

# 2018

Consolidated  
Non-financial Statement



CAREL



CAREL



# 2018 Consolidated Non-financial Statement

**Prepared in accordance with Legislative decree no. 254/2016**

CAREL





# Contents

2018 Consolidated Non-financial Statement	3
CEO's letter to the stakeholders	7
Methodological note	11
CAREL Group	13
Background	14
Responsible governance	25
Customer first	45
Technology and innovation	57
The environment and occupational health and safety	67
Human capital	83
Report of the auditors	101





## CEO's letter to the stakeholders

2018 heralded great change for CAREL following its stock market listing and the transition from a family-owned business to a listed entity.

In addition to organic growth, the entity has developed through acquisitions of entities whose businesses complement its own. Examples of this are the two transactions completed towards the end of the year with the Italian Recuperator S.p.A., which works in the "air-to-air" heat exchanger sector, and the German Hygromatik GmbH, a major player in the humidification sector, which are now an integral part of the CAREL Group.

We also acquired 100% of the related entity CAREL Japan, which has now become a commercial company. The entity's listing meant we gained additional understanding of the social importance of how we do business and the opportunities provided by preparation of a non-financial statement (mandatory under Legislative decree no. 254/2016), which has allowed us to demonstrate the group's focus on topics such as the environment, society, diversity, human rights and anti-corruption to all our stakeholders.

The HVAC/R (Heating, Ventilation, Air Conditioning and Refrigeration) sector continues to grow, driven by the global development of wellbeing of people, industry and food distribution.

However, it is a high energy intensity sector: the International Institute of Refrigeration has estimated that it uses roughly 17% of the electrical energy consumed worldwide.

In addition, some of the gases used for refrigeration and air-conditioning have a strong environmental impact and contribute to the greenhouse effect.

This is part of the reason for our commitment to sustainability, which has always been an integral part of our DNA. We design solutions that allow for energy savings and reduce the environmental impact of machines and systems while concurrently making our customers' systems more efficient.

On average over the last four years, we have invested roughly 6% of our revenue in research & development precisely to improve our solutions' performance, reduce energy consumption and improve our customers' productivity.

1 August 2018 was Earth Overshoot Day, the date when humanity's demand for ecological resources and services in a given year exceeds what Earth can regenerate in that year. The Global Footprint Network estimates that in just eight months, we will have consumed all the natural resources that our planet can produce in a year.

In this respect, our group has a great opportunity to contribute towards improving the impact on climate change. For example, issues close to our hearts are energy saving and decarbonisation, the area in which we are most active.

CAREL supports the COP 21 goals as defined in the United Nation's Financial and Administrative Framework Agreement and actively promotes international associations that contribute to the development of policies for long-term environmental sustainability.

We are also at the forefront of contributing to the diffusion of the efficient use of natural, low GWP (Global Warming Potential) refrigerants and we proactively work with associations and bodies to promote this.

Technological innovation is the keystone for long-term approach to the issue. The new technologies are applicable to a vaster scope and are designed to create added value in economic and environmental terms. In fact, we have set up a dedicated IoT (Internet of Things) and digitalisation team as the use of data and algorithms has a positive effect on the lives of people and industry. They can anticipate market needs and increase the efficiency of the proposed solutions.

We believe that our services can have a positive impact on the environment in general in terms of energy saving thanks to their



intelligent component. During 2019, we will continue to invest in this strategic lever and will also focus on our human capital, for which our largest investments will continue to be in occupational safety and training. Three new sites will be opened in 2019 (one in Italy and two abroad) and we will build them to comply with the highest efficiency standards and on the premises that the workplace is key to employee satisfaction. Training is another important factor that helps us maintain our technological leadership. We are committed to creating growth opportunities through the valuable collaborations with universities and technical high schools.

**Francesco Nalini**

CEO's





# Methodological note

## Reporting standards

The CAREL Group's 2018 Consolidated Non-financial Statement (the "Statement"), prepared in accordance with articles 3 and 4 of Legislative decree no. 254/2016 (the "decree") presents information on environmental, social, personnel, human rights and anti-corruption topics, useful to gain an understanding of the group's operations, performance, results and its impact.

This Statement will be prepared once a year in accordance with the decree and the GRI Standards (using the "core option"), published in 2016 by the Global Reporting Initiative. They are currently the best known and recognised standards at international level on non-financial reporting. The GRI Content Index is set out on pages 91 to 97 to assist the readers to find the information in this Statement.

The presentation of non-financial information reflects the principle of materiality, which is provided for by the reference regulations and is key to the GRI Standards. The topics discussed herein are those that, after an analysis and assessment of materiality (see pages 38 to 40), have been considered material as they reflect the social and environmental impact of the group's operations or can influence its stakeholders' decisions. In addition and as required by the decree, the group has only presented a brief, qualitative comparison with previous years in this Statement.

The information presented in this Statement solely refers to 2018 given that, as allowed by the decree for the first-time application of the non-financial reporting regulations, the group elected to provide a brief, qualitative comparison with previous years. It will present comparative qualitative and quantitative information starting from the next statement.

## Reporting scope

The qualitative and quantitative data and information presented in the Consolidated Non-financial Statement refer to the group's performance in 2018. As required by article 4 of Legislative decree no. 254/2016, this statement includes the data of the parent (Carel Industries S.p.A.) and its fully consolidated subsidiaries, except for Recuperator S.p.A. and Hygromatik GmbH, as they were acquired on 23 and 30 November 2018, respectively, i.e., near year end, and it was not possible to organise the collection and classification of their non-financial information in a timely and efficient manner. Therefore, their non-financial information will be included starting from 2019. Any other limitations to the reporting scope are described appropriately herein.

## Reporting practice

Preparation of the group's 2018 Statement was based on a structured reporting practice that envisaged:

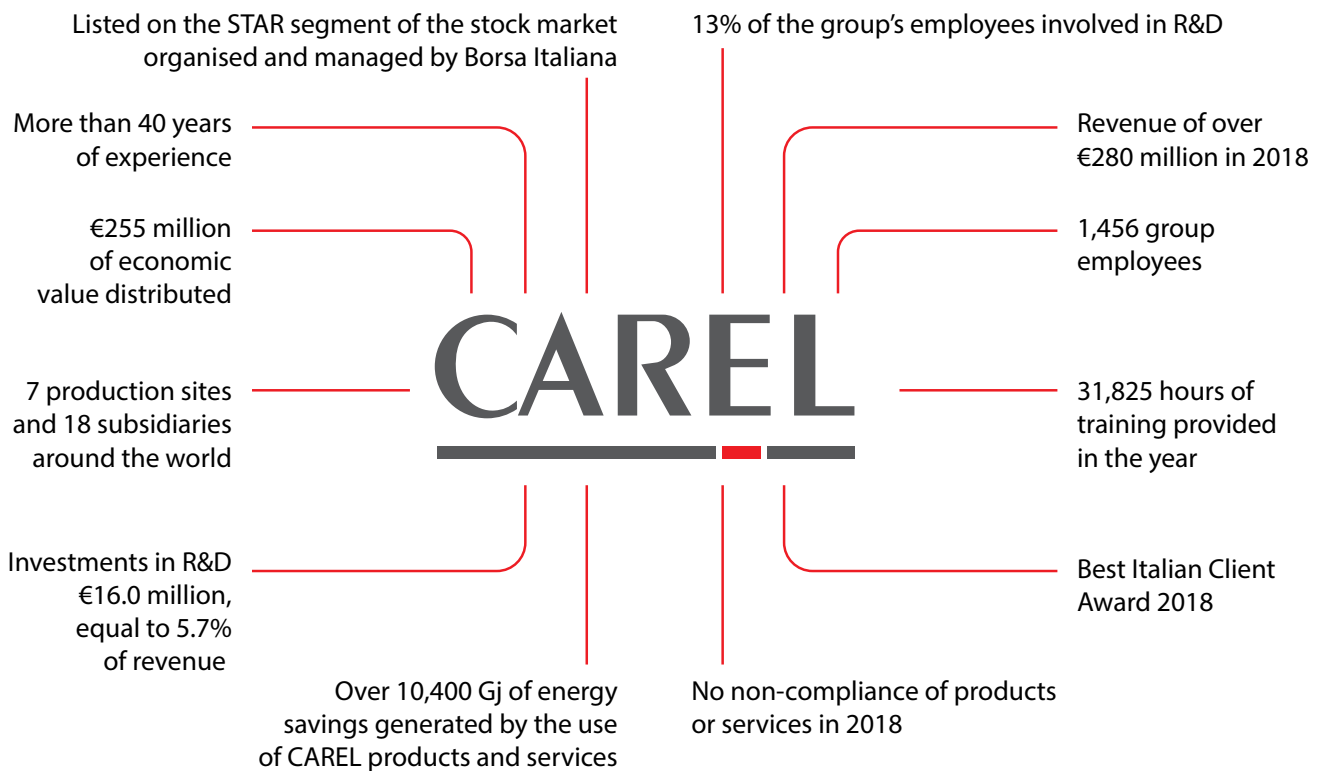
- involvement of all the internal units responsible for the material aspects and related data and information to be included in the Statement. They were asked to contribute to the identification and assessment of the material topics and the significant projects/initiatives to be described and to assist with the collection, analysis and assembly of the data, checking all the information set out in the Statement related to their activities. Specifically, the data and information included herein are taken from the information system used for the group's management and accounts and a non-financial reporting system (data collection forms) introduced specifically to comply with Legislative decree no. 254/2016 and the GRI Standards. The data was processed through extrapolations and calculations or, when specified, estimates. The financial data and information were taken from the 2018 consolidated financial statements;
- the Statement's approval by the board of directors in their meeting held to approve the 2018 consolidated financial statements on 7 March 2019;
- issue of a compliance report on the Statement by Deloitte & Touche S.p.A. after its review;
- publication of the Statement on the parent's website to make it available to all stakeholders in an transparent manner.

## Reporting standards

Identification and presentation of the material topics presented in this Statement were based on the GRI standards of materiality, inclusivity, sustainability and completeness. The group also applied the GRI balance principle for the reporting of positive and negative aspects, comparability, accuracy, timeliness, clarity and reliability when defining the information quality criteria and the reporting scope.

# CAREL Group

CAREL has always stood for advanced control systems offering innovative solutions for the HVAC/R sector. Its high efficiency solutions are a certainty for environmental protection thanks to their optimised and integrated control systems, which allow for significant energy savings and, in turn, a the related smaller environmental impact.



# Background



## 1973-79

- CAREL is set up in the province of Padua
- CAREL starts manufacturing steam humidifiers

## 1980-89

- Design and production of a microprocessor controller for precision air-conditioners in computer rooms
- CAREL creates the first monitoring system for air-conditioning units
- Design and production of programmable controllers for air-conditioning
- SMD technology and in-circuit testing introduced into the production process
- Design and production of controllers for refrigeration
- New programmable electronic board developed, complete with CAREL proprietary programming tools (EasyTools)

## 1990-99

- CAREL introduces serial communication on its entire range of controllers
- The first subsidiary, CAREL France, is established in Lyon
- CAREL receives ISO 9001 certification
- The German subsidiary CAREL DEUTSCHLAND is established
- CAREL UK and CAREL South America are set up

**2000-2004**

- The CAREL Group reaches sales of €55 million
- CAREL China is established
- CAREL Australia and CAREL USA are set up
- ksa.carel.com, the web site with services for users of CAREL software products, goes on-line
- CAREL updates its quality system to the new ISO 9001:2000 standard
- CAREL adopts the ORACLE ERP system
- CAREL Centre for Experimental Thermodynamics founded, dealing, among other things, with the experimentation of control techniques for refrigeration appliances, with special focus on new technologies

**2005**

- CAREL starts production at the new facilities in Suzhou (around 100 km from Shanghai). The new factory makes electronic solutions for the air-conditioning and refrigeration sectors to the same quality standards as the parent, and was established to respond to the growing demand of the Chinese market, as well as to ensure continuity of service to CAREL's western partners who have manufacturing facilities in China

**2006**

- CAREL Company of excellence, among the first one hundred companies of excellence in Italy. This is what emerges from the report entitled Our Excellence by Eurispes, the renowned institute of social studies working in the field of political, economic and social research. This recognition adds to the prestigious special mention in the 2006 F.I.O.R.E. prize (Farnell InOne RoHS Elected), in the RoHS compliant manufacturing technology category, and the Innovation Award as part of the Quality in Development Prize promoted by the Rotary Club, Unindustria Padova, the Chamber of Commerce, Ucid (the Christian Business Union), and the Register of Chartered Accountants.

**2007-2008**

- CAREL Ibérica is set up
- CAREL wins the Mediobanca 2008 Prize awarded to the most dynamic businesses that stand out for high growth and good profitability
- Incorporation of CAREL India, CAREL South Africa and RemoteValue

**2009**

- Corporate restructuring of the CAREL Group, with operational, industrial and commercial functions passing to a new entity: CAREL INDUSTRIES S.r.l., controlled by CAREL S.p.A.
- New Carel office in Russia
- CAREL wins the Marco Polo 2009 prize, awarded by the Veneto region Unioncamere, as the company that showed the highest level of commitment and the most significant results in foreign trade in 2008

- At the 2009 China Awards, CAREL wins the prize in the “Creators of Value” category (electronics sector), as the company that achieved the best performance with China in 2008

#### **2010-2011**

- New production site in Brazil
- Special Mention in “Business Innovation Prize” (Ixl - Imprese x l’Innovazione), established by Confindustria (the main Italian organisation representing manufacturing and services companies) in collaboration with APQI (Italian Quality Awards Association). CAREL was assessed positively after an accurate analysis of the performances of its organisational and strategic model, specifically oriented towards company growth through innovation

#### **2012**

- CAREL INDUSTRIES S.r.l. changes its legal form to a company limited by shares (S.p.A.)
- Innovation prize awarded by “Amici della ZIP”, Padua
- CAREL receives ISO 14001:2004 certification

#### **2013**

- CAREL Nordic is founded
- CAREL receives OHSAS 18001:2007 certification

#### **2014**

- CAREL Middle East is founded

#### **2015**

- Opening of commercial companies in Mexico and Thailand
- Opening of our seventh plant in Labin, Croatia

#### **2016-2017**

- CAREL acquires C.R.C. S.r.l., an Italian company specialised in the distribution of industrial compressors, and Alfaco Polska sp.z o.o., a Polish distributor which effectively becomes a commercial company

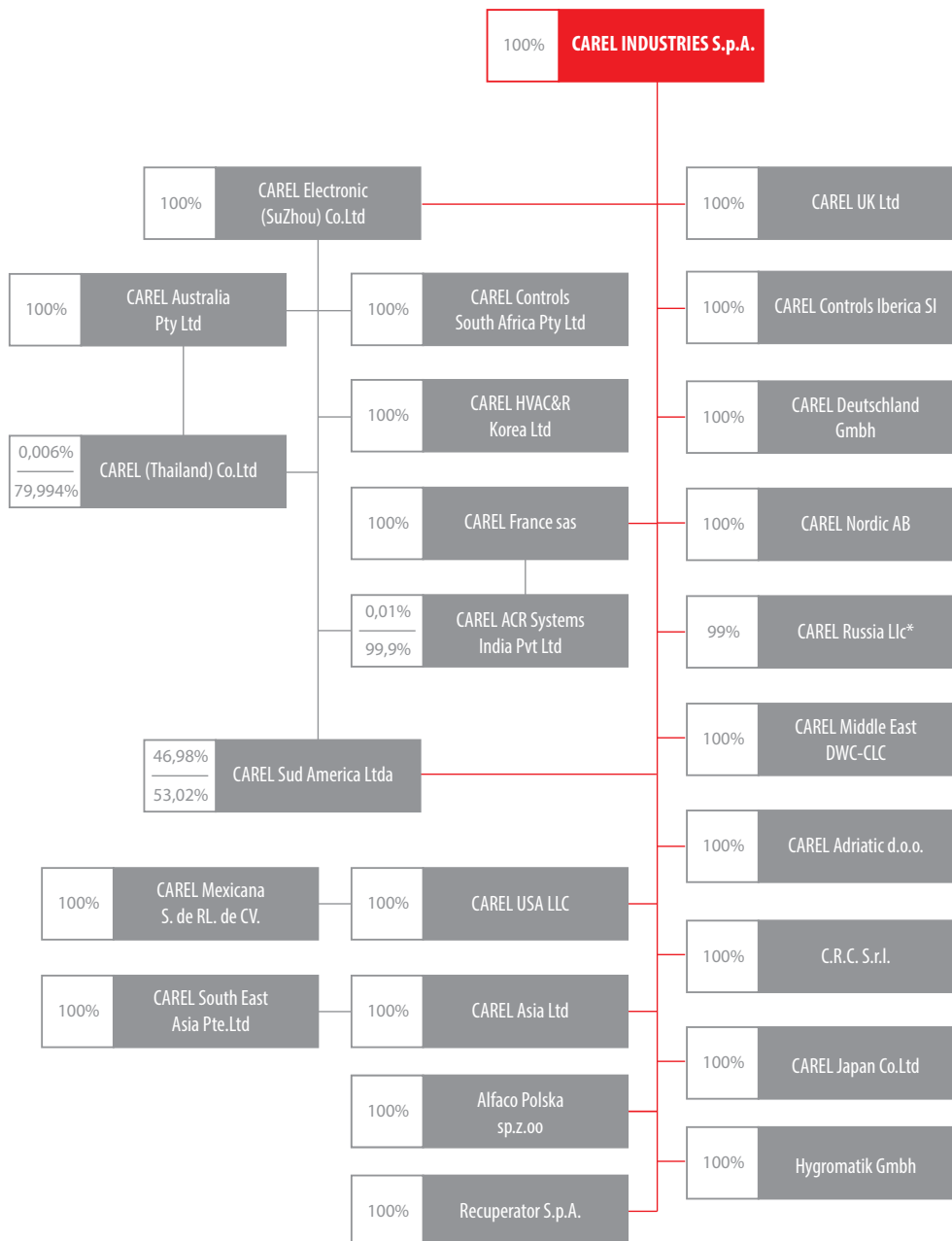
#### **2018**

- In June, the parent is listed on the STAR segment of Borsa Italian’s stock market with an initial capitalisation of €720 million
- In November, CAREL acquires Recuperator S.p.A., which designs, produces and sells air-air heat exchangers
- In December, CAREL finalises its acquisition of Hygromatik GmbH, which designs, manufactures and sells steam and adiabatic humidifiers



# Group structure

The graph shows the group entities and the parent's investments therein at 31 December 2018. This statement includes the information of the parent (Carel Industries S.p.A.) and its consolidated subsidiaries except for Recuperator S.p.A. and Hygromatik GmbH as they were acquired near the year end.



