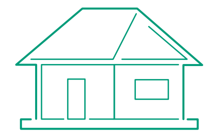
ANNUAL REPORT
2019

WILO PROFILE

The Wilo Group is one of the **world's leading premium providers** of pumps and pump systems for the building services, water management and industrial sectors. In the past decade, we have developed from a hidden champion into a visible and connected champion. Today, Wilo has around 8,000 employees worldwide.

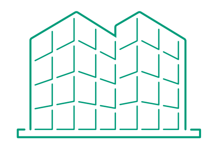
Our innovative solutions, smart products and individual services move water in an **intelligent, efficient and climate-friendly** manner. We are also making an important contribution to climate protection with our sustainability strategy and in conjunction with our partners. We are systematically pressing ahead with the digital transformation of the Group. We are already the digital pioneer in the industry with our products and solutions, processes and business models.

MARKET SEGMENTS



BUILDING SERVICES RESIDENTIAL

We are full-range supplier and customers' first choice.

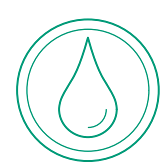


BUILDING SERVICES COMMERCIAL

We are market, innovation and smart solution leader.

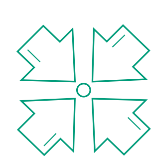
OEM

We are preferred partner for smart integrated solutions.



WATER MANAGEMENT

We are global market player and digital solution provider.



INDUSTRY

We are specialist in selected branches and applications.

“Since its formation, Wilo has written an impressive success story that has peaked in the last decade. Ten record years in succession clearly confirm our corporate strategy. In an increasingly complex world, we are maintaining our course and have created an extraordinarily solid foundation for the coming decade and beyond.”

Oliver Hermes, CEO & President Wilo Group

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NET SALES EUR 1.48 BILLION

The Wilo Group can look back on a decade of steady and profitable growth. In the past financial year, net sales increased by a further 1.0 percent.

KEY FIGURES

		2019	2018	2017
Net sales	EUR million	1,477.8	1,463.5	1,424.8
Net sales growth	%	1.0	2.7	7.4
EBITDA	EUR million	180.1	153.5	160.6
(as % of net sales)	%	12.2	10.5	11.3
Consolidated net income	EUR million	72.4	64.2	85.9
(as % of net sales)	%	4.9	4.4	6.0
Earnings per ordinary share	EUR	7.38	6.55	8.76
Cash flow from operating activities	EUR million	168.5	81.7	140.4
Cash	EUR million	166.1	135.4	161.8
Investments[1]	EUR million	155.7	154.8	195.7
R&D expenses[2]	EUR million	67.6	66.3	63.6
(as % of net sales)	%	4.6	4.5	4.5
Equity	EUR million	792.4	738.4	707.0
Equity ratio	%	48.3	49.5	51.6
Employees (annual average)	Number	7,749	7,830	7,726

[1] Investments in intangible assets, property, plant and equipment and company acquisitions.
[2] Including capitalised development costs.

CASH FLOW FROM OPERATING ACTIVITIES

EUR 168.5 MILLION

Cash flow from operating activities also reached a new record high, more than doubling–year–on–year to EUR 168.5 million.

EBITDA EUR 180.1 MILLION

EBITDA reached a historical high in 2019. Operating earnings before interest, taxes, depreciation and amortisation improved by a substantial 17.3 percent.

2016	2015	2014	2013	2012	2011	2010
1,327.1	1,317.1	1,234.7	1,230.8	1,187.1	1,070.5	1,021.4
0.8	6.7	0.3	3.7	10.9	4.8	10.3
158.1	171.5	159.1	169.9	159.0	134.5	146.0
11.9	13.0	12.9	13.8	13.4	12.6	14.3
76.0	80.5	69.8	83.0	78.2	53.4	71.1
5.7	6.1	5.7	6.7	6.6	5.0	7.0
7.88	8.35	7.11	8.12	7.63	5.19	7.31
137.4	132.3	109.8	130.2	120.8	54.4	95.1
178.3	165.8	149.1	177.5	176.5	166.0	152.8
113.0	106.4	66.1	71.2	90.0	62.0	52.4
65.0	62.4	51.2	43.9	39.2	36.8	33.8
4.9	4.7	4.1	3.6	3.3	3.4	3.3
653.6	560.9	477.1	476.9	458.0	407.2	401.1
53.6	49.3	46.4	47.9	46.8	45.8	47.6
7,548	7,383	7,425	7,194	6,900	6,708	6,268

INVESTMENTS

EUR 155.7 MILLION

The Wilo Group made further significant investments in a modern, future-oriented corporate infrastructure in 2019. Investments remained above-average at over 10 percent of net sales.

EMPLOYEES 7,749

An annual average of more than 7,700 people were employed at the Wilo Group worldwide. They are the basis for and the driving force behind its economic success.

EDITORIAL BY THE EXECUTIVE BOARD

Dear Ladies and Gentlemen,

The 2019 financial year was an extremely successful one for the Wilo Group. With a volume of almost EUR 1.5 billion, we achieved record net sales for the tenth year in a row. This was driven in particular by excellent growth in the markets of Eastern Europe, India and North America as well as the nations of Central Asia. Over the past decade, we have increased our net sales by an outstanding 60 percent.

One notable achievement in 2019 was our significantly above-average growth in the water management market segment and in products, systems and solutions for cold water applications. More than half of Wilo's business activities now involves non-heating applications. We also recorded a double-digit increase in profitability of more than ten percent. Measured in terms of the internationally recognised key indicator EBITDA, our operating earnings reached an all-time high of around EUR 180 million. All of these figures are extremely pleasing. However, they are also accompanied by considerable uncertainty for the current year, as the continued spread of the coronavirus is having a significant negative impact on the global economy. The Executive Board of the Wilo Group is keeping a close eye on developments concerning the coronavirus

Oliver Hermes, CEO & President Wilo Group

pandemic and taking a range of suitable measures to limit the health risk to employees and the economic impact on the company.

Extensive investment in the future

We made extensive investments in 2019 amounting to over EUR 155 million, corresponding to over ten percent of net sales. Our focus on the future is underlined even more clearly by our activity over the past decade. Our investments during this period totalled around EUR 1 billion. Investment activity focused on the future-oriented expansion of production capacities, the extension of the sales infrastructure, the acquisition of companies in various countries and the implementation of the digital transformation. These investments are made possible not least thanks to the structure of our Group, with the Wilo-Foundation as the main shareholder. The vast majority of our profits and cash flows are not distributed, but instead are made available for us to use in realising future projects.

——— The Wilo-Foundation takes a long-term perspective. This allows us to plan well ahead and expand our workforce, thus giving us all security. These are the benefits of family ownership in contrast to a capital market-oriented approach. It also shows that, contrary to the argument made by the International Monetary Fund, family companies like Wilo are the reason why social equality is being promoted and social inequality reduced – and not just in Germany.

Occupying long-term growth areas

Digitalisation, globalisation, urbanisation, energy and water shortage are global developments that will shape society and people's lives over the coming decade.

——— Throughout Asia and Africa, globalisation and urbanisation mean that new cities are being constructed and existing cities are combining to form smart urban areas characterised by intelligent networks. The underlying principle is the connectivity of products, systems and solutions in all areas of life. The connected world is fundamentally changing the economy, the environment, infrastructure and logistics. Wilo is addressing this long-term growth area with solutions and services that are as smart, i.e. intelligent, as they are resource-efficient. An expanding population, global economic growth and the intensification of the trends toward globalisation and urbanisation mean that energy and water requirements are continuously rising – while there are immense losses and inefficiencies on the consumption side. Around the world, Wilo is not only helping to modernise energy and water supply systems and make them fit for the future, but is also making a sustainable contribution to slowing the growth in energy and water consumption with its intelligent solutions.

Harnessing national industrial strategies

Some countries are currently adopting and systematically implementing national industrial strategies, and we have adapted accordingly. The "America First" approach is dominant in the USA. For the US government, this primarily involves strengthening national companies in various sectors and driving the reindustrialisation of the country. With this in mind, we have significantly strengthened our strategic position by acquiring US pump manufacturers. Following the successful integration of the US companies Weil & Scot following their acquisition in 2017, we purchased another company in 2019 – American-Marsh Pumps. The acquisition of American-Marsh Pumps represents a milestone in the systematic implementation of our growth strategy. As well as strengthening our local position, it will make our US activities the most profitable in the Wilo world.

——— The Chinese government has a clear plan for advancing its own industrial landscape. To this end, it has formulated the "Made in China 2025" strategy, which is currently being implemented. As part of the "Belt and Road Initiative", Chinese investments worth in excess of 300 billion US dollars have already been triggered with a view to establishing intercontinental trade and infrastructure networks between Europe, Africa and Asia. The Wilo Group is participating in these investment activities. We initiated 30 projects in the past financial year that are currently being implemented and that can be assigned to the Belt and Road Initiative. Within the next decade, China will overtake Germany as the biggest individual market within the Wilo Group in terms of net sales, although the short-term outlook has deteriorated considerably as a result of the coronavirus pandemic and business development in 2020 is subject to uncertainty.

——— Russia has also formulated a clear industrial strategy, not least in response to the sanctions that were imposed some years ago and that remain in place. The aim is to reduce the country's dependence on the commodity markets, and particularly oil and gas. Russia is seeking to diversify its industry and increase local value added as well as strengthening export activities. Reflecting this industrial strategy, we have established a dedicated production site in the Moscow region and concluded a special investment contract (SPIC) with the Russian Federation. At the same time, we are continuously increasing the degree of vertical integration at our Russian plant. We also manage our Eurasian activities from Moscow, as well as our exports from Russia to Central Asia. Despite the tense geopolitical situation, we succeeded in increasing our market share once again in 2019.

——— The nations of the Middle East have developed national visions that include clear goals for strengthening their industrial activities. All of these visions are aimed at reducing the respective nations' dependence on oil and gas and preparing for the future. Like the Chinese industrial strategy, the national visions in Saudi Arabia, the United Arab Emirates, Oman, Kuwait and Qatar all set out clear climate protection targets and objectives for digital transformation. Here, too, we have adapted accordingly. Wilo is especially successful when it comes to acquiring projects aimed at energy and water efficiency and the intelligence and "smartness" of products, systems and solutions. This is why it is particularly unfortunate for the region that it contains the countries with the greatest prevailing geopolitical uncertainty. We have suspended our business activities in Iran altogether.

——— Meanwhile, in Europe, efforts to identify a coherent industrial strategy on the part of the EU are in vain. Nowhere in the world can boast higher life expectancy than Europe, and no region of the world is as comfortable, healthy, peaceful and wealthy – nor is that wealth distributed more widely. In the World Happiness Report 2019, which examines the quality of life in individual countries, the top seven positions were occupied by European countries. The Wilo Group has not lost its confidence in the European markets. Quite the opposite, in fact: The construction of the new WiloPark in Dortmund, at the very heart of Europe, is the biggest investment project in Wilo's history and one of the largest industrial projects in Germany. We have also been generating above-average growth in Eastern Europe for a number of years and our water management activities are developing extremely well in these markets. We will generate future growth in Europe in the areas of water management, building services, project business, and products, systems and solutions for cold water applications.

——— We are well positioned to meet the challenges of the new decade. We are protected by our "local for local" approach, not least in an era of growing protectionism with all of the barriers to free trade this entails. Our organisation is designed to enable as much decentralisation as possible while allowing only as little centralisation as necessary. This also helps us to take into account the industrial strategies of individual nations.

Shaping climate protection and digital transformation

Irrespective of geopolitical uncertainties and the development of regional strategies, there will be two dominant topics for industrial and technology companies in the next ten years: climate protection and digital transformation.

——— The Wilo Group is making an important contribution to slowing climate change and achieving the global climate protection targets. While others continue to talk, we are already taking action. We are a climate protection company. Climate protection forms

Dr. Patrick Niehr
Chief Change Officer (CCO)

Georg Weber
Chief Technology Officer (CTO)

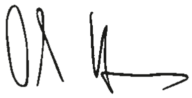
Mathias Weyers
Chief Financial Officer (CFO)

part of our business model. Sustainable thinking and action are required when working with the valuable resources of water and energy and addressing climate protection, and both are rooted in Wilo's corporate culture.

——— We are systematically driving the digital transformation of the Group in the dimensions of products and solutions, processes, and business models. On the product side, the digital flagship is the Stratos MAXO, but many of the water management systems and solutions we have developed for cold water applications can also already be described as smart. The move to the new Wilo Smart Factory, the first digital factory in the Wilo world, is more or less complete. The Smart Factory consistently applies Industry 4.0 standards and processes that will be rolled out at all production sites in the new decade. We are also making progress with the digital transformation of our customer interfaces. Previously located in Berlin, the "Wincubator", our incubator for the development of new business models, is being integrated into the WiloPark in Dortmund. This will also enable us to cooperate with the start-up scene in the Ruhr area, which is growing in size.

——— Ladies and Gentlemen, we are excellently positioned for the future. Although the spread of the coronavirus has adversely affected the global outlook for 2020, we are entering the new decade with confidence. We would be delighted if you would accompany us on this exciting journey.

Yours,



Oliver Hermes
CEO & President Wilo Group

"As a technology leader and global player, Wilo sees itself as part of an international community that transcends national borders. Respect, trust and a willingness to embrace change are firmly rooted in our corporate culture. We will continue to be driven by our pioneering developments and our desire to remain ahead of the game."

Dr. Patrick Niehr

"In the last decade, Wilo has pursued a systematic digitalisation strategy, expanded its strategic partnerships and pressed ahead with its international positioning. During this time, we have developed from a hidden champion into a visible and connected champion."

Georg Weber

"The Wilo Group has always taken care to ensure a healthy balance between growth and profitability on the one hand and investment and financing on the other. Furthermore, our stable shareholder structure, our high self-financing capacity with strong operating cash flows and our solid statement of financial position and financing structure mean we are ideally positioned to successfully continue on our desired path of profitable growth in the new decade."

Mathias Weyers

2010

LOCAL PRODUCTION

Wilo opens an additional production site in Kolhapur, India. Net sales on the subcontinent increase by 25 percent this year.

For the first time, the Wilo Group exceeds net sales of

EUR 1 billion.

SALES DRIVE

Wilo constructs and moves into its own modern sales and administrative buildings in Austria and Turkey.

2011

GOING GLOBAL

Wilo forms subsidiaries in Morocco, Vietnam and Australia, meaning it is now represented on every continent.

wilofoundation

The Wilo-Foundation is formed. As the majority shareholder, it holds over 90 percent of the share capital. The Wilo-Foundation ensures continuity and enables long-term planning.

2012

MOVING WITH THE TIMES

With an updated brand presence and a new, dynamic logo, Wilo clearly demonstrates its intention to continue expanding its innovation and technology leadership.

THE FUTURE BEGINS

The first plots are purchased for the biggest investment program in the company's history: the construction of Wilo's new headquarters in Dortmund.

GOING GLOBAL

Wilo identified the immense importance of the Chinese market at an early stage and opened its own production site in Beijing. This site is now comprehen-sively rebuilt and expanded.

2013

MADE IN BUSAN

With the commissioning of the plant in Busan, Wilo expands its local production capacities in South Korea.

GEP®
INDUSTRIESYSTEME
A WILO BRAND

STRONGER

The Wilo Group strengthens its position in the area of process water, extinguishing water and drinking water extraction with the acquisition of GEP Industrie-Systeme GmbH.

For the first time, Wilo has more than 7,000 employees worldwide.

7,000

2014

GOING GLOBAL

Wilo forms new subsidiaries in Mexico, Tunisia and Nigeria, strengthening its local presence in emerging economies.

SMART START

At ISH 2015, Wilo sets its course for a digital future with the presentation of its first smart home-compatible products.

PIONEERING

Wilo's branch in Berlin takes shape at the EUREF Campus. EUREF is "Europe's energy transition centre" and already meets the German Federal Government's climate targets for 2050 at this point.

2015

2016

EXPERTISE

The Wilo Group expands its wastewater activities and increases its application expertise with the acquisition of GVA Gesellschaft für Verfahren der Abwasser-technik mbH & Co. KG.

GVA
A WILO BRAND

GROUND-BREAKING

Construction work on the new Dortmund site begins with a symbolic ground-breaking ceremony.
The investment is a key element of the corporate strategy. The site will also be home to the first Wilo Smart Factory.

MADE IN RUSSIA

Wilo underlines the importance of the Russian market and establishes a platform for the entire Eurasian region with the opening of a new plant in Noginsk near Moscow.

2017

SMART PRODUCTS

At ISH, Wilo presents the Wilo-Stratos MAXO, the world's first smart pump*. It sets new standards in terms of system efficiency, connectivity and installation.

GOING GLOBAL

Wilo strengthens its presence on the African continent and forms a subsidiary in Kenya.

MADE IN USA

Wilo acquires the operations of the pump manufacturer Weil & Scot. The newly acquired production capacities allow it to significantly expand its US business.

2018

HARMONY

The brand presence in France, Italy, Africa and Latin America is harmonized and the products of the Salmson brand, which has belonged to Wilo since 1984, are successively replaced by Wilo products.

GOING GLOBAL

Wilo opens a new location in Astana, now Nur-Sultan. Markets throughout Central Asia can be developed and supported from the Kazakh capital.

CONTINUITY THROUGH CHANGE

Dr. Jochen Opländer names Oliver Hermes as his business successor.

2019

The tenth record year in succession

2019

JANUARY

VISIT FROM CHINA

Shi Mingde, the Ambassador of the People's Republic of China to Germany, visits Dortmund, where he is welcomed by Mayor Ullrich Sierau and meets with Oliver Hermes for around two hours.

JANUARY

LOCAL PRESENCE IN DUBAI

Following a year-long construction period, Wilo opens its new facility in Jafza (Jebel Ali Free Zone), Dubai. With the opening of its first branch in Dubai in 2008, Wilo lays the groundwork for successful development in the Middle East. "This new building and its functional expansion reflects the strategic significance of this central location within the region," says Oliver Hermes.

MARCH

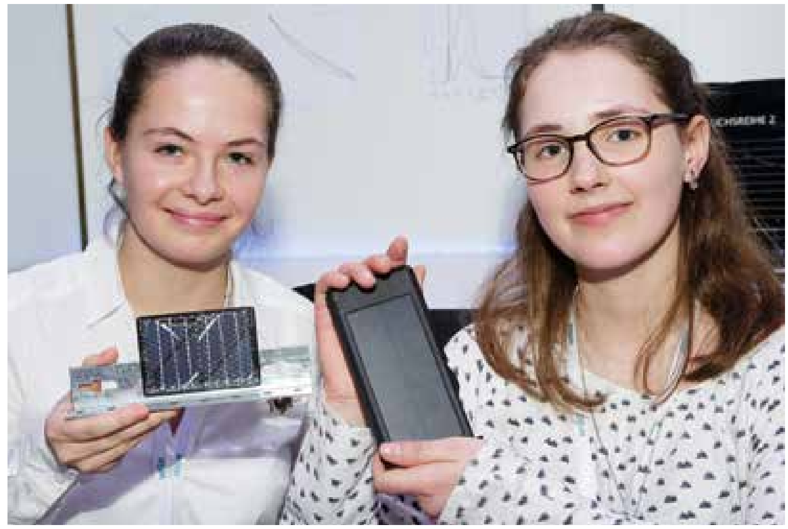
STRONG PRESENCE

At the world's leading trade fair for water, heat and climate, the ISH in Frankfurt, Wilo presents smart and connected solutions at its 1,200 m² booth. Wilo also offers customers and partners a varied trade fair programme including the Wilo-Wortwechsel, a podium discussion in which Oliver Hermes talks to experts about the geopolitical role of Europe and Franco-German relations.

APRIL

JUGEND FORSCHT

Traffic lights, eggs and artificial intelligence – a veritable fireworks display of ideas. For the first time, the regional competition of “Jugend forscht” is supported by Wilo and the Wilo-Foundation this year. “Inspiring scientists at a young age is something that is very close to our heart,” comments Evi Hoch from the Executive Board of the Wilo-Foundation.



JUNE

TOP INNOVATOR

Wilo makes the leap to the top table at the 26th edition of the Top 100 innovation competition. The award is presented by the two mentors, Ranga Yogeshwar and the scientific director of the competition, Prof. Nikolaus Franke. “The renowned Top 100 seal in the ‘Innovative Processes and Organisation’ category recognises the performance of our employees in a very special way,” says Oliver Hermes.

JUNE

MEETING IN BERLIN

On his first visit to Germany as the Ukrainian head of state, Volodymyr Zelensky, the President of Ukraine, meets Chancellor Angela Merkel and German business representatives in Berlin – including Oliver Hermes. “The Wilo Group has been active in Ukraine for more than 20 years. Despite all of the challenges, the Wilo Group can report that business is generally developing positively,” says Oliver Hermes.

2019

AUGUST

THE KEY TO THE FUTURE

The key to the Wilo Smart Factory is symbolically handed over after a construction period of 36 months. In the presence of over 80 project participants, architects, representatives of the various building trades, service providers and Wilo employees, the handover represents the official starting signal for the move to the factory of the future.

AUGUST

GERMAN-RUSSIAN EXCHANGE

The German-Russian Summer School (GRSS) takes place in Dortmund and Berlin from 19 to 30 August 2019. 21 Russian and 20 German students take part. The event is hosted by TU Dortmund, with Wilo as the co-initiator, key driver and main sponsor. Oliver Hermes, President and CEO of the Wilo Group, welcomes the group of international students to the WiloPark on 26 August.

SEPTEMBER

INNOVATION CONFERENCE

The Wilo Group invites 200 high-profile guests from politics, industry and business to the innovation conference in Moscow. Guests of honour include the former Chancellor of the Federal Republic of Germany, Gerhard Schröder, the President of the Russian Central Bank, Elvira Nabiullina, and the Chairman of the Eurasian Economic Commission, Tigran Sargsyan.

SEPTEMBER

OAOEV CHAIRMANSHIP

Oliver Hermes becomes the new Chairman of the German Eastern Business Association (OAOEV). He takes over from Wolfgang Büchele as the leader of the largest regional initiative of the German economy. “The OAOEV is the German economy’s most important bridge to 29 countries in Central and Eastern Europe. Wilo has also benefited hugely from these networks,” says Oliver Hermes.

NOVEMBER

MADE IN USA

WILO USA LLC, a subsidiary of WILO SE, acquires the operations of the US pump manufacturer J-Line Pump Co., d/b/a American-Marsh Pumps, in an asset deal. “The acquisition of American-Marsh Pumps strengthens our strategic position in the USA and expands the product portfolio for our customers in the water management, industry and building services segments,” says Oliver Hermes.

AMERICAN-MARSH PUMPS

A WILO COMPANY

DECEMBER

NEW EXECUTIVE BOARD MEMBER

Dr. Patrick Niehr is appointed as a new member of the Executive Board with effect from 1 January 2020. Dr. Niehr takes charge of the Group Human Resources, Group Legal & Insurance, Group Market Segment Management, Group Product Management and Group Marketing functions in addition to restructuring and integration activities.

GROUP MANAGEMENT REPORT 2019

The Wilo Group continued on its consistent growth path and increased its net sales for the tenth year in succession. This means Wilo can look back on a remarkably successful decade of steady growth. All in all, net sales have risen by over 60 percent in the last ten years. In 2019, we again achieved new records in terms of EBITDA and cash flow from operating activities. Investments remained above-average at over 10 percent of net sales. Over the past decade, the Wilo Group has invested around a billion euros and created a modern, efficient, future-oriented corporate infrastructure that will promote growth.

THE 2019 FINANCIAL YEAR AT A GLANCE

NET SALES

EUR 1,477.8 million

With net sales growth of 1.0 percent, the Wilo Group continued on its profitable growth path in spite of the challenging macroeconomic environment and the pronounced global economic slowdown. Net sales rose to EUR 1,477.8 million.

INVESTMENTS

EUR 155.7 million

The Wilo Group is continuing to make substantial investments in the future. In the past financial year, more than EUR 155 million was invested in the construction and expansion of new and existing sales and production locations, state-of-the-art manufacturing technologies and company acquisitions, among other things. With the acquisition of the operations of the US pump manufacturer American-Marsh Pumps, the Wilo Group has sustainably expanded its production capacities in the USA and its portfolio of high-quality local products.

EBITDA

EUR 180.1 million

CONSOLIDATED NET INCOME

EUR 72.4 million

Wilo generated a record EBITDA of EUR 180.1 million in 2019. Profitability increased substantially compared with the previous year, with the EBITDA margin improving by 1.7 percentage points to 12.2 percent. The reorganisation and efficiency measures initiated in previous years had the desired effect and achieved considerable savings. Consolidated net income also increased significantly by EUR 8.2 million or 12.8 percent to EUR 72.4 million.

CASH FLOW

EUR 168.5 million

Cash flow from operating activities more than doubled year-on-year to a new record of EUR 168.5 million. This significant improvement was due in particular to targeted measures to optimise working capital.

EMPLOYEES

7,749

The Wilo Group's employees are the basis for and the driving force behind its economic success. An annual average of more than 7,700 people were employed at Wilo around the world.

RESEARCH AND DEVELOPMENT

EUR 67.6 million

Wilo intends to establish itself as the digital pioneer of the pump industry and set new standards as an innovation leader. This means research and development traditionally play an important role. At EUR 67.6 million or 4.6 percent of net sales, expenditure for research and development exceeded the high prior-year level.

SMART FACTORY

Construction work on the Smart Factory at the Dortmund location was completed. The symbolic handover of the key in August marked the start of the move to the new, state-of-the-art production facility, and the first production lines began operations on schedule. This represented a significant milestone in the digital transformation of the Wilo Group. The Smart Factory implements central elements of the Industry 4.0 vision. The new production concept provides for an optimised and digitalised value chain with straightforward and flexible logistics and communications channels.

BASIC INFORMATION ON THE WILO GROUP

- **Premium provider of products, system solutions and services for building technology, water management and industry**
- **Global production and distribution network ensures proximity to customers**
- **The Wilo Group is represented in all major markets with over 7,700 employees worldwide**
- **Research and development activities remain at a very high level**

Customers and products

Wilo is a global, premium provider of pumps and pump systems for heating, ventilation and air conditioning, water supply and wastewater disposal. The Wilo Group meets every need with its portfolio of products, system solutions and services. The extensive product range extends from high-efficiency pumps designed for houses, apartment blocks and public and commercial buildings, via special pumps and agitators for water management, through to specific products and solutions for industrial applications.

