<b>Poland</b>	SEST LU-VE POLSKA Sp.z.o.o	P	<b>85,536</b>	<b>20,913</b>	<b>966</b>	<b>44,550</b>	<b>14,851</b>	<b>54</b>	<b>2,442</b>
<b>Czech Republic</b>	HEAT TRANSFER SYSTEMS (HTS) s.r.o	P	<b>46,961</b>	<b>3,544</b>	<b>418</b>	<b>11,068</b>	<b>3,393</b>	<b>1,134</b>	<b>671</b>
<b>Spain</b>	LU-VE IBERICA S.L.	C	<b>13,018</b>	<b>117</b>	<b>14</b>	<b>135</b>	<b>270</b>	<b>7</b>	<b>67</b>
<b>Sweden</b>	LU-VE Sweden AB	P	<b>18,018</b>	<b>286</b>	<b>48</b>	<b>1,183</b>	<b>1,957</b>	<b>62</b>	<b>(121)</b>
<b>Australia</b>	LU-VE Contardo Pacific Pty. Ltd.	C	<b>466</b>	<b>3,739</b>	<b>-</b>	<b>-</b>	<b>3,715</b>	<b>-</b>	<b>-</b>
<b>China</b>	LU-VE HEAT EXCHANGERS (TIANMEN) Co. Ltd	P	<b>13,715</b>	<b>94</b>	<b>67</b>	<b>2,285</b>	<b>1,989</b>	<b>438</b>	<b>515</b>
<b>South Korea</b>	LU-VE South Korea LLC	C	<b>-</b>	<b>54</b>	<b>1</b>	<b>-</b>	<b>(1)</b>	<b>-</b>	<b>-</b>
<b>Hong Kong</b>	LU-VE Asia Pacific Ltd	C	<b>7</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>359</b>	<b>-</b>	<b>-</b>
<b>India</b>	SPIROTECH HEAT EXCHANGERS Private Limited	P	<b>44,589</b>	<b>142</b>	<b>745</b>	<b>15,928</b>	<b>5,514</b>	<b>1,780</b>	<b>1,374</b>
<b>United Arab Emirates</b>	LU-VE Middle East DMCC	C	<b>-</b>	<b>571</b>	<b>4</b>	<b>87</b>	<b>41</b>	<b>-</b>	<b>-</b>
<b>Russia</b>	"000" SEST LU-VE	P							
	"000" LU-VE Moscow	C							
	<b>TOTAL Russia</b>		<b>38,959</b>	<b>460</b>	<b>372</b>	<b>6,171</b>	<b>7,627</b>	<b>1,891</b>	<b>1,267</b>
<b>USA</b>	Zyklus Heat Transfer, Inc.	P	<b>14,448</b>	<b>14</b>	<b>125</b>	<b>12,590</b>	<b>(3,252)</b>	<b>-</b>	<b>-</b>
<b>Consolidation adjustments</b>				<b>(88,608)</b>		<b>1,930</b>	<b>(18,739)</b>		<b>33</b>
<b>LU-VE Group</b>			<b>492,008</b>	<b>-</b>	<b>4,149</b>	<b>167,595</b>	<b>30,623</b>	<b>8,100</b>	<b>5,847</b>

**11** The economic/financial data reported are audited by external auditors. Regarding any differences between the income tax accrued on profits and the tax due (GRI 207-4-b-x), please refer to the Notes to the Consolidated Financial Statements of LU-VE Group as at 31 December 2021.

**12** Company type: P manufacturing company; C sales company



### 1.3.4 Environmental and social certifications

The Group uses management systems that comply with international ISO standards to monitor the impacts generated by its activities and systematically seek efficient and sustainable improvements.


























Compared to 2020, two Group companies have achieved new milestones in terms of certified management systems. TGD (Travacò Siccomario, Pavia), the Group's subsidiary operating in the production of glass doors and locking systems for refrigerated counters and displays and IoT mirrors for special applications, obtained ISO 45001 Occupational Health and Safety Management Systems certification in 2021. This certification replaces the previous OHSAS 18001, which has therefore been discontinued.

There were also updates for Spirotech, the Group's Indian company with two facilities, one in Bhiwadi (Rajasthan) and the other in Sarole (Maharashtra).

The LU-VE Spirotech plant in Bhiwadi has had its ISO 14001 environmental management certificate renewed. In 2018, the facility had already been awarded the renewal of the "IGBC Green Factory Building - Gold" certification issued by the Indian Green Building Council (IGBC) on waste management, water efficiency, reduction of fossil fuel use, energy efficiency and natural resource conservation.

In 2021, the Sarole site achieved ISO 9001 Quality Management Systems, ISO 14001 Environmental Management Systems and ISO 45001 Occupational Health and Safety Management Systems certification.



PRODUCTION FACILITIES	ISO 9001	ISO 14001	ISO 45001	ISO 50001
<b>ITALY</b>				
Alonte (Vicenza)				
Limana (Belluno)				
Travacò Siccomario (Pavia)				
Uboldo (Varese) <sup>13</sup>				
<b>CHINA</b>				
Tianmen (Hubei)				
<b>FINLAND</b>				
Vantaa (Uusimaa)				
<b>INDIA</b>				
Bhiwadi (Rajasthan)				
Sarole (Pune Dist., Maharastra)				
<b>POLAND</b>				
Gliwice (Slesia) 2 plants				
<b>CZECH REPUBLIC</b>				
Novosedly (South Moravia)				
<b>RUSSIA</b>				
Lipetsk				
<b>SWEDEN</b>				
Asarum (Karlshamn)				
<b>USA</b>				
Jacksonville (Texas)				

<sup>13</sup> Le certificazioni indicate fanno riferimento alle società con sede a Uboldo: LU-VE Spa e Tecnair LV S.p.A.

### 1.3.5 Sustainability awards and recognitions

The Group received several awards related to sustainability in 2021, including regarding contributions to innovation, support for the territory and growth.



#### China Awards 2021

"Silk Road 2020" category, reserved for "Italian companies that particularly stand out for their long and significant growth and development path over the years in the Chinese market".



#### Top Job 2021

Companies where people work best in Italy (Mechanical Industry category) - attributed by ITQF (German Institute for Quality and Finance) and La Repubblica Affari&Finanza.



#### "L'impresa oltre l'impresa" Award 2021

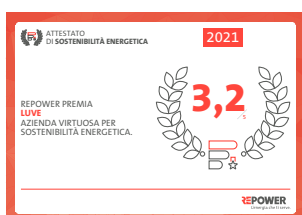
Given by the Lombardy Region "for the long and significant commitment to growth and development brought to the area even in a difficult period like that of the pandemic".



#### Sustainability Leader 2021

Among the 150 most sustainable companies in Italy).

Awarded by Statista GmbH (a German company specialising in market research and business data analysis), in collaboration with "Il Sole 24 Ore".



#### Virtuous company for energy sustainability

Awarded by Repower, a company specialising in energy efficiency services for companies.





### **Green Star Sustainability 2021**

4th place in the ranking reserved for the engineering industry.

Awarded by ITQF (German Institute for Quality and Finance) in collaboration with the Institute for Management and Economic Research (IMWF) in Hamburg and La Repubblica Affari&Finanza.



### **Bronze Medal EcoVadis 2021**

Annual Sustainability Assessment.

LU-VE Group is in the top 20% of companies in terms of sustainable procurement and in the top 30% of companies for the manufacture of general purpose machinery.



### **“KNVVK & Young Cool Innovation Award 2021”**

Award for being one of the best technologies/innovations in the field of refrigeration for IGEA, a LU-VE Group system for air sanitation (patent pending).



### **“Gulfood Manufacturing Industry Excellence Awards Winner 2021”**

Most Innovative Processing Solution Award - Awarded for IGEA, LU-VE Group's air sanitisation system.



### **Engineering Export Promotion Council (EEPC) Award**

For the seventh time, Spirotech/LU-VE Group of Bhiwadi (India) has been awarded by the Engineering Export Promotion Council (EEPC). The initiative is sponsored by the Indian Ministry of Commerce and Industry.



## Palmarès 2009 – 2020

### 2009

- Finalist in the 2009 Friend of the Environment Innovation Award - LU-VE SpA, awarded by Legambiente/Green Economy.
- 2009 "Etica&Impresa" Award - LU-VE SpA "Special Mention" Category "Occupational Health and Safety" (for the "Zero Risks-Zero Accidents" and "Zero Risks-Safely Together" programmes).

### 2010

- 2010 "Etica&Impresa" Award - LU-VE SpA "Equal Opportunities" Category (Positive actions planned and/or contracted aimed at implementing and disseminating the use of tools designed to protect and enhance gender, ethnic and social diversity).

### 2012

- Company to Watch 2012 Award – Databank Cerved.

### 2013

- • Supplier Award Mark Gardner - Dean & Wood.

### 2014

- "IGBC Green Factory Building - Gold" 2014, Spirotech India (three-year award).

### 2015

- China Awards 2015, "Top Investors in China" category.
- "From father to son" - Among the finalists of the 6th edition of the "From father to son 2015" Award.

### 2017

- "Best social responsibility practices 2017" LU-VE SpA Awarded by the Lombardy Region and Unioncamere Lombardia.
- Finalists in the 15th edition of the Sodalitas Social Award, recognition for companies committed to achieving a sustainable future (growth, development and inclusion), awarded by Sodalitas Foundation.



## 2018

- China Awards 2018, "Top Investors in China" category.
- IGBC Green Factory Building - Gold 2018 Spirotech India (three-year award).
- Felix Industry Award 2018 "High Budget Honour" - Awarded by Cerved, LUISS, Confindustria Lombardia and ANSA.
- Supplier Quality Award 2018 - Ingersoll Rand.

## 2019


- "Best social responsibility practices 2019" LU-VE SpA Awarded by the Lombardy Region and Unioncamere Lombardia.
- China Awards 2019, "Top Investors in China" category.
- Sustainability Award 2019 Spirotech (Bhiwadi, India) - Global Supplier Award Programme of Trane Technologies.
- National Awards for Export Excellence - Spirotech awarded in the Large category, General Machinery sector. Award sponsored by the Engineering Export Promotion Council (EEPC).

## 2020

- Eccellenze d'Impresa 2020 - LU-VE SpA "Special Mention Internationalisation Category", awarded by GEA, Harvard Business Review Italia and Arca Fondi SGR.
- Digital Stars Italia 2020 (Mechanical Industry category), awarded by ITQF (German Institute for Quality and Finance).
- China Awards 2020, "Silk Road" category for growth and development in China.
- "Dynamic companies" Mediobanca - 55th edition of the study on "Leading Italian companies".
- Top Job 2020 Best Employers - Companies where people work best in Italy (Mechanical Industry category), awarded by ITQF (German Institute for Quality and Finance) and La Repubblica Affari&Finanza.
- M&A Awards 2020: LU-VE among the Italian "champions" for the acquisition of Alfa Laval's "Air" division.







*“There is no work, there is no capital that does not begin with an act of intelligence”*

*(Carlo Cattaneo — philosopher, political scientist, linguist and writer)*



The background of the entire image is a photograph of the interior of Antelope Canyon. It features smooth, undulating sandstone walls with a warm, orange-red color palette. The lighting creates a play of light and shadow, highlighting the textures and curves of the rock formations. The perspective is looking down a narrow passage, with the walls curving inwards.

# ADVANCED WORLD

**Ideas and passion for a cooler world**

# ADVANCED WORLD

**Ideas and passion for a cooler world**



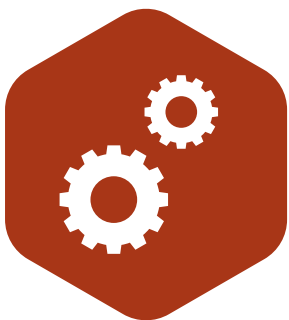
## **Over 3,235 m<sup>2</sup>**

**of Research and Development laboratories**



## **€1.9 million**

**total investments in research and development**



## **74%**

**solutions with high efficiency (EC) motors in 2021**

### **In this section**

Over the last 10 years, LU-VE Group's technological leadership has been strengthened thanks to the development of products that use natural refrigerant fluids and energy-efficient motors. The main solutions and applications of 2021 and the principal collaborations and the customer-oriented approach of LU-VE Group are described here.





”

## Protecting the environment is our duty

We owe it to our generation, but above all to future generations. We see this as a fixed point, an essential principle, not a point of arrival but one of departure.

**Stefano Filippini**, R&D Director LU-VE Group

## 2.1 Driving change

Research and innovation are distinctive elements of LU-VE Group's philosophy and actions in order to maintain its position as a technological industry leader and offer cutting-edge solutions.

Since its foundation, investment in research and development has resulted in a considerable range of innovative products that have become a **benchmark for the world's leading heat exchanger manufacturers.**

Design, research and development activities are led by the Technical Department, which follows the guidelines defined at Group level and aimed at maximising energy efficiency. In particular, the indications contained in the European ErP (Energy related Products) Directive are followed, which aims to reduce energy use along the supply chain from the design phase through to production and transport.

Most research activities are conducted in the Group's largest laboratory located at the Uboldo plant in Italy, which plays a strategic role in the development of innovative solutions.



Respect for and protection of resources and the environment were important decision criteria in the development of new products. In practice, this approach has translated and continues to translate over the years into rigorous design that takes into account both the performance and quality of the solutions and the entire product life cycle.

LU-VE Group faces a moderate risk resulting from the inability to offer technologically innovative products in line with market trends. Although a potential source of damage in terms of competitiveness and failure to generate positive impacts, this risk is unlikely thanks to the Group's innovative capacity, its significant investments in R&D and also thanks to the market's recognition of its role as a front runner.

During the reporting year, **€1.9 million was invested in new technologies and experimental studies that mainly concerned the development of solutions with natural refrigerants**, high energy efficiency and reduced refrigerant use. In addition to this value, there are a number of other research expenses that are not capitalised, in line with international accounting standards, but are expensed in the profit and loss account for each year. In 2021, this value was approximately €100,000.

The company has been moving in two directions for some time now: first, **the switch from traditional HFC (hydrofluorocarbon) fluids to natural refrigerant fluids** because they have lower GWP (Global Warming Potential) and ODP (Ozone Depletion Potential), and second the development of products with energy-efficient electronic EC motors.

These activities are mapped in the European Taxonomy (Regulation (EU) 2020/852), the details of which are reported in the dedicated chapter of this document.





## Leading R&D laboratories

LU-VE Group has **three R&D laboratories, in Uboldo (Varese, Italy), Alonte (Vicenza, Italy) and Vantaa (Finland). The R&D laboratory in Uboldo is at the forefront in Europe** in terms of size and above all competence, as it is one of the few in the world capable of conducting performance tests on appliances that use CO<sub>2</sub> 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-dynamic 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 fins and therefore less frost formation, reducing dehumidification.

**The results of the CFD analysis have been accurately confirmed by experimental tests.**

The laboratory uses dedicated software for the dimensioning of the CO<sub>2</sub> systems being designed, specifically developed by the Group and calibrated with the laboratory's own data.





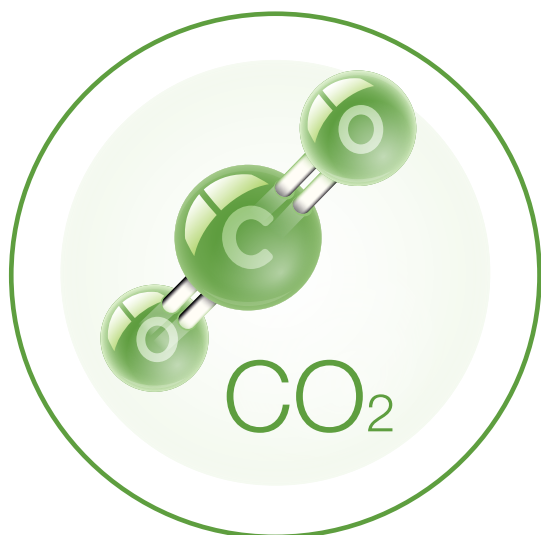
## 2.1.1 Sustainable refrigerant fluids

**Over time, the refrigeration industry has identified refrigerants that are increasingly sustainable** because of their low Global Warming Potential (GWP) and Ozone Depletion Potential (ODP). The Global Warming Potential expresses the contribution of the gas to the greenhouse effect, while the Ozone Depletion Potential expresses the value of ozone layer degradation that it can cause. Low GWP and ODP values are the hallmarks of sustainable refrigerant fluids.

**At international level**, the commitment to the gradual reduction of the greenhouse effect caused by traditional refrigerant fluids (or fluorinated gases) is defined by the Kigali Amendment (2016) to the Montreal Protocol (operational instrument of UNEP, the United Nations Environment Programme, for the implementation of the Vienna Convention for the Protection of the Ozone Layer, ratified by more than 170 countries).

**At European level**, the F-Gas Regulation also requires the total quantity of the most important F-gases sold in the EU to be reduced by up to one fifth of 2014 sales by 2030, and foresees a reduction of emissions from F-gases by two thirds compared to 2014 levels by 2030. The European Commission is currently reviewing the F-Gas Regulation; a Commission proposal for a new regulation is expected by April 2022.

In this context, **natural refrigerant fluids, together with the new A2L fluids, represent an important tool for the achievement of environmental commitments**, as they are characterised by zero ODP and low or zero GWP.



### Natural refrigerant fluids: CO<sub>2</sub>

CO<sub>2</sub> is a fluid that guarantees high levels of system safety thanks to its non-toxic and non-flammable characteristics, factors which enable its use in unlimited quantities. Moreover, CO<sub>2</sub> is characterised by high thermodynamic performance at medium and low temperatures and low production costs compared to other refrigerant gases. The main system considerations for its application as a refrigerant fluid are the high operational pressures of the fluid and its inefficiency in the presence of high external temperatures. The most common applications are in large-scale retail outlets, followed to a small extent by data centres, industrial sites and commercial applications. In 2021, there was a total of 40,000 transcritical CO<sub>2</sub> installations in Europe, showing growth over the previous year<sup>14</sup>.

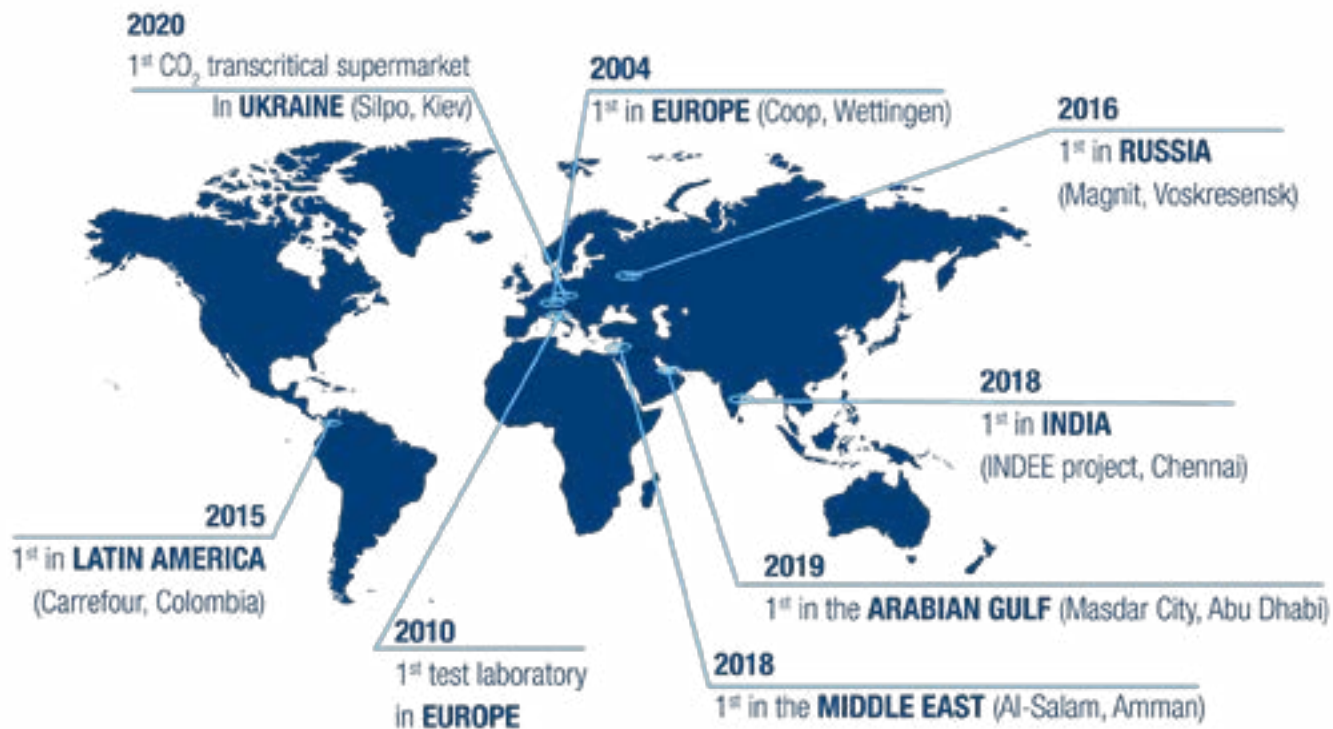
Through research projects on new refrigerants, LU-VE Group has had a track record of highly successful CO<sub>2</sub> installations in Europe, Latin America, the Middle East and Asia from 1986 to the present.

**In 2004, the company built Europe's first transcritical CO<sub>2</sub> plant** (Coop Tägipark in Wettingen, Switzerland), with a strong focus on natural refrigerant fluids.

In 2018, a new challenge began to move the "CO<sub>2</sub> equator" and make this technology efficient in countries where it was not previously possible.

**Two pilot systems are in operation in India** (INDEE Project at the ITT - Indian Institute of Technology Madras in Chennai) and in Amman, Jordan, where one of the most advanced CO<sub>2</sub> refrigeration systems for supermarkets in the region is in operation, as part of a project developed by the United Nations Industrial Development Organization (UNIDO), with the support of the Jordanian Ministry of the Environment.

**The first system was installed in Ukraine in 2020 for a supermarket** (Silpo, in Kyiv, Ukraine) with zero environmental impact, equipped with heat pumps, solar energy and a high-efficiency carbon dioxide cooling system.

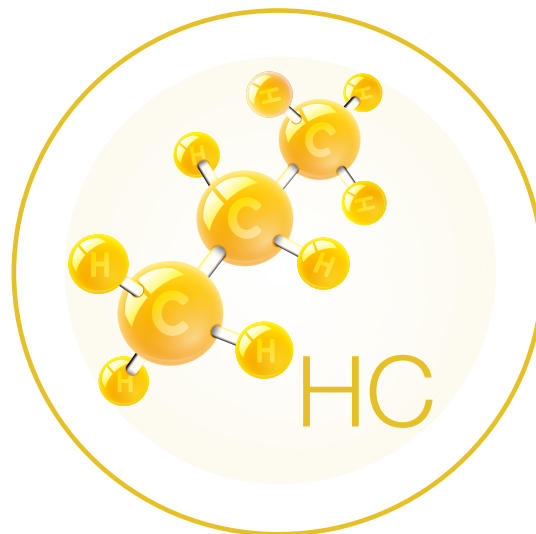


## Other natural refrigerant fluids

In addition to CO<sub>2</sub>, the other natural refrigerant fluids that have gradually been established in the refrigeration industry are **hydrocarbons (HC)** and **ammonia (NH<sub>3</sub>)**, the application of which is long established in industrial refrigeration.

However, solutions using natural refrigerant fluids are characterised by certain limitations that must be managed carefully **to ensure performance and safety during use.**

## Hydrocarbons (HC)



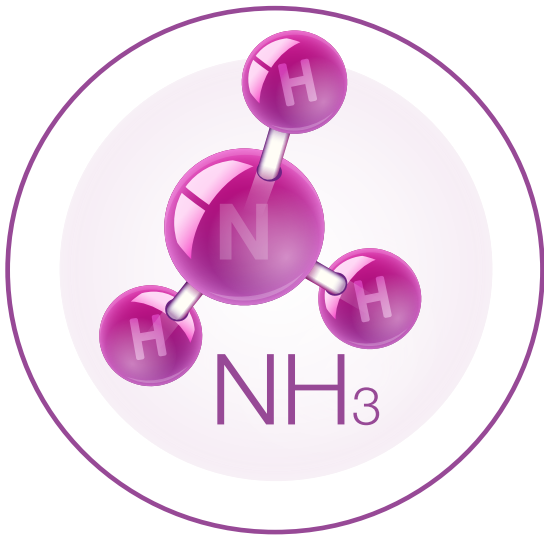
**Hydrocarbons (HC) such as propane** are characterised by physical properties that enable their use in a vast range of applications. However, problems such as flammability currently limit the use of hydrocarbons in small-scale refrigeration systems.

