2019

ANNUAL REPORT

CAREL

Directors' report

at 31 December 2019

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Letter to the shareholders

Dear shareholders,
The results achieved in 2019 confirm the wisdom of the strategic decisions that have fostered Carel's development: indeed, for the tenth consecutive year, the group recorded an increase in revenue, which, this year is 16.8%. Excluding the contribution of the two companies acquired at the end of 2018, HygroMatik GmbH and Recuperator S.p.A., the growth would have been 5.1%. Profitability, i.e., gross operating profit as a percentage of revenue (gross operating profit margin) hovered at roughly 20%, while the profit for the year came to €35 million. This performance is even more satisfactory considering the unfavourable macro-economic context in which the group operated, marked by a slowdown in the Eurozone and the US-China trade tensions. The impact of the latter on the group's business was slight, partly thanks to the finalisation of the site expansion project launched in early 2018 and completed in 2019, which involved a total investment of approximately €20 million. This tripled the size of the Chinese site located in Souzhou and doubled the size of the North American site in Manheim, Pennsylvania, making it possible to meet local demand on-site. Expansion of production capacity is also essential to allow the group's expected growth in the coming years, which is primarily based on an innovation-focused commercial offer, through solutions capable of anticipating customers' needs, with particular attention to environmental sustainability issues.

It is precisely the concept of sustainability that underpins the group's investments in research and development, which accounted for around 6% of revenue in 2019, in line with past trends. Energy saving and the transition to natural refrigerants, with less harmful effects on global warming, are an essential part of the group's key strategies and place it among the most advanced operators in the market.

The same dedication that enabled the group to achieve these important growth targets was also seen in the integration of the two companies acquired at the end of 2018: Recuperator S.p.A., a leader in the design and production of air-to-air heat exchangers with registered office in Rescaldina (Milan) and HygroMatik GmbH, a German leader in the humidification sector. These are the largest transactions the group has ever carried out and represented a real challenge. The group managed the process effectively and efficiently: in both cases, the results achieved in 2019 were excellent, with an overall increase in revenue of around 10%. The consolidation scope expanded again in September, thanks to the acquisition of Enersol, a Canadian distributor specialised in the humidification sector.

Lastly, the group also made significant progress in the services sector which, together with its organic and external growth, is the third pillar of its strategic vision for the future. During 2019, it signed the first contracts for the supply of digital services to some major European modern distribution chains and a new specifically-dedicated unit, the "after sales and services" unit, has been active for some months now.

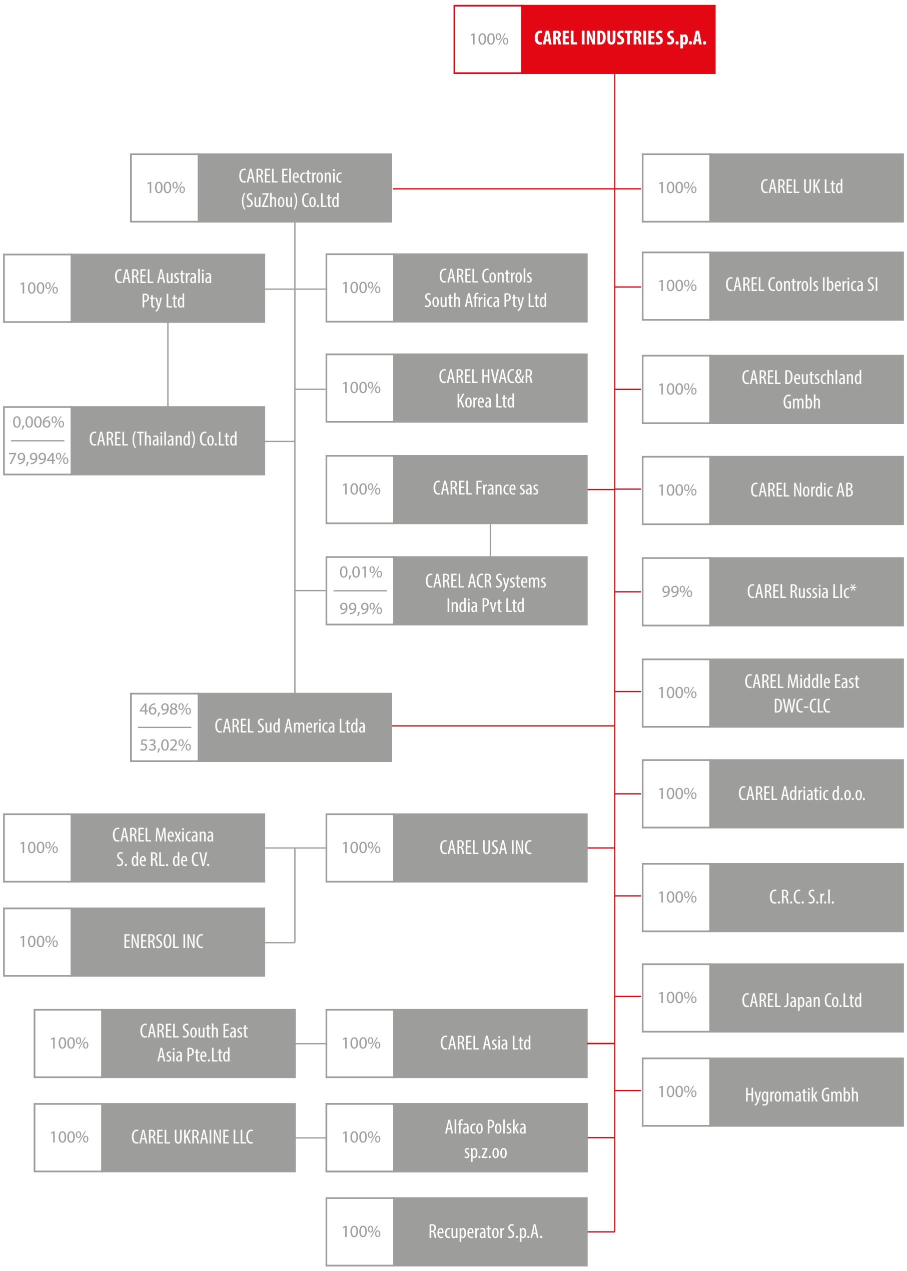
2019, the first full year since its listing on the stock exchange, was therefore an important year for the group and, once again, showed the resilience of its business portfolio together with the ability of all Carel's women and men to give their best even in less than optimal scenarios. These elements represent a solid foundation on which to continue to build a success story that has now lasted more than 45 years.

Chairperson
Luigi Rossi Luciani

“...the results are based on three strategic pillars: organic growth, external expantion and a strong focus on connectivity and innovation...”

Group structure CAREL INDUSTRIES

The following graph shows the group's structure at 31 December 2019:


100% CAREL INDUSTRIES S.p.A.
100% CAREL Electronic (SuZhou) Co.Ltd
100% CAREL UK Ltd
100% CAREL Australia Pty Ltd
100% CAREL Controls South Africa Pty Ltd
100% CAREL Controls Iberica Sl
100% CAREL HVAC&R Korea Ltd
100% CAREL Deutschland Gmbh
0,006% 79,994% CAREL (Thailand) Co.Ltd
100% CAREL France sas
100% CAREL Nordic AB
0,01% 99,9% CAREL ACR Systems India Pvt Ltd
99% CAREL Russia Llc*
100% CAREL Middle East DWC-CLC
46,98% 53,02% CAREL Sud America Ltda
100% CAREL Adriatic d.o.o.
100% CAREL Mexicana S. de RL. de CV.
100% CAREL USA INC
100% C.R.C. S.r.l.
100% ENERSOL INC
100% CAREL Japan Co.Ltd
100% CAREL South East Asia Pte.Ltd
100% CAREL Asia Ltd
100% Hygromatik Gmbh
100% CAREL UKRAINE LLC
100% Alfaco Polska sp.z.oo
100% Recuperator S.p.A.

*=1% held by CAREL France sas

Corporate bodies

Board of directors	*Chairperson*	*Luigi Rossi Luciani*
	Executive deputy chairperson	*Luigi Nalini*
	Chief executive officer	*Francesco Nalini*
	Executive director	*Carlotta Rossi Luciani*
	Independent director	*Cinzia Donalisio*
	Independent director	*Marina Manna*
	Independent director	*Giovanni Costa*
Board of statutory auditors	*Chairperson*	*Saverio Bozzolan*
	Standing statutory auditor	*Paolo Ferrin*
	Standing statutory auditor	*Claudia Civolani*
	Alternate statutory auditor	*Giovanni Fonte*
	Alternate statutory auditor	*Fabio Gallio*
Independent auditors		*Deloitte & Touche SpA*
Control and risks committee	*Chairperson*	*Marina Manna*
	Member	*Cinzia Donalisio*
	Member	*Giovanni Costa*
Comitato Remunerazione	*Chairperson*	*Cinzia Donalisio*
	Member	*Marina Manna*
	Member	*Giovanni Costa*
Supervisory body as per Leg. dec. no. 231/2001	*Chairperson*	*Fabio Pinelli*
	Member	*Andrea Baggio*
	Member	*Alessandro Grassetto*

REFRIGERATION applications

Industrial applications HVAC

RESIDENTIAL APPLICATIONS

Heating, Ventilation and Air Conditioning

Operations and markets

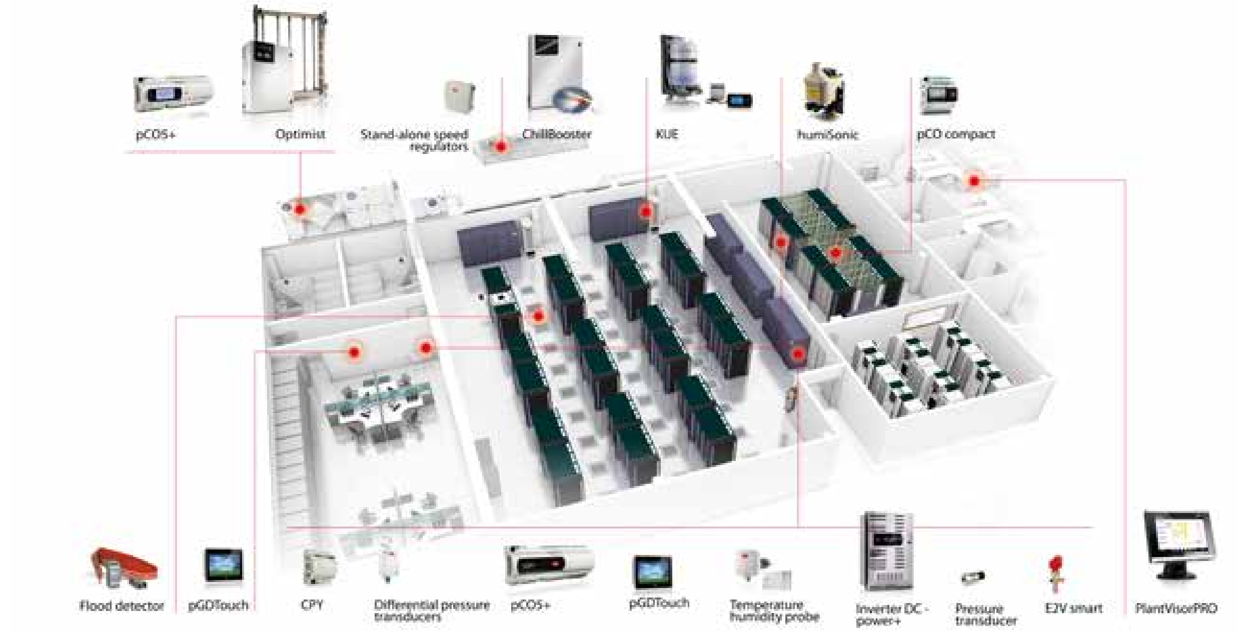
The group is active in the design, manufacturing and global distribution of technologically innovative components and solutions (hardware and software) to achieve energy-efficient control and regulation instruments for the air conditioning (Heating Ventilation Air Conditioning, "HVAC") and refrigeration markets (together "HVAC/R"). In this context, the group designs, manufactures and markets control and humidification solutions for the application segments.

Industrial | **Commercial** | **Residential**

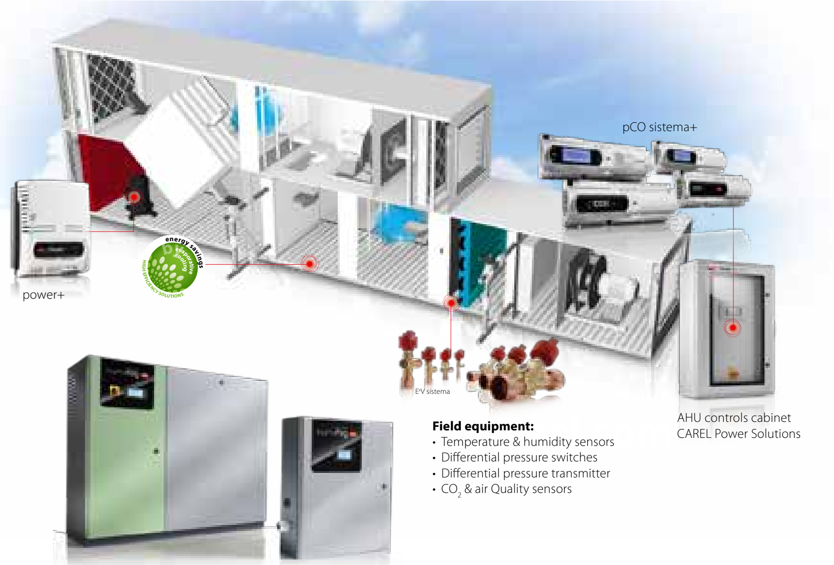
With reference to the **HVAC sector**, the group offers solutions for integration into individual units, such as heat pumps, shelters, rooftops, computer room air conditioners (CRAC), chillers and air handling units. Its industrial applications are designed for data centres, the process industry, commercial applications mainly consisting of components for air-conditioning systems in commercial buildings, and residential applications principally comprising control solutions for heat pumps.

The following charts show the CAREL systems:

- for applications in data centre air-conditioning systems;


pCOS+
Optimist
Stand-alone speed regulators
ChillBooster
KUE
humiSonic
pCO compact
Flood detector
pGDTouch
CPY
Differential pressure transducers
pCOS+
pGDTouch
Temperature humidity probe
Inverter DC - power+
Pressure transducer
E2V smart
PlantVisorPRO

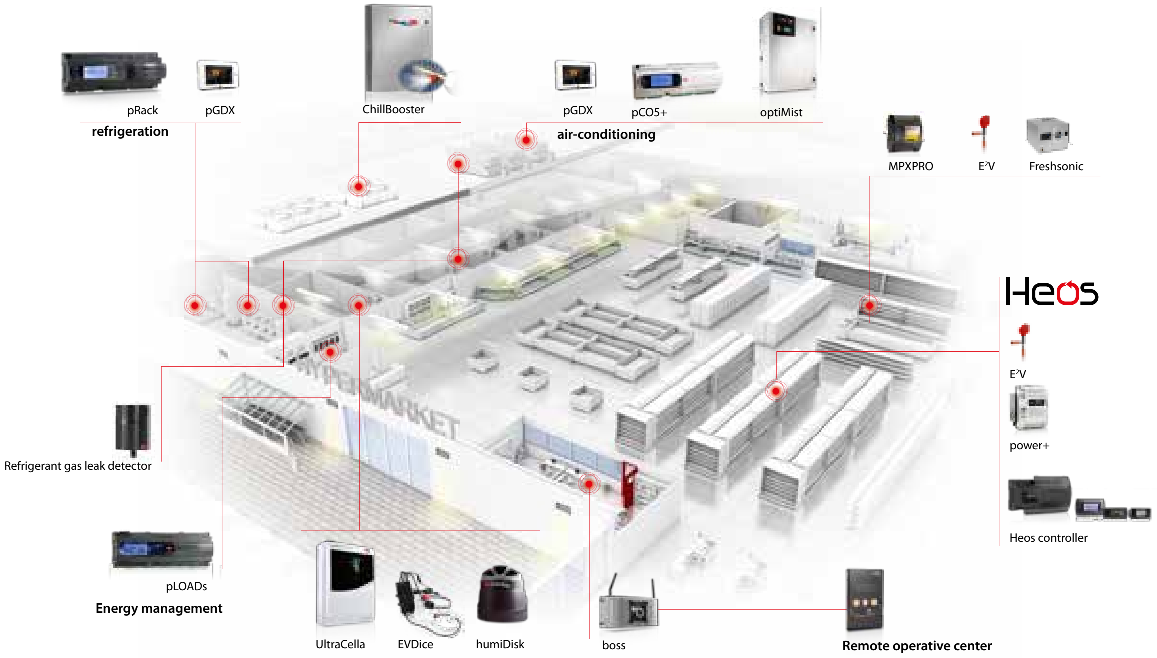
- for air treatment systems:


pCO sistema+
power+
E²V sistema
Field equipment:
• Temperature & humidity sensors
• Differential pressure switches
• Differential pressure transmitter
• CO_2 & air Quality sensors
AHU controls cabinet
CAREL Power Solutions

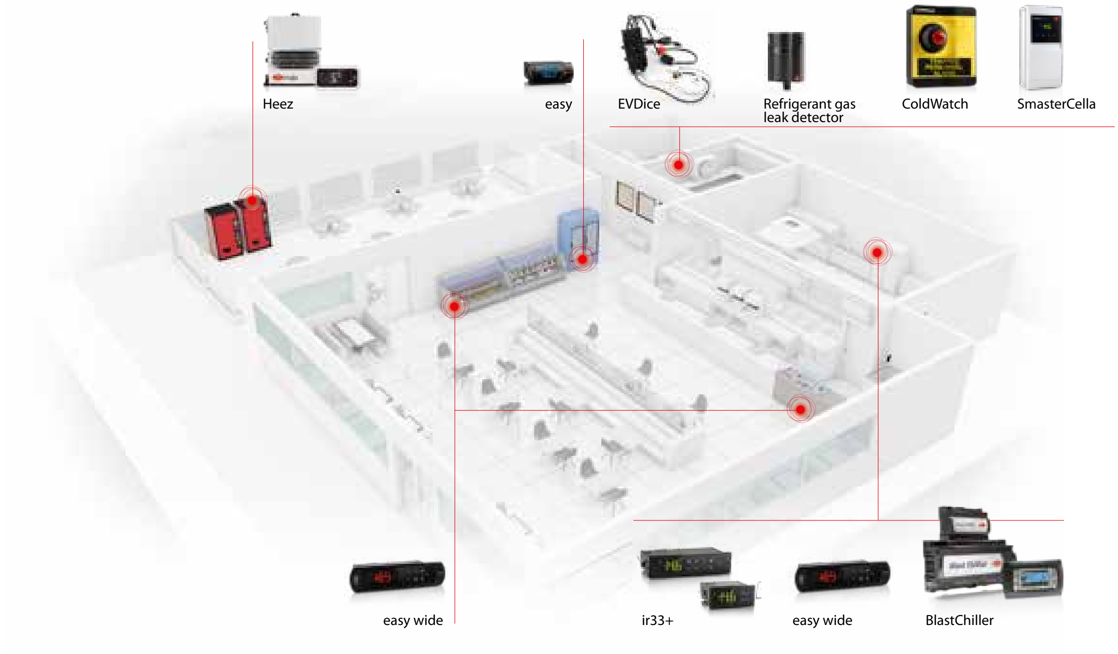
In the **refrigeration sector**, the group specialises in the design, manufacturing and distribution of control systems for the food retail and food service segments.
Carel's offer is for:

- individual refrigerator units, such as beverage coolers, plug-in refrigerators and display cabinets;
- complex and interconnected commercial refrigeration systems, such as those for supermarkets of all sizes, convenience stores and foodcourts;
- supervisory systems for individual machines, such as plant and remote supervision centres.

Example application of Carel's solutions for commercial refrigeration in food retail (supermarkets):


pRack
pGDX
refrigeration
ChillBooster
pGDX
pCO5+
optiMist
air-conditioning
MPXPRO
E²V
Freshsonic
Heos
E²V
power+
Heos controller
Refrigerant gas leak detector
pLOADs
Energy management
UltraCella
EVDice
humiDisk
boss
Remote operative center
HYPERMARKET

Example application of Carel's solutions for commercial refrigeration in food service (quick service restaurants):


Heez
easy
EVDice
Refrigerant gas leak detector
ColdWatch
SmasterCella
easy wide
ir33+
easy wide
BlastChiller

Example application of Carel's solutions for commercial refrigeration in food service (beverage coolers):

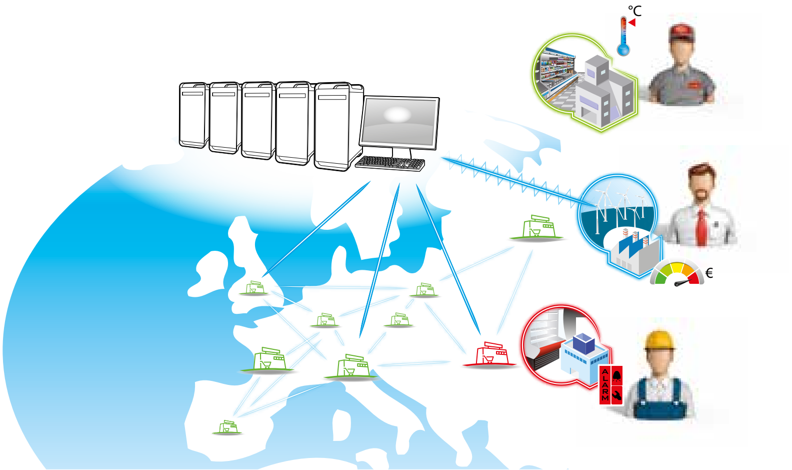
DC
Rotary Technology
APPLICA
CAREL
Heez
32

The group's portfolio is complemented by services linked to Carel's solutions, such as **commissioning** (contract work), remote management and monitoring of the group's HVAC/R systems and application components, which allows for "dialogue" between the group's service centres and end customers, subscriptions for services dedicated to the remote management and monitoring of plant and machinery through the processing of data collected using **Internet of Things** features.

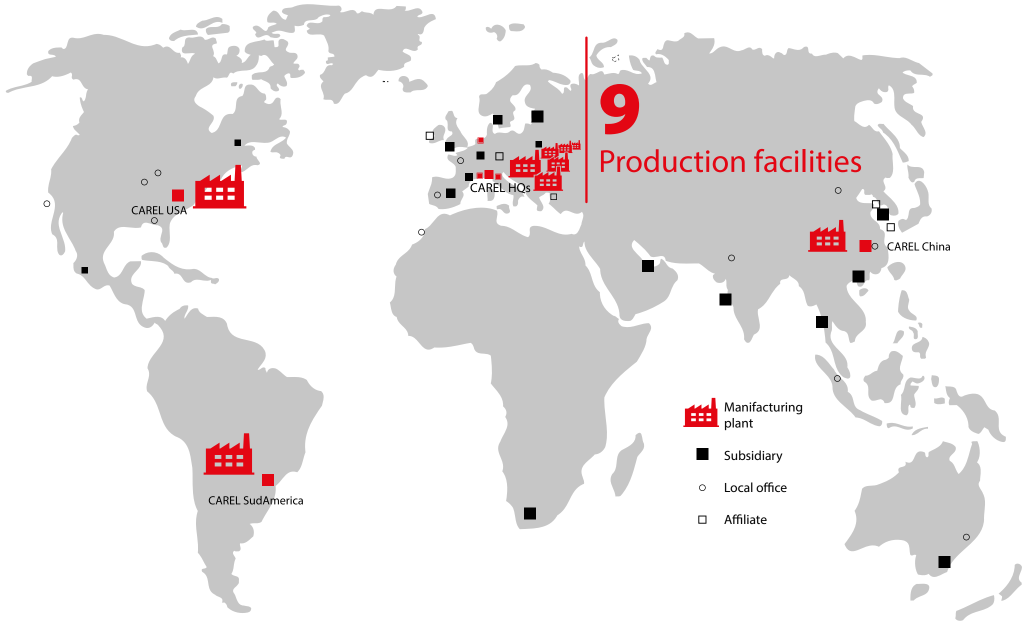
The **IoT solution** has been developed to integrate the specific solutions of the HVAC/R markets via cloud and on-site solutions. The portfolio includes benchmarking, statistics, alarms and standard reporting, whereby users can optimise their daily activities and achieve their goals more effectively in terms of services, energy, quality and marketing. The development of this business is crucial for Carel, including for its future.

There is a strong interest in remote connectivity and data analytics proposals, which allow sector operators to reduce operating costs for the management of plant and refrigerator units located around the country. This interest is not tied solely to the specific applications but it is widespread and growing, as predicted by all the main analysts, in terms of the number of connected devices and the consequent volumes of data collected.

Example IoT solutions for the HVAC and refrigeration markets:



The group operates through 27 subsidiaries, of which nine production sites in Italy, Croatia, Germany, China, the US and Brazil.


9
Production facilities
CAREL USA
CAREL HQs
CAREL China
CAREL SudAmerica
Manifacturing plant
■ Subsidiary
○ Local office
□ Affiliate

Overview of the global market

Over the last few years, the **global air-conditioning market** has grown between 3% and 5%, driven by the performance of the residential business sector, where Carel is not very active, while Carel's involvement in the industrial and commercial sectors consists of the supply of low volume niche applications characterised by high efficiency technology.

Generally speaking, the air-conditioning sector is strongly driven by increasingly energy-efficient and low-environmental impact innovative technologies.

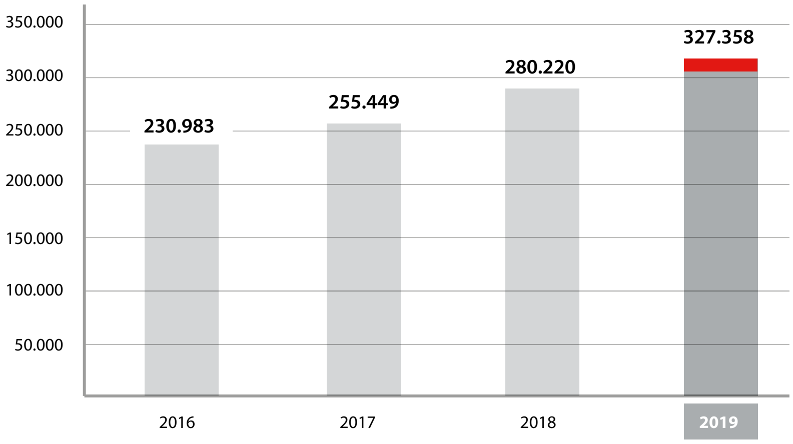
The refrigeration market, in which the group mainly operates in the commercial segment, grew in line with the growth in the air-conditioning market and with the recent growth in the food service and food retail market in 2019. Moreover, the market's increasing inclination to mostly invest in small and medium-sized stores is still evident. This favours monitoring solutions that, while maintaining the required control performance, allow a sustainable shift to smaller systems and stores with an improved management of operating costs, such as energy consumption and maintenance costs.

In both markets, the pressure on operators generally increased due to the directives and regulations aimed at reducing the carbon footprint, by decreasing direct impacts (e.g., F-gas or SNAP regulations in the US) and the increasingly stringent need to adopt technologies that reduce indirect emissions through improved energy efficiency of refrigeration units and systems (e.g., Ecodesign in the EU and DOE in the US).