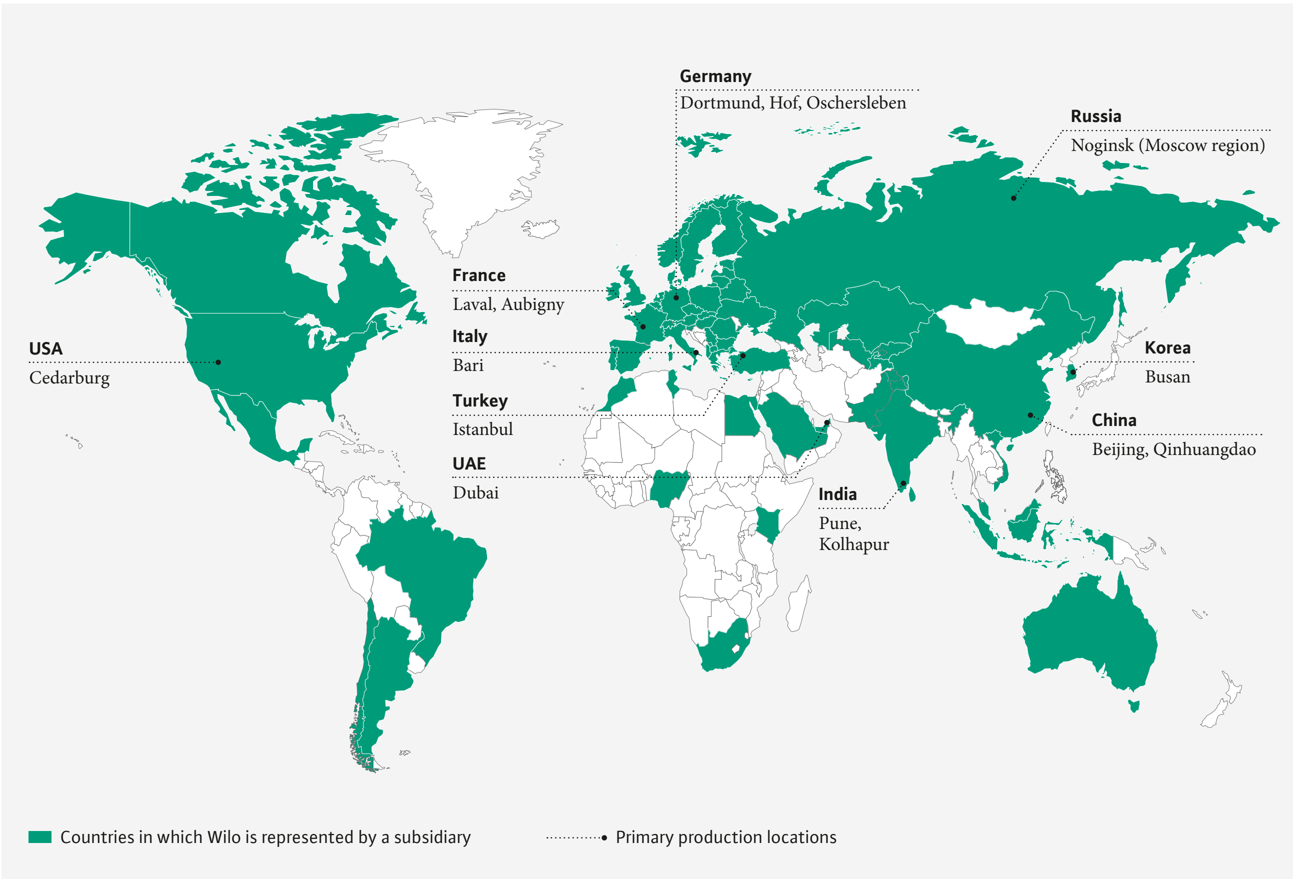
The Wilo Group's corporate strategy and the operational focus of its over 7,700 employees are systematically geared towards customers and their specific needs and requirements for products, applications and services. The foundation of the Wilo Group's long-standing market success is the close cooperation with OEM partners, consultants, specialist retailers and tradesmen as well as general contractors, investors and end users in a spirit of mutual trust. As a premium provider, Wilo aims to develop leading technology and intelligent solutions that make people's everyday lives noticeably easier. This is the principle behind the claim "Pioneering for You".

The Wilo Group manufactures pumps and pump systems at 15 primary production locations in Europe, Asia and the Americas. In accordance with the global production strategy (GPS), these global production sites constitute the production network in the narrower sense. They are coordinated and managed accordingly.

Wilo also has other, smaller locations, such as Wülfrath and Chemnitz, at which it develops and manufactures highly specialised products such as water supply and wastewater treatment systems. In addition, products for local markets are assembled at a variety of locations. This ensures that local requirements can be met efficiently with the fastest possible delivery to customers. With the acquisition of the operations of the US pump manufacturer J-Line Pump Co. – d/b/a American-Marsh Pumps – the Wilo Group has expanded its production capacities in the USA. The company, which is based in Collierville, Tennessee, manufactures centrifugal pumps and vertical turbines in particular.

With this structure, the Wilo Group has an efficient, customer-oriented network with currently more than 70 production and sales companies in over 50 countries. In combination with numerous additional branches and independent sales and service partners, this ensures that customers' needs and requirements are met at all times and to the highest standards of quality worldwide.

Wilo Group locations



Market segments

The Wilo Group operates in five market segments: Building Services Residential, Building Services Commercial, OEM (Original Equipment Manufacturers), Water Management and Industry. The portfolio of products, system solutions and services is systematically tailored to the specific needs of customers in the respective market segments. This strong focus, combined with the Group's traditional innovative strength and proximity to customers thanks to a local presence, are a key factor in its success. This enables the Wilo Group to identify the different trends in each region and changing requirements at an early stage and respond to them quickly and flexibly.

Building Services Residential & Commercial

Around the world, energy and resource efficiency is becoming markedly more important due to ecological and, not least, economic reasons. Accordingly, there is a growing focus on economic efficiency and sustainability when it comes to commercial and private building use. This makes it increasingly necessary to use innovative systems incorporating optimally coordinated components. Wilo offers the necessary energy-efficient concepts in the Building Services Residential and Building Services Commercial market segments. These relate to heating technology and air conditioning as well as water supply and wastewater disposal. In particular, Wilo's product and system solutions find applications in houses, apartment blocks, public buildings, industrial and office buildings, hospitals and hotels.

OEM

Wilo is a strong partner of leading OEMs and manufacturers of products including boilers, heat pumps and air conditioning systems. The Wilo Group's pumps and hydraulic systems offer the highest degree of reliability, flexibility and efficiency. OEM customers also benefit from Wilo's many years of experience, detailed knowledge of the market and pronounced application expertise. The Wilo Group is also a development partner for these customers and sees itself as a forward thinker and a trendsetter. Taking into account current and future regulatory requirements, Wilo anticipates the new demands of the global market and constantly changing market requirements at an early stage, allowing it to develop and offer future-oriented solutions that are ideally tailored to the specific needs of customers and the market. Wilo offers a broad range of established, tried-and-tested integrated products and intelligent, individually developed solutions.

Water Management

Thanks to the fast pace of urbanisation and climate change as well as growing environmental pollution, water as a raw material is becoming a scarce and precious commodity in more and more regions of the world. Providing the rapidly growing global population with enough clean drinking water is a fundamental problem. In addition, the demand for water from agriculture and industry is rising sharply around the world. The safe and sufficient purification and supply of water therefore already involves profound global challenges. As a partner to the water management industry, Wilo offers professional solutions designed to meet the increasingly complex requirements involved in drinking water extraction, water pumping, and the transportation and processing of wastewater. Wilo's pumps and pump systems for water management set benchmarks around the world in terms of technical performance, efficiency and sustainability.

Industry

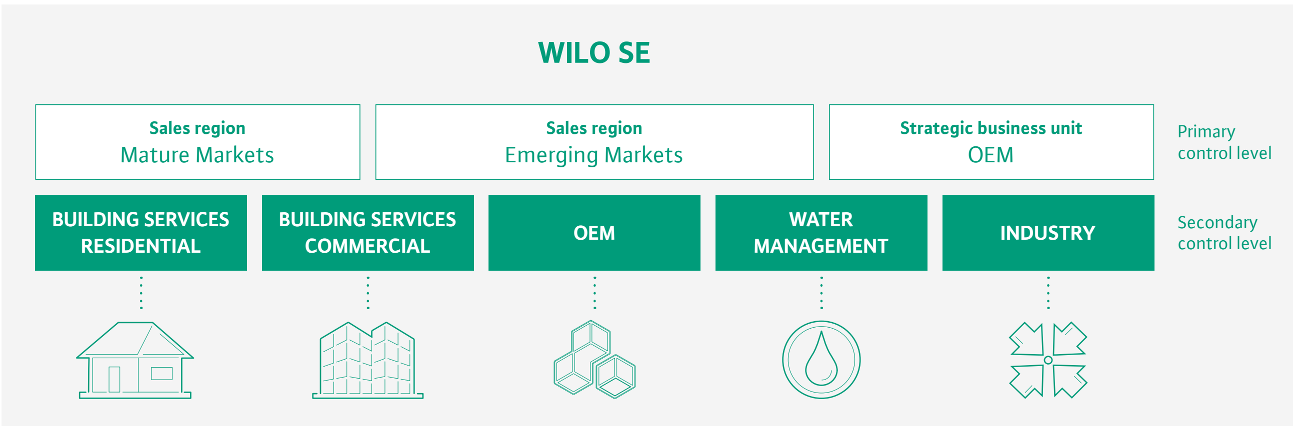
Wilo develops and manufactures pumps that guarantee the highest level of reliability, flexibility and efficiency. These are vital and process-critical factors for pumps and pump systems in industrial applications in particular. The Wilo Group's particular strength in the Industry market segment lies in support applications for processes in various industries. As every industrial sector has its own, often highly specific requirements in terms of pumps and peripherals, Wilo develops individual concepts and solutions for every industrial requirement, thereby ensuring smooth installation, safe operation and efficient maintenance. Wilo pumps are used around the world for pumping cooling water in power plants, for example. Other important applications include dewatering in the mining industry and food production.

Group organisation and management

The Wilo Group can look back on a long and successful history. The company's foundations were laid more than 140 years ago. "Kupfer- und Messingwarenfabrik Louis Opländer", founded in Dortmund in 1872, was the predecessor to WILO SE, a European Company (Societas Europaea). The company is domiciled in Dortmund, Germany. As the parent company of the Wilo Group, WILO SE performs central management activities for the entire Group as well as its own operations. With around 90 percent of the shares in WILO SE, the majority shareholder is the Wilo-Foundation. The issued capital of WILO SE amounts to EUR 26,980 thousand.

As at 31 December 2019, the Wilo Group encompassed WILO SE and more than 70 production and sales companies worldwide. WILO SE holds a direct majority interest in most of its subsidiaries. In November 2019, WILO USA LLC acquired the operations of the US pump manufacturer J-Line Pump Co. – d/b/a American-Marsh Pumps – in an asset deal.

Organisation and management structure of the Wilo Group

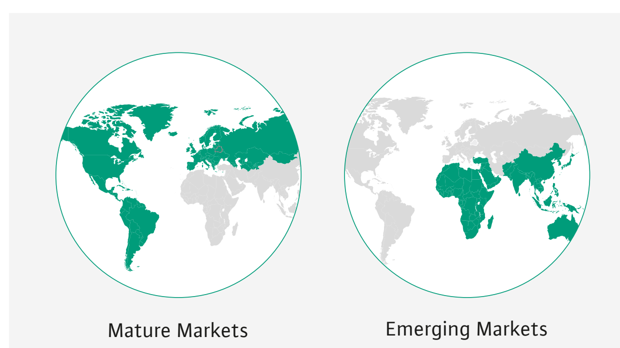


American-Marsh Pumps, which is headquartered in Collierville,Tennessee, is a leading manufacturer of centrifugal and vertical turbine pumps and has a history dating back to 1873. The manufacturing capacities acquired in Tennessee will help Wilo to meet the needs of customers on the US market in a prompt and efficient manner and offer an even wider range of high-quality products made in the USA to businesses, industry, municipalities and agricultural enterprises.

The internal organisational and management structure was optimised further in the year under review in order to underline the importance of OEM business for the Wilo Group. The Mature Markets and Emerging Markets sales regions and the additional OEM strategic business unit were defined as the top-level organisational and management units by which the Wilo Group is primarily controlled. These units are each headed by an experienced manager who reports directly to the Executive Board. This allows sales activities to be closely geared towards the requirements of the respective markets and regions. The five market segments are the secondary control level.

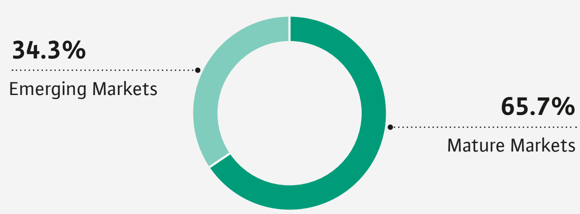
The management and controlling of the Building Services Residential & Commercial, Water Management and Industry market segments are covered by the managers of the Group Market Segment Management function, while the management and controlling of the OEM market segment is organised directly in the OEM strategic business unit.

Composition of the sales regions
as at 31 December 2019



As at 31 December 2019, the Mature Markets sales region covered Europe, Russia, Belarus, Ukraine, the Caucasus nations and North and Latin America. The Emerging Markets encompassed China, India, Korea, the Southeast Asian nations, Australia and Oceania, Turkey, the Middle East and Africa.

Net sales
by region in 2019



In the 2019 financial year, 65.7 percent of consolidated net sales were attributable to the Mature Markets and 34.3 percent to the Emerging Markets.

As part of strategic planning for the implementation of Ambition 2025, the functional organisational structure was enhanced in order to release additional optimisation potential. One critical aspect for success is the strengthening of the Emerging Markets sales region, which is becoming steadily more important for the Wilo Group as a whole. The structure of the sales regions was examined accordingly, with the result that responsibility for Russia, Belarus, Ukraine, the Caucasian nations and Latin America was transferred to the Emerging Markets sales region with effect from 1 January 2020.

The organisational structure has an entirely functional alignment. The management and controlling of the Wilo Group is the responsibility of the Executive Board of WILO SE, which consisted of three members in the 2019 financial year. Dr. Patrick Niehr was appointed to the Executive Board of WILO SE with effect from 1 January 2020, meaning that the Executive Board of WILO SE had an additional member from the start of the year. The newly created function of Chief Change Officer bundles intragroup tasks and relieves the burden on the CEO function in particular. The following schedule of responsibilities reflects the new allocation of functional responsibilities within the Executive Board.

The Supervisory Board of WILO SE appoints, controls and monitors the Executive Board. The Supervisory Board, which

Schedule of responsibilities

President & CEO
Oliver Hermes

- Government & Public Affairs
- Sales Regions Mature & Emerging Markets
- Strategic Business Unit OEM
- Group Service
- Digitisation Team
- Coordination of Executive Board activities

CCO
Dr. Patrick Niehr

- Group Market Segment Management
- Group Product Management
- Group Marketing
- Group Legal & Insurance
- Group Human Resources

CTO
Georg Weber

- Group Research & Development
- Group Procurement & Supply Chain Management
- Group Operations
- Group Quality
- Group Location Management

CFO
Mathias Weyers

- Group Controlling
- Group Accounting & Taxes
- Group Finance
- Group Internal Audit & Compliance
- Group Information Management
- Group Mergers & Acquisitions

comprises a total of six ordinary members, is appointed by the Annual General Meeting. Two members of the Supervisory Board are employee representatives appointed at the proposal of the European Works Council of WILO SE. Detailed information on the cooperation between the Executive Board and the Supervisory Board can be found in the Report of the Supervisory Board in this Annual Report.

As part of the continuous review and optimisation of the controlling system, the Executive Board revised the system of management-relevant key performance indicators in the year under review. The key performance indicators were harmonised to an even greater extent and aligned with the specific requirements of Ambition 2025. In managing the Wilo Group, the Executive Board is continuing to focus on the development of net sales and earnings power. In light of the accelerated increase in net sales from organic and external growth that is planned as part of Ambition 2025 and the high level of investments, which will require substantial financial resources, a greater focus is now also being placed on leverage. Leverage describes the ratio of consolidated net debt (financial liabilities and lease liabilities less cash) to consolidated EBITDA. As a result, earnings power is now no longer based primarily on EBIT and the EBIT margin, but on operating earnings before interest, taxes, depreciation and amortisation, i.e. EBITDA and the EBITDA margin. Net sales, EBITDA, the EBITDA margin and leverage are the central performance indicators for the Wilo Group, meaning they are included in the analysis of the course of business, the assessment of the position of the Group and the outlook for the purposes of external financial reporting in accordance with GAS 20.

Another financial key performance indicator at Group level is free cash flow, which reflects the excess liquidity generated by the Wilo Group. A constantly positive free cash flow serves to ensure the financial independence and liquidity of the company. The main levers for improving free cash flow are increases in net sales and EBITDA. The development of free cash flow is also aided by the systematic management of working capital and a coordinated investment policy.

The Wilo Group is required to maintain standard financial ratios (financial covenants) under the terms of its long-term financing agreements. In addition to leverage, these primarily include the equity ratio and the interest cover ratio, which is defined as the ratio of consolidated EBITDA to consolidated interest expenses. These ratios are also regularly reviewed and reported to the Executive Board in order to ensure compliance with the required minimum values at all times. The Wilo Group continued to comply with the agreed financial ratios in 2019.

All the management-relevant key indicators are derived from the key indicators in the consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS).

In addition to the key performance indicators and ratios described above, non-financial aspects such as employees, processes along the value chain, sustainability and social engagement play an important role in the business success and the development of the Wilo Group. ➔ *More information can be found in Wilo's Sustainability Report, which is available at wilo.com/sustainability-report.*[1]

Corporate strategy

Ambition 2025 sets out the corporate objectives, development and strategic growth path until 2025 and beyond.

"Together we accelerate our profitable growth as a worldwide solution provider" summarises the main strategic objectives and underlines the importance of cooperation with various stakeholders across national, sector and industry boundaries. Accordingly, the Wilo Group plans to press ahead with its globalisation strategy and intensify cooperation and networking among all the stakeholders along entire value chain in a targeted manner. The corporate strategy focuses on the Wilo Group's intention to step up its development from a component manufacturer into a solution provider to an even greater extent.

[1] The content accessed via the link does not form part of this Group management report. In line with the statutory provisions, KPMG AG Wirtschaftsprüfungsgesellschaft has not audited the references or the information to which they refer.

Our Ambition 2025

Ultimate Customer Satisfaction | Engaged & Empowered People | Innovation Leadership | Digital Pioneer | Business Excellence | Independent & Responsible Company

BUILDING SERVICES RESIDENTIAL	BUILDING SERVICES COMMERCIAL	OEM	WATER MANAGEMENT	INDUSTRY
We are full-range supplier and customers' first choice.	We are market, innovation and smart solution leader.	We are preferred partner for smart integrated solutions.	We are global market player and digital solution provider.	We are specialist in selected branches and applications.

Accordingly, the Group is continuing to intensify the development of intelligent products, systems, services and solutions and pressing ahead with its digital transformation.

This growth strategy is built on six clearly defined strategic pillars:

- Wilo strives to ensure maximum customer satisfaction – this is the principle behind the claim "Pioneering for You".
- Wilo enables and develops its employees – they are the backbone of the company.
- Wilo is setting new standards as an innovation leader – including innovations in terms of new technologies and materials, products and services, process and (digital) business models.
- Wilo aspires to establish itself as the digital pioneer of the pump industry – by seizing the opportunities presented by digital transformation.
- Wilo stands for business excellence in all processes – along the entire value chain.
- Wilo will remain an independent, responsible company – based on a stable organisation and shareholder structure.

Wilo strives for ultimate customer satisfaction.

Wilo engages and empowers employees.

WILO sets new standards as innovation leader.

Wilo develops into the digital pioneer in the pump industry.

Wilo stands for business excellence.

Wilo remains an independent and responsible company.

To achieve the strategic objectives, the fundamental strategic directions for each of the five market segments were defined. The objective in the Building Services Residential market segment is to be a full-service provider and preferred supplier. The Building Services Commercial market segment is focused on the expansion of market and innovation leadership as a solution provider. In the OEM market segment, Wilo is continuing to position itself as a preferred partner with smart and integrated solutions.

The global market presence in the Water Management market segment will be strengthened through digital solutions for the water management industry. In the Industry market segment, Wilo will continue to focus on selected sectors and applications in future.

Ambition 2025 is being implemented as part of specific growth initiatives taking into account the following key aspects: covering every area of application across all market segments, strengthening the position as a provider of solutions, expanding regionally and developing new business models and markets. The growth initiatives explicitly also take account of external growth through targeted company acquisitions.

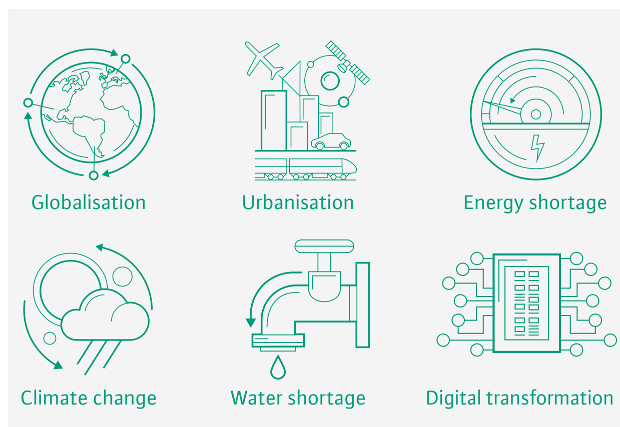
In order to highlight and increasingly address particularly important aspects of the strategy, a specific ten-point plan for each of Mature and Emerging Markets and a five-point plan for the OEM strategic business unit were developed in the year under review in addition to the growth initiatives. These three plans set out clearly defined, action-based, project-driven measures that will be implemented over the coming years in order to support the growth initiatives.

The Wilo Group is also pressing ahead with projects to improve efficiency in sales and production in order to permanently secure and accelerate its profitable growth. These extensive, Group-wide projects comprise the analysis and optimisation of significant cost structures and drivers.

Wilo has defined six relevant megatrends in the context of strategic long-term planning. Globalisation, urbanisation, energy shortage, climate change, water shortage and digital transformation will influence the Wilo Group's business in the future and are already having an impact on the company's current performance.

Taken together, these six megatrends are contributing to a major global trend: the creation of smart urban areas. Wilo defines this as the establishment and expansion of metropolitan areas where the organisation, infrastructure and aspects of life are digitally and intelligently connected. A smart urban area uses state-of-the-art information and communication technology to improve people's quality of life. Intelligent, innovative infrastructures help to make mobility in conurbations more efficient, conserve resources and reduce negative effects on the environment. Smart urban areas are arising not only in the familiar big cities in mature markets, but also in many emerging economies such as India and China. Wilo has identified smart urban areas as offering attractive business potential and is systematically tapping into new business areas here. This strategy goes hand in hand with the intensive digitalisation of the Group.

The Wilo megatrends



The overarching vision and mission and the corporate values provide the framework for Ambition 2025. The vision is the guiding objective that the Wilo Group wants to achieve and a confident statement of Wilo's clear position in a constantly changing world.

On the basis of this vision, the mission defines the main purpose or undertaking that Wilo is pursuing. It also serves as a set of instructions for meeting the current and future challenges of the market. The Wilo Group wants to use its products and the pertinent system solutions and services to make people's lives easier around the world. Integrity, fairness, respect, passion and responsibility are the inviolable values by and with which Wilo works and lives. They form a shared foundation to which each individual in the company commits – regardless of their position, duties and responsibilities. Traditionally, the sustainable success of the Wilo Group has been based to a large extent on these shared values.

The Wilo Group has developed an explicit sustainability strategy on the basis of Ambition 2025. The central tenet of this strategy is to provide more people with clean water while simultaneously reducing the ecological footprint. A total of 17 strategic objectives have been formulated within the four strategic action areas of "Water", "Energy & Emissions", "Material & Waste" and "Employees & Company". These objectives are integrated into the functional strategies of the individual departments and are therefore part of regular reporting. ➔ *More information can be found in Wilo's Sustainability Report, which is available at wilo.com/sustainability-report.*[1)]

Research and development

Strategy and direction

Ambition 2025 and the corporate objectives define the overarching framework for the Wilo Group's research and development activities. The primary aim is to further expand the Wilo Group's leading position with regard to technology, innovation and quality. To this end, clear risks and opportunities from the megatrends relevant to Wilo were first identified using the corporate foresight process. On this basis, three strategic action areas were derived for research and development: energy and resource efficiency, systems technology, solutions expertise, and digital technologies.

In some cases, the strategic action areas are also addressed in close cooperation with outside partners, other industrial companies and, increasingly, innovative start-ups. The aim is to enrich and expand internal know-how with external expertise. The Wilo Group has established a global research and development network to help it conduct the various research projects. Wilo also takes advantage of government grants for application-related basic issues. As a result of digitalisation, Wilo is increasingly also shifting its development focus to new business models and complementary services.

Vision, mission and values

OUR VISION	OUR MISSION	OUR VALUES
Wilo, the water solution leader for a smart and resource-efficient world.	Inventing and managing responsible water solutions that benefit everyone, everywhere.	Integrity, fairness, respect, passion, responsibility.

[1)] The content accessed via the link does not form part of this Group management report. In line with the statutory provisions, KPMG AG Wirtschaftsprüfungsgesellschaft has not audited the references or the information to which they refer.

A central research and development organisation is responsible for all research and development activities. Traditional areas of development, such as mechanics, hydraulics, microelectronics and software, are addressed by dedicated central developer teams for systems and digital products. This ensures that the challenges arising partly from the digital transformation of all areas of the company are brought together and tackled as quickly as possible.

Product series development is also coordinated centrally but is carried out locally at the Wilo Group's various locations. In addition to a more agile way of working in light of the advance of digitalisation, this form of organisation enables global, cross-divisional and interdisciplinary cooperation with the ideal transfer of knowledge. Product development places particular weight on the growth markets in Asia.

Results

Numerous structural measures were again performed in the area of research and technology in 2019, leading to further significant process optimisations. The modular global platform concept developed with the support of external partners was rolled out further. The aim of the platform concept is to use the results and development components of the various projects across divisions and projects, thereby ensuring the lasting transfer of technology and knowledge. Development costs can thus be permanently lowered and the time to market reduced.

In 2019, key elements of product development activities included the finalisation of ongoing development projects and the definition of new Wilo – top development projects with regard to the new platform concept and advancing digitalisation. These cross-divisional projects are intended to further enhance customer benefit and increase the pace of development.

In 2019, Wilo presented a versatile series of standard pumps with the global launch of the Wilo-Atmos GIGA-N series. Improved hydraulics and the use of IE3 motors enable increased overall efficiency than the predecessor models, and hence significant energy savings. The extensive range of motors and materials and the broad temperature range from -20 to +140°C mean this pump series covers a wide range of different applications.

In the area of system solutions for smart sewage pumping stations, the year under review saw the launch of the Wilo-Rexa SOLID-Q with Nexos Intelligence. It is characterised by operational reliability, energy efficiency and digital networking. It can make a significant contribution to reducing energy costs thanks to its high hydraulic efficiency combined with high-efficiency IE5 motors and intelligent speed control. Data networking with the station network via integrated Nexos Intelligence enables comfortable and cost-effective remote monitoring and extensive data logging functions.

The integration of Wilo Smart Connect into the Wilo Assistant app represented another milestone in product digitalisation. Thanks to a customer-friendly user interface, a wide range of Wilo pump models that are successfully in use on the market can now be parameterised and monitored easily using the app.