In line with other natural refrigerants, hydrocarbons have also increased significantly in recent years. The applications are diverse in this case, too: from small cooling units to vaccine storage and heat pumps for domestic and industrial use.





## Ammonia (NH<sub>3</sub>)



**Ammonia (NH<sub>3</sub>)** is another high performance refrigerant fluid, which is toxic to humans, however, and highly flammable, characteristics that limit its usage volume in many countries.

**Usually used in large refrigeration units,** ammonia is the highest performing natural fluid but also requires various system adjustments and the introduction of technologies to minimise volumes.

For this reason, the number of “low charge” systems with reduced quantities of ammonia has grown in recent years.

## Drycoolers and water (H<sub>2</sub>O)



**Water and glycol water are often used for refrigeration, conditioning and in industrial processes as a heat carrier fluid.**

Systems of this type typically consist of a machine that produces chilled water through a refrigeration cycle (chiller) and a chilled water distribution system.

The main advantages of water and glycol systems over direct expansion systems are easier installation and better control of cell humidity. Another important advantage of this type of system is the reduction in the amount of refrigerant used in the system, with important benefits for the environment.

A drycooler is often used in this type of system, which is a heat exchanger that allows the water temperature to be reduced, increasing system efficiency using a chiller, or which allows the chiller (free-cooling) to be replaced altogether if the ambient temperatures are low enough.



## The evolution of natural refrigerant fluids in LU-VE Group solutions

Overall, LU-VE Group has pushed the marketing of natural refrigerant fluid solutions over traditional fluids through the years.

An analysis of air cooled products in 2021 showed that sales of products using natural refrigerant fluids have increased over the years.

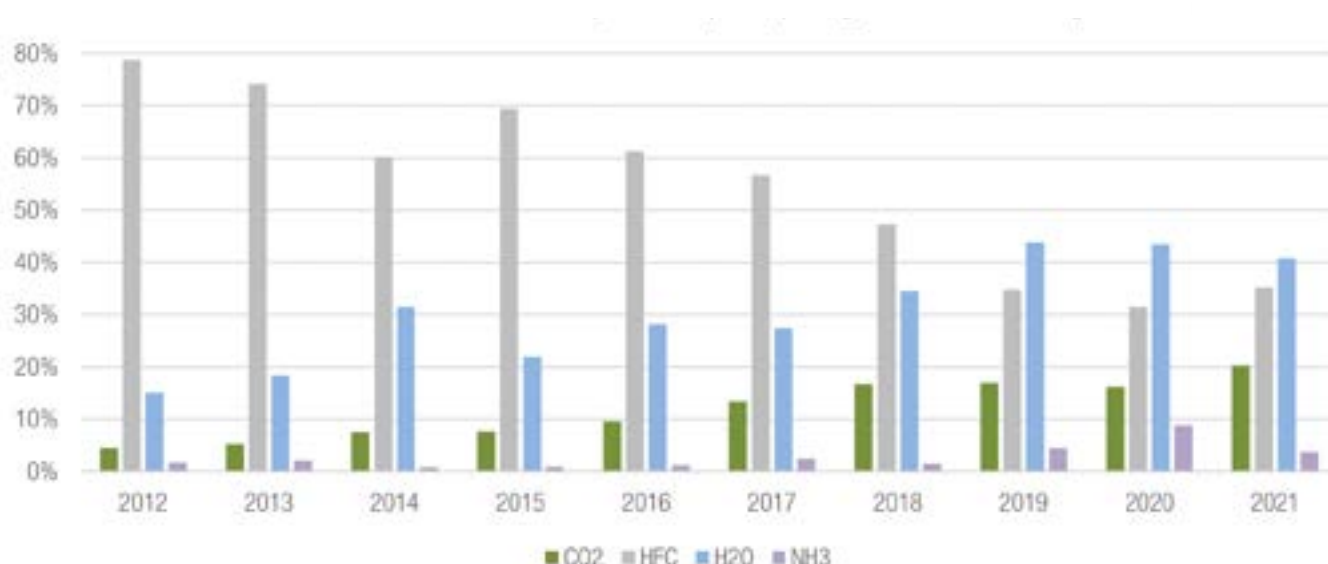
For the air cooled product ranges from 2012 to 2021, the share of sales of HFC (hydrofluorocarbon) solutions in total turnover fell from 79% to 35%. At the same time, there was strong growth in CO<sub>2</sub> applications, with the proportion of turnover rising to 20%, compared to

4% ten years earlier.

At the same time, H<sub>2</sub>O solutions accounted for 41% of turnover in 2021. The marketing of NH<sub>3</sub> solutions is also on the rise, albeit with some fluctuations over the years, and in 2021 accounted for 4% of turnover for air cooled products.

Given the strategic importance of the evolution of these products, LU-VE Group plans to extend this analysis to the entire product portfolio at global level, with the ultimate aim of measuring their evolution over time and supporting strategic and commercial policies to maximise the positive impact generated by these applications.

% of sales of products by type of refrigerant



## The “new” A2L fluids

In 2021, the Group continued exploring the applications of refrigerant fluids classified as A2L, low flammability (ISO 817:2014 Refrigerants - Designation and safety classification) and with an overall reduced environmental impact in terms of GWP (Global Warming Potential).

A2L fluids (R454A, R454C, R455A, R457A) have an average global warming potential (GWP) between 140 and 240, significantly lower than most traditional HFC fluids characterised by values even higher than 3,900 (R404A, R407C, R410A).

LU-VE Group has introduced a new dedicated series of commercial evaporators specifically designed for these fluids.

**To ensure safe use, an in-depth risk analysis has been carried out and a specific design methodology has been developed, also with the help of expert Notified Bodies.**





# RELAX!

We've taken care of **A2L**



Commercial unit cooler range  
**TOP SAFETY** for A2L applications



[www.luvegroup.com](http://www.luvegroup.com)



2.1.2 Products with efficient motors

Fans with electronic EC motors are one of the major innovations of recent years and mark an important step in the direction of achieving ventilated heat exchangers with improved efficiency and minimum energy input for ventilation. This has significant advantages from the point of view of reducing the energy consumption of refrigeration systems.

Axial EC fans are the result of joint development between LU-VE Group and the German manufacturer EBM-Papst. LU-VE premièred them to the world at the IKK trade fair in 2002 and they have been gaining market share ever since.

Unlike conventional asynchronous AC motors (in which the rotor has one coil), EC motors (Electronically Commuted or Electronically Controlled) have permanent magnets which, together with the current in the stator coil, generate torque on the rotor without dissipating energy. As a direct consequence, the efficiency of the electronic motor is higher.

From traditional motors to electronic ones

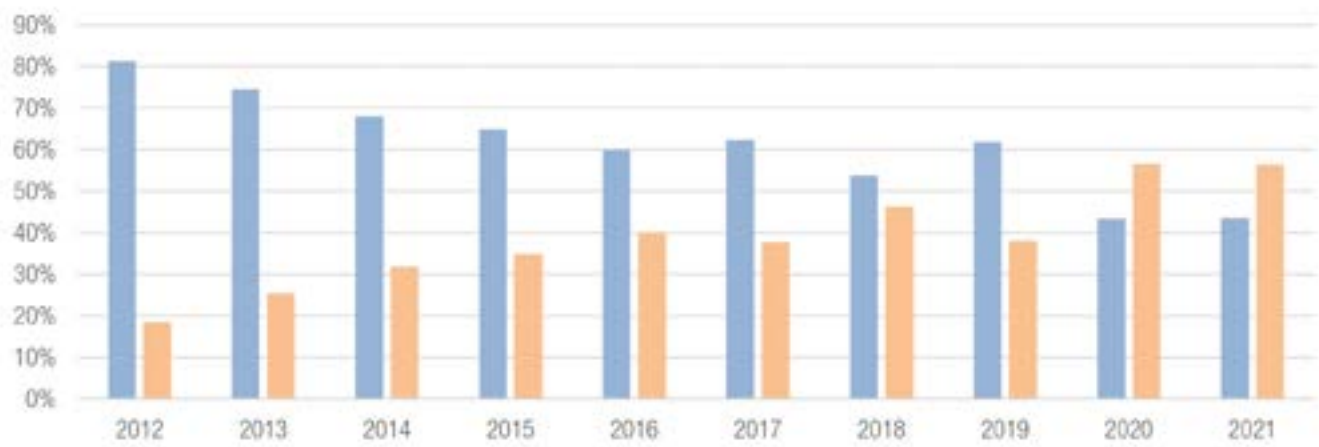
Looking at the type of motor used, which has a direct impact on the energy consumption of the product in use, **the Group has over the years increased the use of electronic EC motors, which are more efficient than traditional asynchronous AC motors.**

Compared to 2012, taking into account total sales, the use of AC motors fell from 81% to 44%, while EC motors increased from 19% to 56%, as shown in the first graph.

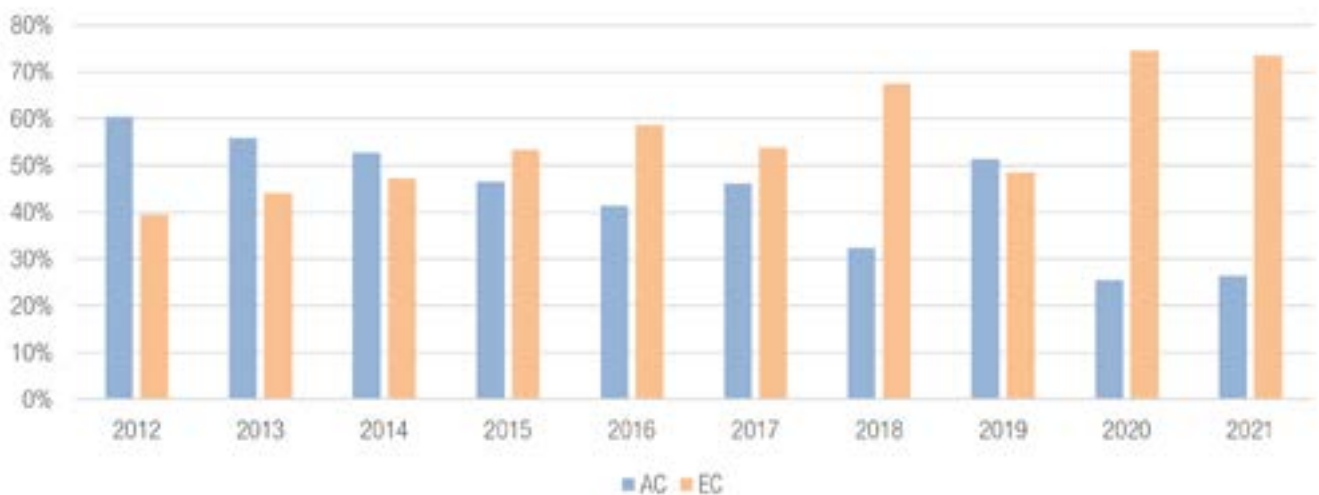
Focusing on the marketing of solutions with natural refrigerant fluids as shown in the second graph, the use of AC motors has fallen from 61% to 26% over the last ten years. EC motors see the opposite trend, rising from 39% to 74%.

It should be noted that the 2019 figure is anomalous due to the change in the analysis scope relating to the acquisition of Fincoil and Air Hex Alonte during that year.

% of total sales  
with EC/AC motors



% of sales of products with natural refrigerants  
with EC/AC motors







# Innovation is in our DNA



2021

## Igea

Antibacterial photocatalytic filter for dual discharge unit coolers

2021

## Mirabilia

High transparency door

2019

## R-Fin

Reinforced fin with high corrosion resistance

2019

## Image

Digitally animated mirror for collective spaces

2019

## Magic Vision

Glass door with a high resolution transparent screen for commercial refrigerators and freezers

2018

## Armonia

Industrial unit coolers with low ammonia charge

2018

## Gateway

IoT technology for "Magic Mirrors"

2016

## Nidea

Intelligent and efficient electric defrosting system

2016

## Emeritus

Combined adiabatic solution to maximize outdoor machine performance

2015

## Zero Energy Glass

Energy Free glass for freezers

2015

## The Whisperer plus

Compact high performance silencer 2.0

2014

## Plug&save

Integrated solution for unit coolers with expansion valve and controller

2012

## Minichannel

Reduced refrigerant charge condensers

2011

## Lt 0Energy door

High energy saving doors

2010

## The Whisperer

Compact high performance silencer

2009

## BLS Titan door

Titan model door with LEDs integrated in the double glazing to illuminate the product





\* Innovations prior to the founding year of LU-VE (1985) refer to Contardo

## 2.2 Cultivating a passion for innovation

Innovation is in LU-VE Group's DNA: it is represented by the great wealth of technical knowledge and know-how developed over the years and which has been increasingly enriched thanks to the passion and intellectual application of all resources.

### 2.2.1 2021 Solutions

New products and improved versions of existing lines were launched on the market in 2021. All the innovations presented in 2021 are listed below, broken down by area of impact.



FOOD  
SAFETY



ENERGY  
EFFICIENCY

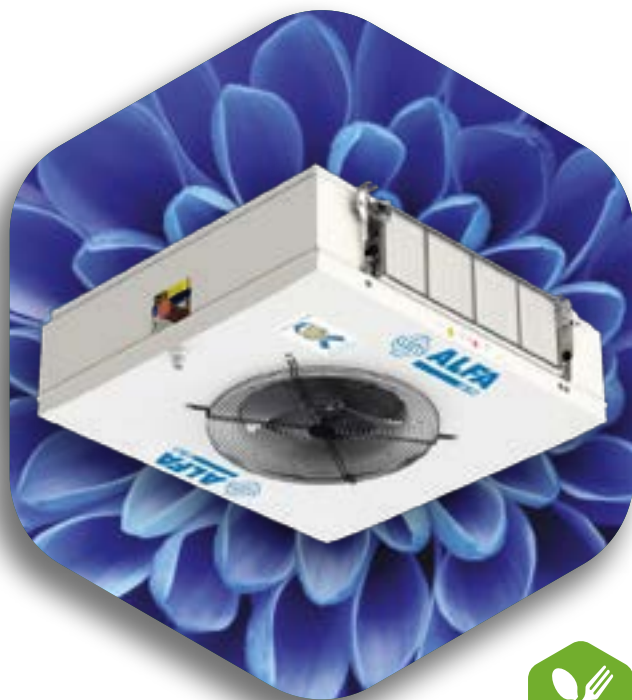


CLIMATE  
WELL-BEING



DIGITAL  
TRANSFORMATION

### Optigo FMD dual flow



For commercial refrigeration, the new range of Optigo FMD dual flow commercial air coolers, branded ALFA LU-VE, has been introduced.

This new range offers several advantages in terms of robustness and corrosion resistance, thanks to an epoxy powder-coated metal cover instead of pre-painted sheet metal.

The solution is characterised by low energy consumption and a low refrigerant charge. It also uses low-noise EC motors as standard.

The new Optigo FMD improves energy efficiency by 26.6% compared to the previous CDE range.

### ALFABLUE BX industrial CO<sub>2</sub> gas cooler



ALFA LU-VE's new generation "Alfablue" is an industrial CO<sub>2</sub> gas cooler derived from the LU-VE SAV/EAV/XAV range.

Thanks to the optimised coil with high-efficiency turbulence-control fin, the new "Alfablue" range offers improved performance and easier installation. Available for both vertical and horizontal flow, "Alfablue" is designed for easy integration in any environment.

It features a set of improvements compared to the previous series, such as the new LPX fin that is more efficient than the previous one (about 5% more with the same materials used), new high-efficiency fans (950 mm diameter), with quieter and better energy behaviour, and new circuit design. Overall, the new "Alfablue BX" improves energy efficiency by 32.7% and reduces the noise level by 2.2 dB(A).

### Optigo FMC for high-end commercial refrigeration



Since its first appearance over ten years ago, Optigo has become a trademark in the high-end commercial refrigeration scene. Already available in the selection software, the new version is suitable for general applications in small and medium-sized refrigeration and freezing environments.

Thanks to the optimised coil with high-efficiency turbulence-control fins, a feature of LU-VE Group technology, the new Optigo FMC air cooler delivers improved performance and reduced energy costs. In particular, it improves energy efficiency by 18.2% compared to the previous CCE range.

The solution is easy to install (plug&play) and also available with EC motors. Manufactured in Europe and included in the Eurovent certification programme, the range is also available for natural fluids (CO<sub>2</sub>) and glycol water. Optigo FMC is highly customisable at the customer's request, with a wide range of accessories available.



## New geometry for heat pumps



A new heat pump exchanger geometry was developed in 2021 that is capable of reducing the refrigerant charge by 69% and the use of materials by 24% for the same heat exchange and compared to a conventional finning system.

Heat pumps are a decisive element in the path to decarbonisation and sustainability. The development of new exchange matrices with high efficiency and low refrigerant charge is a further step forward in terms of overall sustainability.

## Mirabilia door: transparency and energy savings



The new version of the Mirabilia glass door is designed for refrigeration appliances in the commercial sector and is characterised by increased thermal insulation, thus enabling a reduction in the overall energy consumption of the refrigerators on which it is installed.

The door's surface is almost entirely transparent thanks to a transparent vertical edge reduced to only 4 mm. The door is also available in an anti-reflection version with unchanged thermal insulation characteristics.

The new version of the Mirabilia glass door also has a longer life cycle with the same performance as its predecessor, as certified by accredited laboratories. Lastly, the plastic components have been reduced to increase the recyclability of the product at the end of its life cycle.

## Igea: the new sanitising antivirus filter



Igea is the new solution designed by LU-VE Group for sanitising air. The Igea kit is easy to install and can be applied to all commercial dual flow air coolers manufactured by LU-VE Exchangers, ALFA LU-VE and AIA LU-VE.

The Igea filter eliminates viruses, bacteria and other pathogens thanks to LED-activated photocatalysts with  $\text{WO}_3$  tungsten trioxide.

As for the product's benefits, tests conducted by IRCCS San Raffaele Hospital in Milan show a 100% reduction in SARS-CoV-2 viral load after 30 minutes of use. Tests conducted by the University of Salento showed that the use of Igea prolongs the shelf life of climacteric fruit, i.e., fruit that continues to ripen after separation from the plant, by up to an additional 10 to 15 days.

Tests carried out in LU-VE Group's laboratories have shown that the performance of the evaporator is maintained with the filter installed (only -2% of the air quantity, compared to the same machine without filter). Lastly, the use of LED technology (rather than traditional UV lamps) ensures reduced power consumption, increased device longevity, as well as protecting the safety of people (it does not emit ultraviolet rays).

## New regulation and IoT on air heat exchangers



As part of IoT ("Internet of Things") solutions, the "smart" heat exchanger launched in 2021 is capable of connecting to a network, processing data and exchanging information with other objects.

To be defined as "smart", an object must first be identifiable, i.e., have a unique identifier in the digital world, and then it must be connected in order to be able to transmit and receive information.

The innovative application of IoT to heat exchangers offers the customer value-added services in terms of product regulation during operation and maintenance. In addition, the product can be optimised based on the integration of data managed by the system on which it is installed.

In order to ensure the effectiveness of remote monitoring activities, thorough data collection was implemented, firstly focusing on improving regulation accuracy and increasing the knowledge of the various operating conditions.

## 2.2.2. 2021 Applications

Over the years, the Group has contributed positively to the global refrigeration and air conditioning industry through its solutions. Some of LU-VE Group's most significant applications in 2021 are reported below, broken down by application areas.

### Applications to combat the Covid-19 pandemic

Marketing its solutions, in 2021 LU-VE Group **contributed to management of the Covid-19 pandemic** in various aspects related to the storage of vaccines and the ability to ensure high air quality in intensive care units.

### Applications for decarbonisation

**At international level, technological solutions are being sought and adopted to achieve the goal of zero “net carbon emissions”.**

In this context, heat pump systems can represent a valid technological solution, as they allow the extraction of heat from a natural source (air, water or ground) and make it available at the desired temperature. At the same time, heat pumps also make it possible to recover the residual heat generated by the refrigeration systems, which can then be used for heating, thus increasing the efficiency of the system.

LU-VE Group has designed and engineered special products to make the most of heat sources: an evaporator capable of absorbing heat from the outside, even in winter conditions, and transferring it to the working fluid, allowing the heat pump to operate in conditions of high efficiency.

### Applications for maximum energy efficiency

**LU-VE Group installations aimed at maximising the energy efficiency of its customers' facilities continued throughout 2021.**

The quest for maximum efficiency is a significant dimension of product sustainability, whether for industrial or domestic use.



FIGHTING THE COVID-19  
PANDEMIC



APPLICATIONS FOR  
DECARBONIZATION



APPLICATIONS FOR  
MAXIMUM ENERGY  
EFFICIENCY



## Solutions for vaccine storage



The distribution of vaccine doses calls for a need to preserve, transport and store doses at temperatures between  $-90^{\circ}\text{C}$  and  $-15^{\circ}\text{C}$ , depending on the case<sup>15</sup>. Effective organisation and state-of-the-art technology are therefore essential for proper vaccine storage. With its facility in China, LU-VE Group has built industrial evaporators for hospital applications to maintain vaccine storage cells at very low temperatures.

## Solutions for intensive care



The high bed occupancy rate in intensive care units was also one of the most critical aspects of pandemic management in 2021. With regard to the situation in Italy, during the year many regions exceeded the 30% alert threshold for the medical bed occupancy rate for Covid-19 patients<sup>16</sup>. The increase in this indicator and the rise in admissions to intensive care units have led several hospitals to increase their number of beds.

In 2021, the Group supported the creation of new intensive care units by supplying close control air conditioners to the Azienda Ospedaliero-Universitaria San Luigi Gonzaga near Orbassano (Turin, Italy), a leading hospital in the national healthcare scene for medical and surgical activities. The Group provided its solutions designed for sensitive environments, where the primary objective is high air quality, enabling the construction of the new Covid-19 intensive care unit as well as the new room dedicated to magnetic resonance imaging.

<sup>15</sup> Centers for Disease Control and Prevention (Product Info by U.S. Vaccine)

<sup>16</sup> Ministry of Health of the Italian Republic (Ordinance 7 January 2022)

## Zero-emission district heating



In southern Finland, the city of Espoo and the energy company Fortum are committed to making district heating production carbon neutral within the next few years. To date, most of Espoo's emissions have come from heating buildings and hot water used for domestic purposes. They plan to phase out fossil fuels such as coal as early as 2025 and replace them with smart solutions such as the use of residual heat, and electricity from renewable sources such as biomass or geothermal energy. This project, known as "Espoo Clean Heat", is one of the most significant climate change mitigation projects in Espoo.

The current pilot system - Vermo Heating Plant - consists of a thermal power station that produces heat from the air and uses LU-VE Group's heat exchangers to operate the heat pumps. The aim is to increase the size of this facility tenfold over its current size. In fact, it is expected that, in the near future, thermal power plants with air source heat pumps will be able to meet almost one third of the heat demand in Espoo when the outside temperature is close to zero.

Currently, the energy plant consists of seven large exchangers using 40% ethylene glycol as the carrier fluid. Depending on the outside temperature, the total output of the units can exceed 700 kW. Particular attention has also been paid to limiting noise from the facility, which is located near a residential area. Another major advantage of the Fortum-designed plant is the limited construction risks: air is always available, without the need for high-impact, costly drilling.

The new generation of district heating based on these new smart, flexible solutions fits in well with the growth and sustainability strategy of LU-VE Group and its product portfolio.

## Solutions for flower bulb storage



LU-VE Group supplied ammonia solutions for heat pumps for a 500 kW plant used to store flower bulbs in the Netherlands. The system cools the bulbs to stop root growth and heats them so that no harmful fungi can grow.

Cooling takes place via an ammonia system, while heating takes place via the residual heat transferred to a water/glycol system. When the residual heat is not available from the standard cooling system - mainly during the winter season - the heat pump units are activated to provide thermal power of about 1800 kW. The solution is distinguished by the fact that the use of available residual heat from the evaporator means that natural gas is not burnt and the electricity used to operate the system comes mainly from solar panels and, only if necessary, from the electricity grid.