\*CAREL France S.a.s. owns 1% of CAREL Russia LLC

## Business and markets

The CAREL Group designs, manufactures and sells high tech components and solutions (hardware and software) on a global level for high energy efficiency in the control and regulation of air conditioning systems and equipment (“HVAC”) and refrigeration sectors (together “HVAC/R”).

Over the years, the group has designed systems and applications for vertical market niches with very specific needs requiring highly tailored solutions.

Specifically, the group designs, manufactures and distributes control and humidification solutions for the residential, industrial and commercial segments in the HVAC market. It offers solutions for each application segment to be integrated into (i) individual units, like heat pumps, shelters, rooftop, computer room air conditioners (CRAC), chillers and air treatment systems as well as (ii) complex systems such as but not limited to entire systems for shopping centres, supermarkets, museums and data centres.

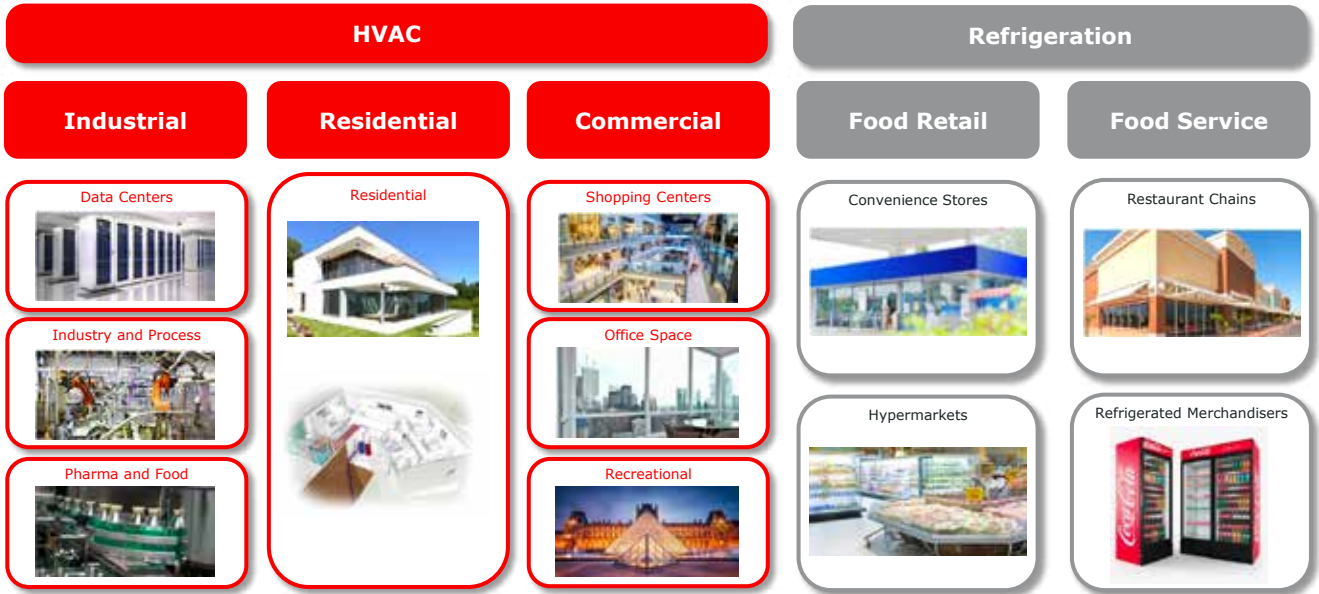
It designs, manufactures and distributes control and humidification systems in the food retail and food service segments of the refrigeration market. Like for the HVAC market, the group designs, manufactures and offers solutions to be integrated into (i) individual units, like bottle coolers, plug-in refrigerators, multiplexed refrigerators, compressor racks and condensing units as well as (ii) complex systems such as but not limited to entire systems for supermarkets of all sizes, convenience stores and restaurants.

The group also offers services associated with its products such as, for example:

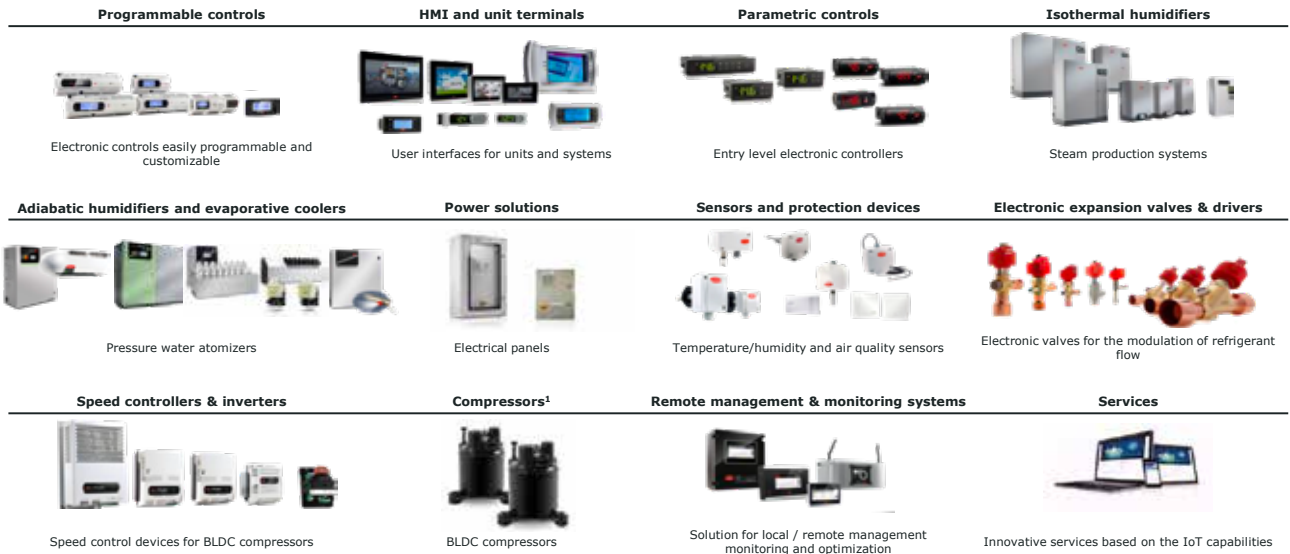
- commissioning activities or contract work;
- membership of the tERA service platform, which manages and monitors the group’s HVAC/R systems and components on a remote basis, facilitating dialogue between the group’s service centre and the end users;
- access to dedicated remote plant and machinery management and control services that process data using the IoT properties of the solutions offered in the cloud or on-site.

Each user can optimise their daily activities through benchmarks, statistics, alerts and standard reports to help achieve their service, energy, quality and marketing goals. Development of these activities is of strategic interest to the group, including with a view to the future.

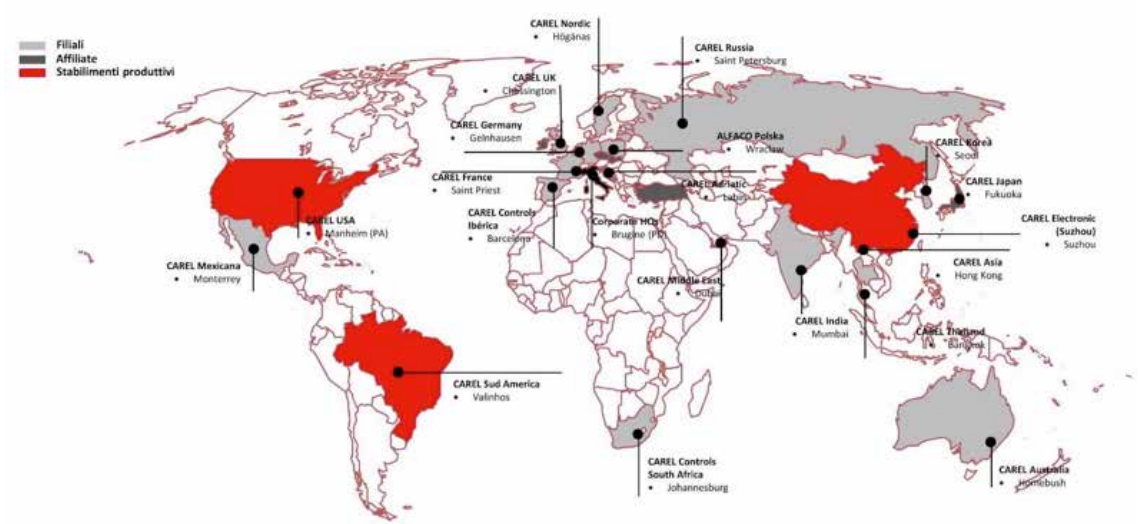
The following diagrams summarise the HVAC and refrigeration market segments and the control solutions offered by the CAREL Group.



**PRODUCT PLATFORM**



The group operates on a global basis with 18 subsidiaries and seven production sites, as shown below.



Up until November 2018, the group had five production sites, including one in Italy near the parent's registered office and the others spread across four continents, specifically, Manheim (PA, USA), Suzhou (China), Valinhos (SP, Brazil) and Labin (Croatia).

US	BRAZIL	ITALY (x3)	CROATIA	CHINA
<b>99 people</b> <b>3.7k sqm</b>	<b>47 people</b> <b>1.7k sqm</b>	<b>660 people</b> <b>17.6k sqm</b>	<b>133 people</b> <b>6.9k sqm</b>	<b>237 people</b> <b>5.8k sqm</b>
<ul style="list-style-type: none"> <li>Manheim (Pennsylvania)</li> <li>Established in <b>2004</b></li> <li>Assembling humidifiers, programmable controls and electrical panels</li> <li>Reference market: <b>North America</b></li> </ul>	<ul style="list-style-type: none"> <li>Valinhos (Sao Paulo)</li> <li>Established in <b>2010</b></li> <li>Specialised in the production of parametric controls</li> <li>Reference market: <b>South America</b> (serving North America as well)</li> </ul>	<ul style="list-style-type: none"> <li>Brugine (Padova)</li> <li>Established in <b>1996</b></li> <li>Covering the whole portfolio production (programmable and parametric controls, valves, inverters, humidifiers and panels)</li> <li>Reference market: mainly <b>Europe</b></li> </ul>	<ul style="list-style-type: none"> <li>Albona (Labin)</li> <li>Established in <b>2015</b></li> <li>Producing electronic expansion valves and related drivers and inverters, controls, and electric panels</li> <li>Reference market: <b>Europe</b></li> </ul>	<ul style="list-style-type: none"> <li>Suzhou (Jiangsu)</li> <li>Established in <b>2005</b></li> <li>Focused on the manufacturing of parametric and programmable controls, and humidifiers</li> <li>Reference market: <b>APAC</b></li> </ul>

The acquisitions of Recuperator S.p.A. and Hygromatik GmbH added another two production sites at the end of the year: one in Rescaldina (Milan), which manufactures air-air heat exchangers, and one near Hamburg (Germany), which manufactures isothermal adiabatic humidifiers.

## Mission and values



# Mission

We lead the evolution of control technology and humidification for air conditioning and refrigeration.

Our products support customers with the most efficient energy savings solutions.

Data-driven services through our IoT platform grant personalised value

The high efficiency solutions mission sums up the CAREL model, the starting point and finishing line for the process of inventing, manufacturing and distributing its systems. As an innovative consultant and technological partner, CAREL anticipates market needs and proposes high efficiency solutions that also guarantee high performance.

Research, innovation and technology are the cornerstones of the CAREL Group's success. For over 40 years, it has placed the customer first, offering functionally and aesthetically different solutions with a view to constant improvement.

The values at the root of the group's business activities and practices that guide its daily decisions are:

**CUSTOMER FIRST**  
**ACHIEVEMENT**  
**RESPECT**  
**EVOLUTION**  
**LEARNING**

## Creation of value for stakeholders

2018 was a positive year for the CAREL Group, which saw a 9.7% increase in revenue to €280.2 million. This progress was mainly driven by the refrigeration business, which grew by roughly 15.5%. The air-conditioning segment also improved its performance, with an increase of 7.0%.

Non-current assets at €131.3 million, up €94.0 million from 2017, mainly due to the purchase price allocation for Recuperator S.p.A. and Hygromatik GmbH, which led to recognition of intangible assets (€32.8 million), property, plant and equipment (€2.2 million) and goodwill (€44.8 million).

Net of the allocations made as a result of the business combinations, the group made investments of €18.4 million during the year, compared to €10.0 million in 2017, mainly in buildings, plant and machinery (€14.5 million). Economic value, which is an organisation's ability to create wealth and distribute it to its stakeholders, generated and distributed by the group in 2018 approximates €286 million. Economic value distributed by the group amounts to €255 million. More than 89% of its economic value generated was distributed to internal and external stakeholders.

<b>DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED (€'000) [GRI 201-1]</b>	<b>2018</b>
<b>Economic value generated by the group</b>	<b>286,454</b>
Revenue	280,220
Other income	3,532
Financial income	833
Impairment of financial assets	15
Impairment of loans and receivables	(130)
Exchange rate differences	(352)
Net losses on the sale of property, plant and equipment and intangible assets	(117)
Depreciation, amortisation and impairment losses on property, plant and equipment and intangible assets	2,453
<b>Economic value distributed by the group</b>	<b>(255,440)</b>
Operating expenses	(165,899)
Distributions to employees	(70,718)
Distributions to lenders	(969)
Distributions to investors <sup>(1)</sup>	(10,000)
Distributions to public administrations	(7,666)
Distributions to bodies/associations	(131)
Donations <sup>(2)</sup>	(58)
<b>Economic value retained by the group</b>	<b>31,014</b>
Amortisation, depreciation, provisions and impairment losses	(10,262)
Other reserves	(20,752)

(1) When approving the draft financial statements, the board of directors resolved to propose a dividend pay-out of €10 million to the shareholders.

(2) Donations include scholarships granted to deserving children of employees and a contribution towards crèche costs.

More information about the group's performance and its financial position is available in the Directors' report, which is included in the 2018 Annual Report.







Responsible governance



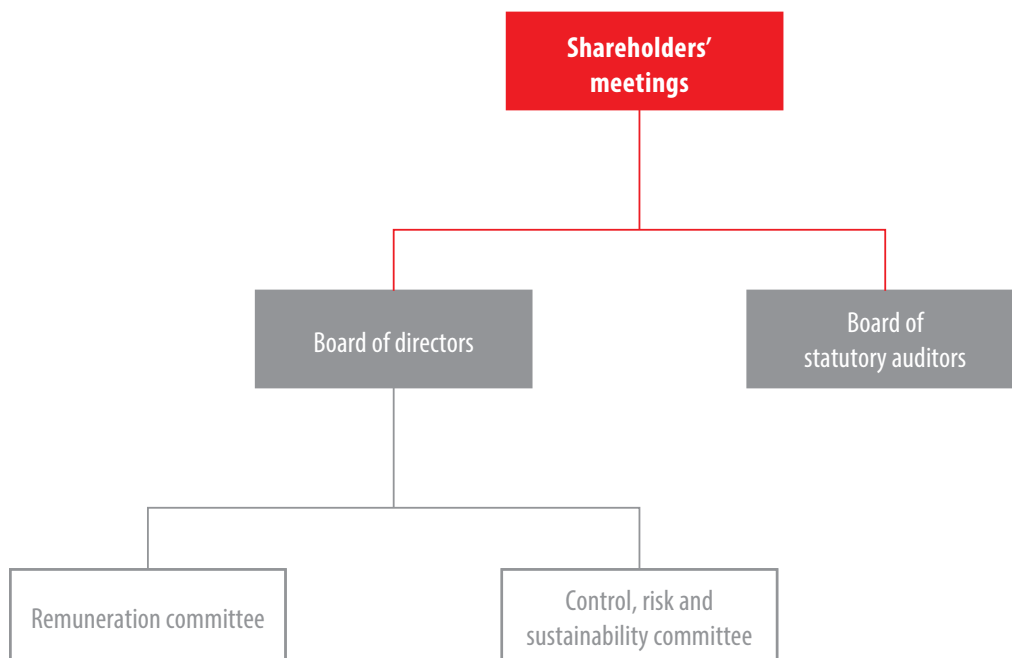
## Governance

### CAREL Industries S.p.A. is the parent of the CAREL Group.

At 31 December 2018, the parent's share capital of €10,000,000, split into 100,000,000 ordinary shares without a par value, is held by Luigi Rossi Luciani S.a.p.a. (LRL) (36.17%), Luigi Nalini S.a.p.a. (LN) (23,58%), Capital Research & Management Company (8.02%) and other shareholders (32.23%).

It has a traditional corporate governance model comprising:

- **Shareholders' meeting**, authorised to resolve on all matters reserved to it by the law or by-laws;
- **Board of directors**, which oversees the entity's running;
- **Board of statutory auditors**, whose tasks comprise monitoring (i) compliance with the law and by-laws and correct administration principles, (ii) the internal controls and administrative-accounting system, and the latter's reliability in properly presenting the parent's operations, (iii) the proper implementation of the corporate governance rules established by the Code of Conduct, (iv) the adequacy of the instructions given to the subsidiaries about the disclosure of inside information, and (v) the financial reporting process, the efficiency of internal controls, internal audit and risk management systems, the statutory audit of separate and consolidated financial statements and the independence of the independent auditors.



