



**LEADERSHIP WITH PASSION**  
**2018 Sustainability Report**  
**of the LU-VE Group**

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

**Dear Stakeholders,**

The dynamic nature of our working community has been particularly apparent in 2018, our third year of trading on the Italian Stock Exchange.

The acquisition of Zyklus in the United States, the major expansion of the manufacturing sites in Poland and China, and the launch of the process to acquire the “Air” division of the Swedish multinational Alfa Laval, demonstrate the vitality of our business, furthering our expertise and, thanks to the acquisition currently being pursued, developing our skills.

Many young professionals working at all levels of our organisation are developing their careers, following the principles of humility and passion to constantly further their personal and professional development.

This year was also characterised by the progressive standardisation of policies and procedures at Group level, focusing in particular on promoting a sense of responsibility towards the environment at all organisational levels, as well as on the management of intellectual capital, respect for others and occupational health and safety.

This is an ongoing process aimed at consolidating the new Governance and Strategic Sustainability models in the spirit of the “Make One Company - Make One Culture” ethos.

I would like to express my sincere gratitude to everyone working within the Group, in particular those who have been personally involved in all of the major operations of the year, and wish our new collaborators a warm welcome.

I believe that we have the facilities and mentality needed to confront the challenges that await us, thanks to the conscious collaboration between workplaces, sectors and companies within the Group.

Happy reading.

Iginio Liberali

*The*

*Chairman*

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## 2018: A YEAR OF PASSION, ACTION AND INNOVATION



Start of negotiations for the acquisition of the “Air” division of Alfa Laval



Entry onto the US market and expansion of sites in Poland and China



Installation of the first transcritical CO<sub>2</sub> systems in the Middle East



Over 2,600 employees worldwide



EUROVENT “Certify All” Certification for the 19th consecutive year



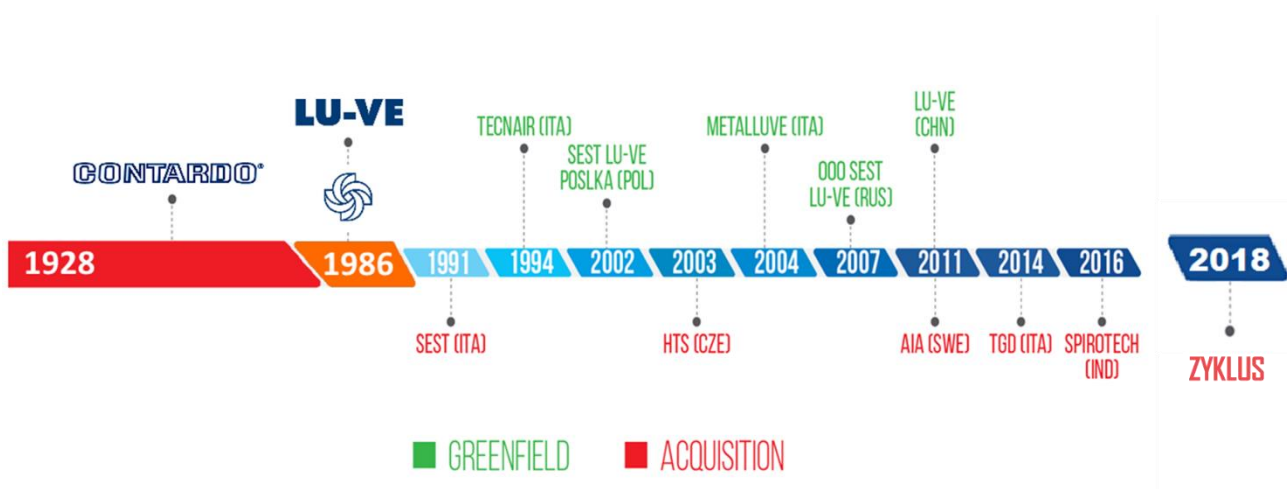
22 patents filed in Italy since the Group’s foundation

# 1. “MAKE ONE COMPANY”

## 1.1 THIRTY YEARS OF GROWTH

The LU-VE Group has operated in the commercial and industrial refrigeration and industrial air conditioning sectors for over thirty years, designing, manufacturing and marketing solutions in more than 100 countries. Combining experience, tradition and a vision of the future, the Group is one of the leading global players in the application of cutting-edge solutions and substantially and continuously contributes to sector research and innovation.

With the ambition of maximising potential and internal collaboration, in 2014 the LU-VE Group launched the “Make One Company - Make One Culture” project. Characterised by the subsequent acquisitions and continuous growth, the project continues to play a strategic role in the Group's approach to the management of internal processes and market operations.



Today, the LU-VE Group is an international business consisting of 13 manufacturing companies in Italy, the Czech Republic, Sweden, Poland, Russia, China, India and the United States, six sales companies and one representative office in the United Arab Emirates.

#### HEADQUARTERS

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

1	LU-VE S.p.A.	Uboldo (VA) - Italy
2	LUVEDIGITAL S.r.l. (software development)	Uboldo (VA) - Italy
3	SEST S.p.A.	Limana (BL) - Italy
4	TECNAIR LV S.p.A.	Uboldo (VA) - Italy
5	MANIFOLD S.r.l.	Uboldo (VA) - Italy
6	THERMO GLASS DOOR S.p.A. (TGD)	Travacò Siccomario (PV) - 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 LUVE	Lipetsk - Russia
11	LU-VE HEAT EXCHANGERS (CHANGSHU) LTD	Changshu - China
12	SPIROTECH HEAT EXCHANGERS PRIVATE LIMITED	New Delhi - India
13	ZYKLUS HEAT TRANSFER, INC.	Jacksonville - USA

#### SALES COMPANIES

1	LU-VE Contardo Pacific Pty. Ltd.	Thomastown - Australia
2	LU-VE India Corporation Private Ltd	New Delhi - India
3	LU-VE Austria GmbH	Vienna - Austria
4	LU-VE Deutschland GmbH	Stuttgart - Germany
5	LU-VE France S.a.r.l.	Lyon - France
6	LU-VE Iberica s.l.	Madrid - Spain

#### REPRESENTATIVE OFFICES

1	LU-VE S.p.A. Middle East Office	Dubai - United Arab Emirates
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## 1.2. WHAT WE DO: OUR PRODUCTS AND AREAS OF APPLICATION

The LU-VE Group designs, manufactures and markets solutions primarily for the commercial and industrial refrigeration and air conditioning markets, and to a lesser extent for the power generation and special applications markets.

AREAS OF APPLICATION	PRODUCT TYPES			
	AIR COOLED HEAT EXCHANGERS	AIR COOLED EQUIPMENT	CLOSE CONTROL	INSULATED GLAZING
Commercial and Industrial Refrigeration	■	■		■
Air Conditioning	■	■	■	
Power Generation		■		
Special Applications		■		

In the **refrigeration** segment, the Group develops applications for the supply chain involving the preservation, processing and storage of food products at controlled temperatures. Another aspect of this sector is insulated glazing, glass doors for refrigerated counters and display cases used to maintain the temperature and visibility of the goods on display.

The **air conditioning** sector includes the manufacture of products and components for air treatment in public and “technological” spaces, such as data centres, phone centres, operating theatres and clean rooms, in order to guarantee the control of temperature, humidity and air purity levels. In this field of application, **close control** systems enable the rigorous control of parameters such as temperature, humidity and air purity in controlled rooms, areas and particularly sensitive “technological” spaces, such as operating theatres and clean rooms.

In the **power generation** sector, the LU-VE Group designs and develops special applications for cooling systems used in energy production plants.

Finally, the **special applications** market consists of numerous different and extremely specialised applications. **Special applications** are developed for the heat exchanger market, particularly in relation to compressed air systems for industrial applications, electrical enclosures for large industrial and telecommunications plants, rail air conditioning, transport and refrigeration, and electrical appliances.

## 1.3 HOW WE OPERATE: FROM THE DESIGN PHASE TO THE CLIENT

*The phases of our value chain*



*Note: The LU-VE logo denotes activities managed directly by the Group*

The starting point and distinctive characteristic at the base of the Group's activities is the **design** of marketed solutions. The constant search for innovative technological solutions, made possible thanks to collaborations with Universities and Research Centres, enables the Group to respond to the specific needs of its clients while actively contributing to improvements in the sector.

Based on the characteristics of the end solution, the Group activates **procurement** procedures to obtain the raw materials - copper, aluminium, steel and iron sourced mainly from the European Union - and semi-finished components such as motorised fans and other catalogue and specialist parts. To ensure the efficient management of resources and the greater standardisation of the materials used in its manufacturing processes, the LU-VE Group aims to establish long-lasting, mutually beneficial relationships with its suppliers characterised by reliability and reciprocal trust. With the dual aim of developing the understanding of its pool of suppliers and effectively monitoring the environmental and occupational health and safety procedures of those suppliers, in late 2017 the LU-VE Group implemented new procurement procedures based on a certification and evaluation system of specific categories of suppliers of semi-finished components that will gradually be brought into operation and extended. In 2018, the Group also began to carry out audits of some of its Italian suppliers, focusing on the quality of service or of the supplied goods or environmental and occupational health and safety aspects, depending on the case.

As well as **controlling the quality** of the supplied goods, the Group can count on various **manufacturing facilities** located near or in the immediate vicinity of the main markets it serves. When the manufacturing process is complete, before the product is transferred to the logistics department, **final testing** is carried out. This activity is meant first and foremost to verify the exchanger's seal against any leaks as well as to control the electrical components.

The product is then sent to customers all over the world.



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## 1.4 THE GOVERNANCE MODEL AND INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM

The governance of the LU-VE Group aims to maximise the value created for shareholders and stakeholders while controlling business risks and ensuring the integrity and fairness of decision-making processes. LU-VE S.p.A. has adopted a **traditional corporate governance model** and complies with the **Corporate Governance Code**. Its corporate governance structure, developed in line with the recommendations of the aforementioned Code and relative updates, consists of the Shareholders' Meeting, the Board of Directors, the Board of Statutory Auditors and the Supervisory Body.

The **Internal Control and Risk Management System** is an integral part of the Governance Model and is described in the "Guidelines on the Internal Control and Risk Management System of the LU-VE S.p.A. Group" approved by the Board of Directors on 21 September 2017. The model is characterised by the involvement, with different roles and within the scope of their respective functions and attributions, of:

- a) the Board of Directors (BoD), which performs a strategic role and evaluates the adequacy of the Internal Control and Risk Management System of LU-VE S.p.A. and the LU-VE Group, and identifies within it:
  - i. one or more Directors responsible for establishing and maintaining an effective Internal Control and Risk Management System;
  - ii. a Control and Risk Committee, with the duty of supporting the assessments and decisions of the Board of Directors relating to the Internal Control and Risk Management System, as well as those relating to the approval of periodic financial reporting. The Board of Directors also assigns responsibilities for sustainability topics among the Control and Risk Committee, as defined on 19 February 2019;
- b) the Internal Audit Manager, responsible for verifying that the Internal Control and Risk Management System is functioning and adequate;
- c) other roles and departments with specific duties regarding Internal Control and Risk Management, structured according to the size, complexity and risk profile of the relative business;
- d) the Board of Statutory Auditors, which monitors: (i) compliance with the law and the deed of incorporation, as well as compliance with the principles of proper administration in the running of company activities; (ii) the adequacy of the organisational structure, the internal control system and the administrative/accounting system of the Company; (iii) the methods for concretely implementing the corporate governance rules laid out in the Corporate Governance Code;
- e) the Supervisory Body established and functioning pursuant to Italian Legislative Decree no. 231/2001, if appointed;
- f) Directors and control bodies of the subsidiaries, when present.

Relevant risks are subject to an annual report to the Control and Risk Committee and the Board of Directors from the Director responsible for the Internal Control and Risk Management System, who identifies them with the support of the competent corporate departments and the Internal Audit Manager; at the same time, the same Director specifies the mitigating actions carried out and/or to be adopted.

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The Control and Risk Committee provides opinions to the Board of Directors in terms of the evaluation of the adequacy of the Internal Control and Risk Management System with respect to the characteristics of the company and the risk profile assumed, as well as its effectiveness.

In addition, pursuant to Italian Legislative Decree 231/2001, LU-VE S.p.A. and the subsidiary SEST S.p.A. have adopted an Organisation, Management and Control Model intended to prevent and combat the risk of the commission of the offences laid out in the Decree itself, 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 Company to rely on rules and control instruments that can prevent or promptly react to prevent the commission of any offences. With reference to the Organisation, Management and Control Model pursuant to Italian Legislative Decree no. 231/2001 adopted by LU-VE S.p.A. and Sest. S.p.A., it is noted that at year-end 2018 amendments were being made in response to changes to legislation, with the implementation of certain organisational changes to corporate departments. Furthermore, the duty of producing an Organisation, Management and Control Model pursuant to Italian Legislative Decree no. 231/2001 was extended to the subsidiary Tecnair LV S.p.A.

In 2018, steps were made to introduce a whistleblowing system to the Organisation, Management and Control Model, aimed at providing a channel to enable employees to report the commission of any unlawful activity that may come to their knowledge as a result of their working activities. This system, in line with the national legislative framework, aims to further protect employees against any form of unlawful activity and to promote the values of ethics that characterise the Group.

The **Risk Assessment Document** produced pursuant to the provisions of Italian Legislative Decree 81/2008, as amended, is an integral part of the Model adopted by the two companies, representing the mapping of risks present within the company and containing all of the procedures required for the implementation of the necessary prevention and protection measures and the roles of those who need to implement them.

In 2018, the LU-VE Group also conducted an **assessment of non-financial risks**, considering the main risks at global level, the phases of the value chain, specific details of the manufacturing processes and the countries in which the Group operates. Non-financial risks were classified into different categories depending on the likelihood of occurrence and the potential impact. The majority of the risks identified were assigned a low or negligible score, such as the loss of sensitive data due to cyber attacks, consumer health and safety, and cases of discrimination, inequality or failure to respect equal opportunities within Group companies. The risks classified as “moderate” were duly described, along with the management methods adopted by the Group to mitigate such risks, in dedicated sections of the following chapters: The well-being of our employees, Cutting-edge solutions and Respect for the environment. Any corrective action aimed at mitigating these risks was also integrated into the improvement objectives defined at Group level for 2018.

Although the protection of human rights was not identified as a material topic, the Group nonetheless analysed forced and child labour, discrimination, the protection of civil, political, economic and cultural rights, and the infringement of human rights throughout the supply chain. This analysis, conducted according to the principles and guidelines defined by the International Guidance on Social Responsibility (ISO 26000), Social Accountability (SA 8000) and Global Compact of the United Nations, did not detect any significant risks to be investigated. Nonetheless, in accordance with its Internal Control and Risk Management System, the Group periodically assesses

the adequacy of this evaluation, including upon its entry into new countries or in view of organisational changes.

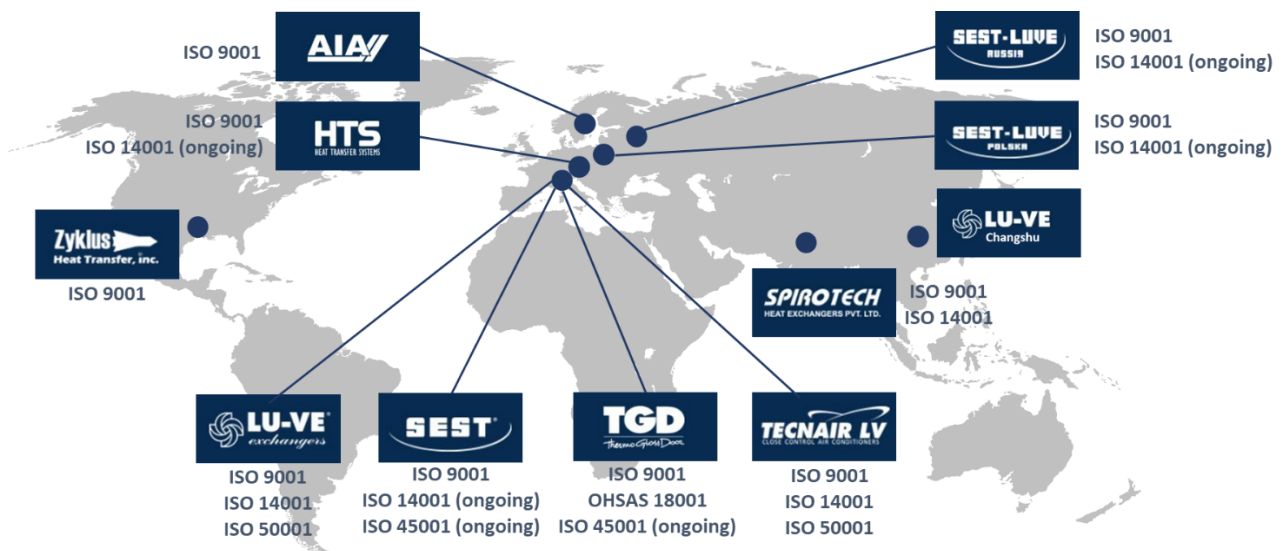
The ethical principles of the LU-VE Group are formalised in the **Code of Ethics** adopted by LU-VE, published on the Group's website and distributed to all Companies in order that they ensure its adoption and compliance by employees and commercial partners. All recipients are entitled and required to 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 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 as suppliers, advisors and trade partners.

With specific reference to non-financial information, the Board of Directors is also responsible for the approval of the Sustainability Report/Non-Financial Statement.

In 2018, the LU-VE Group defined the **improvement objectives** for the sustainability topics deemed most relevant according to the analyses carried out during the preparation of the 2017 Sustainability Report and the outcome of specific assessments at the Group's main manufacturing sites. These objectives were approved by senior management and were implemented by department and sector managers, each according to their area of responsibility. This Sustainability Report reports the results achieved and expected for each relevant sustainability topic.