Employees

With a slightly lower headcount, the employee structure in research and development remained largely stable in 2019 compared with the previous year. The proportion of women in research and development was still around 10 percent. The proportion of highly qualified university graduates was around 70 percent. However, the needs-driven recruitment of qualified young candidates in the disciplines of technology and the natural sciences represents a growing challenge. With its extensive human resources activities, the Wilo Group therefore seeks to be perceived by potential applicants as an employer of choice. Special talent promotion programmes, a variety of internal and external training and mentoring programmes and increased cooperation with start-ups are some examples of measures aimed at achieving this goal. They are intended to ensure that Wilo will continue to successfully attract and retain highly qualified employees in the future.

Patents and licences

The Wilo Group's patent strategy is aimed at securing Wilo's competitive advantage against competitors through property rights. In particular, these competitive advantages involve more cost-effective production processes and innovative products and product features that offer particular benefits for the customer. Corresponding new developments are identified in the Wilo patent process and secured through patent applications, with a particular focus on inventions relating to digital product features. The patents support Wilo's profitable growth by preventing competitors from copying development results. Wilo increased its applications and patent portfolio compared with the previous year. In the year under review, Wilo also submitted appropriate patent applications in Russia for the first time.

Investment and expenditure

In 2019, investment in research and development again focused on the further expansion of laboratory and test facilities. Investment was concentrated in particular on the automation of existing test benches at the Dortmund site and their remote monitoring, as well as preparations for connecting them to the digital structures of the new Smart Factory.

R&D costs*
in EUR million and *as a percentage of net sales*

* including capitalised development costs

Total research and development costs including capitalised development costs amounted to EUR 67.6 million in the year under review (previous year: EUR 66.3 million). At 4.6 percent of net sales, they were slightly above the high level of 4.5 percent recorded in the previous year. Development costs (including borrowing costs) were capitalised in the amount of EUR 17.7 million (previous year: EUR 16.9 million). Research and development costs in the amount of EUR 50.3 million (previous year: EUR 50.7 million) were recognised in profit or loss. Amortisation of capitalised development costs amounted to EUR 4.4 million in the year under review (previous year: EUR 2.3 million).

BUSINESS REPORT

- **Global economic slowdown in 2019 following escalation of trade conflicts**
- **Net sales increase for the tenth year in succession**
- **Significant improvement in EBITDA and consolidated net income**
- **Operating cash flow reaches new record high**
- **Company acquisition in the USA successfully completed**

General economic and industry-specific conditions

Tangible slowdown in global economic momentum in 2019

According to the International Monetary Fund (IMF), the world economy grew by just 2.9 percent in 2019 compared with 3.6 percent in the previous year. The Kiel Institute for the World Economy (IfW) expects an increase of 3.0 percent. This represents the lowest level of global growth since the financial crisis a good ten years ago. World trade and industrial production weakened across the board. The main factors were the trade conflict between the USA and China and the continued lack of clarity with regard to Brexit. The economy was additionally dampened by geopolitical tensions and the resulting uncertainty among economic players. However, the US Federal Reserve's return to an expansive monetary policy, which was followed by many countries, served to limit an even more pronounced downturn. The IMF estimates growth in the industrialised nations at 1.7 percent in 2019 (previous year: 2.2 percent). The pace of expansion also slowed in the emerging and developing nations, but they remained the main driver of the world economy with growth of 3.7 percent (previous year: 4.5 percent).

The following section presents the macroeconomic and industry-specific developments in 2019 in the regions that are relevant to the Wilo Group. In addition to the general economic development of individual countries and regions, the economic performance of the Wilo Group is especially influenced by the construction and sanitary industries, among others.

Mature Markets – European construction industry enjoys sustained upturn, robust industry environment in Russia and the USA

EUROPE. Having enjoyed a strong expansion until midway through the previous year, European economic development flattened out further in 2019. This was mainly due to a downturn in industrial production and weak exports, including to China. By contrast, consumer and service sectors remained robust. Domestic demand was supported by the sustained expansive monetary policy of the European Central Bank and fiscal policy impetus from various governments. According to the Eurostat statistical office, the euro area recorded economic growth of 1.2 percent in 2019 (previous year: 1.9 percent), with the highest growth rates again recorded in Eastern Europe and Ireland. Moderate growth was reported in Scandinavia, Belgium and the Netherlands. The Italian economy continued to largely stagnate as a result of structural deficits. In France and Spain, where the economy is largely geared towards consumer goods, economic momentum remained comparatively stable.

By contrast, German industry's above-average focus on capital and intermediate goods and the automotive sector and its tight integration with the global markets meant the German economy was harder hit by the global economic weakness than other euro area nations. Industrial production slumped in 2019 and slipped into recession. However, this was offset by lively private consumer spending and a strong construction industry. According to the German Federal Statistical Office, gross domestic product (GDP) saw modest growth of 0.6 percent overall (previous year: 1.5 percent).

The European construction industry continued to expand in 2019 on the back of the robust domestic economy, strong demand for new construction and renovation, and the favourable financing environment. In addition to the upturn in building construction, substantial growth impetus was delivered by infrastructure and civil engineering measures. According to the Euroconstruct industry network, the volume of European construction output grew by 2.3 percent in real terms in 2019 (previous year: 3.2 percent). Other than Finland and Sweden, all the 19 European countries that are significant for the construction industry and that are covered by the Euroconstruct data recorded growth. Construction activity in Ireland and Hungary saw double-digit growth, while the upturn in Poland was also extremely pronounced. The Eastern European construction industry grew by 7.3 percent (previous year: 12.8 percent) on the back of infrastructure projects. Construction output in Western Europe increased by 2.0 percent in real terms (previous year: 2.6 percent).

According to the German Federal Statistical Office, construction investment in Germany accelerated further in 2019 with growth of 3.8 percent in real terms (previous year: 2.5 percent). According to the German Institute for Economic Research (DIW), the nominal volume of new residential construction increased by 7.4 percent to EUR 78.5 billion (previous year: 10.1 percent). New commercial and public construction also enjoyed highly dynamic growth of 7.8 percent to EUR 40.1 billion (previous year: 6.2 percent). However, two-thirds of the total construction volume was attributable to work on existing buildings such as expansion, conversion, maintenance and modernisation. These measures also saw brisk growth of 7.7 percent to EUR 168.8 billion for residential construction (previous year: 7.9 percent) and 5.9 percent to EUR 68.5 billion for non-residential construction (previous year: 6.3 percent).

The German sanitary industry developed extremely positively in this environment. According to the German Federal Statistical Office, net sales from the installation of gas, water, heating, ventilation and air conditioning systems increased by 6.6 percent in the first three quarters of 2019 (previous full year: 5.5 percent).

RUSSIA. Despite the sanctions, the Russian economy continued to recover in 2019, albeit only moderately. The Russian central bank slashed the key interest rate in several steps from June 2019 onwards. Having initially seen little growth, production according to IfW figures picked up in the second half of the year. According to the central bank, government spending made a significant contribution to this development. Despite the higher level of inflation, the economy was also supported by private consumer spending. However, capital expenditure remained muted and exports declined. The IMF estimates moderate growth in the Russian economy of 1.1 percent in 2019 (previous year: 2.3 percent).

Following several years of weakness, the Russian construction sector enjoyed strong growth in the previous year thanks in particular to a non-recurring effect, namely the Yamal liquefied natural gas project. This expansion is now more broad-based, with the Rosstat statistical office reporting a similar construction volume in 2019 to the previous year. The Russian construction sector continued to be dominated by major projects and substantial infrastructure investments, but residential construction also saw a recovery.

USA. The US economy lost momentum during 2019 following the expiry of the strong impetus provided by the tax reform. Exports also came under pressure as a result of the trade conflicts and the weakness of the global markets. Private investment also stagnated in this environment. The strength of the labour market meant that private consumer spending remained the main growth driver. Government consumer spending also increased further. According to the IMF, the US economy is expected to have grown by 2.3 percent in 2019 (previous year: 2.9 percent).

In real terms, construction investment in the USA initially declined in 2019 before recovering from July onwards, thanks among other things to three interest rate cuts by the Federal Reserve. All in all, the US construction industry stagnated.

It was boosted by significantly higher public construction activity, whereas private construction activity declined. Residential construction in particular saw a slowdown. Although the number of residential units completed increased by 5.6 percent in 2019, private spending on residential construction declined by 5.6 percent up to the end of November, with the figure for detached houses falling by as much as 6.9 percent. Construction expenditure in the water supply sector increased by 5.1 percent up to the end of November, while the figure for the broadly defined wastewater/waste disposal sector rose by 9.7 percent.

LATIN AMERICA. In 2019, the economic environment and the development of the construction industry were characterised by low momentum or prolonged crises in almost all the economically significant countries in the region. According to the latest World Bank data, however, the region as a whole recorded a slight upturn in economic output of 0.8 percent (previous year: 1.7 percent). The extensive crisis in Venezuela continued and Argentina remained in a deep recession, with economic output declining by 3.1 percent. On the other hand, Brazil continued to recover, albeit still with an extremely moderate growth rate of 1.1 percent (previous year: 1.3 percent). In Chile, growth slowed considerably following the boom in the previous year. The conflict with the USA meant that the Mexican economy stagnated (previous year: +2.1 percent).

Emerging Markets – Slower growth in most economies, Turkey still in crisis mode

CHINA. In 2019, the Chinese economy suffered from the trade conflict with the USA and weak international trade. To restrict the negative consequences for the domestic economy, economic policy was relaxed again and minimum reserve requirements were lowered. However, the support measures are more limited than previous packages on account of the high level of debt in China already and the need to prevent another lending boom. As a result, the pace of expansion continued to slow. According to the NBS statistical office, growth in China amounted to 6.1 percent in 2019 (previous year: 6.6 percent).

Despite these factors, the underlying economic momentum in China remains above-average. In conjunction with the sharp rise in demand for housing and the huge need for modern infrastructure, both of which are elements of rapid urbanisation, this is providing structural impetus for the Chinese construction industry. According to NBS, building investments saw strong growth of 9.9 percent in nominal terms in 2019 (previous year: 9.5 percent). Residential construction increased by as much as 13.9 percent (previous year: 13.4 percent). After falling by 4.9 percent in the previous year, Chinese investment in water management increased slightly once again in the year under review, rising by 1.4 percent in nominal terms.

INDIA. Following the massive liquidity problems affecting the shadow banks that are important to the Indian economy and the collapse of the lease and finance group IL&FS, economic momentum slowed substantially from summer 2019 onwards. In particular, this impacted the Indian automotive industry, which is now an important element of the national economy, as well as the property sector. As a result, economic growth weakened to a far greater extent than originally anticipated. According to the IMF, GDP growth slowed to 4.8 percent in 2019 (previous year: 6.8 percent).

The Indian construction industry was hard hit by the escalating problems in the finance sector in 2019. According to the market research firm Anarock, 575,000 residential units were not handed over to buyers as planned because of – in some cases significant – delays. Many construction sites came to a complete standstill. On the other hand, investment in the systematic creation and expansion of smart cities continued.

KOREA. Following the downturn in the previous year, investment activity declined further as a result of the global economic slowdown and weak exports in key industrial sectors (including semiconductors, automotive and plastics). Private consumer spending also lost momentum slightly. Accordingly, the Korean economy continued to slow. The Bank of Korea cut the key interest rate twice in an effort to stabilise the situation. According to its own figures, gross domestic product grew by 2.0 percent (previous year: 2.7 percent).

In this environment, the construction industry remained under pressure across all segments. In addition to commercial construction, which was already weak as a result of the broad investment restraint, housing construction slowed considerably. According to data from the Korean central bank, construction investment declined by 3.3 percent in real terms in 2019, thereby continuing the negative development recorded in the previous year.

SOUTHEAST ASIA. Singapore's economic growth almost came to a standstill in 2019 due to the country's strong dependence on the world markets. Other countries in the region were also hit by the weak global demand, particularly Thailand. The GDP growth rate in the five major ASEAN nations slowed to 4.7 percent (previous year: 5.2 percent).

The construction industry, which is characterised by a high level of infrastructure investment, is considered to be one of the key pillars of the economy along with exports. Residential construction is also being driven by population growth, increased prosperity and urbanisation. However, this segment can be subject to temporary overheating, as is currently the case in Malaysia. By contrast, residential construction in Singapore continued to recover in 2019. The construction industry also enjoyed strong growth in this sector in Indonesia, Vietnam and the Philippines.

TURKEY. Turkey remained in a deep economic crisis in 2019. However, the substantial currency depreciation did not continue. Inflation improved but remains high at 15 percent. Domestic demand was weak on account of the significant loss of purchasing power and the overindebtedness of many companies. Under political pressure, the central bank cut the key interest rate several times during the second half of the year. The low point of the recession is now likely to have been overcome. According to the latest World Bank figures, the Turkish economy stagnated in 2019 (previous year: +2.8 percent).

The construction industry is in a downward spiral and saw a further slump in 2019. Demand on the property market declined further, meaning that residential construction remained in crisis. Despite a tangible easing of construction costs, building permits again fell dramatically by almost 64 percent in the first three quarters of 2019 in terms of the number of residential units. Commercial property also saw negative development. Vacancy rates on the Istanbul office market increased, while many infrastructure projects were delayed on account of financing problems.

MIDDLE EAST & AFRICA. According to the IMF, growth in the Middle East and North Africa fell to 0.8 percent (previous year: 1.9 percent) as a result of the considerable political uncertainty and smouldering geopolitical hotspots, as well as lower oil prices. Saudi Arabia, Kuwait, the United Arab Emirates, Qatar and Iraq continued their expansion, whereas Iran slipped into a deeper recession due to the US sanctions. Among the oil-importing nations, Tunisia and Egypt remained on a moderate growth path. The Egyptian economy again enjoyed highly dynamic growth. The Sub-Saharan region also saw further robust growth on the back of a slight upturn in Nigeria. However, the South African economy remained weak.

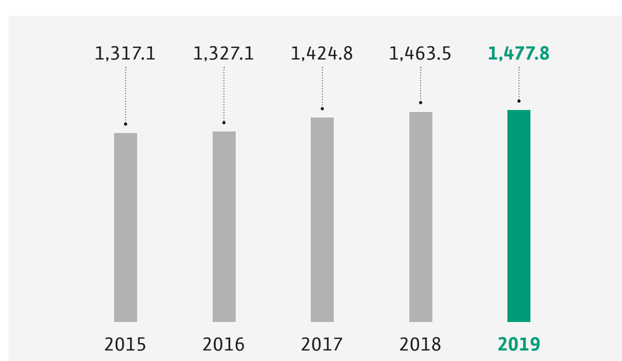
Under these conditions, construction in the region was characterised by a wide range of varying factors. In Egypt, commercial construction and civil engineering both continued on their strong growth path in 2019. The high level of demand meant that residential construction saw extremely dynamic growth, with the centre of the boom being Cairo. Construction work on the new administrative capital also continued and Egypt made substantial investments in infrastructure, including the modernisation of water management. The construction industry saw only moderate development in Saudi Arabia and Tunisia, and the same was true of Nigeria and South Africa, where the order situation did not improve. In Algeria, the construction industry suffered from financing problems and insolvency.

Results of operations

Net sales development

In the 2019 financial year, the Wilo Group increased its net sales for the tenth year in succession. Net sales grew by 1.0 percent or EUR 14.3 million to EUR 1,477.8 million. Exchange rate effects were negligible on the whole in the year under review.

Net sales development
in EUR million



Net sales development in the individual sales regions was as follows in the 2019 and 2018 financial years:

Net sales development by region

EUR million	**2019**	2018	Change %
Mature Markets	970.3	955.5	1.5
Emerging Markets	507.5	508.0	–0.1
Total	**1,477.8**	**1,463.5**	**1.0**

The Mature Markets and Emerging Markets sales regions consisted of the following countries as at 31 December 2019:
– Mature Markets: All European countries, Russia, Belarus, Ukraine, Caucasus nations and nations of the American continent
– Emerging Markets: India, China, Korea, Southeast Asian nations, Australia and Oceania, Turkey, Near East and Middle East nations, African nations

MATURE MARKETS. Net sales in the Mature Markets increased by 1.5 percent to EUR 970.3 million.

In the German-speaking region, net sales increased slightly by 0.8 percent. In Germany, the Wilo Group's largest individual market, net sales declined by 1.5 percent. While growth was generated in the Water Management, Industry and OEM market segments, net sales decreased in the area of building technology. In Austria, meanwhile, Wilo recorded significant growth across all market segments in 2019. Net sales rose by 19.8 percent in total. This positive development was driven in particular by strong project business in the Building Services Commercial and Water Management market segments, including in connection with flood protection measures. In Switzerland, net sales were up slightly on the previous year. Growth in the Building Services Residential and, in particular, Water Management market segments offset the downturns in the other market segments.

In France, Wilo's second-largest individual market within the Mature Markets sales region, net sales declined by 4.2 percent. Growth in the OEM market segment was not sufficient to offset the downturn in the other market segments.

The standardisation of the brand presence, in which Salmson brand products are being successively replaced by Wilo products, prompted many wholesalers to initially work their way through old stocks. This had a temporary impact on new business that should already be reversed in 2020.

Net sales in the Benelux nations fell by 4.5 percent. With the exception of Industry and Building Services Residential, net sales decreased across all market segments. There is significant competitive pressure in the Building Services Commercial market segment, with an impact on project business in particular. In the Netherlands, there were also delays in the approval of construction projects in 2019 as a result of new, more stringent climate protection requirements.

Net sales in Italy fell by 5.3 percent year-on-year, primarily as a result of the downturn in the OEM market segment. The main reason was an inventory effect among exporters. Many Italian OEM customers that export from Italy to Turkey significantly expanded their inventories in 2018 ahead of the introduction of stricter energy efficiency regulations in Turkey, meaning that demand was correspondingly lower in the year under review. Significant growth in the Building Services Commercial market segment on the back of strong project business was not sufficient to offset this effect in 2019.

Meanwhile, the other Mediterranean nations recorded net sales growth of 4.4 percent, with growth recorded in Spain, Greece and Portugal. The main growth driver was the Building Services Residential market segment, which saw a substantial upturn in replacement business in particular.

In Poland, the Wilo Group's net sales increased by 3.7 percent, with growth recorded across almost all market segments. This positive development was driven by focused market cultivation and the booming construction industry.

In the other Eastern European nations, Wilo's net sales increased by 3.0 percent year-on-year overall. In particular, strong growth was recorded in the Water Management market segment in Hungary, the Czech Republic and Romania. Net sales in the Industry market segment also saw substantial growth compared with the previous year. By contrast, the OEM market segment saw a fall in net sales after strong performance in the previous year.

Net sales in the United Kingdom and Ireland were up slightly on the previous year in 2019. Project business stagnated, while reorganisation measures at a major wholesaler had a negative impact on business development. The resulting downturn in net sales was offset by strong growth in the Water Management market segment, where some large-scale projects were realised on the basis of long-term master agreements. The OEM market segment also saw growth. Many customers stocked up considerably in anticipation of Brexit.

In Russia, Wilo recorded growth in almost all market segments. Net sales rose by 4.9 percent in 2019. The production site in Noginsk, near Moscow, enables the Wilo Group to serve the local market efficiently and in line with requirements. Wilo is also benefiting from the growing trend towards localisation. In the Building Services Commercial and Industry market segments in particular, some major projects were realised and significant growth was generated on the back of government subsidies in the district heating and agricultural sectors.

The Caucasian nations achieved substantial growth of 10.4 percent. Almost all market segments contributed to this positive development. The main growth drivers were the Water Management and Industry segment, with key projects being completed in Kazakhstan.

The Wilo Group also saw substantial net sales growth of 13.6 percent in North America thanks to positive business development in both the USA and Canada. The Building Services Commercial market segment enjoyed especially high growth. This was due in particular to focused key account management. Double-digit growth rates were achieved in the OEM market segment as a result of strong performance at Scot. In addition, the Water Management Water Management market segment, which is based on Wilo's portfolio business in the USA, generated substantial net sales growth thanks to the reorientation.

Wilo also recorded substantial net sales growth of 9.0 percent in Latin America. Wilo expanded its market presence on the Latin American market in the year under review with the establishment of a subsidiary in Chile. As a result, the net sales growth in Chine and Mexico more than offset the downturn in Brazil. This positive development was driven by the Building Services Residential and Water Management market segments, where Chile and Argentina in particular enjoyed strong growth.

EMERGING MARKETS. The Wilo Group's net sales in the Emerging Markets remained essentially unchanged year-on-year in the 2019 financial year.

On the Chinese market, Wilo increased its net sales by 3.0 percent. Performance was curbed in particular by the downturn in OEM business. which mainly resulted from the expiry of Chinese government subsidiaries for more environmentally friendly boilers (coal-to-electricity). Business activity was still being boosted by this campaign at the start of the previous year. Excluding the OEM market segment, net sales in China rose by 9.7 percent.

Double-digit growth rates were recorded in the Building Services Commercial, Water Management and Industry market segments. Strong project business as a result of targeted market cultivation contributed to this positive development. In addition, the Wilo Group benefited from an upturn in investment as a result of more stringent environmental requirements in the area of water management in particular.

In India, the Wilo Group enjoyed substantial net sales growth of 15.3 percent. Despite the difficult general economic and market conditions, all market segments contributed to this positive development. In the Water Management market segment, this is due to successful project business with above-average growth. This was supported by the Indian government's extensive infrastructure measures in the area of water supply and wastewater disposal. Wilo also recorded extremely high growth of around 20 percent on the building technology market. The sales organisation in India has been successively expanded in recent years with the aim of achieving greater diversification between the market segments, while the dealer network has been extended.

By contrast, net sales in Korea declined significantly by 9.7 percent. Net sales in all market segments were affected by the negative overall market development. Distributors also built up substantial inventories towards the end of the previous year in connection with various sales campaigns. Accordingly, the level of demand was extremely low in the first months of 2019 in particular. Growing competitive pressure, the weakness of the construction industry and the trade dispute between Korea and Japan also had an adverse effect.

In Southeast Asia and Oceania, the Wilo Group increased its net sales by 15.4 percent. Double-digit net sales growth was generated in all market segments. Indonesia and Vietnam in particular enjoyed significant growth thanks to the strong performance of the construction industry.

Net sales in Turkey fell by 5.7 percent, with the ongoing strained economic situation continuing to have an impact in 2019. However, the Building Services Residential market segment recorded moderate growth in spite of the high level of price pressure from local competitors, which was exacerbated by the depreciation of the Turkish lira against the euro. Net sales in the OEM market segment even saw clearly double-digit growth. However, this was not sufficient to offset the downturn in the other market segments, particularly Building Services Commercial and Water Management.

Wilo recorded net sales growth of 4.1 percent in the Middle East region. The pronounced recovery of project business in the United Arab Emirates, Bahrain, Egypt, Qatar and Iraq more than compensated for the downturn in net sales in the OEM market segment, which was largely due to the cessation of business activities in Iran. In North Africa, the expansion of the dealer network and strong project business resulted in substantial growth of 13.7 percent.

By contrast, net sales in Central and Southern Africa fell by 23.2 percent. Other than Building Services Residential and Water Management, net sales declined in all market segments. This was largely due to delays in project business as a result of obstacles affecting payment transactions, among other things. The figure for the previous year was also boosted by a major water supply project in Nigeria.

Net sales in the market segments developed as follows in the 2019 and 2018 financial years:

Net sales development by market segment

EUR million	**2019**	2018	Change %
Building Services & OEM	1,184.6	1,189.5	–0.4
Water Management & Industry	293.2	274.0	7.0
Total	**1,477.8**	**1,463.5**	**1.0**

Earnings development

Results of operations

EUR million		**2019**	2018	Change %
Net sales	in EUR million	1,477.8	1,463.5	1.0
Gross profit	in EUR million	507.5	521.8	-2.7
Gross margin	*in %*	*34.3*	*35.7*	*-3.9*
Earnings before interest, taxes, depreciation and amortisation (EBITDA)	in EUR million	180.1	153.5	17.3
EBITDA as a percentage of net sales (EBITDA margin)	*in %*	*12.2*	*10.5*	*16.2*
Depreciation and amortisation	in EUR million	76.9	61.6	24.8
Earnings before interest and taxes (EBIT)	in EUR million	103.2	91.9	12.3
EBIT as a percentage of net sales (EBIT margin)	*in %*	*7.0*	*6.3*	*11.1*
Net finance costs	in EUR million	-5.6	-8.5	34.1
Consolidated net income before taxes	in EUR million	97.6	83.4	17.0
Consolidated net income	in EUR million	72.4	64.2	12.8

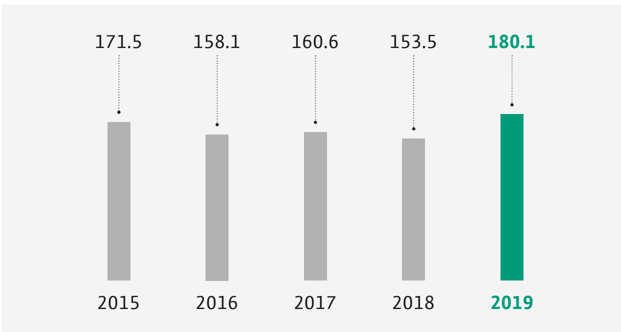
Gross profit fell by EUR 14.3 million year-on-year to EUR 507.5 million. Accordingly, the gross margin declined by 1.4 percentage points to 34.3 percent. This was due in particular to a change in the product sales mix in favour of a lower share of high-margin products and a shift in regional distribution. Firstly, the lower-margin Water Management and Industry market segments recorded significantly above-average growth of 7.0 percent, while there were corresponding shifts in the product mix within the individual market segments. Secondly, net sales declined in regions with higher margins, such as Germany (-1.5 percent) and France (-4.2 percent), while the growth generated in 2019 was primarily in countries with comparatively low margins. The cost of sales also increased as a result of higher material and component costs due to exchange rate effects as well as higher depreciation following the commissioning of new production facilities and tools, among other things. The savings generated through cost reduction measures and increased selling prices partially offset the negative impact of the changed product and regional mix and the higher cost of sales.

Selling and administrative expenses were reduced significantly by 3.7 percent or EUR 13.9 million year-on-year to EUR 359.3 million. The future-proofing and growth- and savings-oriented reorganisation projects initiated in the previous year and initiatives to strengthen sales efficiency had the desired effect and achieved considerable savings in 2019.

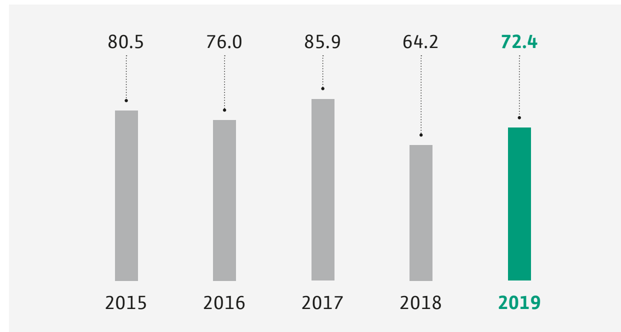
As a customer-focused premium provider, the Wilo Group counts on pioneering and innovative product and technology developments. Research and development therefore play a central role at Wilo. Total spending on research and development, i.e. all research and development costs including capitalised development costs, amounted to EUR 67.6 million in the year under review (previous year: EUR 66.3 million). At 4.6 percent of net sales (previous year: 4.5 percent), it remains very high. Research costs recognised in profit or loss and non-capitalised development costs amounted to EUR 50.3 million (previous year: EUR 50.7 million). This equates to a slight decrease of 0.8 percent.