## LU-VE & Triple Solar: zero-impact heating



In 2021, the collaboration between LU-VE Group and Triple Solar BV continued for the development of the PVT heat pump panel solution for recovering energy. This development is enjoying great market success in the world of air conditioning, for summer and winter comfort with zero environmental impact.

As part of the co-design, LU-VE Group developed a specific heat exchanger capable of recovering the heat normally lost by solar panels during their operation. With a modular design and therefore applicable on systems of any capacity, the exchanger operates as a primary exchanger in the external section of a water-to-water heat pump and is installed underneath the solar panels, recovering the heat they disperse during the production of electricity from solar rays. The materials, configuration and circuitry of the heat exchanger are optimised to operate at maximum efficiency in all environments and at all latitudes.

LU-VE Group also participates, for its part, in Triple Solar's Life Cycle Analysis study on PVT panels and on the sustainability of materials, with the ultimate aim of minimising impacts by reducing carbon dioxide emissions.

## Special chemical product cooling



Stepan Deutschland GmbH, a manufacturer of special chemical products, has relied on LU-VE Group to handle the cooling of certain compounds (additives). The main objective was to achieve the highest possible performance, reaching a total output of 10.8 MW (3.6 MW per unit, a total of three units) at an ambient temperature of +35°C, with a fluid intake temperature of 65°C in a limited space, while minimising the level of noise emissions. LU-VE Group's Emeritus technology was selected as the winning solution to achieve the required performance and meet these conditions with an activation temperature of the adiabatic modules (dry/wet transition temperature) of 23°C.

Patented in 2016 and developed in collaboration with the Polytechnic Institute of Milan, the Emeritus system combines the benefits of the spray system with those of the adiabatic pre-cooling system. Using these technologies, the machine can reduce electricity consumption by up to 60% and water consumption by up to 95% compared to traditional evaporation towers. In addition, there is a considerable reduction in noise levels, up to six decibels, and a significant increase in the overall efficiency of the refrigeration system, as it makes it possible to lower the condensation temperature and therefore the energy absorbed by the system. Thanks to a sophisticated control system, Emeritus optimises the machine's performance under various climatic conditions.



## Ensuring the cooling of industrial processes



In 2021, a set of P-Series units with Free Cooling technology for cooling technical and process rooms were installed at the German facility of the Leipa Group (specialist in the production of recycled paper and packaging).

Due to the corrosive atmosphere at the production site, both the hall units and dry coolers have a special configuration and are equipped with heat exchange coils treated with the LU-VE Alupaint® procedure.

## Heat pump exchangers in home appliances



In the home appliance sector, heat pumps, especially for domestic dryers, have supplanted previous resistance or gas solutions in favour of greater reliability and reduced energy use. Heat pumps are a growth segment for LU-VE Group and an advantageous solution in terms of optimising energy consumption for the entire industry. In 2021, LU-VE Group produced around three million heat exchangers for major European (and other) manufacturers of heat pump dryers for the development of energy-efficient machines.

Most of the heat exchangers supplied by LU-VE Group use propane, a natural refrigerant fluid which also gives excellent results in terms of reducing carbon footprint without penalising performance, since these products are installed in applications that achieve the highest energy classes (A+++). The use of propane enables LU-VE Group to guarantee high standards of quality and durability, characteristics particularly sought after by the market.

The Group's new goals for accelerating the sustainability of widely used products is the further miniaturisation of heat exchanger tubes (with consequent reduction in the use of raw materials) and the evaluation of alternative materials.

## Optimising data centre performance



In 2021, LU-VE Group continued the installation of “VXX3 Wet Wall” solutions at several major European data centres. The “VXX3 Wet Wall” adiabatic device developed by AIA LU-VE of Sweden is able to improve cooling performance by 300% compared to a conventional solution.

This efficiency can be exploited to reduce the size of the machine and make it useful for special applications, such as data centres that require high cooling performance and highly compact machine dimensions.

The “VXX3 Wet Wall” air conditioner was developed to provide maximum cooling capacity while significantly reducing energy consumption.

## iMage: the digital TV mirror



iMage is a digital mirror capable of becoming a TV screen or hosting other applications depending on its use. This continuously evolving digital signage solution is the result of a partnership with Philips PPDS, which provides its professional displays (P-Line series) combined with TDG’s iMage technology.

Thanks to its high-tech design, iMage finds its natural home in the halls and rooms of prestigious hotels, yachts, restaurants and bars, gyms, spas and any other high-end facility. iMage has a wide range of applications, lending itself to tailor-made solutions to meet customer needs, as in the case of the Demo Hotel in Rimini, a landmark in the hotel industry, where architect Laura Verdi redesigned iMage by transforming the design of the restrooms, thus creating a unique sensory experience.

IoT & Digital Signage products can be found in numerous facilities, including the “I Gigli” shopping centre in Campi Bisenzio (Florence), Fondaco dei Tedeschi in Venice, the registry offices of the Municipality of Milan, Cavour Business Hotel in Milan, multi-Michelin starred Don Alfonso restaurant in Massa Lubrense, Sorrento (NA) and the new ODSweet Duomo Milano Hotel.

## 2.3 Partnerships and customer orientation

Research and innovation are distinctive features of LU-VE Group's corporate philosophy. The Group's greatest strength is its major investment in research and development, which has enabled it to produce a broad range of innovative products that set the standard for the world's leading heat exchanger manufacturers. With its three laboratories, LU-VE Group is one of the European companies with the largest research and development facilities.

Collaborations with universities and specialised centres and the active involvement of customers and business

partners enable the company to fully grasp and understand the opportunities and needs of the sector, develop appropriate solutions and maintain relationships of trust, sharing best practices with its partners.

Since its foundation, the Group has collaborated or is collaborating with some 30 Italian and international universities and research institutes on three continents. It has closely collaborated with the Polytechnic Institute of Milan since 1986.

During 2021, the Group gave several technical presentations in different languages covering topics of central interest to the industry, such as natural refrigerant fluids and A2L refrigerants, in relation to GWP benefits.

PARTNER	PROJECT
<b>Polytechnic Institute of Milan (Italy)</b>	Heat exchange research activities Research into <i>close control</i> systems for operating theatres Research activities with the Food Sustainability Observatory <sup>17</sup>
<b>Brno University of Technology (Czech Republic)</b>	Development of new exchanger families
<b>Danish Technological Institute (Denmark)</b>	Experimentation of ammonia evaporators
<b>Stazione Sperimentale del Vetro in Murano (Italy)</b>	Thermal insulation <i>performance</i> of insulated glazing
<b>Norwegian University of Science and Technology (Norway)</b>	Experimental research activities into the application of CO <sub>2</sub> technologies in countries with tropical climates
<b>Aalto University (Finland)</b>	Research on energy efficiency and heat pump technology combined with district heating systems
<b>LUT University (Finland)</b>	Research on energy efficiency and heat pump technology combined with district heating systems

CONFERENCES AND PRESENTATIONS		
Event	Title	Topics
<b>Webinar CSG</b>	<i>The new generation of low-GWP refrigerants. Challenges and solutions</i>	Low-GWP HFC/HFO. A2L refrigerants
<b>19th European Conference. The latest refrigeration and air conditioning technologies</b>	<i>Next generation of low GWP refrigerants</i>	Low-GWP HFC/HFO. A2L refrigerants
<b>World Refrigeration day</b>	<i>A sustainable future: the great challenge for the next generation of refrigeration specialists</i>	Natural refrigerants. Low-GWP HFC/HFO. A2L refrigerants
<b>Webinar CSG</b>	<i>Low-GWP A2L refrigerants - Challenges and solutions</i>	Low-GWP A2L refrigerants
<b>Refrigera 2021</b>	<i>High-glide refrigerants: impact on heat exchangers</i>	Low-GWP HFC/HFO. A2L refrigerants

<sup>17</sup> The research activity with the Food Sustainability Observatory is discussed in depth in the first chapter in relation to the social impacts of LU-VE Group's solutions



### 2.3.1. EASYGO project

under the Horizon 2020 programme, with a €3.4 million fund and a duration of four years.

2021 is the second year of the Group's collaboration in the EASYGO project funded by the European Union



#### EASYGO project

The project was created with the aim of disseminating and improving the technologies, efficiency and sustainability of geothermal systems, with a focus on both electricity production and Heating, Ventilation and Air Conditioning (HVAC). The collaboration includes four universities - TU Delft (Netherlands), ETH Zürich (Switzerland), RWTH Aachen (Germany) and the Polytechnic Institute of Milan (Italy), as well as a dozen companies, each with specific expertise in the field.

In the context of the first Training Week held in September 2021 at the Dutch Technische Universiteit Delft TU Delft, LU-VE Group presented a number of scientific contributions to the PhD students of the universities involved. In addition to technical training activities for students and company representatives, the week of meetings was dedicated to sharing the developments each has achieved in their own field of research.

Specifically, LU-VE Group presented the article “Application of the novel Emeritus air cooled condenser in geothermal ORC”, written in collaboration with the Energy Department of the Polytechnic Institute of Milan, which shows the benefits of the Emeritus technology applied to an ORC (Organic Ranking Cycle) with geothermal heat source and ambient air condensation. Thanks to an efficient balance of water resources, this technology allows the thermodynamic cycle to operate at a significantly lower condensation temperature. This guarantees higher efficiency, comparable to that achievable with an evaporation tower, but with significantly reduced water consumption. Saving water is a key issue in improving the sustainability of these types of installations and encouraging their deployment in places where access to water is scarce.

The Training Week in Delft was also an opportunity for students and companies to visit the university's test laboratories, which are at the forefront of ORC in Europe and use an ALFA LU-VE dry cooler to cool the water.

The EASYGO project will continue in 2022, with the second Training Week scheduled to take place in spring at RWTH University in Aachen, Germany. The week will provide a new opportunity for students and companies to update participants on technological developments in their respective research areas, as well as to continue with training and dissemination activities by the lecturers involved in the programme, who are among the leading experts in Europe on the development of these topics.



## 2.3.2. Listening to customers

The Group monitors its customers' satisfaction through periodic analyses, the results of which aim to identify solutions to improve its commercial range. In particular, in order to ensure continuous feedback, as well as a one-to-one relationship between the customer and the sales representative, the Group implements a customer satisfaction survey at least every two years.

A survey was conducted among all customers of air cooled products in 2021 to gather their opinions on what motivates their choice of supplier and on the perception of LU-VE Group's performance. An in-depth look at sustainability issues was included in the survey for the first time. The survey showed that customers' attention is mainly focused on two aspects: reducing the energy consumption of products and preferring appliances that use natural refrigerant fluids: two directions along which LU-VE Group continues to invest in order to generate a positive impact.

### The "CARRIER ALLIANCE SUPPLIER" programme

LU-VE Group joined the Carrier Alliance programme as part of a long-term strategic agreement signed with Carrier Global Corporation, an international manufacturer specialising in safe and sustainable building and cold chain solutions.

Under the agreement, LU-VE Group will supply engineered components including heat exchangers, glass doors and aftermarket solutions for Carrier's HVAC and commercial refrigeration portfolios.

LU-VE Group and Carrier have been working together for many years in the refrigeration and HVAC sector and on the use of new low environmental impact refrigerants and increased heat exchanger efficiency. The agreement envisages the implementation of these activities.

"The collaboration between LU-VE and Carrier will allow us to shorten the supply chain, with further advantages in terms of sustainability, delivery times and quality of service", said Matteo Liberali, CEO of LU-VE Group. "In particular, we see great potential in the area of refrigerated transport thanks to our in-depth knowledge of coil technology and HVAC, where LU-VE is at the forefront in the use of natural refrigerant fluids."

## 2.3.3 Quality control

All LU-VE Group products are tested before being introduced into the market. Controls are carried out in LU-VE Group laboratories or at the laboratories of the Group's technical partners such as universities or accredited centres. For the air cooled, close control and insulated glazing product categories manufactured in Italy, the Group conducts health and safety impact assessments. Specifically, risk assessments are carried out relating to electrical safety, and further safety testing is conducted in accordance with European directives, such as the "Machinery Directive 2006/42/EC", applicable to all machinery introduced to the European market.

Once the product planning and development phase is complete, the Planning, Research and Development Department produces a detailed guide (Installation and Maintenance Manual) that contains the technical specifications and instructions for the correct use of the solution. The document contains information on the possible presence of substances potentially harmful to the environment, on the safety of the product and how to dispose of it, and on environmental impacts, in accordance with applicable regulations. Customers have constant access to the Customer Services department of the Sales division for any subsequent maintenance requirements or requests for assistance.

Thanks to its partnerships with many suppliers, the Group is able to eliminate the majority of manufacturing defects, including those defined as "concealed", or which cannot be identified during the manufacturing and testing phase.

The recurrence of product defect events has historically been very limited, with a percentage impact considered natural for the business segment. In 2021, the incidence of returns was confirmed at 0.10% on both gross and net revenues. In cases in which product defects are identified, the Group company involved agrees on corrective actions to be taken with the customer and if necessary activates the insurance taken out to cover that eventuality.





## 2.3.4 Eurovent Certification

For over 20 years, LU-VE Group has been a voluntary adopter of the Eurovent certification programme, the European association for heating, ventilation, air conditioning, process cooling and food cold chain technology.

The Group believes that subjecting its products to tests and controls by a recognised third party such as Eurovent allows it to monitor product performance in a concrete and precise manner and to ensure reliable solutions and transparent communication for its business partners.

**Specifically, the “Eurovent Certified Performance” (ECP) certificate verifies product compliance with precise standards relating to product performance in terms of power, air flow, energy consumption, noise levels and construction characteristics.**

Over the years, the Group has received major recognitions in several areas:

### 2000

LU-VE was the **first company in Europe** to obtain the new “Eurovent Certify All” certification for all the ranges of condensers, dry coolers and unit coolers;

### 2016

LU-VE was the first manufacturer that Eurovent certified for their heat exchangers for refrigeration, **never registering a single negative test** during three different test cycles (between 2011 and 2015);

### 2020

LU-VE was among the very first companies to obtain **Eurovent certification for CO<sub>2</sub> unit coolers** (thermal performance, energy consumption and air flow rate), marketed under the brands LU-VE Exchangers and AIA LU-VE.

Several LU-VE Group customers have joined the Eurovent programme. Recognition of the value of this voluntary certification and choice of transparency is an important factor in choosing the Group as a business partner.



- ✓ CAPACITY
- ✓ SOUND PRESSURE LEVEL
- ✓ ENERGY CONSUMPTION

“Certify All” certification of EUROVENT.





# THE NATURAL LEADER

to guarantee performance



“CO<sub>2</sub> EUROVENT CERTIFICATION” \*



**CAPACITY, AIR FLOW, ENERGY CONSUMPTION ARE CERTIFIED!**

\*LU-VE Exchangers and AIA LU-VE CO<sub>2</sub> DX unit coolers

[www.luvegroup.com](http://www.luvegroup.com)

*“The universe is change:  
life is how our thoughts create it”*

*(Marcus Aurelius — Roman emperor, philosopher and writer)*





# BETTER WORLD

**Live and work in better places**

# BETTER WORLD

## Live and work in better places



**+ 18%**

increase in employees compared to previous year



**+ 4,100**

active workforce, of which more than 1,200 in Italy



**Over 35,000**

training hours provided in one year

### In this section

The LU-VE Group family and the methods of protecting health and safety in the workplace, with particular reference to the period of the pandemic. The activities and objectives achieved in terms of promoting well-being, growth of collaborators, attraction of talents and communication are described here.



## The human factor is fundamental for growth

The company is conceived as a place with the objective of creating values: the safety for those who work there and the well-being of those who use our products and components.

**Iginio Liberali**, President of LU-VE Group



### 3.1 Improving workplaces

LU-VE Group cares about its people, who are the soul and source of its success, in keeping with the principle that **companies are first and foremost “women, men and ideas”**.

The health emergency which lasted throughout 2021 forced LU-VE Group to take continuous action to protect the well-being of its employees. LU-VE Group continued to keep a very close eye on the issue throughout the year. The Crisis Committee (known as the “Coronavirus Crisis Unit”), which has been active since 2020, periodically monitored the progress of the pandemic to identify the best ways of preventing risk in the workplace. All facility managers took part in the meetings, describing the local situations, comparing the problems encountered and defining, within the Committee, the best ways of managing the risks caused by the pandemic, with the dual aim of preserving the health of workers and allowing business continuity.

The Committee is composed of:

- CEOs of LU-VE S.p.A.;
- Executives tasked with Group responsibilities;
- A number of production company managers (Poland, Russia and the Czech Republic in particular);
- Facility managers and Health and Safety Officers of the Italian companies belonging to the Group;
- Manager of the Group’s Internal Audit function.

Participation in the Crisis Committee was open to the directors and statutory auditors of LU-VE S.p.A., as well as the President of the company’s Supervisory Board. This shared and up-to-date management allowed work to continue at each facility, limiting the number of infections and minimising the need to reduce the productivity of departments and activities at the various facilities.

The regulations prepared at the outbreak of the health emergency at the beginning of 2020 were formalised and supplemented by regulations issued during 2021. In accordance with the decisions of the governments of each country, the companies introduced compulsory Green Passes for access to workplaces and company canteens.



#### LU-VE: a great company to work for

For two consecutive years (2020 and 2021), the ITQF (German Institute for Quality and Finance) in collaboration with the newspaper “La Repubblica - Affari&Finanza” has drawn up the report “Top Job - Companies where people work best in Italy”, which lists the best national companies in terms of welfare and career excellence. LU-VE was among them both years, in the Mechanical Industry category.

The (unsponsored) study examined 2,000 companies with the aim of analysing their economic and qualitative aspects. The study used the innovative “social listening” methodology and employed algorithms and artificial intelligence (AI): comments in the field of corporate culture and career were identified on the entire Italian language web (social media, blogs, forums, portals, news, videos).

The other winners include: Adidas, Amazon, Armani, Deloitte, Coca Cola Italia, Google, FCA, Ferrari, Ikea, Lamborghini, Mapei, Mercedes Benz, Nestlè Italia, Open Fiber, Otis Servizi, Pirelli, Recordati, Samsung, Tetrapak and Vodafone.



Remote working has been extended to:

- ensure that employees benefit from work-life balance;
- reduce the risk of infection by reducing in-office presence.

A “right to disconnect” has also been established for remote working to ensure compliance with working hours regulations.

In all the Group’s facilities and offices, the social distancing criteria in the different company environments have been maintained, establishing the maximum number of people per room and limiting access to environments that did not meet the minimum safety requirements.

The control system (provision of swab tests and strong

attention to internal tracing for the entire work population) has made it possible to keep the infection curve under control at all facilities and offices. In addition, the precautionary choice of reducing travel to a minimum has been maintained in order to further limit opportunities for meetings and therefore possible contagion, while at the same time increasing the possibilities of interaction between sites or with customers and suppliers through the use of IT communication platforms. In particular, LU-VE Group’s “Travel Policy” sets out the principles to be taken into account before planning a meeting or trip, including an assessment of the purpose of the meeting (business benefit related to the meeting, need for face-to-face interaction) and the impacts of the meeting (work-life balance, CO<sub>2</sub> emissions and costs).



### Vaccination for all Indian employees

With reference to India, where the regulations in force and guidelines differ from those in Italy and other countries where the Group operates, vaccination (first and second dose) was offered to all employees of the Bhiwadi and Sarole facilities and the New Delhi offices with the support of healthcare personnel at local hospitals. The initiative was perceived positively by the employees.

The employees received their first dose administered by healthcare personnel from local hospitals directly on company premises in specially prepared areas. The vaccination sessions were held over four consecutive weekends. LU-VE Group bore the full costs of the operation, which was completed at the end of October 2021 on administration of the second dose.

The company is satisfied with the good organisation and success of the initiative.



## Human Resources Management Policy

The company continued to adopt the principles set out in the Human Resources Management Policy already structured and published in 2019.

The Policy recognises that **human capital is the “most important, strategic and fundamental resource for the Group’s growth”** and formalises values such as passion in doing one’s job, the pursuit of excellence, the establishment of trust, a sense of belonging, continuous innovation, the growth of employees, hard work and reliability.

The document also formalises the Group’s objectives and priority areas for ensuring a positive, stimulating and safe working environment.

### 3.1.1. The LU-VE Group Family

As at 31 December 2020, LU-VE Group had a workforce of 4,149 - 3,040 of which were employees. There is also a significant labour workforce which includes workers from staffing companies and outsourced activities.

Of the employee population, around 32% are women. The gender difference is mainly due to the characteristics of the engineering industry which, especially in the past, mainly attracted men. However, LU-VE Group has seen a 20% increase in the number of female employees compared to 2020.

The percentage of Group employees under 30 years of age increased in 2021 compared to previous years, reaching 21% overall.

The establishment of medium/long-term professional relationships between people working in the Group is part of our attention to employees. The objective is to provide opportunities and tools for the constant and continuous growth of employees over time, while also conveying pride and a sense of belonging to the LU-VE Group “team”.

This distinctive feature of the company can be seen in the types of contracts stipulated with employees. Looking at employees in 2021, 83% have permanent contracts, while the remaining 17% have temporary contracts.

The spirit of LU-VE Group is based on the principle of dialogue and listening. Attention to people is considered a priority and is a consolidated practice that also ensures constructive and collaborative relationships with trade unions.



#### Relations with trade unions

Formal health and safety agreements with trade unions are governed by the respective national laws of the countries in which the Group operates.

**In Italy**, 100% of employees are covered by the National Collective Labour Contract and formal health and safety agreements. Similarly, **in Sweden and Germany** there are collective agreements covering 100% of the company population, signed by employers and trade unions.

The other countries in which the Group operates do not envisage this type of collective bargaining.

**In China**, there are no agreements with trade unions in the field of occupational health and safety, but the local subsidiary signs an internal agreement with all employees involved in managing health and safety risk activities. Based on this, training is organised, the awareness of risks is raised and individual protective equipment is provided. The implementation of the agreement is monitored periodically, as are regular health checks.

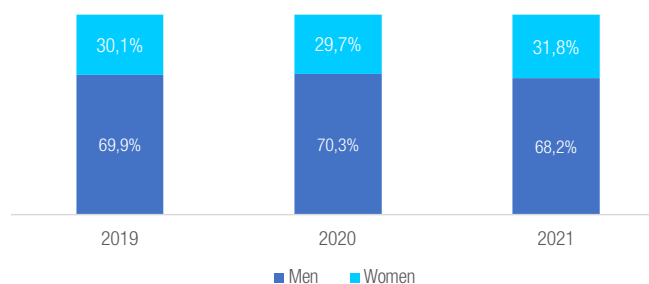
Similarly, internal collaboration has been initiated in **Poland** to discuss these issues, and communication and discussion actions will be consolidated over the next few years.

**Finland** also has positive and proactive labour relations.

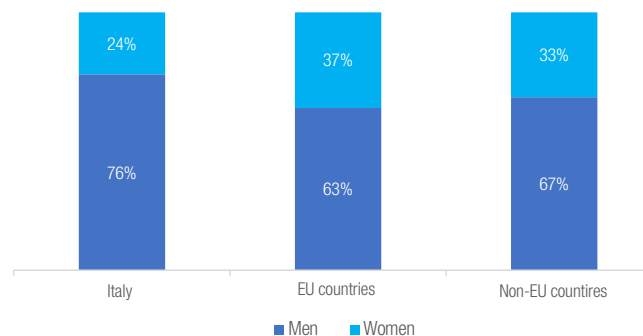
**In 2021, industrial relations continued in a spirit of cooperation.** This enabled company agreements to be renewed, where present, and action, programmes and measures to sustain company objectives and the well-being of all workers to be shared.