As regards the management of company processes, certain Group companies have adopted quality (ISO 9001), environmental (ISO 14001), energy (ISO 50001) and health and safety (OHSAS 18001 / ISO 45001) management systems in accordance with the corresponding standards. The progressive standardisation and development of these organisational models is one of the objectives defined at Group level. As regards environmental certifications, the Spirotech Heat Exchangers Private Limited site received the IGBC Green Factory Building – Gold certification.



## 1.5 TOPICS CONSIDERED

In accordance with the materiality principle defined by the GRI Sustainability Reporting Standards, the Sustainability Report aims to report on the Group's performance in relation to topics that influence its capacity to create value in the short, medium and long term, which reflect the significant impacts of the organisation and which are of interest to the Group's stakeholders.

This Sustainability Report reports the Group's performance in relation to the topics identified as "material" in the previous reporting year. The nine topics, shown in the table below, are also associated with the three key elements of the Group's business strategy: distinctive positioning, responsible growth and shared value.

MATERIAL TOPICS IDENTIFIED BY THE LU-VE GROUP		
	Topic	What does it mean for the LU-VE Group?
Responsible growth	1. Growth strategies	Promoting growth strategies aimed at commercial expansion at domestic and international level through the development of new geographical markets and an increase in shares in existing markets, within a context characterised by the reduction of labour in Industry 4.0 and delocalisation within a global economy.
	2. Women, men and ideas	Safeguarding and strengthening the know-how of our people through professional development paths which enable us to provide customers with a competent and professional service, while motivating personnel and promoting talent.
	3. The well-being of our people	Promoting the well-being of our people and offering them a workplace in which every individual can best express their potential, guaranteeing equal opportunities and investing in security and the creation of an inclusive environment which is capable of welcoming the many people who find themselves working side by side with their different cultures, ethnicities and religions.
Distinctive positioning	4. Customer orientation	Generating enthusiasm among our customers through 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.
	5. Cutting-edge solutions	Promoting sector technological progress by investing in research concerning solutions capable of minimising the environmental impact and the noise emissions of finished products, also in collaboration with highly qualified partners linked to the world of universities and research.
	6. Sales ethics	Managing relationships characterised by transparency with all Group stakeholders, ensuring compliance with the regulations in force in terms of combatting active and passive corruption and guaranteeing honest and truthful institutional communications and promotions based on factual information.
Creation of shared value	7. Economic and financial sustainability	Guaranteeing long-term economic results through adequate accounting management and the capacity to meet the needs of the market and of current and future customers.
	8. Reduction of environmental impact	Minimising the environmental impact of its production processes, enacting energy efficiency policies, reducing direct and indirect emissions, water consumption and the generation of waste.
	9. Quality of life	Offering solutions capable of boosting food preservation and ensuring control over temperature, humidity and air purity levels in specific environments (clean rooms) to increase service quality and improve quality of life.

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## **2. RESPONSIBLE GROWTH**

In a context characterised by technological development, the globalisation of the labour market and increasing sensitivity to business practices aimed at promoting employee well-being, this section of the document aims to illustrate the ways in which the LU-VE Group intends to continue to grow on the market and as a Group.

The section dedicated to marketing strategies (§ Growth strategies) is followed by sections to illustrate the Group's approach to the growth of its employees and the development of skills (§ Women, men and ideas) and the protection of health and well-being (§ The well-being of our people).

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## 2.1 GROWTH STRATEGIES

### 2.1.1. MARKETS, COUNTRIES AND EMPLOYEES

The business of the LU-VE Group currently operates in a particularly positive scenario: the overall demand for commercial and industrial air conditioning and refrigeration solutions is increasing in response to the demand for solutions to improve the living conditions of an increasingly expanding global population.

The Group's success in this global context has been ensured thus far by a conscious growth strategy that considers the cost of labour in the country in which the Group invests and the desire to maintain the existing workforce. The expansion of manufacturing activities at the Group's existing sites and locations, along with a robust acquisition policy, has enabled the Group to lay new foundations in 2018 aimed at medium and long term growth.

“Internationalisation continues to be at the heart of our development policies. In December 2018 we signed an agreement to acquire the “Air” division of the Alfa Laval Group. In 2018 alone, we invested in various strategic markets, doubling the size of our site in Poland, acquiring a company in the United States and optimising our operations in China. In this regard, I am proud to say that almost all of our Chinese employees will accompany us on our move from Changshu to Tianmen. This is another aspect of our approach to business: companies are first and foremost women, men and ideas.

Iginio Liberali, *Chairman of the LU-VE Group*

The acquisition of the US company **Zyklus Heat Transfer Inc.** in 2018 has enabled the Group to enter the US market and consolidate its global commercial presence in the production of heat exchangers in the commercial refrigeration, refrigerated transport and air conditioning sectors.

In December 2018, the LU-VE Group also announced that it had reached an agreement for the acquisition of the **“Air” division of the Alfa Laval Group**, enabling the Group to become one of the three leading operators in the sector at a global level and the second largest in Europe, consolidating its position in the power generation and commercial evaporator sections.

The consolidation of existing markets has also been made possible thanks to the significant increase in production capacity in Poland and the expansion of the existing factory. Meanwhile, the transfer of the Chinese factory will enable production capacity to be increased twofold, as well as bring the site into closer proximity of its main clients in China, with a subsequent reduction in costs and the optimisation of production processes. The new Chinese site will include the factory, offices, a dormitory and the canteen.

For its investments in China the Group was honoured in the “Top Investors” category of the “China Awards 2018”, promoted by Fondazione Italia Cina and Class Editori and sponsored by the Ministry of Foreign Affairs, the Ministry of Economic Development, the Ministry of the Environment and the Italian-Chinese Chamber of Commerce, as well as the Italian Chamber of Commerce partnership in Italy.

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In the course of the year the Group continued to incorporate the Indian company Spirotech Heat Exchangers Private Limited into its activities, enabling the Group to consolidate its presence in Asia while contributing to the creation of a modern cold chain.

In fulfilling its commitments to the international market, the LU-VE Group has developed its organisation based on the skills and professional characteristics available locally in the countries in which its manufacturing facilities are located. In line with 2017, in 2018 the percentage of senior managers at the various offices of the Group recruited from local communities was 89.2%. In 2016, this percentage was 91.4%.<sup>1</sup>

## **A PLANNING SYSTEM FOR INTERNATIONAL PRODUCTION**

In order to manage increasingly international production activities and to effectively connect the design and production phases in sites located in different parts of the globe, the Group has implemented a platform to enable technical product information to be shared between sites. The possibility to share information between different Companies and sites in a straightforward and structured way paves the way for a centralised planning system, as well as improving the efficiency of the entire production cycle.

### **2.1.2 KEY FIGURES IN 2018**

In 2018, the growth strategies defined by the Board of Directors of the Parent Company with the support of senior management at Group level and the Management Boards of the various Companies were implemented operationally by two strategic business units: the Cooling Systems BU (for the marketing of air cooled equipment and close control air conditioners) and the Components BU (for the marketing of air cooled heat exchangers and special glass doors for refrigerated counters and display cases).

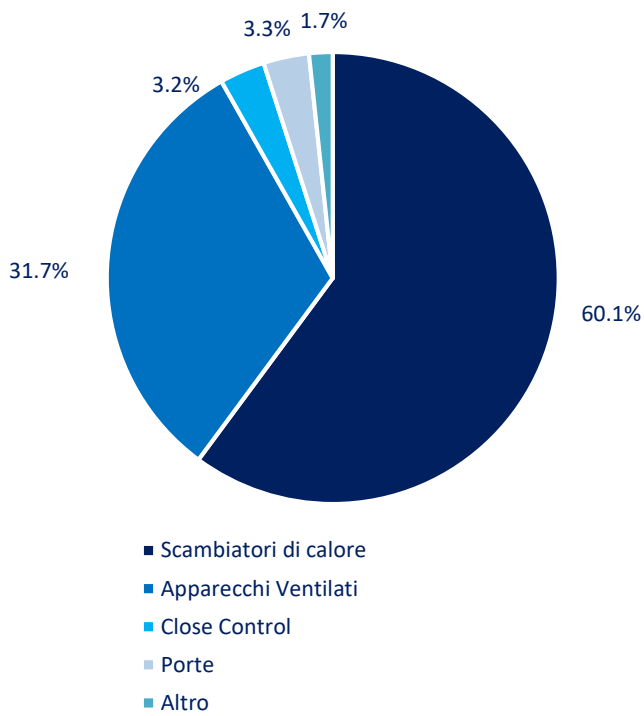
Overall, the Group's commercial division consists of internal units located at the sales branches and representative offices as well as at the manufacturing sites. These are supported by various external agents, whose collaboration with the Group has been consolidated, with a deep understanding and knowledge of the product portfolio and the reference market.

In 2018, the products most marketed by the LU-VE Group were heat exchangers, followed by air cooled equipment. Also as regards applications, the LU-VE Group reconfirms its considerable commitment in the refrigeration sector and slight growth in the power generation and industrial applications sector with respect to the previous year.

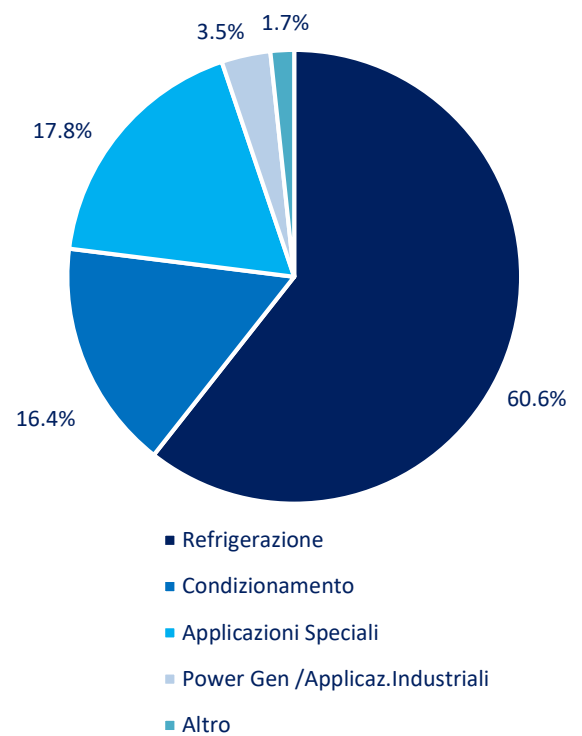
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<sup>1</sup> For this calculation, the following key management positions were taken into consideration for each LU-VE Group Company, when applicable: *Chief Executive Officer, Chief Financial Officer, Balance Sheet Manager, Finance & Controlling Manager, Internal Audit Manager, Legal and Corporate Affairs Manager, Sales & Marketing Director, Human Resources Manager, Information Technology Director, Chief Communication Officer, Research & Development Director, Operations Manager, Supply Chain Manager and Quality Manager*. Senior Managers with citizenship in the country where the Group Company is located are considered to be from the local community.

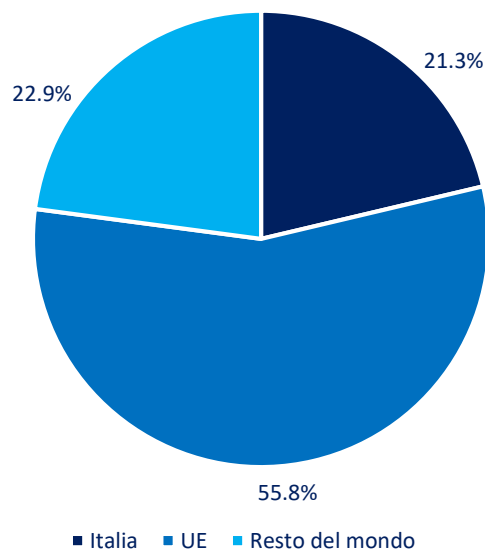
Breakdown of turnover by product type, 2018



Breakdown of turnover by sector, 2018



Breakdown of turnover by location, 2018





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## 2.2 WOMEN, MEN AND IDEAS

### 2.2.1 HOW WE PROMOTE THE GROWTH OF OUR EMPLOYEES

The growth of a Group is accompanied by the professional and personal growth of its employees, whose ideas, skills and abilities are the driving force behind the business.

Similarly, the progressive development of our employees poses new challenges in terms of HR management: in 2018, the LU-VE Group laid the foundations for the progressive standardisation of its employment policies, from recruitment and performance appraisals to its approach to training. This standardisation will culminate in the definition in 2019 of a **Group HR management policy** aimed at promoting the key values expressed in the Group's Code of Ethics at an operational level and favouring the adoption of a uniform approach. The policy will be approved by the Group HR Department and will be notified and distributed to all companies with the support of local HR Managers.

In 2018, the Group HR Department conducted the **mapping of the roles and skills** of employees at all Group companies, depending on the requirements of each company role. As well as offering an overview of the workforce and the skills available at the various companies, this mapping also enabled the adoption of a shared and uniform approach for the identification of the training requirements of individual employees. The training programme will be able to be personalised according to the actual needs of the employees and the skills required by their professional role. The skills of each employee will be assessed by the various managers by the end of 2019, while the development programme with individual appraisals will begin in 2020.

To promote the adoption of a standardised **performance appraisal** system, in 2018 the Group's HR Department began to develop an MBO (Management by Objectives) system for executives and managers, shared by all Group companies. In 2018 the specific objectives were mapped on a dedicated online platform and the system architecture was designed, breaking down the company objectives associated with the financial performance of the Group into individual targets based on the skills development programme of the individual employee. The new MBO model will be implemented at Group level from 2019.

The Group has also begun to roll out the performance appraisal system to all employees, including white and blue collar workers. Given the volume of people involved, the project will proceed in stages, beginning with companies presenting the greatest organisational complexities before being extended to all Group companies by 2020.

In order to ensure an appropriate level of employee engagement in the Group's development at all of its commercial and manufacturing companies, the Group has continued to develop an organic internal communications plan. The aim for 2019 is to launch the first pilot version of an internal communications campaign in Italian, aimed at informing all employees at the Group's Italian companies of the results achieved and the growth strategies of the LU-VE Group. Once the "pilot" phase in Italian is complete, in the second half of the year work will commence on the English version in order to reach all employees at the Group's various sites.

#### LU-VE EMPLOYEES FOR THE REGION

Conscious of the skills it has accrued in its thirty years of activity in the refrigeration sector, the LU-

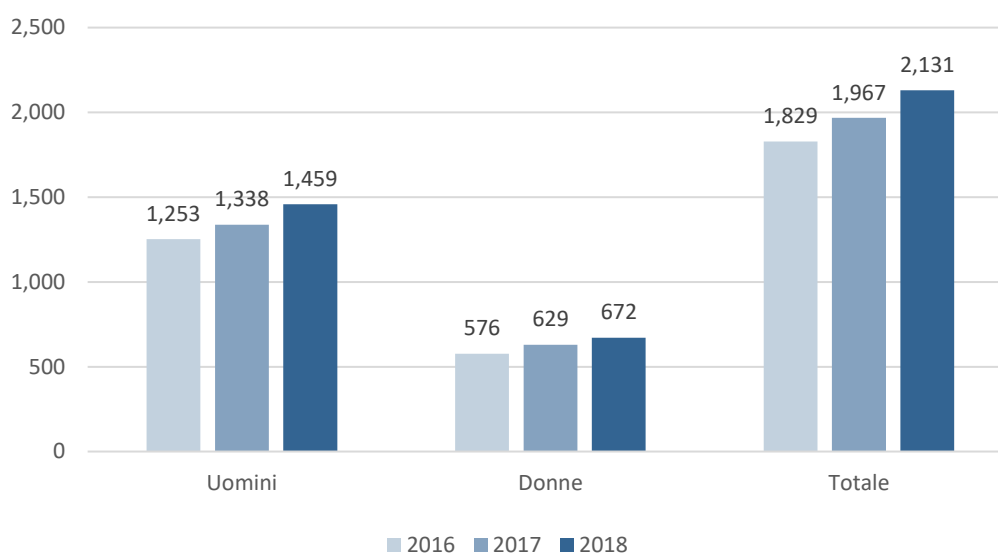
VE Group intends to establish a business academy able to involve all stakeholders with whom it interacts on a daily basis, with the aim of enhancing, sharing and promoting the company's intellectual capital acquired in over thirty years of business. The **LU-VE Academy** project, which was first studied in 2018, envisages the creation of a space dedicated to internal training and possibly the organisation of public courses and international events open to the community.

## 2.2.2 KEY FIGURES IN 2018<sup>2</sup>

As at 31 December 2018, the LU-VE Group had **2,609 workers<sup>3</sup>**, of which 2,131 were employees. The increase in the number of workers in the last year is principally due to the acquisition of the company Zyklus Heat Transfer, consisting of 79 employees, and the opening of the new manufacturing site in Poland, which saw the integration of over 100 resources.

A total of 32% of the employees are women. The gender gap is due primarily to the characteristics of the business which, especially in past years, attracted primarily male workers.

*Number of employees by gender as at 31 December*



<sup>2</sup> The percentages may not add up to 100% due to rounding.

<sup>3</sup> The number of workers includes employees and temporary workers.

Overall, in 2018 58% of employees of the LU-VE Group were aged between 30 and 50, while 24% were under 30.