**The board of directors has two committees: the control, risks and sustainability committee and the remuneration committee.**



**Board of directors**

which oversees the entity's running



**Control, risk and sustainability committee**

- which, following adequate investigations, supports the "board of directors"
- assessments and decisions on the internal control and risk management system and its approval of the interim and annual financial statements and the non financial statement ad per Legislative decree no. 254/2016;
- has advisory powers related to transactions with related parties;
- has advisory and investigatory powers with regard to the board of statutory auditors concerning statutory audits, in compliance with the requirements of the Legislative decree no. 39 of 27 January 2010 and assists the board of directors with equity investments;
- assist the board of directors through proactive and advisory support, monitoring sustainability issues related to the group's operations and define and propose guidelines and policies about sustainability and oversee the compliance with any conduct standards introduced by the parent and its subsidiaries.



**Remuneration committee**

- provides advisory support and recommendations to the board of directors about remuneration;
- prepares the documentation to be provided to the board of directors for the adoption of the resolutions concerning remuneration.

**Risk and sustainability and Remuneration Committee**

The directors shall have widespread and diversified skills to ensure a balanced combination of profiles and experience. They shall be able to carry out their duties in accordance with the ruling regulations and by-laws and, specifically, they shall meet the eligibility, professionalism and honourability requirements established by the current regulations and the by-laws <sup>1</sup>.

Given the parent's structure and size, as well as its ownership structure and list-based voting system provided for by the by-laws, the board of directors did not deem it necessary to adopt specific diversity policies and/or practices with respect to the composition of the boards of directors and statutory auditors and the age, gender and educational and professional background of the various members.

However, article 17 of the by-laws establishes that, when a director is elected, the lists of candidates cannot be composed, if containing a number of candidates equal to or greater than three, only by candidates belonging to the same gender, whether male or female, but must contain a number of candidates of the less represented gender to ensure the presence of a number of directors of the less represented gender at least equal to one third of the total number of directors.

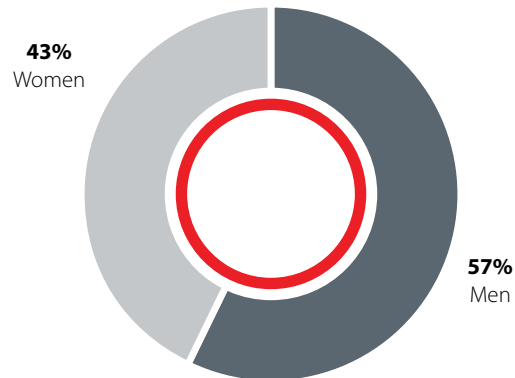
<sup>1</sup> More information is available at <https://cg.carel.com/it/documenti-societari/>

The parent's board of directors in office at 31 December 2018 was elected by the shareholders on 29 March 2018 with a three-year term, i.e., until approval of the financial statements at 31 December 2020.

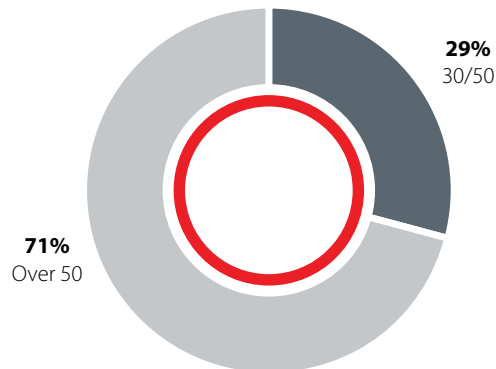
#### COMPOSITION OF THE BOARD OF DIRECTORS AND COMMITTEES [GRI 102-22] [GRI 405-1]

	<b>Board of directors sustainability committee committee</b>	<b>Control, risks and Remuneration</b>	<b>Comitato</b>
No. of directors	7	3	3
Executive	4	0	0
Non-executive	3	3	3
(of whom, independent)	(3)	(3)	(3)
Women	3	2	2
Men	4	1	1
< 30 years	0	0	0
30-50 years	2	0	0
> 50 years	5	3	3

#### Board of directors by gender



#### Board of directors by age bracket



## Internal control and risk management system

The CAREL Group is aware of the importance of adopting and implementing a suitable internal control and management risk system, which is used by the board of directors, management and other personnel of the CAREL Group entities. The system comprises rules, procedures and units put in place to identify, measure, manage and monitor the key risks the group is exposed to. It also helps to ensure that the group operates in line with its objectives and its medium to long term sustainability - in economic, equity, financial and environmental, social and governance (ESG) terms. It protects the group's assets, the efficiency and effectiveness of its processes and ensures compliance with the relevant regulations and respect for human rights and the environment.

Starting from 2019, CAREL's risk management framework will include ESG risks and the related procedures for their appropriate management.

The group manages risks in a cohesive manner, inspired by national and international best practices. In fact, the parent complies with Borsa Italiana's Code of Conduct for Listed Companies and, hence, is governed by various administrative and control bodies, each of which has specific characteristics. An integrated risk management model identifies all types of risk that could impede the group's achievement of its strategic objectives or damage its reputation or brands, etc.. The model is considered when strategic decisions are taken and in key decision-making processes. It covers both internal and external risks, the latter in particular are tied to the group's sector and market and its stakeholders' perception of how it operates.

The following bodies monitor the internal controls and risk management system, to the extent of their responsibilities:

- board of directors;
- control, risks and sustainability committee;
- remuneration committee;
- the competent director;
- board of statutory auditors;
- supervisory body;
- internal audit function;
- manager in charge as per article 154-bis of the Consolidated Finance Act.

In addition to financial risks (e.g., credit risk, currency risk, etc.), the risk assessment also identifies non-financial risks, the most important of which are shown in the next table. Risks related to the material topics are dealt with in the relevant sections, while this section provides an overall view of the risk management system.

### Operational risks tied to:

- technological change and production obsolescence;
- product liability (e.g., defective products, etc.);
- availability and cost of components necessary to carry out the business;
- production plant capacity and business continuity;
- reducing energy costs;
- protection of intellectual property;
- management of innovative and development projects;
- country risk.

### Compliance risks tied to:

- general changes in the legislative framework and introduction of limitations to the group's business;
- environmental topics;
- occupational health and safety regulations;
- administrative liability of entities as per Legislative decree no. 231/2001;
- cyber security and ICT systems;
- personal data processing.

### Risk related to stakeholder engagement:

- management of relations with suppliers;
- management of relations with customers;
- ability to attract new customers;
- management of relations with distribution operators;
- management of relations with related parties;
- retention of senior managements and key personnel.

### REPUTATION RISK

The entire group is exposed to this risk. Management of relations with stakeholders, employees, the community, suppliers and shareholders, day-to-day operations and working of the IT systems as well as compliance with regulations are all areas that could affect the group's reputation and market standing.

## Ethics and integrity

An essential factor for success, a tool to promote its reputation and an indispensable asset is the adoption of behaviour inspired by high ethical standards when carrying out business.

To this end and in accordance with Italian regulations, on 30 March 2017, the parent adopted a Code of Ethics (updated on 12 November 2018) designed to direct its activities and those of all the parties that work for and on behalf of the group in line with the principles of correctness, loyalty and honesty. The subsidiaries are required to comply with the fundamental principles set out in the parent's Code of Ethics.

Legality, morality, dignity, equality and professionalism are just some of the principles and values provided for by the Code of Ethics adopted by the parent and shared with its subsidiaries and a reference point for the CAREL Group in its business life.

In addition to the Code of Ethics and to ensure compliance with the principles of integrity, ethics and transparency in business, the parent also has an organisational, management and control model as provided for by Legislative decree no. 231/01 (the "Model") (updated on 12 November 2018), which is the Italian legislative tool for entities' administrative liability. This model contains the main measures to mitigate the risk of corruption in the private and public sectors.

The Model is designed using an analysis of the areas where predicate crimes could be committed. Specifically, CAREL mapped its risks and assessed its internal processes. After this risk self-assessment, which included interviews of its key officers, of the risks to which the parent is exposed (specifically corruption), the parent revised and updated the Model in 2018 to reflect the new legislative requirements. This included implementation and formalisation of measures to protect whistleblowers in line with Law no. 179/2017. The parent also updated and supplemented the special section to include a section on the predicate crimes and administrative offences of the abuse of inside information and market manipulation as covered by the Consolidated Finance Act (market abuse), which was necessary after the parent's recent listing on the STAR segment of Borsa Italiana's stock market.

The parent has suitable general and specific controls and measures to mitigate the risk of unlawful behaviour and ensure compliance with these principles.

The Code of Ethics provides that CAREL considers available information about the background and reputation of third parties before entering into a partnership, transaction or project with them. It assesses, inter alia, the potential risks of corruption tied to factors like the country in which the partnership will take place, the characteristics of the transaction or project, the third party's potential commercial partners and its possible effects.

The supervisory body, appointed by the parent's board of directors, is responsible for implementing the Model. It also monitors the Model's effectiveness and efficiency and proposes updates or amendments to align it with changes in the parent's structure or legislation, including through periodic checks of the areas at risk. The supervisory body also ensures compliance with, and the correct functioning and application of the Model and the Code of Ethics. It receives any requests for information or reports of violations of either the Model or the Code of Ethics.

The CAREL Group's commitment to the prevention and fight against corruption includes the dissemination of the above internal documents and the scheduling and holding of training courses to increase employees' awareness of the issue. The main content and recent updates made to the Model and the Code of Ethics, approved at the end of 2018, will be communicated to all personnel in the first quarter of 2019.

Everyone who works directly or indirectly for or on behalf of the group may report violations or suspected violations of the Model and the Code of Ethics using the whistleblowing system provided for therein and available on the parent's website. No such reports were received in 2018.

No cases of corruption inside the group were documented during the year.

As proof of the group's ongoing commitment to ethical behaviour and integrity in its business, there were no reports and/or complaints received about non-compliance with laws or regulations or legal action promoted for anti-competitive behaviour, anti-trust or monopoly violations either in or out of court in 2018.



## Transparent and effective communications to the market

The CAREL Group's objectives include creating value for its stakeholders. It is also committed to ensuring transparent, complete, true and timely disclosures to the markets using various tools such as press releases, its website and direct contacts with analysts, investors and lenders.

The board of directors resolved to set up an Investor Relations Unit on 29 March 2018 before its stock market listing.

This Unit's main task is to liaise with the financial markets, and in primis analysts, investors and shareholders, either through press releases or announcements on the parent's website. It uses numerous tools such as:

- daily telephone calls and emails;
- conference calls attended by senior management;
- financial press releases;
- road shows.

Specifically, road shows include visits to the major European and non-European financial hubs to meet current and potential investors directly in their home cities. The Unit also participates in important conferences and meetings organising one-to-one or one-to-many meetings as part of the road shows.

During 2018, these visits were very frequent both before and after the stock market listing. Starting from presentation of the interim six monthly data on 7 September 2018, the Unit visited several financial hubs including Milan, London, Frankfurt and Paris where it met with roughly 70 investment funds. In addition, many fund managers visited the parent's Italian headquarters in Brugine to meet the group's management team and founders and visit the production site and R&D department.

At the end of 2018, the lenders that underwrote the IPO were Alantra, Goldman Sachs and Mediobanca (the latter two joint bookrunners were part of the syndicate that assisted the group during the listing process).

The Investor Relations Unit also manages the insider dealing and inside information procedures. The Investor Relations Manager is responsible for ensuring that the recipients and relevant shareholders are aware of the procedure and keeps a register of their names. With respect to inside information management, the Unit keeps an insider register and the relevant information list. It also manages the special loyalty shares register. During the year, the Unit issued numerous financial communications and this trend will continue in 2019. CAREL's inclusion in the basket of mid cap Italian companies (FTSE Italia Mid-Cap) on 24 September 2018 has extended the range of potential investors and makes it even more worthwhile organising one or more road shows outside Europe and specifically in North America.

## CAREL and the sustainability



### **“We recognise environmental issues as a corporate priority”**

The group has always recognised the importance of sustainable development and has applied this principle to its entire manufacturing chain. Its focus on the environment is an intrinsic part of its business and an ongoing daily commitment, allowing it to look to the future of our planet with confidence.

The CAREL Group’s sustainability policy blends environmental needs, in accordance with local and international regulations, with its system of values and responsibilities. The group’s commitment is translated into compliance with standards and regulations by all its sites, in line with the relevant actions and best practices.

### **Social-environmental policies and guidelines**

In 2018, CAREL has summarised its operating practices in its Code of Ethics and its Policies on Diversity, Human Rights, the Environment and Occupational Health and Safety, approved by the board of directors on 12 December 2018, to emphasise its commitment to comply with the highest sustainability standards and to define reference principles for social and environmental topics. These act as guidelines for the group entities. The group has also defined values and conduct rules specifically for the topic of anti-corruption in its Organisational, management and control model as per Legislative decree no. 231/01 and its Code of Ethics adopted on 30 March 2017 and updated on 12 November 2018.

CAREL also formally approved the group’s Anti-corruption Policy as additional support and to monitor this topic.

These policies are based on the main guidelines and international standards on responsible business behaviour and are disseminated to all recipients through appropriate training and information activities.

The policies related to the social-environmental topics defined by Legislative decree no. 254/2016 are summarised below. The following sections provide suitable disclosures on the group’s policies, commitments and practices.

Diversity	Human rights
<b>Document: Diversity policy</b>	<b>Document: Human rights policy</b>
<p>The CAREL Group commits to:</p> <ul style="list-style-type: none"> <li>• respect private life and all individuals, avoid discriminatory practices, free from any form of harassment, offence, abuse or other conditioning that could make the work environment hostile, intimidating and offensive;</li> <li>• guarantee equal opportunities in all work environments through respect for the physical and moral integrity of individuals;</li> <li>• encourage inclusion and integration of individuals, focus on their personal capabilities, avoid any form of discrimination based on mental or physical limitations or diversity;</li> <li>• acknowledge and respect personal dignity, private life and the rights of all individuals, foster a work environment based on values like trust, dialogue, mutual respect, wellbeing and work/life balance;</li> </ul>	<p>The CAREL Group commits to:</p> <ul style="list-style-type: none"> <li>• non-engagement in child labour;</li> <li>• refuse all forms of forced or compulsory labour and all forms of physical or physiological constraints;</li> <li>• non-tolerance of sexual, personal, or other harassment or offense;</li> <li>• eliminate all forms of discrimination including distinction, exclusion or preference that denies or affects equal opportunities or treatment at work;</li> <li>• encourage the professional development and growth of each employee through respect for their physical and moral integrity;</li> <li>• acknowledge workers' rights to set up a trade union and to collective bargaining without distinction or prior authorisation;</li> <li>• protect employee health and safety;</li> <li>• consider the expectations of local communities, contribute to their development, respect their cultural and environmental heritage;</li> <li>• respect the confidentiality of personal information;</li> <li>• respect personal dignity, private life and the rights of all individuals, foster a work environment based on values like trust, dialogue, mutual respect, wellbeing and work/life balance;</li> <li>• request its business partners to act in accordance with principles of fairness, integrity and respect for human rights and to comply with the regulations ruling in the countries where they operate.</li> </ul>

## Occupational health and safety

### Document: Environmental, occupational health and safety policy

The CAREL Group commits to:

- effectively implement, control and regularly assess, when necessary, its environmental and occupational health and safety management systems;
- regularly set security and environmental protection goals;
- engage with stakeholders, shareholders, local communities and administrations for occupational health and safety issues;
- protect the environment and natural resources as priorities;
- minimise its environmental impact;
- promptly identify potential risks using a system to prevent pollution, environmental incidents and environmental emergencies to minimise its impact on the environment;
- act in accordance with the ruling laws and regulations to reduce pollution and protect the environment;
- pursue exemplary results concerning environmental issues and promote scientific development and sustainable technology;
- focus on minimising waste, improving resources management, limiting hazardous substance spillages, rationalising water resources, limiting its impact on biodiversity, optimising the use of raw materials;
- consider the potential impact of its systems, processes and products over their lifetime on the environment and, especially, during their utilisation stage and after their useful life;
- rationalise energy consumption and ensure security by improving processes;
- adopt an injury prevention system;
- provide for the technical design of work environments, equipment and processes;
- encourage workers to play an active role in preventing risks;
- closely comply with established security and prevention measures.
- le misure di sicurezza e prevenzione stabilite.

In addition to the above policies, the parent and other production sites have the following certifications:



The finance function directs and coordinates the sustainability activities. It prepares the annual Consolidated Non-financial Statement as per Legislative decree no. 254/2016 and carries out the related activities (e.g., data collection, analysis and validation, reporting updates, coordination and approval and sending the draft Non-financial Statement to the board of directors for its approval).

## Materiality analysis

In 2018, the CAREL Group commenced a materiality analysis to identify the most important non-financial topics for it and its stakeholders that it will focus on constantly. It also defined the content of this Statement in line with the GRI Sustainability Reporting Standards.

The outcome was the definition of a materiality matrix that identifies the more material topics that could generate economic, social and environmental impacts and that are priorities for sustainability management and reporting as they affect stakeholders' expectations, decisions, assessments and actions.