Operating earnings before interest, taxes, depreciation and amortisation (EBITDA) therefore increased by EUR 26.6 million to EUR 180.1 million. Accordingly, the EBITDA margin (ratio of EBITDA to net sales) rose from 10.5 percent in the previous year to 12.2 percent in the 2019 financial year. The substantial recovery in EBITDA was due to the high level of savings as a result of the cost-cutting measures in the previous year. Other operating income also improved significantly by EUR 11.2 million, from minus EUR 5.9 million to plus EUR 5.3 million. Net foreign-currency income from operating activities improved by EUR 2.5 million. The previous year was also characterised by expenses in connection with reorganisation and sales efficiency improvement measures. Another positive effect of around EUR 15 million resulted from the initial application of IFRS 16 “Leases”. Since 1 January 2019, all right-of-use assets under leases have been recognised in the statement of financial position and depreciated on a straight-line basis over the term of the lease.

EBITDA
in EUR million



Consolidated net income
in EUR million



The Wilo Group selected the modified retrospective approach for the initial application of IFRS 16 "Leases", meaning it did not restate the prior-year figures. Accordingly, depreciation and amortisation increased compared with the previous year.

The net finance costs of the Wilo Group improved by EUR 2.9 million, from minus EUR 8.5 million in the previous year to minus EUR 5.6 million in the year under review. The net result from the utilisation and remeasurement of derivative financial instruments increased significantly year-on-year by EUR 4.9 million to plus EUR 1.4 million. The opposite was true of net interest income, which deteriorated by EUR 1.8 million to minus EUR 5.1 million as a result of the higher debt volume as well as the initial application of IFRS 16 and the corresponding recognition of the interest portion.

Income taxes amounted to EUR 25.2 million (previous year: EUR 19.2 million). Current tax expense fell slightly, from EUR 26.1 million to EUR 25.2 million. Deferred tax income and expenses offset each other. While deferred tax expenses for the origination and reversal of temporary differences increased slightly, the level of deferred tax assets recognised for tax loss carryforwards in the year under review was significantly lower than in the previous year, meaning that deferred tax income declined accordingly.

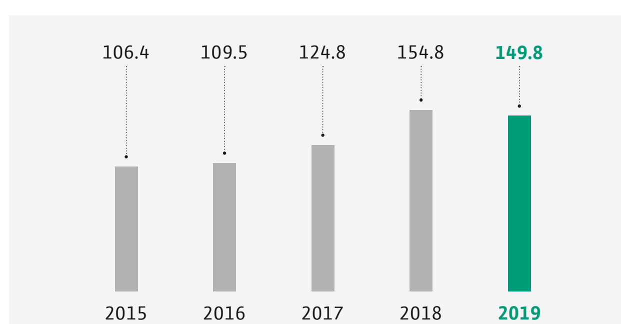
Consolidated net income grew by EUR 8.2 million to EUR 72.4 million. As a result, earnings per ordinary share increased to EUR 7.38 after EUR 6.55 in the previous year. The return on sales, which describes the Wilo Group's ratio of consolidated net income to net sales, improved from 4.4 percent in the previous year to 4.9 percent in the year under review.

Cash flows

Capital expenditure

Capital expenditure on intangible assets and property, plant and equipment (not including company acquisitions and leases) was again extremely high at EUR 149.8 million in the year under review. To support the overarching strategic objective of generating long-term profitable growth, the Wilo Group enhanced its capacities and structures for products and distribution and implemented new technologies. Investment again focused on the construction and expansion of new and existing sales and production locations, the targeted expansion and continuous modernisation of production capacities, the establishment of structures as part of the digitalisation of the Wilo Group, and new manufacturing technologies.

Capital expenditure on intangible assets and property, plant and equipment[1)]
in EUR million



1) excluding leases

In addition, WILO USA LLC acquired the operations of the pump manufacturer American-Marsh Pumps along with net assets of EUR 5.9 million as part of the Wilo Group's M&A activities. The acquisition did not result in any goodwill. The acquisition has expanded the Wilo Group's production capacities in the USA, allowing it to offer an even wider range of high-quality products made in the USA. Investments including company acquisitions therefore amounted to EUR 155.7 million in the past financial year.

In 2019, the majority of capital expenditure for the modernisation and adjustment of production capacity was again attributable to the locations in Germany and France. Capital expenditure on property, plant and equipment and intangible assets including capitalised development costs at these locations totalled EUR 128.8 million. This corresponds to more than 85 percent of the Wilo Group's total capital expenditure in the year under review and reflects the particular importance of the Group's Western European locations in terms of its strategic focus. With these future-oriented investments, the Group is seeking to actively strengthen these locations even further. In previous years, priority was given to the expansion of the production and sales locations in the high-growth markets of Korea, China, India, Turkey and Russia. In this way, the Wilo Group actively laid the foundations for participating in the significant growth potential of these markets.

Capital expenditure in the past financial year again primarily related to the strategic location development project at the Wilo Group's headquarters in Dortmund, where the Wilo Group is constructing a state-of-the-art Smart Factory at which significant elements of the Industry 4.0 vision are being realised, among other things. The project also involves the construction of a modern office building that will be home to around 500 head office employees from 2020. The main construction work on the Smart Factory was completed in the year under review, the relocation of production facilities to the new factory has begun and the first production lines have gone live. Construction and expansion work on the administrative building and the associated thoroughfares and parking spaces continued as planned.

With a view to current and future changes in the product portfolio and further improvements in cost efficiency, the Wilo Group also invested in corresponding production capacities. Among other things, the Smart Factory in Dortmund was fitted with an automated small parts warehouse and new, modern systems for component production that offer a high degree of automation and efficiency gains thanks to their superior manufacturing technology. This will allow Wilo to generate substantial cost savings in future. In addition, a large portion of the investments again went on the expansion of IT infrastructure as part of the digital transformation. Development costs including borrowing costs were capitalised in the amount of EUR 17.7 million (previous year: EUR 16.9 million). Notable investments were also made in the expansion of the sales locations in Romania and Italy.

Capital expenditure on intangible assets and property, plant and equipment (not including company acquisitions and leases) broke down as follows in the 2019 and 2018 financial years:

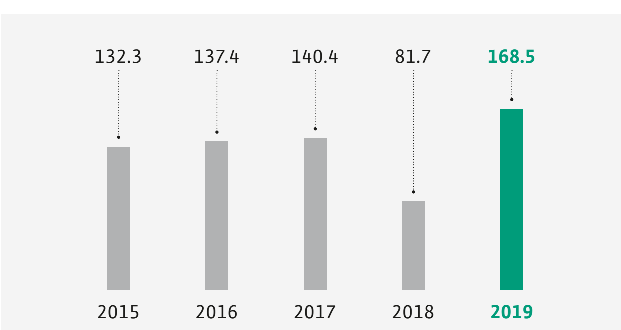
Capital expenditure on intangible assets and property, plant and equipment

EUR million	**2019**	2018	Change
Capital expenditure on intangible assets	**23.0**	**24.8**	**-1.8**
Land and buildings	3.5	21.5	-18.0
Technical equipment and machinery	10.1	8.8	1.3
Operating and office equipment	19.3	21.4	-2.1
Advance payments and assets under construction	93.9	78.3	15.6
Capital expenditure on property, plant and equipment	**126.8**	**130.0**	**-3.2**
Total	**149.8**	**154.8**	**-5.0**

Cash flow and liquidity

In the 2019 financial year, cash flow from operating activities increased significantly from EUR 86.8 million to EUR 168.5 million. This was mainly due to the pronounced improvement in working capital of EUR 75.0 million. The main reason for this improvement was the reduction in inventories as a result of a Group-wide inventory optimisation project. After adjustment for exchange rate effects, inventories were reduced by EUR 28.0 million compared with a sharp increase of EUR 33.6 million in the previous year. Trade receivables increased only slightly in the year under review, by EUR 2.7 million after adjustment for exchange rate effects, following a significant increase of EUR 22.4 million in the previous year as a result of the substantial expansion of business activities towards the end of the year. The EUR 11.3 million increase in earnings before income and taxes (EBIT) to EUR 103.2 million also contributed to the improvement in the cash flow from operating activities. In addition, another positive effect of around EUR 15 million resulted from the initial application of IFRS 16 "Leases". Payments in connection with leases that were not previously reported in the statement of financial position in accordance with IAS 17 served to reduce cash flow from operating activities in their full amount. Under IFRS 16, these payments are now broken down into interest and principal components. The principal component reduces cash flow from financing activities, as does the interest component, which the Wilo Group has opted to report in cash flow from financing activities. This has therefore had a positive impact on cash flow from operating activities and a negative impact on cash flow from financing activities. The Wilo Group selected the modified retrospective approach for the initial application of IFRS 16, meaning it did not restate the prior-year figures.

Cash flow from operating activities
in EUR million



Net cash used in investing activities increased slightly by EUR 1.8 million to EUR 150.4 million in the year under review. Payments for capital expenditure on intangible assets and property, plant and equipment were down slightly on the high levels recorded in the previous year. However, the acquisition of the operations of American-Marsh Pumps resulted in a cash outflow of EUR 5.9 million in 2019.

Cash flow from financing activities declined by EUR 29.1 million to EUR 11.7 million. An additional EUR 40.0 million of the syndicated loan (previous year: EUR 60.0 million) and EUR 11.5 million of the KfW development loan (previous year: EUR 8.0 million) was drawn down in the 2019 financial year. The EUR 14.8 million dividend payment to the shareholders of WILO SE served to reduce liquidity (previous year: EUR 19.3 million). In addition, repayments of lease liabilities and the corresponding interest payments reduced the cash flow from financing activities by EUR 17.4 million.

The individual cash flows for the 2019 and 2018 financial years were as follows:

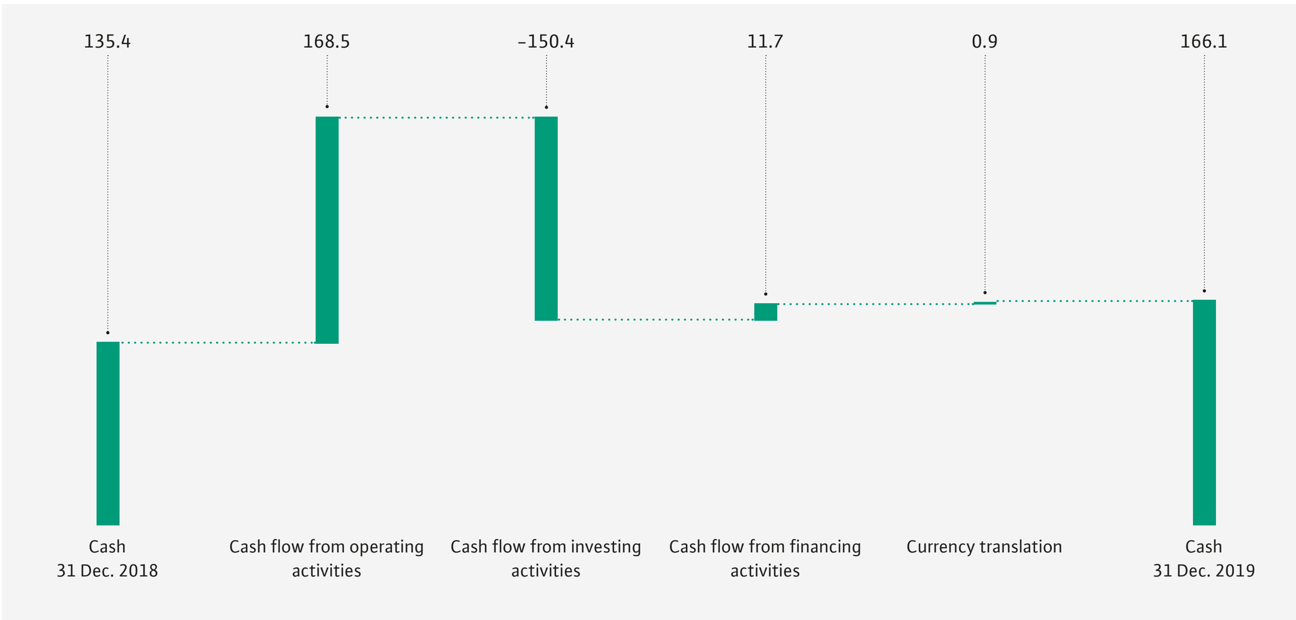
Cash flows

EUR million	**2019**	2018	Change
Cash flow from operating activities	168.5	81.7	86.8
Cash flow from investing activities	-150.4	-148.6	-1.8
Cash flow from financing activities	11.7	40.8	-29.1
Change in cash	**29.8**	**-26.1**	**55.9**
Cash at the end of the financial year	166.1	135.4	30.7
Free cash flow	10.2	-73.1	83.3

Despite the sustained high level of capital expenditure, the Wilo Group generated positive free cash flow of EUR 10.2 million in the 2019 financial year, calculated as the difference between the cash flows from operating and investing activities including interest income and expenses and dividends received. This represents a significant improvement of EUR 83.3 million. The funds generated are available to the Wilo Group to service its capital providers. This means the Wilo Group continues to have a high self-financing capacity.

Including the positive net effects of currency translation in the amount of EUR 0.9 million, cash increased by EUR 30.7 million to EUR 166.1 million as at 31 December 2019.

Change in cash
in EUR million



Financial management

The goal of financial management is to maintain the financial independence of the company, ensure liquidity at all times and support the operating activities of the Wilo Group. In addition to its operating cash flow, the Wilo Group has sufficient financing facilities from international banks for this purpose, consisting of short and medium-term cash credit facilities as well as guarantee and margin facilities of more than EUR 390 million. This includes a syndicated loan concluded in 2013 with a credit facility of EUR 300.0 million whose term was extended by one year to 2024 during the year under review. Overall, EUR 108.3 million (previous year: EUR 67.3 million) of the cash credit facilities were utilised as at 31 December 2019, of which EUR 105.0 million (previous year: EUR 65.0 million) related to the syndicated loan. Guarantee and margin facilities were utilised in the amount of EUR 24.9 million (previous year: EUR 21.3 million).

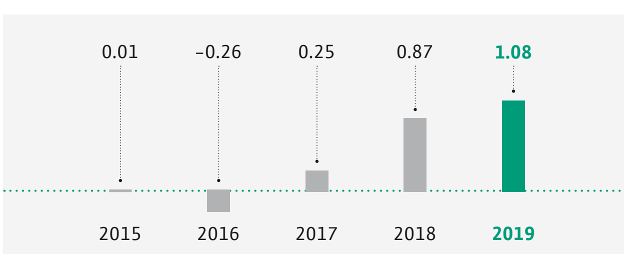
The Wilo Group's financial liabilities increased by EUR 50.4 million to EUR 318.9 million as at 31 December 2019.

Financial liabilities primarily comprise senior notes in the amount of EUR 75.0 million, EUR 37.0 million and EUR 30.0 million. These senior notes, each of which has a ten-year term, were issued by WILO SE in US private placements in 2011, 2013 and 2017. The Group also has a promissory note loan with a volume of EUR 25.0 million, which was taken out in 2011 and will be repaid in instalments until 2020. This promissory note loan had a carrying amount of EUR 2.5 million as at 31 December 2019 (previous year: EUR 5.0 million). An additional promissory note loan with a volume of EUR 50.0 million and a term of ten years was taken out in 2017. This loan will be repaid in instalments from 2022. In addition, a KfW development loan of EUR 19.5 million with a term of ten years was concluded in 2017 to finance the administrative building as part of the construction project at the Dortmund location. The loan amount has been drawn down since 2018 according to the progress of construction. It will be repaid in instalments after two redemption-free years. The KfW development loan was drawn down in full as at 31 December 2019 (previous year: EUR 8.0 million).

The Wilo Group operates active portfolio management with regard to the origin, type and maturity structure of its borrowings. Financing policy focuses primarily on both return and security targets.

WILO SE currently expects to be able to repay the tranches of the senior notes and promissory note loans, other loan liabilities and overdrafts on maturity from its budgeted cash flows from operations, as well as through refinancing measures as required. There is no indication that the volatility and deterioration of the global economic and financial market environment could have a material negative impact on the Wilo Group's financing activities. As at 31 December 2019, cash amounted to EUR 166.1 million (previous year: EUR 135.4 million). The Wilo Group's leverage, which describes the ratio of the net financial position (financial liabilities and lease liabilities less cash) to consolidated EBITDA, increased from 0.87 at the end of the previous year to 1.08 as at 31 December 2019, largely as a result of the initial application of IFRS 16 and the resulting recognition of lease liabilities as well as the assumption of additional financial liabilities. The Wilo Group selected the modified retrospective approach for the initial application of IFRS 16, meaning it did not restate the prior-year figures.

Leverage



→ *More detailed information on the financing structure can be found in note (9.10) to the consolidated financial statements on* ***page 111 et seq***.

Financial position

The Wilo Group's total assets increased by 10.1 percent or EUR 150.6 million year-on-year to EUR 1,641.4 million as at 31 December 2019. Non-current assets rose by 18.5 percent or EUR 142.1 million to EUR 909.3 million. This was attributable in particular to capital expenditure on intangible assets and property, plant and equipment in the amount of EUR 149.8 million. Investments in property, plant and equipment of EUR 126.8 million mainly related to location development in Dortmund and new manufacturing technologies. The Wilo Group also invested EUR 23.0 million in intangible assets, of which EUR 17.3 million related to capitalised development costs plus capitalised borrowing costs of EUR 0.4 million. As part of the initial application of IFRS 16 "Leases", right-of-use assets of EUR 39.2 million were also recognised in property, plant and equipment as of 1 January 2019. The Wilo Group also assumed property, plant and equipment of EUR 3.4 million as part of the acquisition of the operations of American-Marsh Pumps. Positive exchange rate effects also resulted from the remeasurement of intangible assets and property, plant and equipment originally held in foreign currency in the amount of EUR 5.4 million. Amortisation of intangible assets and depreciation of property, plant and equipment amounted to EUR 76.9 million in the year under review. Intangible assets and property, plant and equipment therefore increased by EUR 131.1 million in net terms. Deferred tax assets rose by EUR 12.4 million to EUR 85.7 million. This was mainly attributable to the recognition of deferred taxes on pension and lease liabilities and tax loss carryforwards.

The carrying amount of current assets increased slightly by 1.2 percent or EUR 8.5 million year-on-year to EUR 732.1 million as at 31 December 2019. Inventories – excluding the inventories assumed as a result of the acquisition of American-Marsh Pumps – declined significantly by 9.9 percent or EUR 26.2 million as a result of a Group-wide inventory optimisation project. All in all, inventories fell to EUR 243.1 million.

Current trade receivables increased slightly by 1.6 percent or EUR 4.6 million to EUR 288.5 million. Working capital was reduced by 4.7 percent overall to EUR 360.6 million. Cash amounted to EUR 166.1 million as at 31 December 2019 and was thus EUR 30.7 million higher than at the end of the previous year.

The Wilo Group's equity increased by 7.3 percent or EUR 54.0 million year-on-year to EUR 792.4 million as at 31 December 2019. This was mainly due to the consolidated net income of EUR 72.4 million for the 2019 financial year. Equity also increased due to positive effects of EUR 6.6 million from the translation of subsidiaries' separate financial statements prepared in local currencies. The scheduled dividend payment to the shareholders of WILO SE served to reduce equity by EUR 14.8 million. Equity was also reduced by actuarial losses on pension obligations after deferred taxes in the amount of EUR 7.0 million. The equity ratio declined slightly from 49.5 percent to 48.3 percent, primarily as a result of the additional financial liabilities assumed in the financial year.

Equity ratio
in %

As at 31 December 2019, non-current liabilities in the amount of EUR 395.5 million primarily consisted of financial liabilities in the amount of EUR 205.4 million and provisions for pensions and similar obligations of EUR 91.1 million. Provisions for pensions and similar obligations increased by EUR 11.1 million in the year under review. This was due in particular to the reduction in the discount rate from 2.05 percent to 1.20 percent. Non-current other financial liabilities rose by EUR 25.3 million to EUR 32.5 million. This was primarily due to the recognition of non-current lease liabilities as a result of the initial application of IFRS 16 "Leases" with effect from 1 January 2019. Deferred tax liabilities rose by EUR 9.2 million to EUR 58.9 million. This was largely due to capitalised development costs and right-of-use assets arising from leases, for which corresponding deferred tax liabilities were recognised.

The carrying amount of current liabilities rose by EUR 43.4 million year-on-year to EUR 453.5 million as at 31 December 2019. On the one hand, current financial liabilities increased by EUR 43.1 million to EUR 113.5 million, largely as a result of the utilisation of the syndicated credit facility to finance the location project in Dortmund, among other things. On the other hand, current other financial liabilities rose by EUR 6.4 million to EUR 42.3 million, particularly due to the recognition of current lease liabilities as a result of the initial application of IFRS 16 "Leases" with effect from 1 January 2019. Conversely, current other liabilities declined by EUR 12.8 million to EUR 78.8 million. The previous year was characterised by reorganisation measures. Moreover, income tax liabilities declined compared to the previous year.

The net assets of the Wilo Group were as follows as at 31 December 2019 and 2018:

Financial position

EUR million	**2019**	**%**	2018	%
Non-current assets	909.3	55.4	767.2	51.5
Inventories	243.1	14.8	264.5	17.7
Current trade receivables	288.5	17.6	283.9	19.0
Cash	166.1	10.1	135.4	9.1
Other current assets	34.4	2.1	39.8	2.7
Total assets	**1,641.4**	**100.0**	**1,490.8**	**100.0**
Equity	792.4	48.3	738.4	49.5
Non-current liabilities	395.5	24.1	342.3	22.9
Current trade payables	173.0	10.5	172.3	11.6
Other current liabilities	280.5	17.1	237.8	16.0
Total equity and liabilities	**1,641.4**	**100.0**	**1,490.8**	**100.0**

Statement by the Executive Board on the economic situation

In a challenging and demanding macroeconomic environment, the Wilo Group increased its net sales for the tenth year in succession. Net sales reached a new record of EUR 1,477.8 million. In light of the difficult and uncertain political and macroeconomic situation in conjunction with an economic slowdown that was more pronounced than anticipated, the Executive Board considers the course of business in 2019 to be very successful on the whole.

The world economy slowed to a greater extent than expected in 2019 as a result of the escalating trade disputes and geopolitical crises and the associated uncertainty. The global economy was hit by a significant and regionally far-reaching downturn that affected the industrialised nations and the typically high-growth developing and emerging economies in equal measure.

The monetary policy turnaround initiated by the US Federal Reserve with a relaxation of interest rates in the summer helped to prevent an even more substantial weakening of the world economy. International economic development in 2019 was also characterised by two separate trends in the industrialised nations. Domestic demand in the form of private consumption and lively construction activity was barely impacted by the downturn, whereas many industrial sectors slipped into recession. This made 2019 a particularly challenging year for international companies like Wilo.

Wilo achieved net sales growth of 1.0 percent in 2019. The original growth target of around 5 percent was not achieved on account of the unexpectedly pronounced global economic slowdown. The fact that the Wilo Group was able to expand once again even in this difficult and uncertain economic environment can be attributed to its clear strategic orientation and the high level of commitment throughout the entire Wilo team.

Wilo generated outstanding growth in 2019 in the markets of Eastern Europe, particularly Russia and Poland, as well as in India and North and Latin America. This shows that the strategy of broad regional diversification is paying off. Risks and downturns in net sales in individual markets are offset by positive developments in other regions.

Another notable achievement in 2019 was the significantly above-average growth in the Water Management segment and in products, systems and solutions for cold water applications. More than half of Wilo's business activities now involves non-heating applications. The megatrends of urbanisation, climate change and water shortage that are strategically addressed by the Wilo Group are contributing to this success and are also opening up significant growth potential for the future.

The Executive Board revised the system of management-relevant key performance indicators in 2019 as part of a continuous review and optimisation of the controlling system. The core indicators were harmonised to an even greater extent and aligned with the specific requirements of Ambition 2025. As a result, earnings power is now no longer based primarily on EBIT and the EBIT margin, but on operating earnings before interest, taxes, depreciation and amortisation, i.e. EBITDA and the EBITDA margin. EBITDA and EBIT both saw double-digit growth in excess of 10 percent. EBITDA achieved a new record of EUR 180.1 million, representing a year-on-year increase of EUR 26.6 million or 17.3 percent. The corresponding EBITDA margin, which describes the ratio of EBITDA to net sales, improved by 1.7 percentage points to 12.2 percent. The Executive Board sees this as an outstanding success, not least in light of the difficult environment. EBIT also improved by a significant 12.3 percent compared with the previous year. At 7.0 percent, however, the EBIT margin failed to meet the Executive Board's expectations as a result of the weaker than expected revenue development and in some cases substantial shifts in the regional and product mix.

One of the main reasons for the improvement in profitability was the significant savings achieved as a result of the cost-cutting measures in the previous year. In light of the uncertain outlook for the coming years and the intense competitive environment, the Executive Board will continue to analyse cost drivers and optimise structures in a targeted manner. Short-term declines in profitability are only accepted if they serve to secure the company's future viability and strengthen its performance in the long term. A high level of profitability resulting in substantial operating cash flows is the only way for the Wilo Group to realise its ambitious growth projects and ensure that it retains a high degree of independence as a company.

Wilo again invested significantly in the year under review, with investments in excess of EUR 155 million. This corresponds to over 10 percent of net sales. Wilo's focus on the future is underlined by its investment activity over the last ten years, with capital expenditure of around EUR 1 billion in the past decade. Investment activity focused on the future-oriented expansion of production capacities, the extension of the sales infrastructure and the acquisition of companies in various countries as well as the company's own digital transformation.

These investments required and will continue to require financing. With a solid statement of financial position and financing structure and a high self-financing capacity with strong operating cash flows, the Group has stable foundations for achieving this. In the past financial year, the Wilo Group more than doubled its cash flow from operating activities to over EUR 168 million. This significant year-on-year improvement was achieved thanks to targeted measures to optimise working capital – particularly inventories – and various initiatives for improving profitability.

With the acquisition of American-Marsh Pumps in the fourth quarter of the year under review, the Wilo Group made further progress in sustainably strengthening its US activities and developing them into the most profitable in the Group. The expansion of production capacities and the product portfolio in the USA will leverage numerous synergies and allow the local market to be served even more efficiently and in line with customer requirements.