<b>EMPLOYEES BROKEN DOWN BY PROFESSIONAL CATEGORY AND GENDER</b>			
	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Executives</b>	<b>1%</b>	<b>2%</b>	<b>2%</b>
Men	100%	100%	97%
Women	0%	0%	3%
<b>Middle managers and white collar workers</b>	<b>27%</b>	<b>27%</b>	<b>27%</b>
Men	66%	65%	65%
Women	34%	35%	35%
<b>Blue collar workers</b>	<b>72%</b>	<b>71%</b>	<b>71%</b>
Men	69%	68%	69%
Women	31%	32%	31%

<b>EMPLOYEES BROKEN DOWN BY PROFESSIONAL CATEGORY AND AGE</b>			
	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Executives</b>	<b>1%</b>	<b>2%</b>	<b>2%</b>
Under 30 years of age	0%	0%	0%
30-50 years	54%	45%	54%
Over 50 years of age	46%	55%	46%
<b>Middle managers and white collar workers</b>	<b>27%</b>	<b>27%</b>	<b>27%</b>
Under 30 years of age	18%	20%	22%
30-50 years	68%	65%	63%
Over 50 years of age	14%	15%	15%
<b>Blue collar workers<sup>4</sup></b>	<b>72%</b>	<b>71%</b>	<b>71%</b>
Under 30 years of age	23%	25%	25%
30-50 years	59%	58%	56%
Over 50 years of age	18%	17%	19%

<sup>4</sup> With a view to optimising the collection and calculation of data, data relative to 2017 and 2016 has been reclassified compared to that published in the 2017 Sustainability Report. For historical data published previously, refer to the 2017 Sustainability Report.

As at 31 December 2018, the Board of Directors was composed of 12 members, of which 3 were women.<sup>5</sup>

<b>NUMBER OF MEMBERS OF THE BOARD OF DIRECTORS BY GENDER, AS AT 31 DECEMBER</b>			
	2016	2017	2018
Men	10	10	9
Women	0	3	3
<b>NUMBER OF MEMBERS OF THE BOARD OF DIRECTORS BY AGE, AS AT 31 DECEMBER</b>			
Under 30 years of age	0	0	0
Between 30 and 50 years of age	2	4	3
Over 50 years of age	8	9	9
<b>Total</b>	<b>10</b>	<b>13</b>	<b>12</b>

In 2018, 85% of Group employees were employed on a permanent contract.

<b>NUMBER OF EMPLOYEES BY CONTRACTUAL TYPE AND GENDER</b>									
	Permanent contract			Temporary contract			Total		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Men	1,158	1,152	1,223	95	186	236	1,253	1,338	1,459
Women	551	556	596	25	73	76	576	629	672
<b>Total</b>	<b>1,709</b>	<b>1,708</b>	<b>1,819</b>	<b>120</b>	<b>259</b>	<b>312</b>	<b>1,829</b>	<b>1,967</b>	<b>2,131</b>

<b>NUMBER OF EMPLOYEES BY CONTRACTUAL TYPE AND REGION</b>									
	Permanent contract			Temporary contract			Total		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Italy	706	718	734	15	43	45	721	761	779
EU Countries	556	536	573	105	216	267	661	752	840
Non-EU Countries <sup>6</sup>	447	454	512	0	0	0	447	454	512
<b>Total</b>	<b>1,709</b>	<b>1,708</b>	<b>1,819</b>	<b>120</b>	<b>259</b>	<b>312</b>	<b>1,829</b>	<b>1,967</b>	<b>2,131</b>

<sup>5</sup> For more information on the Board of Directors, refer to the 2018 Report on Corporate Governance and Ownership Structure of the LU-VE Group.

<sup>6</sup> The data for Non-EU Countries does not include employees on temporary contracts as temporary employment contracts are preferred.

NUMBER OF EMPLOYEES BY PROFESSIONAL TYPE AND GENDER									
	Full-time			Part-time			Total		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Men	1,244	1,327	1,449	9	11	10	1,253	1,338	1,459
Women	530	579	611	46	50	61	576	629	672
<b>Total</b>	<b>1,774</b>	<b>1,906</b>	<b>2,060</b>	<b>55</b>	<b>61</b>	<b>71</b>	<b>1,829</b>	<b>1,967</b>	<b>2,131</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 the different number of men and women in the category of “middle managers and white collar workers”.

RATIO BETWEEN BASE SALARY OF WOMEN AND MEN (PERCENTAGE)									
	Executives			Middle managers and white collar workers			Blue collar workers		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Italy	-	-	63.6	72.9	77.3	79.2	97.3	99.3	97.8
EU Countries	-	-	-	77.3	69.1	71.4	69.1	89.2	67.4
Non-EU Countries	-	-	-	99.1	77.9	92.6	108.1	87.9	127.2

RATIO BETWEEN TOTAL REMUNERATION <sup>7</sup> OF WOMEN AND MEN (PERCENTAGE)									
	Executives			Middle managers and white collar workers			Blue collar workers		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Italy	-	-	53.8	73.6	75.0	76.4	90.3	92.0	93.8
EU Countries	-	-	-	71.2	66.1	71.6	73.1	97.1	75.3
Non-EU Countries	-	-	-	97.0	75.1	87.1	119.5	91.8	126.2

<sup>7</sup> Total remuneration: gross salary in addition to annually variable amounts, such as bonuses in cash and available shares linked to individual performance and/or company productivity and all additional non-extemporaneous salary elements.

As regards training, every employee has the opportunity to take part in technical as well as management training courses. The course programme has been designed to provide everyone with the tools and skills needed to carry out their activities in line with the company's objectives and values.

Aside from individual training initiatives, meant to expand and supplement the technical and specialised skills of individual employees, ad hoc training courses have been organised for specific company roles.

In 2018, the LU-VE Group provided a total of 28,140 training hours for its employees, marking a rise of 69% compared to 2016. Training programmes covered both technical topics, such as technical design, health and safety, and lean production, and transversal subjects like foreign languages and

<b>AVERAGE HOURS OF TRAINING PER CAPITA BY GENDER AND PROFESSIONAL CATEGORY</b>						
	<b>Men</b>			<b>Women</b>		
	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Average hours of training per capita	9.7	15.2	14.4	7.9	12.3	10.6

management development programs.

	<b>Executives</b>			<b>Middle managers and white collar workers</b>			<b>Blue collar workers</b>		
	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Average hours of training per capita	22.7	16.5	14.0	15.2	23.0	22.5	6.6	10.9	9.7

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## 2.3 THE WELL-BEING OF OUR PEOPLE

### 2.3.1 HOW WE ENSURE THE WELL-BEING OF OUR PEOPLE

The quality of the working environment is closely linked to employee well-being. In order to maximise the value generated by our employees, in 2018 the LU-VE Group conducted a series of initiatives aimed at improving the health and safety at workplaces and promoting company welfare.

The **HR management policy at Group level**, which will be formalised during 2019, aims to define a series of shared guidelines to promote a culture of safety founded on the awareness of risks and the diffusion of responsible conduct at all levels of the organisation, in line with the provisions already established by the Group Code of Ethics.

This policy will represent another step towards the challenging **target of “zero injuries”**.

“Our guiding principle is that businesses are first and foremost women, men and ideas. The rest comes as a consequence, starting with the safety of our workers. For LU-VE this has always been a fundamental value, starting with our employees, whose happiness is an essential requirement for us at all levels. Our aim is to progressively extend this good practice to all Group sites, beginning with those in Italy.”

Iginio Liberali, *Chairman of the LU-VE Group*

Although health and safety is the responsibility of the individual Companies, as part of the “Make One Company - Make One Culture” campaign, the Group, with the support of a specialist third-party provider, has conducted an **analysis of the occupational health and safety management methods** adopted at five manufacturing sites, in addition to the internal and external audits already carried out in the context of the OHSAS 18001 occupational health and safety certifications. The analysis revealed a series of key actions to increase employee well-being and mitigate the health and safety risk associated with specific tasks and certain working environments, to be implemented by 2020 according to employee priorities. These evaluations have also enabled the identification of certain areas of improvement in the design for the construction of the new manufacturing site in Poland.

The development of an occupational health and safety management model shared at Group level will also be promoted through the adoption of an **organisational model** certified according to the new international occupational health and safety standards **ISO 45001**, to be adopted at the sites in Belluno, Italy and the Czech Republic by 2019 and in Poland by 2020. The model will later be standardised and extended across all of the Group's sites.

#### OUR RISK MANAGEMENT AND MITIGATION MODEL

The guidelines adopted at Group level to reduce the risks associated with occupational health and safety relate to monitoring compliance with current legislation and internal procedures, as well as the constant search for the best safety standards available and applicable to company activities, with a consolidated scientific approach and technology.

The Group's objectives include the mitigation and management of the risks related to the failure to

observe internal procedures as well as current occupational health and safety legislation. This risk is managed at Group level through awareness-raising activities aimed at monitoring injuries and promoting a culture of safety, as well as through the monitoring of health and safety training activities. Furthermore, specific activities are implemented through targeted investments at all of the Group's manufacturing sites.

At manufacturing companies, the appointed managers periodically conduct risk assessments on occupational health and safety and assess the adoption of the necessary measures through specific targeted investments, primarily to ensure compliance with the legislation in force in the country in question. Systematic controls are carried out on machinery and equipment and workers are provided with certified Personal Protective Equipment (PPE). In addition, employee work schedule and time off regulations are regularly respected in compliance with labour legislation and other regulations on workers' rights in the reference country.

The centralised and coordinated control and monitoring of accidents, injuries, absenteeism, reporting and near misses are managed at Group level. In particular, in 2018 training programmes were conducted by the HR Department at Group level, aimed at standardising the methodology for the collection and consolidation of the data used to calculate injury rates.

Furthermore, particular focus was given to the promotion of occupational health and safety at all of the Sales Companies. The main activities regard the creation of ergonomic and functional work spaces for employees, with particular attention given to lighting, the design of shared spaces and equipping workstations with injury prevention equipment.

Alongside the physical and organisational measures, the Group also promotes training and awareness-raising activities on occupational health and safety which are periodically monitored by the HR Department.

## OCCUPATIONAL HEALTH AND SAFETY IN ITALY

In Italy, home to 37% of the Group's entire population, several particularly significant occupational health and safety initiatives were carried out.

### Evaluation of work spaces

In order to improve the ergonomics of work spaces and minimise the risks associated with repetitive movements, the transportation of loads and poor posture, a comprehensive mapping of all work duties was carried out. The targeted actions to be implemented will be assessed in the course of 2019.

### Health checks

In 2018, the first phase of a programme to monitor the health of almost all employees through medical check-ups was completed. One of the goals for 2019 is to consolidate the data on potential sources of risks and the people who may be exposed to them as a result of their professional roles, with the aim of identifying appropriate measures to eliminate or mitigate risks to the lowest possible level.

### Microclimate evaluation and mitigation of chemical risk

The investments in 2018 aimed to regulate the ambient temperature of workspaces to a



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comfortable level, through the installation of air conditioning systems in the manufacturing department of large-scale industrial condensers. In 2018 a specific assessment of chemical substance risk was carried out, which studied the quantity of chemical substances present in the Group's Italian sites as well as emission levels. The analysis confirmed the absence of polycyclic aromatic hydrocarbons and identified any areas of improvement, in relation to which Group companies have already begun to implement appropriate mitigation strategies. An integral part of this strategy is the progressive mitigation of residual chemical risk. To this end, in 2018 the Group constantly strived to reduce hazardous substances to a minimum and, where possible, replace them entirely.

#### **Work-related stress assessment**

Since 2014 the Group has monitored the trend of absenteeism and associates such data with an assessment of specific risks, thus activating a system designed to verify employee exposure to work-related stress (monitoring began in 2010 for Italian companies). In 2018 a new schedule to monitor the company workforce was launched, which will continue through the 2018-2020 period and will involve direct and indirect workers divided by group. In 2018, the monitoring system, based on the guidelines published by the INAIL and shared with Employee Representatives, envisaged the measurement of work-related stress for company managers. This decision was based upon the principle that managers can play an active role in the management and mitigation of work-related stress for the entire company workforce, contributing to the promotion of a calm and balanced working environment.

#### **Personnel safety in transit**

In light of the Group's continuous geographic expansion and the resulting increase in the need for certain key employees to travel, such as sale managers and Technical Office personnel of Italian companies, in 2018 a Travel Policy has been developed to protect people while travelling.

### **TRAINING BREAKS**

In 2018, the Federmeccanica-Assistal Fiom-Fim-Uilm National Health and Safety Commission identified "training breaks" as an innovative training method for occupational health and safety topics and introduced this approach into the national Guidelines. Moreover, the application of said guidelines in the metalworking sector will be periodically assessed and monitored.

First introduced in the Group's Italian companies, the concept of training breaks consists of short training sessions (15-30 minutes) carried out during working hours for small groups of workers, focusing on individual aspects of health and safety and looking in particular at the risks related to their specific role, place of work, equipment and substances used and the relative safety procedures. These initiatives are based around the active involvement of employees and aim to promote the constant improvement and diffusion of the culture of safety and prevention.

### **RELATIONS WITH TRADE UNIONS**

Constructive dialogue with trade unions is of primary importance to the creation of a working environment based on employee dialogue and feedback.

The formal health and safety agreements with trade unions are subject to the laws of the countries

in which the Group operates. In Italy, 100% of employees are covered by formal health and safety agreements. In China, there are currently no agreements in place with the trade unions concerning occupational health and safety, but the Company enters into an internal agreement with all workers who manage activities with health and safety risks, calling for risk training and awareness raising and the supply of personal protection equipment, the application of which is checked periodically, in addition to the performance of periodic health checks. In Sweden, a collective agreement covering 100% of the company population is entered into by the employers and trade unions. A similar system is in place in Germany. This type of contract does not exist in the other countries in which the Group operates.

As well as monitoring health and safety aspects, the Group is also committed to developing a **company welfare system**. The provision of benefits, managed directly by HR Managers, differs from country to country depending on the requirements and cultures present within the Group. The Group HR Department oversees the adoption of these benefits and strives to ensure the adequacy of the various welfare packages. Benefits are provided to all employees, be they full time or part time, with the exception of the companies LU-VE HEAT EXCHANGERS (China), HEAT TRANSFER SYSTEMS (Czech Republic) and SPIROTECH HEAT EXCHANGERS (India), which provide benefits exclusively to full-time workers.

*The main benefits of the LU-VE Group, 2018*

	LU-VE S.p.A.	SEST S.p.A.	TECNAIR LV S.p.A.	THERMO GLASS DOOR S.p.A. (TGD)	HEAT TRANSFER SYSTEMS (HTS) s.r.o.	SEST-LUVE-POLSKA Sp.z.o.o.	"OOO"SEST-LUVE	SPIROTECH HEAT EXCHANGERS PRIVATE LIMITED	LU-VE HEAT EXCHANGERS (CHANGSHU) LTD	LU-VE SWEDEN AB
Work-life balance (e.g. flexible working hours, incentives for commuters)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Promotion of healthy lifestyles (e.g. gym membership)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Support for workers' families (e.g. scholarships)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Medical insurance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

The LU-VE Group has a long history of supporting workers' children, whose abilities and commitment to academic study have led to the achievement of excellent results. In 2018 a total of 27 scholarships were awarded. In order to provide all young people with the possibility of receiving this award, the Group decided to extend this historical practice to all Group companies from 2019.

## 2.3.2 KEY FIGURES IN 2018

In the reference three-year period, despite the interventions promoted by the Companies there was an increase in the number of accidents, with a resulting rise in frequency and severity rates. In 2018 the absenteeism rate fell by 0.3% compared to 2016 and 2017.

ACCIDENT INDEXES <sup>8</sup> AND ABSENTEEISM RATES <sup>9</sup>										
		Accident frequency rate			Accident severity rate			Absenteeism rate		
		2016	2017	2018	2016	2017	2018	2016	2017	2018
Italy	Men	19.9	19.5	23.8	558.5	609.5	539.0	4.6	4.4	4.9
	Women	11.1	13.7	3.4	407.5	746.5	398.4	5.2	6.4	7.2
EU Countries	Men	9.4	9.6	18.2	127.6	244.8	582.3	4.7	5.4	5.9
	Women	8.1	17.1	20.5	147.3	512.8	1,152.8	9.2	9.4	8.9
Non-EU Countries	Men	3.9	0.0	1.3	37.2	0.0	9.5	6.2	5.0	3.4
	Women	0.0	0.0	11.0	0.0	0.0	170.5	5.9	5.5	2.1
Total		10.4	11.1	14.7	258.4	373.9	496.5	5.7	5.7	5.4

Finally, in 2018 one alleged case of occupational illness was recorded in Italy (this has not yet been definitively confirmed by the competent body INAIL). In this respect, the professional illness rate - calculated as the number of cases of occupational illness/hours worked\*1,000,000 - was 1.03 for men (compared to 1.08 in 2017). No fatalities have been reported in the last three years.

<sup>8</sup> The accident ratios were calculated as reported below:

- Frequency rate: number of accidents/hours worked\*1,000,000
- Severity rate: number of days lost per accident/workable hours\*1,000,000

Days lost considers the calendar days starting from the day subsequent to the accident.

The calculation of the frequency and severity rates of accidents in 2018 did not include commuting accidents.

<sup>9</sup> The absenteeism rate was calculated as reported below:

- Absenteeism rate: number of days of absenteeism/workable days\*100

Reasons for absence considered were: injury, illness, unjustified absence, strike and absence for trade union reasons

<sup>10</sup> In 2018 the injury of an employee which took place in 2017 was not recognised by INAIL.

In the course of 2018, 333 employees left the Group, while 439 were hired.

<b>NUMBER OF HIRINGS AND DEPARTURES BY GENDER<sup>11</sup></b>						
	<b>Hirings</b>			<b>Departures</b>		
	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Men	262	317	316	150	237	228
Women	84	121	123	67	63	105
<b>Total</b>	<b>346</b>	<b>438</b>	<b>439</b>	<b>217</b>	<b>300</b>	<b>333</b>

<b>NUMBER OF HIRINGS AND DEPARTURES BY AGE</b>						
Under 30 years of age	197	246	213	92	146	123
30-50 years	131	169	205	97	114	177
Over 50 years of age	18	23	21	28	40	33
<b>Total</b>	<b>346</b>	<b>438</b>	<b>439</b>	<b>217</b>	<b>300</b>	<b>333</b>

<b>NUMBER OF HIRINGS AND DEPARTURES BY REGION</b>						
Italy	43	80	66	24	40	46
EU Countries	110	209	240	94	118	152
Non-EU Countries	193	149	133	99	142	135
<b>Total</b>	<b>346</b>	<b>438</b>	<b>439</b>	<b>217</b>	<b>300</b>	<b>333</b>

Since 2007, the LU-VE Group has supported the Alfa Cooperative through the “Come le scarpe nel frigorifero” (“Like shoes in the refrigerator”) project, aimed at promoting the integration of people with disabilities into concrete working roles that involve participation in normal company life. Indeed, this work plays a therapeutic role, favouring the social recognition of employees and thus boosting their self-esteem and personal dignity. Over the years, this consolidated partnership has enabled the integration of certain people of the Cooperative into the Group as employees.