The finance function coordinated the analysis with the assistance of an external expert. It consisted of a structured assessment involving management in charge of the potential material non-financial topics. The materiality analysis process was organised as follows:



During the identification phase, the finance function selected the potential material topics by analysing various sources, the main ones of which were:

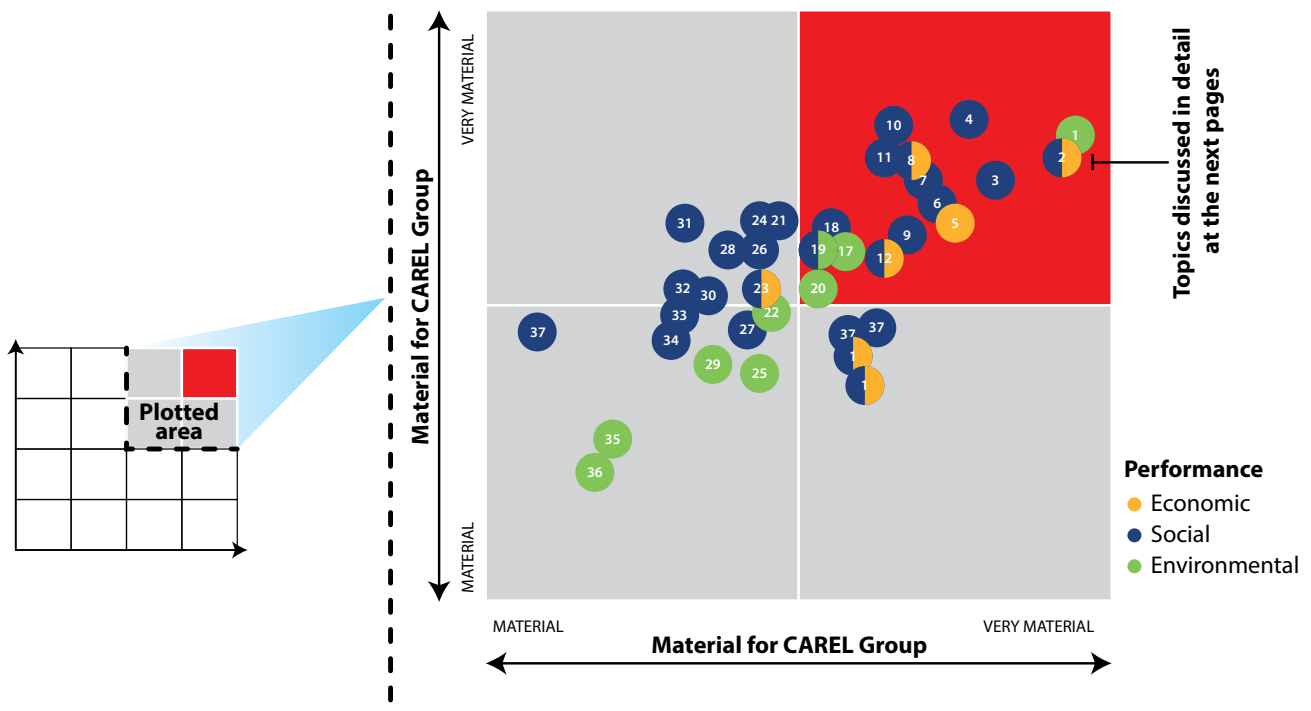
- the GRI Sustainability Reporting Standards, and the legislative requirements for non-financial information (Legislative decree no. 254/2016 which transposed Directive 2014/95/EU on the disclosure of non-financial information by the European Commission into Italian law);
- internal documents, including, for example, the Code of Ethics, internal policies and commitments;
- international multi-stakeholder standards/initiatives, such as the Global Compact;
- external documents like reports analysing scenario changes prepared by, inter alia, the World Economic Forum, assessment questionnaires of rating agencies for inclusion in responsible investment indices;
- benchmarking analysis of the main competitors;
- media searches.

During the assessment and prioritisation phase, the function heads checked, analysed and prioritised the individual topics. As representatives of the group's global vision of processes and activities, these function heads assessed the individual topics from both the group's and stakeholders' points of view. For the first year of preparation of the Statement, the function heads that liaise with the stakeholders on a daily basis presented their views as well. The topics were analysed using different criteria: compliance with the group's strategy, economic and environmental impact, reputation risks and impacts and consistency with the group's internal policies.

They identified 37 topics of which 16 are material and were included in the materiality matrix identifying three pre-conditions based on the sustainability model:

- creation of economic value that is sustainable over time;
- adoption of an efficient and transparent governance system to support business;
- ongoing focus on regulatory compliance issues.

The board of directors approved the materiality matrix.



The following table shows the material topics relevant to the group and its stakeholders and included in this Statement, which comments briefly on the group’s approach to the other topics included in the matrix, given their social importance. Moreover and in accordance with Legislative decree no. 254/2016 on non-financial reporting, specific information is provided on the following:

- anti-corruption;
- respect for human rights.

MATERIAL TOPICS	
<b>1</b> Energy efficiency and sustainable products	<b>20</b> Environmental impact and pollution
<b>2</b> R&D and product innovation	<b>21</b> Employee engagement, observation and satisfaction
<b>3</b> Product and service compliance	<b>22</b> Sustainable procurement policies and practices
<b>4</b> Customer engagement and satisfaction	<b>23</b> Risk management
<b>5</b> Brand reputation protection	<b>24</b> Talent attraction, development and retention
<b>6</b> Customer safety	<b>25</b> Waste reduction and utilisation of responsible waste elimination methods
<b>7</b> Training and professional development	<b>26</b> Well-being, life/work balance and worker protection
<b>8</b> Quality and product safety	<b>27</b> Labour relations
<b>9</b> Ethics and integrity	<b>28</b> Engagement with the communities and local institutions
<b>10</b> Occupational health and safety	<b>29</b> Fight against climate change and reduction of greenhouse gas emissions
<b>11</b> Privacy, security and data protection	<b>30</b> Diversity, equal opportunities and inclusion
<b>12</b> Engagement with investors and fair trade practices	<b>31</b> Remuneration, incentive systems and benefits
<b>13</b> Respect for human rights	<b>32</b> Corporate governance
<b>14</b> Partnership opportunities	<b>33</b> Protection of human rights in the supply chain
<b>15</b> Disaster management	<b>34</b> Prevention and fight against corruption
<b>16</b> Responsible advertising and marketing	<b>35</b> Efficient use of water, reduction of water consumption and water discharge monitoring
<b>17</b> Efficient and effective use of energy resources	<b>36</b> Protection of the environment, biodiversity and restoration of natural habitats
<b>18</b> Dialogue and internal communication	<b>37</b> Community involvement and development
<b>19</b> Responsible supply chain management	

(the topics of greater relevance to the group which it has reported on are highlighted in red)

## Stakeholder engagement

The group's ongoing engagement and the active involvement of internal and external stakeholders represents its responsibility for its local social context. Its focus on the quality of engagement with stakeholders, provided for in the Code of Ethics and designed to ensure an understanding of their expectations and needs and the related alignment of the group's service model, translates into a proactive approach with all its stakeholders that it interacts with on a daily basis in numerous ways.

The group is aware that this interaction is an opportunity for mutual growth and enrichment as well as being essential to create long-term value.

CAREL has identified its stakeholders through internal and benchmark analyses as parties that are affected by its operations.

A summary of the main engagement channels and tools with its principal stakeholders is set out below:

Stakeholder	Engagement tools and channels [GRI 102-40]
Shareholders, investors and analysts	Shareholders' meeting Press releases Financial disclosures to the market Institutional websites Daily telephone calls and emails Conference calls Road shows
Financial institutions	Financial disclosures to the market Regular meetings with banks
Customers	Liaising with sales personnel and branches Institutional websites Customer satisfaction surveys (Voice of Customer) Online analysis of the brand's reputation and social media
Employees	New hires onboarding programme (CAREL Group Induction Process) Performance appraisals Intranet Internal social network (Tibbr) Internal magazine (Display – CAREL People Magazine)
Trade unions, worker representatives	Regular meetings with trade union representatives
Suppliers and business partners	Ongoing dialogue and transfer of good practices and skills Definition and agreement of standards Regular visits to production sites Certification and auditing of suppliers (CAREL Supplier Audit Check-list) Liaising with control quality personnel Order management software
Media	Interviews with senior management Press conferences Events Press Area of the website
Bodies and institutions (local bodies, public administration, regulators, sector associations)	Meetings with representatives of local institutions
Communities and future generations (local communities and NGOs, schools and universities)	Supporting and sponsoring social initiatives Dialogue with universities and schools



The group participates in and supports activities organised by national and international organisations, the key ones of which are:

- **European Partnerships for Energy and the Environment – EPEE:** this is the most influential European energy and environment association. Its mission is to promote sustainable development in the HVAC/R sector. The group plays a key role in this association as it participates in the definition of legislative policies, including to improve current regulations, and sector trends.
- **European Heat Pump Association – EHPA:** this represents most of the operators of the European heat pump sector. Its main objective is to promote awareness and proper deployment of heat pump technology in the European market and to provide technical and economic assistance to the European authorities. The group is part of the association and participates in the drafting of standards at European Parliament level.
- **American Society of Heating, Refrigerating and Air-Conditioning System – ASHRAE:** this international society promotes the community's wellbeing through sustainable technologies for the environment. The society and its members focus on construction, energy efficiency, internal air quality and refrigeration systems and the sustainability of sector technologies. CAREL, as a member of the CEC (Conference & Exposition Committee) coordinates the conferences on sustainability, the economy and/or finance to raise awareness and facilitate the understanding of these topics' importance. CAREL is also a member of the technical committee for humidification and plays an active part in updating and maintaining technological standards for humidification equipment.
- **Air conditioning, Heating & Refrigeration Institute – AHRI:** this is one of the largest sector associations for the HVAC/R sector in the US. CAREL participates in the definition of sector trends through discussions with the EPA (Environmental Protection Agency) and the DOE (Department of Energy), which provide legislative guidance.
- **Alliance for Internet of Thing Innovation – AIOTI:** this organisation promotes dialogue and interaction between the Internet of Things (IoT) operators in Europe, contributing to the creation of a dynamic European IoT network to speed up the use of this emerging technology. CAREL joined the Alliance in 2018 and is currently assessing its involvement in the work groups for research, such as intelligent agriculture and food safety and smart energy.
- **Eurovent:** This association represents operators in the European HVAC, cooling and cold chain technologies for food sectors. It has more than 1,000 members based in Europe, the Middle East and Africa. CAREL is actively involved in the association which promotes and influences the sector through the creation and review of sector studies, rules and standards for the ventilation, air conditioning and refrigeration sectors, focusing on ecodesign and the efficient use of energy. The association includes an independent certification body which has certified some of the CAREL Group's products.

- **Italian Association of Air Conditioning, Heating and Refrigeration – AICARR:** this association follows issues related to the conscious use of energy, natural resources and innovation in energy infrastructures. CAREL participates in its core activities, providing assistance during workshops and training.
- **China Refrigeration and Air-conditioning Industry Association - CRAA:** this is a non-profit Chinese organisation that represents the manufacturers and distributors of the HVAC/R sector. It contributes to making regulations and the design and adoption of standards. The purpose of CAREL's membership is to gain an awareness of medium to long-term trends in the Chinese market.
- **The China Association of Refrigeration - CAR:** this is a Chinese association of air conditioning and heating system operators that is part of the Chinese Institute of Science and Technology. CAREL's participation in the Light commercial equipment innovation centre committee is fundamental for the group's future in Asian markets.

The group is also a member of HACCP INTERNATIONAL, BACNET and KONNEX for the certification of its products.





Customer first



## Customer importance and service excellence

Business relations with customers are a fundamental part of CAREL's assets. They refer to the group's fundamental values which puts the customer first. In order to strengthen customers' view of and confidence in the group, its relations are based on the principles of legality, morality, professionalism and honourability set out in its Code of Ethics.

Since 2007, the group has adopted the lean philosophy, designed to maximise the creation of value for customers. This has affected all internal processes and is of strategic value, as the philosophy requires ongoing improvements to quality, efficiency and delivery times of the group's products to its customers.

The most important customer category is that of the original equipment manufacturers (OEM), which manufacture complete units for applications in the HVAC/R markets.

<b>CUSTOMER FIRST</b>	Care of needs understanding of the wishes guaranteed quality
<b>ACHIEVEMENT</b>	Of personal commitment of result
<b>RESPECT</b>	of people and each other as trust in relationship with partners of the environment
<b>EVOLUTION</b>	as innovation as technology as ergonomics
<b>LEARNING</b>	as personal growth as professional improvement as company enhancement

Customer intimacy and direct engagement are key factors for the group, based on a strategy implemented over time and ensured by its global presence with seven production sites in four continents and a network of 18 commercial companies.

Over the years, the group has created a network of partnerships with customers (co-development) to achieve a better understanding of their needs, promote innovation and maximise the length of their relationship for the supply of critical components, enhancing the customer lifetime value.

To mitigate the risk of not meeting customer needs by identifying changes in their preferences and technological innovation in their markets, as well as the risk of not attracting new customers, the group monitors its customers' satisfaction levels by analysing market performance and through a structured ("Voice of Customer") process. This process collects and combines information about customer satisfaction at group level assisted by the key account managers who are in almost daily contact with their key customers. Satisfaction is assessed on two levels: Quality, i.e., the quality of the products offered to the customer, and

Service, i.e., the level of the logistics service rendered. The rating has three grades shown as a set of traffic lights. The group quality manager assembles customer opinions once a month using the information provided by the local quality representatives to prepare a customer monthly report, showing the percentage of red and orange ratings for each production site in terms of both quality and service/logistics.

CAREL plans to flank its current customer satisfaction assessment process with a new model in 2019.

CAREL uses the net promoter score (NPS) model, which shows the loyalty level in a company-customer relationship.

As confirmation of the international market's positive perception of the group, CAREL won the Best Italian Client Award 2018 with Lloyd's Register Italia recognising it "for its commitment to obtaining the highest quality standards, combining the need to create products with high energy savings and the possibility to effectively reduce environmental impact".



## Quality and product safety

The CAREL Group's products comply with national, EU and international safety standards. Specifically, the CAREL products bear the CE mark in Europe, confirming their compliance with the EU safety requirements. Outside the EU, the group products are certified for safety by authorised laboratories or national or international bodies.

The group manufactures and sells control products and systems that can also be customised to meet a customer's specific requirements or needs. They are used for various applications, including very complex ones, where the precision of the control systems over humidity, temperature or other environmental parameters could have a fundamental effect on manufacturing safety, product quality and operating efficiency as well as compliance with environmental regulations.

Before it launches new products, CAREL has its products tested by international accredited laboratories and certification bodies to check their compliance with the regulations and standards applicable from time to time. This also ensures greater impartiality and reliability of the analyses and tests.

During approval of a product development project (value proposition), the group identifies the international health and safety regulations applicable to the utilisation scenario and the countries where the product will be distributed. When developing more sophisticated projects or machinery designed specifically for a customer or to meet market requests to avoid the risk of defects, damage or malfunctioning due to the introduction of new technologies.

Specifically, each new product developed by CAREL is assessed for its risks to the health and safety of its users. The group's quality system includes all the guidelines in this respect, with three different test levels:

- internal standards: reliability assessments, useful life assessments, DFMEA, FPMEA, higher acceptance levels than those of international regulations, product checks and validation plans (for hardware and software, including with automated tests) to collate the experience gained in-house;
- legal requirements: obligations imposed by the law, directives and regulations at national, EU and international level depending on where the products will be sold; the group usually performs all the tests necessary to use the CE mark or other mandatory marks, including on products that will be added to;
- voluntary health and safety product certifications, provided by a third party notified/accredited expert (IECEE CB, UL, TUV, CCC/CQE, EAC); these certifications ensure that the product is safe in electrical and mechanical terms.

The following table shows the percentage of new products for which health and safety aspects have been tested to obtain, inter alia, the CE, cULus, cURus and cETLus marks compared to the number of projects completed in the year. The assessment does not include projects exclusively for software, as it is not applicable.

[GRI 416-1]

<b>PRODUCTS ASSESSED FOR HEALTH AND SAFETY PURPOSES</b>	<b>M.U.</b>	
Total new products that entered production in 2018 and underwent health and safety testing	no.	10
Total new products that entered production in 2018	no.	10
Percentage of products covered by the health and safety tests	%	100%

Five of the group's production sites have the ISO 9001:2015 quality management system certification.

The next table shows cases of products and services that were not in compliance with the laws and regulations covering their health and safety.

[GRI 416-2]

<b>NON-COMPLIANT PRODUCTS AND SERVICES</b>	<b>M.U.</b>	
Cases of non-compliance with laws, mandatory and/or voluntary regulations covering the effect of products and services on health and safety during their life time	no.	-

## Product information

Customer health and safety is a key aspect of CAREL's business model. The group even tests the materials used to build the components to ensure they comply with the EU regulations and especially the REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) and RoHS (Restriction of Hazardous Substances) Directives.

These tests check all the information on the labels and specifically:

- the product's identification;
- traceability (lot, production date and series number);
- mandatory quality marks (e.g., CE mark and other legally-required marks);
- product utilisation ratings;
- information about how to install the product or its safety.

The certification bodies usually check the product documentation (instructions leaflet and installation manual).

After the tests are performed during introduction or approval of the components, CAREL's quality system includes specific requests for updates of the information received from suppliers and a list of materials deemed to be dangerous.

The following table shows the percentage of new products that entered production in 2018 for which health and safety aspects have been tested for their labelling compared to the number of projects completed in the year. The assessment does not include projects exclusively for software, as it is not applicable.

[GRI 417-1]

PRODUCTS WHOSE LABELLING HAS BEEN TESTED FOR HEALTH AND SAFETY REASONS	M.U.	
Total new products that entered production in 2018 and underwent health and safety testing of their labels	no.	9
Total new products that entered production in 2018	no.	9
Percentage of products covered by the health and safety tests	%	100%

It is normal practice that 100% of the products meet the legal requirements for the marks to be included in the label and/or user instructions (manual/instructions/online guide). The labels are made of materials that comply with the requirements of the standards for durability and marking indelibility.