Employees by gender  
(31.12.21)



Employees by gender and geographical area  
(31.12.2021)



## EMPLOYEES BY PROFESSIONAL CATEGORY AND GENDER

	2019	2020	2021
<b>Executives</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>
Men	97%	97%	97%
Women	3%	3%	3%
<b>Middle managers and white collar workers</b>	<b>31%</b>	<b>31%</b>	<b>30%</b>
Men	66%	68%	66%
Women	34%	32%	34%
<b>Blue collar workers</b>	<b>68%</b>	<b>68%</b>	<b>69%</b>
Men	71%	71%	69%
Women	29%	29%	31%

## EMPLOYEES BY CONTRACT TYPE AND GENDER

	Permanent contract			Temporary contract		
	2019	2020	2021	2019	2020	2021
Men	85%	86%	86%	15%	14%	14%
Women	83%	84%	77%	17%	16%	23%
<b>Total</b>	<b>84%</b>	<b>86%</b>	<b>83%</b>	<b>16%</b>	<b>14%</b>	<b>17%</b>

## EMPLOYEES BY PROFESSIONAL CATEGORY AND AGE

	2019	2020	2021
<b>Executives</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>
Under 30 years of age	0%	0%	0%
Between 30 and 50 years	44%	38%	39%
Over 50 years of age	56%	63%	61%
<b>Middle managers and white collar workers</b>	<b>31%</b>	<b>31%</b>	<b>30%</b>
Under 30 years of age	17%	16%	18%
Between 30 and 50 years	65%	66%	64%
Over 50 years of age	17%	18%	18%
<b>Blue collar workers</b>	<b>68%</b>	<b>68%</b>	<b>69%</b>
Under 30 years of age	22%	21%	23%
Between 30 and 50 years	57%	58%	56%
Over 50 years of age	21%	21%	21%
<b>Total</b>			
<b>Under 30 years of age</b>	<b>20%</b>	<b>19%</b>	<b>21%</b>
<b>Between 30 and 50 years</b>	<b>60%</b>	<b>60%</b>	<b>58%</b>
<b>Over 50 years of age</b>	<b>20%</b>	<b>21%</b>	<b>21%</b>

## EMPLOYEES BY CONTRACT TYPE AND GEOGRAPHICAL AREA

	Permanent contract			Temporary contract		
	2019	2020	2021	2019	2020	2021
Italy	99%	99%	97%	1%	1%	3%
EU countires	73%	76%	78%	27%	24%	22%
non-EU countires	82%	82%	73%	18%	18%	27%
<b>Totale</b>	<b>84%</b>	<b>86%</b>	<b>83%</b>	<b>16%</b>	<b>14%</b>	<b>17%</b>

## EMPLOYEES BY EMPLOYMENT TYPE AND GENDER

	Full-time			Part-time		
	2019	2020	2021	2019	2020	2021
Men	99%	100%	99%	1%	0%	1%
Women	91%	92%	93%	9%	8%	7%
<b>Total</b>	<b>97%</b>	<b>97%</b>	<b>97%</b>	<b>3%</b>	<b>3%</b>	<b>3%</b>

With reference to the difference between the base salary and between the remuneration of women and men, the data provided in the table below is difficult to compare due to the presence of very different job levels and duties and the different numbers of men and women. In particular, in the Indian company Spirotech, the women have very different functions than their male colleagues in the same category.

The indices were calculated for each company by adding up the basic salary and total remuneration of each employee, as indicated in the methodological note, and dividing it by the number of employees belonging to each professional category and gender. When the ratio index equals 100, then there is parity between men and women in the basic salary and total remuneration.

## RATIO BETWEEN BASIC SALARY OF WOMEN AND MEN (%)

	Executives			Middle managers and white collar workers			Blue collar workers		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Italy	71.7	63.9	62.1	78.6	78.1	78.1	101.9	95.3	95.6
EU countries	-	-	-	72.5	72.5	67.9	69.2	68.8	71.0
Non-EU countries	-	-	-	107.9	112.0	96.7	148.3	124.2	120.9

## RATIO BETWEEN TOTAL REMUNERATION OF WOMEN AND MEN (%)

	Executives			Middle managers and white collar workers			Blue collar workers		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Italy	65.0	67.2	55.6	76.6	76.1	76.7	99.6	93.4	94.4
EU countries	-	-	-	70.9	71.8	67.0	71.1	71.6	74.0
Non-EU countries	-	-	-	97.9	105.2	90.6	138.5	114.2	110.6











































### 3.1.2. Promoting well-being

In 2021, the first sustainability survey aimed at LU-VE Group employees was prepared and shared, supporting the “Sustainability Through People” project.

The provision of benefits (provided for some Group companies and managed directly by individual HR Managers) differs from country to country, depending on their national needs and cultures. The Group HR Department oversees the adoption of these benefits and strives to ensure the adequacy of the various welfare

packages. All Group employees have access to welfare systems, with the exception of some companies (LU-VE Tianmen, China; HTS, Czech Republic; Spirotech, India) which only provide benefits to full-time workers.

With regard to the company welfare system, a series of initiatives are in place to increase the well-being of people and their families, as detailed in the following table.

THE MAIN BENEFITS OF LU-VE GROUP (2021)				
	Work-life balance <i>(eg. flexible working hours, incentives for commuter)</i>	Promotion of healthy lifestyles <i>(eg. gym membership)</i>	Support for workers' families <i>(eg. scholarship)</i>	Healthcare <sup>18</sup>
LU-VE S.p.A. (Italy)				
AIR HEX ALONTE S.r.l. (Italy)				
SEST S.p.A. (Italy)				
TECNAIR LV S.p.A. (Italy)				
THERMO GLASS DOOR S.p.A. (Italy)				
LU-VE HEAT EXCHANGERS (TIANMEN) Co. Ltd (China)				
FINCOIL LU-VE OY (Finland)				
SPIROTECH HEAT EXCHANGERS Private Limited (India)				
SEST LUVE-POLSKA Sp.z.o.o. (Poland)				
HEAT TRANSFER SYSTEMS (HTS) s.r.o. (Czech Republic)				
"000" SEST LU-VE (Russia)				
LU-VE SWEDEN AB (Sweden)				

<sup>18</sup> Note that this benefit refers to healthcare facilities for employees that are not legally required in the contractual regulations in force in the respective countries



## Questionnaire for employees at Italian facilities

A survey was launched in 2021 for all personnel at the Italian facilities in order to gather the opinion of employees on the priorities and dimensions of sustainability they consider most relevant. The questionnaire also made it possible to collect feedback from employees on their working well-being, one of the key dimensions of corporate sustainability.

The 448 answers helped to outline LU-VE Group's vision of corporate sustainability for the future and to identify priority areas for action.

The strengths identified are in line with the core values on which the company was founded and by which it still operates. The survey revealed an inclusive and non-discriminatory working environment, a sense of pride and

passion in working and being part of the Group, and a constant commitment to improve the quality of the activities carried out. The ideas for improvement that emerged are aimed at strengthening the relationship between managers and their staff through constant feedback, as well as identifying a growth and development path for people. There was also an interest in acquiring new skills and sharing ideas openly within the target area or working group.

The survey found that the priority issues, on which the Group wants to continue to invest over the years, relate to positioning the Group as an industry leader in developing innovative technologies, supporting the fight against climate change and establishing itself as a reference point for young talent.



### Respect for human rights

Although LU-VE Group mainly operates in Europe, a region that is not considered at risk from a human rights protection perspective, the age of the employees hired at all of the Group's facilities is constantly monitored, and during the periodic internal audits performed by the Parent Company in all Italian and foreign facilities, any risks or cases of violation of human rights are investigated. The assessment activities carried out by the Group are supported by regular inspections and evaluations by its clients, some of whom belong to international groups which, like LU-VE Group, operate worldwide.

After updating the analysis of non-financial risks, the risks related to the inability to monitor, manage and resolve critical issues and complaints connected to the lack of respect for human rights are low, thanks to the activities carried out by LU-VE Group.

Cases of forced labour among employees is classified as a moderate risk with a high severity but low probability of occurrence due to the timely monitoring of the overall workload of employees.

The Group did not record any cases of human rights violations in 2021.



### 3.1.3. Widespread communication

During 2021, the Group continued its internal and external communication activities.

Internal communication aims to share and strengthen a common culture, a sense of belonging and to express the Group's gratitude to the people whose quality of work enables the company to achieve its results. With the aim of ensuring that all employees are adequately involved in the life of the Group, the development of organic communication within the various companies that make up the Group continued.

External communication towards all stakeholders and the market aims to convey an image of solidity, professionalism and also to express the values which inspire the Group, as well as naturally promoting LU-VE Group's products.

### Internal Blogs And Newsletters

The "Roses & Values" Newsletter created in printed format in 2019 evolved into a fully digital version in Italian and English (sent via email and WhatsApp) and then into a blog ([we.luve.it](http://we.luve.it)) dedicated to the Group's employees worldwide.

We.luve.it is structured in three sections: news (corporate, products, trade fairs and events), interesting material from around the world (stories written by or about employees, recipes, travel), and service information currently dedicated only to the various Italian facilities. The blog has four sub-pages with specific information for the Italian facilities in Uboldo (Varese), Travacò Siccomario (Pavia), Alonte (Vicenza) and Limana (Belluno), such as anti-COVID safety, service announcements, agreements for employees. In 2021, the blog had nearly 19,000 users and almost 260,000 page views.



# ROSES & VALUES



### Social Media And Web

Communication with the outside world, the market, investors and the financial community, and the labour market has for some time now increasingly taken place through the internet and social media. The Marketing and Communication Department constantly publishes news on multiple channels: social media, technical and economic-financial press.

The main channel is LU-VE Group's LinkedIn page, which has shown excellent qualitative and quantitative performance over time. The page is in English and Italian, as well as occasionally in German, Spanish, Russian, Finnish and Dutch. With the digital age now in full flow, the Group has been rewarded by users for offering quality content: financial reports, product and technology news, events, interviews, webinars and personnel recruitment. 10,000 followers were reached in March 2021, rising to over 17,000 in December 2021, making LU-VE one of the top pages in the industry in terms of number of users. In 2021,

there were approximately 46,000 unique visitors. In addition, since May 2021, LU-VE Group has also started to use LinkedIn in an increasingly systematic way for campaigns to recruit new resources.

LU-VE Group pages are also active on Facebook (Italian and English), YouTube, Instagram (Russian) and WeChat (Chinese).

In 2021, the Group's website as a whole consisted of two main sections: Products and Investor relations - over 252,000 users with over 1.5 million page views.

There are also two specific Newsletters sent out as needed to communicate specific news and information. The Investors Newsletter is dedicated to the economic and financial market and is intended for stock market investors, while the Customers Newsletter is reserved for product information.

## 3.2 Being a point of reference for talents and promoting growth

LU-VE Group can rely on motivated human resources who carry out their activities with passion and tenacity in order to achieve results and enrich their personal background.

The mutual trust between employees and LU-VE Group is the basis for the growth of the company and the professional development of each employee.

Being able to attract talent is the Group's way of continuing to develop cutting-edge solutions, maintain its leadership and generate a positive impact globally, in line with its *vision*.

Employee recruitment and development within the Group follows principles of transparency and equal opportunities, right from the search and selection process.

During 2021, 463 employees left the group and 780 were recruited.

The trend of recruitments and terminations was positive in 2021; in particular, the recruitment of men increased from 316 in 2020 to 454; for women, recruitment increased from 132 in 2020 to 326 in 2021.

At the end of 2021, there was a positive difference between the incoming and outgoing turnover rate, in line with the Group's expansion process.

In particular, there is a significant increase in the incoming turnover rate for female employees, from 16.3% in 2020 to 33.7% in 2021; as well as the incoming turnover rate for employees under the age of 30, which increased from 29.7% to over 50%.

This strong increase reflects the Group's commitment and focus on attracting young people to invest in.

In the updated assessment of non-financial risks, the possible loss of company know-how due to the departure of strategic company figures, the difficulty of finding adequate human resources on the market and low levels of employee engagement emerged as a moderate risk.

In order to reduce this risk, the Group promotes medium-term management identification and skills development projects for its resources.





NEW HIRES AND DEPARTURES BY GENDER						
	New Hires			Departures		
	2019	2020	2021	2019	2020	2021
Men	374	316	454	275	228	297
Women	129	132	326	83	109	166
<b>Total</b>	<b>503</b>	<b>448</b>	<b>780</b>	<b>358</b>	<b>337</b>	<b>463</b>
NEW HIRES AND DEPARTURES BY AGE						
Under 30 years of age	168	154	324	115	97	142
Between 30 and 50 years	309	260	369	201	183	232
Over 50 years of age	26	34	87	42	57	89
<b>Total</b>	<b>503</b>	<b>448</b>	<b>780</b>	<b>358</b>	<b>337</b>	<b>463</b>
NEW HIRES AND DEPARTURES BY REGION						
Italy	60	42	121	60	54	73
EU countries	234	232	278	134	145	179
Non-EU countries	209	174	381	164	138	211
<b>Total</b>	<b>503</b>	<b>448</b>	<b>780</b>	<b>358</b>	<b>337</b>	<b>463</b>
INCOMING AND OUTGOING TURNOVER RATE BY GENDER						
	Incoming turnover rate			Outgoing turnover rate		
	2019	2020	2021	2019	2020	2021
Men	20.5%	16.5%	21.9%	15.1%	11.9%	14.3%
Women	16.4%	16.3%	33.7%	10.6%	13.5%	17.2%
<b>Total</b>	<b>19.3%</b>	<b>16.5%</b>	<b>25.7%</b>	<b>13.7%</b>	<b>12.4%</b>	<b>15.2%</b>
INCOMING AND OUTGOING TURNOVER RATE BY AGE						
Under 30 years of age	31.8%	29.7%	50.5%	21.7%	18.7%	22.2%
Between 30 and 50 years	19.8%	15.8%	20.8%	12.9%	11.2%	13.1%
Over 50 years of age	5.0%	6.0%	13.9%	8.0%	10.1%	14.3%
<b>Total</b>	<b>19.3%</b>	<b>16.5%</b>	<b>25.7%</b>	<b>13.7%</b>	<b>12.4%</b>	<b>15.2%</b>
INCOMING AND OUTGOING TURNOVER RATE BY REGION						
Italy	6.1%	4.3%	11.8%	6.1%	5.5%	7.1%
EU countries	21.9%	20.1%	22.2%	12.6%	12.6%	14.3%
Non-EU countries	37.5%	29.3%	49.9%	29.4%	23.3%	27.7%
<b>Total</b>	<b>19.3%</b>	<b>16.5%</b>	<b>25.7%</b>	<b>13.7%</b>	<b>12.4%</b>	<b>15.2%</b>

### 3.2.1. Skills enhancement

In 2021, efforts continued to develop a harmonised and structured approach to assessing individual performance in order to support the growth of employees in a meritocratic and constant manner.

The performance assessment system has been implemented on a specific SAP Success Factor module involving all employees at Group level.

#### Employee performance assessment

Depending on the tasks performed and the responsibilities held, each year employees are involved in a **“Skills Development”** which envisages the assessment and monitoring of skills belonging to four different sections: professional characteristics, professional ability, personal aptitude and, only for people involved in production activities, operational skills.

A total of 2,510 employees were assessed in the “Skills Development” process in 2021.

In addition, the new MBOs (Management By Objectives) for executive and managerial functions were also formalised and shared this year.

The Group's Human Resources Department developed the MBO system on the SAP SuccessFactors platform, providing 262 MBOs in 2021.

### 3.2.2. Training

A further significantly effective tool for LU-VE Group is training, which is aimed at stimulating resources and ensuring development of the skills required to maintain the high quality of processes and products.

**A total of 35,720 hours of training were provided to Group employees in 2021, an increase of 31% compared to 2020.** This trend is in line with the desire to align the training provided with pre-pandemic levels.

In 2021, in continuity with past years, ad hoc training courses were organised for specific company roles, and in particular to support people taking on new managerial roles in the company.

The Group recognises that training is not only a means

of increasing skills and consequently the company's competitiveness, but also an opportunity to motivate its employees and allow them to question their own professional and relational abilities.

**Training is also considered an effective tool for creating awareness of prevention, safety, environment and sustainability issues.**

Considering future sustainability challenges, training was organised on the economic, social and environmental dimensions and what it means to integrate these issues into strategy and business in practice.

During the year, a series of workshops were organised for top management to create a common knowledge base and direct future projects and investments towards four main goals:

- development of increasingly sustainable products;
- increasing employee well-being;
- optimising the use of resources during production processes;
- growth strategies towards continuous progress.

The Group's aim is to update meetings with front-line managers in order to continue to keep pace with the dynamic context in which the company operates and to anticipate and seize new opportunities.

**In the coming year, the training will be extended to other employees** so that communication and implementation of the initiatives will be more widespread and effective.

## AVERAGE HOURS OF TRAINING PER CAPITA BY GENDER AND PROFESSIONAL CATEGORY

	Men			Women		
	2019	2020	2021	2019	2020	2021
Average hours of training per capita	15.5	10.8	11.4	11.1	8.3	12.6

	Executives			Middle managers and white collar workers			Blue collar workers		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Average hours of training per capita	16.2	14.5	17.8	21.1	17.3	18.4	11.0	6.6	8.8





### 3.3 Ensuring workplace safety

With reference to “ordinary” health and safety management (for details concerning Covid emergency management see the previous sections of this chapter), LU-VE Group applies the principles formalised in the human resources management policy, based on the preservation of the health and safety of employees through accident prevention and protection measures and special training sessions.

One of the Group’s major objectives is the consolidation and dissemination of procedures for monitoring and improving health and safety in all plants through the now formalised governance model for risk management and reduction.

During 2021, **the Group continued to pursue the Make One (Sustainable) Company objective**, by increasing the sharing of management and control practices across the various facilities, fostering lively collaboration between site HSE Managers working with the central departments, with the ultimate goal of adopting the best HSE standard across the various facilities and promoting continuous improvement for the entire Group.

**The Group continued its efforts to increase the number of workers’ safety monitoring and assessment actions in 2021, which led to a 21% reduction in the injury rate compared to 2020.**

The injuries are mainly related to contusions, superficial cuts and slips.

In 2021, the most serious injury occurred at the company HTS (Czech Republic), due to a fall by a member of staff during a manual load handling and transport operation, resulting in a fractured ankle. The cause of the incident was attributed to a lack of room for manoeuvring and a lack of attention to the operation in progress.

The main actions taken to eliminate this hazard and to minimise the risk in the future included optimising storage space, reducing the need for manual load handling and increased training.

In 2021, ten injuries relating to external workers were recorded, for which, on a total of 2,411,156 hours worked, a specific accident rate was calculated of 4.15.

Workers have access to general occupational health services in accordance with the laws and regulations of the relevant countries.

**No fatalities have been reported in the last three years.**

**In addition, no cases of work-related ill health were recorded for 2021.**

At Group level, the HSE Internal Audit interfacility working group was established. Its activity started in Q1-2022 with audits at the Italian facilities and analyses will continue in the following quarters at the other European facilities, before progressing in 2023 to the non-EU countries.

Each audit report will contain an improvement plan that will be implemented at the individual facility and will build on the shortcomings found and the best available solutions. This project will therefore be decisive in achieving Group-wide business integration, through:

- **the dissemination of best possible practices at the different facilities;**
- **the minimisation of impacts;**
- **increasing comfort in the workplace**

The aim is to create a single Group standard for HSE management by 2024.



At the same time, at Group level, a package of indicators (HSE KPIs) is being finalised for use in interfacility audits and measured periodically at each facility using a single methodology for all companies. This will make it possible to receive consistent and commensurate data centrally and to have an optimal and functional decision-making tool to define development investments.

Normal HSE risk management activities continued at all facilities, as well as the application of all statutory audits of plant and equipment, worker training and information, and health supervision. The Italian facilities in Alonte (Vicenza), Limana (Belluno), Travacò Siccomario (Pavia) and the Indian plant in Sarole (Pune Dist., Maharashtra) have an organisational model for health and safety that complies with the international ISO 45001 standard.

The method of assessing risks related to occupational health and safety approved in 2020 by all HSE Managers of the Italian facilities is confirmed as a best practice model that can be replicated throughout the Group, even where the legislation in force on the subject is less stringent than in Italy.

The development of the risk management and mitigation process has been and continues to be supported by the implementation of dedicated software for managing operational aspects related to health, safety and environmental risks - HSE - and by interfacility audits conducted in a shared manner.

The following one-off activities at individual facilities carried out in 2021 should also be noted.



**At the facility in Uboldo (Varese, Italy),** the “safe machines” project was completed with the inspection of all machines and the application of risk reduction projects.

After identifying the risk level for each machine depending on how and how often employees use it, the “continuous monitoring” principle of compliance with safety requirements was applied.

This process will be gradually implemented at each facility after the machine safety audit programme has been implemented.





The handover of facility management from Alfa Laval was completed **at the facility in Alonte (Vicenza, Italy)**, with the last remaining shared work areas being decommissioned, making it possible to manage the entire facility according to the needs and procedures defined by the HSE Manager with the Facility Manager and central support.

The increase in available space has made it possible to redistribute activities appropriately and thus improve the already good working conditions.

The reorganisation of spaces in the Sheet Metal Department, the most critical from an acoustic point of view, was completed by separating the noisy activities from the others and drastically reducing noise emissions with completion of the machine “characterisation” systems.

The result was verified on completion of the acoustic measurement campaign and the consequent drafting of the exposure assessment document, which represents the first assessment LU-VE has carried out at Alonte according to a methodology that will be adopted at Group level and therefore gradually applied in all facilities.

The results of this assessment certified the achievement of the acoustic comfort objectives not only in the critical areas (Sheet Metal Department), but also in the various reorganisations of spaces in the other departments.



**At the facility in Novosedly (Czech Republic)** which for several years has been one of the facilities with the highest number of accidents and the highest safety indicators, a project was launched to bring about a drastic reduction in the incidence of injuries, which will end in 2022.

This project included a phase of monitoring the actual conditions of the working environment and an assessment of management's awareness in relation to the issue of HSE protection of personnel. The project to systematically check compliance with the Essential Safety Requirements and/or application of the various Machinery Directives for all the machines at the facility has begun in order to increase the intrinsic safety of workstations. In addition, the HSE organisation was reorganised by hiring a new HSE Manager who, with central assistance and support, can implement the Risk Assessment in accordance with the Group methodology adopted by the Italian facilities, and consequently launch a consistent and effective worker information and training campaign on the most important HSE issues.

In this context, a facility-wide assessment of noise risk is planned for launch in early 2022, which will make it possible to identify possible projects to improve working conditions. The aim is twofold: to drastically reduce the incidence of injuries and to implement a virtuous HSE organisational model in a first non-Italian facility, so that it can set an example for all the others.



## INJURY RATES AND DATA 2019/2021

	2019	2020	2021
Hours worked	4,196,916	4,347,949	5,085,600
Total number of work-related injuries	36	37	34
Commuting accidents <sup>19</sup>	4	5	3
Total number of high-consequence work-related injuries <sup>20</sup>	-	-	1
Rate of work-related injuries <sup>21</sup>	8.58	8.51	6.69
Rate of high-consequence work-related injuries <sup>22</sup>	-	-	0.20
Severity rate <sup>23</sup>	335.25	219.18	235.76

**19** *Commuting accident refers to an accident that takes place during the commute between the workplace and a place relating to private life (e.g., place of residence, place where meals are usually eaten), only when the transport has been organised by LU-VE Group.*

**20** *A high-consequence work-related injury is a work-related injury that results in a fatality or in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within six months.*

**21** *The rate of work-related injuries is calculated as the number of work-related injuries/hours worked x 1,000,000. In the accident rate calculation, commuting accidents were only taken into account when the transport was organised by LU-VE Group (e.g., bus or vehicle of the company or contractor).*

**22** *The rate of high-consequence work-related injuries is calculated as the number of high-consequence work-related injuries/hours worked x 1,000,000.*

**23** *The severity rate is calculated as the number of days lost due to a work-related injury/hours worked x 1,000,000. Days lost due to commuting accidents are also included in the calculation of days lost, only when the transport was organised by LU-VE Group (e.g., company or contractor bus or vehicle).*



### 3.3.1. Safety education

In order to support each resource in implementing the defined procedures and guidelines, employees must be provided adequate knowledge and a corporate culture must be created that recognises the value of operating in compliance with rules and risk prevention.

An innovative method invented by LU-VE Group is that of “training breaks” used to educate, in factories and offices, on the rules and operating procedures for preserving and constantly improving safety at work.