<sup>11</sup> The data for 2018 also includes the company Zyklus Heat Transfer Inc.; consequently the workforce data for 2017 and the hirings and departures in 2018 cannot be compared with the workforce data of 2018.

<b>TURNOVER RATE BY GENDER</b>						
	Inbound turnover rate			Outbound turnover rate		
	2016	2017	2018	2016	2017	2018
Men	20.9%	23.7%	21.7%	12.0%	17.7%	15.6%
Women	14.6%	19.2%	18.3%	11.6%	10.0%	15.6%
<b>Turnover rate</b>	<b>18.9%</b>	<b>22.3%</b>	<b>20.6%</b>	<b>11.9%</b>	<b>15.3%</b>	<b>15.6%</b>

<b>TURNOVER RATE BY AGE</b>						
	2016	2017	2018	2016	2017	2018
Under 30 years of age	51.2%	53.4%	42.1%	23.9%	31.7%	24.3%
30-50 years	11.6%	14.5%	16.7%	8.6%	9.8%	14.5%
Over 50 years of age	5.6%	6.8%	5.2%	8.8%	11.8%	8.2%
<b>Turnover rate</b>	<b>18.9%</b>	<b>22.3%</b>	<b>20.6%</b>	<b>11.9%</b>	<b>15.3%</b>	<b>15.6%</b>

<b>TURNOVER RATE BY REGION</b>						
	2016	2017	2018	2016	2017	2018
Italy	6.0%	10.5%	8.5%	3.3%	5.3%	5.9%
EU Countries	16.6%	27.8%	28.6%	14.2%	15.7%	18.1%
Non-EU Countries	43.2%	32.8%	26.0%	22.2%	31.3%	26.4%
<b>Turnover rate</b>	<b>18.9%</b>	<b>22.3%</b>	<b>20.6%</b>	<b>11.9%</b>	<b>15.3%</b>	<b>15.6%</b>

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### **3. DISTINCTIVE POSITIONING**

Global energy consumption is continuously on the rise. Within this context, the manufacture and use of low energy consumption machines not only represent one of the main challenges at domestic and international level, but are also an essential prerequisite of business in modern markets.

At the same time, the unique nature of the solutions demanded by customers often require businesses to develop dedicated projects designed to respond to individual needs.

This section will deal in particular with the methods whereby the LU-VE Group intends to stand out in the market, first and foremost by meeting customer needs (§ Customer-focused approach) and developing innovative solutions capable of minimising environmental impacts in the utilisation phase (§ Cutting-edge solutions). The last section of this chapter describes how the Group manages its business in compliance with regulations and its own values (§ Sales ethics).

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## 3.1 CUSTOMER-FOCUSED APPROACH

### 3.1.1 HOW WE RESPOND TO OUR CUSTOMERS' NEEDS

Ensuring continuous product and service improvements to guarantee full customer satisfaction is one of the targets expressed in our mission. Indeed, the LU-VE Group is committed to interpreting current and latent market demand and transforming it into technologically advanced, cutting-edge products able to provide excellent and reliable performance over time.

Specifically, the Group adopts an approach aimed at maximising plant performance and reducing manufacturing and operating costs throughout the life cycle, acting not as mere supplier but as a veritable partner. The development of new technologies with new materials is always aimed at providing customers with a competitive advantage.

The corporate culture of the LU-VE Group contributes to the success of the organisation, placing the customer at the centre through the ability to innovate and the spirit of initiative, both of which are key elements to the construction of long-lasting mutual trust.

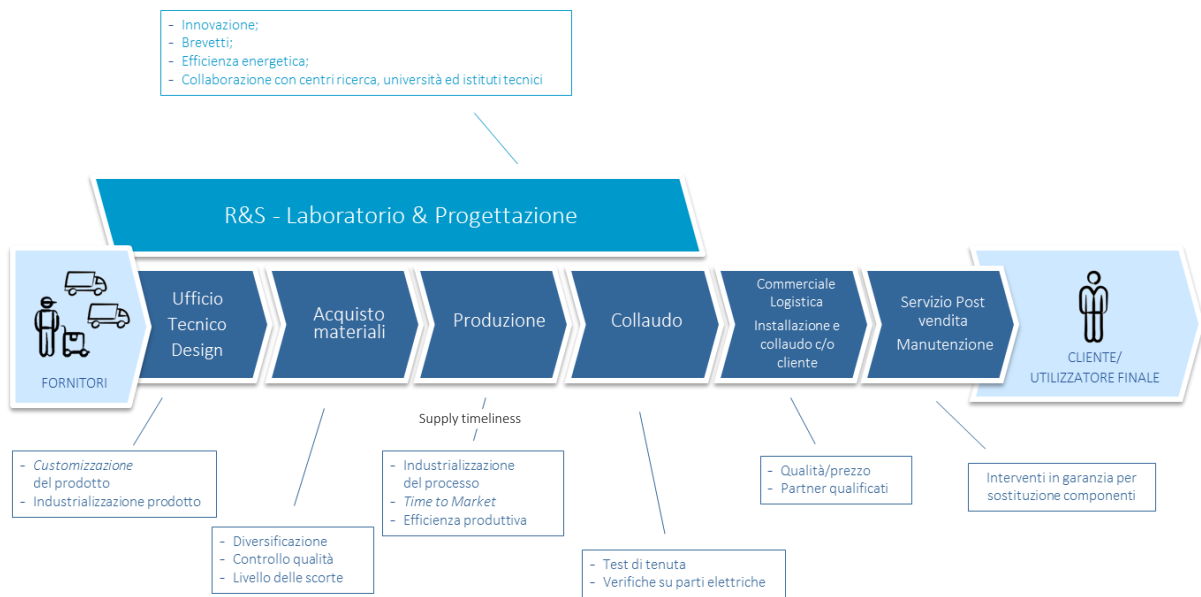
Customer requirements are handled by a **matrix sales organisation** - consisting of two divisions or "Strategic Business Units" with centres of responsibility by country and experts dedicated to specific product lines. Aside from standard products in the catalogue, our internal skills and resources allow us to develop highly customised products on the basis of the particular specifications and system performance requirements of customers.

For special products, the technical office collaborates with the Group's research and development department to optimise each individual design and planning phase. Furthermore, the co-design process calls for customer engagement in order to meet functionality and reliability needs, as well as to limit total product costs and the use of raw materials in terms of components.

Once the solution planning and development phase is complete, the Planning, Research and Development Department produces a detailed "Installation and Maintenance Manual" that contains the technical specifications and instructions for the correct use of the solution. This document also provides information on the presence of potentially harmful substances for the environment, as well as the product's safety and disposal methods and the relative environmental impacts, based on applicable legislation. Customers have constant access to the Customer Services department of the Sales division for any subsequent maintenance requirements or requests for assistance.

In 2018, the process to **optimise the time scales for product design and delivery to the end client** was continued with the introduction of key technical roles for the management of special products during the planning phase. In the same way, the offer management process was optimised to reduce order processing times through the continuous refinement of IT tools for automatic product configuration and "customisation" management. In 2018 in particular, the automatic product configurator managed 26.7% more orders than in 2017.

## All the way to customers: the Group's activities from start to finish



## QUALITY CONTROL

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 "Machines Directive 2006/42/EC", applicable to all machinery introduced into the European market.

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, at a percentage which is considered natural for the business segment. 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. Nearly all customer returns are linked to product quality issues, which are typically related to defects that make the product unsuitable for use within the warranty period and cannot be repaired by the customer. Total returns in 2018 amounted to 0.1% of revenue, in line with 2017. In 2016, this value was 0.3%.



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### 3.1.2 KEY FIGURES IN 2018

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 the one-to-one relationship between the customer and the sales representative the Group implements a **customer satisfaction survey** at least every two years.

In the last three-year period, two surveys were carried out. In 2016, the analysis - aimed primarily at air cooled product customers - intended to evaluate customer perception of the Group's brand reputation. Of the 23 customers who participated, three main factors emerged that were recognised and particularly appreciated: product innovation, pre-sales activity and the low product noise level.

In 2018, the Group organised a Customer Forum in Russian which involved some of its key customers. The event was attended by over 82% of those invited and enabled the Group to compare itself with the demands of the markets in which it operates and to the relative products, as well as to compare the quality management systems implemented at Group level and by the Russian subsidiary. During the event, participants also took part in a guided tour of the manufacturing site of "OOO" SEST-LUVE, enabling them to get to know the technological and manufacturing business of the Group. Finally, the possibility of gaining a better understanding of the services offered by the Group was particularly well-received by participating customers.

#### **SPIROTECH WINNER OF "2018 SUPPLIER QUALITY AWARD"**

Spirotech Heat Exchangers Private Limited, the Indian manufacturing company of the LU-VE Group, was named the winner of the "2018 Supplier Quality Award", a recognition awarded by Ingersoll Rand to the commercial supplier who has shown the most improvement in terms of quality indicators, using operational excellence, tools and initiatives dedicated to improving quality. The company received the award during an awards ceremony held in Charlotte, USA.

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## 3.2 CUTTING-EDGE SOLUTIONS

### 3.2.1 RESEARCH, TECHNOLOGY, LEADERSHIP

Technological development is a key factor in responding to the needs of a constantly evolving market. For the LU-VE Group, offering cutting-edge solutions means designing and developing solutions able to **minimise energy consumption** during use, reduce the internal volume of the cooling circuit and the refrigerant fluid, and minimise the noise level of solutions.

The Group has been committed to designing and promoting innovative solutions with low environmental impacts for many years, thanks in part to its ability to unite the desire to innovate with the know-how developed in 30 years of business. When designing its solutions - managed by a dedicated Technical Department - the Group assesses the environmental impacts throughout the life cycle of the project according to the principles of the Life Cycle Perspective, Design for the Environment, Life Cycle Assessment and Life Cycle Cost, and works in accordance with the European Directive 2009/125/EC (ErP - Energy related Products) to minimise impacts overall.

The gradual introduction of **natural refrigerant fluids** such as carbon dioxide, ammonia and propane represents a valid alternative to hydrofluorocarbons (HFC) and enables the greenhouse gases associated with climate change to be significantly reduced. In fact, one kilogramme of carbon dioxide can have an environmental impact up to 4,000 times lower than one kilogramme of R-404A (which until recently was the standard refrigerant in the EU and still is in Non-EU Countries) in terms of global warming potential (GWP).

The **research and development investments**, including into natural refrigerant fluids, and the recent acquisitions such as that of the US company, have led the Group to produce a broad range of innovative products that are technological leaders in the field at a global level.

“The synergies in terms of Research and Development, global market coverage, and the use of cutting-edge product and manufacturing technologies in the sectors of commercial and industrial refrigeration, large air conditioning units and power generation enable us to consolidate our cutting-edge position in the developments of our sector. This move also serves to promote and consolidate the research and production of the most advanced products in Italy, in particular in the application of “green” refrigerants, energy saving technology and respect for the environment.

*Iginio Liberali, Chairman of the LU-VE Group*

The Group's investments focus particularly on the development of alternative technologies, the increase in production capacity of products that use nature refrigerant fluids, and the research into innovative solutions able to push the technological boundaries of these applications.

“We have been pioneers in transcritical CO<sub>2</sub> installations in Europe since the early 2000s, and in 2018 we had the pride of installing the first transcritical CO<sub>2</sub> systems in India and Jordan”.

The LU-VE Group's interest and research into the field of refrigeration with natural fluids began in the early 1990s.

THE MOVE TOWARDS NATURAL REFRIGERANTS: THE CHALLENGES

This marked the beginning of a long journey - studied by numerous patents - aimed at increasing the competitiveness, both in terms of performance and cost, of solutions used by these fluids. An integral part of this strategy is the research into solutions that use a lower amount of refrigerant to exchange the same amount of heat.

The LU-VE Group was one of the first companies in the sector to apply computational fluid dynamics to explain fluid dynamic flows and heat exchange processes, as well as to install cutting-edge equipment in its laboratories; in 2011 the Group installed a test chamber to test CO<sub>2</sub> exchangers in transcritical conditions.

The experience gained has led to the development of **software dedicated to the dimensioning of the CO<sub>2</sub> systems** calibrated with data from our laboratory. The project enables the machine's performance to be calculated during the design phase according to the specific specifications of the individual client and application, with the results then shared with the customer.

**The first transcritical CO<sub>2</sub> system** in Europe was installed in Wettingen, Switzerland in 2004, and was promoted by the LU-VE Group in collaboration with several international partners.

Transcritical systems work in conditions where the refrigerant fluid used is above the critical temperature (in the case of CO<sub>2</sub>, the critical temperature is 31°C, a particularly low figure when compared to the critical temperature of HFC fluids). As a result, the energy efficiency of transcritical CO<sub>2</sub> systems may be reduced during the warmest times of the year.

The technologies developed by the Group, such as the spray solutions, help to **maintain a high level of energy efficiency** even in climatic conditions characterised by high external temperatures.

In 2016, the LU-VE Group installed the first transcritical CO<sub>2</sub> system in Russia. Finally, the first installations of this kind took place in India and the Middle East in 2018..

## POSED BY THEIR APPLICATION

Natural refrigerant fluids gradually gaining traction in the refrigeration industry include carbon dioxide, ammonia and hydrocarbons. However, solutions using natural refrigerant fluids are characterised by certain limitations that must be managed carefully to ensure performance and safety during use.

**Carbon dioxide** 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 inefficiencies in conditions characterised by high external temperatures.

**Ammonia** is another high performance refrigerant fluid but is both toxic to humans 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 presents various system limitations.

**Hydrocarbons** 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.

### 3.2.2 NEW SOLUTIONS AND PARTNERSHIPS IN 2018

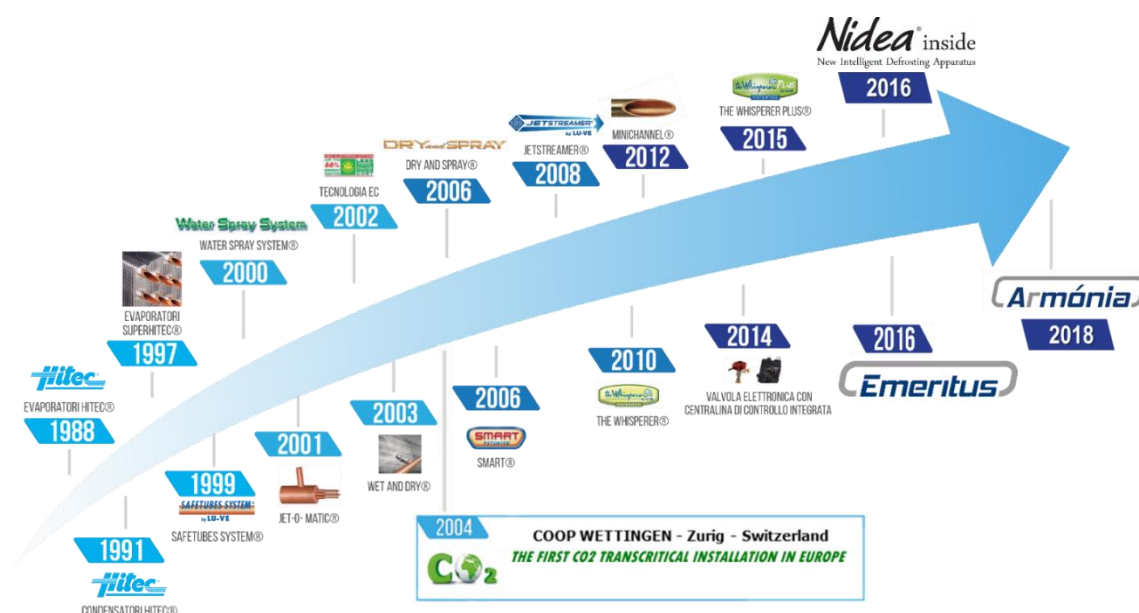
The LU-VE Group actively promotes technological innovation in the sector, entering into partnerships with Universities and Specialist Centres, sharing best practices at conferences and trade fairs and dedicating both resources and commitment to scientific publications.

**International partnerships**, several of which have been consolidated over the years, are promoted by the Group to further specific projects and experimental research activities. Some of these collaborations lead to the production of reports and scientific papers and promote the technological development of solutions in the sector. The results of innovative technologies and models are then protected with dedicated patents.

*Active partnerships with Universities and Specialist Centres, 2018*

<b>PARTNER</b>	<b>PROJECT</b>
Polytechnic University of Milan (Italy)	Research activities into thermal exchange Research activities into close control for operating theatres
Brno University of Technology (Czech Republic)	Development of new exchanger families
Danish Technological Institute (Denmark)	Experimentation of ammonia evaporators
University of Parma (Italy)	Development project on new products in the bonding sector
University of Trento (Italy)	Research activities into corrosion and the choice of materials
Experimental Glass Station in Murano (Italy)	Thermal insulation performance of insulated glazing
Norwegian University of Science and Technology (Norway)	Experimental research activities into the application of CO <sub>2</sub> technologies in countries with tropical climates

Partnerships with Universities and Specialist Centres have also contributed to the Group's power of innovation: one of the most recent solutions developed, *Armónia*, was created thanks to a research project in collaboration with the Danish Technological Institute and the Polytechnic University of Milan, while the long-standing partnership with the latter was also behind the development of the *Emeritus* project.