Business overview

2019 was a positive year for the Carel Group with a **16.8% rise in turnover**, while the increase would have been 15.9% using constant exchange rates.

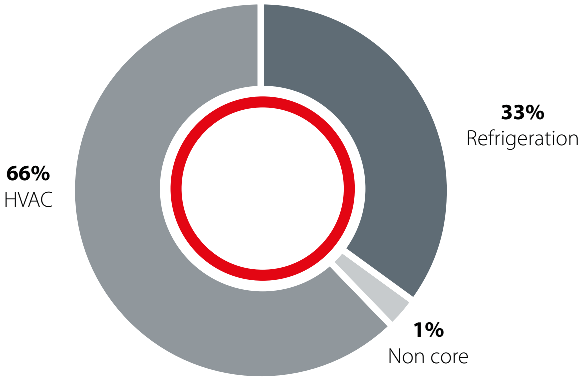
The following table and chart show the growth in revenue between 2016 and 2019, showing a CAGR of 12.3%:



The two companies acquired at the end of 2018, Recuperator S.p.A. and HygroMatik GmbH, contributed €18.9 million and €16.2 million, respectively, to sales revenue. Both companies recorded an increase in revenue, up 14% and 4.5%, respectively, on 2018 .On a like-for-like basis and excluding the increase in turnover arising from the acquisition of the Canadian distributor in September 2019, revenue would have increased by 5.1% at current exchange rates and by 4.2% at constant exchange rates.

REVENUE BY BUSINESS SEGMENT

The breakdown of revenue by business segment on the left shows an increase in the HVAC segment (25.4% at current exchange rates and 24.4% at constant exchange rates), including revenue generated by HygroMatik GmbH and Recuperator S.p.A.. Net of the acquisitions, revenue would have grown by 6.4% and 5.3% at current and constant exchange rates, respectively. The refrigeration segment's revenue increased by 5.2% and 4.5% at current and constant exchange rates, respectively, in 2019. Overall, the core business (HVAC/R) rose by 17.9% (5.9% on a like-for-like basis).

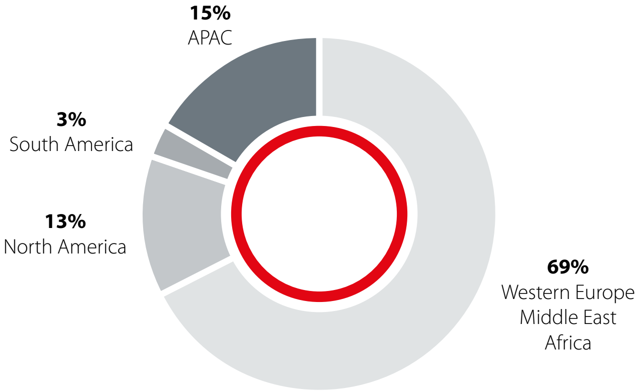


The less profitable non-core business accounted for 1% of turnover, down by 29.3%. Revenue by business segment is broken down in the following table (thousands of Euros):

	2019	2018	Variation%	fx Variation %
HVAC revenue	215,366	171,684	25.4%	24.4%
REF revenue	107,578	102,289	5.2%	4.5%
Total core revenue	**322,943**	**273,973**	**17.9%**	**17.0%**
Non-core revenue	4,415	6,247	-29.3%	-29.4%
Total revenue	**327,358**	**280,220**	**16.8%**	**15.9%**

REVENUE BY GEOGRAPHICAL SEGMENT

In **geographical terms**, the most growth was seen in **the EMEA area** (+18.8%), driven, in particular, by the consolidation of the new acquirees, excluding which revenue would have grown by 2.7%. Specifically, the HVAC segment performed especially well, with energy-efficient solutions continuing to gain market share. On the other hand, the refrigeration segment recorded non -recurring revenue in 2018 that increased its revenue by 18% in this geographical segment and, hence, saw a slight decrease in 2019.



Sales in North America grew by 19.6% at current exchange rates and 13.6% at constant exchange rates, with a two-digit growth rate in both business segments. The refrigeration segment, in particular, achieved very positive results with its energy-efficient solutions.

In South America, revenue increased by 9.9% (11.0% at constant exchange rates). Both business segments performed well, especially in Brazil. On the other hand, the rest of the continent remained stagnant, due to the social-economic conditions, especially in Argentina, which is battling a severe economic crisis.

Lastly, revenue increased in **Asia** by 7.8% at current exchange rates and 6.2% at constant exchange rates. Specifically, the refrigeration segment saw a significant increase, thanks to the signing of important contracts in the food retail segment and additional market share gained in the food service - OEM segment.

A breakdown of revenue by geographical segment is provided below (thousands of Euros):

	2019	2018	Variation%	fx Variation %
Europe, Middle East and Africa	226,470	190,635	18.8%	18.9%
APAC	50,205	46,594	7.8%	6.2%
North America	42,461	35,512	19.6%	13.6%
South America	8,222	7,479	9.9%	11.1%
Total	**327,358**	**280,220**	**16.8%**	**15.9%**

Listing on the stock market

Carel Industries S.p.A.'s ordinary shares were listed on the STAR segment of the stock market organised and managed by Borsa Italiana S.p.A. on 11 June 2018. The transaction entailed assigning 35,000,000 ordinary shares, which subsequently increased to 40,250,000 on 25 June 2018 following the exercise of the greenshoe option. The placement with institutional investors involved 40.25% of the share capital and 25.20% of shares with voting rights.

During 2019, the share price jumped by 53.4%, levelling off at €13.86 per share on the last trading day of the year. Considering the initial offering price of €7.20 per share, it rocketed by 92.5%. The average daily volume traded during 2019 was approximately 37,000 shares, while the maximum price reached in the same period was €15.74 per share.

Carel Industries share at 31 December 2019:

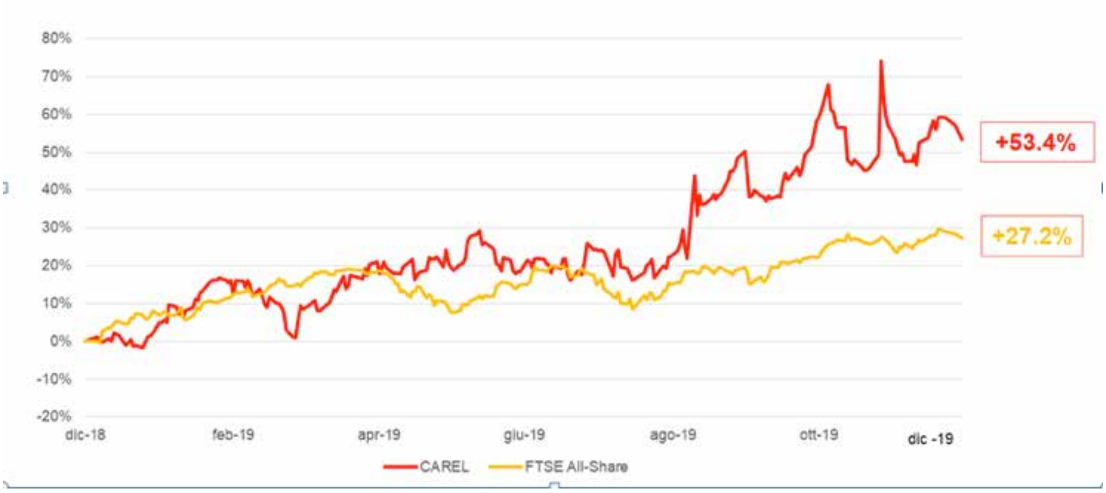
Stock exchange:	MTA Segmento STAR di Borsa Italiana
Isin code:	IT005331019
Ticker:	CLR
Indexes:	FTSE All-share Capped, FTSE Italy All-Share, FTSE Italy Mid Cap, FTSE Italy Star, FTSE Italy Industria, FTSE Italy Edilizia e Materiali
Number of shares:	100,000,000.00
Nominal amount:	Not assigned
Earnings per share:	0.35
Dividend per share:	0.12

Major shareholders at 31 December 2019

Shareholders of CAREL INDUSTRIES S.p.A.	No. of shares	% of share capital	Voting rights	% of voting rights
Luigi Rossi Luciani S.a.p.a.	36,167,433	36.167%	72,334,866	45.280%
Luigi Nalini S.a.p.a.	23,582,567	23.583%	47,165,134	29.524%
Capital Research & Management Company	9,947,251	9.947%	9,947,251	6.227%
Other*	30,302,749	30.303%	30,302,749	18.969%
Total	**100,000,000**	**100.00%**	**159,750,000**	**100.00%**

* including 83,335 treasury shares

Share performance in 2019:



Mergers & Acquisitions

In 2019, the group continued to pursue its organic growth strategy by strengthening its direct market presence through the incorporation and/or acquisition of local distributors.

Specifically:

INCORPORATION OF CAREL UKRAINE LLC

On 16 January 2019, the group company Alfaco Polska s.p.z.o.o. incorporated Carel Ukraine LLC, a commercial company operating in Ukraine. The subsidiary has seven employees and distributes all Carel's core products, especially in the refrigeration segment, while in the HVAC segment it mainly distributes other brand products.

ACQUISITION OF ENERSOL INC

On 16 September 2019, the subsidiary Carel Usa Llc took over the entire share capital of Enersol Inc, a historical Canadian distributor of Carel humidification products based in Montreal, Quebec. This transaction is part of the group's strategy to expand its direct sales network, aimed at strengthening its relationship with end customers in order to consolidate its market leadership.

The consideration paid is €1.3 million. The difference between the consideration paid and the acquiree's equity has been allocated to goodwill (roughly €1 million), pending the completion of the purchase price allocation procedure provided for by IFRS 3 Business combinations.

At the acquisition date, the acquiree had ten employees.

Other significant events

Industrial Footprint

During 2019, the group completed two important projects to expand its industrial footprint by investing over €11.7 million in two production sites:

- the new Carel Group site in the Suzhou (China) area, one of the most innovative and important technological districts in the country, which was inaugurated on 16 July. The new site of the group company Carel Electronic Suzhou, incorporated in 2005, was built to strengthen production for the Chinese market and consolidate the group's presence in the Asia-Pacific region. Within the over 15 thousand square metres of the new complex, an important part will be dedicated to research and development, Carel Electronic Suzhou's true excellence, which, also thanks to an innovative laboratory, will focus on the development of new technologies. New production lines have been rolled out, in particular those of the inverters platform, which has been designed to guarantee maximum flexibility in terms of the range of products that can be produced. The approximately 50 resources employed in research and development will contribute to making the new research centre a real hub of key expertise, useful for developing cutting-hedge solutions in line with the expectations of all Carel customers in China and the APAC region;
- the extension of the Manheim site in Pennsylvania was opened on 5 September 5. The addition of 3,700 square metres to the group's North American headquarters will increase the group's presence in the US, Canadian and Mexican markets, as well as supporting its future growth in this region. In particular, in addition to a warehouse, the new wing houses the mechanical lines (humidifiers and electrical panels), with enough space to double the current production capacity in the future. The existing part of the plant will be dedicated to electronic production. In 2019, the programmable control platform localisation process, which started in 2018, continued and its lines are expected to double in 2020. The extension of the production site in North America will lead to a considerable improvement in the level of service provided to the market and procurement lead times, increasing the number of employees in Manheim to around 70, most of whom will be involved in operations, logistics, HR, Finance, Quality, R&D and marketing, supply chain and customer care.

Tax issues

- In September 2019, the parent received an assessment notice for transfer pricing issues relating to 2015, as a result of the tax inspection carried out in 2018 into 2013, 2014, 2015 and 2016. The parent had already provided for the assessed tax of €193 thousand (relating to IRES, corporate income tax, and IRAP, regional tax on production), plus interest, in its 2018 separate financial statements and it settled it through an F24 tax return form on 30 September 2019. At the date of preparation of this annual report, there are no other ongoing tax inspections about transfer pricing issues.
- On 1 July 2019, Carel Industries S.p.A. aligned the carrying amounts (resulting from the PPA procedure for the companies acquired at the end of 2018, Recuperator S.p.A. and HygroMatik GmbH) of intangible assets and goodwill to their tax bases pursuant to article 15.10-bis of Law decree no. 185/2008. This entailed the payment of the substitute tax of 16% on the higher values allocated and recognised in the consolidated financial statements at 31 December 2018. Payment of the tax, approximately €11.1 million allows for the deduction through the parent's tax return, starting from 2021, of one fifth of the amortisation of the above-mentioned amounts per year. The amount paid has been recognised under other non-current assets at 31 December 2019.
- In 2019, the Chinese company completed the procedures for the renewal of the "high tech enterprise recognition". This is a direct tax relief that allows the Chinese group company to apply the reduced rate of 15%, instead of the ordinary rate of 25%, on its profits from investments in intellectual properties. The local Chinese government

authorised the relief application which will allow the subsidiary to benefit from the reduced rate for three years, from 1 January 2019 to 31 December 2021. At the date of preparation of this annual report, the Chinese local tax authorities were checking the deductibility of certain costs for intragroup services. This may give rise to potential liabilities estimated at around €300 thousand, which have been provided for under income taxes in 2019.

- Again in 2019, the Croatian group company Carel Adriatic d.o.o. availed of the tax benefit provided for by Croatian legislation, which allows it to offset corporate income taxes against a portion of the investments made in the production unit. This benefit is expected to be used up in 2020.

Other significant events related to financing activities

The group's main financing activities in 2019 were as follows:

SIGNING OF NEW MEDIUM-TERM LOANS

In April 2019, the group agreed two medium-term loans of €20 million each to reschedule the deadlines of its debt considering the cash outflows expected for 2019.

Both loans have a four-year term. One of them provides for amortised repayment and the other one for bullet repayment. Interest rate swaps (IRS) were put in place to hedge both loans.

Reference should be made to section 33 Other information of the notes to the consolidated financial statements for more information.

DIVIDEND DISTRIBUTIONS

In June, the parent distributed dividends of €9,992 thousand, in accordance with the shareholders' resolution of 15 April 2019.

REPURCHASE OF TREASURY SHARES

During the first half of the year, in accordance with the board of directors' resolution of 25 January 2019, the parent repurchased 83,335 treasury shares for €807 thousand, which reduced its equity.

The board of directors approved the repurchase on 25 January 2019 in order to (a) fulfil the obligations of the share-based performance plans for the parent's and subsidiaries' boards of directors and/or employees; implement actions to support the market liquidity so as to facilitate ordinary trades in other than ordinary market conditions and (c) carry out sales, exchanges, transfers or other disposals of treasury shares in connection with acquisitions of equity investments and/or properties and/or the signing of agreements (including commercial) with strategic partners and/or the implementation of industrial projects or performance of extraordinary finance transactions as part of the parent's and group's expansion plans. The board of directors set the maximum number of repurchasable treasury shares at 5 million, equal to 5% of the parent's share capital.

Transition to IFRS 16

On 1 January 2019, the group adopted IFRS 16, which provides a new definition of a lease and introduces a criterion based on control (right of use) of an asset. Briefly, the new standard requires the recognition of a right-of-use asset with a balancing entry under financial liabilities. Accordingly, rather than recognising the lease costs in profit or loss, an entity now recognises amortisation/depreciation on the capitalised asset and interest expense accrued on the financial liability.

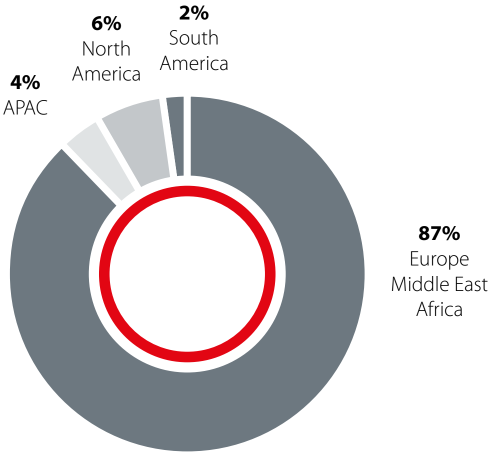
The main effects of the FTA of the above standard are summarised below:

Recognised right-of-use assets	01.01.2019	31.12.2019
Land and buildings	14,137	13,587
Industrial and commercial equipment	388	333
Other items of property, plant and equipment	1,300	1,296
Total	**15,824**	**15,215**

The other items of property, plant and equipment are mainly leased cars.

The main right-of-use assets are concentrated in Europe, the Middle East and Africa and mostly refer to buildings leased to the parent, Recuperator S.p.A. and the Croatian group company.

Leases in other areas are mainly related to the commercial offices, in particular in North America.



The effect on the group's net financial debt is as follows:

Lease liabilities	01.01.2019	31.12.2019
Non-current lease liabilities	11,191	11,787
Current lease liabilities	4,633	3,461
Total	**15,824**	**15,248**

The effect on the 2019 statement of profit or loss is as follows:	2019
Lower lease payments	3,988
Depreciation	(3,831)

Interest expense	(399)
Total	**(242)**

Overview of the group's performance

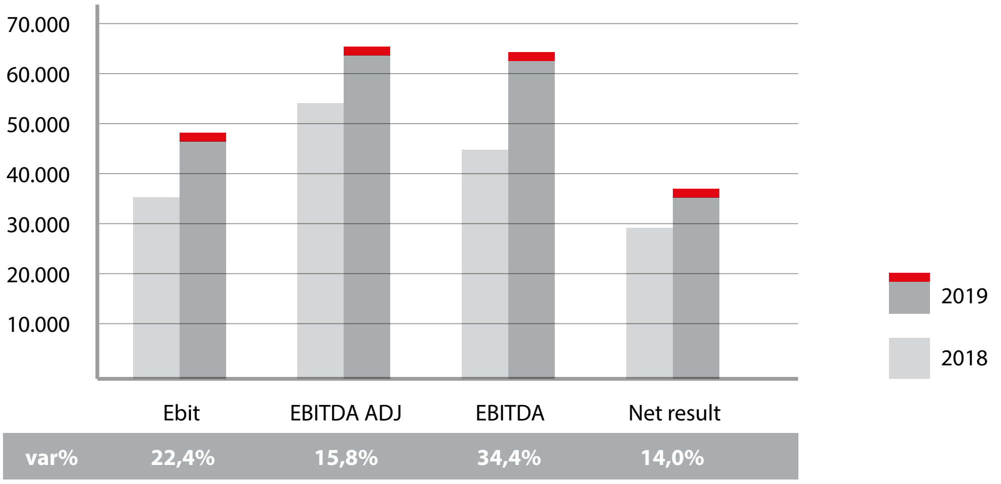
The main performance figures for 2019 compared to the previous year are as follows:

	2019	2018	Variation	Variation %
Operating profit	46,363	37,867	8,496	22.4%
Adjusted EBITDA	63,913	55,209	8,704	15.8%
EBITDA	63,132	46,986	16,146	34.4%
Profit for the year	35,068	30,752	4,316	14.0%

In 2019, EBITDA amounts to €63.1 million, accounting for 19.3%[2] of revenue, showing an increase of €16.1 million, or 16.8%, from €47.0 million in the previous year. This increase is mainly due to:

- the contribution of the two companies acquired in December 2018, Recuperator S.p.A. and HygroMatik GmbH, (€7.1 million);
- the 2018 costs incurred for listing the parent's share on the STAR segment of Borsa Italiana S.p.A., which did not repeat in 2019 (€8.2 million);
- the transition to IFRS 16 on 1 January 2019, which improved EBITDA by roughly €4 million.

Net of non-recurring items of approximately €0.8 million in 2019 and the effect of the first-time adoption of the above standard, the adjusted EBITDA would have amounted to €59.9 million, or 18.3% of revenue, compared to 19.7% in the previous year.



The FX adjusted EBITDA (i.e., at constant exchange rates) would be €63.5 million.

The profit for the year came to €35.1 million, up by 14% on the previous year (€30.8 million), mainly due to the direct increase in EBITDA. Indeed, the group incurred listing costs of approximately €8 million in 2018. As a percentage of revenue, net profit amounts to 10.7%, substantially in line with 2018.

The adjustments related to the above-mentioned non-recurring events, used to calculate the adjusted EBITDA are as follows:

	2019	**2018**
Consultancies	451	6,134
Wages and salaries	-	412
Business trips and travel	15	58
Marketing and advertising	-	53
Other services	-	378
Accruals to provisions	-	1,177
Sundry cost recoveries	315	11
Total adjustments	**781**	**8,223**

(1) The group calculates EBITDA as the sum of the profit before tax, the gain or loss on equity-accounted investments, exchange differences, net financial income (expense), amortisation, depreciation and impairment losses. It uses EBITDA to assess its operating performance.
(2) The EBITDA margin is the ratio of EBITDA to revenue.

The 2019 adjustments mainly relate to M&A costs incurred during the year.
The main financial position indicators at 31 December 2019 and 2018 are as follows:

	31.12.2019	**31.12.2018**	**Variation**	**Variation %**
Non-current assets	167,957	131,364	36,593	27.9%
Working capital	45,253	53,383	(8,130)	(15.2%)
Defined benefit plans	(7,844)	(7,333)	(511)	7.0%
Net invested capital	**205,365**	**177,414**	**27,952**	**15.8%**
Equity	143,241	118,288	24,953	21.1%
Net financial debt	62,124	59,125	2,999	5.1%
Total	**205,365**	**177,414**	**27,952**	**15.8%**

Non-current assets amount to €168.0 million, up by €36.6 million from €131.4 million at the previous year end, mainly due to investments and the effect of FTA of IFRS 16. Net of right-of-use assets, the group's investments amount to €23.6 million, compared to €11.8 million at the end of the previous year.

The main investments were, in particular, for buildings and plant and machinery for a total of €15.9 million. Their breakdown by geographical segment is set out in the graph on the right.

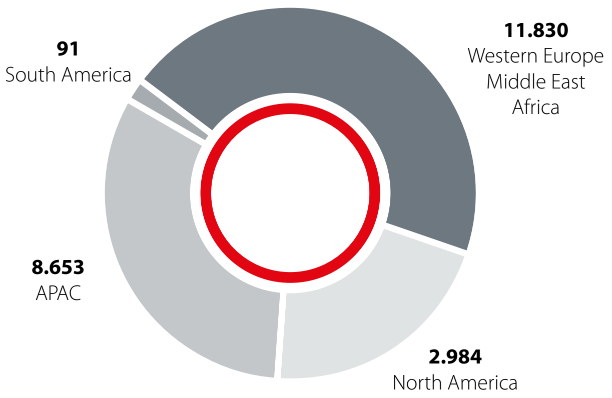
The group opened a new site in China and completed the extension of its North American site in 2019, investing €9.1 million and €2.5 million in "Land and buildings" in 2018 and 2019, respectively.

Moreover, it invested €2.2 million in equipment for the Chinese group company.

In Croatia, the group invested €1 million in plant and machinery to fully exploit its production capacity.

Lastly, the group made significant investment in plant and machinery in Italy, both for the parent and Recuperator S.p.A. (€2.8 million and €0.7 million, respectively).

The investments in intangible assets, mostly made by the parent, amounted to €5.8 million and related to licences and research projects.

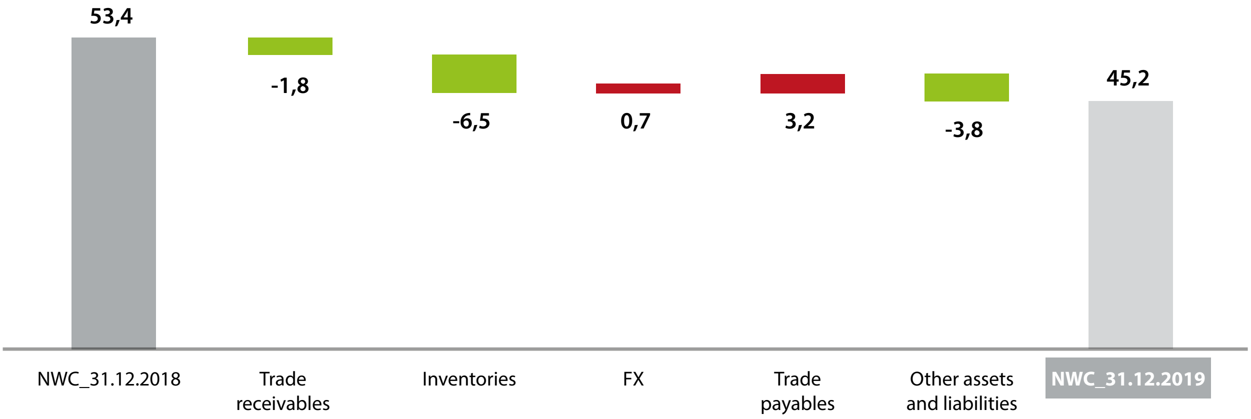


Amortisation and depreciation totalled €16.8 million in 2019, compared to €9.2 million in 2018. The increase is principally due to:

- the contribution of HygroMatik GmbH and Recuperator S.p.A. for the entire year (€1.0 million) compared to just one month in 2018;
- the two acquirees' purchase price allocation procedure (€2.6 million);
- the transition to IFRS 16 (€ 3.8 million).

Lastly, with reference to non-current assets, in July 2019, the parent aligned the carrying amounts of the intangible assets arising from the consolidation of the two companies acquired in December 2018 to their tax bases. This led to the recognition of a non-current asset of €11 million, which is expected to be recovered over five years starting from 2021.

Net working capital of €45.2 million fell by €8.1 million to 53.4 million at 31 December 2018. This improvement is principally affected by the decrease in inventories and trade receivables (€6.5 million and €1.8 million, respectively). The decrease in other assets and liabilities is mainly due to the reduction in tax receivables, following the offsetting against the tax expense for the year.



The group's net financial debt amounts to €62.1 million compared to €59.2 million at 31 December 2018. This increase is mainly due to the recognition of lease liabilities of €15.2 million, following the application of

IFRS 16. Excluding these financial liabilities, the group's net financial debt would have improved by €12 million to €46.9 million. Moreover, in 2019, the parent paid dividends of roughly €10 million. Reference should be made to the statement of cash flows for more information on the cash flows for the year.

	31.12.2019	**31.12.2018**
Non-current financial liabilities	74,700	68,866
Current financial liabilities	35,031	45,651
Non-current lease liabilities	11,787	-
Current lease liabilities	3,461	-
Cash and cash equivalents	(62,798)	(55,319)
Current financial assets	(56)	(72)
Net financial debt	**62,124**	**59,125**

The main financial indicators for the two years are set out below. For comparative purposes, they are also shown net of the effect of FTA of IFRS 16:

Indici	**2018**	**2019 (PRE-IFRS 16)**	**2019**
ROS [3]	13.5%	14.1%	14.2%
ROI [4]	21.3%	24.3%	22.6%
ROE [5]	26.0%	24.6%	24.5%
ROA [6]	11.9%	13.8%	13.3%
Inventory turnover([14]	2.5	2.7	2.7
DSO [15]	74.6	66.1	66.1
Average DPO [16]	84.1	77.9	77.9
Group tax rate [18]	-17.8%	-22.0%	-22.0%
R&D - Investments [7]	16,035	18,060	18,060
R&D as % of revenue [8]	5.7%	5.5%	5.5%
Capex as % of revenue[9]	6.6%	7.2%	8.12%(19)
Cash Conversion Rate [17]	49.7%	74.3%	71.2%

(3) The Return on Sales (ROS) is the ratio of operating profit (loss) to revenue.
(4) The Return on Investment (ROI) is the ratio of operating profit (loss) to net invested capital.
(5) The Return on Equity (ROE) is the ratio of the profit (loss) for the year to equity.
(6) The Return on Assets (ROA) is the ratio of the operating profit (loss) to total assets.
(7) The R&D - Investments are the sum of Opex R&D and Capex R&D.
(8) The R&D investments as a percentage of revenue is the ratio of R&D investments to revenue.
(9) The Capex as a percentage of revenue is the ratio of cash flows from investing activities to revenue.
(10) The group calculates net financial debt using the method set out in paragraph 127 of the CESR recommendation 05/054b, which implemented Commission Regulation (EC) 809/2004 (see chapter X, paragraph 10.1).
(11) Net non-current assets is the sum of property, plant and equipment, intangible assets, equity-accounted investments and other non-current assets.
(12) Net working capital is the sum of trade receivables, inventories, tax assets, other assets, deferred tax assets, trade payables, tax liabilities, other current liabilities, deferred tax liabilities and provisions for risks.
(13) Net invested capital is the sum of (i) net non-current assets, (ii) net working capital and (iii) defined benefit plans.
(14) Inventory turnover is calculated as the ratio of (i) purchases of raw materials, consumables, goods and changes in inventories to (ii) average inventories at the end of the previous and current years. This ratio is multiplied by 365.
(15) DSO is the ratio of (i) the average trade receivables at the end of the previous and current years to (ii) revenue. This ratio is multiplied by 365.