A key milestone in the digital transformation of the Wilo Group was achieved with the completion of construction work and the commissioning of the first production lines at the new Smart Factory in Dortmund. Pumps have been manufactured at the state-of-the-art production facility since the end of 2019. Smart production not only connects machines and workstations, but the Smart Factory is an emblem of Wilo's pioneering spirit that offers an ideal environment for creativity, future-oriented work and new ideas. By the time of Wilo's 150th anniversary in 2022, production, administration, customer service and product development will have been brought together again at the headquarters in Nortkirchenstrasse within a new structure – the WiloPark. The new, modern administrative building is already set to open in April 2020. In past years, Wilo made major investments outside Germany in particular, including in India, China, Korea, Turkey and Russia. With the creation of the WiloPark, the Executive Board is issuing a clear and positive statement that Germany as a location and securing jobs at the headquarters in Dortmund are top priorities for Wilo.

In light of the extremely challenging environment in 2019 and the specific factors for the Wilo Group's business, the Executive Board has a broadly positive assessment of the company's business performance and economic situation in terms of the growth generated, its strong operating cash flow, its strong market presence and innovative capacity and its solid financing structure.

Although the improvement was less pronounced than expected due to the circumstances discussed above, the Executive Board considers the development of operating profitability in the form of the EBITDA margin to be a success.

In summary, the Executive Board still considers the economic situation of the Wilo Group to be highly stable and sustainable. This assessment is based on the results in the consolidated financial statements and the separate financial statements of WILO SE for 2019 and takes into account business performance up until the preparation of the 2019 Group management report. At the time of this Group management report being prepared, business performance in early 2020 is in line with the Executive Board's expectations.

The 2020s have begun, and the Executive Board is not only looking back with pride at a successful 2019 financial year, but also looking back on a exciting and highly successful decade. The Wilo Group has increased its net sales by an outstanding 60 percent over the past ten years. With its stable ownership structure, financial strength, innovative power, clearly defined strategy and dedicated managers and employees, the company is extremely well positioned to master the immense challenges of the future and the various scenarios the next decade will present. In recent years as well as in the 2019 financial year, Wilo has established highly solid foundations that will allow it to continue on its desired path of profitable growth in the coming decade.

REPORT ON RISKS AND OPPORTUNITIES

- **Integrated risk management system provides transparency and security**
- **Systematic identification and realisation of operational and strategic opportunities**
- **Overall risk situation largely unchanged year-on-year**
- **No risks that could jeopardise the future of the company**

Risk and opportunities policy

The Wilo Group's corporate strategy and business policy are primarily aimed at ensuring the independence of the company, growing profitably and increasing enterprise value in the long term. As an enterprise with global operations, the Wilo Group is exposed to various risks. At the same time, however, the global focus also gives rise to numerous opportunities. In this respect, business activity requires the careful monitoring of all relevant risks and opportunities. As a matter of principle, the Executive Board makes its strategic and operational decisions on the basis of a systematic analysis and assessment of identified risks and opportunities with regard to the income, financial and liquidity situation of the Wilo Group in addition to future development. Risks that could jeopardise the future of the company as a going concern, or that are inappropriately high or unclear, are categorically not entered into.

Accordingly, the comprehensive and systematic risk management system that is installed throughout the entire Wilo Group and the forward-looking procedure for managing opportunities are fixed components of corporate management.

Opportunities management

The systematic identification and realisation of operational and strategic opportunities is essential for promoting and ensuring the profitable growth that is the aim of the corporate strategy.

As opportunities management is not directly integrated into the risk management system, opportunities are not assessed in line with the methodology prescribed by risk management.

Instead, the Wilo Group identifies and assesses operational opportunities directly in the regions, market segments and central functions, where the respective markets are monitored and analysed. This allows trends and new developments to be recognised at an early stage and any potential opportunities to be derived. These are then evaluated in detail as part of the planning process and incorporated directly into medium-term planning via scenario calculations. Resources are coordinated and allocated at Group level.

Opportunities of elevated strategic significance arising from acquisitions or partnerships are analysed, assessed and implemented at Executive Board level, as are changes in strategy.

The risks and opportunities potentially arising from the relevant global megatrends for the Wilo Group and the accompanying implications for the company are derived and analysed as part of the corporate foresight process. In this way, the corresponding opportunities are systematically included in the ongoing development of the corporate strategy.

Risk management system

The Wilo Group has a state-of-the-art, integrated, globally available risk management system. It ensures that business risks are identified at an early stage and effective countermeasures are initiated promptly. Monitoring of the measures initiated and their consistent implementation is a key component of this system. Once identified, risks are assessed, managed as far as possible, and monitored at all times. The risk management system is audited annually by Internal Audit on the basis of Audit Standard No. 2 promulgated by Deutsches Institut für Interne Revision (DIIR).

Risk management at the Wilo Group is organised on a decentralised basis. Level-two managers throughout the Group who act as risk management officers are responsible for risk tracking and reporting. They work in close cooperation with the Group risk manager and are aided by Controlling. Checklists and risk classification ensure uniform risk assessment and procedural compatibility throughout the entire Wilo Group. The relevant communication and information platform is provided by software in line with Group requirements.

The Executive Board bears overall responsibility for risk management and defines the risk strategy for the Wilo Group. Risk strategy is implemented throughout the Group using uniform guidelines and processes.

Integral components of the risk management system are:

- the Risk Management Directive
- the risk atlas
- risk management officers in the regions and central functions
- the Group risk manager
- regular risk reporting
- ad hoc risk reporting

The Risk Management Directive of the Wilo Group sets out the principles for handling risks. It also stipulates the requirements for risk reporting, procedures for the measurement of risk and compulsory reporting thresholds. Furthermore, it defines the duties and authorisations of all persons involved in the risk management process.

The risk atlas sets out uniform categories to be used for the structuring of risk identification. To ensure that all relevant risk areas are tracked at all times, the risk atlas is checked for completeness on an ongoing basis and adjusted as required.

The respective risk management officers of the Wilo Group ensure that risks are tracked and controlled in the divisions for which they are responsible. In this way, specific risks are identified and reported on for the individual sales regions and central functions. The Group risk manager coordinates this decentralised risk management process and reports regularly to the WILO SE Executive Board on a quarterly basis and on an ad hoc basis as necessary.

As part of risk identification, information on customers and suppliers is analysed and market and competition analyses are prepared in line with the respective data protection regulations and for internal purposes only. Furthermore, risks relating to the political and macroeconomic environment are monitored and assessed.

The risks identified are analysed using a uniform methodology set out by the Risk Management Directive. The specific probability of occurrence (in the next twelve months), gross and net risk are calculated for each identified risk. The net risk takes into account measures to prevent or mitigate risk. The aim of these measures is to reduce the potential loss or the probability of occurrence. Where possible and economically feasible, risks are limited at the Wilo Group by insurance policies or, for financial risks, by the use of suitable derivative financial instruments. The Risk Management Directive also defines binding reporting thresholds. It stipulates that the risk management officers must report every risk for which the net potential loss exceeds a defined value regardless of the probability of occurrence.

The risks reported by the divisions are aggregated at Group level in the risk management system. The Executive Board receives quarterly and, if necessary in individual cases, immediate reports on the findings of risk analyses. In addition, the Supervisory Board and the Audit Committee it appoints are comprehensively and constantly informed of the status and development of the risk management system.

The basic aim of this controlling system is to keep the Wilo Group's overall risk exposure transparent and within acceptable business limits.

Risk classification and risk assessment

The sections below describe the key risks to the Wilo Group. Suitable countermeasures, hedges and the general conditions are taken into account in calculating the respective probability of occurrence and potential loss.

The risks, their probabilities of occurrence and their possible financial impact on EBIT are measured and classified as follows:

Probability of occurrence	
Unlikely	≤ 20%
Possible	> 20% ≤ 50%
Likely	> 50%

If the probability of occurrence of a potential risk is between 20 percent and 50 percent, the corresponding risk is classed as possible. A potential risk is considered likely if the possibility of the risk actually occurring is higher than 50 percent and unlikely if the possibility is no greater than 20 percent.

Potential negative impact on EBIT	
Low	≤ 10%
Medium	> 10% ≤ 50%
High	> 50%

Overview of business risks

	Probability of occurrence	Potential negative impact on EBIT
General risks		
Economic environment	Possible	Medium
Extraordinary external disruptions	Possible	Medium
Legal and regulatory environment	Possible	Medium
Industry-specific risks		
Competition	Possible	Medium
Company-specific risks		
Research and development	Possible	Low
Production	Unlikely	Medium
Human resources	Possible	Low
Information technology	Unlikely	Medium
Acquisitions and strategic partnerships	Possible	Medium
Financial risks		
Exchange rates	Likely	Low
Interest*	Possible	None
Commodities	Possible	Low
Defaults	Possible	Low
Financing and liquidity	Unlikely	Low

* The possible impact of interest rate risk relates to net financial costs and is classed as low.
More detailed information can be found in the “Financial risks and opportunities” section of the Group management report.

In the event of the assumed occurrence of a risk, the possible financial impact on EBIT that can be derived is classified into one of the three categories low, medium or high based on the forecast percentage deterioration of EBIT. An EBIT deterioration of between 10 percent and 50 percent is considered a medium earnings impairment. An earnings reduction that is feasible but considered low would therefore have an estimated negative effect on EBIT of up to 10 percent, while a high financial impact would be an expected negative effect of more than 50 percent.

The overarching risk classification in the Wilo Group’s risk profile as summarised in the “Overview of business risks” table did not change compared with the previous year.

General risks and opportunities

Economic environment

Economic and market risks can arise due to general economic, political and social trends. The specific development of the construction sector and the sanitary industry in the respective countries and regions is considered particularly important in terms of industries. The Wilo Group is dependent on these developments to a significant extent. However, the broad international presence of the Wilo Group also helps to balance risk between activities in individual regions.

On account of the uncertainties and risks involved, the Wilo Group carefully observes and continuously analyses economic developments and expectations from a macroeconomic and political perspective as well as with a view to developments in its customers' industries. This allows corresponding countermeasures to be taken at an early stage where necessary in order to secure the current or planned future economic situation of the Wilo Group to the best possible extent. In particular, this involves specific country risks, which are minimised by way of targeted countermeasures. Although the conditions on the global markets remain extremely uncertain in some cases, meaning that future expectations are subject to risk, selected markets in Asia, Latin America and Africa offer extremely good growth opportunities. However, these populous, high-growth markets also involve heightened risk. The Wilo Group reduces its risk potential considerably by adopting targeted organisational changes, expanding and upgrading local production capacity, optimising their use and leveraging synergies.

Growth in the world economy slowed considerably in 2019. The trade conflicts meant that growth momentum declined in the industrialised nations as well as in the developing and emerging economies. Economic researchers expect 2020 to see a slight upturn in world trade and a stabilisation in the global economy, although the underlying trend will remain weak. Forecasts remain subject to considerable uncertainty. The potential spread of the coronavirus epidemic, the sharp rise in government and private debt around the world and nationalism and protectionism all represent major political and economic risk factors. In addition, the expansion of the US trade conflicts to Europe cannot be ruled out. The geopolitical crises in North Africa and the Middle East also remain unresolved. Although Brexit has now taken place, the economic consequences are still unclear. In this combination of circumstances, there is a possibility that an escalation in risk or a renewed turnaround in interest policy could lead to upheaval on the capital markets with a corresponding impact on the real economy. The Wilo Group is closely monitoring these developments and, if necessary, will selectively adjust business policy decisions in a timely manner in order to limit the financial risks to the Group and reassess the opportunities.

All in all, the Wilo Group considers the potential negative impact of the economic environment on the company's results of operations to be moderate (medium earnings impact according to risk classification).

Extraordinary external disruptions

As a globally operating group of companies, Wilo is exposed to various external risks. Natural disasters, terrorist attacks, epidemics, fire and political unrest can potentially impair business activity at the affected location. The Wilo Group classifies the probability of occurrence of extraordinary disruptions as possible. Targeted measures have been taken to minimise the potential impact of the current coronavirus epidemic, geopolitical crises in individual countries and regions and the relevant forecast risks for the Wilo Group's business. In the event of a further escalation, additional steps will be taken to limit the risk to which the Group is exposed. To the extent possible and reasonable, the Wilo Group is also adequately insured against operational shutdowns and property damage. In addition, Wilo has developed and implemented appropriate emergency plans and preventive measures to minimise the potential negative effects. The Wilo Group classes the earnings effect of extraordinary external disruptions as moderate (medium earnings impact according to risk classification).

Legal and regulatory environment

Material changes in legal conditions and the regulatory environment (e.g. restrictions on trade, tax legislation, product quality, energy efficiency and safety standards) can have a negative or positive effect on the business activities of the Wilo Group.

On the one hand, restrictions on trade could make commodity procurement more difficult or more expensive and the sale of products in certain markets or regions may be restricted. There has been a global rise in protectionist tendencies and an observable rejection of free trade and globalisation. In addition, heightened requirements as a result of product quality or safety standards may lead to increased production or research and development costs.

On the other hand, changes in legal conditions and the regulatory environment can also give rise to opportunities. For example, the introduction or tightening of energy efficiency directives could lead to increased demand for energy-efficient products.

With its broad range of high efficiency pumps, the Wilo Group is in an ideal position to serve the respective markets quickly and comprehensively. The legal conditions and the regulatory environment in all its key markets are continuously observed in order to ensure that it can identify potential problem areas or opportunities at an early stage and quickly adapt its business activities accordingly. The occurrence of risks arising from the legal or regulatory environment is possible. The impact on the Wilo Group's results of operations is considered to be moderate (medium earnings impact according to risk classification).

Urbanisation

The rapid growth of the world's population is unabated; population explosions are being seen in Asia and Africa in particular. The United Nations (UN) expects the Earth will be home to nearly ten billion people in 2050. At the same time, the proportion of the population living in urban conurbations is increasing rapidly worldwide. Over half of all people currently live in cities. The UN estimates that it will be a good two-thirds by 2050. In addition to today's existing cities and metropolitan regions, which are constantly growing, other entirely new cities will be built. The emerging economies, especially in the Asian region, will account for much of this development. This dramatic urbanisation in conjunction with sustained high population growth will go hand in hand with numerous ecological, economic and social challenges. Sustainable and intelligent urban development in these regions is therefore essential. However, the same applies to the growing established conurbations in industrialised nations, which are increasingly modernising and redesigning their urban structures and public networks with a view to environmental and climate protection. Globally, smart cities and smart urban areas are being designed that integrate digital infrastructures in order to make cities more efficient, less wasteful of resources and more social. The megatrend of urbanisation – especially in the shape of smart urban areas – is the source of considerable long-term growth potential for the Building Services Residential and Commercial and Water Management market segments.

Water shortage

Water is a scarce resource in many regions of the world. According to estimates from WHO (World Health Organisation) and UNICEF, 844 million people currently have no access to a rudimentary supply of drinking water. Around 2.3 billion people live without basic sanitation. Water supply and wastewater disposal present an increasing problem, especially in cities that are growing rapidly as a result of urbanisation. The overuse of groundwater reserves there often results in a drop in the water table, while huge quantities of drinking water are lost due to outdated and dilapidated pipe systems. In future, it will therefore be all the more important to use the available resources efficiently and to utilise intelligent technologies for water extraction and purification. Wilo has responded to this megatrend with its products and system solutions in the Water Management market segment and provides professional solutions for the complex requirements for drinking water extraction, water pumping and wastewater transportation and processing, giving rise to substantial growth opportunities in the Emerging Markets in particular.

Climate change & energy shortage

Man-made climate change is becoming increasingly visible and tangible thanks to global warming and the growing incidence of extreme weather conditions. The continued melting of the polar ice caps, rising sea levels and the clustering of droughts and storms are just a few of the expected and already relevant effects of climate change. Drastic action is required worldwide to stop, or at least limit, climate change and its consequences. Almost all countries in the world have now initiated packages of measures aimed at reducing greenhouse gases, particularly in the transport and energy sectors. In addition to the increased use of renewable energies, there is an increased focus on developing and using more energy-efficient processes and technologies. At the same time, the long-term increase in world trade, the drastic growth of cities in the wake of urbanisation and the rapid economic development of emerging economies entail a significant rise in demand for energy. Demand also remains high in the industrialised nations. The global competition for raw materials is coming up against the finite nature of fossil resources such as oil, coal and gas. In this respect, renewable energies have to be used and sustainable energy savings made for ecological, social and economic reasons.

As such, the megatrends of climate change and energy shortage offer substantial growth opportunities for all five of the Wilo Group's market segments in all of the regions in which the company has a presence. In particular, numerous opportunities are arising in urban conurbations, where increasing populations, stricter environmental standards and heightened requirements for energy and resource efficiency are posing new challenges for urban planners. Around the world, innovative urban infrastructures are being created on the basis of smart systems and digital solutions. Demand for forward-looking, resource-conserving products and system solutions will also increase as a result of the tightening of minimum legal standards. Wilo products already offer customers higher energy efficiency throughout the entire operation phase. High-efficiency pumps reduce power consumption by up to 80 percent compared with older, unregulated pumps. Wilo aspires to shape the future as an innovation leader and digital pioneer and to evolve into the leading system provider with tailored, intelligent, and resource-efficient solutions in line with the company's vision. In this way, Wilo is helping to reduce energy consumption and hence lessen the impact of CO_2 on the environment.

Digitalisation

The digital transformation of society, trade and industry is ever-present. The fundamental changes driven by the establishment of new technologies are affecting almost everything. Modern information and communication technologies are finding their way into all areas of life and commerce. New digital technologies are changing traditional production and business processes. Companies' complete value chains are being affected by the digital transformation (Internet of Things, Industry 4.0). Established business models are being called into question and new, innovative business models are emerging. The digital transformation presents significant opportunities for the Wilo Group. In addition to efficiency and productivity improvements and the corresponding optimisation of existing business processes, it also opens up the possibility of new and innovative business models for the pump industry. Digitalising the Wilo Group itself and taking advantage of the resulting opportunities requires a fundamental and sustainable reorganisation of the value chain and business processes. To this end, Wilo has defined a digitalisation strategy that is a fixed component of the wider corporate strategy. An interdisciplinary group of experts has been specially formed within the company in order to drive the Wilo Group's digital transformation in a targeted, strategic manner.

Wilo expects the digitalisation of the company to have a positive impact on its business activities in the medium to long term. The smart urban areas emerging around the world have been identified as a particular source of business potential in this context. The Wilo Group is systematically tapping into new business areas here.

Industry-specific risks and opportunities

Competition

Competition risk remained largely unchanged compared with the previous year. Although the growing price competition involves uncertainties, the Wilo Group mainly mitigates these risks by making increased use of product lines with unique selling propositions. It also ensures a high level of competitive capability through its technological edge, particularly in the area of energy efficiency and digitalisation, and through its outstanding product quality and extensive global network. The occurrence of competition risks is possible. Wilo rates the risk of earnings effects for the Group that emerge from the competitive environment and differ from corporate planning as moderate (medium earnings impact according to risk classification).

Technological progress in building management

Manufacturers and consumers are increasingly focusing on smart living. In smart homes, everyday devices and systems in private households are electronically integrated in order to combine higher energy efficiency with greater convenience, economic efficiency, flexibility and safety. The devices and systems can be controlled and accessed centrally and remotely. Smart homes offer attractive growth opportunities for the Building Services Residential and Building Services Commercial market segments. Wilo has wide-ranging systems and solutions expertise in this area. The opportunities arising from this can positively influence the business activities of the Wilo Group in the medium to long term.

Company-specific risks and opportunities

Research and development

Wilo is firmly committed to technological progress. The company invests continuously and with great commitment in the development of new technologies and products to strengthen its market position. In 2019, research and development costs including capitalised development costs amounted to 4.6 percent of consolidated net sales. In order to identify the opportunities of new technologies at an early stage, Wilo conducts regular technology screening and maintains continuous dialogue with universities and research institutions. The Wilo Group limits the risk of paying insufficient attention to customer requirements in the development process with customer surveys, trend analyses and targeted market tests.

The effectiveness and target conformity of all development activities are examined continuously. The purpose of this is to minimise qualitative, time and financial risks in development projects. Professional project management and regular deviation analyses ensure a constant focus on customer requirements. Binding Group-wide standards and guidelines are applied here. The occurrence of risks from research and development is possible, but the impact on the results of operations of the Wilo Group is considered low.

Production

Quality risk is mitigated by the uniform Group-wide production standards of the Wilo Production System (WPS) and by the company's comprehensive quality management. This risk is classed as unlikely. The risk of production stoppages is strictly limited through the use of state of-the-art production plants and professional control systems. The Wilo Group counters procurement risks by way of integrated procurement and supplier management. Supply bottlenecks are primarily prevented by ensuring the availability of second-source suppliers. Insurance is also taken out to offset the financial consequences of business risks of this kind. If such risks occur despite this, the company estimates that this could entail a medium earnings effect for the Wilo Group.

Human resources

One of the basic criteria for the Wilo Group's success is its qualified employees and their expertise, commitment and motivation. The loss of qualified personnel in strategic positions can lead to the loss of company-specific knowledge, capacity bottlenecks or decreased productivity. The Wilo Group counters this risk with methods such as coordinated demographic management. Its core elements are active succession planning and the development of new staff as part of Group-wide talent management. The occurrence of HR risks is generally possible. However, the impact on EBIT is classified as low.

Information technology

All important business processes for the Wilo Group are integrated into efficient IT systems. In extreme circumstances, the failure of key systems or substantial data losses could lead to business interruptions. Wilo mitigates these IT risks with daily backups of critical business data. In particular, the business database aiding production, materials management, order processing, financial accounting and cost accounting in particular conforms to top security standards. The Wilo Group runs its critical business applications in two separate, certified and highly powerful data centres.

Certified processes and business recovery plans are also in place for the event of disasters. An annual monitoring audit is performed to maintain the certificate. System downtime is further minimised by targeted utilisation of an in-house support team and outside service providers. Given these measures, the occurrence of IT risks is unlikely and the earnings effects have been limited to a medium level.

Acquisitions and strategic partnerships

In order to expand its technological spectrum and geographical presence, the Wilo Group also provides for the realisation of external growth opportunities as part of the corporate strategy. The opportunities arising from acquisitions and strategic partnerships are varied and offer additional potential for growth and efficiency. They can also provide access to new sales channels and markets. However, company acquisitions are considered only if they are considered beneficial from both a strategic and economic perspective. With regard to research and development in particular, the Wilo Group enters into strategic partnerships in order to advance joint technology projects. The company cooperates with prominent universities and research institutes in this area.

In addition to the opportunities resulting among other things from the expected synergies, company acquisitions also always entail risks. Accordingly, each investment decision is preceded by a careful assessment and analysis of the commercial, technical, legal, tax and financial conditions (due diligence). The aim is to identify, quantify and limit the risks associated with the acquisition. In addition, an individual strategy for integration into the Wilo Group is developed and corresponding measures are planned and implemented for each acquisition.

Despite this careful examination, risks may emerge after an acquisition that were not identified during the due diligence process, not considered to be material or not accurately quantified. In addition, the identified benefits and synergies may not occur to the expected extent, within the expected timeframe, or at all. The integration process may be more difficult and cost-intensive than expected, thereby jeopardising the realisation of the planned goals and synergies. If business develops more poorly than expected in the long term, the necessary goodwill impairment may have an impact on earnings.

The occurrence of risks arising from acquisitions and strategic partnerships is generally possible. The Wilo Group considers the corresponding impact on its earnings to be moderate (medium earnings impact according to risk classification).

Financial risks and opportunities

Exchange rates

The company's global presence makes it important to manage changes in exchange rates. Currency risk for the Wilo Group primarily results from its operating and financing activities. Wilo limits currency risk, which largely relates to the supply of goods and services to Group companies, through same-currency offsetting transactions and derivative financial instruments.

The occurrence of exchange rate risks from the operating activities of Group companies with third-party customers and suppliers is probable, but the Wilo Group rates the associated earnings impact as low. These activities are predominantly transacted in local currency.

Currency risk from financing activities results above all from foreign-currency borrowing from third-party lenders. Foreign-currency loans are also granted to Group companies for financing purposes. Wilo uses derivative financial instruments to reduce such currency risks.

To prepare the consolidated financial statements, the annual financial statements of the subsidiaries that are based outside the euro area, or whose functional currency is not the euro, are translated into the reporting currency (euro). Changes in the average exchange rate of a currency can therefore notionally influence both net sales and income as a result of translation.

However, this translation risk is not associated with any effects on the cash flows in local currency.

Overall, the occurrence of currency risks is considered likely, but the Wilo Group classes the associated impact on earnings as low. ➔ *Further information on currency risks in accordance with IFRS 7 and a corresponding sensitivity analysis can be found in section (12) "Risk management and derivative financial instruments" on **page 124 et seqq.** of the notes to the consolidated financial statements.*

Interest

The interest rate risk mainly results from floating rate financial liabilities and the investment of cash. Both rises and falls in the yield curves result in interest rate exposure. The Wilo Group mitigates adverse changes in value from unexpected interest rate movements by using derivative financial instruments on a case-by-case basis. The occurrence of interest rate risk is considered possible, and the impact on net finance costs is rated as low as most financial liabilities have fixed long-term interest rates. On the other hand, favourable interest rate developments in connection with the investment of cash could have a positive effect on net interest income. Group Treasury monitors and analyses developments on the financial markets in order to optimise the balance between liquidity retention and the investment of cash in term money or debt instruments with an excellent credit standing and a maximum time horizon of up to two years. ➔ *Further information on interest rate risks in accordance with IFRS 7 can be found in section (12) "Risk management and derivative financial instruments" on **page 126** of the notes to the consolidated financial statements.*

Commodities

The Wilo Group is mainly exposed to commodity price risk as a result of price fluctuations on the global markets for copper, aluminium, stainless steel and their alloys. The Wilo Group uses commodity derivatives in a targeted manner to minimise commodity price risk. They are used if the effect on earnings from the change in commodity prices is significant to the Wilo Group and corresponding financial instruments are available and can also be used efficiently at the same time.

The prices for most of the copper procurement volume for the 2020 financial year have already been determined in order to minimise the impact on earnings from the change in copper prices for the Wilo Group. In contrast, the prices for the procurement volume for stainless steels and their alloys are not hedged, as the available financial instruments are not suitable for effectively minimising the risk of price changes for these specific commodities.

According to current information, the Wilo Group's results of operations could primarily be affected by price fluctuations on the global markets for copper and aluminium from the 2021 financial year.

Commodity price risks are possible, but the Wilo Group classes the associated impact on earnings as low. ➔ *Further information on commodity price risks in accordance with IFRS 7 and a corresponding sensitivity analysis can be found in section (12) "Risk management and derivative financial instruments" on **page 126 et seq.** of the notes to the consolidated financial statements.*

Defaults

Customer credit risk is countered by way of a uniform and effective Group-wide system that encompasses systematic receivables management and the monitoring of payment behaviour. As the Group does not generate more than 10 percent of its total net sales with any one customer, dependency on individual customers is limited. The Wilo Group did not experience any significant negative influence from its customers' payment practices in the past financial year. The possible effect on earnings of default is currently also considered low for 2020.