Thirty years of innovation, 1988-2018

Since 1989 the LU-VE Group has published over 30 papers in collaboration with authoritative partners in the field of refrigeration and other sectors in which the LU-VE Group has an active presence.

## SCIENTIFIC RESEARCH AND PUBLICATIONS, 2018

The “New CO<sub>2</sub> gas cooler for dry and wet operation” research project describes the operational principle of the Emeritus solution and its benefits in terms of the performance of CO<sub>2</sub> applications.

The results of the study were presented at the 13<sup>th</sup> edition of the Gustav Lorentzen natural refrigerants conference held in Valencia in 2018. Organised by the Polytechnic University of Valencia and the International Institute of Refrigeration (IIR) and promoted by leading companies in the sector, the event focused on sharing the latest research into the field of natural refrigerant fluids and how these solutions, which are already used extensively and successfully in Scandinavian countries, can be applied with higher temperatures, thus responding to the pronounced need for their use in air conditioning systems.

The “Techno-economic optimization of a geothermal ORC with novel “Emeritus” heat rejection units in hot climates” research project developed in partnership with the Polytechnic University of Milan focuses on the technical and economic optimisation of Organic Rankine Cycle (ORC) geothermal systems which use the new Emeritus technology developed by the LU-VE Group equipped with the spray system and adiabatic panels.

The research shows a substantial increase in the amount of energy produced by the geothermal system, as well as in the yields of the Emeritus unit, compared to a traditional solution in dry conditions, or without the use of spray technology. The results of the research, which were presented at the 2017 ORC International Conference, were approved by the international journal Renewable Energy produced by Elsevier and will be published in 2019.

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Finally, in 2018 the LU-VE Group was a partner in the **ATMOsphere** project, a series of workshops promoted in various countries around the world with the aim of sharing the most recent technological innovations with political decision-makers and key stakeholders and promoting the use of natural refrigerant fluids. During the workshops, the LU-VE Group presented some of its case studies, including the optimisation of the performance of a CO<sub>2</sub> system installed in Trapani, Italy.

## ARMÓNIA

### THE RANGE OF LOW VOLUME AMMONIA EVAPORATORS FOR INDUSTRIAL REFRIGERATION



Thanks to targeted system solutions developed through the partnership with the Polytechnic University of Milan and the Danish Technological Institute, Armónia enables the **quantity of refrigerant to be reduced by up to 67%** compared to traditional solutions, using 0.07 kg of fluid per kW of installed thermal power. This result, achieved thanks to a compact and efficient heat exchange geometric and an optimised circuit system, reduces operating costs and energy consumption.

Thanks to these innovations, the LU-VE Group has further reduced the volume of ammonia used in its heat exchangers which, as seen previously, use a lower volume compared to traditional units of the same capacity.

These results not only enable the **mitigation of health and safety risks** associated with ammonia-based systems, but also enable the size of the refrigeration unit within the manufacturing site to be reduced, thus reducing investment costs. The possibility of reducing the volume of ammonia also enables the **expansion of the field of application** of these solutions, which are often subject to regulatory limits, and, therefore, increases the environmental benefits associated with the introduction of natural refrigerants.

Developed for industrial refrigeration, the technology used by Armónia may also be applied in other fields in the future thanks to its capacity to offer high levels of efficiency with significantly lower volumes of fluid.

## EMERITUS

### THE SPRAY SYSTEM AND ADIABATIC PRE-COOLING SYSTEM IN CO<sub>2</sub> APPLICATIONS



The Emeritus system, introduced and patented in 2016 and developed in collaboration with Milan Polytechnic University, combines the benefits of the spray system with those of the adiabatic pre-cooling system. Using these technologies, Emeritus 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 6 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 used by the system. Thanks to a sophisticated control system, Emeritus optimises the machine's performance under various climatic conditions.

As well as HFC refrigerant fluids, the solution can also be applied to natural fluids such as CO<sub>2</sub>, ammonia and water. Thanks to its performance-optimising characteristics, Emeritus **significantly increases the efficiency of CO<sub>2</sub> solutions in extremely hot climates**, effectively overcoming what for many years was considered one of the principle barriers preventing the widespread use of CO<sub>2</sub>

systems.

## MINICHANNEL

### REDUCING INTERNAL VOLUMES TO ACHIEVE ULTRA-LOW PROPANE LOAD LEVELS



Minimising the internal volume of heat exchangers, and therefore the quantity of refrigerant fluid, broadens the **field of application of propane as a refrigerant fluid**. Thanks to the introduction of the cutting-edge technology Minichannel, which uses a special ribbed tube measuring only 5mm in diameter, the **amount of propane used has been reduced by 68%** to exchange the same amount of heat, compared to traditional systems.

As such, Minichannel is **crucial to reducing the quantity of refrigerants** in propane applications, enabling such solutions to compete in regulatory contexts that limit the quantity used in each individual system.

## GLASS DOORS

### ENERGY SAVING WITH THE HOT GAS DEFROST SYSTEM TECHNOLOGY



In the field of glass doors, in 2018 the LU-VE Group introduced an innovative and efficient defrosting system using the *Hot Glass Defrost System* technology.

The new system is superior to traditional defrosting systems which use electrical resistance and, thanks to an internal circuit heated by the heat produced by the machine itself, enables a reduction in electricity use of 82%. This new system also significantly reduces heat loss into surrounding environments and offers a higher level of defrosting efficiency.

## INVISIBLE

### CLOSE CONTROL AIR CONDITIONING FOR DATA CENTERS



In the field of close control ventilation systems, in 2018 the Invisible system was launched, a new underfloor air conditioning concept for data centers.

By enabling the installation of cooling systems in spaces where the enclosures that house the servers cannot be positioned, Invisible responds both to the increasing demand for space in data centers as well as to the exponential increase in server power density. In particular, the system is designed to intake warm air, treat it and cool the data center environment, ensuring that the data centers benefit from a high-performance working environment.



## INTERNET OF THINGS (IoT) SOLUTIONS



Patented in Italy and awaiting approval at European level, the Gateway - the IoT Mirror for Lift Cars technology implements Internet of Things (IoT) solutions into elevators. The solution was designed and developed by TGD.

In particular, Gateway introduces a mirror with touch-screen technology into elevators, which is able to communicate with the user and the external environment via the internet, displaying interactive content such as news bulletins, weather reports, environmental images and advertising.

Furthermore, Gateway also offers features to increase safety. In the event of an alarm, the application of a micro webcam enables the security/help service to communicate with those inside the cabin.

Gateway also accelerates and facilitates elevator maintenance activities, transforming the screen into a remote computer with audio-visual capabilities and touch-screen technology. This enables maintenance personnel to connect with the service centre, access files remotely (manuals, instructions and documents) to speed up and optimise any maintenance works, and visualise the operational metrics and parameters of the system in real time.

## OUR MODEL TO GUARANTEE INNOVATION IN THE LONG-TERM

The proposal of innovative technological solutions in line with market trends represents an essential competitive advantage to ensure the Group's business in the long-term. While the risk is considered unlikely, this would be particularly significant in the case that the Group did not intercept a disruptive innovation within the sector.

The Group has historically occupied a leading position in the field of design, research and development. These activities are led by a dedicated Department that operates in accordance with guidelines defined at Group level intended to maximise energy efficiency, starting from the instructions set forth in the European Energy using Products (ErP) Directive.

In addition, so as to pursue research and development objectives, the Group has adopted a policy for investment in research structures and methodologies and boasts consolidated collaborations with many universities and research centres in Europe and worldwide. The results of innovative technologies and models are then protected with dedicated patents.

The Group's research and development laboratory, located at the Uboldo site, is at the cutting edge in Europe in terms of size as well as expertise, being one of the few in the world capable of conducting performance testing on CO<sub>2</sub> fuelled equipment applied to evaporators and condensers.

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## 3.3 SALES ETHICS

### 3.3.1 PRINCIPLES, RULES AND RESPONSIBILITIES

Considering its responsibility in an international context, the Group deems compliance with legislation in the countries in which it operates, lawful competition, the fight against corruption and correct financial and commercial disclosure to be of vital importance. Promoting and consolidating ethical conduct allows for the establishment of long-term relationships with employees, customers, shareholders and local communities while preserving the company's reputation and economic/financial sustainability in the long-term.

The activities of the LU-VE Group are based on **principles of honesty, transparency, loyalty, integrity and correctness**, as defined in the Code of Ethics.

The Group operates in compliance with any regulatory provisions applicable in Italy and in every other Country in which the Group Companies operate, and rejects any conduct that is incompatible with the Code of Ethics, the applicable regulatory provisions and any internal regulations. The achievement of results which are consistent with the interests of the Company and the Group must, therefore, always be based on conduct and procedures that are compatible with the Group's ethics.

The Group undertakes to translate the principles defined in the Code of Ethics into concrete actions through the promotion of a culture characterised by sales ethics and the implementation of internal control systems aimed at ensuring that all Group Companies operate in line with the Group's ethics. The Code of Ethics also establishes explicit behavioural restrictions and an associated penalty system applicable both internally and externally to the Group's business activities, concerning integrity, the fight against active and passive corruption and conflicts of interest.

Another key theme of the Code of Ethics is the promotion of the principle of transparency with respect to all stakeholders and the responsibility to the general public, whose economic and social development may be influenced by the activities of the Group Companies, even if only indirectly.

The Italian Companies LU-VE S.p.A. and SEST S.p.A. have adopted an **Organisation, Management and Control Model pursuant to Italian Legislative Decree 231/2001**, approved by the Board of Directors, aimed at preventing the criminal liability of entities. Within the model, the Companies have created a procedure for the management of procurement and works contracts with the goal of governing the management of contract activities or works so as to protect the environment as well as the health and safety of all personnel concerned, in the case of the assignment of works carried out by contractors, cooperatives or autonomous workers. Specific measures to manage regulatory matters have been introduced at other Group Companies.

In 2018, steps were made to introduce a **whistleblowing** system to the Organisation, Management and Control Model, aimed at providing a channel to enable employees to report the commission of any unlawful activity that may come to their knowledge as a result of their working activities. This system, in line with the national legislative framework, aims to further protect employees against any form of unlawful activity and to promote the values of ethics that characterise the Group.

To ensure transparency and corporate communication for financial aspects, a structured procedure is in place with shared responsibilities with regard to ordinary disclosure and the disclosure of so-called price-sensitive information. With reference to sales communications, however, the

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Communication Department and the Marketing Managers of the Sales Department, working jointly with the CEO, the CCO, the CFO and the Sales & Marketing Director, are responsible for ensuring the consistency and uniformity of such information.

#### **EUROVENT-CERTIFIED SINCE 2000**

To ensure the transparency of sales communications based on facts, the Group has voluntarily signed up to the Eurovent certification scheme.

This certification guarantees that the information specified in the catalogue is consistent with the actual performance of the solutions, in terms of power, air flow, energy consumption, noise levels and construction characteristics, as a result ensuring the solution's capacity to provide optimal operating conditions and minimum costs, for the entire lifecycle of the system.

In 2000, LU-VE S.p.A. was the first company in Europe to obtain the prestigious Eurovent "Certify All" certification for unit coolers, condensers and dry coolers. In 2018, LU-VE products passed the laboratory testing laid out by the certification procedure for the 19th year in a row, which calls for an annual verification of certain models of the ranges selected on a sample basis by Eurovent and tested at specialised international institutions.

### **3.3.2 KEY FIGURES IN 2018**

In the reporting period, the LU-VE Group did not identify any cases of incidents of corruption, or legal actions for anti-competitive, anti-trust or monopolistic behaviours. Furthermore, the Group was not subject to any penalty or assessment of non-compliance with laws or regulations regarding the environment and the communication of product information.

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## 4. CREATION OF SHARED VALUE

The generation of shared value means being aware of belonging to a system that involves not only its shareholders and investors but also employees, customers, suppliers, local communities and companies.

At the centre of the Group's approach to business is the conviction that the value of a business goes beyond its purely economic results and is deeply linked to its ability to propose solutions to today's challenges, generating tangible improvements in the communities in which it operates.

This section deals with the methods implemented by the Group in order to guarantee long-term economic and financial sustainability (§ Economic and financial sustainability), generating shared value for its shareholders and investors, employees and suppliers. The second part focuses on key aspects and actions aimed at mitigating the impact of production processes with regard to safeguarding future generations and local communities (§ Respect for the environment). Finally, this chapter describes the methods by which the Group aims to improve quality of life within the company (§ Quality of life).

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## **4.1 ECONOMIC AND FINANCIAL SUSTAINABILITY**

### **4.1.1 VALUE GENERATED FOR STAKEHOLDERS**

The ability to innovate and develop cutting-edge technologies represents a key strategy to ensuring a business' profitability in the refrigeration and conditioning sector. Similarly, investments are another way of ensuring the generation of value added for customers.

The Group's economic results are the expression of annual investments in research and development, the technological progress of products and processes and the improvement and consolidation of the commercial presence in the market.

In 2018, the Group began to invest in manufacturing facilities to ensure adequate volumes and proximity to significant markets, as well as new acquisitions in order to enter new markets.

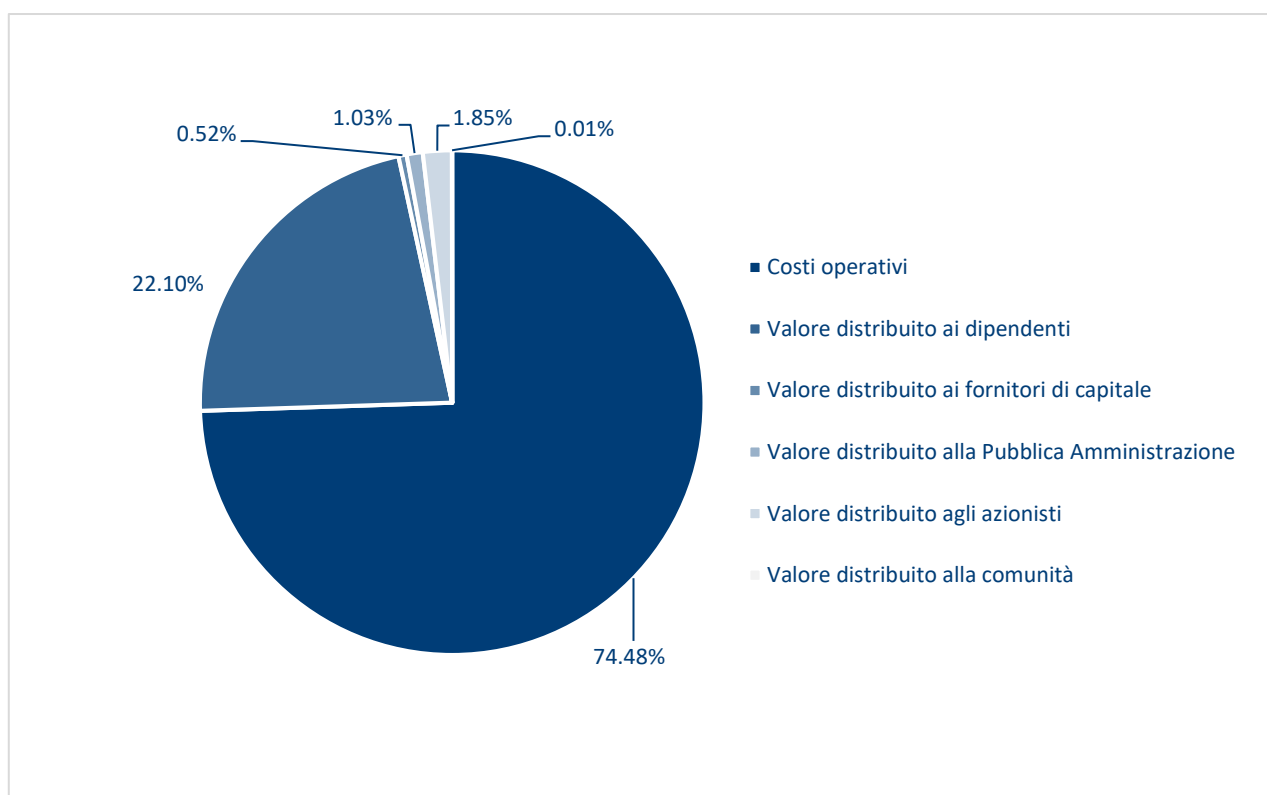
The Group is also committed to minimising net working capital in order to remain in a position of minimum risk for investors and to maintaining an adequate and competitive cost of production that can be reconciled with the best technological levels and the timing accepted by customers as well as by the market.

To ensure efficiency and quality when responding to market and customer demands, the Group has implemented a system of specific departments based on the various areas of expertise. 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.

### 4.1.1 KEY FIGURES IN 2018

DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED (IN THOUSANDS OF EURO)			
	2016	2017	2018
<b>Economic value generated</b>	<b>241,971</b>	<b>279,167</b>	<b>313,753</b>
<i>Revenues and operating income</i>	236,266	270,032	306,869
<i>Financial income</i>	2,055	1,633	1,241
<i>Change in inventories</i>	3,650	7,502	5,643
<b>Economic value distributed</b>	<b>219,218</b>	<b>256,573</b>	<b>284,304</b>
<i>Operating costs</i>	158,934	191,152	211,759
<i>Value distributed to employees</i>	49,902	56,280	62,823
<i>Value distributed to providers of capital</i>	1,794	1,462	1,483
<i>Value distributed to governments</i>	4,659	3,219	2,932
<i>Value distributed to shareholders</i>	3,876	4,416	5,265
<i>Value distributed to the community</i>	53	44	42
<b>Economic value withheld</b>	<b>22,752</b>	<b>22,594</b>	<b>29,449</b>

*Breakdown of economic value distributed in 2018*



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## 4.2 RESPECT FOR THE ENVIRONMENT

### 4.2.1 POLICY, MANAGEMENT MODEL, COORDINATION

The Group is committed to promoting a sense of responsibility to the environment across all levels of the organisation, and its actions are oriented towards observing all environmental protection requirements.