(16) DPO is the ratio of (i) the average trade payables at the end of the previous and current years to (ii) the sum of purchases of raw materials, consumables and goods and changes in inventories and cost of services. This ratio is multiplied by 365.
(17) The cash conversion rate is calculated as the ratio of (i) operating cash flows net of cash flows from investing activities to (ii) EBITDA.
(18) The group tax rate is the ratio of income taxes to the profit before tax.
(19) It includes the increases relating to leases recognised after 1 January 2019.

Key cash flows are as follows:

Cash flows from operations (indirect method)	**2019**	**2018**
Profit for the year	35,047	30,752
Profit for the year net of amortisation, depreciation and impairment losses, provisions, net financial (income) expense, income taxes and (gains) on the sale of non-current assets	**64,532**	**48,436**
Cash flows before changes in net working capital	4,015	(9,329)
Interest and income taxes paid	(18,982)	(11,636)
Net cash flows from operating activities	**49,565**	**27,471**
Cash flows used in investing activities	(22,347)	(48,956)
Increase (decrease) in share capital	(807)	31
Sales (acquisitions) of equity investments	-	-
Dividends to owners of the parent and non-controlling investors	(10,066)	(30,000)
Cash flows from financing activities	(9,249)	63,220
Change in cash and cash equivalents	**7,096**	**11,766**
Opening cash and cash equivalents	55,702	43,552
Closing cash and cash equivalents	62,798	55,319

Cash flows generated by operating activities amount to €49.6 million in 2019, which is a significant improvement on 2018 (€27.5 million).

In 2019, the group generated cash of €7.1 million after distributing dividends of €10 million and investing €22 million. Financing activities used cash flows of €9 million, including lease payments relating to IFRS 16 of €4 million.

Overview of the parent's performance: CAREL INDUSTRIES S.p.A.

The parent, Carel Industries S.p.A., has its offices at the main production site in Brugine (Padua).

The parent manufactures and markets products which it distributes to the end customers in the markets it manages directly (mostly Italy) and its foreign subsidiaries in the markets they manage.

In 2019, the main events affecting the parent were:

- the alignment of the carrying amounts of intangible assets to their tax bases, as detailed in the Tax issues section and in the notes to the consolidated financial statements. This led to the recognition of a non-current asset of €11.2 million;
- the agreement of two medium to long-term loans totalling €40 million, in order to reschedule its cash outflows during the year.

The parent also continued to invest in its international development and made capital injections of €1.8 million to boost the commercial operations of its US subsidiary.

The parent provides centralised treasury services to the group and the European entities have a cash pooling system in which it acts as pooler. At year end, it had respectively financial assets and financial liabilities of €1.8 million and €4.7 million related to the cash pooling account.

The parent's net financial debt amounts to €87.4 million (31 December 2018: €84.0 million). As a result of the transition to IFRS 16, the parent recognised lease liabilities of €2.7 million.

It also distributed dividends of €9.9 thousand to its shareholders during the year.

The parent's key figures are summarised below:

	pre-IFRS 16	a)	b)	(a-b)/b
CAREL INDUSTRIES S.p.A.	**2019**	**2019**	**2018**	**Variation %**
Revenue from third parties	97,766	97,766	95,824	2.0%
Intragroup revenue	78,280	78,280	84,452	(7.3%)
Other revenue	4,490	4,490	3,971	13.1%
Operating costs	(155,626)	(154,204)	(161,532)	(4.5%)
EBITDA	**24,910**	**26,332**	**22,715**	**15.9%**
Amortisation, depreciation and impairment losses	(5,974)	(7,374)	(5,784)	27.5%
Operating profit	**18,936**	**18,958**	**16,931**	**12.0%**
Net financial income	9,264	9,224	9,859	(6.4%)
Profit before tax	28,200	28,182	26,791	5.2%
Income taxes	(5,462)	(5,473)	(2,804)	95.2%
Profit for the year	**22,738**	**22,708**	**23,987**	**(5.3%)**

The parent performed well in 2019; revenue from third parties amounts to €97.8 million up by 2.0% on the previous year. Intragroup revenue decreased by 7.3%.

Other revenue mainly consists of royalties from group entities for know-how licences and tax assets for R&D activities as provided for by national laws.

Operating costs include the capitalisation of development expenditure of €2.5 million (compared to €2.1 million in 2018). The decrease in operating costs is mainly due to the costs related to the listing process incurred in 2018, which did not repeat in 2019 and the transition to IFRS 16, which decreased costs by €1.4 million.

The number of employees increased from 660 to 680 at the reporting date.

Financial income includes dividends of €10.1 million (2018: €9.9 million) received from foreign companies, mainly the Chinese, German, French and UK companies.

Taxes jumped in absolute terms and as a percentage of profit before tax (to 19.7% in 2019 from 10.5% in 2018), mainly due to the recognition, in 2018, of the tax benefit ("patent box") for 2015, 2016 and 2017, while the benefit related solely to one year in 2019. The increase is also due to the rise in the IRAP rate, from 3.9% to 5.5%, following the measure introduced by Legislative decree no. 142 of 29 November 2018.

The reclassified statement of financial position as at 31 December 2019 compared with the previous year end is as follows:

CAREL INDUSTRIES S.p.A.	31.12.2019	31.12.2018	Variation %
Non-current assets	156,369	139,238	12.3%
Working capital	17,621	19,391	(9.1%)
Defined benefit plans	(5,256)	(4,979)	5.6%
Net invested capital	**168,734**	**153,649**	**9.8%**
Equity	81,335	69,601	16.9%
Net financial debt	87,399	84,048	4.0%
Total coverage	**168,734**	**153,649**	**9.8%**

The increase in net non-current assets is mainly due to:

- investments in property, plant and equipment and intangible assets of €3.7 million and €5.3 million, respectively;
- the recognition of right-of-use assets of €2.6 million;
- the recognition of a non-current asset of €11.2 million following the alignment of the carrying amounts allocated to the two companies acquired in December 2018 in the consolidated financial statements to their tax bases.

Other changes relate to the capital increase made by Carel USA Inc (€1.8 million).

Working capital decreased, principally due to the reduction of €3.6 million in inventories and in the tax assets used to offset the tax expense for the year. These reductions were only partially offset by a decrease in trade payables.

Lastly, the net financial debt amounts to €87.4 million at 31 December 2019, comprising cash and cash equivalents of €25.5 million and loan assets of €3.3 million, offset by financial liabilities of €116.3 million, including lease liabilities of €2.7 million.

The reconciliation of the parent's and group's equities at 31 December 2019 is provided below:

	12_2019		12_2018	
	Equity	**Profit for the year**	**Equity**	**Profit for the year**
CAREL INDUSTRIES S.p.A.	**81,335**	**22,708**	**69,601**	**23,987**
Profit and equity of consolidated entities	128,840	23,674	112,878	19,579
Derecognition of the carrying amount of investments in consolidated entities	(131,429)	(325)	(127,919)	(1,231)
Derecognition of intragroup dividends	-	(10,666)	-	(9,915)
Derecognition of intragroup profits on inventories	(5,234)	1,528	(6,761)	(1,417)
Purchase price allocation	69,275	(1,981)	70,276	(326)
Other adjustments	80	80	(82)	1
CAREL INDUSTRIES Group	**142,868**	**35,019**	**117,992**	**30,678**

Occupational health and safety

There were no fatal injuries or cases of professional diseases during the year, continuing the trend of previous years.

During 2019, at group level, 12 incidents occurred in the workplace and 14 during the commute to and from work, which resulted in a sick leave of more than three days for the workers involved.

Specifically, at Carel Industries S.p.A., the following events took place:

- one injury leading to time off work of less than three days (two in 2018);
- ten injuries leading to time off work of more than three days (12 in 2018),

for a total of 11 injuries (14 in 2018), including six during the commute to and from work (eight in 2018) and five in the workplace (six in 2018).

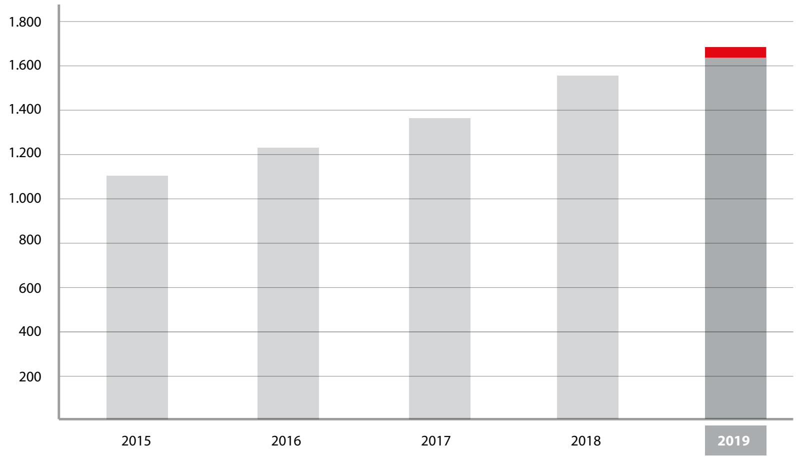
The group did not receive any complaints nor was it ordered to appear in court for alleged violations of occupational health and safety regulations or environmental crimes.

During 2019, as confirmed by the relevant authorities, Carel Industries S.p.A. complied with the requirements for the installation of centralised aspiration systems following the issues challenged during 2018 and with the instructions issued after the accident that occurred at the factory in October 2017. The parent's Italian production site, which had already obtained the OHSAS 18001:2007 certification, completed the transition to the new ISO 45001:2018 certification of its health and safety management system in 2019.

The group implemented a number of measures at its various sites to improve the level of occupational health and safety. A detailed description is provided in its consolidated non-financial statement (NFS) prepared pursuant to Legislative decree no. 254/16, to which reference should be made.

HR and organisation

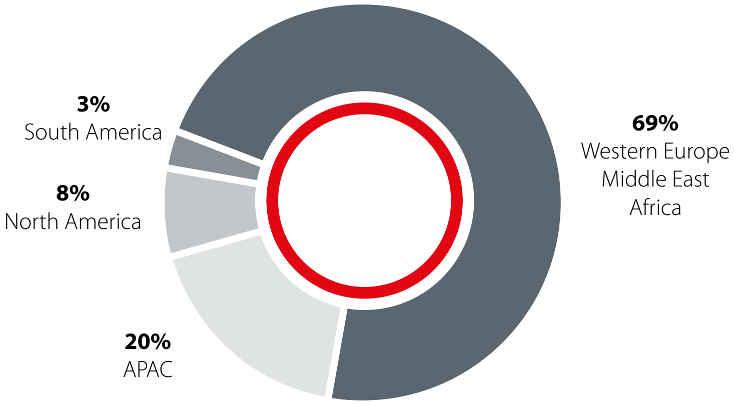
The group's growth, also in terms of the total number of employees, is in line with the trend of the last five years:



At year end, a breakdown of the **group's employees** by geographical segment is as follows:

	31.12.2019	31.12.2018	Variation
Europe, Middle East and Africa	1,165	1,107	58
APAC	345	311	34
North America	133	112	21
South America	46	47	(1)
Total	**1,689**	**1,577**	**112**

he breakdown by geographical segment is shown in the graph on the right. Blue and white collars account for 34% and 66%, respectively.



Development and selection

During the year and in line with the previous years, the group continued to enhance its organisational, technical, commercial and production structure, to adequately support its business growth.

Overall, the group hired 297 resources in 2019, while 185 left. This growth in the group's workforce is mainly due to the new companies entering the consolidation scope, in particular, the new Ukraine commercial group company and the newly-acquired Enersol in Canada.

The Italian head office hired 61 employees during the year while 41 (32 white collars and 9 blue collars) left, some of whom had reached retirement age.

Once again in 2019, the turnover rate in Italy and, more generally, in the foreign production sites, confirms the fierce competition for highly-qualified personnel on the global labour market.

The group intends to continue with the approach it adopted in the past, which is to cultivate the best talents in its organisational structure internally, in order to ensure continuity of skills and upskilling.

To this end, it continued to promote organisational developments, job rotations and overseas secondments within the group entities, with the aim of promoting the development of an international approach and skills in different group areas, via the International Mobility initiatives.

In 2019, ten employees were sent abroad on secondment to both commercial and production companies.

In February 2019, the group rolled out its "Join The Future" programme. At its fourth edition, this is the group's graduate programme which involves recruiting young talents, who have recently graduated in STEM and their introduction - using a fast-track approach through interdisciplinary projects - into different group areas. It comprises both internal and external training courses, including a final two-month international placement with a group company.

This year the programme involved eight successful graduates who are now part of the group's workforce.

The group carried out many projects to improve engagement and thus mitigate the risk of losing employees and their skills.

Specifically, the parent introduced a smartworking pilot to improve the work/life balance for its employees and its attractiveness to potential candidates. This provides for the possibility to work from home one day a week with more flexible hours in accordance with a signed and agreed-upon regulation. This project was extended to around 100 employees and, in 2020, the situation will be reassessed and the group will decide whether to extend it to a larger base of white collars.

Furthermore, the group adopted a remuneration policy, updated in 2019, which aims, on the one hand, to align the interests of the owners and management, by pegging the remuneration of the key personnel to the group's performance and, on the other hand, intends to attract, motivate and retain the key resources and best talents with a competitive salary.

2019 training courses

The group is aware that keeping its employees' skills and professionalism up to date and constantly adequate is key to ensure its organisational development and, in line with previous years, it launched extensive training programmes, involving employees from all group entities and countries in which it operates.

A total of 48,728 (16,469 in Italy) hours of training were provided, including 29,927 (11,378 in Italy) to white collars and about 18,242 (4,715 in Italy) to direct and indirect production personnel, confirming the continuation and commitment to investments in production made by the group.

The group's main training courses were of a technical/application, management and professional refresher nature, in addition to covering HSE (health, safety and environment) issues, which accounted for 11.6% of total training hours.

Approximately 13.3% of total hours of training focused on soft skills, specifically communication and management subjects (communication, public speaking, leadership, coaching) for resources across the different group entities.

Approximately 9% of the hours were dedicated to induction activities for new hires, with training sessions focused on interdisciplinary topics (of a technical nature, but also commercial and organisational) and 7.8% related to the HVAC/R applications. With reference to the purely technical/specialist topics, the hours of training focused on design and patents (electronic, mechanical and IT) amounted to approximately 5.5% of the total and 24% on operations.

Industrial relations

The following considerations refer only to the parent (Carel Industries S.p.A.), since the trade unions involvement in foreign commercial companies or production sites is either only marginal or non-existent (since it is not mandatory under applicable local legislation).

Discussions with the trade unions continued to be positive, in line with the shared decision-making approach introduced in previous years.

After about seven months of negotiations, in April 2019, the revised second level internal additional agreement for the 2019-2021 three-year period was signed. This lays the groundwork for the reorganisation and extension of the social welfare policies offered to employees. Specifically, the criteria for parental leave were revised, as were those for the possibility of advances on post-employment benefit, contributions to the cost of crèches and playschools, contributions to schooling for the low-income families and a supplement to the INPS (the Italian Social Security Institution) share of the allowances for optional maternity leave. The parent has also undertaken to set up a welfare platform, to be made available to all employees (excluding managers), in order to optimise decisions about the services that national and internal labour agreements will offer to all workers with maximum flexibility and decision-making autonomy.

As a result of the changes in the roles and responsibilities assigned to production personnel, in 2019, a fruitful discussion began on professional grading levels in order to verify their consistency and adequacy with respect to the services actually performed. To this end, the parent undertook to meet with trade union representatives and to provide them with all the necessary answers - relating to the workers concerned - within 30 days of the date of the formal request for revision of their levels.

In 2019, there were a total of three strikes, with average participation of 13.4% (34% if only blue collars are considered). As in it was often the case in the past, these strikes were not due to the internal matters and/or situations, but rather they were tied to protests against and awareness building about occupational health and safety or solidarity towards employees of companies in the area let go as a result of serious business crises.

Lastly, the unionisation level (number of members compared to total employees) is slightly higher than in 2018 at around 14.3% (compared to 13.5% in 2018). While increasing, this ratio confirms the parent's substantially positive industrial relations situation and the absence of conflicts or significant pending disputes. The most represented unions are FIOM Cgil (94.8% of members) and FIM Cisl (5.2% of members).

2019 R&D activities

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

The development teams continue to focus on solutions for more energy efficient products and the possibility to use natural refrigerants. The cost of refrigerants in Europe is sky-rocketing due to the restrictions on those with the greatest environmental impact.

In this context, the R&D centre implemented a conflict minerals (3TGs) policy, identifying the macro-categories of items that may contain the 3TGs, in order to make the investigation easier. The group commenced evaluating active raw material suppliers of the four production sites that use the 3TGs tin alloys for welding, electronic microchips, tantalum capacitors or LCD displays.

In 2019, the group procured 85% of the value of products purchased did include 3TGs from conflict-free sources and 74% of component manufacturers that source conflict-free 3TGs declare that they are committed to monitoring their upstream supply chain.

With respect to user health protection, the group has always paid particular attention to compliance with the applicable European legislation. More specifically, Carel applies the **REACH** (Registration, Evaluation, Authorisation and Restriction of Chemicals) **and RoHS** (Restriction of Hazardous Substances Directive) **European directives** by actively involving its entire value chain and, through its internal chemicals compliance team, it continuously vouches the REACH compliance statements of the various manufacturers.

CAREL in the new EPEE steering committee
EPEE
European Partnership for Energy and the Environment

In addition, thanks to a specific project, the parent can state its compliance with the EU RoHS Directive of 21 July 2011 and the Commission Delegated Directive (EU) 2015/863 of 31 March 2015 restricting the use of certain hazardous substances in the production of electrical and electronic equipment.

The Knowledge Centre has continued to provide training (19 sessions) about refrigeration and air-conditioning to more than 277 technical and commercial employees, who received extensive training about the related applications.

The IoT division, which was set up in 2018 and reports to the CEO, continued to strengthen group investments in solutions that aid value creation using data collected from the system, in order to continue providing chargeable services to customers, promoting non-traditional solutions, such as improving system efficiency, predictive maintenance and remote management. The group signed its first contracts with refrigeration retail customers, which was its priority for 2019.

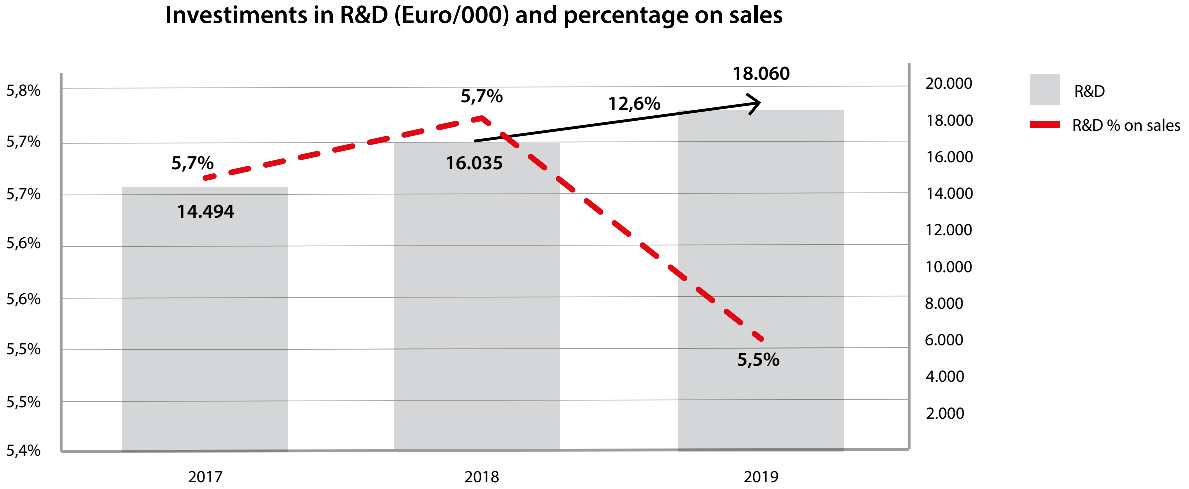
Currently the R&D unit comprises the IoT division, the Knowledge Centre and the centres for electronics, mechanics and software tools competence centres.

At the end of 2018, thanks to the acquisitions of Hygromatic GmbH and Recuperator S.p.A., the group's mechanics competence centre started to work in the passive heat recovery and isothermal and adiabatic humidification sectors.

In 2019, the R&D unit had an average of 225 employees (including 152 at the parent, 12 in the US, 52 in China, four at Hygromatick GmbH and five at Recuperator S.p.A.) who are very qualified and have a high educational level (roughly two thirds are university graduates).

Costs (personnel expense, opex and capex) of the R&D activities equalled 5.5% of turnover (5.8% excluding Hygromatic GmbH and Recuperator S.p.A.) and amounted to €8.0 million, up 12.6% on the previous year, confirming the group's ongoing commitment to innovation.

Variations in R&D investments over the last few years are shown in the following graph (in thousands of Euros and as a percentage of turnover):



As the IFRS requirements were met for some of the projects developed or underway, the group capitalised the related expenditure of roughly €3.0 million under intangible assets.

In 2019, in addition to those already created in 2018, the group introduced additional positions to improve its organisational and management structure. Specifically, it created a program manager role, in addition to the system managers, which were incremented in two uncovered areas during the year, and the competence managers introduced in the previous year, to coordinate cross-competence design activities, which are increasingly frequent in the group's sector.

Very extensive organisational and management integration activities were carried out by the parent with its new subsidiaries, HygroMatik GmbH and Recuperator S.p.A., in 2019. As Recuperator S.p.A. is a less structured company, integration focused on sharing the group's development process, the use of lean tools (visible planning, barashi, issue board and A3-T), the harmonisation of product certification processes and design, simulation and verification tools and methods. With respect to HygroMatik GmbH, the group mostly focused on the integration of product portfolios, in order to expand its offer in Germany, Switzerland and Austria.

The group confirmed its modular approach to product development in the various areas (electronic, mechanical and software) to encourage as far as possible the re-use and re-usability of the modules and thus reduce development times, achieve greater reliability and decrease product costs. It focused especially on honing development skills at the other global production sites through its global competence centres to improve their ability to meet group design requirements. It maintained its development processes, methods and standards and circulated them throughout the group to be used as a basis for all design activities and guarantee identical quality levels at each site. A production part approval process (PPAP) has been put in place for suppliers of materials, in particular of customised materials, in order to improve the quality in terms of both the design and the reliability of the production flows. This will improve the reliability of the supply flows, with the resulting improvements in logistics and quality. Furthermore, R&D activities are also developed through long-standing partnerships with Padua University (in areas ranging from analogue and digital electronics, power electronics to the theory of systems and controls, thermodynamic applications, technical physics and mechanical production processes), CNR (National Research Institute) and the most important sector associations, such as EPEE (European Partnership for Energy and the 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).

During the year, four guiding principles underpinned product development projects:

- acquisition of new base technologies and processes;
- development of new products/product platforms;
- operating improvement of platform products;
- development of new vertical solutions using available products.

The four guiding principles led to:

- energy efficiency;
- natural refrigerants;
- monitoring, data analysis and streamlining of systems;
- revision and expansion of current product ranges.

Product development activities mainly focused on the introduction of a new iJ refrigeration range, officially presented at Euroshop 2020. With a renewed and futuristic look, the product covers the highly profitable food service market segments: merchandiser, food storage and display, food process, scientific application and distribution. The product is programmable, highly customisable, with a wide variety of formats and functionalities, able to withstand hostile environments and may be connected through NFC, BlueTooth and WiFi.

Again in the refrigeration segment, the group introduced HEOS BOX system refrigeration modules for food retail water loop systems. This solution is aimed at facilitating the HEOS water loop system's market penetration by directly supplying the finished refrigeration module with a data connection.

Both in the refrigeration segment, with propane refrigerated counter solutions with variable speed compressors (HEOSone), and in the HVAC (uChiller) segment, both derived from the recently-developed ACU platform, at the basis of the HEEZ system developed in 2017. Both of the apps use a Bluetooth connection system to connect to hand-held devices, Applica and Controlla, which allows for complete, user-friendly control of the device and the respective unit.

The programming suite for the programmable range was extended to improve connectivity, with the introduction of the new commissioning and integration features with the Applica and Controlla apps.

Turning to connectivity, the group introduced the advanced CloudGate gateway for both WiFi and LTE connections to the tERA portal, in order to allow the collection of information from field controls. With an affordable cost, it allows an extremely wide variety of LTE connections for the most important 4G standards (CAT1, CATM1 and NB-IoT), as well as the traditional 2G .

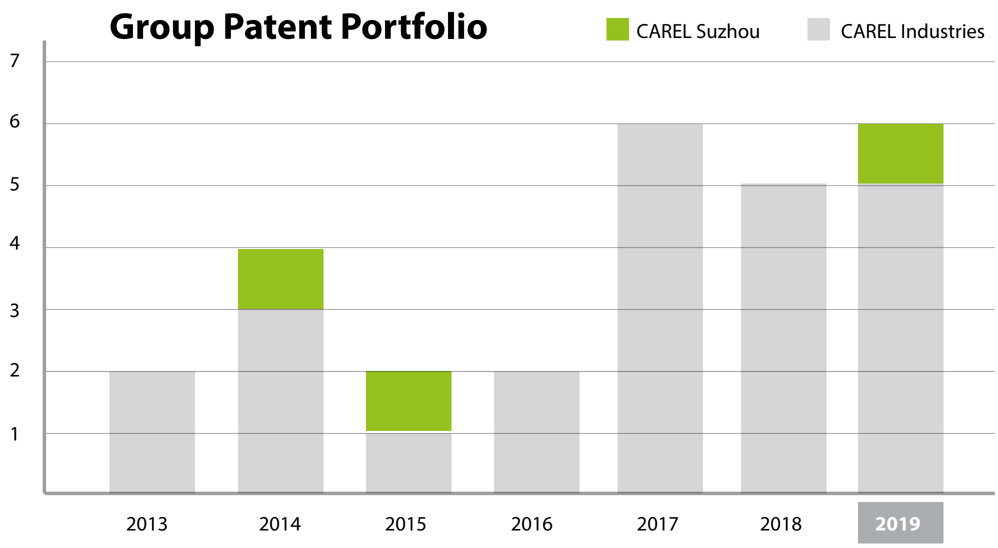
In terms of IoT, in addition to the consolidation of the Applica and Controlla system used to monitor bottle coolers, the apps for hand-help devices, the centralised control systems tEra and remotePRo for both refrigeration (retail chain) and air-conditioning (data centres) have also been upgraded, supporting the development of services for controlling plant, maintenance and energy saving, identifying the most critical devices and the measures to make them more efficient.