There were no cases of non-compliance with the law and mandatory and/or voluntary regulations about the information and labelling of products and/or services in 2018.

## Respect for confidentiality and protection of personal data

An appropriate IT system is essential for an international group like CAREL to ensure a high level of efficiency. The group's operations could be adversely affected by service discontinuities caused by IT systems or unauthorised access attempts by hackers that could lead to the loss of data, damage to intellectual property and, more in general, other risks related to the working of the IT systems that could impact the production processes. Accordingly, the group acknowledges the confidentiality and protection of data (including personal data) as fundamental and essential for the management of its relations with its stakeholders so that important data can be treated in compliance with the current regulations.

The group has disaster recovery and business continuity plans to deal with a breakdown or discontinuity of its IT services. It stores personal data and data of its customers and other parties it works with or that use CAREL products and solutions in dedicated internal and external data centres. The group has internal procedures and measures to monitor access to data by its employees and their processing to mitigate the above risks that could also damage its reputation or lead to fines from the Data Protection Authority should the data be damaged, lost, stolen, disclosed or processed for reasons other than those for which consent was given.

In order to ensure maximum transparency about data management and processing, the data protection policy pursuant to article 13 of Regulation (EU) no. 2016/679 (the General Data Protection Regulation, GDPR) is published on CAREL's website in the section on data access as well as the Data Protection Authority's guidelines for the protection of personal data and the use of cookies. These disclosures provide users with information about how the data entered by them is processed and how the website's cookies are used. They shows that information and personal data obtained by CAREL is kept confidential and that CAREL does

not ever use confidential data unless it has been specifically authorised to do so and, if so, it acts in strict accordance with the current data protection and processing legislation.

During the year, the parent commenced a project to implement the measures required by the GDPR by carrying out the following procedures:

- appointment of an external data protection officer and related communication to the Data Protection Authority;
- drafting of policies - compliance by design & by default, data breach, data protection, data retention, rights of data subjects and data protection impact assessment (DPIA);
- preparation and updating of information and consent forms;
- preparation of the list of data processing;
- appointment of internal controllers;
- provision classroom training courses on data processing and protection.

The parent set up an internal team to carry out these activities assisted by an external specialist and their work will continue into the first half of 2019, mostly for the training courses.

The group was not subjected to attacks like Dos (Denial of Service) and malware (e.g., Cryptolocker) during the year and, therefore, the data of its customers or other individuals (e.g., employees, consumers, etc.) were not lost, stolen or exposed. In 2018, it did not receive complaints about data protection or loss violations from consumers.



All mentions are neutral or positive, which is excellent and confirms the strength of CAREL's relations with the main sector media.

Overall, the market's perception of the brand is very positive, without any critical issues affecting its reputation.









Technology and innovation



## Research, development and innovation

The group has always put R&D at the centre of its business to retain its leadership position in the niches of the HVAC/R market, ensure its competitive edge and provide customers with technologically innovative solutions at competitive prices.

The group engages in applied research and development focusing on solutions to improve energy efficiency, reduce the environmental impact and cut back on the use of natural refrigerator gases. These research goals are supplemented by the emerging automation sector related to remote connections, where the group is developing data-driven solutions and services to provide customers with bespoke services using IoT platforms.

Product and process innovation is a key success factor that has contributed to the group's growth in recent years and will be strategic for its future development. The group's ability to quickly respond to market changes relies on its capacity to continuously introduce new products, solutions and/or services or new and updated versions of its products and services that meet or incorporate technological innovations. The intrinsic nature of these products and services and their development means that the group has to constantly upgrade them along with its performance, characteristics and the reliability of its technology.

To this end, CAREL has adopted a modular approach to product development in the different areas (electronics, mechanics and software) to promote as far as possible the ongoing introduction of innovative solutions by reusing different modules to reduce development times, ensure greater reliability and lower product costs.

The group's products are the result of very scrupulous research, design, development and industrialisation activities. It decides whether to develop a new product to offer the market new and better products in line with the requests and needs of its customers.

CAREL's trademark skills are in the areas of development of integrated solutions for the use of the cooling cycle to control the temperature and humidity and the use of isothermal and adiabatic humidification for controls of humidity and, in some cases, the temperature to adapt the products to different market requirements.

A market approach that does not offer individual products but rather integrated solutions to fully respond to the requirements of an application is very innovative.

## “Customise solutions to stand out from competitors and create additional evolved functions and performances based on our know-how and research into our customers”

Technological innovation is the result of ongoing dialogue between the various areas involved in product development, i.e.:

- the marketing function, which provides information about the customer’s specific requirements and market trends;
- the product platforms function, which defines the product structure to meet both market needs and those of the different application segments in which the group operates;
- the competence centres, which define the technological solutions that meet the customers’ requirements in an innovative manner.

CAREL R&D activities are carried out at three dedicated sites in Italy, China and the US, specialised in HVAC/R, humidification, electronics, power electronics and precision mechanics applications. Each R&D centre has five competence centres focused on developing technical knowledge in five areas. The thermodynamic competence centre is part of the knowledge centre, which is where new technologies are researched and products are tested, such as for example the new natural refrigerants.

The laboratories in Italy, China and the US play a fundamental role in developing innovation. There are 11 of them: three thermodynamic laboratories, three humidification laboratories, two electronics laboratories, two power electronics laboratories and one valves laboratory.

At 31 December 2018, the group’s R&D department has 193 engineers and technicians, equal to 13% of its workforce.

The following table shows the number and percentage of R&D employees by geographical area at year end:

### Breakdown of R&D employees by geographical area

Country	no.	%
Italy	140	72%
United States	11	6%
China	42	22%
Total	193	100%

The group's commitment to continuous innovation in designing high efficiency solutions reduces the environmental impact of machinery and plant and increases the efficiency of its customers' systems. It has invested an average of 5.8% of its revenue in R&D in the last three years.

The next table shows investments in R&D over the three years as a total and a percentage of revenue:

### Investments in research and development

	2018	2017	2016
€'000	16,035	14,494	14,392
Percentage of revenue	5.7%	5.7%	6.2%

**"Our laboratories  
are at the heart  
of our business"**

**3 R&D centres  
11 laboratories  
around the world**

In addition to the actual R&D employees, the commercial companies have software developers who build the upgrades necessary to make the software compliant with the local markets and who have the technical skills necessary to ensure efficient and prompt post-sales assistance.

The availability of integrated software development environments is essential to develop integrated solutions that allow the group's customers to put the solutions into immediate use.

Over the last three years, the R&D unit has worked on more than 20 product development projects a year and over 600 customisation projects for customers. The group's intellectual property is protected by 29 patents (requested or granted), five of which are for innovative solutions designed in 2018. They also cover new applications for other environments which CAREL applies to solutions of interest to its customers.

### Investments in R&D

**€ 16.0 million**  
**5,7 % of revenue**  
**29 filed patents**

It follows that the group has had to deal with the risks related to protection of its intellectual property, or rather its potential inability to properly protect its intellectual property, technological know-how and trademarks.

The group responds to this risk by keeping the know-how deemed essential to maintain its competitive edge in-house, limiting the use of external developers (who have to sign a confidentiality agreement as part of their contract) to a minimum.

Intellectual property protection is also governed by the Code of Ethics, which provides that the employees are required to protect, maintain and defend CAREL's rights and to respect the intellectual property rights of other parties.

R&D activities are also carried out through long-standing partnerships with the Padua University (in areas ranging from analogue and digital electronics to power electronics, system and control theory, thermodynamic applications, technical physics and mechanical production processes to data statistical analyses), the CNR (National Research Institute) and the most important sector associations such as EPEE (European Partnership for Energy and Environment), AICARR (Italian Association of Air Conditioning, Heating and Refrigeration), ASHRAE (American Society of Heating and Air-Conditioning Engineers), AHRI (Air-conditioning, Heating and Refrigeration Institute) and EHPA (European Heat Pump Association).

## Energy efficient and sustainable products and services

Commitment to sustainability and respect for the environment have always been part of CAREL's DNA. When developing and improving integrated solutions designed for various market segments, CAREL's approach is solution rather than product based. It pays close attention to sustainability issues, and has research programmes for:

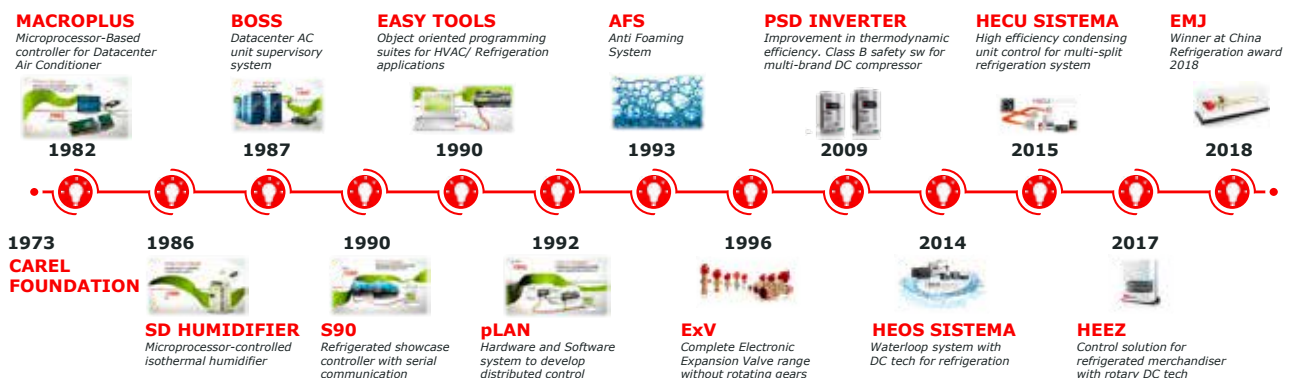
- energy efficiency;
- use of natural refrigerants;
- monitoring and analysis of data and system optimisation.

## Energy efficiency

The increased efficiency of CAREL's conditioning and refrigeration systems is one of its cornerstones. In addition to its move towards less energy intensive systems, CAREL also pays close attention to their power supply. The transition from traditional gas or fossil fuel heating systems to electric pump solutions should allow for the better use of renewable sources. The main new designs and innovations of recent years of HVAC/R technologies have led to:

- optimisation of refrigeration systems and circuits;
- introduction of variable speed compressors using BLDC technology, facilitating greater efficiency in applications like heat pumps;
- specific devices for CO2 refrigerant applications making the systems more efficient and extending the use of these applications in hotter geographical areas;
- the Heez system, which was then used to build the most efficient bottle cooler integrated control system in the world. It is a variable speed propane application that allows beverage distribution applications to reduce their environmental impact.

The ongoing development of these activities has also allowed the group to maintain its competitive edge on the global market for the introduction of new technologies for the HVAC/R sector as shown in the following diagram. It has obtained numerous awards from the most important sector bodies such as, for example, the AHR refrigeration award from ASHRAE in 2016 for the HEOS system and the World Beverage Innovation Award for Heez during the Drinktec 2017 exhibition.



CAREL not only optimises systems but also designs solutions that allow system optimisation like the HEOS (High Efficiency Showcase) system, where supermarket refrigeration is radically transformed from a centralised refrigerated liquid production system to a distributed system in which each cabinet can be optimised to minimise the system's consumption.

In the humidification sector, the group focuses on adiabatic humidification, which allows the production of humidity using less energy compared to isothermal humidification. One related application is evaporative cooling, with more efficient temperature controls especially in air treatment applications.

### **Natural refrigerants**

The effects of traditional refrigerants on the environment and their banning in some geographical areas has made it fundamental for CAREL to use low environmental impact natural refrigerants like propane (R290), carbon dioxide (R744) and ammonia (R717), sometimes in tandem with variable speed compressor technologies.

CAREL has focused on developing industrial and commercial refrigeration systems that can use natural refrigerants in each application niche served with its main compressor manufacturer partners in recent years. Another area the group focuses on is that of solutions that use fewer refrigerants so as to decrease their cost and environmental impact like the HEOS system.

### **Monitoring and analysis of data and system optimisation**

The new IoT division has allowed the group to concentrate on solutions that allow more evolved system optimisation solutions alongside the traditional monitoring of systems and alarm management. The system functioning data provide the energy managers with additional information about the system's output.

It also allows for the assessment of any drops in performance which is essential to implement scheduled maintenance programmes.

The group also has system monitoring and optimisation services, where data from other similar systems are compared to align the performances of the less efficient systems with those of the best-performing systems. System optimisation can also be coordinated using devices making up the system depending on its use, the environmental conditions or use of the system.

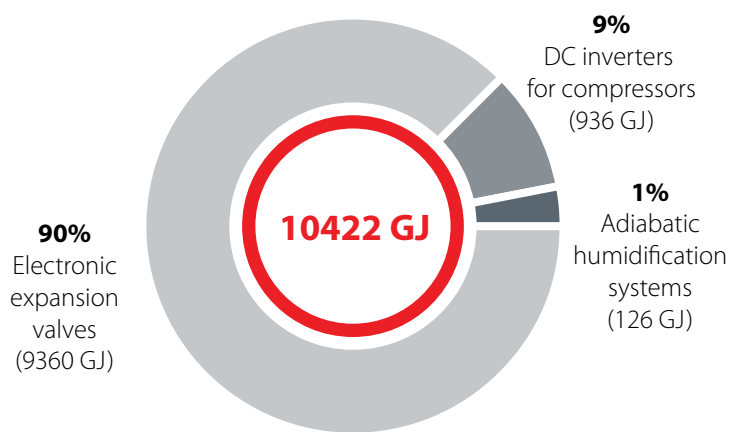
Introduction of an advanced control system in even the most simple cases allows significant savings in the machines' and systems' energy requirements thanks to functions like, for example, optimisation of switching on and off rather than using it only when strictly necessary.

In order to provide an estimate of the energy savings generated by the use of CAREL products and/or services, the group selected a basket of solutions that represent its production and philosophy and are its best performers in terms of the energy efficiency of the individual units for HVAC and REF installations. These



are the electronic expansion valves, inverters for DC compressors and adiabatic humidification systems. The group modelled the reference working conditions for each selected product (considering the application - either HVAC or REF - the size and refrigeration capacity of the installation and the most commonly used refrigerant today) to calculate the average energy performance obtainable with equivalent traditional technologies. Using the best methodologies available, it estimated the energy savings obtained by using the CAREL solutions presented in the following graph to identify the differences with the traditional solutions.

**Reduction in consumption of electrical energy**





The environment and occupational  
health and safety



The group has recently adopted an “Environmental and occupational health and safety policy” reflecting its principles and values to guarantee the quality of its work and contribute to the achievement of exemplary results in the sector in terms of environmental protection and occupational health and safety. The prevention system allows the group to identify potential risks in advance and is backed up by this policy which becomes part of the system and represents the commitment of the parent, its direct and indirect subsidiaries, its partners and stakeholders. The policy supplements the parent’s integrated quality, environment and occupational health and safety policy.

The group continues its search to reduce negative effects on the environment, which has always been fundamental to its business.

This includes the ongoing research into solutions for systems and plant regulation and control that use low environmental impact refrigerants as well as solutions that provide customers with the maximum possible energy efficiency. In addition, CAREL is committed to the following objectives:

- ongoing improvement of its processes to reduce their impact on the environment, the local community and improve health and safety in the workplace;
- compliance with the applicable legal requirements and other signed agreements;
- adoption of a system to prevent pollution, environmental incidents, injuries and occupational diseases.

CAREL shares this commitment with its suppliers and customers, both of which are essential to and an integral part of its development.

The ongoing improvement of processes is fundamental to minimise occupational health and safety risks. Technical designs of the workplace, equipment and processes based on the highest levels of compliance with the ruling regulations on safety and hygiene in the workplace are prepared and the group also has specific internal policies.

Dedicated resources at the parent and Carel Electronic (Suzhou) Co. Ltd. manage environmental and occupational health and safety aspects as both sites are ISO 14001:2015 certified while the Italian site also has the OHSAS 18001:2007 certification and plans to upgrade to the new ISO 45001:2018 standard. The group does not currently have a unit to manage environmental and occupational health and safety matters although they are managed locally by the related plant managers at the group’s production sites and commercial companies.

In 2018, the group was not found guilty or summonsed to appear in court for violations of the occupational health and safety regulations or for environmental crimes. It did not receive any complaints in this respect during the year.

## Environmental protection <sup>1</sup>

The group's Code of Ethics states that protection of the environment and natural resources are priorities. Specifically, the Code states that the group and all its employees shall act in compliance with the ruling laws and regulations when carrying out their duties to protect the environment, reduce pollution and contribute to the achievement of exemplary results in this sector. In addition, the group contributes to the promotion of scientific and technological development for the protection of the environment and resources at the appropriate levels and during the performance of its activities.

As noted, dedicated resources at the parent and Carel Electronic (Suzhou) Co. Ltd. manage environmental issues as both sites are ISO 14001:2015 certified. They prepare specific environmental policies to flank those defined at group level. The group does not currently have a unit to manage environmental and occupational health and safety matters although they are managed locally by the related plant managers at the group's production sites and commercial companies.

Although it is not exposed to particularly significant risks, CAREL has identified the following possible environmental impacts related to emissions (harmful ozone gas, greenhouse effect, pollutants) and consumption of natural resources (electrical energy, natural gas, water, raw materials). It monitors and manages these impacts constantly to ensure compliance with the ruling legal requirements of the countries where it operates.