In order to define a standardised approach to the management of environmental aspects at all of its manufacturing sites, the Group intends to formalise a common **environmental policy** in 2019. This policy will define - for each relevant aspect - a series of guidelines to be followed by all manufacturing companies, translating the commitment formalised in the Code of Ethics to protect and safeguard the environment and standardising the commitments defined in the environmental policies already adopted by certain Group Companies (Italy and India).

In 2018 the Group conducted a series of **environmental and health & safety assessments** at five manufacturing sites. The assessments were conducted by a specialist third-party company and aimed to standardise the data collection methods used for non-financial reporting and identify a series of possible actions to improve and increase the efficiency of manufacturing activities, going beyond mere compliance with the legislation in force in the country in question.

In order to promote common practices, in 2018 a **coordinator** was appointed at Group level with responsibility over HSE matters, reporting directly to the COO. The coordinator will be responsible for ensuring the correct implementation of the improvement measures identified by the assessments and promoting the adoption of a management model standardised at Group level.

Several Group Companies in Italy and India have already adopted an organisational model certified according to international environmental management standard **ISO 14001**, while certain Group Companies in Italy have developed an energy management model certified according to international standard ISO 50001. ISO 14001 certification is expected for the site in Belluno, Italy in 2019 and the Polish site in 2020. This certification will later be standardised and extended across all of the Group's sites.

### 4.2.2 KEY FIGURES IN 2018

Total energy consumption by the Group's manufacturing companies was **199,265.1** GJ in 2018 and includes electricity sourced from the national grid, of which 2,509 GJ was certified as renewable, energy generated by the solar panel systems in place at the Group's sites and fuel used by the company fleet, the central heating systems and for production processes.

Following the energy efficiency measures implemented at the Group's sites in 2017, such as the replacement of part of the lighting system with LED bulbs at the Uboldo site and the introduction of a fume post-combustor system to reduce emissions and improve heat recovery at the Limana site, in 2018 positive results were achieved in terms of the reduction of energy consumption, with a total estimated saving of around 6,500 GJ during the year.

In line with last year, the photovoltaic panels at the Italian facilities made it possible to cover internal energy requirements for more than 2,500 GJ and satisfy a portion of the national grid

electricity demand, equal to around 300 GJ. Furthermore, some of the electricity bought by the Group is certified as renewable.

<b>ENERGY CONSUMPTION WITHIN THE ORGANISATION</b>			
<b>ENERGY CONSUMPTION FROM FOSSIL FUELS</b>			
	<b>2016</b>	<b>2017</b>	<b>2018</b>
Natural Gas	89,241.3	83,793	87,453.4
Diesel	7,799.5	9,409.1	10,968.8
Gasoline	668.4	557.4	903
LPG and propane	1,124.5	1,599.6	4,302.6
<b>Total</b>	<b>98,833.7</b>	<b>95,359.1</b>	<b>103,627.8</b>
<b>ENERGY CONSUMPTION FROM ACQUIRED ENERGY (GJ)</b>			
Electricity from the national electricity grid	74,732.5	81,042	85,391.8
District heating	6,183.3	6,822.6	7,648.1
<b>Total</b>	<b>80,915.8</b>	<b>87,864.6</b>	<b>93,039.9</b>
<b>ELECTRICITY SELF-GENERATED FROM RENEWABLE SOURCES (GJ)</b>			
Electricity from photovoltaics generated and consumed	2,619.1	2,729	2,597.4
Electricity from photovoltaics generated and sold	388.8	392.8	307
<b>Total</b>	<b>3,007.9</b>	<b>3,121.8</b>	<b>2,904.5</b>

<b>DIRECT GHG EMISSIONS (SCOPE 1) (tCO<sub>2eq</sub>)</b>			
	<b>2016</b>	<b>2017</b>	<b>2018</b>
Refilling of refrigerant gas <sup>12</sup>	503.7	220.4	78
Fuel consumption	5,766.6	5,603.6	5,527.3
<b>Total</b>	<b>6,270.3</b>	<b>5,824</b>	<b>5,605.3</b>

<sup>12</sup> In 2018 the refrigerant gases considered for the calculation of Scope 1 GHG emissions are: HFC-134a, R404A, R410A.



<b>INDIRECT GHG EMISSIONS (SCOPE 2) <sup>13</sup> (tCO<sub>2eq</sub>)</b>			
	<b>2016</b>	<b>2017</b>	<b>2018</b>
Electricity (market-based)	11,483.9	12,831.4	13,577.0
Electricity (location-based)	10,049.8	11,289.4	11,903.3
District heating	350.9	374.1	398.3
<b>Total (market-based)</b>	<b>11,834.8</b>	<b>13,205.5</b>	<b>13,975.3</b>
<b>Total (location-based)</b>	<b>10,400.7</b>	<b>11,663.5</b>	<b>12,301.5</b>

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 Group's various sites.

<b>OTHER ATMOSPHERIC EMISSIONS (kg) <sup>14</sup></b>		
		<b>2018</b>
CO		1,316
NOx		5,357
Particulate		462
VOC		4,867
Oil mist		164
Heavy metals	Copper	187
	Iron	165
	Zinc	13
	Aluminium	16
	Tin	3
	Lead	3

<sup>13</sup> Total emissions are expressed in CO<sub>2eq</sub> although the Scope 2 (location-based) emissions 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.

<sup>14</sup> Due to improvements to the data collection and calculation process, data from previous years is not compared to the data for 2018 as such a comparison could be misleading. For historical data published previously, refer to the 2017 Sustainability Report.

The Group's water consumption trends were stable in the reference three-year period. As regards water discharges, however, a significant variation can be seen in the values relative to discharge into surface water, owing to the introduction of a new calculation method at Group level which excludes rainwater, where possible.

<b>WATER WITHDRAWAL BY SOURCE<sup>15</sup> (m<sup>3</sup>)</b>			
	<b>2016</b>	<b>2017</b>	<b>2018</b>
Municipal water procurement	38,757	33,943	37,596
Owned wells	150,671	153,786	149,638
Other <sup>16</sup>	1,165	1,888	2,318
<b>Total</b>	<b>190,593</b>	<b>189,617</b>	<b>189,552</b>
<b>WATER DISCHARGES (m<sup>3</sup>)</b>			
	<b>2016</b>	<b>2017</b>	<b>2018</b>
Discharge into surface water	4,369.3	8,586.7	175.3
Discharge into sewer network	217,153.5	179,791.8	177,456.7
Other <sup>17</sup>	526.0	1,556.0	-
<b>Total</b>	<b>222,048.8</b>	<b>189,934.5</b>	<b>177,632</b>

Specifically, the item “other” relating to withdrawals refers to the use of cisterns for process water and drinking water at the Indian facility, while that relating to discharges refers to disposal as waste or transfer to painting systems or testing tanks.

As regards hazardous waste, the main types of hazardous waste deriving from Group operations are chemical compounds, such as lubricating oils and solvents, while as regards non-hazardous waste, the main types are processing scraps such as aluminium, copper, iron, packaging cardboard and, for some of the Group’s Italian companies, waste water resulting from manufacturing activities and disposed of as waste, in the absence of the sewer network.

<sup>15</sup> The information provided does not include the company Manifold S.r.l. for 2016, as the monitoring of water withdrawals, intended only for civil uses, began in 2017.

<sup>16</sup> The ‘other’ category refers to the water storage tanks present at the Indian factory.

<sup>17</sup> Please note that in 2018 the presence of more accurate data has enabled the data previously included under the item ‘Other’ to be included in the items ‘Discharge into surface water’ and ‘Discharge into sewer network’.

<b>HAZARDOUS AND NON-HAZARDOUS WASTE BY DISPOSAL METHOD(T)</b>			
	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Total hazardous waste</b>	<b>483.8</b>	<b>318.5</b>	<b>241.0</b>
Recycling or reuse	83.2	77.8	106.0
On-site storage	187.7	20.7	16.2
Disposal in the landfill	149.7	56.2	77.8
Energy recovery <sup>18</sup>	-	-	8.5
Other <sup>19</sup>	63.2	163.8	32.6
<b>Total non-hazardous waste</b>	<b>5,071.3</b>	<b>5,240.1</b>	<b>5,887.7</b>
Recycling or reuse	4,624.1	4,909.6	5,460.9
On-site storage	23.3	54.5	36.4
Disposal in the landfill	190.6	101.1	91.9
Energy recovery <sup>20</sup>	-	-	34.9
Other <sup>21</sup>	233.3	174.9	263.6
<b>Total waste</b>	<b>5,555.1</b>	<b>5,558.6</b>	<b>6,128.7</b>

Please note that in 2018, as part of a test conducted in a controlled environment at the facility of the company SEST S.p.A. certain anomalies were observed in the levels measured at one of the two cisterns used to store processing effluents. Following a number of checks, the company emptied the tanks, issued immediate notification of the methods pursuant to Article 242 of Italian Legislative Decree no. 152/06, and subsequently updated the Authorities on the progress of the activities. At the same time, as agreed with the local authorities the company acted to implement the measures necessary to ensure the safety of the area and to investigate any impact on the environmental matrices.

As regards environmental monitoring, the results of the analyses conducted for the land matrix following the removal of the primary source showed that all samples were in line with the limits established by current regulations. As regards groundwater, initial results highlighted certain excesses to the legal limit for the concentration of iron and nickel (only close to the storage point), but the trends identified by the results of further sampling activities demonstrate that this phenomenon is diminishing, with concentrations already falling below the permitted limits by late November 2018. The result of the environmental assessments did not identify any risks for human workers present at the site.

<sup>18</sup> For the years 2016 and 2017 waste destined for energy recovery was included under the category 'Recycling, reuse and recovery'.

<sup>19</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>20</sup> For the years 2016 and 2017 waste destined for energy recovery was included under the category 'Recycling, reuse and recovery'.

<sup>21</sup> The category 'Other' refers primarily to waste disposed of through chemical/physical treatment and biological treatment for both hazardous and non-hazardous waste.

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## OUR ENVIRONMENTAL RISK MANAGEMENT AND MITIGATION MODEL

Having assessed the non-financial risks, the LU-VE Group has identified the management of water consumption and discharge, the management of atmospheric emissions and waste management as key issues upon which to focus its attention.

In order to adequately monitor possible risks associated with these environmental aspects, every Group Company has an appointed representative responsible for overseeing and managing environmental aspects at each manufacturing site. This representative is also responsible for disclosures to local authorities and, where necessary, may engage specialist third-party companies (for example, in relation to investigations regarding atmospheric emissions and waste treatment).

Processes to monitor the environmental performance of production sites with regard to the environmental aspects deemed to be significant are in place at Group level. The identification of an HSE coordinator at Group level represents another step in sharing best practices among the Group's various manufacturing companies and the implementation of optimisation measures.

Furthermore, the Group adopts a preventive approach in the management of environmental risks through the presence of management systems in line with international standard ISO 14001, which provides for the analysis of significant environmental risks at each individual site. The Uboldo site in Italy and the Group's factory in India already hold this certification. Management models in line with the international standard are currently being implemented at the Italian site of Limana and the Group's facility in Poland. These models will be rolled out to other foreign sites in the future.

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## 4.3 QUALITY OF LIFE

### 4.3.1 A MORE LIVEABLE, ADVANCED AND AWARE WORLD

The quality of life of every individual benefits from the refrigeration market every day, so much so that it has become one of the main indicators linked to the growth of developing countries.

The great developments in the refrigeration sector in the last 150 years have helped to improve people's quality of life in various contexts, from nutrition - removing the barrier between climate and season, to technology, thanks to cooling systems in place at data center rooms, to health and the medical sector.

In particular, food conservation and the control of air temperature, humidity and purity levels in specific environments are closely linked to a range of modern social challenges such as reducing food waste and safeguarding people's health. Indeed, technological developments in these sectors are affecting increasingly broader contexts and are constantly evolving.

The Group's awareness of the value and importance of solutions designed to improve human well-being and quality of life is represented by its desire to actively contribute to the creation of a more liveable, advanced and aware world, as expressed by its vision and the company mission.

Thanks to the skills and knowledge gained over the years by its Design, Research and Development Department, the LU-VE Group is focused on research and the support of technological initiatives capable of making a positive impact on people's quality of life. The relationships with universities and research centres managed by the Department make it possible to identify and pursue innovative and experimental projects across multiple fields, in advanced countries as well as in the most rapidly growing developing countries.

In 2018 in particular, the LU-VE Group consolidated its commitment to sharing its know-how and distinctive skills to promote the adoption of high-performance and environmentally friendly solutions, with particular reference to warm climates. Furthermore, the Group conducted new experiments to continue to ensure the quality of close control systems.

### 4.3.2 KEY INITIATIVES IN 2018

In 2018, as part of the **INDEE project** LU-VE Group experts held various sessions at the University of Chennai in India aimed at students and teachers, with the purpose of sharing technological know-how regarding refrigeration using natural refrigerant fluids.

In partnership with the University of Norway, the Group has developed a demonstrative system capable of simulating the operating conditions of a transcritical plant and evaluating the sustainability of CO<sub>2</sub> fluids in the process of conserving foodstuffs.

During the project, participants were able to expand their understanding of aspects relating to the dimensions of CO<sub>2</sub> refrigeration systems and learn about the application of this technology in countries characterised by hot climates such as India.

Raising awareness among local communities is part of a wider plan to move the so-called “CO<sub>2</sub> equator”, enabling these technologies to be applied in countries where the climatic conditions would have previously rendered this impossible. This aim is of strategic importance to the sustainability of the refrigeration sector as India is currently characterised by a growing population and increasing demand for air conditioning systems. In this regard, the diffusion of more efficient technologies could help to reduce the sector's environmental impacts.



In the context of CO<sub>2</sub> solutions, in 2018 the LU-VE Group completed the installation of the **first transcritical system** in the Middle East in a supermarket in Amman, the capital city of Jordan. In this case, the technological innovations introduced by the LU-VE Group enabled the installation of a CO<sub>2</sub> system in an arid climate characterised by very high temperatures.

In particular, to ensure maximum heat exchange efficiency, the LU-VE Group provided the heat exchanges, gas coolers and air coolers. The project was part of an extensive partnership between the LU-VE Group and its trade partners and the Jordanian Ministry of Environment, financed by the Climate and Clean Air Coalition and coordinated by the United Nations Industrial Development Organisation (UNIDO). The project represents an important milestone in the distribution of environmentally friendly systems in subequatorial climates.

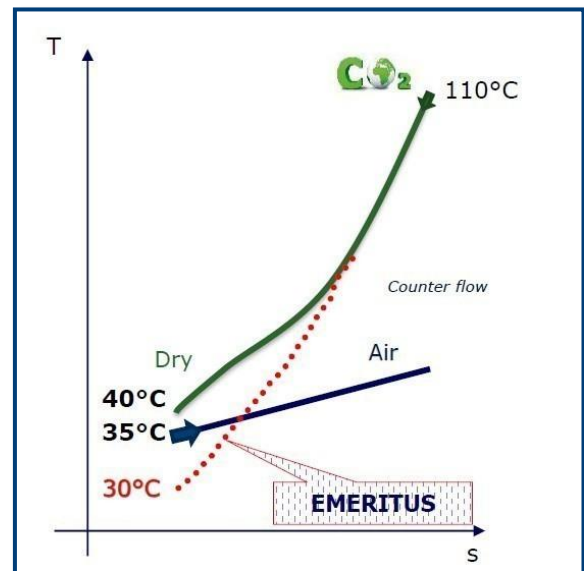
Furthermore, in 2018 the LU-VE Group also contributed to the installation of the first transcritical CO<sub>2</sub> system in Serbia, at a supermarket in the city of Belgrade.

**CO<sub>2</sub> SOLUTIONS: EXCEEDING THE LIMITS IN HOT CLIMATES**

In terms of its thermo-physical properties, CO<sub>2</sub> is characterised by a high evaporation temperature and low viscosity, making it a highly efficient refrigerant fluid with low pressure losses but which presents specific system limitations. In particular, compared to HFC fluids CO<sub>2</sub> requires higher pressures, increasing as the external temperatures rise. For example, at an external temperature of 30°C, CO<sub>2</sub> requires a level of pressure over five times that required by HFC fluids.

To overcome these barriers and optimise system performance, in transcritical conditions it is necessary to lower the outlet temperature of CO<sub>2</sub> as much as possible. Lowering the output temperature can be achieved by designing a circuit that brings the temperature of the CO<sub>2</sub> closer to that of the external temperature, or by reducing the so-called parasitic heat, namely the heat exchanged by the hot and cold pipes of the unit.

The LU-VE Group's response to the challenges that characterise CO<sub>2</sub> refrigeration systems is the Emeritus system which, thanks to its combination of adiabatic pre-cooling technology and the spray system, enables the outlet temperature of CO<sub>2</sub> to be reduced when operating in sub-critical conditions at temperatures over 30°C.



In fact, it is only thanks to the system developments and technological solutions introduced by the LU-VE Group that CO<sub>2</sub> refrigeration systems have become competitive and high-performing even in conditions characterised by very high external temperatures.

With reference to close control systems, the trend in operating room systems is seeing an increasingly widespread use of unidirectional filtering ceilings, commonly referred to as “laminar ceilings”. These ceilings make it possible to generate a unidirectional flow of perfectly sterile air which descends at low speed so as not to create any turbulence, rather than having the traditional blast of clean air which mixes with the internal air and slowly dilutes its contamination. In this manner, the air is free of any form of particulate within the sterile area of the operating table.