There is also a risk of default with regard to the banks with which investments are conducted, at which credit facilities are held, or with which hedges are concluded. The potential default of these partners would have a negative impact on the Wilo Group's financial position and results of operations. All in all, however, the occurrence of this risk is considered to be unlikely as Wilo enters into such transactions only with those banks that have good to very good credit ratings. Group Treasury permanently monitors and assesses the credit ratings of these banks and takes appropriate measures to reduce counterparty risk as required.

Financing and liquidity

Liquidity risk stems from a potential lack of cash for paying due liabilities in full and on time in the agreed currency. There is also a risk of having to accept unfavourable financing terms in the event of liquidity bottlenecks and volatility on the international financial and capital markets. To minimise liquidity and financing risks, the Wilo Group aims to ensure long-term, cost-effective coverage of liquidity and capital requirements at all times. Various financing instruments are used for this purpose. Liquidity management therefore makes a valuable contribution to the profitable growth of the Wilo Group.

The financing instruments include committed cash credit facilities and guarantee and margin facilities for the parent company and subsidiaries of more than EUR 390 million with international banks of good to very good credit standing. EUR 108.3 million of the cash credit facilities and EUR 24.9 million of the guarantee and margin facilities were utilised as at 31 December 2019. Furthermore, as at 31 December 2019, there were promissory note loans of EUR 52.5 million and senior notes of EUR 138.7 million that were issued in US private placements, as well as a KfW development loan that was utilised in the amount of EUR 19.5 million.

The Wilo Group's leverage, i.e. the ratio of the net financial position (financial liabilities and lease liabilities less cash) to consolidated EBITDA, increased from 0.87 at the end of the previous year to 1.08 as at 31 December 2019 as a result of the strategic high level of targeted investment and the initial application of IFRS 16 "Leases".

In order to achieve a needs-driven supply of cash with matching maturities and the optimum allocation of cash within the Group, the Wilo Group prepares corresponding liquidity and finance plans based on the budget planning and strategic five-year planning process in addition to the year-to-date forecast. Rolling three-month liquidity planning is also prepared on a monthly basis for each Group company. The cash directly available to the Wilo Group over the course of 2019, including committed cash credit facilities, was at all times higher than the minimum reserve of EUR 100.0 million defined by the Executive Board of WILO SE.

The Wilo Group uses cash pooling, netting and borrowing arrangements to the extent advisable and permitted under local commercial and tax regulations. At Group level, all financial transactions are tracked by central treasury software and monitored by WILO SE, enabling risks to be balanced between the individual companies of the Group.

The Wilo Group is required to maintain standard financial ratios (financial covenants) under the terms of its long-term financing agreements. If it falls short of certain minimum values in terms of these financial covenants, the lenders are entitled to demand early repayment, among other things. As such, a failure to meet the agreed minimum values would potentially have a substantial financial impact. These figures are regularly reviewed, planned and reported to the Executive Board of WILO SE in order to ensure compliance with the required minimum values at all times and to enable suitable countermeasures to be initiated at an early stage as necessary. Due to its strong equity base and profitability, the Wilo Group still expects to comply with its financial covenants throughout the term of the existing financing agreements.

The Wilo Group believes that liquidity and financing risks are unlikely to arise on account of the cash and credit facilities available, the financing structure and the business model. The financial impact on the Group is therefore rated as low. ➔ *More detailed information on the use of derivative financial instruments can be found in note (11) and (12) of the notes to the consolidated financial statements.*

Overall assessment

The Wilo Group's current risk situation is largely unchanged compared with the previous year. The integrated risk management system ensures that all of the identified risks are controlled at all times. In the view of the Executive Board, no risks or combinations of risks that could jeopardise the company as a going concern are currently discernible. Taken together with the attractive opportunities available to it in the medium and long term in particular, the Wilo Group has a balanced, future-oriented risk-reward profile allowing it to continue to grow profitably in line with its corporate strategy.

OUTLOOK

- **World economy to recover but momentum to remain low**
- **Coronavirus epidemic, high level of global debt and geopolitical crises represent substantial risks**
- **Moderate net sales increase expected in 2020**
- **Full commissioning of Smart Factory and move into new administrative building at headquarters in Dortmund**

General economic and industry-specific conditions

Forecast stabilisation of the world economy subject to considerable risk due to the coronavirus epidemic

According to the forecasts issued prior to the outbreak of the coronavirus epidemic, the consensus view was that the world economy would stabilise in 2020 but remain weak. In its December forecast, the Kiel Institute for the World Economy (IfW) anticipated modest growth in global GDP of just 3.1 percent. In January, the IMF lowered its forecast for global economic growth in 2020 from 3.4 percent (October forecast) to 3.3 percent. The rapid spread of the coronavirus at the start of 2020 is increasingly becoming a major risk to the global economy. Production shutdowns in China are now impacting not only the local economy, but increasingly also other countries as a result of the interconnectedness of cross-border value chains. On 22 February 2020, the IMF therefore downwardly revised its global economic growth forecast by a further 0.1 percentage points to 3.2 percent. This is based on the assumption that the Chinese economy will recover in the second quarter and the extent and duration of the impact on the world economy will be limited. If the crisis is not halted in the near future and the shortfalls in production cannot be recovered, however, all of the forecast economic and industry trends for 2020 in this report would have to be downwardly revised to a significant extent.

The Executive Board of the Wilo Group is keeping a close eye on developments and taking suitable measures to limit the economic impact on the company.

All in all, the risks of macroeconomic development again outweigh the opportunities in 2020. Despite initial agreements in the US-China trade dispute, there has been no real relaxation of the tension to date. Although the spiral of ever-higher tariffs and stricter trade rules appears to have been halted, it is unrealistic to expect the restrictions that have been introduced to be lifted altogether. According to the ifo Institute, there is still a risk that the USA will escalate or extend the trade disputes to other countries and regions, including Europe.

The sharp rise in private and public debt is another major global risk. The level of government debt in Italy and France remains high. Financial stability in some emerging economies, particularly China, is also subject to considerable risk. As the possibility of an escalation in the geopolitical hotspots in North Africa, the Middle East and North Korea cannot be ruled out, the world economy is particularly subject to disruption in 2020.

The following section presents the expected macroeconomic and industry-specific developments in 2020 in the regions that are relevant to the Wilo Group. In addition to the general economic development of individual countries and regions, the economic performance of the Wilo Group is influenced in particular by the construction and sanitary industries. Unless otherwise stated, all forecasts were issued prior to the outbreak of the coronavirus epidemic and do not take into account the potential impact of this development. This means they are subject to a considerable degree of uncertainty.

The new composition of the sales regions has been in force since 1 January 2020. The Mature Markets comprise Europe and North America. The Emerging Markets are composed of China, India, Korea, the Southeast Asian nations, Australia and Oceania, Latin America, Russia, Belarus, Ukraine, the Caucasian nations, Turkey, the Middle East and Africa. The forecasts are prepared on the basis of the new structure.

Mature Markets – European economy to remain weak, continued slowdown in the USA in the absence of new impetus

EUROPE. According to the IfW and the IMF, the pace of economic expansion in Europe will remain relatively weak and subject to risk in 2020. Uncertainly with regard to the future trade rules between the European Union and the United Kingdom, and potentially also the USA, are having a tangible impact. In addition, the possibility that the US administration will impose new trade restrictions on the European Union in 2020 cannot be ruled out. These factors, the structural problems in Italy and the lack of reform progress in France are limiting the potential for recovery in the euro area. On the other hand, the expansive monetary policy and largely stimulating fiscal policy are likely to have a positive effect.

Private and public consumer spending and construction activity are set to remain the key pillars of the euro area economy. The slight upturn in world trade is also likely to lift some of the pressure on export-oriented industry. In January, the IMF lowered its growth forecast for the euro area from 1.4 percent (October forecast) to 1.3 percent. Similarly, the IfW is not anticipating an upturn in economic growth in the euro area in 2020, and is again forecasting growth of just 1.2 percent (previous year: 1.2 percent).

While France and Italy are expected to enjoy a slightly more favourable tailwind, the economic researchers expect Spain and Austria to lose momentum slightly. Growth in the EU nations of Eastern and Southeastern Europe is also expected to flatten. The IfW is forecasting a notable slowdown in economic growth in the United Kingdom to just 0.6 percent in 2020 as a result of the Brexit process (previous year: 1.3 percent).

As the industrial sector in Germany remains weak, the IfW expects a cyclical recovery to be delayed. This means the German economy will again see contrasting developments in 2020. On the one hand, construction and private consumer demand will continue to drive growth, while government consumption is expected to rise sharply. On the other hand, industry is in a recession according to the ifo Institute. The investment climate has also deteriorated considerably. Accordingly, the IfW expects equipment investments to decline in 2020 following stagnation in the year under review, with particularly negative development in the first half of the year. The IfW and the IMF are forecasting modest economic growth of 1.1 percent for Germany. Deutsche Bundesbank's growth forecast for 2020 is 1.0 percent. Adjusted for calendar effects, i.e. eliminating the additional working days in 2020, this represents an increase of just 0.6 percent.

In terms of the European construction industry, the Euroconstruct industry network expects the upturn in construction to continue until 2022 at a moderate but sustained level. In 2020, construction output is forecast to rise by 1.1 percent in real terms (2021: 0.9 percent, 2022: 1.1 percent). Within this, output in 2020 is expected to increase by 3.7 percent in the core markets of Eastern Europe and by 1.0 percent in the Western European nations that are significant for the construction industry. Euroconstruct expects construction activity to remain lively in the area of infrastructure and building modernisation and maintenance. In addition, the heightened efforts on the part of most European governments in the area of climate protection are likely to give rise to new or expanded subsidy programmes. This will provide additional impetus for investments in heat insulation in buildings and the modernisation of heating and air conditioning systems.

The German construction industry entered the new year with a healthy order situation. Incoming orders in building construction are at a high level. The number of approvals for construction work on existing buildings jumped by 8.4 percent in the first eleven months of 2019. The IfW expects construction investment to see broad-based growth of 2.2 percent in real terms in 2020 (commercial construction +0.6 percent, residential construction +2.2 percent, public-sector construction +5.2 percent). According to the industry experts from DIW, the total volume of new construction and work on existing buildings, such as expansion, conversion, maintenance and modernisation, is expected to increase by 6.8 percent to EUR 264.1 billion in the area of residential construction and by 6.5 percent to EUR 115.6 billion in the area of non-residential construction in 2020.

The German Federal Climate Protection Act (KSG) was adopted in December 2019. In addition to introducing a CO_2 price from 2021, the climate package already provides for additional incentives to modernise housing and heating systems from the start of 2020. Existing subsidies have been expanded financially, tax incentives have been created and a replacement premium has been introduced for oil-fired heating systems. In addition to the existing replacement obligation for heating systems that are obsolete and no longer efficient, oil-fired heating systems will no longer be permitted to be installed from 2026 with the exception of hybrid systems. These initiatives could resolve the modernisation backlog affecting heating systems. According to the Federal Association of the German Heating Industry (BDH), heating and hot water account for one-third of total final energy consumption in Germany. The Climate Protection Plan 2050 states that CO_2 emissions in the building stock must be cut by 40 percent between 2014 and 2030. According to the BDH, two-thirds of this target could be achieved on time by accelerating the replacement of obsolete heating systems with modern, efficient heating systems from the current level of around 580,000 to around a million per year, with the remaining one-third achievable through insulation.

USA. The US economy is expected to see a further slowdown in growth as exports and company investments are on the weak side. In addition, the effects of the tax reform have expired. An expansion of trade disputes, such as to Europe, or the expansion of geopolitical conflicts with US involvement would further exacerbate the negative outlook. On the other hand, expansionary monetary policy and the robust employment market are expected to support private demand in particular. All in all, the IMF anticipates a slowdown in US growth to 2.0 percent in 2020.

Residential construction in the USA enjoyed a robust order situation at the turn of 2019/2020. Orders on hand are expected to have increased as the volume of building permits and construction starts exceeded the number of completions. In addition, lower interest rates are likely to provide new impetus for private construction activity on the whole. However, the environment for commercial construction has become less favourable as a result of the slowdown in economic momentum as well as international uncertainties. The conditions for new, large-scale public investments in construction and infrastructure projects have become somewhat more limited as a result of the deterioration in the national budget.

Emerging Markets: Asia remains global economic driver, but considerable uncertainty due to the impact of the coronavirus epidemic

CHINA. Given the size of its economy and its close integration within global value chains, China remains extremely important to the world economy. According to experts, the pace of expansion in the Chinese economy will continue to slow in 2020. The rapid spread of the coronavirus paralysed many areas of the Chinese economy in early 2020 as public life came to a standstill and many companies halted production. Above and beyond this, the structural shift aimed at promoting high-tech and services and strengthening domestic demand continued as planned. According to the IMF's latest forecast from 22 February, China is expected to record growth of 5.6 percent in 2020. However, this is based on the assumption that the Chinese economy will return to normality in the second quarter of 2020, meaning the current forecast is subject to uncertainty. If this is not the case, a further significant slowdown in the economy can be anticipated.

China's structure of building investments suggests growth in 2020. New construction starts at the turn of 2019/2020 were 8.5 percent higher than one year previously. The drivers are residential construction (+9.2 percent) and the construction of office buildings (+17.1 percent). The authorities are taking efforts to stabilise the property market and prevent bubbles with measures such as the new fixed interest rate for mortgages. Commercial construction is seeing a downturn in activity (construction starts: -5.6 percent). Urbanisation and the expansion and modernisation of infrastructure are systematic, long-term drivers of the Chinese construction sector.

Investments in environmental protection are also becoming increasingly important. A new environmental ministry was created in 2018. Among other things, it aims to improve the poor quality and supply of drinking water and modernise the wastewater infrastructure. New, ambitious targets and programs are expected to be set out in the new five-year plan that is being developed in 2020. However, business life in China is currently being impacted by the coronavirus crisis, which is overshadowing the positive trend in the construction and water management industries.

INDIA. The Indian economy is expected to see a further moderate upturn in 2020. The central bank is expected to cut interest rates again in order to increase banks' liquidity and stimulate private investment. The government also adopted a stimulus package and cut corporate taxes last autumn, which is likely to boost private-sector investment activity on the whole. The measures to stabilise the financial sector should gradually rebuild trust and stimulate private consumer spending. The IMF expects India to record growth of 5.8 percent in 2020.

Extreme oversupply on the market means there is a risk of a wide-scale property crisis in 2020. Additional problems resulted from last year's standstill affecting the completion of 575,000 residential units. The dimensions of this issue are huge, as only 460,000 residential units came onto the market in the previous three years combined. The Indian government is planning to launch a fund with a volume of EUR 3.1 billion in order to reactivate the construction projects that have been halted. Irrespective of this, an additional seven million affordable apartments will be constructed by 2023 as part of the social housing scheme. The programme for developing Smart Cities has also been expanded further. In addition, India is planning to make substantial investments in infrastructure projects between now and 2024. All in all, this means the outlook for the Indian construction industry is positive in the medium to long term despite the current challenges.

KOREA. The Bank of Korea is forecasting a slight economic upturn in 2020. Korean exports are expected to increase again, while investment activity is set to pick up momentum with growth of 4.9 percent. This is due to planned investments and the investment backlog in the semiconductor and electronics industry and projects in connection with the rollout of 5G. Private consumer spending is also expected to increase on the back of an expansionary fiscal policy with government transfers as well as low inflation. All in all, the Bank of Korea is anticipating a slight increase in GDP growth to 2.3 percent in 2020. However, this forecast would have to be downwardly revised during the year if the further spread of the coronavirus to Korea cannot be curbed.

Despite low interest rates, the Bank of Korea is not yet forecasting a turnaround for the Korean construction industry in 2020. Instead, construction investment is expected to decline by a further 2.3 percent. The main reason is the sustained weakness of residential construction, which looks set to continue until 2021 in light of the weak leading indicators. Commercial construction is also expected to remain under pressure even with increased construction activity on the part of the public sector. However, civil engineering is likely to recover thanks to major infrastructure projects such as power plants.

SOUTHEAST ASIA. In the absence of significant demand on the part of the global economy, there is unlikely to be a real upturn in growth in Southeast Asia for the time being. However, high levels of government spending on infrastructure and lower interest rates in many of the countries in the region should have a positive effect. For 2020, the IMF expects Singapore to record growth of 1.0 percent and the five major ASEAN nations to grow by 4.8 percent.

The outlook for the region's construction industry in 2020 remains largely positive. Although growth in the industry is likely to flatten slightly in Singapore and Malaysia due to cyclical factors, momentum is expected to remain extremely strong in Indonesia thanks to the construction of the new capital city, as well as in Vietnam. The prospects for the Philippines are also positive, among other things due to the large-scale investments in water management that are planned.

LATIN AMERICA. The economic outlook for the region is set to improve in 2020. All in all, the World Bank expects growth in Latin America to increase to 1.8 percent, with Brazil (+2.0 percent) and Mexico (+1.2 percent) recovering in particular. The recession in Argentina appears to be continuing, however, with the World Bank forecasting a downturn in economic output of 1.3 percent. Chile is expected to continue to enjoy solid development, with growth rising to 2.5 percent. The economic tailwind is likely to boost the construction industry in most Latin American nations, not least since various central banks (including Mexico, Brazil and Chile) have recently used the scope available to them to lower interest rates.

RUSSIA. The Russian central bank intends to cut interest rates further in the first half of 2020. This is likely to stimulate private consumer spending, especially since inflation is falling. Investment activity is also expected to see a considerable upturn, with additional impetus for the economic recovery being provided by the extensive new major projects at a national level. The IMF is forecasting economic growth of 1.9 percent for 2020.

The Russian government is planning to sustainably strengthen the construction sector. Under a plan presented in October, the share of GDP attributable to construction is set to increase to 7.8 percent by 2030 (2018: around 6 percent). This will be driven by residential construction. The “Housing and Urban Environment” national project is intended to improve the housing situation and stimulate the construction of new apartments. This will give rise to around 425 million square metres of residential space by 2024, followed by a further 120 million square metres every year. This corresponds to a 50 percent increase in construction output compared with 2017. Between 2019 and 2021 alone, a good EUR 6.5 billion is set to be invested in the construction of new housing and the modernisation of the municipal infrastructure. In the short term, however, private residential construction is likely to be adversely affected by the mortgage finance reform that was introduced in mid-2019, which imposed tight limits on the authorised financial institutions as well as stricter rules.

TURKEY. Lower interest rates are expected to have a positive impact on economic development in 2020. Industrial production has recently begun to gradually recover from its dramatic slump but remains at a low level. At the same time, confidence among companies has risen steadily across the board. However, the turn of 2019/2020 saw another downturn in consumer confidence. The prospects of an economic recovery are also fragile on account of the geopolitical conflicts in which Turkey is involved. However, the World Bank expects the economy to enjoy moderate growth of 3.0 percent in 2020.

In this environment, there are still no signs of a turnaround for Turkey’s construction industry. Despite lower mortgage rates, financing conditions remain unfavourable for private individuals in particular as purchasing power has fallen sharply. Leading indicators like the extremely low level of confidence among consumers and within the construction industry, as well as the downturn in permits for residential construction, suggest that the crisis is set to continue. In addition, a number of major public-sector infrastructure projects have come to a halt as a result of financing problems. The only sector to see an upturn to a certain degree is hotel construction, where international chains are investing in new builds and modernisation as a result of the recovery in tourism. Although the Turkish market offers extremely attractive potential in the medium to long term, particularly in the areas of air conditioning and water and wastewater management, 2020 looks set to be a problematic year.

MIDDLE EAST & AFRICA. The countries in this region are politically and economically very varied and must therefore be considered individually. The crises in the Arab region are still ongoing. Indeed, the conflict between the USA and Iran means there is currently a risk of escalation that could overflow into other countries. It is therefore unrealistic to expect a normalisation of the situation with an economic boost for the affected countries at present. All in all, the IMF expects the nations of the Middle East and North Africa to enjoy stronger growth of 2.8 percent in 2020. In addition to the oil-exporting states, the prospects for Egypt are particularly positive. In the Sub-Saharan region, the IMF is forecasting a slight upturn in growth in Nigeria and South Africa.

In the Middle East and North Africa, the prospects for the construction industry in 2020 remain uncertain and subject to risk. Construction demand is expected to slow in the United Arab Emirates, Kuwait and Algeria. By contrast, Tunisia is planning to boost the construction of social housing, among other things. Saudi Arabia is adopting reforms to strengthen the private sector and is planning extensive investments in water management. The construction boom in Egypt is also expected to continue on a broad footing in 2020. The construction industry in South Africa and Nigeria has considerable potential, but excess capacity is currently a problem and demand has yet to pick up again.

Outlook for the Wilo Group

Future orientation

Economic researchers initially forecast a stabilisation in the global economy in 2020 following the slowdown in the year under review. However, the continued spread of the coronavirus could have a significant negative impact on the global economy. The protective measures imposed by the Chinese government and international governments at the start of the year largely brought public life, trade and industry to a standstill. Due to the size of the Chinese economy as a sales market and a generator of economic output as well as the interconnected nature of the global value chains, this crisis is currently also adversely affecting other countries and the world economy as a whole. As such, there is a possibility that the economic forecasts will deteriorate further as the year progresses. The Executive Board of the Wilo Group is keeping a close eye on developments concerning the coronavirus epidemic and taking suitable measures to limit the risk to employees and the economic impact on the company.

A number of other major factors mean the global economy is highly susceptible to risk, and hence especially challenging for companies. Firstly, the rise of protectionism and nationalism is leading to paralysis. The possibility of further upheaval cannot be ruled out, particularly in Europe as a result of trade conflicts with the USA and the consequences of Brexit.

There is also a risk that geopolitical crises will escalate. In addition, the global debt situation has intensified considerably. All of these factors could trigger turbulence on the international financial markets that would have an impact on the real economy. All in all, the risk profile for the global economy is currently worse than it was one year ago.

A high degree of business flexibility and pronounced adaptability are key factors for success in high-risk, challenging markets of this nature. These are especially important in crisis situations and in the event of upheaval in the Wilo Group's core segments. These attributes are firmly enshrined within the Wilo Group's corporate culture, strategy and management. Their success is underlined by the profitable growth that the Wilo Group has generated for many years even in a shifting environment and in the face of intense global competition. In order to secure the success factors of flexibility and adaptability going forward, the Wilo Group has laid new organisational and operational foundations. The Mature Markets and Emerging Markets sales regions have been reorganised, and a specific ten-point plan for each region and a five-point plan for the newly created OEM strategic business unit have been adopted in addition to the existing growth initiatives. This strategic course is rounded off by local efficiency projects in sales and production. In addition, the Executive Board was expanded to four members with effect from 1 January 2020 and the schedule of responsibilities was adjusted accordingly. With these measures, the Wilo Group is confirming its clear aspiration of continuously evolving into a solution provider with a clear customer focus, irrespective of whatever short-term changes in external economic and political influences 2020 may bring. Accordingly, Wilo is also intensifying the development of intelligent products, systems, services and solutions and pressing ahead with the digital transformation of the Group as planned. The Wilo Group will continue expanding its product portfolio, focusing on core competencies in heating, air conditioning and cooling as well as water supply and wastewater disposal. This means the company is future-proof. In addition to accelerated organic growth, acquisitions to promote growth play an important role provided they make good strategic and economic sense.

The clear and sustainable implementation of the future-oriented business policy and balancing risk within the company are extremely important. The Wilo Group will continue to harness its strengths in future. One of these is successful customer orientation. With the reorganisation of the sales areas and the specific plans and initiatives for the individual operational market segments, the Wilo Group has significantly increased its proximity to the customer and its local flexibility once again. This will already start to pay off in 2020. Wilo's successful strengths over many years also include its pronounced innovative ability and the continuous development of new technologies. In addition, the Wilo Group's strong international market presence and diversification in terms of regions and market and product segments typically allow it to offset individual risks and temporary market disruption to a certain extent.

A fundamental management principle at Wilo is and will remain to identify trends and changes on the market at an early stage and to analyse them quickly. This allows alternative scenarios to be devised and implemented very quickly and countermeasures to be initiated at short notice. With a view to the particular challenges in 2020, effective crisis management with a view to the coronavirus epidemic and the resulting economic downturn will play a major role. The same is true of considerable upheaval on the international financial and currency markets and the escalation of geopolitical crises with negative consequences for the real economy. If necessary, the Wilo Group will continue to initiate appropriate and prompt countermeasures from this position of strength in future.

The megatrends relevant to the Wilo Group are the cornerstones of the defined corporate strategy, regardless of short-term crises and fluctuations in demand. They will change, drive and shape the Wilo markets in the decades to come. Six megatrends are contributing to one major global trend: the creation of smart urban areas. These are characterised by cities and metropolitan regions connecting their digital infrastructures in order to make them more efficient, less wasteful of resources, and more social for people.

Wilo has identified smart urban areas as offering business potential and will systematically tap into new lines of business in this area.

The coming years will be dominated by two megatrends in particular: climate change and digital transformation. With its innovative, high-tech products and system solutions, the Wilo Group is already making an important contribution to slowing climate change and achieving the climate protection targets. Wilo products enable higher energy efficiency throughout the entire operation phase. High-efficiency pumps reduce power consumption by up to 80 percent compared with older, unregulated pumps. The intelligent connectivity of pumps and pump systems also creates extensive potential for energy savings. In this way, Wilo is helping to reduce energy consumption and hence lessen the impact of CO_2 on the environment. With an eye to the future, demand for forward-looking, resource-conserving products and system solutions will also increase as a result of the tightening of minimum legal standards and heightened requirements in terms of energy and resource efficiency. The Wilo Group is well positioned to participate in this trend with its portfolio of smart, energy-efficient products, systems and solutions.

The digital transformation necessitates extensive business initiatives in order to leverage the resulting opportunities and prevent future disadvantages for the company. Wilo is continuing on its own path of digital transformation. Its own value chain and existing business processes are being fundamentally and sustainably reorganised with high levels of investment, with an initial focus on the Dortmund location. The central element is the intelligent, digital networking of production methods and logistics as well as products. This extensive internal digital transformation is sustainably improving the Wilo Group's competitiveness while also generating direct benefits for customers, including in terms of quality standards, punctual deliveries and optimised service. In addition, the Wilo Group is actively targeting its innovative capacity at providing customers with intelligent, connectible solutions.

Outlook for the regions

MATURE MARKETS. Leading economic researchers currently expect the European economy to stabilise in 2020, albeit with the pace of expansion remaining relatively weak and subject to risk. The relaxed monetary policy of the European Central Bank and stimulating fiscal policy in many countries will have a positive effect on domestic demand in particular. This means that construction investment will remain a key pillar of the economy alongside private consumer spending. At the same time, there are no signs of a turnaround for the weak industrial sector. Production output in industries such as automotive, chemicals and mechanical engineering will not increase in 2020, meaning the propensity to invest in the euro area will remain limited. The structural deficits in some euro area nations, demographic developments including a growing skills shortage and considerable uncertainty with regard to the future rules of trade not only with the United Kingdom, but also with the USA, all constitute additional economic burdens and risk factors for Europe. In addition, a more pronounced and long-lasting outbreak of the coronavirus could significantly disturb important supply chains and sales markets for European industry.