Applied for the first time in 2012 at the Uboldo facility, the method consists of short training sessions (15-30 minutes) carried out directly in small groups in the places where the industrial processes are carried out, directly in the departments or at the workers’ workstations. This choice was not only dictated by technical and organisational requirements, but also by the desire to

involve workers as actively as possible and to improve training effectiveness. The latter focuses on continuous updating on the risks linked to the job, the workplace, the equipment used and the related safety operating procedures, which are explained to small groups of employees by the tutor/manager of the prevention and protection service, assisted by the supervisor and the workers’ safety representative.

This method has also been crucial in combating the spread of Covid-19 in the workplace since March 2020. In 2018, the Federmeccanica-Assistal National Health and Safety Commission, Fiom-Fim-Uilm, acknowledged “training breaks” as an innovative training method, including it the national Guidelines for the engineering sector.



#### Safety leadership

In conjunction with the ordinary health and safety courses for employees, a training project was developed at Group headquarters in 2021 on the subject of awareness of the role of supervisor and associated responsibilities.

The aim of the training project was to propose a direct and pragmatic approach to the issue of behavioural safety. Considering the history and culture of the LU-VE facility in Uboldo, the most functional and performing approach is in fact represented by a practical activity carried out directly in the department, “where conduct is seen on a daily basis”.

The contents of the training covered supervisor conduct for workplace safety and the improvement of leadership elements.

The project reinforced the awareness that there is no such thing as a “safety intervention”, but that continuous and integrated safety management is necessary, and above all that a “safety culture” is necessary.



*“Imagination is more important  
than knowledge”*

*(Albert Einstein — Nobel Prize for Physics)*





The background is a vibrant, monochromatic red. It features a series of thick, flowing, organic shapes that resemble liquid or soft fabric, creating a sense of movement and depth. The lighting is soft, with subtle gradients of red, from deep maroon to a brighter, almost pinkish-red at the top. The overall effect is one of warmth and dynamic energy.

# BALANCED WORLD

**More opportunities for all**

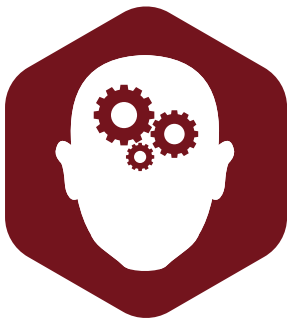
# BALANCED WORLD

## More opportunities for all



**58**

**scholarships awarded to children of employees**



**87.1%**

**directors from local communities**



**92%**

**Group production companies involved in the development of social initiatives**

### In this section

LU-VE Group is engaged in multiple initiatives dedicated to its collaborators and local communities. The longstanding tradition of scholarships for the children of employees complements the numerous activities in support of people, inclusiveness and multiculturalism.



”

## **Grey matter is our raw material**

This does not refer only to the products but it is the mindset that guides us to maintain the commitments made to our collaborators and the communities in which we operate, to promote human growth, both professional and non-professional.

**Fabio Liberali**, CCO LU-VE Group



## 4.1 Supporting employees and their families

For LU-VE Group, creating shared value means strengthening the competitiveness of a company while improving the economic, social and environmental conditions of the communities in which it operates. In fact, the Group has for years been involved in schemes to promote the well-being of its people and their families. Specifically, LU-VE Group has a long history of promoting the education and training of young generations. The Group has provided scholarships to support the education of employees' children since 2001. The

project stems from the direct desire of the President and founder of LU-VE Group, Iginio Liberali, who recognises that scholarships are a meritocratic and concrete tool for promoting equal opportunities for growth and training among youth: "We must think of the young and their education. I know the value of scholarships well: I myself was able to continue my school career, from middle school to university graduation, thanks to scholarships from the Necchi company in Pavia, where my father was a worker. One of the first choices I made when I founded LU-VE was to create the 'Ermanno and Chiara Liberali' Scholarship, named after my parents".



### **"Ermanno and Chiara Liberali" Scholarships - 20th edition**

The 2021 edition of the "Ermanno and Chiara Liberali" Scholarship marks the twentieth anniversary of the initiative that LU-VE Group has made available to the families of its employees in order to encourage the studies of the most deserving students at state or recognised universities and higher education colleges.

The "Ermanno and Chiara Liberali" Scholarship has the characteristics of having stringent prerequisites and being inclusive, supporting excellence in study and ensuring equal opportunities. The allocation rules were established in agreement with the Joint Trade Union Representatives of the various facilities.

Since 2001, when the competition was launched, 312 scholarships have been awarded for a total of approximately €600,000.

The initiative targets all employees of the Group's Italian companies and starting this year, also those of the foreign company SEST LU-VE Polska (Poland).

58 scholarships were awarded in 2021. A total of 37 girls and 21 boys were awarded for a total of almost €125,000. The winners will also be given the opportunity to carry out an internship at one of the Group's companies, with times and procedures still to be defined.

The Scholarship will gradually be extended to all Group companies.



### 4.1.1 Attention to people

One of the company's recurring employee initiatives is the celebration of those who have achieved high seniority at LU-VE Group.

LU-VE Group is aware of the importance of closeness to local communities, inclusiveness and multiculturalism. The Group has always undertaken to develop its organisation, starting with local resources and professionals, especially the front line managers, recruiting resources from the countries it operates in and where its facilities are based. In 2021, the percentage of Directors at the various locations of the Group recruited from local communities was 87.1% (4 directors out of a total of 31 are not from local communities), compared to 87.5% in 2020.

Since its inception, the Group has considered work a fundamental right, not only to provide families with economic stability, but also to ensure inclusiveness and equal opportunities, both individually and collectively. In particular, the work context is very important for people with disabilities. Difficulties in getting people with disabilities into work have an immediate effect on a family's economic situation, which is already burdened by care and nursing activities, and on the individual well-being of each individual. Providing stable employment means ensuring financial security and active participation in social life.



#### **Celebrating collaboration between company and people**

For about a decade now, at the express wish of the President, LU-VE Group has been organising a special event to recognise the seniority of employees.

The tradition established over the years is intended to reinforce the mutual esteem and dedication that LU-VE Group has always striven to establish between company and employee.

During 2021, awards were given to 42 employees - 32 men and 10 women - who completed 25 and 30 years of seniority in the company in 2020.



## **“Like shoes in the fridge”: the project with Cooperativa Alfa**

At its facility in Uboldo (Varese, Italy), LU-VE Group has been collaborating with the Alfa Social Cooperative in Lomazzo (Como, Italy) since 2006 through the “Like shoes in the fridge” project, with the aim of encouraging the employment of people with disabilities or social disadvantages in the life of the company.

This collaboration falls within the parameters set for the recruitment of personnel registered for the employment in the protected category. In accordance with the principles of the ILO (International Labour Organisation), full inclusion in the work environment allows for a diverse workforce and improves productivity and service.

The Cooperative carries out the following at LU-VE Group’s Uboldo facility: cleaning and sanitising external areas, the production facility, offices, kitchen and company canteen; separated waste inside the company; raising workers’ awareness of waste separation; pest control and rodent control; minor internal portage; safety and ecology consultancy.

The Cooperative (in partnership with LU-VE Group’s human resources department and corporate occupational medicine) helps to manage situations of work stress due to a disability.

LU-VE Group provides access (free of charge) to the company canteen, all means of transport for internal goods handling and equipment for working at heights. It also provided the cooperative with an internal secretariat, changing rooms and a telephone line. In addition, the Group:

- includes cooperative members in its internal training courses (e.g., course for forklift truck drivers, first aid, waste management);
- provides company access to the area services institutionally operating in the field of job placement of disabled people and the social and health services which are part of hospital psychiatric services, so that the job placement path is transparent and also controlled by the public bodies;
- invites cooperative members to events organised by the company to mark Christmas or other anniversaries;
- allows cooperative members to use the company canteen free of charge together with LU-VE staff to create moments of socialisation.

During 2021, LU-VE Group employed 33 people from Cooperativa Alfa, while in 2020 the total number was 30. The personal stories of some of the people in the Cooperative have been collected in the book “Like shoes in the fridge”.



### **LU-VE and Cooperativa Alfa**

*“What LU-VE Group allows us to do is absolutely commendable. Alfa is trying hard, the crew are committed, but above all the company and the Liberali family are allowing us to carry forward an initiative that is hard to find in other factories.”*

**Dott. Antonio Gervasio**, doctor and head of the Alfa Social Cooperative







## 4.2 Initiatives to support communities

### Ice skating

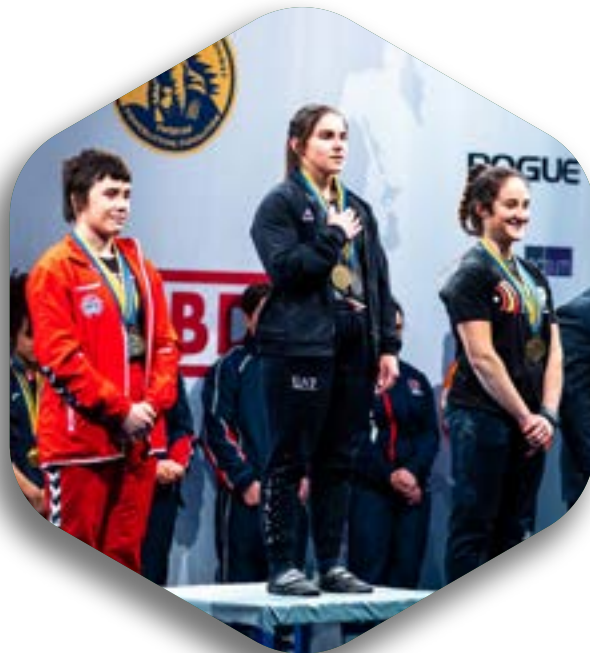
#### GABRIELE GALLI FOR THE 2026 OLYMPICS



Sponsored by LU-VE Group for two years, Gabriele Galli is an athlete from Uboldo (Varese) who joined the Italian national ice-skating team in 2021 with the prospect of participating in the Beijing 2022 Games. After passing all the qualifying events to participate in the Olympics, he saw his dream evaporate, blocked by a quarantine imposed by his room-mate's positive Covid test which prevented him from competing at the third World Cup in Salt Lake City, the last qualifying event for Beijing. His goal is now the 2026 Milan-Cortina Olympic Games. LU-VE Group will continue to support him for the commitment and passion he continues to express with his flying skates.

### Powerlifting

#### POWERLIFTING VIKINGS VENETO



Six athletes from the PowerLifting Vikings Veneto Sports Club sponsored by LU-VE Group received the call from the Italian national team to participate in the world championships held in Halmstad, Sweden, from 23 September to 3 October 2021.

Appointed head coach of the Azzurri, it has been praised by the president of the Italian PowerLifting Federation, Sandro Rossi, for the team's outstanding results: 12 medals, one world title, one world record and one overall second place. In the Junior category, and in addition to having contributed with four out of five athletes to the formation of the national team that won the world team title for the first time in history, Vikings Veneto obtained the following results by weight category: one gold medal accompanied by a world record for Giulia Grechi (19 years old, cat. -52kg); three gold medals for Giada Palma, (23 years old, cat. -84kg); three silver medals for Sara Naldi (23 years old, cat. -63kg); one gold, one silver and three bronze medals for Manolo Che Omarini (master, cat. -74kg).

**Polysport of excellence**  
**CENTRO UNIVERSITARIO SPORTIVO PAVIA**



LU-VE Group continued to sponsor CUS Pavia in 2021, a multi-sports club linked to the University of Pavia and famous for being a breeding ground for Olympic, world and Italian champions in various disciplines.

As usual, the track record of 2021 is of the highest level. Canoe rallies: Mathilde Rosa (K1F individual classic) won the Senior European Championships, while at the Senior World Sprint Championships Tommaso Mapelli and Giacomo Bianchetti took bronze (C1M teams). Giulia Formenton (K1F team classic) took gold at the European U.23 Championships, with four silver and four bronze medals in various categories. At the Italian Championships, the CUS won a total of 12 national titles. Rowing: Matteo Mulas and Tommaso Molinari Italian Champions Double Scull Lightweight, Francesco and Tommaso Molinari Italian Champions Double Scull Under 23 and the Women's Coxless Four Crevani Beatrice, Bini Arianna, Boiocchi Gaia, and Marta Fraccaro. One gold at the World Cup (Matteo Mulas - Quad Scull Lightweight) and one bronze at the Under 23 European Championships (Francesco Molinari - Quad Scull). Several placings of CUS youth at the Italian Junior and Cadet Championships in various disciplines: 60m, 100m, 200m, 3000 steeplechase, 4x2km, cross country, high jump, discus and hammer). A Lombardy regional cadet title in the discus. The first rugby and volleyball teams participated in their respective Serie C tournaments.

**Football**  
**FCFJ AT THE NATIONAL JUNIOR FOOTBALL CHAMPIONS**



LU-VE Group supports the Futura Junior Football Club based in Porvoo, Finland with football players aged between 8 and 12. The coach Jan Zimmer said: "We try to make them understand that winning isn't the most important thing, but playing to improve is".

The 2009 class of Football Club Futura Junior came second in the final ranking of the National Junior Championships after playing 11 matches and winning seven of them against the best national teams representing larger cities. The news of their placement was also published in the major local newspaper, Uusima. "Our goal was to finish in the top eight to stay in the Southern League and be in the national championship again next year," Jan explained, "and the boys did it".



**Football**  
**ASD CALCIO LIMANA CAVARZANO**



LU-VE Group's involvement in supporting certain sports activities in Limana (Belluno, Italy) continued for the 2020/2021 season, sponsoring ASD Calcio Limana Cavarzano, which competes in the Promozione Veneto and Category Three championships.

**Football**  
**GEMONESE CALCIO ALLIEVI**



A set of yellow and red T-shirts sponsored by LU-VE Group for the Allievi youth team of Gemonese Calcio.

After winning the championship in 2019-20 and after a forced break in the 2020-21 season, morale was low and a lack of sponsors threatened to leave the team without a kit.

LU-VE Group dressed the team to bring back a smile and some enthusiasm.



**Karting**  
**PETER STILLER, KART DRIVER**



**Volley**  
**ASD CALCIO and VOLLEY LIMANA**



Since 2021, LU-VE Group has been following and sponsoring a promising young kart driver, Peter Stiller, 16.

He began competing in 2021 at the championships in China, where he was born and lives, taking two wins and nine second places. Peter became the X30 Senior vice-champion of the Rotax Max Trophy and took second place in the Chinese NKCC National Championship for the X30 Junior category. His next goal is the European Championships for the 2022 season.

LU-VE Group's involvement in supporting certain sports activities in Limana (Belluno, Italy) continues for the 2020/2021 season, sponsoring Volley Limana in the C series. For generations, this sports club has been developing the talents of youth who are just starting out and those who want to reach levels of excellence, accompanying them on their growth path typical of team sports.





## Mountain running REGIONAL MOUNTAIN RUNNING CHAMPIONSHIPS



For the third consecutive year, the Group has supported the Regional Mountain Running Championships, held near its headquarters in Limana, Italy, and organised by the Belluno Athletics Association.

The race was attended by athletes from the Master, Absolute, Promesse, Junior, Cadet, Cadet male and female categories who are FIDAL members for the current year.

## Water sports LEGA NAVALE ITALIANA



LU-VE Group financially supported the Lega Navale Italiana for the development of a new base at Lake Santa Croce in Alpago (Belluno) as a National Nautical Centre affiliated with FIV.

The Santa Croce base is used for the dinghy and catamaran sailing activities and is the headquarters of the Lega Navale Italiana of Belluno (Italy).









## 4.2.2 Local communities

### CHINA

#### Supporting small villages



The “100 companies for 100 villages” project is a programme involving companies in the Hubei Province to help and support small communities in the area. LU-VE Heat Exchanger in Tianmen joined the initiative for the second year running.

Construction work on the “Three Gorges Dam”, needed to produce electricity and contain flooding of the Yangtze River, the third longest in the world, had led to the expropriation and displacement of some areas downstream of the dam. LU-VE Tianmen (300km east of the dam) contributed to the improvement of civic facilities in one of the small villages located in the Tianmen municipality.

In 2020, the civic commitment turned to technical aspects, in line with the Covid-19 pandemic requirement (provision of masks, laser thermometers to measure temperatures and protective clothing). In 2021, LU-VE Tianmen contributed to the renovation of a kindergarten. In 2022, General Manager Thomas Stiller announced that the donation would be used to strengthen the banks of the Yangtze to further improve defences against flooding during the rainy season and against adverse weather phenomena.

### IVORY COAST

#### Ayamé, the habit of hope



In 2021, LU-VE Group began supporting the activities of the Pouponnière (kindergarten) Shalom Soua in Ayamé, Ivory Coast, founded and run by APPA (Pavia Agency No. 1 for Ayamé); its motto is: “To get into the routine of cultivating the habit of hope”.

Pouponnière is a care facility for children age zero to six years, developed to meet the health and care needs of the local community. A high percentage of the adult population is HIV positive on the Ivory Coast, and transmission between mother and unborn child is very frequent. With effective treatments available to allow children to make a full recovery, there was a need to take them in and provide them with the necessary treatment for a speedy recovery, also considering that many of them were orphans.

The first Pouponnière consisted of a first building capable of accommodating up to 25 babies, but this soon proved insufficient. The expansion of the paediatrics department and the increase in the number of newborn babies in need of care led to the opening of the New Pouponnière in 2007, a modern facility consisting of several large rooms and high-quality indoor facilities that can accommodate up to 60 children.

At the end of 2021, the project received the “Award of Excellence” from the President of the Ivory Coast Republic, Alassane Ouattara, for the best child protection institution in the Country.

## FINLAND

### Close to SOS Children's Villages



With its company in Finland, LU-VE Group supported SOS Children's Villages Finland, part of the international organisation SOS Children's Villages which helps vulnerable children in more than 130 countries around the world.

The fund donated to the association supports the work of the Apuu initiative ([apuu.fi](http://apuu.fi)), an emergency chat for childcare. The aim is to help children in need between the ages of 7 and 12, especially following the impacts of restrictions due to the Covid-19 pandemic. Children use the chat to discuss anxiety, bullying, relationships with their friends and concerns about their parents.

Up to October 2021, children had used the Apuu chat more than 32,000 times compared to when it opened in spring 2020; above all, the number of contacts for serious situations has increased. In each discussion, the professional supporting the chat plans how the issue should be resolved together with the child, and then reports serious cases to the police or child welfare services or those which require emergency social services.

## INDIA

### Relief, education and digital development



Spirotech, the Indian subsidiary of LU-VE Group based in Bhiwadi (Rajasthan), subsidised five charitable activities in the country in 2021, amounting to just under 12 million rupees, or around €140,000.

The largest share went to the Prime Minister's National Relief Fund, a government fund used to provide immediate relief to families affected by natural disasters such as floods, cyclones and earthquakes.

A second contribution was made to Computer Shiksha, an organisation that works to bridge the digital divide, especially among the most disadvantaged population groups and above all among children through interventions in schools.

A further part finances the L.E.U. Foundation (Learn Empower Uplift) for three different projects: Center for Developing Young Minds, Bal Shiksha Kendra Running Expense and JumpStart the future of a child, all dedicated to early childhood education programmes of those in the most disadvantaged social classes, with the aim of supporting children's language skills, literacy and social-emotional development.

The LU-VE Group company also has a long working relationship with the National Association for the Blind and helped support the digital transformation of libraries by creating audio books for the visually impaired in 2021.

Lastly, the final part of funds was allocated to the Anandashram Socio Cultural Organisation, a non-government organisation working on education for young people, vocational training and the development and empowerment of women.



## POLAND

### Supporting hospitals in Zabrze and Chorzów



In response to the health emergency caused by the Covid-19 pandemic, the Polish office in Gliwice has supported local hospitals.

Personal protective equipment (masks, overalls, gloves, shoe protection), a forklift truck and a platform for oxygen tanks were donated to the local hospital in the city of Zabrze, while water and coffee were provided to the hospital in the city of Chorzów.

## POLAND

### Szlachetna Paczka: the “noble package”



“Szlachetna Paczka” is one of the most recognised social programmes in Poland. This is a “package” to help families in need, made possible thanks to the cooperation of donors and volunteers. Volunteers seek out families and work with them, while donors make financial contributions.

The Group's Polish facility involved about a hundred people who contributed to the donation of these packages, consisting of washing machines, food, clothes, bicycles and school supplies.



## RUSSIA

### The Franciscans of the Tau Centre



With its subsidiary in Russia, LU-VE Group has been supporting the Tau Centre in Ussurijsk in the Russian Far East since 2015.

Managed by Franciscan monk Stefano Invernizzi, the Centre has offered shelter to homeless adults, a soup kitchen for the underprivileged and the disabled, an after-school care programme, various laboratories for children of poorer families and a project for physically-challenged children since 2007.

The facility in Lipetsk, Russia contributes to the expenses for heating the facility and to a project to renovate the system, so that it can save on consumption and optimise internal heat retention. The centre is particularly proud of the assistance it provides to guests in managing the red tape needed to obtain or renew personal documents which, for bureaucratic reasons, many of them do not have.

The Centre looks after their physical well-being and social inclusion, following the procedures that enable them to obtain identity cards and residence certificates that are fundamental for healthcare. This restores dignity to the adult guests, who can return to being citizens with their own rights and receive a pension that gives them independence and hope for the future.

## TANZANIA

### The angels of Malaika Children's Home



The Group company TGD (Travacò Siccomario, Pavia) has been supporting the "Malaika Children's Friends Onlus" since 2017, a children's home in Tanzania that has been welcoming orphaned, abandoned or medically needy children since 2011, with the aim of helping them grow in peace within their culture, trying to reunite them with their families of origin where possible and supporting their growth as independent adults.

The Malaika (which in Swahili means "angel") group home is located a few kilometres from Arusha close to the village of Moshono. It employs a number of people, so even the local economy benefits from it: "mums" who take turns in managing the home; a "dad" who takes the children to school and works with them in the fields and the chicken coop; a coordinator who oversees activities as a whole, does the accounts and manages spending; a nurse who looks after the younger children and the health of everyone; and lastly a night watchman, who guarantees peace of mind for the mums and the young guests.

There are 29 guests at the "angels" house: 23 are residents and six have returned to their families, but Malaika Children's Friends continues to support their education and medical costs.



## USA

### Breast Cancer Awareness Month



In October 2021, the Jacksonville (Texas) office participated for the first time in "Breast Cancer Awareness Month" to raise awareness about the risks of breast cancer.

The American Cancer Society - an American volunteer organisation active in the fight against cancer - in collaboration with the pharmaceutical industry, has supported this project since 1985 with the aim of promoting mammography as the most effective way to prevent breast cancer.

Promoted at the behest of personnel at the American LU-VE Group company, the initiative involved around sixty employees who - dressed in pink for the occasion - promoted a breast cancer prevention campaign by distributing information leaflets about the health centres where mammograms can be carried out for early and preventive diagnosis. Given the enthusiasm and the high level of participation, new ideas are being considered for the next edition in 2022 to involve even more people and give the company an even more active role.









*“The future should not be predicted  
but made possible”*

*(Antoine de Saint-Exupéry — writer and aviator)*







# CONSCIOUS WORLD

**Stewardship for a better future**



# CONSCIOUS WORLD

Stewardship for a better future



**3,157.6 tons of CO<sub>2</sub>**

avoided thanks to the supply of certified renewable energy at the headquarters



**0.051**

Intensity of GHG emissions (tCO<sub>2</sub>eq/€ of turnover)



**64%**

suppliers who have completed the “Supplier Form” on good practices and respect for human rights

## In this section

The production activities of LU-VE Group are analyzed and reported taking into consideration all environmental impacts: energy consumption, emissions, use of water resources and waste management. The section closes with the management methods and activities to promote responsible supply chains.



”

## **Attention to sustainability is one of our distinctive features**

Since our foundation we have made research and investments in environmentally-friendly solutions and the innovations we have introduced have since become a constant reference standard for the entire sector.

**Matteo Liberali**, CEO LU-VE Group

## 5.1 Raising awareness of major environmental challenges and reducing impacts

LU-VE Group is aware of the importance of a shared culture that actively involves all stakeholders, focusing attention on the environment and responsible consumption. In a context of increasing global warming due to climate change, governments, institutions, companies and organisations must promote conduct aimed at preserving the environment for future generations. The growing importance of climate change issues is also demonstrated by the outcome of the materiality analysis updating process for the 2021 NFS. The environmental principles guiding the Group's actions were formalised in the environmental policy implemented during 2021 and definitively published in early 2022.