In 2018, working in collaboration with Milan Polytechnic University, the LU-VE Group carried out various laboratory tests to measure the turbulence under filtering ceilings for operating theatres and, in particular, compared the results to the reference technical standards. The tests showed that the ceilings produced by the LU-VE Group guarantee levels of turbulence which are significantly lower than the legal limit. In fact, all forms of turbulence must be carefully avoided to ensure that the air does not bring contaminants into the most critical areas.

The close control air conditioning solutions offered by the LU-VE Group provide multiple benefits. First of all, these solutions offer greater patient protection as particulate, a possible carrier of virologic or bacterial contamination, cannot come into contact with the wound or surgical instruments. In addition, the unidirectional flow makes the room more usable as it considerably improves the recovery time, or the period of time required after each operation for the air

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conditioning system to dilute contamination until returning to the required air quality level. The recovery time declines from roughly 15 minutes for a room with turbulent air distribution to just a few seconds for a room with unidirectional distribution.



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## 5. METHODOLOGICAL NOTE

This document is the second 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 the “LU-VE Group”). As laid out in Article 5 of Italian Legislative Decree 254/16, this document constitutes a separate report featuring dedicated wording to identify it as the Consolidated 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 254/16.

The topics reported in this document were identified by the materiality analysis conducted for the previous year, confirmed in 2018 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. Similarly, the stakeholders and the main requests identified are unchanged from those indicated in the 2017 Sustainability Report.

The scope of the financial data is the same as the scope of the 2018 Consolidated Financial Statement, while the reporting boundary, in line with the requirements of the Decree, includes all LU-VE Group Companies consolidated line-by-line, except for India Corporation Private Ltd (India) in 2018 which was not considered relevant to the consolidation (3 employees in 2017). As concerns the environmental data, 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. Furthermore, please note that the environmental data for 2018 does not include the company Zyklus Heat Transfer Inc. as this was acquired during the reporting period.

In 2018 the major organisational changes regarded the integration into the Group of the US company Zyklus Heat Transfer Inc., a company specialising in the manufacture of heat exchangers for the commercial refrigeration, refrigerated transportation and air conditioning sectors, the expansion of the manufacturing site in Gliwice, Poland, and the transfer of manufacturing operations in China from the Province of Changshu to Tianmen. 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 Structures, both available on the company's website.

The data and information provided in this document refers to the activities carried out by the LU-VE Group in 2018 (from January to December 2018), 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 document was prepared in compliance with the fifth generation of the guidelines on sustainability reporting of the Global Reporting Initiative (GRI), the 2016 GRI Sustainability Reporting Standards, according to the “Core” option and in accordance with the required principles

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of content and quality. The end of the document contains a table with an index of the content relating to the GRI requirements, both general and connected to specific material topics.



The **Global Reporting Initiative** (GRI) is an independent international organisation headquartered in Amsterdam and established in 1997 to develop and promote a methodology for the preparation of a document that describes the economic, environmental and social impacts that a business generates with its activities.

The dissemination of the GRI guidelines has favoured the creation of a shared vocabulary of sustainability and made it possible to compare the economic, environmental and social performance of businesses and organisations over time and across distances, irrespective of their sectors.

The **GRI Standards**, the most recent evolution of the guidelines, currently represent the main point of reference at national and international level for non-financial reporting.

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 the LU-VE Group presented in this document is portrayed within the wider context of the sustainability of the Company's business.
- **Stakeholder inclusivity:** this document identifies the Group's stakeholders and the methods whereby their interests were taken into account in the definition of the document's content.
- **Materiality:** the topics reported on were identified based on their relevance for the Group's business, as well as its stakeholders. In the next year, the Group proposes the progressive development of stakeholder engagement and feedback methods, gradually increasing the engagement of external stakeholders with reference to non-financial topics. Furthermore, the Group intends to identify the most suitable engagement tools and methods in response to the characteristics and requirements of the various reference groups.

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*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)

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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 evaluate the sustainability performance of the LU-VE Group in the reporting period.
- **Reliability:** the data presented in this document were gathered, processed and validated by the managers of each department with the collaboration of a consultancy 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 2016-2018 three-year period and accompanied by a comment relating to their trends so as to enable comparisons between Group performance over time. Please note that the comparative data presented in relation to the year ending 31 December 2016 was not subject to limited audit.
- **Balance:** the content of this document reports on the LU-VE Group's performance in the reporting period in a balanced manner.
- **Timeliness:** the Report takes into consideration events that took place after 31 December 2018 which could be significant for the assessment of the Group's performance by stakeholders.

The main stakeholders, whose requests were taken into consideration during the topic selection process, are listed in the table below. In 2018 stakeholder expectations were broadly in line with those identified by the Group.

STAKEHOLDERS	MAIN EXPECTATIONS	MAIN INSTRUMENTS FOR FEEDBACK AND ENGAGEMENT
<b>Shareholders and Investors</b>	<ul style="list-style-type: none"> <li>· Management of the privileged 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 Register</li> <li>· One-to-one meetings</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>· Capacity to meeting requirements in product design</li> <li>· Service vicinity</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>Employees</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>· Climate and satisfaction surveys</li> </ul>
<b>Regulatory entities and other associations</b>	<ul style="list-style-type: none"> <li>· Maintenance of the 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 and Sustainability Report</li> <li>· Dedicated communications</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</li> </ul>

For each material topic, the scope of impacts and the GRI Disclosure applied are indicated.

MATERIAL TOPICS IDENTIFIED BY THE LU-VE GROUP		Scope of impacts		
	Topic	Parties generating impacts	Type of impact	Reconciliation with GRI Topics
Responsible growth	1. Growth strategies	Entire Group	Direct	202 - Market presence
	2. Women, men and ideas	Entire Group	Direct	404 - Training and education 405 - Diversity and equal opportunity
	3. The well-being of our people	Entire Group <sup>22</sup>	Direct	401 - Employment 403 - Occupational health and safety
Distinctive positioning	4. Customer-focused approach	Entire Group	Direct Indirect	416 - Customer health and safety
	5. Cutting-edge solutions	Entire Group	Direct	417 - Marketing and labelling
	6. Sales ethics	Entire Group	Direct Indirect	205 - Anti-corruption 206 - Anti-competitive behaviour 307 - Environmental compliance 419 - Socioeconomic compliance
Creation of shared value	7. Economic and financial sustainability	Entire Group	Direct	201 - Economic performance
	8. Reduction of environmental impact	Entire Group	Direct Indirect	302 - Energy 303 - Water 305 - Emissions 306 - Effluents and waste
	9. Quality of life	Entire Group	Direct Indirect	N/A

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 are reported in detail under the respective chapters.

<sup>22</sup> As regards occupational health and safety, the persons who generate impacts are employees. The organisation evaluates the possibility of gathering data from the employers of external collaborators and suppliers who work at the Group sites in order to report on any accidents and occupational illnesses.

The association between the topics covered by Italian Legislative Decree 254 and the material topics subject to this Non-Financial Disclosure are given below.

		1. Strategie di crescita	2. Benessere delle nostre persone	3. Donne, uomini e idee	4. Orientamento al cliente	5. Soluzioni d'avanguardia	6. Etica commerciale	7. Sostenibilità economico - finanziaria	8. Riduzione dell'impatto ambientale	9. Qualità della vita
Ambiente	L'utilizzo di risorse energetiche					x		x		
	Risorse idriche							x		
	Emissioni di gas a effetto serra					x		x		
	Emissioni inquinanti in atmosfera					x		x		
	Altri impatti (rifiuti, consumo di materia prima, logistica)					x		x		
Società	Salute e Sicurezza		x							
	Parità di genere		x							
	Dialogo con le parti sociali		x							
	Altri aspetti rilevanti			x					x	
Rispetto dei diritti umani	<i>Ad oggi non ritenuto materiale</i>									
Lotta contro la corruzione							x			

Please note that the topic of human rights is not currently considered significant by the Group based on assessments conducted by the Parent Company Departments in relation to the activity carried out by the Group and the characteristics of its relations with customers, suppliers and employees. Therefore, this topic is not reported on within this document.

This NFS has been subject to an assessment of compliance by an independent auditing firm. In this regard, the independent auditing firm has issued a separate report declaring the compliance of the information provided to the provisions of Article 3, paragraph 10 of Italian Legislative Decree 254/2016. This assessment was conducted according to the procedures identified in the "Report of the auditing firm" annexed to this document.

This document was also approved by the LU-VE S.p.A. Board of Directors on 22 March 2019 and is published on the website of the LU-VE Group ([www.luvegroup.com](http://www.luvegroup.com)) in the "Investor relations" - Sustainability section.

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## 5.1 THE CALCULATION METHODOLOGY

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

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

- Italy, including LU-VE S.p.A., TECNAIR LV S.p.A., MANIFOLD S.r.l., LUVEDIGITAL S.r.l., SEST S.p.A. and THERMO GLASS DOOR S.p.A. (TGD);
- European Union countries, including HEAT TRANSFER SYSTEMS (HTS) s.r.o. (Czech Republic), LU-VE SWEDEN AB (Sweden), SEST-LUVE-POLSKA Sp.z.o.o. (Poland), LU-VE France s.a.r.l. (France), LU-VE Deutschland GmbH (Germany) and LU-VE Iberica s.l. (Spain);
- Non-European Union countries, including LU-VE HEAT EXCHANGERS (CHANGSHU) LTD, SPIROTECH HEAT EXCHANGERS PRIVATE LIMITED, LU-VE India Corporation Private Ltd (India) - for the years 2016 and 2017, "OOO" SEST-LUVE (Russia), LU-VE Contardo Pacific Pty Ltd. (Australia) and Zyklus Heat Transfer Inc. (USA).

### 5.1.1 THE EMPLOYEES OF THE LU-VE GROUP

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 is expressed in the Head Count at 31 December. Furthermore, employees on secondment - one at LU-VE S.p.A. and two at SEST S.p.A - were considered among the workforces of the companies with whom the employment contracts are held, specifically HEAT TRANSFER SYSTEMS (HTS) s.r.o., "OOO" SEST-LUVE and LU-VE HEAT EXCHANGERS (CHANGSHU) LTD.

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.

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.

Following the acquisition in 2018 of the company Zyklus Heat Transfer Inc., please note that the workforce data for 2017 and the hirings and departures in 2018 cannot be compared with the workforce data of 2018.

Information regarding benefits has not been reported for Zyklus Heat Transfer Inc.

### 5.1.2 ACCIDENT RATIOS

The accident ratios were calculated as reported below:

- Frequency rate: number of accidents/hours worked\*1,000,000
- Severity rate: number of days lost per accident/workable hours\*1,000,000
- Absenteeism rate: number of days of absenteeism/workable days\*100
- Occupational illness rate: number of cases of occupational illness/hours worked\*1,000,000

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

Commuting accidents are not included in the calculation of the frequency and severity rates in 2018.

The calculation of the accident frequency and severity rate and the absenteeism rate, broken down by geographical area and gender, includes hours worked and any accidents of the three workers on secondment, one at LU-VE S.p.A. and two at SEST S.p.A.

### 5.1.3 SALARY AND REMUNERATION

To calculate 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 the three workers on secondment - one at LU-VE S.p.A. and two at SEST S.p.A. - was considered with reference to the country to which the employees have been seconded.

### 5.1.4 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 2016, 2017 and 2018.

Energy savings have been calculated from comparative analyses based on direct measurements, where available, carried out before and after the implementation of energy optimisation measures. In the absence of direct measurements, the data reported has been derived from estimates based on expected consumption values.

### 5.1.5 GREENHOUSE GAS EMISSIONS

Emissions were calculated in terms of CO<sub>2</sub> equivalent (gases including: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O) according to the following method:

- **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 2016, 2017 and 2018 editions.
- **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 2016” published by the Association of Issuing Bodies (AIB) in 2017 for the 2016 and 2017 data, and Figure 4 of the document “European Residual Mixes 2017” published by the AIB in 2018 for the 2018 data. For the countries for which the 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, 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 (2016) for 2018 and the previous version (2015) for 2016 and 2017. Lastly, for the calculation of emissions relating to

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consumption from district heating, the coefficients used are those reported in DEFRA's "UK Government GHG Conversion Factors for Company Reporting" in the 2016, 2017 and 2018 editions.

The indicators reported represent the best possible estimate on the basis of the data available when this document was prepared.



## 6. 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	§ What We Do: Our products and areas of application, p. 6 § Cutting-edge solutions, p. 35, 37-39
102-3	Location of headquarters	Via Caduti della Liberazione, 53, 21040 Uboldo VA, Italy
102-4	Location of operations	§ Thirty years of growth, p. 5
102-5	Ownership and legal form	§ Thirty years of growth, p. 5 Report on Corporate Governance and Ownership Structure 2018, “Information on Ownership Structure” section
102-6	Markets served	§ Growth strategies, p. 13 -15
102-7	Scale of the organisation	§ Thirty years of growth, p. 5 § Women, men and ideas, p. 17 § Economic and financial sustainability, p. 44
102-8	Information on employees and other workers	§ Women, men and ideas, p. 19-20 § Methodological Note, p. 54, 59
102-9	Supply chain	§ How we work: from design to customer, p. 7
102-10	Significant changes to the organisation and its supply chain	§ Methodological Note, p. 54 § Growth strategies, p. 13
102-11	Precautionary principle or approach	In all of its actions, the LU-VE Group applies the principle of prudence by carefully monitoring its activities. § The governance model and internal control and risk management system, p. 8-10
102-12	External initiatives	§ The governance model and internal control and risk management system, p. 8-10 § The topics that tell our story, p. 11 § Respect for the environment, p. 45 § Methodological Note, p. 54-55
102-13	Membership of associations	Eurovent Certification (LU-VE S.p.A.), Unindustria Varese (LU-VE S.p.A. and Tecnair LV S.p.A., Manifold Srl), Associazione Italiana Condizionamento dell’Aria, Riscaldamento e Refrigerazione [Italian Air Conditioning, Heating and Refrigeration Association] (Tecnair LV S.p.A.)
<b>Strategy</b>		
102-14	Statement from senior decision-maker	§ Letter to stakeholders, p. 1
<b>Ethics and Integrity</b>		
102-16	Values, principles, standards and norms of behaviour	§ The governance model and internal control and risk management system, p. 8-10 § Sales ethics, p. 40-41
<b>Governance</b>		
102-18	Governance structure	§ The governance model and internal control and risk management system, p. 8
<b>Stakeholder engagement</b>		
102-40	List of stakeholder groups	§ Methodological Note, p. 56

General Standard Disclosures	Description of General Standard Disclosures	Page, references, notes and any omissions
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102-42	Identifying and selecting stakeholders	§ Methodological Note, p. 56
102-43	Approach to stakeholder engagement	§ Methodological Note, p. 56
102-44	Key topics and concerns raised	§ Methodological Note, p. 56
<b>Reporting practice</b>		
102-45	Entities included in the consolidated financial statements	§ Methodological Note, p. 54
102-46	Defining report content and topic Boundaries	§ The topics that tell our story, p. 11 § Methodological Note, p. 54-61
102-47	List of material topics	§ The topics that tell our story, p. 11 § Methodological Note, p. 57
102-48	Restatements of information	§ Methodological Note, p. 54 § Women, men and ideas, p. 18
102-49	Changes in reporting	§ Methodological Note, p. 54, 59-61
102-50	Reporting period	§ Methodological Note, p. 54
102-51	Date of most recent report	05 April 2018
102-52	Reporting cycle	Annual
102-53	Contact point for questions regarding the report	§ Methodological Note, p. 55
102-54	Claims of reporting in accordance with the GRI Standards	§ Methodological Note, p. 54-56
102-55	GRI Content Index	§ GRI content index, p. 62-67
102-56	External assurance	§ Report of the auditing firm, p. 68-70

## Specific Standard Disclosures

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Economic performance		
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GRI 201-1	Direct economic value generated and distributed	§ Economic and financial sustainability, p. 44
<b>Market presence</b>		
GRI 103-1		§ Methodological Note, p. 54-58
GRI 103-2	Management approach disclosures	§ Growth strategies, p. 13 -14
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Specific Standard Disclosures	Description of Specific Standard Disclosures	Page, references, notes and any omissions
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GRI 103-2	Management approach disclosures	§ Methodological Note, p. 54-58
GRI 103-3		§ Sales ethics, p. 40-41
GRI 205-3	Confirmed incidents of corruption and actions taken	§ Sales ethics, p. 41
<b>Anti-competitive behaviour</b>		
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GRI 103-2	Management approach disclosures	§ Methodological Note, p. 54-58
GRI 103-3		§ Sales ethics, p. 40-41
GRI 206-1	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	§ Sales ethics, p. 41
<b>Environmental performance indicators</b>		
<b>Energy</b>		
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GRI 103-3		§ Respect for the environment, p. 45-46
GRI 302-1	Energy consumption within the organisation	§ The calculation methodology, p. 60
GRI 302-4	Reduction of energy consumption	§ Respect for the environment, p. 45 § The calculation methodology, p. 60
GRI 302 - 5	Reductions in energy requirements of products and services	§ Cutting-edge solutions, p. 37
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GRI 103-2	Management approach disclosures	§ Respect for the environment, p. 45, 50
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Specific Standard Disclosures	Description of Specific Standard Disclosures	Page, references, notes and any omissions
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GRI 103-3		
GRI 305-1	Direct (Scope 1) GHG emissions	§ Respect for the environment, p. 46 § The calculation methodology, p. 60
GRI 305-2	Energy indirect (Scope 2) GHG emissions	§ Respect for the environment, p. 47 § The calculation methodology, p. 60-61
GRI 305-6	Emissions of ozone-depleting substances (ODS)	In 2016 and 2017, the company LU-VE HEAT EXCHANGERS (CHANGSHU) LTD registered 4.3 kg and 8.9 kg of R401a refrigerant gas leaks, respectively, equal to 0.158 kg of CFC-11 equivalent for 2016 and 0.326 kg of CFC-11 equivalent for 2017. In 2018 no leaks of refrigerant gases with ozone-depleting potential greater than 0 were identified.  Source of emission factors: Ozone Secretariat UNEP, Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer (10 <sup>th</sup> edition, 2016).
GRI 305-7	Nitrogen oxides (NOx) and sulphur oxides (SOx) and other significant air emissions	§ Respect for the environment, p. 47
<b>Effluents and waste</b>		
GRI 103-1		§ Methodological Note, p. 54-58
GRI 103-2	Management approach disclosures	§ Respect for the environment, p. 45, 50
GRI 103-3		
GRI 306-1	Water discharge by quality and destination	§ Respect for the environment, p. 48
GRI 306-2	Waste by type and disposal method	§ Respect for the environment, p. 48-49
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Specific Standard Disclosures	Description of Specific Standard Disclosures	Page, references, notes and any omissions
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GRI 401-1	New employee hires and employee turnover broken down by age, gender and region	§ The well-being of our people, p. 27-28 § The calculation methodology, p. 59
GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	§ The well-being of our people, p. 25-26
<b>Occupational health and safety</b>		
GRI 103-1		
GRI 103-2	Management approach disclosures	§ Methodological Note, p. 54-58 § The well-being of our people, p. 22-25
GRI 103-3		
GRI 403-2	Types of injury and rates of injury, occupational diseases, lost days and absenteeism, and total number of work-related fatalities broken down by geographic area and gender	§ The well-being of our people, p. 26 § The calculation methodology, p. 59-60
<b>Training and education</b>		
GRI 103-1		
GRI 103-2	Management approach disclosures	§ Methodological Note, p. 54-58 § Women, men and ideas, p. 16-17, 21
GRI 103-3		
GRI 404-1	Average hours of training per year per employee and gender	§ Women, men and ideas, p. 21
<b>Diversity and equal opportunity</b>		
GRI 103-1		
GRI 103-2	Management approach disclosures	§ Methodological Note, p. 54-58 § Women, men and ideas, p. 16
GRI 103-3		
GRI 405-1	Diversity of governance bodies and employees by category according to gender, age and other diversity indicators	§ Women, men and ideas, p. 18-19 § The calculation methodology, p. 59
GRI 405-2	Ratio of average salary of women and men	§ Women, men and ideas, p. 20 § The calculation methodology, p. 60
<b>Customer health and safety</b>		