Provided the uncertainties and risks remain manageable and, in particular, the impact of the coronavirus epidemic can be limited, the fundamental economic conditions for the Wilo Group's specific business in Europe in 2020 vary from market to market but are moderately positive on the whole. In France and Germany, which are particularly important to the Wilo Group due to their market size and strong competitive position, the environment remains positive thanks to low interest rates. In spite of the lively construction industry, however, these markets are characterised by a high degree of maturity and intense competition. Wilo's product mix in Europe is highly attractive, but the market varies considerably throughout the region and is largely saturated in the German-speaking nations.

There is high demand for energy-saving and environmentally friendly heating and air conditioning systems in Europe. The majority of the installed systems are outdated and need to be replaced, especially with regard to more stringent environmental protection requirements. This is broadly stimulating demand in the areas of new construction and modernisation alike. In line with the EU's ambitious climate targets, the German Federal Climate Protection Act (KSG) was adopted in 2019 and new government subsidy programmes initiated in order to increase energy efficiency while helping to reduce harmful emissions. Investments in climate-efficient and economically beneficial heating and air conditioning systems and the modernisation of water and wastewater plants will continue to be boosted by extremely favourable financing conditions in 2020. Building modernisation and renovation is growing in importance in Europe. Smart, connected and digitally controllable devices and systems are becoming increasingly popular. The Wilo Group therefore expects structural demand for high-quality energy-efficient pumps to continue to grow throughout Europe over the coming years.

As a high-tech, high-volume market for pumps, pump systems and associated services, Europe is of central strategic significance for the Wilo Group. The Wilo Group secures its strong market position in Europe through innovative strength, high quality and close customer relationships. This is particularly important in light of the intense competition. In order to continue to overcome the challenges of this market and take advantage of the opportunities presented in future, Wilo is focusing on the following cornerstones of its business in particular: the clearly defined digitalisation strategy, the future-oriented alignment of the organisation, a clear growth strategy, defined measures to reduce costs and increase efficiency, and targeted investments in the future.

The economic outlook for the USA has deteriorated slightly in light of the slower growth that is now anticipated in 2020. Nevertheless, the US economy is expanding at a faster rate than that of the euro area. The relaxed monetary policy and the robust employment market are stimulating private consumer spending, while there is a robust order situation in the residential construction sector. After public-sector construction was the main driver of the industry in the USA of late, the low interest rates could lead to a more pronounced upturn in private-sector construction. Government projects to improve fresh water treatment represent another notable development. The Wilo Group is likely to benefit from additional synergies following the acquisition of American-Marsh Pumps and the expansion of its range of high-quality products made in the USA.

In light of the muted economic and market outlook in many countries in the Mature Markets region, the Wilo Group's forecasts for 2020 are relatively conservative. The company's diversified positioning in terms of regional and product- and service-specific markets allows it to continually balance opposing trends. All in all, the Wilo Group expects the Mature Markets region to generate lower net sales growth than the Group as a whole in 2020.

EMERGING MARKETS. Although the Chinese economy will lose further momentum in 2020, it will broadly continue to grow several times faster than other major economic blocs and nations. The sheer size of the economy means that it offers significant growth potential for companies. The Chinese construction industry and its activities in the areas of residential and commercial construction and drinking water and wastewater management are particularly relevant to the Wilo Group. The prospects for residential construction in China are extremely positive in the medium to long term. The country is also making extensive investments in modernising its water management, including as a response to rapid urbanisation and wide-scale environmental pollution. However, the outlook for 2020 is likely to deteriorate considerably as a result of the coronavirus epidemic.

The outlook for 2020 in the other key Asian markets is fundamentally positive, but in some cases considerably less dynamic than in China. Although the Indian economy is picking up pace again following the slump in the year under review, the property sector is still in crisis. However, impetus is set to be provided by the expansion of infrastructure and smart cities. The same applies to the countries of Southeast Asia, where positive momentum is also being offset by negative effects. In Korea, residential and commercial construction will again see weak development in 2020, but there will be project-related opportunities.

The economic outlook in Latin America is improving. The economic upturn in Mexico, Brazil and Chile is expected to have a positive impact on the Wilo Group's business in 2020.

In Russia, too, the fundamental economic prospects for 2020 are better than they have been of late, with private households and companies benefiting from interest rate cuts. The continued recovery of the Russian economy will also be driven by the realisation of major new national projects, including residential construction and the modernisation of municipal infrastructure. With its own production site near Moscow, the Wilo Group is well positioned to continue to participate in the country's growth in 2020. This location is also beneficial due to the trend towards the localisation of the Russian economy.

Despite the extremely high long-term potential, the short-term outlook for 2020 in Turkey and the nations of the Middle East and Africa is rather muted on the whole. Egypt offers good opportunities thanks to a lively economy and a strong upturn in the construction industry. Key projects and customers are currently more relevant to the Wilo Group's development there than the general development in the region.

The Wilo Group expects the largely positive business development in the Emerging Markets region to continue in 2020. Here, too, varying trends within the region can be largely absorbed thanks to the Group's broad-based regional presence and market-appropriate product mix. Countries seeing a temporary slowdown in demand or less favourable financing conditions for investments will again be slightly offset by the large number of markets enjoying strong structural growth in 2020. All in all, the company expects the Emerging Markets region to generate slightly higher net sales growth than the Group as a whole in 2020. This is based on the assumption that the coronavirus epidemic will be contained rapidly and hence that there will be no additional consequences for the world economy.

Statement by the Executive Board on forecast development

Prior to the outbreak of the coronavirus epidemic, leading economic researchers had forecast a stabilisation in the world economy. However, this was subject to the coronavirus outbreak being contained in terms of both extent and duration, as this would allow the current standstills in many economic sectors to be recovered, at least to some extent. If the epidemic is contained and an international economic crisis that would outweigh the positive underlying trends in the Wilo Group's markets can be prevented, the growth prospects for the construction industry, the sanitary industry and heating and air conditioning, which are particularly important to the Wilo Group, will remain fundamentally positive in 2020. This is supported by the high level of construction demand and the extremely good financing conditions in the industrialised nations. Another driver is the extensive, long-term investment programmes initiated by many emerging nations with a view to promoting residential construction and establishing, expanding and modernising their water management systems. However, competition in some regions and product areas is extremely intensive and requires a high degree of concentration and flexibility within the entire company.

The risks in terms of economic developments, exchange rates and interest rates, and hence for the Wilo Group's business development, require particularly anticipatory, risk-conscious and flexible company management. Assuming that the effects of the risks remain limited and controllable and the impact of the coronavirus epidemic can be controlled in the near future, 2020 should at least see robust demand in most of the countries and market segments of importance to the Wilo Group. Current developments are continuously observed and new trends are anticipated, analysed and evaluated in a timely manner. This allows the Wilo Group to leverage the growth potential in regions and countries that are enjoying positive development on a targeted basis, as well as implementing additional risk mitigation measures in regions and markets that could be affected by potential setbacks.

On the basis of the forecast business development in the individual regions as described above and the negative effects that are already being felt as a result of the coronavirus epidemic, the Executive Board is anticipating growth in the Wilo Group's net sales of no more than 2.5 percent in the 2020 financial year. This is based on the underlying assumptions that the world economy will develop largely free of disruption from the second quarter onwards and that there will be no major upheaval on the currency and capital markets. In particular, this requires the coronavirus epidemic to be contained so that the additional consequences for the world economy remain limited.

The Executive Board optimised and revised the relevant key performance indicators in the year under review as part of a continuous review of the controlling system. The key performance indicators were harmonised to an even greater extent and aligned with the specific requirements of the Ambition 2025 corporate strategy. Earnings power is now based primarily on operating earnings before interest, taxes, depreciation and amortisation, i.e. EBITDA and the EBITDA margin. In terms of profitability, an EBITDA margin of between 11.5 percent and 12.5 percent is forecast for 2020. Leverage is expected to decrease slightly compared with the year under review. These forecasts also depend in particular on the coronavirus epidemic being contained in good time so that the consequences for the world economy remain limited.

One incalculable risk at present is the spread of the coronavirus epidemic and its consequences for the economy in China and worldwide. However, the continued spread of the coronavirus epidemic with unexpectedly long and extensive disruption to value chains and a pronounced impact on the world economy, a significant slowdown in global economic momentum and massive changes in the relevant exchange rates, the escalation of political crises or a dramatic deterioration in international trade relations could all substantially influence the Wilo Group's growth and profitability targets. The Executive Board expects the coronavirus epidemic in particular to have a negative impact on the Wilo Group's business activities. However, the high degree of uncertainty means it is not currently possible to quantify the negative effects for the financial year as a whole.

The Wilo Group systematically aligns its research and development to its medium- and long-term corporate strategy. The key objectives of Ambition 2025 are remaining independent and generating profitable growth. This requires consistently strong innovation. The Wilo Group is synonymous with future-oriented, innovative products and system solutions and is evolving into a solution provider in a targeted manner. Research and development have traditionally played an important role at Wilo and will continue to do so in future. Accordingly, expenditure for research and development will remain at a high level in 2020 irrespective of temporary factors affecting the economy or the Group's markets.

In recent years, the Wilo Group has made substantial investments in a modern, efficient, future-oriented corporate infrastructure that will promote growth, thereby laying broad foundations for the accelerated, profitable growth it is targeting. Multi-year projects, particularly the strategic location development project at the headquarters in Dortmund, will continue. Construction work on the Smart Factory was completed in 2019 and the new administrative building will be completed in 2020. At all other locations, too, the Wilo Group is continuously examining the existing infrastructure and capacities to ensure that they are fit for the future and making targeted investments if this can generate positive effects for the company. In addition, the Wilo Group's digital transformation will continue to be pursued at a fast pace. For this reason, Wilo will continue to make substantial investments in innovative manufacturing technologies and the expansion of the existing sales and production locations in the coming years.

The Wilo Group's capital expenditure will remain high in 2020, although the absolute amount is likely to be lower than in the year under review following the completion of the main construction work at the Dortmund location. In line with Ambition 2025, the Group is also focusing on company acquisitions that are beneficial from a strategic and economic perspective.

The long-term financing structure, the extremely high equity ratio of almost 50 percent and cash of over EUR 160 million constitute a solid basis for the long-term profitable growth of the Wilo Group. Under the terms of the long-term financing instruments in place as at 31 December 2019, WILO SE is required to comply with certain standard financial ratios (covenants). WILO SE fully complied with these covenants at all times in the 2018 and 2019 financial years and there are currently no indications that it will be unable to comply with them in future.

The business targets for 2020 as presented in this report are based on a professional and detailed planning process and are embedded in the Ambition 2025 corporate strategy. They take into account all information on and knowledge of internal and external factors that were available at the time of this management report being prepared. Future unforeseeable developments and events may lead to changes in expectations and deviations from forecasts. All estimates for 2020 assume an unchanged basis of consolidation and unchanged exchange rates compared with the previous year.

CONSOLIDATED FINANCIAL STATEMENTS

Consolidated income statement

for the period 1 January to 31 December 2019

EUR thousand	Note	**2019**	2018
Net sales	(8.1)	1,477,830	1,463,528
Cost of sales	(8.2)	–970,360	–941,747
Gross profit		**507,470**	**521,781**
Selling expenses	(8.3)	–264,627	–270,986
Administrative expenses	(8.3)	–94,638	–102,236
Research and non-capitalised development costs	(8.4)	–50,332	–50,743
Other operating income	(8.5)	14,231	14,932
Other operating expenses	(8.6)	–8,916	–20,811
Earnings before interest and taxes (EBIT)		**103,188**	**91,937**
Net finance costs	(8.7)	–5,553	–8,557
Consolidated net income before taxes		**97,635**	**83,380**
Income taxes	(8.8)	–25,213	–19,158
Consolidated net income		**72,422**	**64,222**
Basic and diluted EPS amount to: EUR 7.38 (previous year: EUR 6.55) per ordinary share	(8.9)		

Consolidated statement of comprehensive income

for the period 1 January to 31 December 2019

EUR thousand	Note	**2019**	2018
Consolidated net income		**72,422**	**64,222**
Items not reclassified to profit or loss in the future			
Remeasurement of pension obligation and plan assets		–10,246	214
On which current income taxes	(8.8)	3,282	–107
Initial application of IFRS 9 and IFRS 15		0	–778
On which current income taxes	(8.8)	0	420
		–6,964	**–251**
Items that may be reclassified to profit or loss in the future			
Currency translation differences		6,593	–12,335
Currency translation differences deferred taxes	(8.8)	–20	214
		6,573	**–12,121**
Cash flow hedges – reclassified to consolidated income statement	(11.1)	–1,511	–101
Other comprehensive income		**–1,902**	**–12,473**
Total comprehensive income		**70,520**	**51,749**

Consolidated statement of financial position

as at 31 December 2019

Assets EUR thousand	Note	**2019**	2018
Non-current assets			
Intangible assets	(9.1)	233,140	222,005
Property, plant and equipment	(9.2)	571,222	451,214
Investments carried at equity		2,640	2,640
Trade receivables	(9.4)	1,976	2,299
Other financial assets	(9.5)	7,307	6,509
Other receivables and assets	(9.6)	7,322	9,281
Deferred tax assets	(8.8)	85,732	73,272
		909,339	**767,220**
Current assets			
Inventories	(9.3)	243,112	264,458
Trade receivables	(9.4)	288,535	283,932
Other financial assets	(9.5)	4,029	7,123
Other receivables and assets	(9.6)	30,023	30,833
Cash	(9.7)	166,056	135,412
Assets held for sale	(9.8)	307	1,811
		732,062	**723,569**
Total assets		**1,641,401**	**1,490,789**

Equity and liabilities			
EUR thousand	Note	**2019**	2018
Equity	(9.9)		
Issued capital		26,980	26,980
./. Nominal amount of treasury shares		-1,477	-1,477
Subscribed capital		25,503	25,503
Capital reserves		26,161	26,161
Other reserves		770,459	716,458
Treasury share reserve		-29,766	-29,766
		792,357	**738,356**
Non-current liabilities			
Financial liabilities	(9.10)	205,406	198,123
Trade payables	(9.11)	71	103
Other financial liabilities	(9.12)	32,464	7,196
Other liabilities	(9.13)	3,787	3,568
Provisions for pensions and similar obligations	(9.14)	91,083	80,030
Other provisions	(9.15)	3,743	3,571
Deferred tax liabilities	(8.8)	58,929	49,690
		395,483	**342,281**
Current liabilities			
Financial liabilities	(9.10)	113,503	70,357
Trade payables	(9.11)	172,955	172,287
Other financial liabilities	(9.12)	42,299	35,912
Other liabilities	(9.13)	78,812	91,557
Other provisions	(9.15)	45,992	40,039
		453,561	**410,152**
Total equity and liabilities		**1,641,401**	**1,490,789**

Consolidated statement of cash flows

for the period 1 January to 31 December 2019

EUR thousand	2019	2018	Change
Earnings before interest and taxes (EBIT)	**103,188**	**91,937**	**11,251**
Depreciation and amortisation of intangible assets and property, plant and equipment	76,906	61,557	15,349
Decrease/increase in provisions	5,282	–4,665	9,947
Losses/gains on disposals of intangible assets and property, plant and equipment	–453	–56	–397
Increase in inventories	27,955	–33,649	61,604
Increase in trade receivables	–2,678	–22,363	19,685
Increase in trade payables	–1,243	5,085	–6,328
Increase/decrease in other assets and liabilities not related to investing or financing activities	–8,201	6,480	–14,681
Other non–cash expenses and income	–3,191	33	–3,224
Operating cash flow before income taxes	**197,565**	**104,359**	**93,206**
Income taxes paid	–29,056	–22,653	–6,403
Cash flow from operating activities	**168,509**	**81,706**	**86,803**
Purchases of intangible assets	–20,131	–21,858	1,727
Disposals of property, plant and equipment	2,840	5,764	–2,924
Purchases of property, plant and equipment	–126,842	–130,046	3,204
Purchases of consolidated companies	–5,900	0	–5,900
Other purchases attributable to investing activities	–359	–2,408	2,049
Cash flow from investing activities	**–150,392**	**–148,548**	**–1,844**
Dividend payment	–14,811	–19,323	4,512
Proceeds from assuming financial liabilities	53,579	70,068	–16,489
Repayment of financial liabilities	–3,150	–3,713	563
Repayment of lease liabilities	–15,986	0	–15,986
Interest payments received	2,503	2,279	224
Interest payments made	–10,434	–8,535	–1,899
Cash flow from financing activities	**11,701**	**40,776**	**–29,075**
Change in cash	29,818	–26,066	55,884
Effects of exchange rate changes on cash	826	–753	1,579
Changes on cash resulting from the basis of consolidation	0	417	–417
Cash at beginning of period	135,412	161,814	–26,402
Cash at end of period	**166,056**	**135,412**	**30,644**

Detailed information can be found in note (10).

Consolidated statement of changes in equity

for the period 1 January to 31 December 2019

	Subscribed capital			Other reserves							
EUR thousand	Issued capital	Nominal amount of treasury shares	Capital reserves	Retained earnings	Currency translation reserve	Hedging reserve	Reserve for remeas-urement of pensions	Treasury share reserve	Equity attributable to share-holders of WILO SE	Non-controlling interests	**Equity**
1 January 2018	**26,980**	**–1,477**	**26,161**	**747,704**	**–41,232**	**–668**	**–20,786**	**–29,766**	**706,916**	**63**	**706,979**
Consolidated net income 2018	0	0	0	64,222	0	0	0	0	64,222	0	64,222
Other comprehensive income	0	0	0	–358	–12,121	–101	107	0	–12,473	0	–12,473
Dividend payments	0	0	0	–19,323	0	0	0	0	–19,323	0	–19,323
Other changes	0	0	0	–986	0	0	0	0	–986	–63	–1,049
31 December 2018	**26,980**	**–1,477**	**26,161**	**791,259**	**–53,353**	**–769**	**–20,679**	**–29,766**	**738,356**	**0**	**738,356**
1 January 2019	**26,980**	**–1,477**	**26,161**	**791,259**	**–53,353**	**–769**	**–20,679**	**–29,766**	**738,356**	**0**	**738,356**
Consolidated net income 2019	0	0	0	72,422	0	0	0	0	72,422	0	72,422
Other comprehensive income	0	0	0	0	6,573	–1,511	–6,964	0	–1,902	0	–1,902
Dividend payments	0	0	0	–14,811	0	0	0	0	–14,811	0	–14,811
Other changes	0	0	0	–1,708	0	0	0	0	–1,708	0	–1,708
31 December 2019	**26,980**	**–1,477**	**26,161**	**847,162**	**–46,780**	**–2,280**	**–27,643**	**–29,766**	**792,357**	**0**	**792,357**

Detailed information can be found in note (7) and note (9.9).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(1.) General information

WILO SE ("the company"), based in Dortmund, Germany, is registered with the Dortmund Local Court in section B no. 21356 and is the parent company of the Wilo Group. The Group's core business is the production and worldwide sale of machinery, notably liquid pumps and appliances. The Wilo Group develops, manufactures and markets pumps and building technology systems, primarily for heating, refrigeration, air conditioning and ventilation systems, for water supply and for sewage and effluent disposal.

(2.) Basis of preparation

The consolidated financial statements of WILO SE as at 31 December 2019 have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and with all interpretations of the IFRS Interpretations Committee (formerly International Financial Reporting Interpretations Committee, IFRIC) applicable for the 2019 financial year. WILO SE exercises the option provided for in section 315e (3) of the Handelsgesetzbuch (HGB – German Commercial Code) and is therefore not required to prepare consolidated financial statements in accordance with German commercial law. To ensure equivalence with consolidated financial statements prepared in accordance with German commercial law, the disclosure requirements of section 315e (1) HGB are met in addition to the IFRS disclosure requirements.

A number of items of the income statement and statement of financial position have been combined for clarity of presentation. These items are reported and explained separately in the notes. The consolidated income statement has been prepared using the cost-of-sales method. The amounts in the consolidated financial statements are generally presented in thousands of euro (EUR thousand).

(3.) Adoption of new and amended IFRS

IFRS 16 LEASES IFRS 16 introduces a standardised accounting model that requires leases to be recognised in the lessee's statement of financial position. A lessee recognises a right of use that represents its right to use the underlying asset and a lease liability that represents its obligation to make lease payments. There are exemptions for leases relating to low-value assets and for short-term leases.

IFRS 16 replaces the existing guidelines on leases, including IAS 17 "Leases", IFRIC 4 "Determining Whether an Arrangement Contains a Lease", SIC-15 "Operating Leases – Incentives" and SIC-27 "Evaluating the Substance of Transactions in the Legal Form of a Lease".

The standard is applicable for the first time in the first reporting period of a financial year beginning on or after 1 January 2019. For initial application, the Wilo Group is applying the modified retrospective approach in accordance with IFRS 16 C5 (b). The process of initial application at Wilo as at 1 January 2019 is broken down into three phases:

1. No reassessment of leases
   As at 1 January 2019, the date of initial application, the Wilo Group refrained from performing a reassessment compared with IAS 17 in order to identify whether contracts contain leases. This transitional provision is applied to all contracts in accordance with IFRS 16 C4, meaning that the amounts carried forward to 1 January 2019 contain all contracts previously classified as finance leases in accordance with IAS 17 (IFRS 16 C11).

2. Initial application for contracts previously classified as operating leases in accordance with IAS 17
   Wilo decided to apply the cumulative method set out in IFRS 16 C5 (b) in conjunction with IFRS 16 C8 (b) (ii). This means IFRS 16 is applied retrospectively to operating leases within the meaning of IAS 17, but the cumulative effect of initial application is not reported in other comprehensive income and the prior-period amounts are not

required to be restated (IFRS 16 C7). In the case of the recognition of right-of-use (RoU) assets as at 1 January 2019 that were previously classified as operating leases in accordance with IAS 17, the RoU asset is recognised in the same amount as the lease liability.

3. Treatment of right-of-use assets following initial application Wilo is applying the provisions of IFRS 16 concerning the definition of leases only for all contracts concluded or modified on or after 1 January 2019 (IFRS 16 C1).

The scheduled amortisation period is equivalent to the term of the underlying lease. In measuring operating lease liabilities, Wilo discounted the lease payments using the relevant incremental borrowing rates as at 1 January 2019. The weighted average rate was 3.6 percent. The effects at the transition date are summarised below:

Effect of initial application of IFRS 16

EUR thousand	
Operating lease obligations as at 31 December 2018 as reported in the consolidated financial statements in accordance with IAS 17	40,638
Not previously classified as operating leases	3,177
Total operating leases	43,815
Discounted using the incremental borrowing rate as at 1 January 2019	42,292
Leases not recognised in accordance with the accounting option due to their underlying assets being low-value assets	-2,078
Leases not recognised in accordance with the accounting option due to their term ending within twelve months of the date of initial application	-1,023
Finance lease liabilities as at 31 December 2018	5,010
Total lease liability as at 1 January 2019	**44,201**

The following standards, interpretations and amendments to existing standards were adopted for the first time in the 2019 financial year, but had no or no material effect on the consolidated financial statements of WILO SE:

- IFRIC 23 “Uncertainty over Income Tax Treatments”
- Amendments to IFRS 9 “Financial instruments: Prepayment Features with Negative Compensation”
- Amendments to IAS 28 “Investments in Associates and Joint Ventures” – Long-term Interests in Associates and Joint Ventures
- Amendments to IAS 19 “Plan Amendment, Curtailment or Settlement”
- Various amendments as part of the “Improvements to International Financial Reporting Standards 2015–2017” regarding IFRS 3 and 11 and IAS 12 and 23

The following standards, amendments to existing standards and interpretations issued by the IASB and the IFRS Interpretations Committee are not yet effective in the 2019 financial year or have not yet been endorsed by the European Union. WILO SE is not adopting early these standards, interpretations or amendments to existing standards or interpretations:

- Framework “Amendments to References to the Conceptual Framework”
- Amendments to IAS 1 and IAS 8 “Definition of Material”
- Amendments to IFRS 3 “Definition of a Business”
- Amendments to IFRS 10 “Consolidated Financial Statements” and IAS 28 “Investments in Associates and Joint Ventures” – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture and Long-term Interests in Associates and Joint Ventures
- IFRS 14 “Regulatory Deferral Accounts”
- IFRS 17 “Insurance Contracts”
- Amendments to IFRS 9, IAS 39 and IFRS 7 “IBOR Reform”

(4.) Basis of consolidation

The consolidated financial statements include WILO SE and all significant companies that WILO SE controls directly or indirectly. WILO SE controls an entity when it is exposed, or has rights, to changing returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

All consolidated companies' financial statements are prepared as at 31 December. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control is achieved until it ends and fully consolidated in accordance with IFRS 10.

In addition to WILO SE, the consolidated financial statements as at 31 December 2019 include seven (previous year: seven) German entities and 62 (previous year: 60) foreign subsidiaries. In addition, one joint venture (previous year: one) is included in the consolidated financial statements using the equity method.

A list of all of WILO SE's direct and indirect shareholdings can be found in the annex to the notes to the consolidated financial statements.

ACQUISITIONS In November 2019, WILO USA LLC formed a wholly-owned subsidiary, "American-Marsh Pumps LLC", Collierville, Tennessee, USA. At the end of the 2019 financial year, American-Marsh Pumps LLC, which was formed for this purpose, conducted a company acquisition in the form of an asset deal within the meaning of IFRS 3. This involved the acquisition of operating assets of the company J-LINE PUMP CO. – d/b/a American-Marsh Pumps –, Collierville, Tennessee, USA.

J-LINE PUMP CO. was a leading manufacturer of centrifugal pumps and vertical turbines. The company acquisition encompassed operating property, plant and equipment and assets (primarily buildings, machinery, receivables and inventories) as well as the risks associated with acquiring the business relationships with customers and suppliers. The employment contracts with employees were also acquired. With this acquisition, Wilo is expanding its product portfolio for customers in the water management, industry and building services segments.

The purchase price was fully paid in the form of cash. The fair values of the identifiable acquired assets and liabilities at the acquisition date were as follows:

Fair values of assets and liabilities

EUR thousand	31 December 2019
Property, plant and equipment	3,412
Inventories	4,774
Trade receivables	903
Current provisions and liabilities	-3,189
Total	**5,900**

Initial consolidation did not result in any positive or negative goodwill. If the acquisition date had been 1 January 2019, net sales of EUR 12,627 million and a net loss of EUR 2,896 million would have been reported in the consolidated financial statements. The company was consolidated for the first time effective 31 December 2019.

(5.) Consolidation methods

The financial statements of the German and foreign companies included in the consolidated financial statements were prepared using uniform accounting policies.

Business combinations are accounted for using the acquisition method in accordance with IFRS 3, with all hidden assets and liabilities disclosed. The assets, liabilities and contingent liabilities of the acquiree identified in accordance with IFRS 3 are measured at fair value at the acquisition date and offset against the purchase price of the acquisition in capital consolidation.