Management's current approach is to assess the energy efficiency of production equipment, vehicles used to transport people and things and technical and technological systems before it purchases them. For example, although the parent does not have structured programmes for energy efficiency improvement, it has projects to replace light bulbs with reduced energy consumption LED lighting, to replace cars with internal combustion heat engines with hybrid vehicles and to improve the thermal insulation of buildings (external coverings and shutters for windowed surfaces). In addition, it is redesigning its current work environment air-conditioning systems to replace the present systems with more energy efficient ones. The parent also plans to perform a second energy diagnosis in 2019 following the first one carried out in 2015. Over the next few years, the group plans to double the site in China (CSZ, Carel Electronic -Suzhou) and extend that in the US (CUS, Carel United States), with a 9% increase in capacity already in 2019. This will lead to a rise in consumption and the related emissions despite the fact that the new sections of the production sites have been designed using maximum efficiency systems. Another efficiency project for the foreign sites is that for Carel Adriatic (CHR) which will have a new air-conditioning system in 2019.

---

<sup>1</sup> The environmental data presented in this section refer to all the group's production sites. They do not include the commercial companies which are deemed immaterial given the small number of employees engaged in production activities. Any other limitations to the scope are specified in the note.

## Energy consumption and emissions

The group's energy consumption is driven by its manufacturing plant, lighting, heating and cooling of the work environments. In addition, its fleet of company cars and logistics vehicles used for internal transport between the different buildings of the same production site also contribute.

The available energy sources vary depending on the operating requirements and geographical areas in which the group's production sites are located. Electrical energy consumption by the sites in China and South America<sup>2</sup> also include consumption for the heating systems.

In 2018, total energy consumption approximated 50,328 GJ and CO<sub>2</sub> emissions for total energy consumption (Scopes 1 and 2) were roughly 3,876.2 tCO<sub>2</sub> e. The following tables show a breakdown of consumption and emissions ("DIRECT AND INDIRECT CONSUMPTION AND ENERGY INTENSITY (GJ)" and "DIRECT AND INDIRECT EMISSIONS AND EMISSION INTENSITY (tCO<sub>2</sub> e)").

The group calculated its energy intensity rate considering the gross surface area and the number of employees of its sites. This rate is 1.38 GJ/m<sup>2</sup> equal to emissions of about 0.11 tCO<sub>2</sub>e/m<sup>2</sup> considering the gross surface area and 42.79 GJ/emp equal to emissions of about 3.30 t CO<sub>2</sub>e/m<sup>2</sup> compared to the number of employees at the sites.

### Direct and Indirect Consumption and Energy Intensity (GJ)<sup>3</sup> [GRI 302-1 | GRI 302-3]

Consumption	2018
<b>Total direct consumption from non-renewable sources</b>	<b>23,363.3</b>
Natural gas	6,663.5
Diesel	
of which: for logistics vehicles	20.6
of which: for company fleet	10,959.9
Petrol	
of which: for company fleet	4,631.4
LPG	1,088.0
<b>Total indirect consumption</b>	<b>26,964.2</b>
Electrical energy from non-renewable sources	26,964.2
Energy intensity (GJ/m <sup>2</sup> )	1.38
Energy intensity (GJ/emp)	42,79

<sup>2</sup> The December figures for the South American site have been estimated.

<sup>3</sup> Energy and emissions intensity is calculated considering the gross surface area and number of employees at the production sites.

## Direct and Indirect Emissions and Emission Intensity <sup>4</sup> (tCO<sub>2</sub>e)

[GRI 305-1 | GRI 305-2 | GRI 305-4]

Emissions	2018
<b>Total direct emissions from non-renewable sources <sup>5</sup></b>	<b>1,457.4</b>
Natural gas	340.51
Diesel	
of which: for logistics vehicles	1.42
of which: for company fleet	754.4
Petrol	
of which: for company fleet	296.2
LPG	64.82
<b>Total indirect emissions from non-renewable sources <sup>6</sup></b>	<b>2,418.8</b>
Electricity	2,418.8
Greenhouse gas emissions intensity (tCO <sub>2</sub> e/m <sup>2</sup> )	0.11
Greenhouse gas emissions intensity (tCO <sub>2</sub> e/emp)	3.30

While it continues to be a priority for the group, protection of the environment and natural resources is given greater or lesser importance by the foreign production sites and commercial companies depending on their location, the local regulations and availability of resources. Therefore, differences in the plants used and legislation impose scope limitations and require clarification about atmospheric emissions. Information about at least the higher impact emissions is given for each production site.

For example, the ozone depleting substances considered vary depending on the plants and refrigerants used. Regular maintenance is carried out at all sites in line with an annual plan to ensure the highest efficiency levels and to reduce the consumption of ozone depleting gases.

With respect to emissions of NO<sub>x</sub>, SO<sub>x</sub> and other significant atmospheric emissions, the Brazilian site (CSA, Carel South America) does not emit VOC. Up until April 2018, no electronic production took place in the US (CUS) and, therefore, there was no information about polluting emissions. The parent's analyses of emissions from the chimneys of its production units show levels slightly below the limits established by the related authorisations. The incinerators of Carel Adriatic (CHR) are subject to regular maintenance and emissions are analysed periodically to comply with the legal requirements for environmental protection. In China, a third party specialist is required to carry out sample tests at Carel Suzhou (CSZ).

<sup>4</sup> Energy and emissions intensity is calculated considering the gross surface area and number of employees at the production sites.

<sup>5</sup> The figures used to calculate the emissions were published by the Department for Business, Energy & Industrial Strategy (BEIS) in 2018

<sup>6</sup> The figures used to calculate the electrical energy emissions were published by the Department for Environment Food & Rural Affairs (DEFRA) in 2015.



The emissions of NOx, SOx and other significant atmospheric emissions of the group in 2018 are shown below:

**NOx, SOx and other significant emissions (kg) [GRI 305-7]**

<b>Emissions<sup>7</sup></b>	<b>2018</b>
Nitrogen oxides (NOx)	54.2
Sulfur oxides (SOx)	2.6
Persistent organic pollutants (POP)	-
Volatile organic compounds (VOC)	827
Hazardous air pollutants (HAP)	-
Particulate matter (PM)	51

**Water**

Management has not provided for monitoring or other initiatives to reduce water consumption to date given that it almost exclusively refers to the restrooms. In 2018, the group's total water consumption was roughly 18,166 cubic metres . Water is obtained from the public aqueduct for each production site and bills are checked regularly to ascertain that consumption has not changed and, therefore, that there are no leakages. The water consumption trend, compared to the volumes produced, is steady.

During 2019, the parent plans to install meters so that it can monitor its water consumption internally.

<sup>7</sup> Water consumption for the Chinese, US and Croatian sites is calculated by adding the bills for 2018. The figure for the South American site was provided by the supplier. Consumption in Italy was estimated using the average daily consumption as definitive data were not available at the date of preparation of this statement.

## Occupational health and safety

The group protects and promotes the health and safety of workers (including those in the supply chain) by adopting preventive measures and spreading an internal culture of the highest respect for the applicable legal requirements and other provisions agreed for occupational safety and hygiene. Its aim is to ensure maximum attention to reduce risks and constantly improve processes.

The group is aware that its responsibility with regard to its employees and colleagues makes it mandatory to do all it can to reduce risks. Accordingly, the technical designs of the work places, equipment and processes must be based on the highest respect for the ruling regulations about occupational safety and hygiene. Specifically, each CAREL employee shall pay utmost attention when carrying out their tasks and shall closely comply with all the established security and prevention measures to avoid all possible risks for themselves and their colleagues and to minimise the risk of injury in the workplace and occupational diseases.

The CAREL Group deems that occupational health and safety is fundamental in ethical-social and practical-economic terms. A significant injury in the workplace firstly has a biological, moral and economic impact on the injured person and their family but it also damages the group's reputation and finances. Accordingly, management is committed to reducing risks to employees' health and safety in the workplace and provides them with suitable and properly maintained equipment and work methods. Employees also have collective and individual protection devices in line with the products available through technical and scientific progress. The group fully complies with the relevant local regulations applicable in the countries where it operates. Although its international vocation means that different laws are applicable at local level, the parent has drawn up a "Policy for the environment and occupational health and safety" which summarises the principles and rules designed to reduce and eliminate the probability of injury and accidents. The parent's board of directors recently approved the policy and it will be distributed to each production site and commercial company around the world. The policy will also be applicable to the group's suppliers, consultants, stakeholders, etc. When designing work stations, the group takes into account the workers' ergonomic needs. In addition and to guarantee the greatest possible involvement of all the workers, the group has a system to report and manage near misses and hazards so it can identify and promptly resolve issues that could pose a risk to the workers' health and safety, thus improving safety levels at work over time.

At least once a year and as required by the ruling Italian legislation, at the parent's premises:

- the competent doctor carries out a general inspection, accompanied by the prevention and protection service manager, to update the existing healthcare protocol;
- the designated prevention system officers (the employer, delegated managers, security representatives, competent doctor and the prevention and protection service manager) participate in the periodic meeting required by Legislative decree no. 81/2008.

Specially trained employees regularly perform integrated internal audits (quality, environment and safety). At least once a year, qualified external experts carry out an audit to check compliance with the law and the environment and safety management system. Their findings are managed in accordance with the procedures established by the management systems of the parent's Italian production site, which is OHSAS 18001:2007 certified. The parent intends to also obtain certification under the new standard ISO 45001:2018. In accordance with the regulations ruling in each geographical area, the group's sites and commercial companies have a training plan, which they update regularly, to provide mostly classroom courses on occupational health and safety depending on the employees' training needs and legal requirements. The group reiterated its commitment to providing its employees with occupational health and safety courses during the year. Specifically, it provided more than 2,800 hours of occupational health and safety training in 2018.

While occupational health and safety management activities are carried out by the parent's employees, as its site is certified and subject to Legislative decree no. 81/2008, the Group does not currently have a unit to manage occupational health and safety although the related activities are carried out in the production sites and commercial companies by the local management.

The parent does not have particularly significant risks. However, it has identified the following risks related to occupational health and safety: accidents involving goods-handling machinery, electric shock, ergonomic risks due to the manual handling of loads and high frequency repeated movements, injuries in general, fire and explosion (the latter risk is limited to certain specific areas) and work stress.

In 2018, no fatal injuries or occupational diseases were recorded. The total absenteeism rate was 3.32%. However, it should be noted that, in 2018, the parent received an inspection notice for ascertainment of the infringement of protection of health and safety in the workplace regulations. The notice alleges the reintroduction of welding fumes into the work environment after collection and filtering, affecting some stations used for manual occasional tin soldering. The parent promptly took steps to resolve the issue and installed centralised aspiration systems as required by Spisal (the prevention and occupational hygiene and safety service). At the date of this report, the body has not yet performed its inspection to check that compliance of the work carried out by the parent.

The following tables show the injuries and related injury rates recorded for CAREL employees in 2018:

#### Number of injuries broken down by gender and geographical area [GRI 403-2]

Number of injuries <sup>8</sup>	Men	Women	Total
In the workplace	10	10	20
Western Europe	3	2	5
Rest of Europe, Middle East and Africa	1	-	1
North America	6	7	13
South America	-	-	-
Asia Pacific North	-	-	-
Asia Pacific South	-	1	1
<b>Commuting</b>	<b>7</b>	<b>7</b>	<b>14</b>
Western Europe	5	3	8
Rest of Europe, Middle East and Africa	-	-	-
North America	-	-	-
South America	2	4	6
Asia Pacific North	-	-	-
Asia Pacific South	-	-	-
<b>Total</b>	<b>17</b>	<b>17</b>	<b>34</b>

#### Injury rates and absenteeism rate (%) [GRI 403-2]

Numero di infortuni <sup>10</sup>	Men	Women	Total
<b>Injury severity rate <sup>9</sup></b>	<b>0.14</b>	<b>0.27</b>	<b>0.19</b>
Western Europe	0.09	0.06	0.08
Rest of Europe, Middle East and Africa	0.02	-	0.01
North America	0.02	0.82	0.23
South America	-	-	-
Asia Pacific North	-	-	-
Asia Pacific South	-	0.05	0.01
<b>Injury frequency rate <sup>10</sup></b>	<b>9.75</b>	<b>16.93</b>	<b>12.38</b>
Western Europe	8.97	14.04	10.42
Rest of Europe, Middle East and Africa	6.07	-	2.87
North America	37.24	122.15	59.52
South America	45.32	60.42	54.38
Asia Pacific North	-	-	-
Asia Pacific South	-	48.36	11.53
<b>Absenteeism rate <sup>11</sup></b>	<b>2.58</b>	<b>4.71</b>	<b>3.32</b>
Western Europe	2.66	5.88	3.62
Rest of Europe, Middle East and Africa	3.09	0.78	1.87
North America	0.14	0.18	0.15
South America	1.17	4.90	3.41
Asia Pacific North	11.63	76.42	22.39
Asia Pacific South	0.96	1.26	1.04

<sup>8</sup> The figures for the parent were taken from the injury register and cover the entire workforce (white and blue collars). Injuries with up to three days sick leave are not included in the calculation.

<sup>9</sup> Injury severity rate: (number of days lost due to injuries at work/total number of hours worked) x 1,000.

<sup>10</sup> Injury frequency rate: (number of injuries/total number of hours worked) x 1,000,000.

<sup>11</sup> Absenteeism rate: (number of days off work/total number of days worked) x 100.

With respect to workers not employed directly by the group (for example, consultants), the following table shows the events that led to the temporary inability of these workers and the related injury rates.

#### Number of injuries broken down by gender and geographical area - Other workers [GRI 403-2]

Number of injuries <sup>12</sup>	Men	Women	Total
In the workplace	2	1	3
Western Europe	1	1	2
Rest of Europe, Middle East and Africa	1	0	1
North America	-	-	-
South America	-	-	-
Asia Pacific North	-	-	-
Asia Pacific South	-	-	-
Commuting	-	-	-
Western Europe	-	-	-
Rest of Europe, Middle East and Africa	-	-	-
North America	-	-	-
South America	-	-	-
Asia Pacific North	-	-	-
Asia Pacific South	-	-	-
<b>Total</b>	<b>2</b>	<b>1</b>	<b>3</b>

#### Injury rates (%) – Other workers

[GRI 403-2]

Injury frequency rate <sup>13</sup>	6.15	2.26	3.91
Western Europe	13.92	27.70	18.53
Rest of Europe, Middle East and Africa	20.39	-	4.98
North America	-	-	-
South America	-	-	-
Asia Pacific North	-	-	-
Asia Pacific South	-	-	-

<sup>12</sup> The figures for the parent were taken from the injury register and cover the entire workforce (white and blue collars). Injuries with up to three days sick leave are not included in the calculation

<sup>13</sup> Injury frequency rate: (number of injuries/total number of hours worked) x 1,000,000

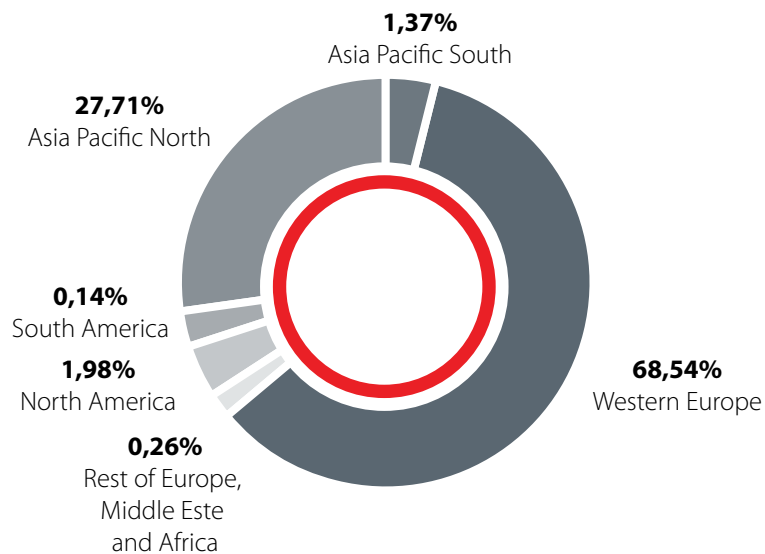
## Responsible supply chain management

In May 2018, the parent sent the Code of Ethics to all its suppliers as a clear message of the group’s commitment to scientific development and sustainable technology. Its aim was to define the reference principles for social and environmental topics and to propose a set of conduct rules to the suppliers. The objective was also to consolidate the dissemination throughout the group of transversal principles that consider the different social, cultural and geographical contexts in which the group operates and which are strongly based on the group’s values of legality and morality, to be achieved through compliance with the principles of dignity, equality, professionalism and honesty. The parent also sent the Code of Ethics to the plant managers of the foreign production sites so that they could distribute it to their local suppliers.

During the year, the group worked with 555 suppliers of which, in terms of turnover, the manufacturers make up 71% of the volumes purchased while the distributors accounted for the other 29%.

The group promotes the use of local suppliers. Specifically, roughly 69% of its suppliers are located in Europe, about 29% in Asia and 2% in America, the Middle East and Africa, based on its total purchases made in 2018<sup>14</sup>. This allocation is due to the fact that the European and Chinese suppliers work with both EU and non-EU sites. The Carel Suzhou site centralises its purchases of materials from Chinese and Asian suppliers to then distribute them to all the group’s production sites.

**Percentage of spending on local supplies**



<sup>14</sup> Total purchases were calculated using the data in the BI purchases received and invoiced report for the period from 1 January to 20 December 2018. These figures were supplemented with those in Oracle for the South American site for all the orders received from 1 January to 31 December 2018, excluding non-inventory articles (they are not considered to be suppliers but purchases of coded/counted goods). The data for the commercial companies were excluded as they are immaterial given the limited number of employees and the lack of manufacturing activities.

CAREL selects its supplies based on principles of impartiality, competence, competitiveness and price, as well as transparency and excellence in accordance with the highest quality standards. The supply transactions comply with the law and regulations about labour, human rights, health and safety, the environment and anti-corruption ruling in the different countries and the principles set out in the Code of Ethics. Each supplier is required to ensure compliance with fundamental human rights, the principles of equal treatment and non-discrimination and prevention of child and forced labour.