With regard to electronic expansion valves, the mid-sized E4V valves have been redesigned, the E5V valves have been upgraded for CO2 applications and the E2V versions upgrade.

In the isothermal humidification field, the group upgraded the Compact Steam humidifier designed for residential applications, by simplifying its installation and maintenance and introducing connectivity functions. In the adiabatic humidification area, it redesigned the Humifog product, in order to increase its capacity, adapt it to the new efficiency standards, renew its user interface and usability of installation and maintenance and ensure connections to remote supervision systems.

The range of Human Machine Interface graphics resulted in a similar redesign for pGDX 7" solutions.

Six new patents were added to the group's portfolio, bringing the total to 37 invention patents (approved - filed) and 33 utility patents.



Events after the reporting date

In February 2020, the Chinese plant had to shut down production for about one week following the restrictions imposed by the Chinese authorities on the entire country for the epidemiological emergency COVID-19 (Coronavirus). The group reacted promptly by transferring part of the production scheduled for the period to other sites. To date, the Chinese plant is rapidly resuming full operation.

In Italy, the spread of the virus has led to the shutdown of production at the Brugine production site (where the parent operates) and a reduction in production capacity at the Rescaldina production site (where Recuperator operates) following the new restrictive measures imposed by the government from 26 March and currently up to 3 April. All the other production sites located in Croatia, North America, South America, China and Germany are operational. There are currently no significant disruptions to the transfer of goods between sites, commercial companies and end customers. As of the date of preparation of this report, the group is increasing production in Croatia and China to make up for the shutdown of the Brugine production site.

In economic terms, in the first two months of the year, the spread of Covid-19 mainly impacted the Asian area which caused a drop in revenue.

At the date of this document, the group has sufficient liquidity, in line with that at year end, to guarantee flexibility should the macroeconomic scenario deteriorate. Moreover, the group's geographical and sector diversification mitigates this risk.

However, the ongoing spread of the virus worldwide and the stringent measures taken by all governments to counter its further spreading are affecting the future macroeconomic growth prospects with probable repercussions on the domestic and international scenario. These instability factors were considered as non-adjusting events pursuant to IAS 10.21.

The directors are constantly monitoring these factors of uncertainty and, as a precautionary measure, have developed a risk mitigation plan that focuses on strategic procurement, an accurate assessment of expenses and investments and frequent monitoring of collection. However, at present, it is not possible to predict how this phenomenon will evolve and its consequences on the macroeconomic scenario, nor is it possible to determine its possible impacts that may require adjustments be made to the carrying amounts of the group's assets and liabilities.

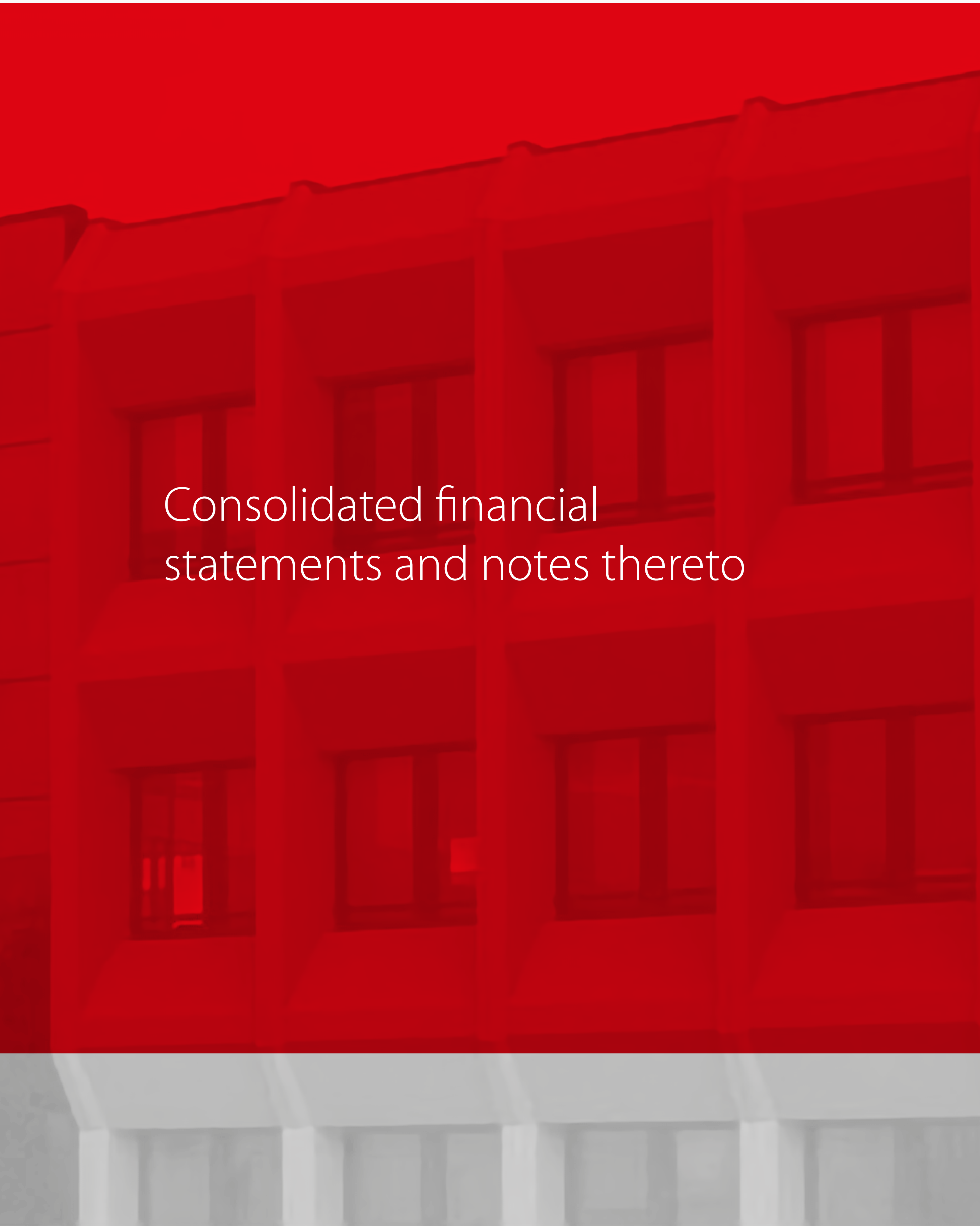
In particular, these factors of uncertainty could mainly, but not exclusively, affect the financial statements captions subject to valuation, for a description of which reference should be made to the sections "Use of estimates" and "Impairment test" in the notes to the consolidated financial statements. Moreover, although the turbulence on the financial markets caused by this emergency led to an abrupt and generalised fall in share prices, which triggered a significant reduction in the value of the company's shares compared to 31 December 2019, their value is nonetheless higher than both the values implicit in consolidated equity at 31 December 2019 and the listing prices, and largely supports the carrying amounts of the group's net assets.

Outlook

As described earlier, the Coronavirus (Covid-19) began to spread on a global basis in early 2020 and its probable future adverse impact on the global economy cannot yet be estimated. Thanks, in part, to the recent expansion of its production capacity, which has increased its flexibility, the group is carefully monitoring the situation in order to reduce the impact on the entire value chain (up-stream and downstream). It will continue to implement its long-term strategic guidelines, including during the current year.

Despite the uncertain scenario generated by the spread of Coronavirus and the consequent restrictive measures for its containment put in place by the public authorities of the affected countries, the group will maintain its strong focus on organic growth, based on a constant drive towards the technological innovation of its products, aimed primarily at energy saving and environmental sustainability. In addition to this, the group intends to expand its consolidation scope through possible acquisitions of companies with significant strategic and industrial similarities and growth in the digital and on-field services sector.

CAREL



Consolidated financial statements and notes thereto

Statement of financial position

(€'000)	Note	31.12.2019	31.12.2018
Property, plant and equipment	1	63,775	37,560
Intangible assets	2	90,534	91,126
Equity-accounted investments	3	536	335
Other non-current assets	4	13,111	2,343
Deferred tax assets	5	4,378	4,128
Non-current assets		**172,335**	**135,491**
Trade receivables	6	58,552	59,951
Inventories	7	48,265	54,285
Current tax assets	8	1,711	6,055
Other current assets	9	6,613	6,001
Current financial assets	10	56	72
Cash and cash equivalents	11	62,798	55,319
Current assets		**177,994**	**181,683**
TOTAL ASSETS		**350,330**	**317,174**

Equity attributable to the owners of the parent	12	142,868	117,992
Equity attributable to non-controlling interests	13	353	296
Total equity		**143,220**	**118,288**
Non-current financial liabilities	14	86,486	68,866
Provisions for risks	15	1,368	1,332
Defined benefit plans	16	7,844	7,333
Deferred tax liabilities	5	10,896	11,820
Non-current liabilities		**106,595**	**89,351**
Current financial liabilities	14	38,492	45,651
Trade payables	18	38,200	41,289
Current tax liabilities	19	1,113	1,539
Provisions for risks	15	2,418	1,649
Other current liabilities	20	20,292	19,407
Current liabilities		**100,515**	**109,535**
TOTAL LIABILITIES AND EQUITY		**350,330**	**317,174**

Statement of profit or loss

(€'000)	Note	2019	2018
Revenue	21	327,358	280,220
Other revenue	22	3,611	3,147
Costs of raw materials, consumables and goods and changes in inventories	23	(138,637)	(115,383)
Services	24	(47,503)	(50,286)
Capitalised development expenditure	25	2,970	2,453
Personnel expense	26	(83,412)	(70,751)
Other expense, net	27	(1,255)	(2,415)
Amortisation, depreciation and impairment losses	28	(16,769)	(9,119)
OPERATING PROFIT		**46,363**	**37,867**
Net financial expense	29	(1,431)	(136)
Net exchange losses	30	(152)	(352)
Share of profit of equity-accounted investees	31	177	15
PROFIT BEFORE TAX		**44,957**	**37,394**
Income taxes	32	(9,910)	(6,643)
PROFIT FOR THE YEAR		**35,047**	**30,752**
Non-controlling interests		28	74
PROFIT FOR THE YEAR ATTRIBUTABLE TO THE OWNERS OF THE PARENT		**35,019**	**30,678**

Statement of comprehensive income

(€'000)		**2019**	**2018**
Profit for the year		35,047	30,752
Items that may be subsequently reclassified to profit or loss:			
- Fair value losses on hedging derivatives net of the tax effect		(270)	(126)
- Exchange differences		926	(754)
Items that may not be subsequently reclassified to profit or loss:			
- Actuarial gains (losses) on employee benefits net of the tax effect		**(314)**	**66**
Comprehensive income		35,389	29,938
attributable to:			
- Owners of the parent		35,333	29,846
- Non-controlling interests		57	90
Earnings per share			
Earnings per share (in Euros)	**12**	**0.35**	**0.31**

Statement of cash flows

(€'000)	2019	2018
Profit for the year	35,047	30,752
Adjustments for:		
Amortisation, depreciation and impairment losses	16,747	9,212
Accruals to/utilisations of provisions	2,426	1,518
Non-monetary net financial expense	1,341	312
Income taxes	9,821	6,643
Gains on the sale of non-current assets	(850)	-
	64,532	**48,436**
Changes in working capital:		
Change in trade receivables and other current assets	3,104	(1,491)
Change in inventories	5,283	(13,123)
Change in trade payables and other current liabilities	(4,988)	6,442
Change in non-current assets	515	(684)
Change in non-current liabilities	101	(473)
Cash flows from operating activities	**68,547**	**39,107**
Net interest paid	(1,657)	(553)
Income taxes paid	(17,325)	(11,083)
Net cash flows from operating activities	**49,565**	**27,471**
Investments in property, plant and equipment	(17,736)	(14,516)
Investments in intangible assets	(5,823)	(3,922)
Disinvestments of financial assets	25	47,030
Disinvestments of property, plant and equipment and intangible assets	2,198	342
Interest collected	316	433
Investments in equity-accounted investees	(25)	(0)
Business combinations net of cash acquired	(1,303)	(78,322)
Cash flows used in investing activities	**(22,347)**	**(48,956)**
Capital increases	-	31
Repurchase of treasury shares	(807)	-
Dividend distributions	(9,992)	(30,000)
Dividends distributed to non-controlling interests	(74)	-
Increase in financial liabilities	48,185	94,557
Decrease in financial liabilities	(53,398)	(31,337)
Decrease in lease liabilities	(4,036)	-
Cash flows from (used in) financing activities	**(20,122)**	**33,251**
Change in cash and cash equivalents	**7,096**	**11,766**
Cash and cash equivalents - opening balance	**55,319**	**43,900**
Exchange differences	383	(348)
Cash and cash equivalents - closing balance	**62,798**	**55,319**

Statement of changes in equity	Share capital	Legal reserve	Translation reserve
Balance at 1.01.2018	**10,000**	**2,000**	**3,430**
Owner transactions			
Allocation of prior year profit	-	-	-
Capital increases	-	-	-
Actuarial gains	-	-	-
Dividend distributions	-	-	-
Change in consolidation scope	-	-	-
Total owner transactions	**10,000**	**2,000**	**3,430**
Profit for the year	-	-	-
Other comprehensive expense	-	-	(770)
Comprehensive income	**-**	**-**	**(770)**
Balance at 31.12.2018	**10,000**	**2,000**	**2,660**
Balance at 1.01.2019	**10,000**	**2,000**	**2,660**
Owner transactions:			
Allocation of prior year profit	-	-	-
Capital increases	-	-	-
Actuarial gains	-	-	-
Repurchase of treasury shares	-	-	-
Dividend distributions	-	-	-
Change in consolidation scope	-	-	-
Total owner transactions	**10,000**	**2,000**	**2,660**
Profit for the year	-	-	-
Other comprehensive income	-	-	897
Comprehensive income	**-**	**-**	**897**
Balance at 31.12.2019	**10,000**	**2,000**	**3,557**

Hedging reserve	Other reserves	Retained earnings	Profit for the year	Equity	Equity att. to non-controlling interests	Total equity
33	**35,195**	**36,294**	**31,117**	**118,068**	**248**	**118,316**
						-
	27,612	3,505	(31,117)	-	-	-
	-	-	-	-	31	31
	77	-	-	77	-	77
	(30,000)	-	-	(30,000)	(74)	(30,074)
	-	-	-	-		-
33	**32,884**	**39,798**	**-**	**88,145**	**205**	**88,350**
		-	30,678	30,678	74	30,752
(126)	66	-	-	(830)	16	(814)
(126)	**66**	**-**	**30,678**	**29,847**	**90**	**29,939**
(93)	**32,950**	**39,798**	**30,678**	**117,992**	**296**	**118,288**
(93)	**32,950**	**39,798**	**30,678**	**117,992**	**296**	**118,288**
-	23,990	6,689	(30,678)	-	-	-
-	-	-	-	-	-	-
-	340	-	-	340	-	340
-	(807)	-	-	(807)	-	(807)
-	(9,992)	-	-	(9,992)	-	(9,992)
-	-	-	-	-	-	-
(93)	**46,480**	**46,487**	**-**	**107,532**	**296**	**107,828**
-	-	-	35,019	35,019	28	35,047
(270)	(314)	-	-	314	29	343
(270)	**(314)**	**-**	**35,019**	**35,333**	**57**	**35,389**
(363)	**46,166**	**46,487**	**35,019**	**142,868**	**353**	**143,220**

Notes to the consolidated financial statements

Content and format of the consolidated financial statements

CAREL INDUSTRIES S.p.A. (the "parent") heads the group of the same name and has its registered office in Via Dell'Industria 11, Brugine (PD). It is a company limited by shares and its tax code and VAT number is 04359090281. It is included in the Padua company register.

The group provides control instruments to the air-conditioning, commercial and industrial refrigeration markets and also produces air humidification systems. It has nine production sites and 20 distribution companies which serve all the main markets.

As it is required to prepare consolidated financial statements, on 28 November 2016, the parent opted to draw up separate and consolidated financial statements starting from 31 December 2017 under the International Financial Reporting Standards (IFRS) endorsed by the European Union as per Regulation (EC) no. 1606/2002 of 19 July 2002, transposed into Italian law by Legislative decree no. 38/2005.

The parent's board of directors approved the consolidated financial statements at 31 December 2019 on 5 March 2020.

The consolidated financial statements include the results of the parent and its subsidiaries, based on their updated accounting records.

Statement of compliance and basis of preparation

The CAREL INDUSTRIES Group's consolidated financial statements at 31 December 2019 were prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and endorsed by the European Commission with the procedure set out in article 6 of Regulation (EC) no. 1606/2002 of the European Parliament and of the Council of 19 July 2002.

The IFRS include all the standards as well as the interpretations of the International Financial Reporting Standards Interpretations Committee (IFRS IC), previously called the Standing Interpretations Committee (SIC), endorsed by the European Union at the reporting date and included in the related EU regulations published at that date.

The consolidated financial statements include the statement of financial position, statement of profit or loss, statement of comprehensive income, statement of changes in equity, statement of cash flows and these notes. They were prepared assuming the parent and its subsidiaries will continue as going concerns. The group deems that it could adopt a going concern assumption pursuant to IAS 1.25/26 given its strong market position, very satisfactory profits and solid financial structure.

The consolidated financial statements were prepared in thousands of Euro, which is the group's functional and presentation currency as per IAS 21 The Effects of Changes in Foreign Exchange Rates. There may be rounding differences when items are added together as the individual items are calculated in Euros.

Financial statements schedules

Statement of financial position.
Assets and liabilities are presented as current or non-current as required by paragraph 60 and following paragraphs of IAS 1.
An asset or liability is classified as current when it meets one of the following criteria:

- the group expects to realise the asset or settle the liability, or intends to sell or consume it, in its normal operating cycle; or
- it holds the asset or liability primarily for the purpose of trading; or
- it expects to realise the asset or settle the liability within twelve months after the reporting period.

All other assets and liabilities are classified as non-current.

Statement of profit or loss.
The group has opted to present the statement of profit or loss classifying items by their nature rather than their function, as this best represents the transactions undertaken during the year and its business structure. This approach is consistent with the group's internal management reporting system and international best practices for its sector. Following adoption of revised IAS 1, the group decided to present the statement of profit or loss and other comprehensive income as two separate statements.

Statement of comprehensive income.
This statement, prepared in accordance with the IFRS, presents other items of comprehensive income that are recognised directly in equity.

Statement of cash flows.
The group prepares this statement using the indirect method. Cash and cash equivalents included herein comprise the statement of financial position balances at the reporting date. Interest income and expense, dividends received and income taxes are included in the cash flows generated by operating activities. The group presents cash flows from operating activities and investing activities and changes in non-current financial position, current liabilities and current financial assets separately. If not specified, exchange rate gains and losses are classified in the operating activities as they refer to the translation of trade receivable and payables into Euros.

Statement of changes in equity.
This statement shows changes in the equity captions related to:

- allocation of the profit for the year of the parent and its subsidiaries to non-controlling interests;
- owner transactions (repurchase and sale of treasury shares);
- each profit or loss item, net of the related tax effects, that is recognised either directly in equity (gain or loss on the repurchase/sale of treasury shares) or in an equity reserve (share-based payments), pursuant to the IFRS;
- changes in the hedging reserve, net of the related tax effects;
- the effect of any changes in the IFRS.

Consolidation scope

The consolidated financial statements include the separate financial statements and financial statements of the parent, CAREL INDUSTRIES S.p.A., and its Italian and foreign subsidiaries, respectively, at 31 December 2019.

Subsidiaries are those entities over which the parent has control, as defined in IFRS 10 Consolidated financial statements. An investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The financial statements of the subsidiaries are consolidated starting from the date when control exists until when it ceases to exist.

Note [33] "Other information" lists the entities included in the consolidation scope at 31 December 2019.

Basis of consolidation

The consolidated financial statements include the separate financial statements and financial statements of CAREL INDUSTRIES S.p.A. and the Italian and foreign entities over which it has direct or indirect control, respectively. Specifically, the consolidation scope includes:

- the subsidiaries, over which the parent has control as defined by IFRS 10 Consolidated financial statements; these entities are consolidated on a line-by-line basis;
- the associates, over which the parent has the power to exercise significant influence over their financial and operating policies despite not having control; investments in these entities are measured using the equity method.

The parent adopted the following consolidation criteria:

- assets, liabilities, revenue and expenses of the consolidated entities are consolidated using the line-by-line approach where the carrying amount of the parent's investments therein is eliminated against its share of the investee's equity. Any differences are treated in accordance with IFRS 10 Consolidated financial statements and IFRS 3 Business combinations. The portions attributable to non-controlling interests are recognised at the fair value of the assets acquired and liabilities assumed without recognising goodwill;
- the group entities are excluded from the consolidation scope when control thereover ceases to exist and any effects of exclusion are recognised as owner transactions in equity;
- intragroup receivables and payables, revenue and expenses and all significant transactions are eliminated, including intragroup dividends. Unrealised profits and gains and losses on intragroup transactions are also eliminated;
- equity attributable to non-controlling interests is presented separately under equity; their share of the profit or loss for the period is recognised in the statement of profit or loss;
- the financial statements of the consolidated foreign entities using a functional currency other than the Euro are translated into Euros using the average annual exchange rate for the statement of profit or loss captions and the closing rate for the statement of financial position captions. Any differences between these exchange rates or due to changes in the exchange rates at the start and end of the year are recognised under equity.

The reporting date of all the consolidated companies is 31 December, except for CAREL India, whose year end is 31 March. However, the Indian company prepares a reporting package at 31 December for consolidation purposes. The group monitors CAREL India for any significant events between 31 December and 31 March, to identify possible adjustments.

Business combinations

Business combinations are treated using the acquisition method. The consideration is recognised at fair value, calculated as the sum of the acquisition-date fair values of the assets transferred and liabilities incurred by the acquirer and the equity interests issued in exchange for control of the acquiree. Transaction costs are usually recognised in profit or loss when they are incurred.

The assets acquired and the liabilities assumed are recognised at their acquisition-date fair value, except for the following items which are measured in line with the relevant IFRS:

- deferred tax assets and liabilities;
- employee benefits;
- liabilities or equity instruments related to share-based payment awards of the acquiree or share-based payment awards of the acquirer issued to replace the acquiree's awards;
- assets held for sale and disposal groups.

Goodwill is calculated as the excess of the aggregate of the consideration transferred for a business combination, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree and the net of the acquisition-date fair value of the assets acquired and liabilities assumed. If this fair value is greater than the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree, the resulting gain is recognised immediately in profit or loss.

The amount of any non-controlling interest in the acquiree at the acquisition date is the pre-combination carrying amount of the acquiree's net assets.

Contingent consideration is measured at its acquisition-date fair value and included in the consideration exchanged for the acquiree to calculate goodwill. Any subsequent changes in fair value, which are measurement period adjustments, are included in goodwill retrospectively. Changes in fair value which are measurement period adjustments are those that arise due to additional information becoming available about facts and circumstances that existed at the acquisition date and was obtained during the measurement period (that cannot exceed one year from the acquisition date). Any subsequent change in contingent consideration is included in profit or loss.

Accounting policies

The consolidated financial statements at 31 December 2019 were prepared in accordance with the IFRS issued by the IASB, endorsed by the European Commission and applicable at the reporting date. They are presented in Euros, which is the group's functional currency, i.e., the currency of the primary economic environment in which it mainly operates. Amounts are rounded to the nearest thousand.

The consolidated financial statements present the financial position and performance of the parent and its subsidiaries. The financial statements used for consolidation purposes are those prepared by the subsidiaries pursuant to the IFRS at 31 December 2019.

The consolidated financial statements include the statement of profit or loss, statement of comprehensive income, statement of financial position, statement of changes in equity, statement of cash flows and these notes, which are an integral part thereof.

They were prepared using the historical cost criterion, except for derivative financial instruments hedging currency and interest rate risks and available-for-sale financial assets, which were measured at fair value as required by IAS 39 Financial Instruments: Recognition and measurement.

Preparation of consolidated financial statements under the IFRS requires management to make estimates and assumptions that affect the amounts in the financial statements and the notes. Actual results may differ from these estimates. Reference should be made to the "Use of estimates" section for details of the captions more likely to be affected by estimates.

Following its decision to adopt the IFRS starting from the consolidated financial statements at 31 December 2017, the group referred to the standards applicable from 1 January 2017 to prepare its consolidated financial statements at 31 December 2019, in accordance with the provisions of IFRS 1.

STANDARDS, AMENDMENTS AND INTERPRETATIONS APPLICABLE TO ANNUAL PERIODS BEGINNING ON OR AFTER 1 JANUARY 2019

The group applied the following standards, amendments and interpretations for the first time starting from 1 January 2019:

- On 13 January 2016, the IASB published IFRS 16 Leases which replaces IAS 17 Leases and IFRIC 4 Determining whether an arrangement contains a lease, SIC-15 Operating leases - incentives and SIC-27 Evaluating the substance of transactions involving the legal form of a lease. This standard provides a new definition of a lease and introduces a criterion based on control (right of use) of an asset to differentiate leases from service contracts based on the identification of the asset, right of substitution, the right to obtain substantially all the benefits from the use of the asset and, lastly, the right to identify the asset's use. The standard establishes a single model for the recognition and measurement of leases by the lessee. It provides for the recognition of the a right-of-use asset, including assets under operating lease, under assets, and a lease liability. The standard does not provide for significant changes for lessors.

The group chose to apply the standard retrospectively, recognising the cumulative effect of the application of the standard on opening equity at 1 January 2019 (without modifying the 2018 corresponding figure), in accordance with IFRS 16.C7-C13. Specifically, with regard to the leases formerly classified as operating leases, the group recognised:

a. a financial liability equal to the present value of future payments at the transition date, discounted using the incremental borrowing rate applicable at the transition date for each contract;

a right-of-use asset equal to the amount of the financial liability at the transition date, net of any prepayments and accrued income/accrued expenses and deferred income related to the lease and recognised in the statement of financial position at the reporting date.

The following table details the impacts of the adoption of IFRS 16 at the transition date:

Non-current assets	01.01.2019
Right-of-use assets - buildings	14,136
Right-of-use assets - industrial and commercial equipment	388
Right-of-use assets - other items of property, plant and equipment	1,300
Total	**15,824**

Financial liabilities	01.01.2019
Non-current financial liabilities	11,191
Current financial liabilities	4,633
Total	**15,824**

The weighted average incremental borrowing rate applied to the financial liabilities recognised at 1 January 2019 is 2.58%.

Non-current assets related to operating leases increased due to the prepayments totalling €116 thousand.

The group decided to not present its right-of-use assets and lease liabilities separately in the statement of financial position.

In adopting IFRS 16, the group used the exemption provided for by IFRS 16.5(a) in relation to short-term leases, mainly related to vehicles and industrial and commercial equipment.