Specific Standard Disclosures	Description of Specific Standard Disclosures	Page, references, notes and any omissions
GRI 103-1		§ Methodological Note, p. 54-58
GRI 103-2	Management approach disclosures	§ Customer-focused approach, p.31
GRI 103-3		
GRI 416-1	Assessment of the health and safety impacts of product and service categories	§ Customer-focused approach, p.31
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GRI 103-2	Management approach disclosures	§ Cutting-edge solutions, p. 30
GRI 103-3		§ Sales ethics, p. 40-41
GRI 417 - 2	Incidents of non-compliance concerning product and service information and labelling	§ Sales ethics, p. 41
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GRI 103-2	Management approach disclosures	§ The governance model and internal control and risk management system, p. 8-10
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GRI 419-1	Non-compliance with laws and regulations in the social and economic area	§ Sales ethics, p. 41
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GRI 103-3		

# REPORT OF THE AUDITING FIRM



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## RELAZIONE DELLA SOCIETÀ DI REVISIONE INDIPENDENTE SULLA DICHIARAZIONE CONSOLIDATA DI CARATTERE NON FINANZIARIO AI SENSI DELL'ART. 3, C. 10, D.LGS. 254/2016 E DELL'ART. 5 REGOLAMENTO CONSOB ADOTTATO CON DELIBERA N. 20267 DEL GENNAIO 2018

### Al Consiglio di Amministrazione della LU-VE S.p.A.

Ai sensi dell'articolo 3, comma 10, del Decreto Legislativo 30 dicembre 2016, n. 254 (di seguito "Decreto") e dell'articolo 5 del Regolamento CONSOB n. 20267/2018, siamo stati incaricati di effettuare l'esame limitato ("limited assurance engagement") della dichiarazione consolidata di carattere non finanziario della Società LU-VE S.p.A. e sue controllate (di seguito "Gruppo LU-VE" o "Gruppo") relativa all'esercizio chiuso al 31 dicembre 2018 predisposta ex art. 4 del Decreto e approvata dal Consiglio di Amministrazione in data 22 marzo 2019 (di seguito "DNF").

### Responsabilità degli Amministratori e del Collegio Sindacale per la DNF

Gli Amministratori sono responsabili per la redazione della DNF in conformità a quanto richiesto dagli articoli 3 e 4 del Decreto e ai "Global Reporting Initiative Sustainability Reporting Standards" definiti nel 2016 dal GRI - Global Reporting Initiative (di seguito "GRI Standards"), da essi individuati come standard di rendicontazione.

Gli Amministratori sono altresì responsabili, nei termini previsti dalla legge, per quella parte del controllo interno da essi ritenuta necessaria al fine di consentire la redazione di una DNF che non contenga errori significativi dovuti a frodi o a comportamenti o eventi non intenzionali.

Gli Amministratori sono responsabili inoltre per l'individuazione del contenuto della DNF, nell'ambito dei temi menzionati nell'articolo 3, comma 1, del Decreto, tenuto conto delle attività e delle caratteristiche del Gruppo e nella misura necessaria ad assicurare la comprensione dell'attività del Gruppo, del suo andamento, dei suoi risultati e dell'impatto dallo stesso prodotti.

Gli Amministratori sono infine responsabili per la definizione del modello aziendale di gestione e organizzazione dell'attività del Gruppo, nonché, con riferimento ai temi individuati e riportati nella DNF, per le politiche praticate dal Gruppo e per l'individuazione e la gestione dei rischi generati o subiti dallo stesso.

Il Collegio Sindacale ha la responsabilità della vigilanza, nei termini previsti dalla legge, sull'osservanza delle disposizioni stabilite nel Decreto.

### Indipendenza della società di revisione e controllo della qualità

Siamo indipendenti in conformità ai principi in materia di etica e di indipendenza del Code of Ethics for Professional Accountants emesso dall'International Ethics Standards Board for Accountants, basato su principi fondamentali di integrità, obiettività, competenza e diligenza professionale, riservatezza e comportamento professionale. La nostra società di revisione applica l'International Standard on Quality Control 1 (ISQC Italia 1) e, di conseguenza, mantiene un sistema di controllo qualità che include direttive e procedure documentate sulla conformità ai principi etici, ai principi professionali e alle disposizioni di legge e dei regolamenti applicabili.

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**Responsabilità della società di revisione**

È nostra la responsabilità di esprimere, sulla base delle procedure svolte, una conclusione circa la conformità della DNF rispetto a quanto richiesto dal Decreto e ai GRI Standards. Il nostro lavoro è stato svolto secondo quanto previsto dal principio "International Standard on Assurance Engagements ISAE 3000 (Revised) - Assurance Engagements Other than Audits or Reviews of Historical Financial Information" (di seguito "ISAE 3000 Revised"), emanato dall'International Auditing and Assurance Standards Board (IAASB) per gli incarichi *limited assurance*. Tale principio richiede la pianificazione e lo svolgimento di procedure al fine di acquisire un livello di sicurezza limitato che la DNF non contenga errori significativi. Pertanto, il nostro esame ha comportato un'estensione di lavoro inferiore a quella necessaria per lo svolgimento di un esame completo secondo l'ISAE 3000 Revised ("reasonable assurance engagement") e, conseguentemente, non ci consente di avere la sicurezza di essere venuti a conoscenza di tutti i fatti e le circostanze significativi che potrebbero essere identificati con lo svolgimento di tale esame.

Le procedure svolte sulla DNF si sono basate sul nostro giudizio professionale e hanno compreso colloqui, prevalentemente con il personale della società responsabile per la predisposizione delle informazioni presentate nella DNF, nonché analisi di documenti, ricalcoli ed altre procedure volte all'acquisizione di evidenze ritenute utili.

In particolare, abbiamo svolto le seguenti procedure:

1. analisi dei temi rilevanti in relazione alle attività e alle caratteristiche del Gruppo rendicontati nella DNF, al fine di valutare la ragionevolezza del processo di selezione seguito alla luce di quanto previsto dall'art. 3 del Decreto e tenendo presente lo standard di rendicontazione utilizzato;
2. analisi e valutazione dei criteri di identificazione del perimetro di consolidamento, al fine di riscontrarne la conformità a quanto previsto dal Decreto;
3. comparazione tra i dati e le informazioni di carattere economico-finanziario inclusi nella DNF e i dati e le informazioni inclusi nel Bilancio Consolidato del Gruppo LU-VE;
4. comprensione dei seguenti aspetti:
  - modello aziendale di gestione e organizzazione dell'attività del Gruppo, con riferimento alla gestione dei temi indicati nell'art. 3 del Decreto;
  - politiche praticate dall'impresa connesse ai temi indicati nell'art. 3 del Decreto, risultati conseguiti e relativi indicatori fondamentali di prestazione;
  - principali rischi, generati o subiti, connessi ai temi indicati nell'art. 3 del Decreto.

Relativamente a tali aspetti sono stati effettuati inoltre i riscontri con le informazioni contenute nella DNF ed effettuate le verifiche descritte nel successivo punto 5, lett. a);

5. comprensione dei processi che sottendono alla generazione, rilevazione e gestione delle informazioni qualitative e quantitative significative incluse nella DNF.

In particolare, abbiamo svolto interviste e discussioni con il personale della Direzione della LU-VE S.p.A e con il personale di HEAT TRANSFER SYSTEMS (HTS) s.r.o., LU-VE SWEDEN AB, SEST S.p.A., SEST-LUVE-POLSKA Sp.z.o.o., SPIROTECH HEAT EXCHANGERS PRIVATE LIMITED e abbiamo svolto limitate verifiche documentali, al fine di raccogliere informazioni circa i processi e le procedure che supportano la raccolta, l'aggregazione, l'elaborazione e la trasmissione dei dati e delle informazioni di carattere non finanziario alla funzione responsabile della predisposizione della DNF.



Inoltre, per le informazioni significative, tenuto conto delle attività e delle caratteristiche del Gruppo:

- a livello di capogruppo e società controllate:
  - a) con riferimento alle informazioni qualitative contenute nella DNF, e in particolare al modello aziendale, alle politiche praticate e ai principali rischi, abbiamo effettuato interviste e acquisito documentazione di supporto per verificarne la coerenza con le evidenze disponibili;
  - b) con riferimento alle informazioni quantitative, abbiamo svolto sia procedure analitiche che limitate verifiche per accertare su base campionaria la corretta aggregazione dei dati.
- per le seguenti società e siti, sede operativa e sito produttivo di Uboldo per LU-VE S.p.A., sede operativa e sito produttivo di Novosedly per HEAT TRANSFER SYSTEMS (HTS) s.r.o., sede operativa e sito produttivo di Asarum per LU-VE SWEDEN AB, che abbiamo selezionato sulla base delle loro attività, del loro contributo agli indicatori di prestazione a livello consolidato e della loro ubicazione, abbiamo effettuato visite in loco nel corso delle quali ci siamo confrontati con i responsabili e abbiamo acquisito riscontri documentali circa la corretta applicazione delle procedure e dei metodi di calcolo utilizzati per gli indicatori.

#### **Conclusioni**

Sulla base del lavoro svolto, non sono pervenuti alla nostra attenzione elementi che ci facciano ritenere che la DNF del Gruppo LU-VE relativa all'esercizio chiuso al 31 dicembre 2018 non sia stata redatta, in tutti gli aspetti significativi, in conformità a quanto richiesto dagli articoli 3 e 4 del Decreto e ai GRI Standards.

#### **Altri aspetti**

I dati comparativi presentati nella DNF in relazione all'esercizio chiuso al 31 dicembre 2016, non sono stati sottoposti a verifica.

DELOITTE & TOUCHE S.p.A.

  
**Massimiliano Semprini**  
Socio

Milano, 4 aprile 2019

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## REPORT OF THE AUDITING FIRM

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### REPORT OF THE INDEPENDENT AUDITING FIRM ON THE CONSOLIDATED NON-FINANCIAL STATEMENT PURSUANT TO ARTICLE 3, PARAGRAPH 10 OF ITALIAN LEGISLATIVE DECREE NO. 254/2016 AND ARTICLE 5 OF THE CONSOB REGULATION ADOPTED WITH RESOLUTION NO. 20267 OF JANUARY 2018

To the Board of Directors of LU-VE S.p.A.

Pursuant to Article 3, paragraph 10 of Italian Legislative Decree no. 254 of 30 December 2016 (hereinafter the “Decree”), and Article 5 of CONSOB Regulation no. 20267/2018, we have been appointed to conduct the limited audit (“limited assurance engagement”) of the consolidated non-financial statement of the Company LU-VE S.p.A. and its subsidiaries (hereinafter “LU-VE Group” or “Group”) relative to the year ending at 31 December 2018 pursuant to Article 4 of the Decree and approved by the Board of Directors on 22 March 2019 (hereinafter the “NFS”).

#### **Responsibility of the Directors and the Board of Statutory Auditors for the NFS**

The Directors are responsible for the preparation of the NFS in line with the provisions of Articles 3 and 4 of the Decree and the “Global Reporting Initiative Sustainability Reporting Standards” defined in 2016 by the GRI – Global Reporting Initiative (hereinafter the “GRI Standards”).

The Directors are also responsible, under the terms provided for by law, for the internal control deemed necessary by the same in order to enable the drafting of a NFS that does not contain significant errors due to fraud or unintentional events or conduct.

Moreover, the Directors are responsible for identifying the content of the NFS, in the context of the topics set forth in Article 3, paragraph 1 of the Decree, considering the activities and characteristics of the Group and the extent necessary to provide an understanding of the Group’s activities, its progress, its results and the impacts of the same.

Finally, the Directors are responsible for defining the company management and organisation model for the Group’s activities as well as – with reference to the topics identified and reported in the NFS – for the policies adopted by the Group and for the identification and management of the risks generated or incurred by the same.

The Board of Statutory Auditors is responsible for monitoring, according to the terms set forth by law, the observance of the provisions established in the Decree.

## **Independence of the auditing firm and quality control**

We are independent according to the principles of ethics and independence set forth by the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, based on fundamental principles of integrity, objectivity, competence and professional diligence, confidentiality and professional conduct. Our auditing firm applies the International Standard on Quality Control 1 (ISQC Italy 1) and, consequently, implements a quality control system that includes documented directives and procedures regarding the compliance with ethical principles, professional principles and the applicable legal and regulatory provisions in force.

## **Responsibility of the auditing firm**

It is our responsibility to express, on the basis of the procedures carried out, a conclusion regarding the compliance of the NFS to the requirements set forth by the Decree and the GRI Standards. Our work has been carried out according to the provisions of the “International Standard on Assurance Engagement 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 appointments. This principle requires the planning and performance of procedures aimed at acquiring a level of limited assurance that the NFS does not contain significant errors. Therefore, our audit consisted of a less thorough examination compared to that necessary to perform a complete audit according to ISAE 3000 Revised (“reasonable assurance engagement”) and, consequently, does not enable us to provide full assurance to have learned all the significant facts and events that may otherwise be identified by the performance of a complete audit.

The procedures carried out on the NFS were based on our professional opinion and included interviews, predominantly with personnel of the company responsible for the preparation of the data presented in the NFS, as well as document analyses, recalculations and other procedures aimed at acquiring evidence deemed useful.

In particular, we performed the following procedures:

1. Analysis of the relevant topics in relation to the activities and characteristics of the Group reported in the NFS, in order to assess the reasonableness of the selection process in the light of the provisions of Article 3 of the Decree and considering the reporting standard used;
2. Analysis and assessment of the identification criteria for the scope of consolidation, in order to assess its compliance with the provisions of the Decree;
3. Comparison of economic and financial data included in the NFS with the data and information reported in the Consolidated Financial Statements of the LU-VE Group;
4. Understanding of the following aspects:
  - Company organisational model and organisation of the Group’s activities, with reference to the management of the topics indicated in Article 3 of the Decree;
  - Policies practiced by the Group relating to the topics indicated in Article 3 of the Decree, results achieved and relative key performance indicators;
  - Main risks generated or incurred associated with the topics indicated in Article 3 of the Decree.

With reference to these aspects, investigations were also made into the information contained in the NFS and the checks described in point 5, letter a) below were performed;

5. Understanding of the processes underlying the generation, detection and management of significant qualitative and quantitative information contained in the NFS.

In particular, we conducted interviews and discussions with management personnel of LU-VE S.p.A. and with personnel of HEAT TRANSFER SYSTEMS (HTS) s.r.o., LU-VE SWEDEN AB, SEST S.p.A., SEST-LUVE-POLSKA Sp.z.oo., and SPIROTECH HEAT EXCHANGERS PRIVATE LIMITED, and carried out limited document checks in order to gather information on the processes and procedures that support the collection, aggregation, processing and transmission of the non-financial data and information to the department responsible for the preparation of the NFS.

Furthermore, for significant information, considering the activities and characteristics of the Group:

- At Parent Company and subsidiary company level:
  - a) With reference to the qualitative information contained in the NFS, and in particular to the company model, the policies adopted and the risk principles, we conducted interviews and acquired supporting documentation to verify the consistency of available evidence;
  - b) With reference to quantitative information, we carried out analytical procedures and limited checks to ascertain the correct aggregation of data based on samples.

## **Conclusions**

On the basis of the work carried out, we did not identify any elements to suggest that the NFS of the LU-VE Group relative to the year ending 31 December 2018 was not produced, in all significant aspects, in compliance with the provisions of Articles 3 and 4 of the Decree and the GRI Standards.

## **Other aspects**

The comparative data presented in the NFS in relation to the year ending 31 December 2018 was not subject to audit.

DELOITTE & TOUCHE S.p.A.

[ILLEGIBLE SIGNATURE]

**Massimiliano Semprini**

Partner

Milan, 4 April 2019