With a view to consolidating procedures and best practices at Group level, in addition to following the principles of the environmental policy, all facilities adopt a widespread governance model for the management and reduction of related risks.

Following the assessment of non-financial risks, three focal points were identified:

- management of energy and water consumption;
- monitoring atmospheric emissions;
- waste management.

Each Group company has a local contact who manages the environmental aspects of the individual facility.

A preventive approach to risk management has been adopted at several facilities, based on management systems compliant with international ISO 14001 standard.

As part of the assessment of climate change-related risks, the Group identifies the possible inability to achieve strategic objectives due to changes in the external environment (also taking into account possible impacts on the supply chain) and possible inadequate management of atmospheric emissions as moderate-level risks.

The process of identifying these risks, as well as the assessments of their relevance and significance for LU-VE Group, were conducted based on the in-depth knowledge of management in relation to the processes and internal procedures adopted by the Group, as well as the context, the competitive scenario and the main dynamics of the reference market, in addition to the regulations in force or whose introduction is already planned.

In order to prevent these risks, LU-VE Group continued the process of sharing skills among the Group's various facilities and developing production capacity, also in terms of site interchangeability. At the same time, in order to mitigate impacts along the entire value chain, it has planned a project to assess and calculate GHG Scope 3 emissions (emission sources not under the company's direct control, but whose emissions are indirectly due to the company's activity) and has planned to become a member of possible international initiatives for combating and adapting to the effects of climate change.



### Environmental policy

The company formalises principles and actions to protect resources and mitigate environmental impacts.

The policy aims to define a standardised approach to the management of environmental aspects at all LU-VE Group facilities, and to express the commitment to safeguarding resources through four fundamental dimensions: people, market (with particular regard to the entire value and supply chain), processes and products.

All the actions aimed at reducing impacts generated by the Group must be controlled through careful and continuous monitoring.



At strategic level, the Group intends to pursue the integration of sustainable development principles into its vision and business model in an increasingly precise and consistent manner, defining quantitative objectives in the coming years in terms of reducing both direct and indirect greenhouse gas emissions.

However, based on historical experience, the Group considers the physical risks connected to climate change are not particularly relevant, i.e., those connected to possible damage to production facilities following extreme weather events, with consequent reduction or stoppage of activities. In any case, the Group manages such eventualities by taking out appropriate insurance policies and constantly cooperating with its reference counterparties (brokers, insurance companies) in order to analyse the main risk factors at its facilities and identify and take appropriate preventive actions.

Other risks (possible sub-optimal management of water consumption and waste) have been identified as moderate; however, the Group is committed to continue controlling them through scrupulous monitoring and development of dedicated initiatives to improve the use of resources at the various facilities.

### 5.1.1 Energy consumption and emissions

With regard to performance, the Group constantly controls the main environmental performance parameters in its facilities, in terms of energy consumption, water withdrawals and discharges, waste production, atmospheric and greenhouse gas emissions, as well as any spills.

For the various environmental aspects, 2021 was characterised by an overall increase in consumption, mainly due to the Group's expansion strategy and the related increase in production at most of the facilities. It should also be noted that in line with completion of the acquisition of the Sarole plant (India), the 2021 figures also include the related consumption.

As regards energy consumption in 2021, total consumption within the Group's production companies is 287,732 GJ and includes self-produced electricity from photovoltaic systems at the facilities, fuel consumption for the company fleet, space heating and production processes, as well as electricity supplied by the national electricity grid, of which 27,294 GJ is certified as coming from renewable sources. The commissioning of new production lines, the installation of new equipment and the increase in working hours at some facilities in 2021 led to an overall increase in energy consumption

compared to the previous year.

The commitment to use renewable energy with a low environmental impact also continues. During 2021, a total of 3,316 GJ was produced from photovoltaic panels at the Group's facilities installed at the parent company's headquarters in Uboldo (Varese, Italy) and at the facilities in Limana (Belluno, Italy) and Vantaa (Finland).

At the end of 2021, the three installations produced over 182 MWh/year, over 541 MWh/year and over 197 MWh/year, respectively.

The plant in Bhiwadi (India) recently completed the installation of a photovoltaic system on the roof of its production facility.

The system covers an area of 10,000 m<sup>2</sup> and is capable of generating up to 1 MW/day, covering the needs of the existing production lines.



Thus the Group's commitment to the use of zero-impact renewable energy continues.

Energy saving initiatives were implemented at some of the Group's facilities in 2021.

Improvements were made to the lighting system at the facility in the Czech Republic to reduce the supply of electricity and increase brightness during working hours. The initiative resulted in an estimated annual saving of 119 GJ.

Virtuous investments in energy efficiency were also made at the facility in Sweden, where replacement of the previous ventilation system was estimated to save 176 GJ annually.



### In Uboldo we only use renewable energy

A further goal in terms of reducing the environmental impact of consumption has been achieved by the Uboldo (Varese) headquarters which has sourced 100% of its energy from “sustainable” and certified renewable sources since 2021, using the Guarantees of Origin as proof of origin.



**100% GREEN A2A**  
USIAMO SOLO ENERGIE RINNOVABILI



### Virtuous company for energy sustainability

The Uboldo plant (Varese, Italy) has been awarded the “Virtuous company for energy sustainability” certificate from Repower, a specialist company in the sector.

The award was given following the “Energy Sustainability Analysis”: a qualitative survey on ten different aspects covering energy supply, optimisation of consumption, prevention and safety, lighting, system engineering and electric mobility.



### ENERGY CONSUMPTION FROM FOSSIL FUELS (GJ)

	2019	2020	2021
Natural Gas	91,083.3	96,905.2	117,925.7
Diesel	8,869.4	7,491.7	8,323
Petrol	925	1,210.4	1,400.1
LPG and propane	8,814.7	16,764.9	20,657.6
<b>Total</b>	<b>109,692.3</b>	<b>122,372.3</b>	<b>148,306.4</b>

### ENERGY CONSUMPTION FROM PURCHASED ENERGY (GJ)

Electricity from the national grid	96,962	104,152.2	125,105.0
District heating	6,921.5	7,838.7	11,232.9
<b>Total</b>	<b>103,883.4</b>	<b>111,991</b>	<b>136,337.9</b>

### ELECTRICITY SELF-GENERATED FROM RENEWABLE SOURCES (GJ)

Electricity from photovoltaics generated and consumed	2,411	3,222.1	3,088.1
Electricity from photovoltaics generated and sold	288.1	394.6	228
<b>Total</b>	<b>2,699.1</b>	<b>3,616.6</b>	<b>3,316.1</b>





The table below shows the overall energy consumption, broken down by fuel energy consumption, purchased energy consumption and consumption of electricity produced by photovoltaics.

The figures for the calculation of greenhouse gas (GHG) emissions are provided below. In particular, Scope 1 emissions arise from the consumption of fuel such as natural gas, diesel, petrol, LPG and from refrigerant gas leaks. The scope 2 emissions - indirect - are due to electricity consumption at the Group's facilities.

TOTAL ENERGY CONSUMPTION (GJ)			
	2019	2020	2021
Energy consumption from fossil fuels	109,692.3	122,372.3	148,306.4
Energy consumption from acquired energy	103,883.4	111,991	136,337.9
Electricity from photovoltaics generated and consumed	2,411	3,222.1	3,088.1
<b>Total</b>	<b>215,986.7</b>	<b>237,585.4</b>	<b>287,732.4</b>

INDIRECT GHG EMISSIONS - SCOPE 1 (tCO <sub>2</sub> eq)			
	2019	2020	2021
Refilling of refrigerant gas <sup>24</sup>	15.7	52	72
Fuel consumption	5,859.9	6,552.3	7.844
<b>Total</b>	<b>5,875.5</b>	<b>6,604.4</b>	<b>7,915.8</b>

EINDIRECT GHG EMISSIONS - SCOPE 2 <sup>25</sup> (tCO <sub>2</sub> )			
	2019	2020	2021
Electricity (market-based)	16,308.9	16,408.4	16,205.0
Electricity (location-based)	13,846.5	14,458.3	16,715.7
District heating	338.5	375.8	532.7
<b>Total (market-based)</b>	<b>16,647.4</b>	<b>16,784.3</b>	<b>16,737.7</b>
<b>Total (location-based)</b>	<b>14,185</b>	<b>14,834.1</b>	<b>17,248.2</b>

<sup>24</sup> In 2021, the following refrigerant gases were recharged: R134A and R410A.

<sup>25</sup> Total emissions are expressed in CO<sub>2</sub>eq although Scope 2 emissions (location-based) deriving from the consumption of electricity are expressed in CO<sub>2</sub>, as the portion attributable to CH<sub>4</sub> and N<sub>2</sub>O gases is not significant.

With regard to energy consumption and the related GHG emissions, the Group pursues the objective of dissociating economic growth and energy intensity and emissions, with a view to reducing its environmental impact. Compared to 2020, both energy intensity and GHG emissions decreased in 2021.

Aside from greenhouse gas emissions, the main emissions of aeriform pollutants coming from the Group's manufacturing activities were also mapped.

These emissions were calculated from the direct measurements taken by consultancy firms and certified laboratories and through estimates based on the manufacturing activities of the various facilities.

Compared to 2020, the increase in other atmospheric emissions (especially carbon dioxide, nitrogen oxides and particulate) is due to the installation of more machinery, especially for the companies in India and the USA.

## ENERGY INTENSITY AND GHG EMISSIONS

	2019	2020	2021
<b>Energy intensity (GJ/€ of turnover)</b>	<b>0.55</b>	<b>0.59</b>	<b>0.58</b>
<b>Intensity of GHG emissions (tCO<sub>2</sub>eq/€ of turnover)</b>	<b>0.051</b>	<b>0.053</b>	<b>0.051</b>

## OTHER ATMOSPHERIC EMISSIONS (kg)

		2019	2020	2021
CO		1,630	2,100	3,872.3
NOx		5,347	5,354	8,770.1
Particulate		452	434	820.6
COV		5,286	9,525	8,970.9
Oil mist		216	235	466.5
Heavy metals	Copper	198	177	174.2
	Iron	137	134	125.3
	Zinc	4	3	2.2
	Aluminium	4	2	0.3
	Tin	5	6	9.1
	Lead	5	5	7.6

## 5.1.2 Water resources

The Group constantly monitors its water withdrawals, seeking to adopt production practices and processes able to reduce requirements as far as possible. In addition, impacts related to water resources, both in terms of withdrawals and discharges related to activities, are monitored using an approach in line with the regulations in force in the various countries in which it operates and using best practices.

Attention to employees is achieved by establishing medium- to long-term professional relationships between people working in the Group.

The aim is to provide opportunities and tools for the constant and continuous growth of employees over time, also conveying pride and a sense of belonging to the “team” LU-VE Group.

Compared to 2020, the Group’s water consumption trends remained in line with the increase in production recorded in the last year. Of the water resources drawn from third parties in 2021, around 18% was drawn from surface sources, while the remaining 82% from ground water.

Water discharge was in line with the withdrawals made during the year and the increase in production recorded during 2021.

Water is returned to the environment in compliance with local discharge regulations, adopting dedicated controls.

As regards water stress areas<sup>26</sup>:

- India (Bhiwadi and Sarole): extremely high risk
- China (Tianmen) and Russia (Lipetsk): high risk
- Italy (Limana, Belluno): medium-high risk
- all other Group facilities: low or medium-low risk.

To mitigate these risks, the Group constantly monitors its withdrawals, seeking to adopt production practices and processes able to reduce its water requirements as far as possible. An example of this approach is the product testing phases that are conducted using helium, rather than water, at many of the Group’s facilities.

WATER WITHDRAWAL BY SOURCE (m <sup>3</sup> )				
		2019	2020	2021
Groundwater		147,105	132,072	159,444
of which freshwater ( $\leq 1,000$ mg/l of total dissolved solids)		6,235	7,954	9,300
other types of water ( $> 1,000$ mg/l of total dissolved solids)		140,870	124,118	150,144
Third-party water sources		63,107	68,803	88,693
of which freshwater ( $\leq 1,000$ mg/l of total dissolved solids)		63,107	68,803	88,93
other types of water ( $> 1,000$ mg/l of total dissolved solids)		-	-	-
Total withdrawal of third-party water sources by withdrawal source	Surface water	8,240	13,258	16,204
	Groundwater	54,867	53,545	72,489
<b>Total</b>		<b>210,212</b>	<b>198,875</b>	<b>248,137</b>

<sup>26</sup> Source: World Resources Institute, *Aqueduct Water Risk Atlas*, [www.wri.org/our-work/project/aqueduct](http://www.wri.org/our-work/project/aqueduct)



WATER DISCHARGE (m <sup>3</sup> )			
	2019	2020	2021
Discharge to third-party water sources	201,793	196,159	230,474
of which freshwater ( $\leq 1,000$ mg/l of total dissolved solids)	198,645	193,546	226,411
other types of water ( $> 1,000$ mg/l of total dissolved solids)	3,148	2,613	4,063
<b>Total</b>	<b>201,793</b>	<b>196,159</b>	<b>230,474</b>

ENERGY CONSUMPTION FROM PURCHASED ENERGY (GJ)			
Electricity from the national grid	96,962	104,152.2	125,105.0
District heating	6,921.5	7,838.7	11,232.9
<b>Total</b>	<b>103,883.4</b>	<b>111,991</b>	<b>136,337.9</b>

ELECTRICITY SELF-GENERATED FROM RENEWABLE SOURCES (GJ)			
Electricity from photovoltaics generated and consumed	2,411	3,222.1	3,088.1

WATER DISCHARGE FROM WATER-STRESSED AREAS (m <sup>3</sup> )			
	2019	2020	2021
<b>Discharge to third-party water sources</b>	<b>37,884</b>	<b>44,527</b>	<b>50,648</b>
of which freshwater ( $\leq 1,000$ mg/l of total dissolved solids)	34,736	41,914	46,585
other types of water ( $> 1,000$ mg/l of total dissolved solids)	3,148	2,613	4,063
<b>Total</b>	<b>37,884</b>	<b>44,527</b>	<b>50,648</b>

## 5.1.3 Waste management

The Group constantly monitors the applicable legislation on water management and disposal in the countries it operates in and works with certified suppliers in order to comply with laws and regulations and to promote best practices. The individual facilities have local contacts responsible for monitoring and collecting waste data.

The Group is aware that inadequate waste management can contribute to serious impacts on the local area, such as contamination of environmental matrices like water and soil. In addition to direct impacts, improper waste management can cause indirect damage to the environment. In fact, what is not recycled or reused represents a potential loss of raw materials.

Aware of its impact, the Group's waste is recycled and if recycling is not possible due to its characteristics or type, it is disposed of. Overall, waste for recycling in

2021 reached about 92% of the total waste produced. With regard to hazardous waste, the main types resulting from the Group's activities are chemical compounds (e.g., lubricating oils and solvents), while the main types of non-hazardous waste are processing waste (e.g., aluminium, copper, iron, packaging cardboard), while in the case of some of the Group's Italian companies (TGD and in part Air Hex Alonte) the waste water resulting from production activities is disposed of as waste.

The following table shows the values of waste generated by the Group, broken down by category (hazardous and non-hazardous). Note that for the 2019 figures, the detail of the type of disposal is reported in line with the requirements of GRI 306-2 (2016). For 2020 and 2021, reporting has been aligned with the new requirements of the Standard - GRI 306 (2020).

HAZARDOUS AND NON-HAZARDOUS WASTE BY DISPOSAL METHOD 2019 (t) <sup>27</sup>	
	2019
<b>Total hazardous waste</b>	<b>375.8</b>
Recycling or reuse	182.3
On-site storage <sup>28</sup>	75.5
Disposal to landfills	73.2
Energy recovery	5.6
Other <sup>29</sup>	39.1
<b>Total non-hazardous waste</b>	<b>5,894.8</b>
Recycling or reuse	5,554.6
On-site storage	91.9
Disposal to landfills	121.7
Energy recovery	34.4
<b>Other<sup>30</sup></b>	<b>92.2</b>
<b>Total waste</b>	<b>6,270.6</b>

<sup>27</sup> The figures relating to waste generated in 2019 are shown according to GRI indicator 306-2 (2016), in line with the 2019 NFS.

<sup>28</sup> The item "On-site storage" includes temporary storage pending disposal pursuant to the provisions of applicable law.

<sup>29</sup> The category "Other" refers primarily to waste disposed of through chemical/physical treatment and biological treatment for both hazardous and non-hazardous waste.

<sup>30</sup> The category "Other" refers primarily to waste disposed of through chemical/physical treatment and biological treatment for both hazardous and non-hazardous waste.

## WASTE BY COMPOSITION 2020 and 2021 (t)

	2020			2021		
	Waste generated	Waste diverted from disposal	Waste directed to disposal	Waste products	Waste diverted from disposal	Waste directed to disposal
<b>Non-hazardous waste</b>						
Aluminium waste	1,851.1	1,851.1	0	2,305.6	2,305.6	0
Copper waste	478.8	478.8	0	582.0	582.0	0
Steel waste	643.2	643.2	0	768.0	768.0	0
Iron waste	1,017.6	1,017.6	0	1,341.7	1,341.7	0
Paper and cardboard	832.6	815.6	17.0	978.0	978.0	0
Plastic	104.8	104.8	0	131.1	131.1	0
Other <sup>31</sup>	2,346	1,905	441.2	2,945.5	2,451.6	495.0
<b>Hazardous waste</b>						
Oil-contaminated waste	11.4	11.2	0.1	314.8	38.6	276.21
Chemical	50.7	50.7	0.0	230.3	216.1	14.2
Other <sup>32</sup>	398.6	318.7	79.9	186.7	171.3	15.4
<b>Total</b>	<b>7,734.8</b>	<b>7,196.7</b>	<b>538.2</b>	<b>9,783.7</b>	<b>8,982.9</b>	<b>800.8</b>

## WASTE DIVERTED FROM DISPOSAL THROUGH RECOVERY OPERATIONS 2020 and 2021 (t)

	2020			2021		
	In loco	External site	Total	In loco	External site	Total
<b>Non-hazardous waste</b>						
Recycling	-	6,270.9	6,270.9	-	7,880.1	7,880.1
Other recovery operations	-	545.2	545.2	161.6	515.3	676.8
Preparation for reuse	-	-	-	-	-	-
<b>Hazardous waste</b>						
Recycling	8.5	163.5	172	0	387.3	387.3
Other recovery operations	-	156.1	156.1	0	38.7	38.7
Preparation for reuse	-	52.5	52.5	-	-	0
<b>Total waste diverted from disposal</b>		<b>7,196,7</b>			<b>8,982.9</b>	

Also in 2021, in line with last year, no significant spills (such to impact the water, soil and subsoil matrices) were recorded.

<sup>31</sup> The category "Other" refers primarily to waste disposed of through chemical/physical treatment and biological treatment for both hazardous and non-hazardous waste.

<sup>32</sup> The category "Other" refers primarily to waste disposed of through chemical/physical treatment and biological treatment for both hazardous and non-hazardous waste.



## 5.2 Promoting a responsible supply chain

2021 was characterised by a particularly complex procurement situation in terms of raw materials, semi-finished products and components, particularly electronics.

The disproportionate lengthening of procurement lead times and the total unavailability of quotas beyond what was stipulated in the contracts were two elements that strongly affected many production activities.

Despite this particularly complex scenario, no significant shortages were recorded at most of the Group's facilities and it was almost always possible to support production continuity of the factories. This was achieved thanks to three key elements:

- continuous alignment work between the Purchasing department and other departments;
- preventive risk management implemented through analyses and regular global meetings;
- careful procurement strategies established by the Purchasing Department over the last three years.

The complex process of selecting suppliers is based on the search for maximum competitiveness, innovation, service quality and level, and building solid, strategic and diversified partnerships. This approach has also proved effective as a tool for protecting and managing supply risk, at least for a critical period of short to medium duration.

There is still a great deal of uncertainty and indeterminacy in the availability of supplies, particularly with regard to electronic components. The current economic situation could create further difficulties in 2022 as it continues.

Due to the fact that LU-VE Group firmly believes in the importance of strategic partnerships established with its most important suppliers, and due to the fact that in some cases the levers available to the management of a company or supplier can be quite limited in the case of long-lasting global crises, in 2021 LU-VE Group decided not to apply the penalties foreseen in contracts for supply delays so as to once again set an example of firm commitment to the sustainability of strategic supply relationships.

### 5.2.1 Ethics and quality in the supply chain

In view of the complexity of ensuring that ethics, social and environmental aspects are respected and shared throughout the Group's value chain, particularly in the supplier assessment, raw material purchasing and quality control stages, a Group coordination figure was made official during the year, known as the "Purchasing process development and compliance specialist". The specialist is responsible for integrating and monitoring social responsibility (CSR) aspects into Group procedures, collaborating on sustainability projects, monitoring the Purchasing Department's KPIs and following compliance issues.

With the aim of extending the monitoring of these issues to the scope outside the Group, depending on its capacity to produce an impact, various activities have been implemented in recent years to support lasting relationships with suppliers, with a view to mutual benefit, reliability and trust and with a focus on continuous improvement and social and environmental management.

Depending on developments in the external context, every six months the contacts at certain facilities in the Quality, Supply Chain and Purchasing departments meet to review the performance of key suppliers over the previous six months, examine any points for attention in supply and consequently define any appropriate improvement plans and update the audit plan to be carried out on Group suppliers. These six-monthly meetings are already operational at the Italian facilities and are being set up in the rest of the Group. Four supplier audits were conducted in 2021, which was still suffering from the limiting effects of the pandemic.

In parallel with the plan's preparation and the conduct of the audits, a process which is already consolidated but also constantly evolving and improving, over the last two years LU-VE Group has formalised the supplier assessment questionnaire with the aim of reviewing the suppliers' management systems and verifying that they share the same values, business ethics and social and environmental responsibility as the Group. The questionnaire sent out when assessing new suppliers and the checklist used during on-site audits examine the same macro-themes: quality, environment, health and safety, ethics and corruption.

In addition to clauses strictly related to quality and labour compliance aspects, in signing the General Purchase Conditions (when setting up the supplies or as soon as possible), LU-VE Group suppliers declare that they are aware of and share the fundamental principles on the basis of which the Group operates. These principles require the supplier to:

- operate with ethics and integrity;
- limit its environmental impact by aiming for efficiency and monitoring aspects such as waste, effluent, air pollution and noise;
- ensure a healthy and safe working environment for all its employees;
- comply with international human rights conventions, such as the International Labour Organisation and the United Nations Convention on Children's Rights.

In the event of non-compliance or inaction by the supplier to take appropriate corrective measures, the Group company involved may terminate the business relationship, even before the contractual deadline.

As regards the management of substances covered by the REACH Regulation (Regulation (EC) No. 1907/2006, Registration, Evaluation, Authorisation and Restriction of Chemicals) and the RoHS Directive (Restriction of Hazardous Substances Directive 2002/95/EC), the system was strengthened with ad hoc training for specific corporate roles, including the Purchasing Department. A questionnaire and declaration form were produced to manage the risk assessment in more detail. An important phase of the project was completed in 2021 and all supplier declarations and information relevant to REACH & RoHS were assessed by the HSE contacts, involving 131 suppliers. By the end of 2021, more than 60% of suppliers had cooperated and provided appropriate documentation. The activity is ongoing and will continue with further actions to raise awareness and proactively involve suppliers. Furthermore, LU-VE Group is in the top 20% of the most virtuous companies in 2021 in terms of sustainable procurement according to the rating of EcoVadis, a company specialising in corporate sustainability assessment, intelligence and collaborative performance improvement tools for global supply chains.



## Supplier Form

In addition to the supplier assessment questionnaire, LU-VE Group uses a form dedicated to analysing and promoting the protection of good labour practices, respect for human rights along the supply chain and compliance with social and environmental regulations, which is called the Supplier Form.

Before the supply agreement is activated, the Group requires (by filling in this document) that in all national and international locations and activities there is a ban on child and forced labour, physical and mental punishment and verbal abuse, that there is a full right to freedom of association, that a system of prevention of discrimination is in place, and regulations on working hours and pay are compliant.

In the event of non-compliance with these principles, the supplier is requested to take the necessary corrective measures to improve the situation and to meet requirements within a reasonable period of time.

In 2021, the supplier assessment questionnaire was updated to make it more user-friendly, easier to fill out and additional compliance aspects were added.