Similarly, the group used the exemption provided for by IFRS 16.5(b) for leases for which the underlying asset is of a low value (i.e., it is worth less than €5 thousand when new). The leases to which the exemption has been applied mainly fall within the categories of computers, telephones and tablets, printers, other electronic devices and furniture and furnishings.

For such leases, the introduction of IFRS 16 did not require the recognition of a financial liability and the related right-of-use asset, but the lease payments are recognised in profit or loss on a straight-line basis over the lease term under service costs.

Furthermore, with reference to the transition rules, the group elected to use the following practical expedient available in the case of the selection of the modified retrospective transition method:

- classification of leases for which the term ends within 12 months of the date of initial recognition as short-term leases. For such leases, the lease payments are recognised in profit or loss on a straight-line basis.

The lease liability comprises:

- the fixed and in-substance fixed lease payment component, net of any incentives received;
- the variable lease payments based on an index or a rate, which are initially measured using the index or rate at the lease commencement date.

After initial recognition, the lease liability is increased by accrued interest (calculated using the effective interest method) and is reduced by the lease payments made.

The group remeasures a lease liability (and adjusts the relevant right-of-use asset accordingly) if:

- the lease term or the assessment of whether the group will exercise the option changes; in this case, the lease liability is remeasured based on the present value of the new lease payments using the revised discount rate;
- the amount of the lease payments change following

changes in the underlying index or rate; in this case, the lease liability is remeasured based on the present value of the lease payment using the original discount rate (unless the lease payments change due to changes in interest rates, in which case the revised discount rate should be used);

- the lease terms are changed and the change does not require the recognition of a separate lease; in this case, the lease liability is remeasured based on the present value of the new lease payments using the revised discount rate.

A right-of-use asset is equal to the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred. It is recognised net of amortisation/depreciation and any impairment losses.

The identification of the lease term is crucial as the form, legislation and commercial practices of property leases vary significantly from one jurisdiction to another. Based on past experience, the group has defined an accounting policy that includes, in addition to the non-cancellable period, the first contractual renewal period, if renewal depends exclusively on the group. In the case of property leases with renewals dependent on both parties, the group assessed the specific facts and circumstances, as well as the penalties, considered in a broad sense, resulting from a potential termination of the lease.

In December 2019, the IFRIC published its final agenda decision about lease term and useful life of leasehold improvements (discussed during the meeting held in November 2019). At the date of preparation of these consolidated financial statements, the group was assessing the possible impact of the interpretation on its estimated lease terms. Based on the above decision, the group's right-of-use assets may increase, with a balancing entry under lease liabilities. The group expects to complete the assessment within the first half of 2020.

- On 12 December 2017, IASB published the "Annual Improvements to IFRSs: 2015-2017 Cycle" that include the amendments to some standards as part of the annual improvement process. The main changes regard:
  – IFRS 3 Business Combinations and IFRS 11 Joint Arrangements: the amendments clarify that when an entity obtains control of a business that is a joint operation, it shall remeasure the previously held interests in that business. This process is not, however, required when an entity obtains joint control of a business that is a joint operation.
  – IAS 12 Income Taxes: the amendments clarify that all the income tax consequences of dividends (including payments on financial instruments classified under equity) shall be recognised consistently with the transaction that generated such distributable profits (profit or loss, OCI or equity).
  – IAS 23 Borrowing costs: the amendments clarify that if any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing becomes part of the funds that the entity borrows generally when calculating the capitalisation rate on general borrowings.

The adoption of these amendments did not affect the group's consolidated financial statements.

- On 7 February 2018, the IASB published "Plan Amendment, Curtailment or Settlement (Amendments to IAS 19)". The document clarifies how an entity shall account for a defined benefit plan amendment (i.e., a curtailment or settlement). This requires an entity to update its assumptions and remeasure its net defined benefit liability or asset. The adoption of this amendment did not affect the group's consolidated financial statements.
- On 7 June 2017, the IASB published "Uncertainty over income tax treatments (IFRIC 23)". The interpretation tackles the subject of uncertainties surrounding tax treatment to be adopted for income taxes. Specifically, the interpretation requires entities to analyse the uncertain tax treatments (individually or collectively, depending on their characteristics) assuming that the tax authorities will examine the tax position and will have full knowledge of all the relevant information. If the entity believes that it is not probable that the tax treatment will be accepted, the entity must reflect the effect of the uncertainty in the calculation of its current and deferred income taxes. Furthermore, the document

does not contain any new disclosure obligations, but highlights that the entity shall establish whether it is necessary to provide information about management's considerations related to the uncertainty inherent in the tax recognition, in accordance with IAS 1. The adoption of this interpretation on 1 January 2019 did not significantly affect the group's consolidated financial statements.

STANDARDS, AMENDMENTS AND INTERPRETATIONS ENDORSED BY THE EU BUT NOT YET MANDATORY AND NOT ADOPTED EARLY BY THE GROUP AT 31 DECEMBER 2019

- On 31 October 2018, the IASB published the *"Definition of Material (Amendments to IAS 1 and IAS 8)"*. The document amended the definition of "material" contained in IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. This amendment aims to make the definition of "material" more specific and introduced the concept of "obscured information" to flank the definitions of omitted or misstated information already present in the two standards subject to the amendment. The amendment clarifies that information is "obscured" if it has been described in such a way that it has the same effect as if it had been omitted or misstated.
  The amendments were endorsed on 29 November 2019 and apply to all transactions after 1 January 2020.
  The directors do not expect these amendments to significantly affect the consolidated financial statements.
- On 29 March 2018, the IASB published an amendment to the *"References to the Conceptual Framework in IFRS Standards"*, which applies to annual periods beginning on or after 1 January 2020 but earlier application is allowed.
- On 26 September 2019, the IASB published *"Amendments to IFRS 9, IAS 39 and IFRS 7: Interest Rate Benchmark Reform"*. They amend IFRS 9 Financial Instruments and IAS 39 Financial Instruments: Recognition and Measurement in addition to IFRS 7 Financial Instruments: Disclosures. Specifically, they amend certain requirements for hedge accounting, providing temporary departures thereto, in order to mitigate the impact of the uncertainty arising from the IBOR reform (which is still in progress) on future cash flows in the period preceding its completion. Moreover, the amendments require entities to provide additional disclosures about their hedging relationships that are directly affected by the uncertainties stemming from the reform, to which the departures apply.
  The amendments become effective on 1 January 2020, but earlier application is allowed. The directors do not expect their adoption will significantly affect the consolidated financial statements.

STANDARDS, AMENDMENTS AND INTERPRETATIONS NOT YET ENDORSED BY THE EU

At the reporting date, the EU's relevant bodies had not yet completed the endorsement process for adoption of the following amendments and standards.

- On 22 October 2018, the IASB published "Definition of a Business (Amendments to IFRS 3)". The document provides clarification regarding the definition of a business for the purposes of the correct application of IFRS 3. Specifically, the amendment clarifies that while a business usually produces output, the presence of output is not strictly necessary to identify a business in the presence of an integrated collection of assets/processes and goods. However, to be considered a business, an acquired set of activities/processes and assets must include at least one input and one substantive process, which, together, contribute significantly to the ability to create outputs.

The directors do not expect these amendments to affect the consolidated financial statements.

- On 18 May 2017, the IASB published IFRS 17 Insurance contracts, which will supersede IFRS 4 Insurance contracts.

The objective of the new standard is to ensure that an entity relevant information that faithfully represents its rights and obligations arising from its insurance contracts.

- On 11 September 2014, the IASB published amendments to IFRS 10 and IAS 28 Investments in Associates and Joint Ventures. The amendments were published to resolve the current conflict between IAS 28 and IFRS 10.

Under IAS 28, gains or losses on the sale or contribution of a non-monetary asset to a joint venture or an associate in exchange for a share of its capital are limited to the share of the joint venture or associate held by the other investors that are not involved in the transaction. The IASB has currently deferred application of these amendments.

- On 30 January 2014, the IASB published IFRS 14 Regulatory Deferral Accounts that allows first-time adopters to continue to recognise amounts relating to rate regulation activities under the previous reporting standards. Since the group is not a first-time adopter, the standard is not applicable to it.

Accounting policies

Revenue and costs.

Revenue is measured based on the fee contractually-agreed with the customer and does not include amounts collected on behalf of third parties. The group recognises revenue when control of the goods or services is transferred to the customer. Revenue is recognised to the extent it is probable the group will receive the economic benefits and it can be measured reliably. Most contracts with customers provide for commercial discounts and discounts based on volumes, which modify the revenue itself. In defining the amount of the variable consideration that may be included in the transaction price, the group calculates the amount of variable consideration that cannot yet be considered realised at each reporting date.

Revenue from the sale of HVAC products and services refer to sales of products for air control and humidification in the industrial, residential and commercial segment (heat ventilation and air conditioning), while refrigeration revenue refers to sales to the food retail and food service segment. The sales in both markets can be divided into the following three macro channels: OEM (Original Equipment Manufacturers), Dealers and Projects. Non-core revenue is earned on products that do not make up the group's core business.

The warranties related to these categories of products are warranties for general repair and in most cases, the group does not provide such warranties. The group recognises warranties in compliance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

There are no significant services provided for a lengthy period of time.

Advertising and research costs are expensed in full as required by IAS 38 Intangible assets. Revenue from services is recognised when the services are rendered.

Interest.

Revenue and expenses are recognised on an accruals basis in line with the interest accrued on the carrying amount of the related financial assets and liabilities using the effective interest method.

Dividends.

They are recognised when the shareholder's right to receive payment is established, which normally takes place when the shareholders pass the related resolution. The dividend distribution is recognised as a liability in the financial statements of the period in which the shareholders approve such distribution.

Income taxes.

They reflect a realistic estimate of the group's tax burden, calculated in accordance with the laws enacted in the countries where the CAREL INDUSTRIES Group operates; current tax liabilities are recognised in the statement of financial position net of any payments on account.

Deferred tax assets and liabilities arise on temporary differences between the carrying amount of an asset or liability pursuant to the IFRS and its tax base, calculated using the current tax rates or tax rates reasonably expected to be enacted in future years. Deferred tax assets are only recognised when their recovery is probable while deferred tax liabilities are always recognised, except in the situations in which recording a tax liability would not be appropriate under IAS 12 Income taxes (for example on initial recognition of goodwill or a situation in which the group does not anticipate the reversal of the liability in the foreseeable future). The group does not apply any netting of current and deferred taxes. A tax liability is accounted for in the year in which the liability to pay a dividend is recognised, if untaxed reserves are distributed.

Translation criteria.

Foreign currency receivables and payables are translated into Euros using the transaction-date exchange rate. Any gains or losses when the foreign currency receivable is collected or the payable settled are recognised in profit or loss.

Revenue, income, costs and expenses related to foreign currency transactions are recognised at the spot rate ruling on the transaction date. At the closing date, foreign currency assets and liabilities, excluding non-current assets (which continue to be recognised using the transaction-date exchange rate) are re-translated using the spot closing rate (except for non-current assets) and the related exchange rate gains or losses are recognised in profit or loss.

The main exchange rates (against the Euro) used to translate the financial statements of foreign currency operations at 31 December 2019 and 2018 (comparative figures) are set out below:

	Average rate		Closing rate	
	2019	**2018**	**2019**	**2018**
US dollar	1.120	1.181	1.123	1.145
Canadian dollar	1.486	n.a.	1.460	n.a.
Australian dollar	1.611	1.580	1.600	1.622
Hong Kong dollar	8.772	9.256	8.747	8.968
Brazilian real	4.413	4.309	4.516	4.444
Pound sterling	0.878	0.885	0.851	0.895
South African rand	16.176	15.619	15.777	16.459
Indian rupee	78.836	80.733	80.187	79.730
Chinese renminbi (yuan)	7.736	7.808	7.821	7.875
South Korean won	1,305.320	1,299.070	1,296.280	1,277.930
Russian ruble	72.455	74.042	69.956	79.715
Swedish krona	10.589	10.258	10.447	10.255
Japanese yen	122.006	130.396	121.940	125.850
Mexican peso	21.557	22.705	21.220	22.492
UAE dirham	4.111	4.337	4.126	4.205
Croatian kuna	7.418	7.418	7.440	7.413

Thai baht	34.757	38.164	33.415	37.052
Polish zloty	4.298	4.262	4.257	4.301
Singapore dollar	1.527	1.593	1.511	1.559
Ukrainian hryvnia	28.922	n.a.	26.720	n.a.

Property, plant and equipment.

They are recognised at historical cost, including ancillary costs necessary to ready the asset for the use for which it has been purchased.

Maintenance and repair costs that do not extend the asset's life and/or enhance its value are expensed when incurred; otherwise, they are capitalised.

Property, plant and equipment are stated net of accumulated depreciation and impairment losses calculated using the methods described later in this section. The depreciable amount of an asset is allocated on a systematic basis over its useful life, which is reviewed once a year. Any necessary changes are applied prospectively.

The depreciation rates of the main categories of property, plant and equipment are as follows:

Industrial buildings	from 3% to 5%
Plant and machinery	from 10% to 15.5%
Industrial and commercial equipment	from 12% to 40%

Land has an indefinite useful life and therefore is not depreciated.

Assets held under finance lease are recognised as right-of-use-assets at the present value of the minimum lease payments. The liability to the lessor is shown under financial liabilities. The assets are depreciated using the above rates. Lease payments for short-term leases or leases of low-value assets are recognised in profit or loss over the lease term.

When the asset is sold or there are no future economic benefits expected from its use, it is derecognised and the gain or loss (calculated as the difference between the asset's sales price and carrying amount) is recognised in profit or loss in the year of derecognition.

Goodwill.

Goodwill is the excess of the aggregate of the consideration transferred for a business combination, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree over the net of the acquisition-date fair value of the assets acquired and liabilities assumed. Goodwill is not amortised but is tested annually for impairment.

Other intangible assets.

These are identifiable, non-monetary assets without physical substance that are controlled by the parent and from which future economic benefits are expected to flow to the entity. They are initially recognised at cost when this can be reliably determined using the same methods applied to property, plant and equipment.

These assets are subsequently presented net of accumulated amortisation and any impairment losses. Their useful life is reviewed regularly and any changes are applied prospectively. Costs incurred to internally generate an intangible asset are capitalised in line with the provisions of IAS 38.

Their estimated average useful life is between three and fifteen years.

Gains or losses on the sale of an intangible asset are calculated as the difference between the asset's sales price and its carrying amount. They are recognised in profit or loss at the sales date.

Impairment losses on non-financial assets.

Assets with an indefinite useful life are not amortised but are tested for impairment once a year to check whether their carrying amount has undergone impairment. The board of directors adopted a policy that defines the criteria for the impairment test, the controls to be carried out to guarantee the reliability of the process and the procedure to approve the test, in line with Consob recommendation no. 0003907 of 15 January 2015.

Amortisable assets are tested for impairment whenever events or circumstances suggest that their carrying amount cannot be recovered (trigger events). In both cases, the impairment loss is the amount by which the asset's carrying amount exceeds its recoverable amount, which is the higher of the asset's fair value less costs to sell and its value in use. If it is not possible to determine an asset's value in use, the recoverable value of the cash-generating unit (CGU) to which the asset belongs is calculated. Assets are grouped into the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The group calculates the present value of the estimated future cash flows of the CGU using a discount rate that reflects the time value of money and the risks specific to the asset.

If an impairment loss on an asset other than goodwill subsequently decreases or no longer exists, the carrying amount of the asset or the CGU is increased to the new estimate of its recoverable amount which will not, in any case, exceed the carrying amount the asset would have had if no impairment loss had been recognised.

Reversals of impairment losses are recognised immediately in profit or loss using the model provided for in IAS 16 Property, plant and equipment.

Equity investments.

Investments in associates and joint ventures are measured using the equity method, while other investments are measured at fair value through other comprehensive income. If fair value cannot be reliably determined, the investments are measured at cost adjusted for impairment losses, which are recognised in profit or loss.

If the reasons for the impairment loss no longer exist, the equity investments recognised at cost are revalued with reversal of the impairment loss through profit or loss.

Financial assets.

They are initially recognised at their fair value and subsequently measured at amortised cost. Financial assets are initially recognised at their fair value increased, in the case of assets other than those recognised at fair value through profit or loss, by ancillary costs. When subscribed, the group assesses whether a contract includes embedded derivatives. The embedded derivatives are separated from the host contract if this is not measured at fair value when the analysis shows that the economic characteristics and risks of the embedded derivative are not closely related to those of the host contract.

The group classifies its financial assets after initial recognition and, when appropriate and permitted, reviews this classification at the reporting date.

It recognises all purchases and sales of financial assets at the transaction date, i.e., the date on which the group assumes the commitment to buy the asset.

All financial assets within the scope of IFRS 9 are recognised at amortised cost or fair value depending on the business model for managing the financial asset and the asset's contractual cash flow characteristics.

Specifically:

- debt instruments held as part of business model whose objective is to hold assets in order to collect contractual cash flows and the related cash flows are solely payments of principal and interest on the principal amount outstanding are subsequently recognised at amortised cost;
- debt instruments held as part of a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and the related cash flows are solely payments of principal and interest on the principal are subsequently measured at fair value through other comprehensive income (FVTOCI);
- all other debt and equity instruments are subsequently measured at fair value through profit or loss (FVTPL).

When a debt instrument measured at FVTOCI is derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment. On the other hand, when an equity instrument measured at FVTOCI is derecognised, the cumulative gain or loss that was previously recognised in other comprehensive income is transferred to retained earnings, without affecting profit or loss.

Debt instruments subsequently measured at amortised cost or FVTOCI are tested for impairment.

Any impairment losses are recognised in profit or loss after use of the fair value reserve if this has been set up. Subsequent reversals of impairment losses are recognised in profit or loss except in the case of equity instruments for which the reversal is recognised in equity.

Inventories.

They are measured at the lower of purchase and/or production cost, calculated using the weighted average cost method, and net realisable value. Purchase cost comprises all ancillary costs. Production cost includes the directly related costs and a portion of the indirect costs that are reasonably attributable to the products.

Work in progress is measured at average cost considering the stage of completion of the related contracts.

Obsolete and/or slow moving items are written down to reflect their estimated possible use or realisation through an allowance.

The write-down is reversed in subsequent years if the reasons therefor no longer exist.

Trade receivables.

They are initially recognised at fair value, which is the same as their nominal amount, and subsequently measured at amortised cost and impaired, if appropriate. Their carrying amount is adjusted to their estimated realisable amount through the loss allowance.

Foreign currency trade receivables are translated into Euros using the transaction-date exchange rate and subsequently retranslated using the closing rate. The exchange rate gain or loss is recognised in profit or loss.

Cash and cash equivalents.

They include cash, i.e., highly liquid investments (maturity of less than three months) that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Employee benefits.

This caption includes the Italian post-employment benefits ("TFR") and other employee benefits covered by IAS 19 Employee benefits. As a defined benefit plan, independent actuaries calculate the TFR at the end of each reporting period. The liability recognised in the statement of financial position is the present value of the defined benefit obligation at the end of the reporting period. These benefits are calculated using the projected unit credit method.

Provisions for risks.

As required by IAS 37 - Provisions, contingent liabilities and contingent assets, the group recognises a provision when it has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Changes in estimates from one period to another are recognised in profit or loss.

Where the effect of the time value of money is material and the payment dates of the obligation can be estimated reliably, the amount of a provision is the present value of the expenditures expected to be required to settle the obligation. Any subsequent changes arising from the passage of time are recognised as financial income or expense in the statement of profit or loss.

No provision is made for possible but not probable risks but the group provides adequate disclosure thereon in the notes.

Trade payables and other current liabilities.

Trade payables and other current liabilities which fall due within normal trading terms are initially recognised at cost, which equals their nominal amount, and are not discounted. When their due date is longer than normal trading terms, the interest is separated using an appropriate market rate.

Financial liabilities.

They are classified as current liabilities unless the group has an unconditional right to defer their payment for at least 12 months after the reporting date. The group removes the financial liability when it is extinguished and the group has transferred all the risks and rewards related thereto. Financial liabilities are initially recognised at their fair value and subsequently measured using the amortised cost method.

Derivative financial instruments.

The group solely uses derivatives to hedge currency risk on foreign currency commercial transactions and interest risk on its medium to long-term debt.

Initial recognition and subsequent measurement is at the derivatives' fair value, applying the following accounting treatment:

Fair value hedge - if a derivative is designated as a hedge of the group's exposure to changes in fair value of a recognised asset or liability that could affect profit or loss, the gain or loss from remeasuring the hedging instrument at fair value is recognised in profit or loss as is the gain or loss on the hedged item.

Cash flow hedge - if a derivative is designated as a hedge of the exposure to variability in cash flows of a recognised asset or liability or a highly probable forecast transaction that could affect profit or loss, the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognised in other comprehensive income; the cumulative gain or loss is reclassified to profit or loss in the same period during which the hedged forecast cash flows affect profit or loss; the gain or loss on the hedge or the ineffective portion of the gain or loss on the hedging instrument is recognised in profit or loss.

When the conditions for application of hedge accounting are no longer met, the group reclassifies the fair value gains or losses on the derivative directly to profit or loss.

Use of estimates.

Preparation of the consolidated financial statements requires management to apply accounting policies and methods that, in certain circumstances, are based on difficult and subjective judgements, past experience or assumptions that are considered reliable and realistic at that time depending on the related circumstances. Application of these estimates and assumptions affects the amounts recognised in the statement of financial position, the statement or profit or loss and the statement of cash flows as well as the disclosures. Actual results may differ from those presented in the consolidated financial statements due to the uncertainty underlying the assumptions and the conditions on which the estimates were based. Finally, the estimates made did not take into account the uncertainties caused by the spread of the Coronavirus, which is described in detail in the section "Events after the reporting date" of the directors' report. In fact, these instability factors were considered as non-adjusting events in accordance with IAS 10.21. At the date of preparation of this report, the directors do not have sufficient information to estimate the possible effect of this phenomenon on the measurement of financial statements captions.

The captions that require the greater use of estimates and for which a change in the conditions underlying the assumptions may affect the consolidated financial statements are:

- loss allowance: this allowance comprises management's best estimates about expected credit losses on receivables from end customers. Management estimates the allowance on the basis of the expected credit losses, considering past experience for similar receivables, the performance of past due receivables, assessments of the credit quality and forecasts of economic and market conditions. Management's estimates, which are based on past experience and the market, may be affected by changes in the competitive scenario or the market in which the group operates;
- allowance for inventory write-down: slow-moving raw materials and finished goods are tested for obsolescence regularly using historical data and the possibility of their sale at below-market prices. If this test shows the need to write-down inventory items, the group sets up an allowance; like for the loss allowance, this allowance is calculated considering past experience and the market. Possible changes in the reference scenarios or market trends could significant modify the criteria used as a basis for the estimates;
- leases: the recognition of right-of-use assets and the related lease liabilities requires significant management

estimates, especially in determining the lease term and the incremental borrowing rate. In determining the lease term, in addition to the contractual deadlines, the group considers any renewal options that it reasonably expects to exercise. The incremental borrowing rate is calculated by considering the type of leased asset, the jurisdictions in which it is acquired and the currency in which the lease is denominated. Possible changes in the reference scenarios or market trends may request to modify the abovementioned assumptions.

Impairment testing of goodwill.

At least once a year, the group tests goodwill for impairment. It calculates the recoverable amount of the CGU as the value in use using the discounted cash flow method applying assumptions, such as estimates of future increases in sales, operating costs, the growth rate of the terminal value, investments, changes in working capital and the weighted average cost of capital (discount rate).

The value in use may change if the main estimates and assumptions made in the plan change and, hence, the impairment test. Therefore, the realisable value of the recognised assets may also change.

Focus should be made on what reported in the following notes with regard to the analysis performed on the possible impacts on the impairment test due to the uncertainty derived from the worldwide spread of the COVID-19.

Fair value.

IFRS 13 is the only reference source for fair value measurement and the related disclosures when this measurement is required or permitted by another standard. IFRS 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This standard replaces and extends the disclosure required about fair value measurement in other standards, including IFRS 7 - Financial instruments: disclosures.

IFRS 13 establishes a fair value hierarchy that categorises into three levels the inputs to valuation techniques used to measure fair value in hierarchical order as follows:

- Level 1 inputs: quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly;
- Level 3 inputs: unobservable inputs for the asset or liability.

The method used to estimate fair value is as follows:

- the fair value of available-for-sale quoted instruments is calculated using quoted prices (level 1);
- the fair value of currency hedges is calculated by discounting the difference between the forward price at maturity and the forward price for the remaining term at the measurement date (the reporting date) at a risk-free interest rate (level 2);
- the fair value of interest rate hedging derivatives is based on broker prices and is calculated considering the present value of the future cash flows discounted using the reporting-date interest rates (level 2).

Reference should be made to the specific comments provided in the notes to the assets or liabilities for more information about the assumptions used to determine fair value.

The fair value of financial instruments not quoted on an active market is calculated in accordance with valuation techniques generally adopted by the financial sector and specifically:

- the fair value of interest rate swaps (IRS) is calculated using the present value of the future cash flows;
- the fair value of forwards to hedge foreign currency risk is calculated using the present value of the difference between the contractual forward exchange rate and the spot exchange rate at the reporting date;
- the fair value of the options to hedge foreign currency risk is calculated using mathematical models that consider the contractual forward exchange rate, the spot exchange rate at the reporting date and the cost incurred to agree such option.

Risks and financial instruments

The objective of IFRS 7 is to require entities to provide disclosures in their financial statements that enable users to evaluate:

- the significance of financial instruments for an entity's financial position and performance;
- the nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the end of the reporting period, and how the entity manages those risks.

The principles in this standard complement the principles for recognising, measuring and presenting financial assets and financial liabilities in IAS 32 Financial instruments: presentation and IFRS 9.

This section presents the supplementary disclosures required by IFRS 7.

The accounting policies applied to measure financial instruments are described in the section on the "Accounting policies".

The group's operations expose it to a number of financial risks that can affect its financial position, financial performance and cash flows due to the impact of its financial instruments.

These risks include:

a. credit risk;

b. liquidity risk;

c. market risk (currency risk, interest rate risk and other price risk).

The parent's board of directors has overall responsibility for the design and monitoring of a financial risk management system. It is assisted by the various units involved in the operations generating the different types of risk.

The units establish tools and techniques to protect the group against the above risks and/or transfer them to third parties (through insurance policies) and they assess the risks that are neither hedged nor insured pursuant to the guidelines established by the board of directors for each specific risk.

The degree of the group's exposure to the different financial risk categories is set out below.

Credit risk

The group operates on various national markets with a high number of medium and large-sized customers, mostly regional or local distributors. Therefore, it is exposed to credit risk in conjunction with its customers' ability to obtain credit from banks.

The group's credit risk management policy includes rating its customers, setting purchase limits and taking legal action. It prepares periodic reports to ensure tight control over credit collection.

Each group company has a credit manager in charge of credit collection on sales made in their markets. Companies active in the same market (e.g., the Italian companies) exchange information about common customers electronically and coordinate delivery blocks or the commencement of legal action.

The loss allowance is equal to the nominal amount of the uncollectible receivables after deducting the part of the receivables secured with bank collateral. The group analyses all the collateral given to check collectability. Impairment losses are recognised considering past due receivables from customers with financial difficulties and receivables for which legal action has commenced.