The group screens its suppliers considering their technical skills, the quality of their goods/services, delivery times, prices and payment conditions and the purchase conditions in general. It requires high performance standards in terms of costs, quality, service and sustainability and, specifically, its suppliers' quality management systems must be ISO 9001:2015 certified.

The group deems it fundamental to have ongoing dialogue with its suppliers and the exchange of good practices and skills as this is essential to obtain quality products and services within the requested timeframes. This interaction takes different forms: visits by technical staff and quality control specialists and IT platforms (e.g., IUNGO, etc.) used to share information, including the management and update of orders.

A complex supply chain like that of CAREL's, comprising national and international suppliers, requires constant supervision and updates given the significant intrinsic risks and the fact that CAREL relies heavily on its suppliers for components necessary for its production. In order to ensure availability of the materials for its production phases, to diversify risks and guarantee the necessary time to market, the group schedules its production carefully and provides that a growing part of its components are supplied by at least two suppliers.

Other risks relate to the protection of the environment, human rights and occupational health and safety. Specifically, the group is exposed to the risk that its suppliers may not comply with its quality standards or the regulations about employment and healthcare, occupational health and safety or that they may deliver raw materials or components that are defective or do not comply with the established standards. Another risk is that the suppliers are unable to deliver the raw materials or components within the agreed time-frame for whatsoever reason (for example, but not limited to, the scarcity of the raw materials, financial difficulties, issues related to the quality of the raw materials, strikes) which could adversely affect the group's production cycle and cause delays in deliveries to customers, with a negative effect on the group's reputation.

The group's current tools to manage these risks include supplier screening and initial checks of their structure by visits to check they meet the group's standards. These checks include a technical inspection of the equipment and plant and a review of the work environment.

With respect to supplier screening and checks of their ability to protect and manage human rights, occupational health and safety and the environment, it should be noted that, at the date of this report, none of the suppliers has been screened using environmental or social criteria and a formalised and documented process.

Although the group does not have a standard systematic control procedure, no complaints were received in 2018 related to alleged violations of human rights or non-compliance with environmental regulations by its supply chain.







Human capital



CAREL is committed to encouraging a climate of trust and respect and the inclusion and integration of its personnel, including through its Code of Ethics and policies to ensure respect for human rights and diversity. These documents set out the ethical principles and conduct standards that the group requires its resources comply with during their daily activities. They include legality, morality, professionalism, dignity and equality. The group also promotes their circulation along its value chain to ensure compliance with these values and conduct standards by all its stakeholders.

The group has defined policies and practices in line with the sector requirements and the necessity of its international stature to ensure efficient and effective human resources management. Specifically, given its increased presence on the global market, the group's resources and skills need to be distributed more widely so that all the organisation's units have access to them (corporate learning). The organisational model and roles are standardised across the various sites and commercial companies and tend to develop similarly in order to guarantee common methods for internal interaction and communication.

A positive work climate is also ensured through dialogue and the sharing of opinions and ideas, which is why the group guarantees unrestricted membership of trade unions and the right to collective bargaining, always in compliance with respect for human rights and diversity. In order to mitigate the risk of strikes or other forms of abstention, or trade union tensions, the group provides that relations and negotiations with the trade unions are handled directly by each group entity, assisted by the parent's functions, which coordinates the activities and ensures compliance with the group's principles. 13.6% of the parent's employees are members of a trade union and disputes are minimal.

In 2018, 49% of the group's employees were covered by collective bargaining agreements<sup>1</sup>.

Five complaints about work issues and/or respect for human rights were presented in 2018 at the production sites in the US and South America. They mainly referred to non-compliance with the conduct rules prescribed by the Code of Ethics in relations between colleagues and between managers and employees or unlawful dismissal claims. Four of these complaints were resolved in 2018 while one is still pending.

---

<sup>1</sup> A national sector labour agreement is not present in some countries where CAREL is active.

## Composition of the workforce

At 31 December 2018, the group has 1,456 employees, which increases to 1,567 if temporary workers are included. Employees with disabilities numbered 37 at the same date, of which 64% were men.

The largest professional category is that of the white collars (roughly 64%) followed by blue collars (34%). Management make up 2% of the total workforce.

The professional category classification set out below reflects the relevant Italian legislation. It should be noted that, in several countries, the group has given some resources (women and men) independent decision-making powers and delegations/proxies for transactions with third parties. Therefore, its workforce in those countries includes persons with contracts similar to junior managers under Italian law that are similar to those for managers under the locally applicable laws.

### Number of employees by professional category and gender [GRI 405-1]

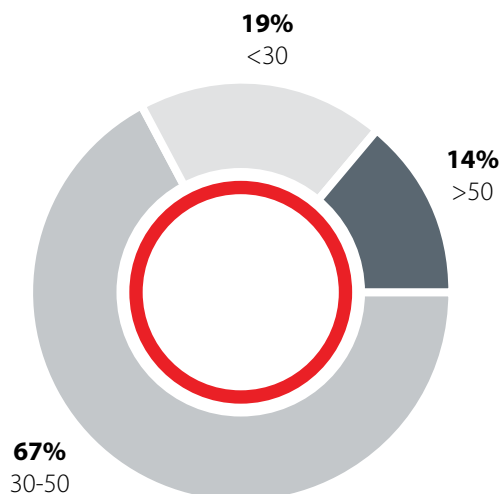
	Men	Women	Total
Managers	34	-	34
White collars	698	226	924
Blue collars	198	300	498
<b>Total</b>	<b>930</b>	<b>526</b>	<b>1,456</b>

### Percentage of employees by professional category and gender (%) [GRI 405-1]

	Men	Women	Total
Managers	2	-	2
White collars	48	16	64
Blue collars	14	20	34
<b>Total</b>	<b>64</b>	<b>36</b>	<b>100</b>

Most employees are in the 30-50 age bracket with an average age of around 38 (40 for men and 36 for women). A breakdown of the employees by professional category and age bracket shows that most of the white collars are also in the 30-50 age bracket (44.3%), while the managers fall into an older age bracket.

### Employees by age bracket (%)



### Percentage of employees by professional category and age bracket (%) [GRI 405-1]

	<30	30-50	>50	Total
Managers	-	1	1	2
White collars	11	45	8	64
Blue collars	8	21	5	34
<b>Total</b>	<b>19</b>	<b>67</b>	<b>14</b>	<b>100</b>

The group's commitment to long-term permanent employment can be seen from the service seniority (roughly 46% of its employees have been with the group for a period of between six and 35 years) and the high percentage of employees with permanent contracts (76%). Workers with temporary contracts number 111<sup>2</sup>, including 60 men and 51 women.

### Number of employees by contract type and gender [GRI 102-8 | GRI 405-1]

	Permanent employment contracts		Fixed-term contracts		Total	
	Men	Women	Men	Women	Permanent	Fixed-term
Western Europe	512	231	24	5	743	29
Rest of Europe, Middle East and Africa	73	51	17	73	124	90
North America	79	31	2	-	110	2
South America	22	25	-	-	47	-
North Asia	29	10	137	87	39	224
South Asia	35	13	-	-	48	-
<b>Total</b>	<b>750</b>	<b>361</b>	<b>180</b>	<b>165</b>	<b>1,111</b>	<b>345</b>

<sup>2</sup> The average number of temporary workers is provided for each site and commercial company for the year.

The group guarantees working hours in accordance with the maximum number established by the applicable regulations and that its workers' needs are met throughout the employment relationship, recognising the existence of these needs related to different stages of their life cycle (e.g., maternity leave, paternity leave, sick leave and leave to care for ill relatives, etc.).

To ensure work/life balance, CAREL provides its employees with solutions to best meet their personal needs. Roughly 2% of its workforce have part-time jobs (mostly women, also because of their needs related to different stages of their life cycle, e.g., maternity leave). The parent has a supplementary contract that provides more favourable conditions to all its employees (i.e., nearly half of the group's workforce) compared to the national sector employment contract, covering issues such as daily and weekly flexible work hours, part-time work, paid leave when children are born.

#### Number of employees by type of job [GRI 102-8]

	Men	Women	Total
Full-time	928	495	1,423
Part-time	2	31	33
<b>Total</b>	<b>930</b>	<b>526</b>	<b>1,456</b>

## Employee selection, development and training

CAREL has always invested in its human capital: it recognises the individual as central to the group's development. Accordingly, it ensures at far as possible that its employees' aptitudes match the group's objectives and challenges. A key factor to achieving this objective is the assessment of employees and development of their skills over their career path as well as acknowledgement of their merits.

#### Talent selection and retention

Talent selection and retention is of great importance to CAREL. Activities to improve its reputation and attractiveness on the market are essential to compete on the labour market (talent acquisition).

The group's future growth and success depend on its ability to hire and retain qualified personnel with a high level of skills and understanding of the group's products and markets, which are essential to carry out their activities.

The HR function assists the unit managers during the recruitment stage to obtain an overall assessment of candidates, considering their technical and market skills as well as their ability to work in a team, their leadership style and the possibility to successfully insert them into the workforce. Their objective is to recruit persons that can efficiently contribute to CAREL's development in the medium to long term.



The group is exposed to the risk of losing certain senior managers and/or key figures as well as the risk of not being able to attract and/or retain highly qualified personnel. Accordingly, the HR function has guidelines for the retention of white collars and managers which mainly cover preventive measures to be implemented to maintain a low turnover rate, assessment tools which consider the importance of the position held and the impact of the person's departure and counter measures to avoid departures.

In 2018, the group hired 333 people, mainly men (203), of which 144 new hires are in the under 30 age bracket while 163 are in the intermediate bracket (30-50).

A geographical breakdown of the new hires shows that 111 were hired in Western Europe, 71 in the Rest of Europe, Middle East and Africa, 35 in North America, 17 in South America, 89 in North Asia and 10 in South Asia. The hiring rate was 22.87% with 29.9% blue collars and 18.6% white collars, solely at the production sites.

#### Turnover rate by gender and age bracket (%) [GRI 401-1]

	Gender			Age bracket		
	Men	Women	Total	<30	30-50	>50
Hiring rate	21.83	24.71	22.87	51.99	16.72	12.75
Departure rate	16.02	17.30	16.48	32.49	12.72	12.75

#### Turnover rate by geographical area (%) [GRI 401-1]

	Geographical segment					
	Western Europe	Rest of Europe, Middle East and Africa	North	Sud America	Nord Asia	Sud Asia
Hiring rate	14.38	33.18	31.25	36.17	33.84	20.83
Departure rate	7.38	20.09	29.46	31.91	31.94	16.67

In 2018, 240 people left the group (149 men and 91 women), including 90 in the under 30 age bracket and 124 in the 30-50 age bracket. A breakdown by geographical area shows that 57 people left the group in Western Europe, 43 in the Rest of Europe, Middle East and Africa, 33 in North America, 15 in South America, 84 in North Asia and eight in South Asia. Overall, the departure rate was 16.48% for the production sites alone (22.4% for blue collars and 13.2% for white collars).

### Training and professional development

Training is a key part of the group's industrial philosophy and essential given the fast changes in the HVAC/R markets and technologies. As a result, the group has always provided its employees with training and development courses, including to ensure maximum professionalism at all levels.

In 2007, the group rolled out a lean philosophy project, which is a management approach designed to maximise the creation of value for customers. CAREL's objective is that "results are obtained through improved processes and the development of people". All the internal processes are affected by the adoption of lean philosophy principles which direct ongoing improvement and the circulation of a leadership culture through coaching, on-the-job learning, sharing of skills and a multi-disciplinary approach.

Training is a tool to maintain an advanced level of technical-application and managerial skills while also providing employees with considerable room for personal development. It includes "transversal skills", team working capabilities and propensity to change, which are all essential to work with a group like CAREL, where competitiveness is a lever for development.

In 2018, the group provided 31,825 hours of training, an average of roughly 22 hours per employee.

#### Number of training hours by professional category and gender [GRI 404-1]

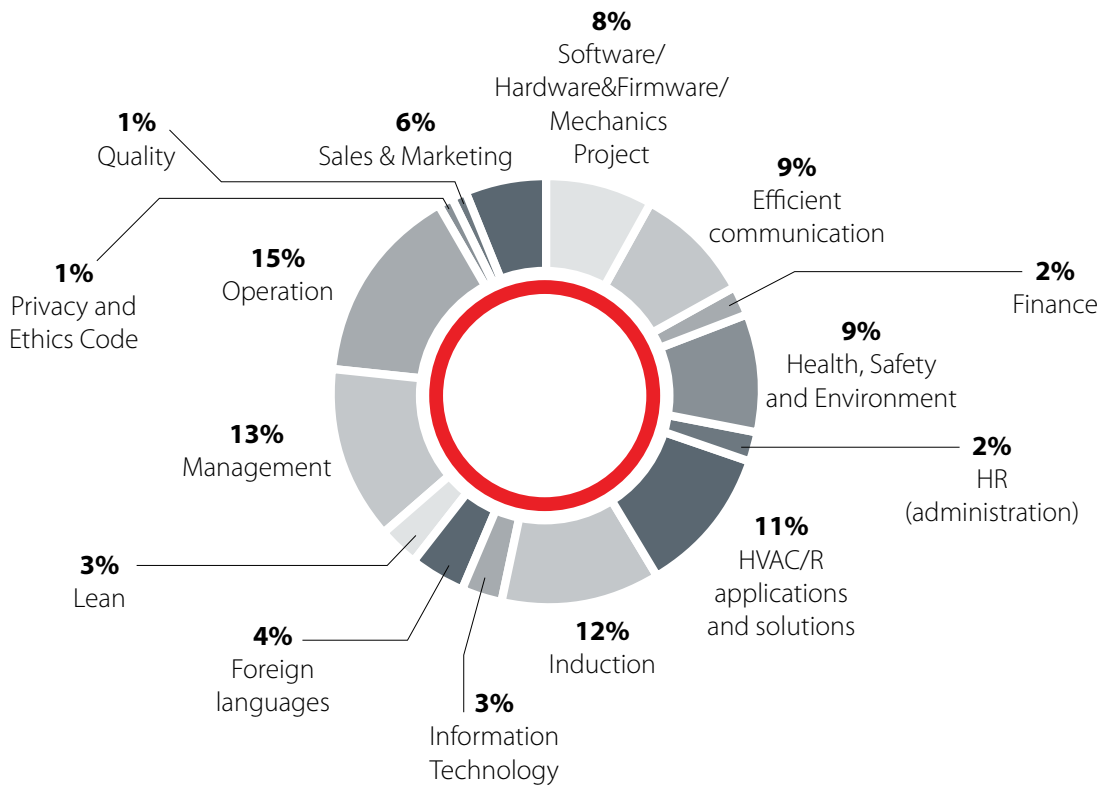
	Men	Women	Total
Managers	649	-	649
White collars	18,839	4,064	22,903
Blue collars	2,741	5,532	8,273
<b>Total</b>	<b>22,229</b>	<b>9,596</b>	<b>31,825</b>

#### Number of average hours of training by professional category [GRI 404-1]

	Men	Women	Total
Managers	19.1	-	19.1
White collars	27	18	24.8
Blue collars	13.8	18.4	16.6

The main training projects carried out in 2018 focused on managerial training, technical-specialist training (operations and applications and HVAC/R solutions) and induction courses for new hires.

### number of hours of training by course



The group's relationships with universities and schools are of particular importance to it. It works closely with the local universities and hosts more than 30 students a year, providing work experience and assistance with their dissertations, especially for courses on engineering, lean management and finance. The educational benefit of these internships is proven by the awards attributed by the Padua University to the parent, such as the "Best tutoring project" awarded in 2017 and 2018. At international level, the group sponsored internship projects with Penn Technology College and Pennsylvania State University in the US and with Suzhou University and Shanghai Jiaotong University in China. CAREL also works with top class business schools to provide its managers and professional staff with refresher courses (SDA Bocconi - School of Management, the Milan Polytechnic and CUOA - Business School).

Group projects for the training and professional development of its employees are described below:

**“Join the Future”:** started in 2008, CAREL’s graduate programme selects new highly talented scientific university graduates and provides them with fast track entry into the group with projects in different internal areas, lean philosophy process improvement, a 2-month international secondment at a group entity and internal and external training courses.

**Job Rotation and International assignment:** aware of the importance of cultivating its employees’ talents, CAREL encourages job rotation and international assignments each year to facilitate the development of an international mindset and skills in different internal areas.

**“CAREL Group induction process”:** each white collar, junior manager and manager hired by the group is provided with a three-day induction course held in Italy, the US and China to introduce the new hire to the group’s history, values, strategies, products and applications and internal processes.

**“Knowledge Center”:** a centre which provides training courses to group employees

The **“Knowledge Center”** set up in 2015 is a dedicated unit that provides technical and application refresher courses to CAREL employees. Assisted by the Sales&Marketing function, this centre monitors the skills of all group employees and updates the skills map for the main CAREL technologies and products. In 2018, the centre provided 15 training courses for a total of 326 hours on new products, technologies and applications to 241 employees from different geographical areas.

## Employee enhancement

The physical growth of the foreign group entities and the parent means that management needs to upgrade its skills and show its leadership abilities in both technical applications and commercial aspects but also in a strict management sense. The management team shall be able to optimise the output of their resources, engage and motivate them to adopt a positive approach to change and innovation and thus drive the ongoing improvement of internal activities and processes (leadership and people engagement).

In fact, the group has standardised tools to assess the performance of those employees who assist managers to assess the results obtained by their colleagues compared to their goals, to identify areas of improvement and people with high professional growth potential. The white collars, junior managers and managers are required to participate in a self-assessment exercise once a year using a list of standardised skills which ends with discussions about new development and training opportunities.

The group has a remuneration policy designed to merge the interests of the shareholders and management by pegging the remuneration of key personnel to the group's performance. Its objectives also include attracting, motivating and retaining key resources and best talents through a competitive remuneration approach.