During the year, 64% of the key suppliers of LU-VE Group sent in a completed Supplier Form, compared to 34% in 2020.

The inability to ensure respect for human rights along the supply chain combined with the insecurity and indeterminacy of supply availability represents a moderate risk for the Group, which is to be carefully monitored and on which preventive actions will continue to be implemented.

## 5.2.2 Material procurement

In politically unstable areas, it is common for armed groups to use forced labour to extract “Conflict Minerals” such as tin, tantalum, tungsten and gold. The mines from which these metals come are often controlled by government forces and militias who wish to benefit from them in order to finance illegal and dangerous activities or to buy weapons.

LU-VE Group adopts actions and mechanisms to counteract the use of Conflict Minerals and to have a clear view of the origin of raw materials and their management along the entire supply chain. The Group annually involves its suppliers in a survey in order to map its supply chain, identify and mitigate risks as required by the OECD “Due diligence guidance for responsible supply chains of minerals from conflict-affected and high-risk areas”. This questionnaire, “Conflict Mineral

Reporting Template CMRT”, is an integral part of the periodic assessment process of the Group’s suppliers. Furthermore, in the General Terms and Conditions of Procurement, the Group’s suppliers are also required to declare that they are familiar with relevant legislation and that they refrain from using minerals from the “Conflict Minerals” regions.

In 2021, the policy dedicated to combating Conflict Minerals and pursuing respect for human rights through responsible business conduct, aimed at preventing and mitigating negative impacts throughout the Group’s direct and indirect activities, was approved, published and disseminated to all Group partners and employees.

















## METHODOLOGICAL NOTE

This document is the Consolidated Non-Financial Statement (the “NFS” or “Sustainability Report”) pursuant to Italian Legislative Decree no. 254 of 30 December 2016, implementing Directive 2014/95/EU, of the companies belonging to the Group comprising LU-VE S.p.A. and its subsidiaries (the “Group” or “LU-VE Group”). As provided for by Article 5 of Italian Legislative Decree no. 254/16, this document constitutes a separate report featuring dedicated wording to identify it as the Non-Financial Statement required by legislation.

This NFS has been produced to the extent necessary to provide a clear understanding of the Group’s activities, progress, results and impact, considering the material topics envisaged by Articles 3 and 4 of Italian Legislative Decree no. 254/16.

The topics reported in this document were confirmed following an analysis of the trends and the Italian and global context, both in terms of national and international trends and current non-financial reporting trends. Compared to last year, the Group has also included the topics of climate change, food safety and waste, responsible supply chain and support to local communities in the list of GRI disclosures reported.

In line with the requirements of the Decree, the reporting scope includes all LU-VE Group Companies consolidated line by line. As regards the environmental data and aspects relating to product safety, in the three-year period only the Group’s manufacturing companies have been taken into consideration, with the exception of LUVEDIGITAL S.r.l., as the environmental impacts of the sales offices and of LUVEDIGITAL were not deemed significant. Starting with this NFS, the data of the new sales company LU-VE South Korea LLC have also been included in the reporting scope with regard to human resources data. The sales company LU-VE Contardo Pacific Pty. Ltd has not been included, as it will be disposed of in 2021.

For details on the corporate structure, aside from the information reported in this document, reference may be made to the Group’s annual documents: the Consolidated Financial Statements and the Report on Corporate Governance and Ownership Structure, both available on the company’s website.

The data and information provided in this document refers to the activities carried out by LU-VE Group in 2021 (from January to December 2021), when not specified otherwise. Furthermore, to provide a fair representation of performance, the use of estimates was limited as much as possible; when estimates were used, they were based on the best methodologies available and duly identified. Any reclassification of previously published comparative data is clearly indicated as such.

The Statement has been prepared in accordance with the latest available version of the GRI Standards, specifically the GRI Sustainability Reporting Standards 2016 as amended (2018, 2019 and 2020), under the “Core” option and in accordance with the required content and quality principles. A table with the list of contents relative to GRI requirements, both general and topic-specific, is reported at the end of the document.

The principles for the definition of report content are suggested by the GRI and include:

**Completeness:** the material topics dealt with in the document are covered in their entirety and reflect the most material environmental, social and economic impacts for the Group’s activities, thus enabling stakeholders to fully assess the Company’s performance in the reporting year.

**Sustainability context:** the performance of LU-VE Group presented in this document is portrayed within the wider context of the sustainability of the Company’s business.

**Inclusion of stakeholders:** this document reports on the Group’s stakeholders and the methods in which their interests are considered when defining the report’s content.



**Materiality:** the topics reported on were identified based on their relevance to the Group's business, as well as to its stakeholders.

To ensure the quality of the information reported, in drafting the report the principles of report quality were followed as suggested by the GRI.

**Accuracy:** the document content provides an adequate level of detail to understand and assess the sustainability performance of LU-VE Group in the reporting period.

**Reliability:** the data presented in this document were gathered, processed and validated by the managers of each function with the collaboration of a consulting firm. The economic data is consistent with that set forth in the Financial report.

**Clarity:** the use of clear and accessible language and graphs and tables to represent the Group's performance make this Report usable and easy to understand for stakeholders.

**Comparability:** the indicators presented in the Report are laid out for the 2019-2021 three-year period and accompanied by a comment relating to their trends so as to enable comparisons between Group performance over time.

**Balance:** the content of this document reports in a balanced manner on the Group's performance in the reporting period.

**Timeliness:** the Report takes into consideration events that took place after 31 December 2021 which could be significant for the assessment of the Group's performance on the part of stakeholders.



For any clarifications or details on the topics dealt with in this Sustainability Report, please contact:  
**[investor.relations@luvegroup.com](mailto:investor.relations@luvegroup.com)**

*Gibbs*



## LIST OF LU-VE GROUP COMPANIES AND LOCATIONS WORLDWIDE

### HEADQUARTERS

1	LU-VE S.p.A.	Uboldo (Varese) - Italy
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### MANUFACTURING COMPANIES

1	LU-VE S.p.A.	Uboldo (Varese) - Italy
2	LUVEDIGITAL S.r.l. (software house)	Uboldo (Varese) - Italy
3	SEST S.p.A.	Limana (Belluno) - Italy
4	TECNAIR LV S.p.A.	Uboldo (Varese) - Italy
5	MANIFOLD S.r.l.	Uboldo (Varese) - Italy
6	THERMO GLASS DOOR S.p.A.	Travacò Siccomario (Pavia) - Italy
7	HEAT TRANSFER SYSTEMS (HTS) s.r.o.	Novosedly - Czech Republic
8	SEST LUVE-POLSKA Sp.z.o.o.	Gliwice - Poland
9	LU-VE SWEDEN AB	Asarum - Sweden
10	"OOO" SEST LU-VE	Lipetsk - Russia
11	LU-VE HEAT EXCHANGERS (TIANMEN) Co. Ltd	Tianmen - China
12	SPIROTECH HEAT EXCHANGERS Private Limited	New Delhi - India
13	ZYKLUS HEAT TRANSFER, Inc.	Jacksonville – USA, Texas
14	AIR HEX ALONTE S.r.l.	Alonte (Vicenza) - Italy
15	FINCOIL LU-VE OY	Vantaa - Finland

*Gibbs*



## SALES COMPANIES

1	LU-VE Austria GmbH	Vienna - Austria
2	LU-VE Asia Pacific HK Ltd	Hong Kong
3	LU-VE Deutschland GmbH	Stuttgart - Germany
4	LU-VE France S.a.r.l.	Lyon - France
5	LU-VE IBERICA s.l.	Madrid - Spain
6	LU-VE Netherlands B.V.	Breda - The Netherlands
7	"OOO" LU-VE Moscow	Moscow - Russia
8	LU-VE Middle East DMCC	Dubai - United Arab Emirates
9	LU-VE South Korea LLC	Seoul – South Korea

## REPRESENTATIVE OFFICES

1	Fincoil LU-VE Oy Denmark	Aarhus - Denmark
2	Fincoil LU-VE Oy Norway	Drammen - Norway
3	LU-VE NL Belgium	Uccle - Belgium
4	LU-VE Vietnam	HCM City - Vietnam
5	LU-VE UK	London, Fareham - United Kingdom
6	LU-VE Thailand	Bangkok - Thailand

*Gibson*

In consideration of the Group's value chain, for each material topic the scope of impacts and the GRI Disclosure applied are indicated.





















RELEVANT TOPICS		SCOPE OF IMPACTS		GRI
	Topic identified as relevant	Parties generating impacts	Type of impact	Reconciliation with GRI Topics
ALL 4	Strategies for long-term growth and value creation	Entire Group	Generated by the Group	201 – Economic performance 207 – Tax
ADVANCED	Research, development and innovation	Entire Group	Generated by the Group; To which the Group contributes	417 – Marketing and labeling
	Products with reduced environmental impact	Entire Group	Generated by the Group	302 - Energy
	Customer orientation	Entire Group	Generated by the Group	416 – Customer health and safety
BETTER	Talent attraction and development	Entire Group	Generated by the Group	404 – Training and education 401 – Employment
	Workers' well-being and safety	Entire Group	Generated by the Group	405 – Diversity and equal opportunity 401 – Employment 403 – Occupational health and safety
BALANCED	Business ethics and integrity	Entire Group	Generated by the Group; To which the Group contributes	205 – Anti-corruption 206 – Anti-competitive behaviour 307 – Environmental compliance 419 – Socioeconomic compliance
	Support for local communities	Entire Group	Generated by the Group; To which the Group contributes	202 – Market presence
CONSCIOUS	Climate change	Entire Group	Generated by the Group; To which the Group contributes	305 – Emissions
	Resource and waste management	Entire Group	Generated by the Group; To which the Group contributes	302 – Energy 303 – Water and effluents 306 – Waste
	Responsible supply chain	Entire Group	Generated by the Group; To which the Group contributes	408 – Child labour 412 – Human rights assessment
	Food safety and waste	Entire Group	Generated by the Group; To which the Group contributes	N/A

*Glibinski*

For each material topic, the report identifies a company management and organisational model, a formalised policy including those of due diligence, the results achieved through them and several non-financial performance indicators, as well as the main risks, generated or suffered, connected to the material topics and which derive from the Group's activities, its products, services or commercial dealings, including, when relevant, the supply and sub-contracting chains.

Specifically, the management of significant non-financial risks identified by the risk assessment is reported under the respective chapters.

The relationship between the areas of Italian Legislative Decree 254 and the material topics, subject to this non-financial reporting, is described below.

RELEVANT TOPICS		AREAS OF ITALIAN LEGISLATIVE DECREE 254			
Topic identified as relevant	Environmental	Social	Related to Human Resources	Respect of Human Rights	Fight against corruption active and passive
Strategies for long-term growth and value creation					
Research, development and innovation					
Products with reduced environmental impact					
Customer orientation					
Talent attraction and development					
Workers' well-being and safety					
Business ethics and integrity					
Support for local communities					
Climate change					
Resource and waste management					
Responsible supply chain					
Food safety and waste					

*Gibbs*



Note that the issue of biodiversity is not currently considered significant by the Group, by virtue of the initial assessments made by the Parent Company's Departments and then reconfirmed in the subsequent dedicated tables in 2021. This issue is considered immaterial in relation to the activity carried out by the Group and the location of its production facilities. Therefore, this topic is not reported on in this document.

As from publications after 1 January 2022, the LU-VE S.p.A. NFS is obliged to include the information required by regulations on the "EU Taxonomy" in relation to environmentally sustainable activities carried out by the Group. Please refer to the section "Taxonomy of environmentally sustainable activities" for this information.

Pursuant to Article 10 of Delegated Regulation (EU) 2021/2178 of 6 July 2021, this disclosure for 2021 concerns the proportion, compared to the total, of the Group's turnover, investments and operating costs related to Taxonomy-eligible activities with reference to climate change mitigation and adaptation objectives, as covered by the annexes to Delegated Regulation (EU) 2021/2139 of 4 June 2021, as well as certain qualitative information.

In this regard, note that the limited assurance of this Consolidated Non-Financial Statement carried out by the auditing firm Deloitte & Touche S.p.A. does not extend to such disclosure.

This NFS has been subject to limited assurance by an auditing firm, which issues a separate report declaring the compliance of the information provided, as regards all significant aspects, with the requirements of Articles 3 and 4 of Italian Legislative Decree 254/2016, as well as with the reporting standards adopted by the Group (GRI). This assurance was conducted according to the procedures identified in the "Report of the auditing firm" attached to this document.

This document was approved by the Board of Directors of LU-VE S.p.A. on 17 March 2022 in consultation with the Control and Risk Committee responsible for sustainability topics since 2019. The document is published on the website of LU-VE Group in the "Investor relations" - Sustainability section.



## Calculation methods

Some methodological information is provided below concerning several indicators used in this Sustainability Report.

### General information

When the reporting standard requires non-financial information broken down by region, the following distinctions have been drawn:

- **Italy:**

- o LU-VE S.p.A.
- o Air Hex Alonte S.r.l.
- o Luvedigital S.r.l.
- o Manifold S.r.l.
- o SEST S.p.A.
- o Tecnair LV S.p.A.
- o Thermo Glass Door (TGD) S.p.A.

- **EU countries**

- o Heat Transfer Systems (HTS) s.r.o. (Czech Republic)
- o LU-VE Austria GmbH (Austria)
- o LU-VE Deutschland GmbH (Germany)
- o LU-VE France s.a.r.l. (France)
- o LU-VE Iberica s.l. (Spain)
- o LU-VE Netherlands B.V. (The Netherlands)
- o LU-VE Sweden AB (Sweden)
- o Fincoil LU-VE OY (Finland)
- o SEST-LUVE-Polska Sp.z.o.o. (Poland)

- **Non-EU countries:**

- o LU-VE Asia Pacific HK Ltd (Hong Kong)
- o LU-VE Heat Exchangers (Tianmen) Co Ltd (China)
- o LU-VE Middle East DMCC (EAU)
- o LU-VE South Korea LLC (South Korea)
- o Spirotech Heat Exchangers Private Limited (India)
- o “OOO” SEST-LUVE (Russia)
- o “OOO” LU-VE Moscow (Russia)
- o Zyklus Heat Tranfer, Inc. (USA)



## The value of LU-VE Group solutions

The following paragraph illustrates the sources of the information contained in chapter 2.2 “The value of LU-VE Group solutions. The scale of the impact at global level”:

- Energy efficiency: IEA “Cooling” Report, 2020
- Food safety: “Food loss and waste must be reduced for greater food security and environmental sustainability” FAO, 2020
- Climatic well-being: “The Future of Cooling Opportunities for energy-efficient air conditioning” Report, OECD and IEA, 2018
- Digital transformation: “Data Centres and Data Transmission Networks” Analysis, IEA, 2020

Furthermore, with regard to “The value of LU-VE Group solutions”, note that a further category of products sold by the Group must be added to the turnover percentages published, grouped as a single category named “Other”, which includes the solutions for the white goods industry and other transport solutions.

## Detailed tables

	NUMBER OF MEMBERS OF THE BOARD OF DIRECTORS BY GENDER (AS AT 31.12.21)			% OF MEMBERS OF THE BOARD OF DIRECTORS BY GENDER (AS AT 31.12.21)		
	2019	2020	2021	2019	2020	2021
Men	9	8	8	75%	67%	67%
Women	3	4	4	25%	33%	33%
Total	12	12	12	100%	100%	100%

	NUMBER OF MEMBERS OF THE BOARD OF DIRECTORS BY AGE (AS AT 31.12.21)			% MEMBERS OF THE BOARD OF DIRECTORS BY AGE (AS AT 31.12.21)		
	2019	2020	2021	2019	2020	2021
Under 30 years of age	0	0	0	0	0	0
Between 30 and 50 years of age	1	2	1	8%	17%	8%
Over 50 years of age	11	10	11	92%	83%	92%
Total	12	12	12	100%	100%	100%

*Gibinski*



### Reduction in energy requirements of products and services

For GRI 302-5, the reduction in energy requirements of LU-VE Group solutions is expressed as a percentage increase in energy efficiency.

The percentage of energy efficiency indicated for the solutions “OPTIGO FMC”, “OPTIGO FMD” and “ALFABLUE BX” is the result of calculations and comparison studies between the previous product ranges and the new lines in question, based on improvements in terms of energy consumption [J].

### Sustainable refrigerant fluids and products with efficient motors

With reference to percentages on the trends of products marketed by the Group indicated in chapter “2.1 Driving change”, subdivided into “2.1.1 Sustainable refrigerant fluids” and “2.1.2 Products with efficient motors”, note that these data were processed with the support of a dedicated data analysis company that made it possible to correlate the various corporate datasets.

The scope of the analysis covered the sales of “air cooled equipment” from 2012 to 2021 and assessed their sales figures over these 10 years.

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## Chapter – BETTER WORLD - Live and work in better places

### General information

For each reporting year, the calculation of the Group’s personnel (broken down by geographical area, gender, contract type and work type) is based on the data received from the various sales and manufacturing branches and on extractions from the centralised IT system. As in previous years, the figures are expressed in terms of headcount as at 31 December.

The term “collaborators”, where used, includes: employees, contract workers and apprentices.

For each year, the calculation of dismissed workers includes contract terminations as at 31/12 of the previous year, while it does not include employees dismissed as at 31/12 of the year in question, as these are considered as part of the workforce until said date.

The hiring and turnover rate, broken down by gender, age and geographical area, is calculated using the number of employees relative to the type of subdivision considered.

Transfers from agency worker to employee were also considered as recruitment.

## Detailed tables

In order to ensure continuity in reporting compared to previous years, detailed tables are provided below. The body of the document contains tables with percentage formulas to improve readability of the data..

NUMBER OF EMPLOYEES BY CONTRACTUAL TYPE AND GENDER									
	Permanent contract			Temporary contract			Total		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Men	1,554	1,651	1,786	273	263	287	1,827	1,914	2,073
Women	651	682	744	134	127	223	785	809	967
Total	2,205	2,333	2,530	407	390	510	2,612	2,723	3,040

NUMBER OF EMPLOYEES BY CONTRACT TYPE AND GEOGRAPHICAL AREA									
	Permanent contract			Temporary contract			Total		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Italy	974	969	997	14	7	27	988	976	1.024
EU countries	775	875	977	292	279	276	1.067	1.154	1.253
Non-EU countries	456	489	556	101	104	207	557	593	763
Total	2,205	2,333	2,530	407	390	510	2,612	2,723	3,040

NUMBER OF EMPLOYEES BY CONTRACT TYPE AND GENDER									
	Full-time			Part-time			Total		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Men	1,814	1,905	2,058	13	9	15	1,827	1,914	2,073
Women	711	743	898	74	66	69	785	809	967
Total	2,525	2,648	2,956	87	75	84	2,612	2,723	3,040

*Gibbs*

## Injury rates

The injury rates were calculated as reported below:

**Frequency index** (or rate of work-related injuries): number of injuries/hours worked\*1,000,000

**Severity index** (or severity rate): number of days lost per injury/hours worked\*1,000,000

**High-consequence injury index** (or high-consequence work-related injury rate): the number of high-consequence work-related injuries, namely that recorded total days of absence exceeding six months/hours worked\*1,000,000

The calculation of the rates for the three years includes only employees, while interns or personnel working on the basis of project contracts were excluded.

The frequency and severity index calculations include commuting injuries only when the transport was organised by the Group.

The calculation of the injury rate and severity rate includes hours worked and (any) injury to employees on secondment in the country to which the employees are seconded.

## Salary and remuneration

GRI 405-2 takes the following data into account:

**“Basic salary”**: Gross annual salary + any potential monthly payments included in the contract

**“Total remuneration”**: Basic salary + any other actual remuneration (MBO, Spot Bonus, Overtime, benefits, allowances)

The calculation of the ratio between basic salary and the ratio between total remuneration of women and men, broken down by geographical area and professional category, the salary of workers on secondment was considered with reference to the country to which the employees have been seconded.

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## Chapter – BALANCED WORLD - More opportunities for all

### General information

For GRI 202-2, the percentage for Directors from local communities was calculated following this methodology:

**definition of “Director”**: Executives, who in the management systems are referred to as Employee-level Director

**definition of “local community”**: nationality with respect to the nation of the legal entity

**definition of “locations”**: all legal entities of the Group



### General information

Note that following the inclusion of AIR HEX ALONTE S.R.L. and FINCOIL LU-VE OY in the scope of environmental data reporting from 2020, the environmental data for 2019 are not fully comparable with the subsequent years.

### Energy consumption

The conversion factors used to standardise energy consumption come from the DEFRA “UK Government GHG Conversion Factors for Company Reporting – Fuel properties” table for the years 2019, 2020 and 2021.

The energy saving data [GJ] reported for the initiative launched at the plant in the Czech Republic were calculated through estimates that took into account the energy consumed by the new installations and the old ones that have been replaced, taking into account a hypothetical operation for 8 hours a day, 365 days a year. The energy saving data [GJ] reported for the initiative launched in the Swedish plant were calculated by estimating the expected consumption of the new installation compared to the previous one. Approximately 50% of the energy savings expected has been assumed from a prudential point of view.

### Greenhouse gas emissions

Emissions were calculated according to the following methodology:

**Direct emissions (Scope 1):** emissions linked to refrigerant gas leaks, the consumption of natural gas and diesel for heating and fuel for the company car fleet, were calculated using the emission factors reported in DEFRA’s “UK Government GHG Conversion Factors for Company Reporting” in the 2019, 2020 and 2021 editions. The emissions were calculated in CO<sub>2</sub> equivalent, as gas CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O gases are taken into consideration.

**Indirect emissions (Scope 2):** indirect emissions correspond to the consumption of electricity and heat from district heating. The calculation of emissions linked to electricity calculated according to the “market-based” approach used the factors presented in Figure 4 of the document “European Residual Mixes” (2018, 2019 and 2020 editions) published by the Association of Issuing Bodies, for European countries, and the factors published by the Center for Resource solutions in “Green-e Energy Residual Mix Emissions Rates” (2018, 2020 and 2021 editions) for the United States of America. For the countries for which residual mix emission factors are not available, in accordance with the provisions of the reporting standards, the same factors as those in the “location-based” method were used. For the calculation of the latter in 2021, the factors presented in “Table 49 - Main socio-economic and energy indicators” published by Terna in the “International Comparison” section were considered, according to the most recent version available at the time of publication of this document (Terna 2020, 2019 data), while for 2020 and 2019 the respective previous editions were used. Lastly, for the calculation of emissions relating to consumption from district heating, the coefficients used are those reported in DEFRA’s “UK Government GHG Conversion Factors for Company Reporting” in the 2019, 2020 and 2021 editions. The emission factors used express the emissions in gCO<sub>2</sub>/kWh.

Both calculation methodologies were used to calculate indirect emissions. Market-based is based on the CO<sub>2</sub> emissions emitted by the energy suppliers from whom the organisation purchases electricity through a contract. The location-based method is based on average emission factors related to energy generation for well-defined geographical boundaries, including local, sub-national or national boundaries. The indicators reported represent the best possible estimate on the basis of data available when this document was prepared.

### Water withdrawals and effluents

PFor GRI 303-3 and 303-4, the water tables indicate the measurement unit of m<sub>3</sub> for reporting purposes.