The following table shows a breakdown of trade receivables by past due bracket:

	31.12.2019		31.12.2018	
	Trade receivables	Loss allowance	Trade receivables	Loss allowance
Not yet due	50,423	(246)	50,083	(642)
Past due < 6 months	8,153	(65)	10,164	(127)
Past due > 6 months	376	(102)	287	(34)
Past due > 12 months	725	(712)	715	(495)
Total	**59,677**	**(1,125)**	**61,249**	**(1,298)**

Liquidity risk

The group's debt mainly bears floating interest rates. Given its ample liquidity, it has an immaterial liquidity risk with respect to its short-term deadlines and, therefore, this risk principally refers to its medium to long-term financing. When deemed significant, the group agrees hedging instruments to neutralise fluctuations in interest rates and agrees a set future expense to cover up to 100% of its future cash outflows.

The group mainly deals with well-known and reputable customers. Its policy is to constantly monitor those customers that request payment extensions. As required by IFRS 7, the next table shows the cash flows of the group's financial liabilities by maturity:

31.12.2019	TOTAL	Total cash flows	Within one year	From one to five years	After five years
Bank loans and borrowings at amortised cost	72,648	73,435	-	73,435	-
Lease liabilities	11,787	13,006	-	7,898	5,109
Effective designated derivative hedges	513	513	-	513	
Other loans and borrowings at amortised cost	1,539	1,594	-	1,297	297
Non-current financial liabilities	**86,486**	**88,548**	**-**	**83,142**	**5,406**
Bank loans at amortised cost	34,236	34,780	34,780	-	-
Lease liabilities	3,461	3,825	3,825		
Bank borrowings at amortised cost	123	125	125	-	-
Other loans and borrowings at amortised cost	635	658	658	-	-
Derivatives held for trading at fair value through profit or loss	37	37	37	-	-
Current financial liabilities	**38,492**	**39,425**	**39,425**	**-**	**-**

Market risk

Currency risk

As the group sells its products in various countries around the world, it is exposed to the risk deriving from changes in foreign exchange rates. This risk mainly arises on sales in currencies like the US dollar, the Chinese renminbi, the pound sterling, the Australian dollar and the Polish zloty.

In addition, the parent has investments in subsidiaries denominated in foreign currency. Changes in equity due to fluctuations in exchange rates are recognised in the translation reserve. The group does not currently hedge against the risk arising on the translation of equity. The following table shows the group's exposure arising from foreign currency assets and liabilities, highlighting the most significant for each year:

31.12.2019	EURO	USD	PLN	CNY	Other currencies	Total
Total assets	261,773	37,190	6,621	36,409	8,337	350,330
Total liabilities	179,233	13,882	2,789	6,266	4,939	207,109

The next table shows a sensitivity analysis of the risk arising on the translation of foreign currency financial statements of the consolidated entities assuming a 10% increase or decrease in the average annual exchange rate. The effect is calculated considering the impact of this increase or decrease on the key performance indicators used by management:

Net revenue	31.12.2019			31.12.2018		
	Average annual rate	Rate +10%	Rate -10%	Average annual rate	Rate +10%	Rate -10%
USD	44,880	40,800	49,867	39,694	36,085	44,104
GBP	7,399	6,727	8,221	8,394	7,631	9,327
CNY	27,829	25,299	30,921	26,860	24,418	29,844
AUD	8,102	7,366	9,002	7,480	6,800	8,311
ZAR	4,183	3,803	4,648	4,237	3,852	4,708
BRL	5,552	5,047	6,169	4,575	4,159	5,083
PLN	18,757	17,052	20,841	14,098	12,816	15,665
Other currencies	7,464	n.a	n.a	7,569	n.a	n.a
Euro	203,192	203,192	203,192	167,314	167,314	167,314

	31.12.2019			31.12.2018		
Profit before tax	**Average annual rate**	**Rate +10%**	**Rate -10%**	**Average annual rate**	**Rate +10%**	**Rate -10%**
USD	13,541	12,310	15,045	10,375	9,431	11,527
GBP	4,723	4,293	5,247	5,680	5,164	6,311
CNY	(7,878)	(7,162)	(8,753)	(12,335)	(11,213)	(13,705)
AUD	5,988	5,444	6,654	5,467	4,970	6,074
ZAR	3,057	2,779	3,397	3,003	2,730	3,337
BRL	3,016	2,742	3,351	2,009	1,826	2,232
PLN	10,847	9,861	12,053	7,945	7,222	8,827
Other currencies	(9,039)	n.a	n.a	(6,373)	n.a	n.a
Euro	20,702	20,702	20,702	21,624	21,624	21,624

The group agrees currency hedges to set the exchange rate in line with forecast sales and purchases volumes to protect itself against currency fluctuations with respect to its foreign currency transactions. The hedges are based on the group's net exposure using currency forwards, to hedge the transaction risk and/or plain vanilla options to hedge the economic risk in line with its financial policy. The hedged risk is part of the global risk and the hedges are not speculative.

Moreover, as the parent prepares its consolidated financial statements in Euros, fluctuations in the exchange rates used to translate the financial statements of the foreign subsidiaries into the presentation currency could affect the group's financial position, financial performance and cash flows.

Interest rate risk

This is the risk that the fair value and/or future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The group is exposed to interest rate risk due to its need to finance its operating activities, both production and financial (the purchase of assets), and to invest its available liquidity. Changes in market interest rates may negatively or positively affect the group's results and, hence, indirectly the cost of and return on financing and investing activities.

The group regularly checks its exposure to interest rate fluctuations and manages such risks through the use of derivatives, in accordance with its financial policies. With regard to such policies, the use of derivatives is reserved exclusively for the management of interest rate fluctuations connected to cash flows and they are not agreed or held for trading purposes.

It solely uses interest rate swaps (IRS), caps and collars to do so.

The group agrees derivatives to hedge part of its financing (cash flow hedges) to set the interest to be paid thereon and obtain an optimum blend of floating and interest rates applied to its financing.

Its counterparties are major banks.

Derivatives are measured at fair value.

Other market and/or price risks

The group is subjected to increasing competitive pressure due to the entry of new players into the OEM market (large international groups) and the development of new organised markets which constantly push prices down, especially in the electronics sector.

Demand for the group's products is also affected by fluctuations affecting the distribution channels of products and applications which, as noted, are mostly the OEM operating indirectly in the construction sector and operators linked to the food distribution sector (for the refrigeration business).

The group protects itself from the business risks deriving from its normal involvement in markets with these characteristics by focusing on technological innovation and geographical diversification and expansion leading to the group gaining international status as it is active on all the continents either directly or through exclusive third party franchisees.

The production sites in Italy, China, Brazil, the United States, Croatia and Germany aim to optimise production. They will also act as potential disaster recovery centres to deal with catastrophes that shut down production at the main site in Italy, where the parent has its registered office. The group's strategy is also to base its production near its markets and customers to provide faster time-to-market services and increase its production output to serve the rapidly growing markets.

The ongoing production structure reorganisation, the related cost savings, geographical diversification and, last but not least, the group's constant commitment to searching for innovative technological solutions make it easier to be competitive.

Climate change and possible impact on the CAREL INDUSTRIES Group

The increasing attention paid to environmental issues and climate change by the main global institutions, as well as the growing awareness among the world's population of the climate impacts that industries have both at production level and in terms of consumption of their products, have led the directors to assess the possible effects that these changes could have on the management of the group's business.

The group has the necessary certifications (CE and UL) to operate on various markets. To date, based on available information, no legislative or regulatory changes are expected in the countries that it serves which could significantly affect the group's activities. The group sees the current focus on energy savings as an opportunity to be grasped, in terms of its R&D, production and commercial strategy.

The directors do not currently believe that there are specific risks that the climate change could impact the group's assets that should be considered, for example, as part of the forward-looking information underlying impairment testing, since there are no production and commercial sites in high-risk areas.

The transition to a green economy inspired by the commitment to fight climate change could give a positive boost to the labour market, with the start of new businesses, the creation of new jobs and/or their reconversion, as well as benefits for health and, of course, for the planet.

Notes to the statement of financial position

[1] PROPERTY, PLANT AND EQUIPMENT

At 31 December 2019, property, plant and equipment amount to €63,775 thousand compared to €37,560 thousand at 31 December 2018. The following table provides a breakdown of the caption and the changes of the year:

	Land and buildings	Plant and machinery	Industrial and commercial equipment	Other items of property, plant and equipment	Assets under construction and payments on account	Total
Balance at 31 December 2017	**4,914**	**7,057**	**6,260**	**3,482**	**692**	**22,405**
- Historical cost	7,672	19,921	28,825	12,193	692	69,303
- Accumulated depreciation	(2,759)	(12,864)	(22,565)	(8,711)	-	(46,900)
Changes in 2018						
- Investments	1,665	4,426	3,011	1,474	3,941	14,516
- Business combinations (historical cost)	2,729	6,792	4,365	1,666	224	15,776
- Reclassifications (historical cost)	200	489	112	242	(942)	102
- Impairment losses	-	-	(3)	-	-	(3)
- Sales (historical cost)	(41)	(105)	(866)	(1,123)	(4)	(2,139)
- Exchange differences on historical cost	48	(48)	(29)	(15)	(8)	(52)
- Exchange differences on accumulated depreciation	(26)	44	20	8	-	45
- Depreciation	(294)	(1,265)	(2,600)	(1,130)	-	(5,289)
- Business combinations (accumulated amortisation)	(1,391)	(3,185)	(3,669)	(1,332)	-	(9,577)
- Reclassifications (accumulated depreciation)	(24)	-	32	(48)	-	(40)
- Sales (accumulated depreciation)	20	95	746	955	-	1,816
Total changes	**2,885**	**7,243**	**1,119**	**697**	**3,212**	**15,156**
Balance at 31 December 2018	**7,799**	**14,300**	**7,379**	**4,179**	**3,904**	**37,560**
including:						
- Historical cost	12,274	31,475	35,415	14,438	3,904	97,505
- Accumulated depreciation	(4,474)	(17,176)	(28,036)	(10,259)	-	(59,945)

	Land and buildings	Plant and machinery	Industrial and commercial equipment	Other items of property, plant and equipment	Assets under construction and payments on account	Total
Balance at 31 December 2018	**7,799**	**14,300**	**7,379**	**4,178**	**3,904**	**37,560**
- Historical cost	12,274	31,475	35,415	14,438	3,904	97,505
- Accumulated depreciation	(4,474)	(17,176)	(28,036)	(10,260)	-	(59,946)
Changes in 2019						
- Right-of-use assets at 1 January 2019	14,137	0	388	1,300	-	15,824
- Investments	438	2,668	4,460	1,814	8,355	17,735
- Investments in right-of-use assets	2,307	-	110	594	-	3,011
- Business combinations (historical cost)	-	-	-	34	-	34
- Reclassifications (historical cost)	12,401	914	250	(168)	(11,459)	1,938
- Sales (historical cost)	(1,826)	(1,360)	(615)	(846)	(14)	(4,662)
- Exchange differences on historical cost	12	5	24	84	52	177
- Exchange differences on accumulated depreciation	(46)	(1)	(47)	(50)	-	(144)
- Exchange differences on right-of-use assets	5			3	-	8
- Depreciation	(512)	(2,152)	(2,996)	(1,452)	-	(7,112)
- Depreciation of right-of-use assets	(3,066)		(165)	(601)	-	(3,831)
- Reclassifications (accumulated depreciation)	(385)	(101)	3	109	-	(374)
- Restatement of right-of-use assets	204	-	-	1	-	205
- Sales (accumulated depreciation)	985	1,062	578	779	-	3,404
Total changes	**24,654**	**1,034**	**1,991**	**1,602**	**(3,066)**	**26,214**
Balance at 31 December 2019	**32,453**	**15,334**	**9,370**	**5,780**	**838**	**63,775**
including:						
- Historical cost	39,747	33,702	40,032	17,253	838	131,572
- Accumulated depreciation	(7,294)	(18,368)	(30,662)	(11,473)	-	(67,798)

“Land and buildings” increased mainly as a result of investments made for the construction of the new production site in China and the extension of the production site in North America.

“Plant and machinery” include the specific assets of the production lines and infrastructures; the increase mainly related to investments in new plant at the Chinese site, with the introduction of a new inverter and SDM production line, and at Recuperator S.p.A., where a new exchanger press was installed. A new production line for the programmable product family was installed at the North American subsidiary.

"Industrial and commercial equipment" principally include production equipment and the main investments were at the parent's site, for the construction of a new production line for parametric products and at the Chinese site.

Increases in "Other items of property, plant and equipment" are mainly due to improvements and investments made in Italy and around the world.

Reference should be made to the Accounting policies section of these notes and the directors' report for information of increases relating to the rights-of-use assets.

A breakdown of property, plant and equipment by geographical segment is as follows:

Tangible assets	2019	2018
Europe, Middle East and Africa	38,124	23,678
APAC	16,716	8,661
North America	7,986	4,593
South America	949	628
Total	**63,775**	**37,560**

The group's property, plant and equipment were not mortgaged or pledged in either year. They are suitably hedged for risks deriving from losses and/or damage thereto through insurance policies taken out with leading insurers.

The group did not capitalise borrowing costs, in line with previous years.

[2] INTANGIBLE ASSETS

At 31 December 2019, this caption amount to €90,534 thousand compared to €91,126 thousand at the end of 2018.

The following table presents changes in these assets:

	Development expenditure	Trademarks, industrial patents and software licences	Goodwill	Other assets	Assets under development and payments on account	Total
Balance at 31 December 2017	**4,298**	**2,698**	**2,730**	**1,213**	**2,092**	**13,031**
- Historical cost	17,983	11,976	2,730	1,581	2,092	36,362
- Accumulated amortisation	(13,685)	(9,279)	-	(367)	-	(23,331)
Changes in 2018						
- Investments	458	1,742	-	4	1,718	3,922
- Reclassifications	438	11	-	(126)	(321)	2
- Impairment losses	-	-	-	-	(93)	(93)
- Business combinations (historical cost)	-	8,797	44,916	24,466	125	78,305
- Sales (historical cost)		(8)	-	(2)	-	(10)
- Exchange differences on historical cost	-	(18)	(18)	(45)	(1)	(84)
- Exchange differences on accumulated amortisation	-	(4)	-	(2)	-	(6)
- Amortisation	(1,913)	(1,293)	-	(323)	-	(3,528)
- Business combinations (accumulated amortisation)	-	(432)	-	(4)	-	(437)
- Reclassifications (accumulated amortisation)		30	-	-	-	30
- Sales (accumulated amortisation)	-	(7)	-	-	-	(7)
Total changes	**(1,016)**	**8,819**	**44,898**	**23,967**	**1,427**	**78,095**
Balance at 31 December 2018	**3,282**	**11,516**	**47,628**	**25,181**	**3,519**	**91,126**
including:						
- Historical cost	18,880	22,501	47,628	25,877	3,519	118,405
- Accumulated amortisation	(15,598)	(10,985)	-	(697)	-	(27,279)

	Development expenditure	Trademarks, industrial patents and software licences	Goodwill	Other assets	Assets under development and payments on account	Total
Balance at 31 December 2018	**3,282**	**11,516**	**47,628**	**25,181**	**3,519**	**91,126**
- Historical cost	18,880	22,501	47,628	25,877	3,519	118,405
- Accumulated amortisation	(15,598)	(10,985)	-	(697)	-	(27,279)
Changes in 2019						
- Investments	946	2,327	-	-	2,550	5,823
- Reclassifications	2,625	(897)	-	-	(3,294)	(1,566)
- Business combinations (historical cost)	-	16	980	-	-	996
- Sales (historical cost)	-	(159)	-	-	-	(159)
- Exchange differences on historical cost	-	31	14	11	(3)	52
- Exchange differences on accumulated amortisation	-	21	-	(3)	-	18
- Amortisation	(1,643)	(2,169)	-	(1,992)	-	(5,804)
- Business combinations (accumulated amortisation)	-	(8)	-	-	-	(8)
- Reclassifications (accumulated amortisation)	-	1	-	-	-	1
- Sales (accumulated amortisation)	-	56	-	-	-	56
Total changes	**1,928**	**(782)**	**994**	**(1,984)**	**(747)**	**(592)**
Balance at 31 December 2019	**5,210**	**10,734**	**48,622**	**23,196**	**2,772**	**90,534**
including:						
- Historical cost	22,451	23,818	48,622	25,888	2,772	123,550
- Accumulated amortisation	(17,241)	(13,084)	-	(2,691)	-	(33,016)

A breakdown of intangible assets by geographical segment is as follows:

Intangible assets	**2019**	**2018**
Europe, Middle East and Africa	87,671	88,506
APAC	1,686	2,402
North America	1,173	218
South America	4	0
Total	**90,534**	**91,126**

With reference to intangible assets:

- the balance of development expenditure shows the expenditure related to projects developed almost entirely by the parent and partially by the Chinese subsidiary that have been capitalised and refer to the production of new innovative products or substantial improvements to existing products incurred before the start of commercial production or use. This expenditure is capitalised when all the requirements of IAS 38 are met. Investments made in 2018 and 2019 related to the projects developed and available for use in those years. Assets under development and payments on account include costs incurred for projects that had not been completed at the reporting date. The reclassifications refer to completed projects, for which amortisation has commenced. Impairment losses are recognised as Amortisation, depreciation and impairment losses in the statement of profit or loss;
- trademarks, industrial patents and software licences include software for management programs and network applications;
- goodwill is the excess of the aggregate of the consideration transferred for a business combination, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree over the net of the acquisition-date fair value of the assets acquired and liabilities assumed.

At 31 December 2019, goodwill amounts to €48,622 thousand, compared to €47,628 thousand at 31 December 2018. The increase is due to goodwill recognised following the first consolidation of Enersol Inc.. The group is currently carrying out the purchase price allocation procedures in accordance with IFRS 3, which it expects to complete in the first half of 2020.

Furthermore, the caption includes amounts that are not material individually or collectively, shown in the caption Other goodwill.

	31.12.2019	Increase	Change in translation reserve	31.12.2018
HygroMatik GmbH	38,499	-	-	38,499
Recuperator S.p.A.	6,326	-	-	6,326
CAREL Thailand CO Ltd	2,054	-	14	2,040
Enersol Inc.	980	980	-	-
Other goodwill	763	-	-	763
Goodwill	**48,622**	**980**	**14**	**47,628**

Acquisition of Enersol Inc.

On 16 September 2019, the US subsidiary CAREL USA Inc. acquired 100% of Enersol Inc. for €1,306 thousand. Since then, the group has had control over this investee and has included it in the consolidation scope.

The assets and liabilities assumed are as follows:

Enersol Inc	16/09/2019	Allocation	16/09/2019
Non-current assets	31	980	1,011
Current assets	604	-	604
Cash and cash equivalents	3	-	3
Total assets	**638**	**980**	**1,618**
Current liabilities	(311)	-	(311)
Total liabilities	**(311)**	**-**	**(311)**

The difference of €980 thousand between the price paid, the assets acquired and the liabilities assumed has been provisionally attributed to goodwill. The group elected to use the 12-month period provided for by IFRS 3 to complete the recognition of this business combination.

The net working capital of the acquiree comprises the following:

Enersol Inc	16/09/2019
Deferred tax assets	-
Trade receivables	313
Inventories	248
Other current assets	44
Provisions for risks	-
Trade payables	(292)
Other current liabilities	(19)
Net working capital	**294**

Impairment test

As required by IAS 36, the group tests goodwill recognised in its consolidated financial statements for impairment at least once a year, including if there are no indicators of impairment.

Goodwill is recognised on the acquisitions shown in the previous table considered as the CGUs for impairment testing purposes. Therefore, it only tested those CGUs to which goodwill had been allocated as impairment factors were identified for the other CGUs. The principal test methods and results for the following main CGUs are shown below:

- Recuperator CGU - allocated goodwill of €6,326 thousand;
- HygroMatik CGU - allocated goodwill of €38,499 thousand;

- Enersol CGU - allocated goodwill of €980 thousand;
- Thailand CGU - allocated goodwill of €2,054 thousand;

The recoverable amount of goodwill of each CGU is determined by calculating value in use.

The methods and assumptions underlying the impairment tests of the CGUs included:

- cash flows as per the business plan, using a three/four-year plan horizon (explicit projections) plus an estimate of the terminal value. Specifically, management used the gross margin based on past performance and its expectations about the future development of the group's markets to prepare the plan, which was prepared at consolidation level and broken down for each CGU;
- the growth rate (g) to determine the cash flows after the plan horizon, calculated specifically for the individual CGUs subject to analysis;
- the discount rate used to discount operating cash flows was the pre-tax WACC rate. Management calculated the cost of capital using the market returns of the last six months on medium to long-term government bonds (ten year) of the countries/markets in which the CGUs are based, adjusted by the market risk premium of each country to account for the investment risk.

The plan used for testing the Recuperator CGU for impairment covers the 2020-2022 period and was approved by the subsidiary's board of directors on 10 January 2020, while that used for testing the HygroMatik CGU for impairment covers the 2020-2023 period and was approved by the subsidiary's board of directors on 27 February 2020.

The main parameters used to test each CGU were as follows:

CGU	Plan horizon	Growth rate g	WACC
Recuperator	2020-2022	1.96%	8.22%
HygroMatik	2020-2023	2.00%	7.92%
Enersol	2020-2022	1.50%	8.14%
Thailand	2020-2022	1.00%	8.4%

The value in use, calculated using the discounted cash flows, including considering the impact of the transition to IFRS 16, supported maintaining the carrying amount of goodwill unchanged. Specifically, with respect to the Recuperator and HygroMatik CGUs to which the highest goodwill is allocated, the test shows a coverage of €2.1 million and €4.9 million, respectively. Although management believes that the assumptions used are reasonable and represent the most probable scenarios based on the available information, the result of the test could differ should the above assumptions significantly change. The factors that could cause impairment are:

- a significant worsening in the actual performances compared to those forecast;
- a deterioration in the economic and financial context and markets in which the group operates.

Management performed a sensitivity analysis, changing the g rate parameters and the business risk (WACC) by +/-0.5%, to back up its assessments and to calculate the results that could arise in the case of a change in the assumptions. It found that the recoverable amount of the CGUs should not decrease to below their carrying amount. Therefore, there was no indication of impairment of the goodwill at 31 December 2019.

The cash flows used in the impairment test do not reflect the possible developments linked to the current national and international scenario affected by the spread of the Coronavirus and the consequent restrictive measures implemented by the governments of the affected countries. These circumstances, which emerged in early 2020, extraordinary in nature and extent, have direct and indirect repercussions on macroeconomic activities and created a context of general uncertainty, whose evolution and related effects cannot be predicted at present. However, in the face of this phenomenon and in compliance with the requirements of international regulators regarding the disclosure required in this circumstance, further stress tests were carried out, related, in particular, to:

- the gross operating profit estimated over the explicit period of the plans, assuming that the possible deterioration of the macroeconomic scenario will affect that period;
- certain variables, such as government bond yield and market risk premium, used to determine the WACC discount rate;

These stress tests reveal that:

- for the Recuperator CGU, the test is passed even if the WACC increases by 1% or the gross operating profit decreases by 60%;
- for the Hygromatik CGU, the test is passed even if the WACC increases by 0.5% or the gross operating profit decreases by 40%.

In order to better interpret the results of this test, it is noted that both CGUs covered by the stress tests refer to two acquisitions completed at the end of 2018: Recuperator S.p.A., a leader in the design and production of air-to-air heat exchangers and Hygromatik GmbH, a German leader in the humidification sector. However, in both cases, the results achieved in 2019 were higher than in the previous year with an overall percentage increase in revenues of approximately 10%.

[3] EQUITY-ACCOUNTED INVESTMENTS

At 31 December 2019, this caption amounts to €536 thousand compared to €335 thousand at 31 December 2018. It may be analysed as follows:

	Registered office	Investment %	31.12.2019	Increase	Change in translation reserve	Equity-accounting	31.12.2018
Arion S.r.l.	Brescia (IT)	40%	71	-	-	-	71
Free Polska s.p.z.o.o.	Krakow (PL)	23%	444	-	4	177	263
Others			21	21	-	-	-
Total			**536**	**21**	**4**	**177**	**335**

[4] OTHER NON-CURRENT ASSETS

At 31 December 2019, other non-current assets amount to €13,111 thousand compared to €2,343 thousand at 31 December 2018; they are broken down as follows:

	31.12.2019	31.12.2018
Related parties	160	160
Guarantee deposits	407	412
Third parties	1,412	1,771
Other assets	11,132	-
Other non-current assets	**13,111**	**2,343**

"Third parties" mainly comprise a non-current VAT asset recognised by the South American group company.

On 1 July 2019, CAREL INDUSTRIES S.p.A. aligned the carrying amounts (resulting from the PPA procedure for the companies acquired at the end of 2018, Recuperator S.p.A. and HygroMatik GmbH) of intangible assets and goodwill to their tax bases pursuant to article 15.10-bis of Law decree no. 185/2008. This entailed the payment of the substitute tax of 16% on the higher values allocated and recognised in the consolidated financial statements at 31 December 2018.

The payment, equal to approximately €11,132 thousand allows for the deduction through the parent's tax return, starting from 2021, of one fifth of the amortisation of the above-mentioned amounts per year. The amount paid has been recognised under other non-current assets at 31 December 2019 and will be reclassified to profit or loss on a straight-line basis over five years starting from 2021.

[5] DEFERRED TAX ASSETS

At 31 December 2019, deferred tax assets amount to €4,378 thousand compared to €4,128 thousand at 31 December 2018. The group has recognised deferred tax assets and liabilities on temporary differences between the carrying amount of assets and liabilities and their tax base.

It calculates taxes using the rates enacted in the countries where it operates when the temporary differences reverse. A breakdown of deferred tax assets is as follows:

	2019 tax base	Deferred tax assets at 31 December 2019	2018 tax base	Deferred tax assets at 31 December 2018
Allowance for inventory write-down	2,793	660	1,855	448
Non-deductible accruals	3,763	964	2,340	615
Amortisation of goodwill	645	132	545	132
Consolidation adjustments to intragroup inventory transactions	6,648	1,415	8,575	1,812
Carryforward tax losses	2,207	449	2,260	405
Other	2,757	758	2,532	716
Total	**18,812**	**4,378**	**18,107**	**4,128**

Changes in deferred tax assets and liabilities are presented in the next table:

	31.12.2019	Recognised in profit or loss	Change in consolidation scope	Recognised in other comprehensive income	31.12.2018
Deferred tax assets	4,378	7	-	244	4,128
Deferred tax liabilities	(10,896)	938	-	(15)	(11,820)
Total	**(6,518)**	**945**	**-**	**229**	**(7,692)**

The Hong Kong and South African group companies recognised deferred tax assets of €449 thousand on carryforward tax losses. The group believed that these losses can be recovered over time based on the cash flows that the group companies will generate in future years. On a prudent basis, the group has not recognised deferred tax assets on the South American company's carryforward tax losses, which total €226 thousand.

Current assets

[6] TRADE RECEIVABLES

At 31 December 2019, this caption amounts to €58,552 thousand compared to €54,643 thousand at 31 December 2018. It may be analysed as follows:

	31.12.2019	31.12.2018
Trade receivables	59,677	61,249
Loss allowance	(1,125)	(1,298)
Total	**58,552**	**59,951**

The next table breaks down trade receivables by geographical segment:

	31.12.2019	31.12.2018
Europe, Middle East and Africa	41,318	43,639
APAC	11,379	11,079
North America	5,308	5,070
South America	1,672	1,460
Total	**59,677**	**61,249**

The group does not usually charge default interest on past due receivables. Reference should be made to the section on risks and financial instruments for details of the receivables that are not yet due and/or are past due.