CAREL has analysed its remuneration policies for its key resources compared to the market, assisted by consultancy companies specialising in remuneration analyses and benchmarking and in actuarial and pension services.

Its remuneration policy for these key resources includes pegging part of their remuneration to achievement of performance goals that are set beforehand using an annual incentive or management by objectives (MBO) system and a long-term incentive plan (LTI).

Since 2016, the Italian parent has introduced welfare agreements and tools leading to the formalisation of a second level internal additional agreement and the introduction of initiatives such as the assignment of non-monetary benefits to employees, extension of the criteria for the assignment of scholarships to children of employees and a review of the contribution for working mothers to include the cost of crèches. The group has always protected the positions of employees in difficult operating situations and guaranteed individual solutions (e.g., flexible working hours, part time for working mothers when they return from maternity leave, assistance with crèche costs, etc.) for their professional development and achievement of personal objectives that ensure work/life balance.

## Dialogue and internal communication

The CAREL Group acknowledges the importance of sharing information and experiences within an organisation, especially if that organisation is a multinational, as this creates a common identity.

A fundamental tool to ensure maximum efficiency at work is the communication and sharing of information available to employees. CAREL has adopted Tibbr, an internal social network to share its experiences and facilitate teamwork, especially for “remote” teams comprising members for different countries.

Another internal communication tool is Display - CAREL People Magazine. Its editors include employees from different areas who contribute content or invite other colleagues to contribute articles. Display is available in Italian and English to all employees both in hard and soft format.

**Positive feedback  
from 68%  
of the interviews  
with employees**

The importance of clear and transparent communications vis-à-vis employees is confirmed by the results of a survey performed by the parent over the end of 2017 and start of 2018 on the organisation's internal climate. Nearly 300 of the roughly 400 employees involved provided their opinions on various aspects of the parent's organisation. The overall result was higher than the external benchmarks used as a reference by the specialist consultants that assisted CAREL: 68% of the surveyed employees gave a positive or very positive opinion compared to the sector's average of 64%.

The survey showed that the most positive aspects were “Identity and values”, “Communication” and “Management and leadership” while the most criticised ones were “Assessment and reward”, “Professional development” and “Work organisation”. The reference chief officers have introduced specific measures to improve the critical issues assisted by the HR function. They have included the activation of market remuneration benchmarks for some areas, the organisation of meetings between senior and middle management to discuss results and priorities and the structuring of a cross-department job rotation assessment process for middle management.

## Bridging table

Table bridging the material topics of the CAREL Group, the aspects of Legislative decree no. 265/2016 and the GRI Standards

Material topics identified by the CAREL Group	Aspects of Legislative decree no. 254/2016	Topic-specific reference GRI Standards	Boundary of impacts	
			Internal	External
Energy efficiency and sustainable products	Environment	Energy (GRI 302)	The entire group	Communities and future generations, customers
R&D and product innovation	Society	Material topic not directly related to a Topic-Specific GRI Standard, for which the management approach adopted and related indicators are explained in this Statement	The entire group	Communities and future generations, customers, suppliers
Product and service compliance	Society	Marketing and labelling of products and services (GRI 417)	The entire group	Customers, shareholders, investors and analysts, suppliers
Customer engagement and satisfaction	Society	Stakeholder engagement (GRI 102-43, 102-44)	The entire group	Customers
Brand reputation protection	Society	Material topic not directly related to a Topic-Specific GRI Standard, for which the management approach adopted and related indicators are explained in this Statement	The entire group	Shareholders, investors and analysts
Customer security	Society	Customer health and safety (GRI 416)	The entire group	Customers
Training and professional development	Personnel	Training and education (GRI 404)	The entire group	Employees, Trade unions, worker representatives
Quality and product safety	Society	Customer health and safety (GRI 416)	The entire group	Customers
Ethics and integrity	Society, personnel, environment, human rights, anti-corruption, supply chain	Organisational profile (GRI 102-12), Ethics and integrity (GRI 102-16) Anti-corruption (GRI 205-3)	The entire group	Employees, customers, shareholders, investors and analysts, communities and future generations
Occupational health and safety	Personnel, human rights	Occupational health and safety (GRI 403)	The entire group	Employees, trade unions, worker representatives
Privacy, security and data protection	Society	Consumer privacy (GRI 418)	The entire group	Employees, customers, suppliers
Engagement with investors and fair trade practices	Society	Anti-competitive behaviour (GRI 206)	The entire group	Shareholders, investors and analysts, bodies and institutions
Efficient and effective use of energy resources	Environment	Energy (GRI 302) Emissions (GRI 305)	The entire group	Communities and future generations
Dialogue and internal communication	Personnel	Governance (GRI 103-2)	The entire group	Employees, trade unions, worker representatives
Responsible supply chain management	Supply chain, human rights	Organisational profile (GRI 102-9) Procurement practices (GRI 204)	The entire group	Suppliers and business partners
Environmental impact and pollution	Environment	Energy (GRI 302) Water (GRI 303) Emissions (GRI 305)	The entire group	Communities and future generations

## GRI content index

Disclosure	Indicator	Page number/Note	Omissions
<b>GRI CONTENT INDEX</b>			
<b>GRI 102: GENERAL DISCLOSURES 2016 - Organisational profile</b>			
102-1	Name of the organisation	P. 27	
102-2	Activities, brands, products, and services	P. 18-19	
102-3	Location of headquarters	P. 108	
102-4	Location of operations	P. 20	
102-5	Ownership and legal form	P. 27	
102-6	Markets served	P. 18-20	
102-7	Scale of the organisation	P. 13-20	
102-8	Information on employees and other workers	P. 87-88	
102-9	Supply chain	P. 78-80	
102-10	Significant changes to the organisation and its supply chain	P. 16	
102-11	Precautionary Principle or approach	P. 30-31	
102-12	External initiatives		The group does not adhere to external initiatives. However, it complies with the International Labour Standards included in the fundamental conventions of the International Labour Organisation (ILO).
102-13	Membership of associations	P. 41-42	
<b>STRATEGY</b>			
102-14	Statement from senior decision-maker	P. 7-9	
<b>ETHICS AND INTEGRITY</b>			
102-16	Values, principles, standards, and norms of behavior	P. 21, 31-32	
<b>GOVERNANCE</b>			
102-18	Governance structure	P. 27-29	
102-22	Composition of the highest governance body and its committees	P. 29	
<b>STAKEHOLDER ENGAGEMENT</b>			
102-40	List of stakeholder groups	P. 40	
102-41	Collective bargaining agreements	P. 85	
102-42	Identifying and selecting stakeholders	P. 39	
102-43	Approach to stakeholder engagement	P. 40	
102-44	Key topics and concerns raised	P. 39-40	
<b>REPORTING PRACTICE</b>			
102-45	Entities included in the consolidated financial statements	P. 11-12	
102-46	Defining report content and topic boundaries	P. 11-12, 37-39	
102-47	List of material topics	P. 39	
102-48	Restatements of information		This is the first time the group has prepared a Consolidated Non-financial Statement.
102-49	Changes in reporting		This is the first time the group has prepared a Consolidated Non-financial Statement.
102-50	Reporting period	P. 11	



Disclosure	Indicator	Page number/Note	Omissions
102-51	Date of most recent report		This is the first time the group has prepared a Consolidated Non-financial Statement.
102-52	Reporting cycle	P. 11	
102-53	Contact point for questions regarding the report	P. 108	
102-54 / 102-55	Claims of reporting in accordance with the GRI Standards and GRI content index	P. 11, 96-98	
102-56	External assurance	P. 102-104	

### ECONOMIC PERFORMANCE: TOPIC SPECIFIC STANDARDS

#### GRI 201: ECONOMIC PERFORMANCE 2016

GRI 103	Management approach 2016	P. 22,95	
201-1	Direct economic value generated and distributed	P. 22	

#### GRI 204: PROCUREMENT PRACTICES 2016

GRI 103	Management approach 2016	P. 78-80, 95	
204-1	Proportion of spending on local suppliers	P. 78	

#### GRI 205: ANTI-CORRUPTION 2016

GRI 103	Management approach 2016	P. 31-32, 95	
205-3	Confirmed incidents of corruption and actions taken	P. 32	

#### GRI 206: ANTI-COMPETITIVE BEHAVIOUR 2016

GRI 103	Management approach 2016	P. 31-32, 95	
206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	P. 32	

### ENVIRONMENTAL PERFORMANCE: TOPIC SPECIFIC STANDARDS

#### GRI 302: ENERGY 2016

GRI 103	Management approach 2016	P. 63-65, 69-71, 95	
302-1	Energy consumption within the organisation	P. 71	
302-3	Energy intensity	P. 71	
302-5	Reductions in energy requirements of products and services	P. 65	

#### GRI 303: WATER 2016

GRI 103	Management approach 2016	P. 69-70, 73, 95	
303-1	Water withdrawal by source	P. 73	

#### GRI 305: EMISSIONS 2016

GRI 103	Management approach 2016	P. 71-73, 95	
305-1	Direct (Scope 1) GHG emissions	P. 72	
305-2	Energy indirect (Scope 2) GHG emissions	P. 72	
305-4	GHG emissions intensity	P. 72	
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	P. 73	

Disclosure	Indicator	Page number/Note	Omissions
<b>ENVIRONMENTAL PERFORMANCE: TOPIC SPECIFIC STANDARDS</b>			
<b>GRI 401: EMPLOYMENT 2016</b>			
GRI 103	Management approach 2016	P. 88-89, 95	
401-1	New employee hires and employee turnover	P. 89	
<b>GRI 403: OCCUPATIONAL HEALTH AND SAFETY 2016</b>			
GRI 103	Management approach 2016	P. 74-75, 95	
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	P. 76-77	
<b>GRI 404: TRAINING AND EDUCATION 2016</b>			
GRI 103	Management approach 2016	P. 90-92, 95	
404-1	Average hours of training per year per employee	P. 90	
<b>GRI 405: DIVERSITY AND EQUAL OPPORTUNITY 2016</b>			
GRI 103	Management approach 2016	P. 86-88, 95	
405-1	Diversity of governance bodies and employees	P. 29, 86-87	
<b>GRI 416: CUSTOMER HEALTH AND SAFETY 2016</b>			
GRI 103	Management approach 2016	P. 49-50, 95	
416-1	Assessment of the health and safety impacts of product and service categories	P. 50	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	P. 50	
<b>GRI 417: MARKETING AND LABELLING 2016</b>			
GRI 103	Management approach 2016	P. 50-51, 95	
417-1	Requirements for product and service information and labeling	P. 50-51	
417-2	Incidents of non-compliance concerning product and service information and labelling	P. 51	
<b>GRI 418: CUSTOMER PRIVACY 2016</b>			
GRI 103	Management approach 2016	P. 51-52, 95	
418-1	Substantiated complaints regarding breaches of customer privacy and losses of customer data	P. 52	





# Report of the auditors



Deloitte & Touche S.p.A.  
Via N. Tommaseo, 78/C int.3  
35131 Padova  
Italia

Tel: +39 049 7927911  
Fax: +39 049 7927979  
www.deloitte.it

**INDEPENDENT AUDITOR'S REPORT  
ON THE CONSOLIDATED NON-FINANCIAL STATEMENT PURSUANT TO ARTICLE 3,  
PARAGRAPH 10 OF LEGISLATIVE DECREE No. 254 OF DECEMBER 30, 2016 AND  
ART. 5 OF CONSOB REGULATION N. 20267/2018**

**To the Board of Directors of  
Carel Industries S.p.A.**

Pursuant to article 3, paragraph 10, of the Legislative Decree no. 254 of December 30, 2016 (hereinafter "Decree") and to article 5 of the CONSOB Regulation n. 20267/2018, we have carried out a limited assurance engagement on the Consolidated Non-Financial Statement of Carel Industries S.p.A. and its subsidiaries (hereinafter "Carel Group" or "Group") as of December 31, 2018 prepared on the basis of art. 4 of the Decree, and approved by the Board of Directors on March 7, 2019 (hereinafter "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 accordance with articles 3 and 4 of the Decree and the "Global Reporting Initiative Sustainability Reporting Standards" established in 2016 by GRI - Global Reporting Initiative ("GRI Standards"), which they have identified as reporting framework.

The Directors are also responsible, within the terms established by law, for such internal control as they determine is necessary to enable the preparation of NFS that is free from material misstatement, whether due to fraud or error.

The Directors are moreover responsible for defining the contents of the NFS, within the topics specified in article 3, paragraph 1, of the Decree, taking into account the activities and characteristics of the Group, and to the extent necessary in order to ensure the understanding of the Group's activities, its trends, performance and the related impacts.

Finally, the Directors are responsible for defining the business management model and the organisation of the Group's activities as well as, with reference to the topics detected and reported in the NFS, for the policies pursued by the Group and for identifying and managing the risks generated or undertaken by the Group.

The Board of Statutory Auditors is responsible for overseeing, within the terms established by law, the compliance with the provisions set out in the Decree.

**Auditor's Independence and quality control**

We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Our auditing firm applies International Standard on Quality Control 1 (ISQC Italia 1) and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Ancona Bari Bergamo Bologna Brescia Cagliari Firenze Genova Milano Napoli Padova Palermo Parma Roma Torino Treviso Udine Verona

Sede Legale: Via Tortona, 25 - 20144 Milano | Capitale Sociale: Euro 10.328.220,00 i.v.  
Codice Fiscale/Registro delle Imprese Milano n. 03049560166 - R.E.A. Milano n. 172039 | Partita IVA IT 03049560166

Il nome Deloitte si riferisce a una o più delle seguenti entità: Deloitte Touche Tohmatsu Limited, una società inglese a responsabilità limitata ("DTTL"), le member firm aderenti al suo network e le entità a esse correlate. DTTL e ciascuna delle sue member firm sono entità giuridicamente separate e indipendenti tra loro. DTTL (denominata anche "Deloitte Global") non fornisce servizi ai clienti. Si invita a leggere l'informativa completa relativa alla descrizione della struttura legale di Deloitte Touche Tohmatsu Limited e delle sue member firm all'indirizzo [www.deloitte.com/about](http://www.deloitte.com/about).

© Deloitte & Touche S.p.A.

## Deloitte.

2

### Auditor's responsibility

Our responsibility is to express our conclusion based on the procedures performed about the compliance of the NFS with the Decree and the GRI Standards. We conducted our work in accordance with the criteria established in the "*International Standard on Assurance Engagements ISAE 3000 (Revised) – Assurance Engagements Other than Audits or Reviews of Historical Financial Information*" (hereinafter "ISAE 3000 Revised"), issued by the *International Auditing and Assurance Standards Board (IAASB)* for limited assurance engagements. The standard requires that we plan and perform the engagement to obtain limited assurance whether the NFS is free from material misstatement. Therefore, the procedures performed in a limited assurance engagement are less than those performed in a reasonable assurance engagement in accordance with ISAE 3000 Revised, and, therefore, do not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified in a reasonable assurance engagement.

The procedures performed on NFS are based on our professional judgement and included inquiries, primarily with company personnel responsible for the preparation of information included in the NFS, analysis of documents, recalculations and other procedures aimed to obtain evidence as appropriate.

Specifically we carried out the following procedures:

1. analysis of relevant topics with reference to the Group's activities and characteristics disclosed in the NFS, in order to assess the reasonableness of the selection process in place in light of the provisions of art. 3 of the Decree and taking into account the adopted reporting standard;
2. analysis and assessment of the identification criteria of the consolidation area, in order to assess its compliance with the Decree;
3. comparison between the financial data and information included in the NFS with those included in the consolidated financial statements of the Carel Group;
4. understanding of the following matters:
  - business management model of the Group's activities, with reference to the management of the topics specified by article 3 of the Decree;
  - policies adopted by the entity in connection with the topics specified by article 3 of the Decree, achieved results and related fundamental performance indicators;
  - main risks, generated and/or undertaken, in connection with the topics specified by article 3 of the Decree.

Moreover, with reference to these matters, we carried out a comparison with the information contained in the NFS and the verifications described in the subsequent point [5], letter a);

5. understanding of the processes underlying the origination, recording and management of qualitative and quantitative material information included in the NFS.

In particular, we carried out interviews and discussions with the management of Carel Industries S.p.A. and with the employees of Carel Adriatic d.o.o., Carel Eletronic (Suzhou) Co.,Ltd, Carel USA LLC, and we carried out limited documentary verifications, in order to gather information about the processes and procedures which support the collection, aggregation, elaboration and transmittal of non-financial data and information to the department responsible for the preparation of the NFS.

## Deloitte.

3

In addition, for material information, taking into consideration the Group's activities and characteristics:

- at the parent company and subsidiaries level:
  - a) with regards to qualitative information included in the NFS, and specifically with reference to the business management model, policies applied and main risks, we carried out interviews and gathered supporting documentation in order to verify its consistency with the available evidence;
  - b) with regards to quantitative information, we carried out both analytical procedures and limited verifications in order to ensure, on a sample basis, the correct aggregation of data.
- for the subsidiaries, Carel Industries S.p.A. and Carel Adriatic d.o.o., which we selected based on their activities, their contribution to the performance indicators at the consolidated level and their location, we carried out site visits, during which we have met their management and have gathered supporting documentation with reference to the correct application of procedures and calculation methods used for the indicators.

### Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the NFS of the Carel Group as of December 31, 2018 is not prepared, in all material aspects, in accordance with article 3 and 4 of the Decree and the *GRI Standards*.

DELOITTE & TOUCHE S.p.A.

Signed by  
**Cristiano Nacchi**  
Partner

Padua, Italy  
March 22, 2019

*This report has been translated into the English language solely for the convenience of international readers.*









## Headquarters ITALY

### CAREL INDUSTRIES HQs

Via dell'Industria, 11  
35020 Brugine - Padova (Italy)  
Tel. (+39) 0499 716611  
Fax (+39) 0499 716600  
CAREL@CAREL.com