# GRI CONTENT INDEX

“In accordance-core” option

## General Standard Disclosures

General Standard Disclosures	Description of General Standard Disclosures	Page, references, notes and any omissions
<b>Organisational profile</b>		
102-1	Name of the organisation	LU-VE Group
102-2	Activities, brands, products and services	§ Make One (Sustainable) Company, pages 10-20 § Cultivating a passion for innovation, pages 62-73
102-3	Location of headquarters	Via Caduti della Liberazione, 53, 21040 Uboldo VA, Italy
102-4	Location of operations	§ Make One (Sustainable) Company, pages 10-11 § Generating value in the long term, page 41 § Methodological Note, pages 146-147
102-5	Ownership and legal form	§ Sustainability, pages 20-27 Report on corporate governance and ownership structure 2021
102-6	Markets served	§ Make One (Sustainable) Company, pages 10-14 § Cultivating a passion for innovation, pages 62-73
102-7	Scale of the organisation	§ Make One (Sustainable) Company, pages 10-20 § Generating value in the long term, pages 32-33, 41 § Improving workplaces, pages pp. 86-88 § Methodological Note, page 154 Capitalisation: €533,62 million
102-8	Information on employees and other workers	§ Improving workplaces, pages 86-89 § Methodological Note, pages 153-155
102-9	Supply chain	§ Sustainability, page 27 § Generating value in the long term, pages 36 § Promoting a responsible supply chain, pages 138-140
102-10	Significant changes to the organisation and its supply chain	§ Make One (Sustainable) Company, pages 10-14 § Promoting a responsible supply chain, pages 138-140
102-11	Precautionary Principle or approach	In all of its actions, LU-VE Group applies the principle of prudence by carefully monitoring its activities. § Sustainability, pages 20-27
102-12	External initiatives	§ Make One (Sustainable) Company, pages 10-14 § Partnerships and customer orientation, pages 74-79 § Initiative to support communities, pages 112-122
102-13	Membership of associations	Eurovent Certification (LU-VE S.p.A.), Unindustria Varese (LU-VE S.p.A. and Tecnaïr LV S.p.A., Manifold Srl), Associazione Italiana Condizionamento dell'Aria, Riscaldamento e Refrigerazione [Italian Air Conditioning, Heating and Refrigeration Association] (Tecnaïr LV S.p.A.)
<b>Strategy</b>		
102-14	Statement from senior decision-maker	§ Leadership with passion, page 3
<b>Ethics and Integrity</b>		
102-16	Values, principles, standards and norms of behavior	§ Sustainability, pages 20-27



Corporate governance		
102-18	Governance structure	§ Sustainability, pages 20-27
Stakeholder engagement		
102-40	List of stakeholder groups	§ Sustainability, pages 26-27
102-41	Collective bargaining agreements	§ Improving workplaces, page 86
102-42	Identifying and selecting stakeholders	§ Sustainability, pages26-27
		§ Partnerships and customer orientation, page 76
		§ Improving workplaces, pages 92-93
		§ Promoting a responsible supply chain, pages 118-119
102-43	Approach to stakeholder engagement	§ Sustainability, pages 20-21
		§ Partnerships and customer orientation, page 69
		§ Improving workplaces, pages 79-80
		§ Promoting a responsible supply chain, pages 118-119
102-44	Key topics and concerns raised	§ Sustainability, pages 20-21
		§ Partnerships and customer orientation, page 69
		§ Improving workplaces, pages 79-80
		§ Promoting a responsible supply chain, pages 138-139
Reporting practice		
102-45	Subjects included in the consolidated financial statement	§ Make One (Sustainable) Company, pages 10-13
		§ Generating value in the long term, page 41
		§ Methodological Note, pages 144-147
102-46	Defining report content and topic boundaries	§ Sustainability, pages 28-30
		§ Methodological Note, pages 144-150
102-47	List of material topics	§ Sustainability, pages 28-30
		§ Methodological Note, pages 148-149
102-48	Restatements of information	§ Methodological Note, page 144
102-49	Changes in reporting	§ Methodological Note, pages 144-156
102-50	Reporting period	§ Methodological Note, page 144
102-51	Date of most recent report	2 april 2021
102-52	Reporting cycle	Annual
102-53	Contact point for questions regarding the report	§ Methodological Note, page 145
102-54	Claims of reporting in accordance with the GRI Standards	§ Methodological Note, pages 144-145
102-55	GRI content index	§ GRI Content Index, pages 158-164
102-56	External assurance	§ Report of the auditing firm, pages 165-168

## Specific Standard Disclosures

Specific Standard Disclosures	Description of Specific Standard Disclosures	Page, references, notes and any omissions
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Economic performance indicators		
Economic performance		
GRI 103-1	Management approach disclosures	§ Generating value in the long term, pages 32-33

*Glibinski*

Specific Standard Disclosures	Description of Specific Standard Disclosures	Page, references, notes and any omissions
GRI 103-2		§ Methodological Note, pages 144-156
GRI 103-3		
GRI 201-1	Direct economic value generated and distributed	§ Generating value in the long term, page 33
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GRI 103-1		
GRI 103-2	Management approach disclosures	§ Supporting employees and their families, page 109
GRI 103-3		§ Methodological Note, pages 144-156
GRI 202 -2	Proportion of senior management hired from the local community	§ Supporting employees and their families, page 109 § Methodological Note, page 155
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GRI 103-1		
GRI 103-2	Management approach disclosures	§ Sustainability, pages 20-27
GRI 103-3		§ Methodological Note, pages 144-156
GRI 205-3	Confirmed incidents of corruption and actions taken	§ Sustainability, page 26
Comportamenti anti-competitive activities		
GRI 103-1		
GRI 103-2	Management approach disclosures	§ Sustainability, pages 20-27
GRI 103-3		§ Methodological Note, pages 144-156
GRI 206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	§ Sustainability, page 26
Tax		
GRI 103-1		
GRI 103-2	Management approach disclosures	§ Generating value in the long term, pages 40-41
GRI 103-3		§ Methodological Note, pages 144-156
GRI 207-1 (2019)	Approach to tax	§ Generating value in the long term, page 40
GRI 207-2 (2019)	Tax governance, control and risk management	§ Generating value in the long term, page 40
GRI 207-3 (2019)	Stakeholder engagement and management of concerns related to tax	§ Generating value in the long term, page 40
GRI 207-4 (2019)	Country-by-country reporting	§ Generating value in the long term, page 41
Environmental <i>performance</i> indicators		
Energy		
GRI 103-1	Management approach disclosures	§ Raising awareness of major environmental challenges and reducing impacts, pages 128-133
GRI 103-2		§ Methodological Note, pages 144-156

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Specific Standard Disclosures	Description of Specific Standard Disclosures	Page, references, notes and any omissions
GRI 103-3		
GRI 302-1	Energy consumption within the organisation	§ Raising awareness of major environmental challenges and reducing impacts, pages 131-132 § Methodological Note, page 156
GRI 302-4	Reduction of energy consumption	§ Raising awareness of major environmental challenges and reducing impacts, pages 130 § Methodological Note, page 156
GRI 302-5	Reductions in energy requirements of products and services	§ Cultivating a passion for innovation, pages 64-65 § Methodological Note, page 153
Water and effluents		
GRI 103-1		
GRI 103-2	Management approach disclosures	§ Raising awareness of major environmental challenges and reducing impacts, pages 128-129, 134-135 § Methodological Note, pages 144-156
GRI 103-3		
GRI 303-1 (2018)	Interactions with water as a shared resource	§ Raising awareness of major environmental challenges and reducing impacts, pages 128-129, 134-135
GRI 303-2 (2018)	Management of water discharge-related impacts	§ Raising awareness of major environmental challenges and reducing impacts, pages 134-135
GRI 303-3 (2018)	Water withdrawal	§ Raising awareness of major environmental challenges and reducing impacts, page 134 § Methodological Note, page 156
GRI 303-4 (2018)	Water discharge	§ Raising awareness of major environmental challenges and reducing impacts, page 135 § Methodological Note, page 156
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GRI 103-1		
GRI 103-2	Management approach disclosures	§ Raising awareness of major environmental challenges and reducing impacts, pages. 128-133 § Methodological Note, pages 144-156
GRI 103-3		
GRI 305-1	Direct (Scope 1) GHG emissions	§ Raising awareness of major environmental challenges and reducing impacts, page 132 § Methodological Note, page 156
GRI 305-2	Energy indirect (Scope 2) GHG emissions	§ Raising awareness of major environmental challenges and reducing impacts, page 132 § Methodological Note, page 156
GRI 305-6	Emissions of ozone-depleting substances (ODS)	In 2019, 2020 and 2021 no leaks of refrigerant gases with ozone-depleting potential greater than 0 were identified.
GRI 305-7	Nitrogen oxides (NO <sub>x</sub> ), sulphur oxides (SO <sub>x</sub> ) and other significant air emissions	§ Raising awareness of major environmental challenges and reducing impacts, page 133
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GRI 103-1		
GRI 103-2	Management approach disclosures	§ Raising awareness of major environmental challenges and reducing impacts, pages 128-129, 136-137 § Methodological Note, pages 144-156
GRI 103-3		

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Specific Standard Disclosures	Description of Specific Standard Disclosures	Page, references, notes and any omissions
GRI 306-1 (2020)	Waste generation and significant waste-related impacts	§ Raising awareness of major environmental challenges and reducing impacts, pages 128-129, 136-137
GRI 306-2 (2020)	Management of significant waste-related impacts	§ Raising awareness of major environmental challenges and reducing impacts, pages 128-129, 136-137
GRI 306-3 (2020)	Waste generated	§ Raising awareness of major environmental challenges and reducing impacts, pages 136-137
GRI 306-4 (2020)	Waste diverted from disposal	§ Raising awareness of major environmental challenges and reducing impacts, pages 136-137
GRI 306-3 (2016)	Significant spills	§ Raising awareness of major environmental challenges and reducing impacts, page 137
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GRI 103-2		§ Raising awareness of major environmental challenges and reducing impacts, pages 128-129
GRI 103-3		§ Methodological Note, pages 144-156
GRI 307-1	Non-compliance with environmental laws and regulations	§ Sustainability, page 26
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GRI 103-1	Management approach disclosures	§ Improving workplaces, pages 84-86
GRI 103-2		§ Being a point of reference for talents and promoting growth, pages 95-96
GRI 103-3		§ Methodological Note, pages 144-156
GRI 401-1	New employee hires and employee turnover	§ Being a point of reference for talents and promoting growth, pages 95-96 § Methodological Note, page 153
GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	§ Improving workplaces, page 92
Occupational health and safety		
GRI 103-1	Management approach disclosures	§ Sustainability, pages 20-21
GRI 103-2		§ Ensuring workplace safety, pages 99-103
GRI 103-3		§ Methodological Note, pages 144-156
GRI 403-1 (2018)	Occupational health and safety management system	§ Sustainability, pages 20-21 § Ensuring workplace safety, pages 99-103
GRI 403-2 (2018)	Hazard identification, risk assessment, and incident investigation	§ Ensuring workplace safety, pages 99-103
GRI 403-3 (2018)	Occupational health services	§ Ensuring workplace safety, pages 99-103
GRI 403-4 (2018)	Worker participation, consultation, and communication on occupational health and safety	§ Ensuring workplace safety, pages 99-103

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Specific Standard Disclosures	Description of Specific Standard Disclosures	Page, references, notes and any omissions
GRI 403-5 (2018)	Worker training on occupational health and safety	§ Being a point of reference for talents and promoting growth, page 98 § Ensuring workplace safety, page 103
GRI 403-6 (2018)	Promotion of worker health	§ Ensuring workplace safety, pages 99-103
GRI 403-7 (2018)	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	§ Ensuring workplace safety, pages 99-103
GRI 403-9 (2018)	Work-related injuries	§ Ensuring workplace safety, pages 89-102 § Methodological Note, page 155
GRI 403-10 (2018)	Work-related ill health	§ Ensuring workplace safety, page 99
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GRI 103-1		§ Being a point of reference for talents and promoting growth, pages 95-98
GRI 103-2	Management approach disclosures	§ Ensuring workplace safety, page 103
GRI 103-3		§ Methodological Note, pages 144-156
GRI 404-1	Average hours of training per year per employee	§ Being a point of reference for talents and promoting growth, page 98
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GRI 103-1		§ Sustainability, pages 21-24
GRI 103-2	Management approach disclosures	§ Improving workplaces, pages 86-89
GRI 103-3		§ Methodological Note, pages 144-156
GRI 405-1	Diversity of governance bodies and employees	§ Sustainability, page 24 § Improving workplaces, pages 86-89 § Methodological Note, pages 152,154
GRI 405-2	Ratio of basic salary and remuneration of women to men	§ Improving workplaces, page 89 § Methodological Note, page 155
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GRI 103-1		§ Sustainability, pages 24-26
GRI 103-2	Management approach disclosures	§ Improving workplaces, page 93
GRI 103-3		§ Promoting a responsible supply chain, pages 138-140
GRI 408-1	Operations and suppliers at significant risk for incidents of child labour	§ Promoting a responsible supply chain, pages 117-120
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GRI 103-1	Management approach disclosures	§ Sustainability, pages 24-26

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Specific Standard Disclosures	Description of Specific Standard Disclosures	Page, references, notes and any omissions
GRI 103-2		§ Improving workplaces, page 93
GRI 103-3		§ Promoting a responsible supply chain, pages 138-140 § Methodological Note, pages 144-156
GRI 412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	§ Promoting a responsible supply chain, pages 138-140
Customer health and safety		
GRI 103-1		
GRI 103-2	Management approach disclosures	§ Partnerships and customer orientation, pages 76-78 § Methodological Note, pages 144-156
GRI 103-3		
GRI 416-1	Assessment of the health and safety impacts of product and service categories	§ Partnerships and customer orientation, page 76
Marketing and labeling		
GRI 103-1		
GRI 103-2	Management approach disclosures	§ Sustainability, page 20-27 § Partnerships and customer orientation, page 76
GRI 103-3		§ Methodological Note, pages 144-156
GRI 417-2	Incidents of non-compliance concerning product and service information and labelling	§ Sustainability, page 26
Socioeconomic compliance		
GRI 103-1		
GRI 103-2	Management approach disclosures	§ Sustainability, pages 20-27 § Methodological Note, pages 144-156
GRI 103-3		
GRI 419-1	Non-compliance with laws and regulations in the social and economic area	§ Sustainability, page 26
Food safety and waste		
GRI 103-1		
GRI 103-2	Management approach disclosures	§ Sustainability, pages 14-19 § Methodological Note, pages 144-156
GRI 103-3		

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# REPORT OF THE AUDITING FIRM



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## INDEPENDENT AUDITOR'S REPORT ON THE CONSOLIDATED NON-FINANCIAL STATEMENT PURSUANT TO ARTICLE 3, PARAGRAPH 10 OF LEGISLATIVE DECREE No. 254 OF DECEMBER 30, 2016 AND ART. 5 OF CONSOB REGULATION N. 20267 OF JANUARY 2018

To the Board of Directors of  
Lu-Ve S.p.A.

Pursuant to article 3, paragraph 10, of the Legislative Decree no. 254 of December 30, 2016 (hereinafter "Decree") and to article 5 of the CONSOB Regulation n. 20267/2018, we have carried out a limited assurance engagement on the Consolidated Non-Financial Statement of Lu-Ve S.p.A. and its subsidiaries (hereinafter "Lu-Ve Group" or "Group") as of December 31, 2021 prepared on the basis of art. 4 of the Decree and approved by the Board of Directors on March 17, 2022 (hereinafter "NFS").

Our limited assurance engagement does not extend to the information required by art. 8 of the European Regulation 2020/852 included in the paragraph "Taxonomy of environmentally sustainable activities".

### Responsibility of the Directors and the Board of Statutory Auditors for the NFS

The Directors are responsible for the preparation of the NFS in accordance with articles 3 and 4 of the Decree and the "Global Reporting Initiative Sustainability Reporting Standards" established by GRI - Global Reporting Initiative ("GRI Standards"), which they have identified as reporting framework.

The Directors are also responsible, within the terms established by law, for such internal control as they determine is necessary to enable the preparation of NFS that is free from material misstatement, whether due to fraud or error.

The Directors are moreover responsible for defining the contents of the NFS, within the topics specified in article 3, paragraph 1, of the Decree, taking into account the activities and characteristics of the Group, and to the extent necessary in order to ensure the understanding of the Group's activities, its trends, performance and the related impacts.

Finally, the Directors are responsible for defining the business management model and the organisation of the Group's activities as well as, with reference to the topics detected and reported in the NFS, for the policies pursued by the Group and for identifying and managing the risks generated or undertaken by the Group.

The Board of Statutory Auditors is responsible for overseeing, within the terms established by law, the compliance with the provisions set out in the Decree.

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### Auditor's independence and quality control

We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the *International Ethics Standards Board for Accountants*, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Our auditing firm applies *International Standard on Quality Control 1* (ISQC Italia 1) and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Auditor's responsibility

Our responsibility is to express our conclusion based on the procedures performed about the compliance of the NFS with the Decree and the GRI Standards. We conducted our work in accordance with the criteria established in the *"International Standard on Assurance Engagements ISAE 3000 (Revised) – Assurance Engagements Other than Audits or Reviews of Historical Financial Information"* (hereinafter "ISAE 3000 Revised"), issued by the *International Auditing and Assurance Standards Board* (IAASB) for limited assurance engagements. The standard requires that we plan and perform the engagement to obtain limited assurance whether the NFS is free from material misstatement. Therefore, the procedures performed in a limited assurance engagement are less than those performed in a reasonable assurance engagement in accordance with ISAE 3000 Revised, and, therefore, do not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified in a reasonable assurance engagement.

The procedures performed on NFS are based on our professional judgement and included inquiries, primarily with company personnel responsible for the preparation of information included in the NFS, analysis of documents, recalculations and other procedures aimed to obtain evidence as appropriate.

Specifically we carried out the following procedures:

1. analysis of relevant topics with reference to the Group's activities and characteristics disclosed in the NFS, in order to assess the reasonableness of the selection process in place in light of the provisions of art.3 of the Decree and taking into account the adopted reporting standard;
2. analysis and assessment of the identification criteria of the consolidation area, in order to assess its compliance with the Decree;
3. comparison between the financial data and information included in the NFS with those included in the consolidated financial statements of the Lu-Ve Group;



4. understanding of the following matters:

- business management model of the Group's activities, with reference to the management of the topics specified by article 3 of the Decree;
- policies adopted by the entity in connection with the topics specified by article 3 of the Decree, achieved results and related fundamental performance indicators;
- main risks, generated and/or undertaken, in connection with the topics specified by article 3 of the Decree.

Moreover, with reference to these matters, we carried out a comparison with the information contained in the NFS and the verifications described in the subsequent point 5, letter a);

5. understanding of the processes underlying the origination, recording and management of qualitative and quantitative material information included in the NFS.

In particular, we carried out interviews and discussions with the management of Lu-Ve S.p.A. and with the employees of Tecnair LV S.p.A., Sest S.p.A., Sest-Luve-Polska Sp.z.o.o., Heat Transfer Systems (HTS) s.r.o., Fincoil Lu-Ve OY and Air Hex Alonte S.r.l. and we carried out limited documentary verifications, in order to gather information about the processes and procedures which support the collection, aggregation, elaboration and transmittal of non-financial data and information to the department responsible for the preparation of the NFS.

In addition, for material information, taking into consideration the Group's activities and characteristics:

- at the parent company's and subsidiaries' level:
  - a) with regards to qualitative information included in the NFS, and specifically with reference to the business management model, policies applied and main risks, we carried out interviews and gathered supporting documentation in order to verify its consistency with the available evidence;
  - b) with regards to quantitative information, we carried out both analytical procedures and limited verifications in order to ensure, on a sample basis, the correct aggregation of data;
- for the following companies and sites, Uboldo (Italy) headquarters and production site for Lu-Ve S.p.A. and Tecnair LV S.p.A., Limana (Italy) production site for Sest S.p.A., Gliwice (Poland) production site for Sest-Luve-Polska Sp.z.o.o., Novosedly (Czech Republic) production site for Heat Transfer System (HTS) s.r.o., Vantaa (Finland) production site for Fincoil Lu-Ve OY and Alonte (Italy) production site for Air Hex Alonte S.r.l., which we selected based on their activities, their contribution to the performance indicators at the consolidated level and their location, we carried out site visits or remote meetings, during which we have met their management and have gathered supporting documentation with reference to the correct application of procedures and calculation methods used for the indicators.



## Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the NFS of the Lu-Ve Group as of December 31, 2021 is not prepared, in all material aspects, in accordance with articles 3 and 4 of the Decree and the GRI Standards.

Our conclusion on the NFS of Lu-Ve Group does not extend to the information required by art. 8 of the European Regulation 2020/852 included in the paragraph "Taxonomy of environmentally sustainable activities"

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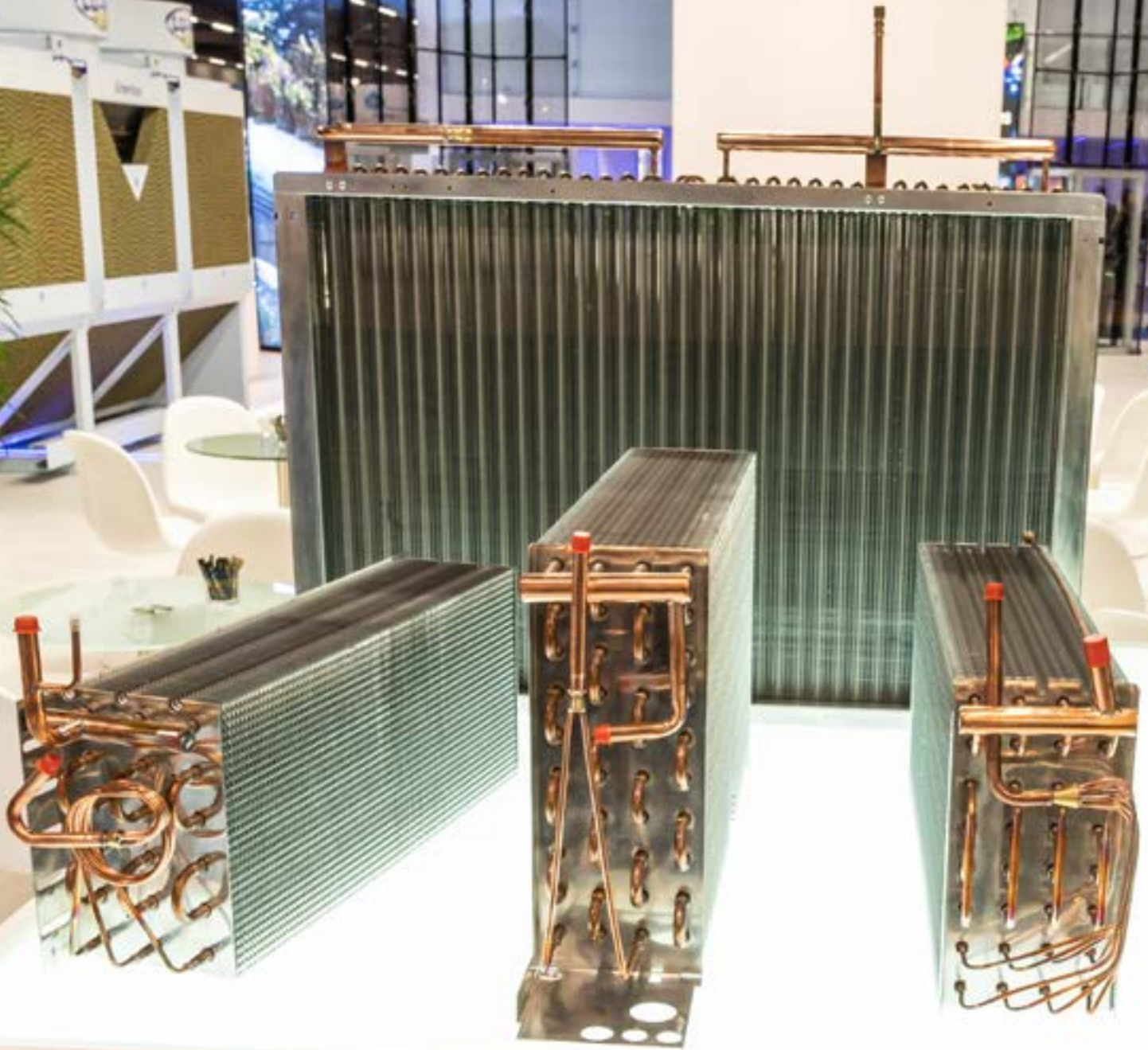
Signed by  
**Massimiliano Semprini**  
Partner

Milan, Italy  
April 6, 2022

*This report has been translated into the English language solely for the convenience of international readers.*



Naturally, LU-VE makes it better



Commercial Refrigeration



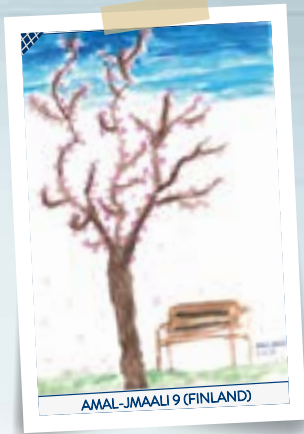






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**“LU-VE'S CHILDREN  
FOR A BLUER SKY AND A GREENER PLANET”**





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