The group's receivables are not particularly concentrated. It does not have customers that individually account for more than 5% of the total receivables at each maturity date.

The loss allowance comprises management's estimates about credit losses on receivables from end customers and the sales network. Management estimates the allowance on the basis of the expected losses, considering past experience for similar receivables, current and historical past due amounts, losses and collections, the careful monitoring of credit quality and projections about the economy and market conditions. It recognises the resulting impairment losses in Other expense (net).

Changes in the allowance are shown in the following table:

	31.12.2018	Accruals	Reversals	Utilisations	Exchange differences	Change in consolidation scope	31.12.2017
Loss allowance	(1,298)	(54)	72	177	4	(35)	(1,462)

	31.12.2019	Accruals	Utilisations	Exchange differences	31.12.2018
Loss allowance	(1,125)	(12)	187	(2)	(1,298)

[7] INVENTORIES

At 31 December 2019, this caption amounts to €48,265 thousand compared to €54,285 thousand at 31 December 2018. It may be analysed as follows:

	31.12.2019	31.12.2018
Raw materials	24,032	25,485
Allowance for inventory write-down	(1,592)	(591)
Semi-finished products and work in progress	2,802	3,243
Finished goods	24,840	27,210
Allowance for inventory write-down	(1,888)	(1,458)
Payments on account	71	396
Total	**48,265**	**54,285**

Inventories, gross of the allowance for inventory write-downs, decreased by a total of €4,588 thousand, thanks to the group's continuous effort to reduce its level of inventories and the resolution of the component shortage issues that affected the first few months of the year.

The group recognised an allowance for inventory write-down, totalling €3,480 thousand, to cover the difference between the cost and estimated realisable value of obsolete raw materials and finished goods. The accrual to the statement of profit or loss was recognised in the caption "Costs of raw materials, consumables and goods and changes in inventories".

[8] CURRENT TAX ASSETS

This caption amounts to €1,711 thousand, compared to €6,055 thousand at the previous year end and includes direct tax assets. The decrease over the previous year end is mainly due to the offsetting of the tax assets at 31 December 2018 against the tax liabilities at the same date.

[9] OTHER CURRENT ASSETS

At 31 December 2019, this caption amounts to €6,613 thousand compared to €6,001 thousand at 31 December 2018. It may be analysed as follows:

	31.12.2019	31.12.2018
Payments on account to suppliers	498	292
Other tax assets	1,000	1,014
VAT assets	1,311	2,051
Prepayments and accrued income	2,220	2,164
Other	1,584	480
Total	**6,613**	**6,001**

Other tax assets mainly consist of the tax assets for research and development expenditure.
The increase in the caption"Other" is mainly due to the recognition of a highly probable insurance payout for repair and replacement costs incurred in connection with defective goods, in relation to which a specific provision has been recognised. Reference should be made to note 15 for more information.

[10] CURRENT FINANCIAL ASSETS

At 31 December 2019, this caption amounts to €56 thousand compared to €72 thousand at 31 December 2018. It may be analysed as follows:

	31.12.2019	31.12.2018
Derivatives	49	40
Other financial assets	7	32
Total	**56**	**72**

The derivatives are forwards and currency options agreed to hedge commercial transactions but which do not qualify for hedge accounting. Fair value gains and losses are recognised in profit or loss. More information is available in the paragraph on financial instruments in note [33] "Other information".

[11] CASH AND CASH EQUIVALENTS

At 31 December 2019, this caption amounts to €62,798 thousand compared to €55,319 thousand at 31 December 2018. Reference should be made to the statement of cash flows for details of changes in the group's cash and cash equivalents.

	31.12.2019	31.12.2018
Current accounts and post office deposits	62,764	55,284
Cash	33	35
Total	**62,798**	**55,319**

Current accounts and post office deposits are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to immaterial currency risk.

At the reporting date, the group's current account credit balances were not pledged in any way.

Equity and liabilities

[12] EQUITY ATTRIBUTABLE TO THE OWNERS OF THE PARENT

The parent's fully paid-up and subscribed share capital consists of 100,000,000 ordinary shares.

Equity may be analysed as follows:

	31.12.2019	31.12.2018
Share capital	10,000	10,000
Legal reserve	2,000	2,000
Translation reserve	3,558	2,660
Hedging reserve	(363)	(93)
Other reserves	46,166	32,949
Retained earnings	46,487	39,798
Profit for the year	35,019	30,678
Total	**142,866**	**117,992**

The hedging reserve includes the fair value gains and losses on interest rate hedges.

Other reserves include a reserve related to the share-based long-term incentive (LTI) plan of €417 thousand, approved by the shareholders on 7 September 2018. Note 33 provides more information about this plan.

Following the shareholders' resolution of 7 September 2018, during the year, the board of directors repurchased treasury shares totalling €807 thousand to service the LTI plan. They are recognised as a reduction in other reserves.

The earnings per share are calculated by dividing the profit attributable to the owners of the parent by the weighted average number of outstanding ordinary shares. The shareholders resolved to distribute a dividend of €0.1 per share on 15 April 2019, which resulted in the distribution of €9,992 thousand in June 2019. There are no potentially dilutive ordinary shares (e.g., stock options or convertible bonds).

The earnings per share are as follows:

	31.12.2019	31.12.2018
Number of shares (in thousands)	99,929	100,000
Profit for the year (in thousands of Euros)	35,019	30,678
Earnings per share (in Euros)	**0.35**	**0.31**

[13] EQUITY ATTRIBUTABLE TO NON-CONTROLLING INTERESTS

At 31 December 2019, this caption amounted to €353 thousand compared to €296 thousand at 31 December 2018 and comprised the non-controlling interest in CAREL Thailand Co. Ltd (20%).

	31.12.2019	Profit for the year	Other comprehensive expense	Dividends resolved	Capital increases	31.12.2018
Equity attributable to non-controlling interests	353	28	29	-	-	296

[14] CURRENT AND NON-CURRENT FINANCIAL LIABILITIES

These captions may be analysed as follows:

	31.12.2019	31.12.2018
Bank loans and borrowings at amortised cost	72,648	66,922
Non-current lease liabilities	11,787	-
Effective designated derivative hedges	513	170
Other loans and borrowings at amortised cost	1,539	1,774
Non-current financial liabilities	**86,486**	**68,866**

	31.12.2019	31.12.2018
Current portion of bank loans at amortised cost	34,236	43,771
Current lease liabilities	3,461	-
Bank borrowings at amortised cost	123	872
Derivatives held for trading at fair value through profit or loss	37	14
Other loans and borrowings at amortised cost	635	994
Current financial liabilities	**38,492**	**45,651**

The following table shows the main characteristics of the bank loans by maturity at 31 December 2019 and 2018:

31.12.2018	Currency	Original amount	Maturity	Interest rate	Terms	Outstanding liability	Current	Non-current
Deutsche Bank	EUR	400	2023	Fixed	2.68%	192	40	152
BNP Paribas	EUR	10,000	2019	Floating	6m Euribor + 0.52%	3,333	3,333	-
BNP Paribas	EUR	15,000	2020	Fixed	0.37%	7,514	5,009	2,505
BNP Paribas	EUR	30,000	2022	Floating	6m Euribor + 0.78%	29,949	4,286	25,663
BNP Paribas	EUR	10,000	2019	Fixed	0.30%	10,000	10,000	-
MedioCredito Italiano	EUR	15,000	2021	Floating	3m Euribor + 0.55%	8,339	3,349	4,990
Mediobanca	EUR	30,000	2021	Fixed	0.88%	29,972	11,983	17,989
Unicredit	EUR	20,000	2023	Fixed	0.45%	20,000	4,444	15,556
Credem	EUR	1,000	2019	Fixed	0.45%	1,000	1,000	-
Pennsylvania Ind. Dev. Authority	US dollar	800	2020	Fixed	4.75%	115	59	56
BNP Paribas	USD	300	2019	Fixed	4.24%	256	256	-
Other loans						23	12	11
Total						**110,693**	**43,771**	**66,922**

31.12.2019	Currency	Original amount	Maturity	Interest rate	Terms	Outstanding liability	Current	Non-current
Deutsche bank	EUR	400	2023	Fixed	2.68%	152	42	110
MedioCredito Italiano	EUR	15,000	2021	Floating	3m Euribor + 0.55%	5,002	3,333	1,667
BNP Paribas	EUR	15,000	2020	Fixed	0.37%	2,511	2,512	-
Unicredit	EUR	20,000	2023	Fixed	0.45%	15,556	4,444	11,111
Unicredit	EUR	20,000	2023	Floating	3m Euribor + 0.92%	20,000	3,333	16,667
Mediobanca	EUR	30,000	2021	Fixed	0.88%	17,989	12,000	5,989
BNP Paribas	EUR	30,000	2022	Floating	6m Euribor + 0.78%	25,676	8,571	17,104
BNP Paribas	EUR	20,000	2023	Floating	3m Euribor + 0.98%	20,000	-	20,000
Total						**106,884**	**34,236**	**72,648**

The following financing agreements require compliance with covenants:

- Mediobanca (loan of €30,000 thousand): Net financial debt to gross operating profit (loss) ratio < 3.50 and gross operating profit (loss) to net financial expense ratio > 5.00;
- BNP Paribas (loan of €20,000 thousand): Net financial debt to gross operating profit (loss) ratio < 3.5.

At 31 December 2019, such covenants have been respected.

The derivatives included under current financial liabilities are forwards and currency options agreed to hedge commercial transactions which do not qualify for hedge accounting. The effective designated derivative hedges include the fair value of four IRSs agreed to hedge interest rate risk on the Banca Nazionale del Lavoro and Unicredit loans. More information is available in note [33] "Other information".

A breakdown of other loans and borrowings at amortised cost is provided below, with indication of whether they are current or non-current:

31.12.2018	Currency	Original amount	Maturity	Interest rate	Terms	Outstanding liability	Current	Non-current
Simest Middle East	EUR	1,000	2021	Fixed	0.50%	625	250	375
MedioCredito Centrale Progetto Horizon 2020	EUR	1,241	2026	Fixed	0.80%	1,266	164	1,101
Lease liabilities						311	102	209
Other loans						567	478	89
Total						**2,769**	**994**	**1,774**

31.12.2019	Currency	Original amount	Maturity	Interest rate	Terms	Outstanding liability	Current	Non-current
Simest Middle East	EUR	1,000	2021	Fixed	0.50%	375	250	125
MedioCredito Centrale Progetto Horizon 2020	EUR	1,241	2026	Fixed	0.80%	1,250	188	1,062
Other loans						549	197	352
Total						**2,174**	**635**	**1,539**

The following tables show changes in current and non-current financial liabilities, comprising lease liabilities (including cash and non-cash changes):

	31.12.2019	Net cash flows	Fair value gains and losses	Reclassification	FTA of IFRS 16	Exchange differences	31.12.2018
Bank loans and borrowings at amortised cost	72,648	36,630	-	(30,905)	-	1	66,922
Effective designated derivative hedges	513	(175)	518	-	-	-	170
Other loans and borrowings at amortised cost	1,539	181	-	(415)	-	(1)	1,774
Non-current financial liabilities	**74,700**	**36,636**	**518**	**(31,320)**	**0**	**0**	**68,866**

	31.12.2019	Net cash flows	Fair value gains and losses	Reclassification	FTA of IFRS 16	Exchange differences	31.12.2018
Bank loans	34,236	(40,440)	-	30,905	-	(1)	43,771
Bank borrowings	123	(747)	-	-	-	(2)	872
Other loans and borrowings	635	(780)	-	415	-	6	994
Derivatives	37	(14)	37	-	-	-	14
Current financial liabilities	**35,031**	**(41,981)**	**37**	**31,320**	**-**	**-**	**45,651**

	31.12.2019	Increases	Restatement of financial liabilities	Repayments	Interest	Exchange differences	01.01.2019
Lease liabilities	15,248	3,291	(222)	(4,064)	395	24	15,824

[15] PROVISIONS FOR RISKS

At 31 December 2019, provisions for risks amount to €3,786 thousand compared to €2,981 thousand at 31 December 2018 and they are broken down as follows:

	31.12.2019	31.12.2018
Provision for agents' termination benefits	767	698
Provision for legal and tax risks	28	39
Provision for commercial complaints	284	301
Provision for product warranties	280	274
Other provisions	9	19
Total - non-current	**1,368**	**1,332**
Provision for legal and tax risks	320	405
Provision for commercial complaints	2,098	1,244
Total - current	**2,418**	**1,649**
Total	**3,786**	**2,981**

The following table shows changes in this caption:

	31.12.2018	Accruals	Utilisations	Reversals	Reclassifications	Change in consolidation scope	Exchange differences	31.12.2017
Provision for agents' termination benefits	698	16	-	-	-	2	-	680
Provision for legal and tax risks	39	31	(15)	(43)	(129)	-	(6)	200
Provision for commercial complaints	301		(154)	-	(67)	-	4	518
Provision for product warranties	274	14	(12)	-	-	36		237
Other provisions	19	4	-	-	-	-		15
Total – non current	**1,332**	**65**	**(181)**	**(43)**	**(196)**	**38**	**(2)**	**1,650**
Provision for legal and tax risks	405	276	-	-	129	-	-	-
Provision for commercial complaints	1,244	1,177	-	-	67	-	-	-
Total – current	**1,649**	**1,453**	**-**	**-**	**196**	**-**	**-**	**-**
Total	**2,981**	**1,518**	**(181)**	**(43)**	**-**	**38**	**(2)**	**1,650**

	31.12.2019	Accruals	Utilisations	Reversals	Reclassifications	Change in consolidation scope	Exchange differences	31.12.2018
Provision for agents' termination benefits	767	70	(2)					698
Provision for legal and tax risks	28	8	(18)					39
Provision for commercial complaints	284	24	(43)				2	301
Provision for product warranties	280	9	(4)					274
Other provisions	9		(11)					19
Total - non-current	**1,368**	**111**	**(78)**	**-**	**-**	**-**	**2**	**1,332**
Provision for legal and tax risks	320	320	(405)					405
Provision for commercial complaints	2,098	1,364	(510)		0			1,244
Total - current	**2,418**	**1,684**	**(915)**	**0**	**0**	**0**	**0**	**1,649**
Total	**3,786**	**1,795**	**(993)**	**0**	**0**	**0**	**2**	**2,981**

The provision for agents' termination benefits includes the estimated liability arising from application of the current regulations and contractual terms covering the termination of agency agreements. Unlike the accruals to the provisions for risks and product warranties and the other provisions, the accrual to this provision is classified under services in the statement of profit or loss.

The provision for commercial complaints increased during the year due to the estimated larger cost for reconditioning certain products which, for reasons related to the technical characteristics of the electrical network in which they are installed, have lost functionality. The accrual is presented in the caption "Other expense, net" of the statement of profit or loss, net of the insurance compensation expected on the basis of the parent's insurance policy. Since the compensation is believed to be highly probable, it has been recognised, for an amount of €750 thousand, in the caption "Other current assets" in accordance with IAS 37.

The provision for legal and tax risks represents management's best estimate of the liabilities arising from legal and tax procedures related to ordinary operating activities, estimated with the support of legal consultants. Specifically, in September 2019, the parent received an assessment notice for transfer pricing issues relating to 2015, as a result of the tax inspection carried out in 2018 into 2013, 2014, 2015 and 2016. The assessed tax for the year and those already provided for in the previous years were paid and, hence, at the date of preparation of this annual report, there are no further open tax inspections about transfer pricing issues.

The accruals to the provision for legal and tax risks relate to the probable risk that the Chinese authorities may challenge the tax deduction of certain intragroup service costs recognised by the Chinese subsidiary, including in accordance with IFRIC 23.

[16] DEFINED BENEFIT PLANS

This caption mainly consists of the group's liability for post-employment benefits and post-term of office benefits for directors recognised by the Italian group entities and the German subsidiary, HygroMatik GmbH. These benefits qualify as defined benefit plans pursuant to IAS 19 and the related liabilities are calculated by an independent actuary. Changes in the liability in both years are shown below:

	31.12.2019	31.12.2018
Opening balance	**7,333**	**5,687**
Interest cost	78	63
Change in consolidation scope	-	1,657
Other variations	15	26
Employee benefits paid	(202)	(105)
Exchange differences	32	16
Accruals	2,455	1,886
Transfer to pension plans	(2,184)	(1,783)
Actuarial gain (loss)	317	(114)
Closing balance	**7,844**	**7,333**

The group also performed sensitivity analyses to assess reasonable changes in the main assumptions underlying the calculations. Specifically, it assumed an increase or decrease of 0.25% in the discount rate. The resulting change in the liability would be immaterial.

[17] DEFERRED TAX LIABILITIES

At 31 December 2019, this caption amounts to €10,896 thousand, compared to €11,820 thousand at 31 December 2018. Changes in deferred tax liabilities are available in note [5] "Deferred tax assets". A breakdown of deferred tax liabilities is as follows:

	2019 tax base	2019 deferred tax liabilities	2018 tax base	2018 deferred tax liabilities
Discounting of non-current liabilities	87	27	153	43
Differences from consolidation adjustments	32,677	9,544	35,446	10,331
Differences on amortisation and depreciation and other differences in standards	5,172	1,022	7,271	1,446
Other	1,584	304	-	-
Total	**39,520**	**10,896**	**42,870**	**11,820**

The largest amount is due to the first-time consolidation of Recuperator S.p.A. and HygroMatik GmbH and differences on amortisation/depreciation, mainly of the parent and the US subsidiary.

[18] TRADE PAYABLES

Trade payables amount to €38,200 thousand, compared to €41,289 thousand at 31 December 2018. The caption decreased mainly due to the consultancy costs incurred in 2018 in connection with the acquisitions made, which did not repeat in 2019.

Trade payables arise as a result of the different payment terms negotiated with the group's suppliers, which differ from country to country.

[19] CURRENT TAX LIABILITIES

At 31 December 2019, this caption amounts to €1,113 thousand compared to €1,539 thousand at the end of the previous year. It entirely consists of direct income tax liabilities..

[20] OTHER CURRENT LIABILITIES

This caption is broken down in the following table and mostly includes personnel-related liabilities (wages and salaries, tax withholdings and social security contributions):

	31.12.2019	**31.12.2018**
Social security contributions	4,156	4,101
Tax withholdings	1,854	1,641
Other current tax liabilities	242	454
VAT liabilities	1,017	899
Wages and salaries, bonuses and holiday pay	11,770	11,387
Other	1,254	924
Total	**20,292**	**19,407**

Notes to the statement of profit or loss

[21] REVENUE

Revenue amounts to €327,358 thousand, compared to €280,220 thousand in 2018, with a year-on-year increase of 16.8%. The increase is mostly due to the 12-month contribution of the two companies acquired in December 2018. On a like-for-like basis, revenue would have increased by 5.1%.

It is shown net of discounts and allowances.
Revenue generated by services amounts to €2,828 thousand compared to €2,432 thousand in 2018. A breakdown of revenue by market is as follows:

	2019	2018	Variation %
HVAC revenue	215,366	171,684	25.4%
REF revenue	107,578	102,289	5.2%
Total core revenue	**322,943**	**273,973**	**17.9%**
Non-core revenue	4,415	6,247	(29.3%)
Total revenue	**327,358**	**280,220**	**16.8%**

There are no group entities that individually contribute more than 5% to the group's revenue.

A breakdown of revenue by geographical segment is as follows:

	2019	2018	Variation %
Europe, Middle East and Africa	226,470	190,635	18.8%
APAC	50,205	46,594	7.8%
North America	42,461	35,512	19.6%
South America	8,222	7,479	9.9%
Total	**327,358**	**280,220**	**16.8%**

[22] OTHER REVENUE

Other revenue amounts to €3,611 thousand, an increase on the €3,147 thousand balance in 2018. The caption may be broken down as follows:

	2019	2018	Delta %
Grants related to income	986	1,141	(13.6%)
Sundry cost recoveries	1,767	1,147	54.0%
Other revenue and income	858	859	(0.0%)
Total	**3,611**	**3,147**	**14.7%**

The grants related to income of €986 thousand (2018: €1,141 thousand) mainly relate to the tax asset for development activities carried out as provided for by Law no. 190 of 23 December 2014 (the 2015 Stability Law).

Sundry cost recoveries mostly refer to the recovery of transport and other costs.

Other revenue and income principally comprise amounts charged to suppliers and customers.

[23] COSTS OF RAW MATERIALS, CONSUMABLES AND GOODS AND CHANGES IN INVENTORIES

This caption amounts to €138,637 thousand, compared to €115,383 thousand in 2018. A breakdown of the caption is as follows:

	2019	2018	Variation %
Costs of raw materials, consumables and goods and changes in inventories	(138,637)	(115,383)	20.2%
% of revenue	(42.4%)	(41.2%)	2.9%

[24] SERVICES

The group incurred costs of €47,503 thousand for services in 2019, down 5.5% on the previous year. The decrease is mainly due to the costs incurred to list the parent's shares on the STAR segment of Borsa Italiana S.p.A. in 2018 and the reduction in costs for the use of third party assets due to the adoption of IFRS 16. The decrease was only partially offset by the 12-month contribution of Recuperator S.p.A. and HygroMatik GmbH compared to just one month in 2018 (December).

Net of the above effects, services as a percentage of revenue would have amounted to 15.4% compared to 15.5% in the previous year.

The caption may be broken down as follows:

	2019	2018	Variation %	of which: non-recurring
Transport	(9,925)	(8,782)	13.0%	
Consultancies	(7,909)	(12,773)	(38.1%)	(451)
Business trips and travel	(4,829)	(4,591)	5.2%	(15)
Use of third party assets	(1,711)	(4,745)	(63.9%)	
Maintenance and repairs	(3,887)	(3,205)	21.3%	
Marketing and advertising	(2,388)	(2,390)	(0.1%)	
Outsourcing	(1,956)	(1,697)	15.3%	
Agency commissions	(2,045)	(1,214)	68.5%	
Utilities	(1,769)	(1,268)	39.5%	
Fees to directors, statutory auditors and independent auditors	(2,187)	(1,650)	32.5%	
Insurance	(1,113)	(1,117)	(0.3%)	
Telephone and connections	(1,089)	(861)	26.5%	
Other services	(6,693)	(5,994)	11.7%	
Total	**(47,503)**	**(50,286)**	**(5.5%)**	**(466)**

[25] CAPITALISED DEVELOPMENT EXPENDITURE

This caption amounts to €2,970 thousand, compared to €2,453 thousand in 2018 and is almost entirely related to development projects capitalised under intangible assets. Part of the capitalised costs refer to equipment and machinery constructed internally and recognised under property, plant and equipment. The caption may be analysed as follows:

	2019	2018	Variation %
Development expenditure	2,859	2,200	30.0%
Plant and machinery constructed on a time and materials basis	111	253	(56.2%)
Total	**2,970**	**2,453**	**21.1%**

The group incurred research and development expenditure of €18,060 thousand and €16,035 thousand in 2019 and 2018, respectively. Only the amounts described above were capitalised, as they met the requirements provided for by IAS 24.

[26] PERSONNEL EXPENSE

This caption amounts to €83,412 thousand compared to €70,751 thousand in the previous year. The rise is principally due to the 12-month contribution of HygroMatik GmbH and Recuperator S.p.A.. A breakdown of this caption and of the workforce by employee category is as follows:

	2019	2018	Variation %
Wages and salaries, including bonuses and accruals	(64,744)	(55,165)	17.4%
Social security contributions	(14,962)	(12,674)	18.1%
Defined benefit plans	(2,455)	(1,884)	30.3%
Other costs	(1,251)	(1,028)	21.7%
Total	**(83,412)**	**(70,751)**	**17.9%**

	2019		2018	
	year end	average	year end	average
Managers	62	51	40	38
White collars	1,052	1,020	987	924
Blue collars	575	563	550	509
Total	**1,689**	**1,633**	**1,577**	**1,471**

In 2019, the group changed its classification of managers. Had the new classification been applied in 2018, total managers would have been 50.

[27] OTHER EXPENSE, NET

This caption amounted to €1,255 thousand, compared to €2,415 thousand for the previous year. It may be broken down as follows:

	2019	2018	Variation %	of which non-recurring costs
Gains on the sale of non-current assets	873	25	>100%	-
Prior year income	435	402	8.3%	-
Release of provisions for risks	0	43	(100.0%)	-
Other income	**1,308**	**470**	**>100%**	**-**
Losses on the sale of non-current assets	(34)	(7)	>100%	-
Prior year expense	(386)	(128)	>100%	-
Other taxes and duties	(918)	(1,024)	(10.3%)	-
Accrual to the loss allowance	(12)	(54)	(77.9%)	-
Accrual to the provisions for risks	(655)	(1,186)	(44.8%)	-
Credit losses	(51)	(76)	(33.2%)	
Other costs	(507)	(410)	23.8%	(315)
Other expense	**(2,563)**	**(2,884)**	**(11.1%)**	**(315)**
Other expense, net	**(1,255)**	**(2,415)**	**(48.0%)**	**(315)**

The gains on the sale of non-current assets mainly relate to the sale of the Chinese site, which was replaced by the new site opened in July 2019.

The accrual to the provisions for risks mainly comprises accruals to the provision for commercial complaints, net of the related insurance compensation of €750 thousand.

[28] AMORTISATION, DEPRECIATION AND IMPAIRMENT LOSSES

Amortisation and depreciation amount to €16,747 thousand, up from €8,817 thousand in the previous year. This increase is principally due to:

- the transition to IFRS 16 (€3,831 thousand);
- depreciation and amortisation arising from the purchase price allocation procedure of HygroMatik GmbH and Recuperator S.p.A. (€2,551 thousand);
- depreciation and amortisation contributed by the two companies acquired in December 2018.

The caption may be broken down as follows:

	2019	2018	Variation %
Amortisation	(5,804)	(3,528)	64.5%
Depreciation	(10,944)	(5,289)	>100%
Impairment losses	(22)	(302)	(92.8%)
Total	**(16,769)**	**(9,119)**	**83.9%**

[29] NET FINANCIAL EXPENSE

Net financial expense amounts to €1,431 thousand compared to €136 thousand in the previous year. The caption may be broken down as follows:

	2019	2018	Variation %
Gains on financial assets	-	433	(100.0%)
Interest income	316	273	15.8%
Gains on derivatives	13	7	68.9%
Other financial income	205	119	71.8%
Financial income	**534**	**833**	**(35.9%)**
Bank interest expense	(948)	(275)	>100%
Lease interest expense	(399)	-	>100%
Other interest expense	(45)	(24)	86.7%
Losses on derivatives	(123)	(179)	(31.4%)
Other financial expense	(450)	(490)	(8.2%)
Financial expense	**(1,965)**	**(969)**	**>100%**
Net financial expense	**(1,431)**	**(136)**	**> 100%**

Gains on financial assets decreased mainly due to the termination of insurance policies in 2018.

On the other hand, financial expense increased, mostly as a result of interest accrued on the bank loans disbursed in the fourth quarter of 2018 and during 2019, as well as the transition to IFRS 16, which led to an increase of €399 thousand.

[30] NET EXCHANGE LOSSES

Net exchange losses came to €152 thousand compared to €352 thousand in 2018. They are made up as follows:

	2019	2018	Variation %
Exchange losses	(3,522)	(4,958)	(29.0%)
Exchange gains	3,370	4,606	(26.8%)
Net exchange losses	**(152)**	**(352)**	**(56.7%)**

[31] SHARE OF PROFIT OF EQUITY-ACCOUNTED INVESTEES

This caption shows a net profit of €177 thousand, compared to €15 thousand in 2018. It comprises the group's share of the profit or loss of equity-accounted investees.

[32] INCOME TAXES

This caption amounts to €9,910 thousand compared to €6,643 thousand in the previous year. It may be broken down as follows:

	2019	2018
Current taxes	(10,214)	(8,868)
Deferred taxes	945	96
Taxes relative to prior years	(641)	2,130
Total	**(9,910)**	**(6,643)**

Taxes relative to prior years are mostly due to the larger 2018 income taxes of the parent.

A reconciliation of the tax expense for the year is as follows using the profit before tax shown in the statement of profit or loss:

	2019	2018
Profit before tax	44,957	37,394
Income taxes calculated using the theoretical IRES rate	(10,790)	(8,975)
IRAP	(1,041)	(796)
Effect of the different rates applied by the group entities operating in other countries	2,183	1,388
Withholding tax on dividends	(587)	(358)
Taxes relative to prior years	(641)	2,130
Effect of the different rates applied by the group entities operating in other countries and other changes	966	(33)
Total	**(9,910)**	**(6,643)**

Reference should be made to note [5] for information about changes in deferred tax assets and liabilities and their composition.

The tax rate applied for the reconciliation of the tax burden is 24%, in line with IRES rate in Italy, the country in which most of the group's taxable profit is earned.

[33] OTHER INFORMATION

Segment reporting

Under IFRS 8, an entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates. Based on the group's internal reporting system, the business activities for which it earns revenue and incurs expenses and the operating results which are regularly reviewed by the chief operating decision maker to make decisions about resources to be allocated and to assess its performance, the group has not identified individual operating segments but is an operating segment as a whole.

Financial instruments

The group is active on international markets and, hence, is exposed to currency and interest rate risks. Specifically, the currencies generating these risks are the US dollar, the Polish zloty and the Chinese renminbi.

The group has a hedging policy to mitigate the risks which involves the use of derivatives, options and forwards, mostly with maturities of less than one year. Transactions in place at the reporting date involving currency hedging transactions are as follows:

	31.12.2019				**31.12.2018**			
Forwards	**Purchases**	**Sales**	**Positive fair value**	**Negative fair value**	**Purchases**	**Sales**	**Positive fair value**	**Negative fair value**
USD/EUR		1,200	10		-	1,865	10	(0)
JPY/EUR	37,431			(3)	17,694	-	3	
AUD/EUR					-	-	-	
USD/CNY		5,500	38		-	2,000	10	-
EUR/ZAR	165			(1)	-	14	0	(0)
ZAR/USD		3,400		(9)	-	7,500	4	-
USD/ZAR		147		(9)	-		-	
PLN/EUR		6,921		(14)	-	9,181	-	(12)
EUR/CNY					-		-	
THB/USD		3,500		(1)	-	4,000	-	(3)
Total forwards			**48**	**(37)**			**28**	**(14)**
Options								
USD/CNY					-	(9,000)	3	-
EUR/CNY					-	(4,000)	3	-
ZAR/USD		12,000	1		-	(12,000)	5	-
THB/USD		26,000		-	-	(26,000)	1	-
Total options			**1**	**-**			**12**	**-**
Total			**49**	**(37)**			**40**	**(14)**

The next table provides information about the interest rate swaps hedging the related risk:

	Notional amount	Floating interest rate	Fixed interest rate	Maturity	Fair value 31.12.2019	Fair value 31.12.2018
BNL	15,000	3m Euribor > -0.55% -0.55% > 3m Euribor	-0.10%	30/06/2021	**(13)**	(16)
BNL	30,000	6m Euribor > -0.78% / -0.78% if 6m Euribor < -0.78%	-0.78%	19/11/2022	**(180)**	(153)
BNL	20,000	3m Euribor > -0.98% / -0.98% if 3m Euribor < -0.98%	-0.02%	30/04/2023	**(192)**	n.a.
Unicredit	20,000	3m Euribor > -0.92% / -0.92% if 3m Euribor < -0.92%	-0.04%	30/04/2023	**(128)**	n.a.

Derivatives hedging foreign currency assets and liabilities are recognised at fair value with any gains or losses recognised in profit or loss. They are natural hedges of the related risks, which are recognised pursuant to IFRS 9.

Long-term share-based incentive (LTI) plan

The "2018-2022 share-based performance plan" resolved by the shareholders on 7 September 2018 is an equity-settled incentive plan, with the free allocation of shares to members of boards of directors and/or group employees. The plan is divided into three rolling cycles (vesting period), each lasting three years (2018-2020, 2019-2021 and 2020-2022), at the end of which the shares will be distributed, after checking that the performance objectives have been reached and based on the date of the board of directors' resolution. The second vesting period that refers to 2019-2020 began in 2019.

The number of shares allocated is subject to achieving specific performance objectives based on adjusted EBITDA and cash conversion ratios. The performance objectives are independent of one another and will be calculated separately for each vesting period.

In accordance with IFRS 2 - Share-based payments - the fair value of the distributions calculated at the allocation date applying the Black Scholes method is recognised in profit or loss as personnel/directors expense, on a systematic basis over the period between the vesting date and the maturity date with a balancing entry in equity.

In 2019, the group recognised an expense of €340 thousand in profit or loss and the same amount was also recognised as an increase in equity. This amount represents the amount attributable to 2019 for the first and second cycles of the plan, the fair value of which amount to €691 thousand and €855 thousand, respectively.

Categories of financial instruments and fair value hierarchy

The next table shows the financial assets and liabilities recognised in accordance with IFRS 7, broken down by the categories established by IFRS 9 at 31 December 2018 and 2019 and their fair value:

			Fair Value		
31.12.2018	**IFRS 9 category**	**Carrying amount**	**Level 1**	**Level 2**	**Level 3**
Derivatives	Financial instruments held for trading	40		40	
Other financial assets	Loans and receivables	32			32
Other current financial assets		**72**			
Total	Loans and receivables	**59,951**			**59,951**
Total financial assets		**60,023**			
including:	**Financial instruments held for trading**	**40**			
	Loans and receivables	**59,983**			
Bank loans and borrowings	Financial liabilities at amortised cost	66,922		66,922	
Other loans and borrowings	Financial liabilities at amortised cost	1,774		1,774	
Effective designated derivative hedges	Financial instruments held for trading	170		170	
Non-current financial liabilities		**68,866**			
Bank borrowings	Financial liabilities at amortised cost	872		872	
Bank loans	Financial liabilities at amortised cost	43,771		43,771	
Derivatives	Financial instruments held for trading	14		14	
Other loans and borrowings	Financial liabilities at amortised cost	994		994	
Current financial liabilities		**45,651**			
Trade payables	Financial liabilities at amortised cost	**41,289**			41,289
Total financial liabilities		**155,806**			
including	**Financial liabilities at amortised cost**	**155,622**			
	Financial instruments held for trading	**184**			

			Fair Value		
31.12.2019	**IFRS 9 category**	**Carrying amount**	**Level 1**	**Level 2**	**Level 3**
Securities	Available-for-sale financial assets				
Derivatives	Financial instruments held for trading	49		49	
Other financial assets	Loans and receivables	7			7
Other current financial assets		**56**			
Trade receivables	**Loans and receivables**	**58,552**			**58,552**
Total financial assets		**58,608**			
including:	**Available-for-sale financial assets**				
	Financial instruments held for trading	**49**			
	Loans and receivables	58,560			
Bank loans and borrowings	Financial liabilities at amortised cost	72,648		72,648	
Other loans and borrowings	Financial liabilities at amortised cost	1,539		1,539	
Lease liabilities	Financial liabilities at amortised cost	11,787			
Effective designated derivative hedges	Financial instruments held for trading	513		513	
Non-current financial liabilities		**86,486**			
Bank borrowings	Financial liabilities at amortised cost	123		123	
Bank loans	Financial liabilities at amortised cost	34,236		34,236	
Lease liabilities	Financial liabilities at amortised cost	3,461			
Derivatives	Financial instruments held for trading	37		37	
Other loans and borrowings	Financial liabilities at amortised cost	635		635	
Current financial liabilities		**38,492**			
Trade payables	Financial liabilities at amortised cost	**38,200**			38,200
Total financial liabilities		**163,178**			
including:	**Financial liabilities at amortised cost**	**162,629**			
	Financial instruments held for trading	**550**			

Off-statement of financial position commitments and guarantees

At the reporting date, the parent issued sureties of €3,290 thousand, including €134 thousand in favour of subsidiaries.

Related party transactions

During 2019 and 2018, the group carried out commercial transactions with related parties as follows:

31.12.2018	Trade receivables	Loan assets	Trade payables	Financial liabilities	Revenue	Costs
Arion S.r.l.		160	(25)	-	-	(1,526)
CAREL Japan Co Ltd	19	95	(1)	-	107	(6)
Free Polska s.p.z.o.o.	2	-	(29)	-	6	(3,444)
Total associates	**21**	**255**	**(55)**	**-**	**113**	**(4,976)**
RN Real Estate S.r.l.	3	-	(10)	-	25	(1,226)
Nastrificio Victor S.p.A.	-	-	(7)	-	-	(42)
Arianna S.p.A.	123	-	-	-	40	(86)
Eurotest laboratori S.r.l.	11	-	(29)	-	39	(282)
CAREL Real Estate Adratic d.o.o.	-	-	(56)	-	2	(299)
Agriturismo Le Volpi	-	-	(5)	-	-	(17)
Eurotec Ltd	120	-	(7)	-	703	(30)
Panther S.r.l.	-	-	(3)	-	-	(7)
Vinh Nam Refrigeration Electric CO	-	-	-	-	1	-
Luigi Nalini Sapa	129	-	-	-	120	-
Luigi Rossi Luciani Sapa	198	-	-	-	184	-
Komsan Sripavatakul	-	-		(74)	-	-
Total other related parties	**584**	**-**	**(117)**	**(74)**	**1,114**	**(1,989)**
Total related parties	**605**	**255**	**(172)**	**(74)**	**1,227**	**(6,965)**

31.12.2019	Crediti	Crediti finanziari	Debiti	Debiti finanziari	Ricavi	Costi	Costi Finanziari
Arion S.r.l.	-	160	-	-	1	(1,147)	-
Free Polska s.p.z.o.o.	-	-	(31)		10	(3,293)	-
Total associates		**160**	**(31)**	**-**	**11**	**(4,440)**	**-**
RN Real Estate S.r.l.	3	-	(95)	(2,468)	27		(19)
Nastrificio Victor S.p.A.	-	-	(13)	-		(36)	-
Eurotest laboratori S.r.l.	11	-	(83)	-	37	(265)	-
CAREL Real Estate Adratic d.o.o.	-	-		(2,704)	2	(1)	(107)
Agriturismo Le Volpi	-	-	(6)	-	-	(17)	-
Eurotec Ltd	132	-	(7)	-	586	(27)	-
Panther S.r.l.	-	-	(6)	-	-	(12)	-
Gestion A.Landry Inc.	-	-	(41)	(28)	-	(1)	-
Humide Expert	-	-	(15)	-	-	(32)	-
Others	6	-	(11)	-	8	(41)	-
Total other related parties	**152**	**-**	**(277)**	**(5,200)**	**660**	**(432)**	**(126)**
Total	**152**	**160**	**(308)**	**(5,200)**	**671**	**(4,872)**	**(126)**

Transactions with RN Real Estate S.r.l. and CAREL Real Estate Adriatic d.o.o. relate to the lease of the industrial buildings where the parent and the Croatian subsidiary carry out their business. Financial liabilities and expense have been recognised following the transition to IFRS 16.
Costs from Arion relate to purchases of pressure sensors and those from Free Polska relate to non-group products purchased and resold by the group company Alfaco Polska.

All the related party transactions take place on an arm's length basis.

List of investees included in the consolidated financial statements and other investees

The following table shows the investees directly and indirectly controlled by the parent as well as all the legally-required disclosures necessary to prepare consolidated financial statements:

	Registered office	Country	Currency	Share/quota capital
				31/12/2018
Parent:				
CAREL INDUSTRIES S.p.A	Brugine (Padua)	Italy	EUR	10,000,000
Group companies:				
C.R.C. S.r.l.	Bologna	Italy	EUR	98,800
CAREL Deutschland GmbH	Frankfurt	Germany	EUR	25,565
CAREL France Sas	St. Priest, Rhone	France	EUR	100,000
CAREL U.K. Ltd	London	United Kingdom	GBP	350,000
CAREL Sud America Instrumentacao Eletronica Ltda	San Paolo	Brazil	BRL	31,149,059
CAREL Usa Inc	Wilmington Delaware	United States	USD	3,000,000
CAREL Asia Ltd	Hong Kong	Honk Kong	HKD	15,900,000
CAREL HVAC&R Korea Ltd	Seul	South Korea	KRW	550,500,000
CAREL South East Asia Pte. Ltd.	Singapore	Singapore	SGD	100,000
CAREL Australia PTY Ltd	Sydney	Australia	AUD	100
CAREL Electronic Suzhou Ltd	Suzhou	People's Republic of China	CNY	75,019,566
CAREL Controls Iberica Sl	Barcelona	Spain	EUR	3,005
CAREL Controls South Africa (Pty) Ltd	Johannesburg	South Africa	ZAR	4,000,000
CAREL ACR System India (Pvt) Ltd	Mumbai	India	INR	1,665,340
CAREL RUS Llc	St. Petersburg	Russia	RUB	6,600,000
CAREL Nordic AB	Hoganas	Sweden	SEK	550,000
CAREL Middle East	Dubai	Dubai	AED	4,333,877
CAREL Mexicana, S. DE R.L. DE C.V.	Guerra, Tlalpan	Mexico	MXN	12,441,149
CAREL Adriatic D.o.o.	Rijeka	Croatia	HRK	54,600,000
CAREL (Thailand) Co. Ltd.	Bangkok	Thailand	THB	10,000,000
Alfaco Polska Sp.z.o.o.	Wrocław	Poland	PLN	420,000
CAREL Japan	Tokyo	Japan	JPY	60,000,000
Recuperator	Rescaldina (MI)	Italy	EUR	500,000
HygroMatik GmbH	Hamburg	Germany	EUR	639,115
CAREL Ukraine LLC	Kiev	Ukraine	UAH	NA
Enersol	Beloeil	Canada	CAD	NA

Share/quota capital	Investment %	Share/quotaholder	Consolidation method	Profit for 2019	Profit for 2018
31/12/2019	31/12/2019			EURO	EURO
10,000,000				22,249,135	23,987,058
98,800	100%	CAREL INDUSTRIES S.p.A.	line by line	277,785	516,039
25,565	100%	CAREL INDUSTRIES S.p.A.	line by line	584,126	1,188,178
100,000	100%	CAREL INDUSTRIES S.p.A.	line by line	288,379	527,568
350,000	100%	CAREL INDUSTRIES S.p.A.	line by line	1,096,413	1,119,839
31,149,059	53,02% -	CAREL INDUSTRIES S.p.A. CAREL Electronic Suzhou Ltd	line by line	639,737	769,126
5,000,000	100%	CAREL INDUSTRIES S.p.A.	line by line	2,093,438	1,218,629
15,900,000	100%	CAREL INDUSTRIES S.p.A.	line by line	182,947	330,553
550,500,000	100%	CAREL Electronic Suzhou Ltd	line by line	120,867	(95,629)
100,000	100%	CAREL Asia Ltd	line by line	59,631	41,117
100	100%	CAREL Electronic Suzhou Ltd	line by line	271,438	412,640
75,019,566	100%	CAREL INDUSTRIES S.p.A.	line by line	6,354,520	8,267,768
3,005	100%	CAREL INDUSTRIES S.p.A.	line by line	574,596	714,010
4,000,000	100%	CAREL Electronic Suzhou Ltd	line by line	156,457	36,106
1,665,340	0,01% -	CAREL France Sas CAREL Electronic Suzhou Ltd	line by line	51,285	203,308
6,600,000	99% -	CAREL INDUSTRIES S.p.A. CAREL France Sas	line by line	306,092	429,286
550,000	100%	CAREL INDUSTRIES S.p.A.	line by line	107,327	150,609
4,333,877	100%	CAREL INDUSTRIES S.p.A.	line by line	(230,818)	(27,713)
12,441,149	100%	CAREL Usa LCC	line by line	47,299	216,190
54,600,000	100%	CAREL INDUSTRIES S.p.A.	line by line	4,276,597	2,424,914
10,000,000	79,994% -	CAREL Electronic Suzhou Ltd CAREL Australia PTY Ltd	line by line	138,956	370,901
420,000	100%	CAREL INDUSTRIES S.p.A.	line by line	2,031,509	813,142
60,000,000	100%	CAREL INDUSTRIES S.p.A.	line by line	(15,501)	(100,131)
500,000	100%	CAREL INDUSTRIES S.p.A.	line by line	804,544	(12,944)
639,115	100%	CAREL INDUSTRIES S.p.A.	line by line	3,539,284	140,031
700,000	100%	Alfaco Polska Zoo	line by line	(90,855)	NA
100	100%	CAREL Usa Inc	line by line	36,055	NA

Other information on subsidiaries

The subsidiaries CAREL Deutschland GmbH and HygroMatik GmbH, both included in these consolidated financial statements, used the exemption provided for by section 264 (3) of the German Commercial Code (HGB) for the disclosures, audit and the preparation of the notes to and directors' report on their financial statements at 31 December 2019.

Fees paid to directors, statutory auditors and key management personnel

The fees paid to directors and statutory auditors for the year ended 31 December 2019 are as follows:

Directors	**2019**	**2018**
Remuneration and fees	1,092	902
Other non-monetary benefits	17	12
Other fees	-	50
Fair value of share-based payments	149	34
Total directors	**1,258**	**1,002**

Statutory auditors	**2019**	**2018**
Fixed fees and fees for participation in committees	103	71
Total statutory auditors	**103**	**71**

Key management personnel	**2019**	**2018**
Remuneration and fees	952	960
Other non-monetary benefits	23	24
Other	-	138
Post-employment benefits or termination benefits	-	18
Fair value of share-based payments	151	34
Total key management personnel	**1,126**	**1,174**

Events after the reporting date

Refer should be made to what reported in the Director's report.

Information pursuant to article 149-duodecies of consob issuers' regulation

The following table, prepared pursuant to article 149-duodecies of Consob Issuers' Regulation, highlights the fees pertaining to the year for audit services and non-audit services provided by the independent auditors.

Services	Independent auditor	Recipient	2019 fees	2018 fees
Audit	Deloitte & Touche S.p.A.	CAREL INDUSTRIES S.p.A.	195	151
		Subsidiaries	37	33
		Subsidiaries	212	229
Attestation services	Deloitte & Touche S.p.A.	CAREL INDUSTRIES S.p.A.	42	417
		Subsidiaries	9	
Other services	Deloitte & Touche S.p.A.	CAREL INDUSTRIES S.p.A.	-	10
		Subsidiaries	2	26
Total			**495**	**866**

Transparency obligations required by Law no. 124/2017 - (Annual market and competition law)

During 2019, the parent did not receive any subsidies, grants, paid positions or any type of economic benefits not of a general nature and that are not fees, remuneration or compensation from public administrations and subjects defined as such by article 35 of Law no. 34 of 30 September 2019, which superseded article 1.125 of Law no. 124/2017. The information below relates to the subsidiary Recuperator S.p.A.:

Grantor: Regione Lombardia - DIREZIONE GENERALE RICERCA, INNOVAZIONE, UNIVERSITA', EXPORT E INTERNAZIONALIZZAZIONE STRUTTURA PRO-TEMPORE RICERCA, INNOVAZIONE E TRASFERIMENTO TECNOLOGICO - Tax code 80050050154

Amount received: €25,000

Motive: grant as per CALL FOR APPLICATION INNODRIVER S3 - 2017 edition - Measures A-B-C as per decree no. 7834 of 29 June 2017 - Measure A (Second window) . ID 723738 - CUP E47H18000490007 (see annex)

Statement on the consolidated financial statements pursuant to article 154-bis of Legislative decree no. 58/98 and article 81-ter of Consob regulation no. 11971 of 14 May 1999 as subsequently amended and supplemented

1. The undersigned Francesco Nalini, as chief executive officer, and Giuseppe Viscovich, as manager in charge of financial reporting of Carel Industries S.p.A., also considering the provisions of article 154-bis.3/4 of Legislative decree no. 58 of 24 February 1998, state that the administrative and accounting policies adopted for the preparation of the consolidated financial statements at 31 December 2019:

- are adequate in relation to the group's characteristics and
- have been effectively applied during the year.

2. There is nothing to report.

3. Moreover, they state that

   3.1 the consolidated financial statements at 31 December 2019:

d. have been prepared in accordance with the International Financial Reporting Standards endorsed by the European Community pursuant to Regulation (EC) no. 1606/2002 of the European Parliament and Council on 19 July 2002;
e. are consistent with the accounting ledgers and records;
f. are suitable to give a true and fair view of the financial position, financial performance and cash flows of the issuer and the group of companies included in the consolidation scope.

3.2 The directors' report contains a reliable analysis of the performance and results, the position of the issuer and group companies included in the consolidation scope and a description of the main risks and uncertainties to which the group is exposed;

Brugine, 5 March 2020

Chief executive officer

Francesco Nalini

Manager in charge of financial reporting

Giuseppe Viscovich

Independent auditors' report

Deloitte.

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INDEPENDENT AUDITOR'S REPORT
PURSUANT TO ARTICLE 14 OF LEGISLATIVE DECREE No. 39 OF JANUARY 27, 2010
AND ARTICLE 10 OF THE EU REGULATION 537/2014

To the Shareholders of
Carel Industries S.p.A.

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Opinion

We have audited the consolidated financial statements of Carel Industries S.p.A. and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2019, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2019, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union and the requirements of national regulations issued pursuant to art. 9 of Italian Legislative Decree no. 38/05.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of Carel Industries S.p.A. (the "Company") in accordance with the ethical requirements applicable under Italian law to the audit of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

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

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Impairment of goodwill allocated to the Recuperator and Hygromatik CGU's	
Description of the key audit matter	As disclosed in Note 2, as of 31 December 2019 the Group presents goodwill related to the Recuperator and Hygromatik CGU's for Euro 6.3 million and 38.5 million respectively. These amounts have been recognized after the acquisition of the two companies in 2018 and, as required by IAS 36 "Impairment of assets", they are not amortized but are subject to an impairment test, performed at least on an annual basis, which compares the recoverable value of the CGUs – based on the value in use methodology – and the carrying value which includes goodwill and other tangible and intangible assets allocated to the CGUs. Note 2 presents the main assumptions applied by the Directors in performing the test, together with the indication of the sensitivity analyses that they prepared to evaluate the uncertainties. The process of performing the impairment test is complex and is based on assumptions related, among others, to the expectations in term of cash flows for the CGU and the determination of appropriate discount rates (WACC) and long-term growth (g-rate). Those estimates depend on factors which may change in time, with possible effects which may be significant on Management's assessment. We considered the significance of the amount of the goodwill, the subjectivity of the estimates underlying the determination of the cash flows for the CGU and the key variables of the impairment test. As a result we assessed that the impairment test represents a key audit matter for the audit of Carel Group's consolidated financial statements.
Audit procedures	We preliminarily examined the assumptions and the methodology applied by Management to perform the impairment test. As part of our audit, among other things, we performed the following audit procedures, supported by the experts belonging to our network: • analysis of the main assumptions adopted to prepare the expectations in terms of cash flows, also using industry data, and obtaining information from Group Management; • analysis of the actual results obtained by the Group compared to the expectations, in order to investigate the nature of the variations and evaluate the reliability of the planning process; • analysis of of the reasonableness of the discount rates (WACC) and long-term growth (g-rate); • test of the clerical accuracy of the model used to calculate the value in use for the CGU; • test of the accuracy of the determination of the carrying value of the CGU and comparison with the recoverable value resulting from the impairment test; • analysis of the sensitivity analyses prepared by Group Management. Finally we verified the appropriateness and the compliance of the disclosure on the impairment test provided by the Group to the requirements of IAS 36.

Responsibilities of the Directors and the Board of Statutory Auditors for the Consolidated Financial Statements

The Directors are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and the requirements of national regulations issued pursuant to art. 9 of Italian Legislative Decree no. 38/05, and, within the terms established by law, for such internal control as the Directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they have identified the existence of the conditions for the liquidation of the Company or the termination of the business or have no realistic alternatives to such choices.

The Board of Statutory Auditors is responsible for overseeing, within the terms established by law, the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISA Italia) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with International Standards on Auditing (ISA Italia), we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;

- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;

- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors;

- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern;

- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation;

- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance, identified at an appropriate level as required by ISA Italia, regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence applicable in Italy, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report.

Other information communicated pursuant to art. 10 of the EU Regulation 537/2014

The Shareholders' Meeting of Carel Industries S.p.A. has appointed us on 13 April 2018 as auditors of the Company for the years from 31 December 2018 to 31 December 2026.

We declare that we have not provided prohibited non-audit services referred to in art. 5 (1) of EU Regulation 537/2014 and that we have remained independent of the Company in conducting the audit.

We confirm that the opinion on the consolidated financial statements expressed in this report is consistent with the additional report to the Board of Statutory Auditors, in its role of Audit Committee, referred to in art. 11 of the said Regulation.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Opinion pursuant to art. 14 paragraph 2 (e) of Legislative Decree 39/10 and art. 123-bis, paragraph 4, of Legislative Decree 58/98

The Directors of Carel Industries S.p.A. are responsible for the preparation of the report on operations and the report on corporate governance and the ownership structure of Carel Group as at 31 December 2019, including their consistency with the related consolidated financial statements and their compliance with the law.

We have carried out the procedures set forth in the Auditing Standard (SA Italia) n. 720B in order to express an opinion on the consistency of the report on operations and some specific information contained in the report on corporate governance and the ownership structure set forth in art. 123-bis, n. 4 of Legislative Decree 58/98, with the consolidated financial statements of Carel Group as at 31 December 2019 and on their compliance with the law, as well as to make a statement about any material misstatement.

In our opinion, the above-mentioned report on operations and some specific information contained in the report on corporate governance and the ownership structure are consistent with the consolidated financial statements of Carel Group as at 31 December 2019 and are prepared in accordance with the law.

With reference to the statement referred to in art. 14, paragraph 2 (e), of Legislative Decree 39/10, made on the basis of the knowledge and understanding of the Group and of the related context acquired during the audit, we have nothing to report.

Statement pursuant to art. 4 of the Consob Regulation for the implementation of Legislative Decree 30 December 2016, no. 254

The Directors of Carel Industries S.p.A. are responsible for the preparation of the non-financial statement pursuant to Legislative Decree 30 December 2016, no. 254.

We verified the approval by the Directors of the non-financial statement.

Pursuant to art. 3, paragraph 10 of Legislative Decree 30 December 2016, no. 254, this statement is subject of a separate attestation issued by us.

DELOITTE & TOUCHE S.p.A.

Signed by
Cristiano Nacchi
Partner

Padova, Italy
March 27, 2020

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

Headquarters ITALY

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