Any excess of the purchase price over the value of acquired, remeasured equity is capitalised as goodwill and tested for impairment annually at the level of the cash-generating unit to which the goodwill is allocated. If the acquired equity exceeds the purchase price, the difference is reassessed and recognised in profit or loss. Intangible assets are recognised separately from goodwill if they can be separated from the company or result from a contractual or other right.

The increase in the shareholding in a controlled and thereby fully consolidated company is treated as a transaction between owners under IFRS 10 in the consolidated financial statements. Any resulting difference is recognised directly in retained earnings and allocated to the shareholders of WILO SE.

Intragroup sales, income, expenses, receivables, payables and contingent liabilities are eliminated. Profits and losses resulting from intragroup trading and recognised in inventories are eliminated. Any temporary differences arising on consolidation are accounted for by recognising deferred tax items as appropriate.

(6.) Currency translation

Foreign-currency transactions in the separate financial statements of WILO SE and consolidated subsidiaries are translated into functional currency at the transaction date exchange rate. Foreign-currency monetary assets and liabilities are translated at the average rate as at the end of the reporting period and any exchange gains or losses are recognised in profit or loss. Non-monetary assets and liabilities measured at cost are translated at the transaction date exchange rate. Non-monetary items measured at fair value are translated at the measurement date exchange rate.

Items in the separate financial statements of consolidated entities are measured in the currency of the primary economic environment (functional currency).

Financial statements prepared in functional currencies other than the euro are translated into euro for consolidation. The reporting currency used in the consolidated financial statements is the euro. All assets and liabilities are translated at the exchange rate as at the end of the reporting period.Consolidated income statement items are translated for inclusion in the consolidated financial statements at annual average rates that appropriately approximate the transaction date exchange rates. Translation differences are accounted for as a separate item in consolidated equity until a subsidiary is disposed of.

The main exchange rates used in currency translation are as follows:

Exchange rates

		Annual average rate		Rate as at 31 Dec.	
	EUR 1 =	**2019**	2018	**2019**	2018
Pound sterling	GBP	0.8754	0.8855	0.8508	0.8981
Chinese yuan	CNY	7.7211	7.8060	7.8205	7.8426
Indian rupee	INR	78.7247	80.5622	80.1873	79.6527
Polish zloty	PLN	4.2976	4.2694	4.2568	4.2938
Russian rouble	RUB	72.2101	74.0612	69.9565	79.7958
Swedish krona	SEK	10.5841	10.2972	10.4468	10.1631
Swiss franc	CHF	1.1111	1.1506	1.0854	1.1266
South Korean won	KRW	1,302.9606	1,294.6704	1,296.2805	1,277.0302
Turkish lira	TRY	6.3626	5.7070	6.6506	6.0662
US dollar	USD	1.1190	1.1780	1.1234	1.1446

(7.) Accounting policies

The accounting policies applied in the previous year have been retained. Notes on the first-time adoption of new or amended standards and interpretations can be found in note (3). Items presented in the statement of financial position are broken down into current and non-current items. An asset or liability is classified as current if it is expected to be realised within twelve months of the end of the reporting period.

ESTIMATES AND ASSUMPTIONS Preparation of consolidated financial statements in line with IASB standards requires management to make estimates and assumptions that affect the amounts and reporting of recognised assets and liabilities, income and expenses and contingent assets and liabilities. Essentially the following matters are affected by estimates and assumptions:

- assessment of impairment on goodwill
- assessment of impairment on capitalised development costs
- measurement of intangible assets and items of property, plant and equipment
- assessment of impairment on trade receivables
- recognition and measurement of provisions for pensions and similar obligations
- recognition and measurement of other provisions

In goodwill impairment testing, the recoverable amount of cash-generating units is measured as the higher of fair value less costs to sell and value in use. Fair value is the best estimate of the amount obtainable at the end of the reporting period from the sale of a cash-generating unit in an arm's length transaction. Value in use is the present value of the future cash flows expected to be derived from continuing use of a cash-generating unit.

The Wilo Group uses the value in use as calculated using the discounted cash flow method in impairment testing for goodwill. The discounted cash flows are based on the strategic planning for a period of five years.

The cash flows forecasts take into account past experience and are based on the best estimate of future development by the company's management. Cash flows after the detailed planning period are extrapolated using growth rates specific to the business area.

The most important assumptions on which the calculation of value in use is based relate to discounted cash flows, estimated growth rates, the weighted average cost of capital and tax rates. These estimates and the underlying methods can have a significant influence on the respective values and ultimately on the amount of possible goodwill impairment. The Wilo Group reported goodwill of EUR 104,840 thousand as at the end of the reporting period (previous year: EUR 104,179 thousand). Further information can be found under "Intangible assets" and "Impairment of assets" (note (7)) and in note (9.1).

For intangible assets and items of property, plant and equipment, the useful lives applied are based on management estimates. Moreover, if necessary, impairment tests determine the recoverable amount of an asset or the cash-generating unit assigned to the asset as the higher of fair value less costs to sell or the value in use.

Fair value is the best estimate of the amount obtainable at the end of the reporting period from the sale of an asset in an arm's length transaction. The discounted future cash flow of the asset in question must be determined to calculate its value in use. The estimate of discounted future cash flows includes significant assumptions that themselves are subject to estimation uncertainty, e.g. the discount rate. Although the management presumes that its assumptions of general economic conditions, estimates of discounted future cash flow and of relevant expected useful lives are appropriate, a change in assumptions or circumstances could require a change in analysis. This could result in additional impairment losses in the future if the trends identified by the management reverse or if its assumptions or estimates prove to be inaccurate. The Wilo Group reported intangible assets of EUR 233,140 thousand (previous year: EUR 222,005 thousand) and property, plant and equipment of EUR 571,222 thousand (previous year: EUR 451,214 thousand) as at the end of the reporting period.

Further information can be found under “Intangible assets”, “Property, plant and equipment” and “Impairment of assets” (note (7)) and in notes (9.1) and (9.2).

Credit risks and risks of default can arise for trade receivables to the extent that customers do not meet their payment obligations and asset losses occur as a result. The necessary write-downs are calculated taking into account the credit rating of the respective customer, any collateral and experience of historical default rates. The actual default on payment by the customer can differ from the expected default on account of the underlying factors. The Wilo Group recognised total write-downs on trade receivables of EUR 24,701 thousand (previous year: EUR 21,700 thousand) as at the end of the reporting period. Further information can be found under “Financial assets” (note (7)) and in note (9.4).

The amount and probability of utilisation are estimated for the recognition and measurement of other provisions. The measurement is based on the most likely settlement amount or the expected settlement amount if there are equal probabilities. The amount of actual utilisation can differ from estimates. The Wilo Group primarily reports provisions for possible warranty claims and provisions for bonuses and customer rebates under other provisions. In total, other provisions of EUR 49,735 thousand (previous year: EUR 43,610 thousand) were reported as at the end of the reporting period. Further information can be found under “Other provisions” (note (7)) and in note (9.15).

The calculation of provisions for pensions and similar post-employment obligations is based on key premises, such as the discounting rates, salary trends, life expectancies and assumptions regarding trends in healthcare. The discounting rates used are determined on the basis of the returns on government bonds of the same term and currency as at the end of the reporting period. Actual developments may differ from the premises assumed on account of the fluctuating market and economic situation. This can have a significant effect on the obligations for pensions and similar post-employment benefits. The resulting differences are recognised in other comprehensive income. In total, provisions for pensions and similar obligations of EUR 91,083 thousand (previous year: EUR 80,030 thousand) were reported as at the end of the reporting period. Further information can be found under “Pensions and similar obligations” (note (7)) and in note (9.14).

The assumptions and estimates are based on current knowledge and the data currently available. Actual developments can differ from estimates. If the actual developments differ from estimates, the resulting consequences for the carrying amounts of the relevant assets and liabilities are taken into account accordingly.

JUDGEMENTS Judgements must be made in the application of accounting policies. In particular, this applies to the following:

- When allocating financial assets in accordance with IFRS 9 to the measurement categories at amortised cost, at fair value through profit and loss (FVTPL) and at fair value through other comprehensive income (FVOCI), judgements must be made.
- The cash-generating units for goodwill impairment testing are formed and defined by product and application and are subject to management judgement. The allocation of goodwill to individual cash-generating units is likewise subject to judgement.
- When using derivatives to minimise the financial risks of hedged items, it must be decided whether hedge accounting is to be used within the meaning of IFRS 9.
- In realising revenues in accordance with IFRS 15 determining whether control is transferred to the customer at a point in time or over time requires the exercise of judgement.

EXPENSE AND REVENUE RECOGNITION In accordance with IFRS, Wilo realises sales when control of distinct goods or services is transferred to the customer, that is, when the customer has the ability to determine the use of the transferred goods or services and obtain substantially all the remaining benefits. This requires that an agreement with enforceable rights and obligations exists and receiving the consideration – taking into account the customer's creditworthiness – is probable. Revenue corresponds to the transaction price to which Wilo expects to be entitled. At Wilo the transaction does not generally include considerations with various amounts in the transaction price. However, if the transaction price does include considerations with various amounts, the amount of the consideration with the most probable amount is determined. If the period of time between the transfer of goods or services and the agreed time of payment exceeds a period of twelve months, and a significant benefit results from the financing, then significant financing components are reclassified from revenues to net financial costs. If a contract covers several distinct goods and/services, the transaction price is allocated to the performance obligation on the basis of the relative stand-alone selling prices. If stand-alone selling prices are not directly observable, then these are estimated at an appropriate level. For each performance obligation, revenue is realised either at a point in time or over a specific period time. Net sales are presented net of trade discounts and rebates.

Cost includes all direct costs and overheads incurred in generating net sales, including depreciation on production machinery. This item also includes amounts recognised for guarantee provisions. Operating expenses are recognised in profit or loss when service is rendered or the expenses incurred. Interest income and interest expenses are recognised on an accrual basis.

ADMINISTRATIVE AND SELLING EXPENSES Administrative expenses and selling expenses include attributable labour and material costs plus depreciation applicable to each functional area.

RESEARCH AND DEVELOPMENT COSTS Development costs are capitalised as intangible assets at cost and amortised over their useful lives, provided the capitalisation criteria described in IAS 38 are met. Development costs that do not meet the capitalisation criteria in accordance with IAS 38 and research costs are reported as a separate line item in the income statement. In the year under review, development costs were capitalised in the amount of EUR 17,320 thousand (previous year: EUR 15,520 thousand). Furthermore, the addition to capitalised development costs also includes borrowing costs of EUR 421 thousand (previous year: EUR 1,348 thousand), meaning that the addition totals EUR 17,741 thousand (previous year: EUR 16,868 thousand).

BORROWING COSTS Borrowing costs are recognised in profit or loss, provided they do not relate directly to the acquisition, development or production of qualifying assets.

If this is the case, these direct borrowing costs are capitalised as incidental costs of acquisition of the qualified asset. Qualifying assets are assets which require a substantial period of time to bring them to a condition suitable for use or sale. In the 2019 financial year, borrowing costs were capitalised in the amount of EUR 2,844 thousand (previous year: EUR 3,004 thousand). The borrowing cost rate, which forms the basis for determining the capitalisable borrowing costs, was 2.09 percent in the year under review (previous year: 2.41 percent).

INTANGIBLE ASSETS Acquired intangible assets with a finite useful life are capitalised at cost and amortised on a straight-line basis over their useful lives (three to five years in the Wilo Group).

In accordance with IFRS 3 and IAS 38 in conjunction with IAS 36, goodwill is not amortised but instead tested for impairment annually and whenever there is an indication that it has become impaired.

If the conditions of IAS 38 are met, development costs with a finite useful life are capitalised and amortised on a straight-line basis over their useful lives.

PROPERTY, PLANT AND EQUIPMENT Physical assets used in the business for longer than one year are measured at cost less straight-line depreciation. Cost comprises the purchase price plus all directly attributable costs incurred in bringing an asset to the location and condition necessary for it to be capable of operating.

The estimated useful life of a building is between ten and 60 years; leasehold improvements and buildings on third-party land are depreciated over the shorter of the lease term or their useful life. The useful lives for technical equipment and machinery are between three and 14 years. Operating and office equipment subject to normal use are depreciated over three to 13 years. Significant parts of an asset that meet the criteria set out in IAS 16 are accounted for using the component approach. The depreciation for the financial year is allocated to the corresponding functional areas.

ASSETS HELD FOR SALE Non-current assets or disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. For this to be the case, the asset or disposal group must be available for immediate sale in its present condition and its sale must be highly probable. Assets held for sale are no longer written down, and are instead measured at the lower of fair value less costs to sell and carrying amount.

LEASES Wilo does not lease out any items itself, instead acting as a lessee only. The starting point for the initial measurement of the lease liability is the present value of the payments to be made over the lease term. The lease liability is carried forward to subsequent periods depending on the agreed repayment.

The right-of-use assets acquired are capitalised at cost on initial recognition and depreciated on a straight-line basis over the term of the lease. Subsequent measurement is based on the provisions for non-current assets.

Leased property is returned to the lessor at the end of the lease term.

Where consolidated companies are lessees, lease payments are recognised in profit or loss on a straight-line basis over the term of the lease.

For the comparative period, depending on the transitional method used, the accounting policies of IAS 17 are retained. Leases that meet the classification criteria for finance leases under IAS 17 are initially recognised as assets and liabilities at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments, each determined at the inception of the lease. If it is not reasonably certain that Wilo will obtain ownership by the end of the lease term, the leased asset is fully depreciated on a straight-line basis over the shorter of the lease term and its useful life. In such a case, the useful life is taken as a basis. On first-time recognition of finance leases under IAS 17, the capitalised amount and the liability are identical.

IMPAIRMENT OF NON-FINANCIAL ASSETS The recoverable amount is measured using the discounted cash flow method on the basis of approved planning over a strategic planning horizon of five years. An appropriate, unit-specific growth factor is applied. The plans are based on past experience and projected market development. The product divisions of the Wilo Group are broken down by product groups and applications to form the cash-generating units. As the Wilo Group does not perform voluntary segment reporting in accordance with IFRS 8, a further subdivision of the cash-generating units into additional segments is unnecessary.

The Wilo Group uses the value in use of each product division as its recoverable amount for the purposes of goodwill impairment testing.

The main assumptions used to determine the value in use of each product division for goodwill impairment testing are shown in the table below:

Assumptions used to determine value in use

Product division	Goodwill in EUR thousand	Long-term growth factor in %	Discount rate before income taxes in %
Heating, Ventilation, Air-Conditioning	7,620	0.1	12.1
Clean and Waste Water	97,220	0.7	12.1

The impairment test for capitalised development costs performed in the 2019 financial year resulted in no impairment losses (previous year: EUR 1,424 thousand).

FINANCIAL ASSETS The Wilo Group's financial assets comprise loans and receivables, acquired equity and debt securities, cash and derivative financial instruments that are assets. Within the Wilo Group, these financial assets are reported under trade receivables, other financial assets and cash.

On initial recognition, a financial asset is classified and measured as follows:

- at amortised cost
- FVOCI debt instruments (investments in debt instruments measured at fair value through other comprehensive income)
- FVOCI equity investments (equity investments measured at fair value through other comprehensive income)
- FVTPL (at fair value through profit or loss)

Purchases and sales of non-derivative financial assets are accounted for on the settlement date, i.e. the date of delivery and transfer of ownership. Derivative financial instruments are accounted for at the trade date.

Financial assets are not reclassified after initial recognition unless the Group changes its business model for controlling financial assets. In this case, all the affected financial assets are reclassified on the first day of the reporting period following the change in the business model.

A financial asset is carried at amortised cost if both of the following conditions are met and it has not been designated as FVTPL:

- It is held within a business model whose objective is achieved by collecting the contractual cash flows, and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt instrument is designated at FVOCI if both of the following conditions are met and it has not been designated as FVTPL:

- It is held within a business model whose objective is achieved by both holding financial assets to collect the contractual cash flows and selling financial assets, and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

When an equity investment that is not held for trading is recognised for the first time, the Group may irrevocably elect whether to present subsequent changes in the fair value of the investment in other comprehensive income. This is done on a case-by-case basis for each investment.

All financial instruments not measured at amortised cost or FVOCI are measured at FVTPL. This includes all derivative financial assets. On initial recognition, the Group may irrevocably elect to designate as FVTPL financial assets that otherwise meet the conditions for recognition at amortised cost or FVOCI if this serves to eliminate or significantly reduce accounting mismatches that would otherwise occur.

The following section describes the subsequent measurement of financial assets and the effects on the income statement:

- *Financial assets at FVTPL* These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in profit or loss.

- *Financial assets at amortised cost* These assets are subsequently measured at amortised cost using the effective interest method. Amortised cost is reduced by impairment losses. Interest income, currency gains and losses and impairment losses are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.

- *Debt instruments at FVOCI* These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, currency gains and losses and impairment losses are recognised in profit or loss. Other net gains or losses are recognised in other comprehensive income. The cumulative other comprehensive income is reclassified to profit or loss on derecognition.

- *Equity investments at FVOCI* These assets are subsequently measured at fair value. Dividend income is recognised in profit or loss unless the dividend evidently covers part of the cost of the investment. Other net gains and losses are recognised in other comprehensive income and are never reclassified to profit or loss.

- *Derecognition of financial assets* The Group derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire or it transfers the rights to receive the cash flows in a transaction that also transfers substantially all the risks and opportunities associated with ownership of the financial asset.

  A financial asset is also derecognised when the Group neither transfers nor retains substantially all the risks and opportunities of ownership and does not retain control of the transferred asset.

- *Impairment of assets* The risk provision and thus any impairment loss is based on the expected loss credit model of IFRS 9. These measurement provisions cover all financial assets not measured at FVTPL, such as loans, lease payments, trade receivables, credit enhancements, contract assets, specific finance guarantees or credit agreements. The measurement approach depends on the change in credit risk since initial recognition. In accordance with IFRS 9, the measurement model consists of the measurement approaches that the risk provision is based either on a twelve-month expected loss or a life time expected credit loss of the financial assets. A lifetime expected credit loss is determined only when the credit risk has significantly increased since initial recognition. An example would be if a receivable is more than 30 days past due or the rating has been downgraded by two or more notches.

For the subsequent measurement of trade payables and receivables, contract assets and lease payments there is a simplified approach using an impairment matrix. These receivables are subject to the lifetime expected credit loss.

INVENTORIES Raw materials and supplies and merchandise are measured at the lower of cost and net realisable value. Cost is determined using the weighted average cost method. Work in progress and finished goods are carried at cost. This includes all costs directly attributable to production and appropriate portions of production overheads. Production overheads include production-related depreciation, pro rata administration costs and pro rata social security costs. Cost does not include borrowing costs. Discounts are recognised on raw materials and supplies and merchandise for quality and functional defects and for risks of failure to sell. Inventories are measured as at the end of the reporting period at the lower of cost and net realisable value.

DERIVATIVES AND HEDGING The Wilo Group uses derivatives solely to reduce exchange rate, interest rate and commodity price risk. These instruments are hedges from an economic perspective. Wilo uses hedge accounting in accordance with IAS 39.

If the hedges do not meet the requirements of IAS 39 or IFRS 9, they are recognised and measured under FVTPL. Measurement is performed using standard measurement methods based on market parameters specific to each instrument. The fair value of forward exchange contracts and cross-currency interest rate swaps is calculated using net present value models, while the fair value of options is calculated using option pricing models. Where possible, the relevant market prices and interest rates at the end of the reporting period are used as the input parameters for these models.

The fair value of forward exchange contracts is determined using the middle spot exchange rate as at the end of the reporting period and taking into account the forward premiums and discounts for the remaining contract term with respect to the agreed forward exchange rate. The fair value of cross-currency interest rate swaps is determined by discounting the expected cash flows using applicable market rates with the same term as at the reporting date. Commodity futures are measured on the basis of current quoted market prices, taking corresponding forward premiums and discounts into account. In contrast, currency and commodity options are measured using option pricing models. The fair value of derivative financial instruments is calculated by banks.

Changes in the fair value of derivatives as at the end of the reporting period are taken directly to profit and loss under other net finance costs. Income and expenses from the realisation of derivatives are disclosed in the income statement in the item in which the effects of hedged items are reported. Income or expenses from the realisation of currency derivatives are recognised under other operating income or expenses, provided the hedged item is assigned to the operating area and the income and expenses from the measurement of this item were recognised accordingly in the same item. If the item relates to financial activity, the realised income and expenses from the currency forward or currency option are reported in other net financial income. Income or expenses from the realisation of cross-currency interest rate swaps are reported in net interest income. Income or expenses from the realisation of commodity derivatives without physical delivery are reported in cost of sales.

OTHER RECEIVABLES AND ASSETS Other receivables and assets primarily include tax receivables, advance payments, employer pension liability assets, deferrals and receivables from employees that are not financial assets. These other receivables and assets are measured at amortised cost.

DEFERRED TAXES Deferred tax assets and deferred tax liabilities are recognised in accordance with IAS 12 for all temporary differences between the carrying amount of an asset or liability in the IFRS financial statements and its tax base.

Deferred tax assets are also recognised in respect of the expected utilisation of unused tax loss carryforwards in subsequent years provided that, according to the estimates made by the Executive Board, the tax loss carryforwards are sufficiently likely to be utilised. Deferred tax assets are tested for impairment as at the end of the reporting period. The impairment test is based on approved planning over a strategic planning horizon of five years. The plans are based on past experience and projected market development. Deferred tax assets on loss carryforwards of EUR 41,159 thousand (previous year: EUR 35,242 thousand) were recognised as at the end of the reporting period.

The Wilo Group also recognises deferred tax liabilities for the tax expenses to arise on the expected profit distributions by the consolidated subsidiaries to WILO SE in the subsequent year. Deferred tax assets and liabilities are measured at the tax rates that apply or that are expected to apply at the realisation date according to the current legal situation in the individual countries.

Deferred tax assets are only offset against deferred tax liabilities if they relate to the same taxation authority and have matching terms. Information on the deferred taxes as at 31 December 2019 is provided in note (8.8).

GOVERNMENT GRANTS In accordance with IAS 20, a government grant is only recognised if there is reasonable assurance of compliance with the conditions attached to it and that the grant will be received. Research and investment grants received by the Wilo Group are recognised in profit or loss over the periods necessary to match them to the costs they are intended to compensate. Investment grants are recognised as deferred income and reversed to profit and loss over the term of the subsidised assets.

EQUITY Treasury shares in the notional amount of EUR 1,477 thousand (previous year: EUR 1,477 thousand) are openly deducted from issued capital.

FINANCIAL LIABILITIES Financial liabilities primary comprise liabilities and derivative financial instruments with negative fair values.

In accordance with IAS 32, primary liabilities such as financial liabilities due to banks, trade payables and liabilities reported under other financial liabilities are recognised in the consolidated statement of financial position if the Wilo Group has a contractual obligation to transfer cash or other financial assets to another party. The primary liabilities are assigned to the “at amortised cost” measurement category within the meaning of IFRS 9 and are carried at settlement amount or amortised cost using the effective interest method. Non-interest-bearing and low-interest liabilities with a term of more than one year are discounted if the time value of money is not immaterial. For liabilities with a term of less than one year, the fair value is assumed to be the same as the settlement amount. Transaction costs that are directly attributable are also recognised for all financial liabilities not subsequently measured at fair value and then amortised over their term using the effective interest method.

In accordance with IFRS 9, derivative liabilities are recognised at fair value with changes in value recognised through profit or loss (FVTPL).

In subsequent measurement, finance lease liabilities are carried at the present value of the lease payments.

Financial assets and financial liabilities are generally reported without offsetting.

PENSIONS AND SIMILAR OBLIGATIONS Provisions are recognised for uncertain liabilities from pension obligations and other post-employment benefits. In accordance with IAS 19, pension obligations for defined benefit commitments are calculated using the internationally recognised projected unit credit method. The calculations are based on actuarial appraisals and biometric parameters.

Actuarial gains and losses and gains and losses from the remeasurement of plan assets are recognised in full in other comprehensive income.

The expense relating to pension obligations, with the exception of the interest portion reported in net finance costs, is allocated to the relevant functional areas. The amount of pension obligations is determined using actuarial methods, for which estimates are essential.

The calculations for pension obligations use the following parameters, shown here on a weighted-average basis:

Calculation parameters for pension obligations

Figures in %	**31 December 2019**	31 December 2018
Discount rate	1.20	2.05
Pension adjustment	2.00	1.99
Salary increase	3.14	3.19

The net interest expense is calculated by multiplying the net pension liability by the discount rate.

The actuarial present value of pension obligations calculated using the projected unit credit method is reduced by the amount of the corresponding assets at the third-party pension provider if the requirements of IAS 19 for plan assets are met.

OTHER PROVISIONS Provisions for taxes include current income tax liabilities. Other provisions are recognised in accordance with IAS 37 when there is a present obligation to a third party resulting from a past event settling the obligation will probably require an outflow of resources and the amount of the obligation can be reliably estimated. Non-current provisions for obligations not expected to result in an outflow of resources in the next year are recognised at the net present value of the expected outflow of resources. The discount rate is based on market interest rates.

The settlement amount includes expected cost increases. Provisions are remeasured as at the end of each reporting period. Provisions are not offset against rights of recourse.

(8.) Notes to the consolidated income statement

(8.1) Net sales

Net sales break down according to the following regions:

Net sales

EUR thousand	**2019**	%	2018	%
Mature Markets	970,307	65.7	955,499	65.3
Emerging Markets	507,523	34.3	508,029	34.7
Total	**1,477,830**	**100.0**	**1,463,528**	**100.0**

Mature Markets and Emerging Markets consist of the following countries:
- Mature Markets: All European countries, Russia, Belarus, Ukraine, Caucasus nations and nations of the American continent
- Emerging Markets: India, China, South Korea, Southeast Asian nations, Australia and Oceania, Turkey, Near East and Middle East nations, African nations

Net sales include revenue from the sale of goods of EUR 1,356,687 thousand (previous year: EUR 1,346,096 thousand) and service income of EUR 121,143 thousand (previous year: EUR 117,432 thousand).

(8.2) Cost of sales

This item consists of costs of the products and merchandise sold.

Cost of sales

EUR thousand	**2019**	2018
Cost of materials	-676,677	-650,792
Miscellaneous costs	-293,683	-290,955
Total	**-970,360**	**-941,747**

(8.3) Selling and administrative expenses

Selling and administrative expenses

EUR thousand	**2019**	2018
Selling expenses	-264,627	-270,986
Administrative expenses	-94,638	-102,236
Total	**-359,265**	**-373,222**

Selling expenses include staff costs, depreciation and amortisation, and customer service, advertising, sales promotion, market research and shipping costs for sales in particular.

(8.4) Research and non-capitalised development costs

Research and non-capitalised development costs

EUR thousand	**2019**	2018
Research and development costs	-67,652	-66,263
of which capitalised development costs	17,320	15,520
Total	**-50,332**	**-50,743**

(8.5) Other operating income

Other operating income

EUR thousand	**2019**	2018
Foreign-currency gains from operating activities	5,612	5,995
Income from disposals of intangible assets and property, plant and equipment	1,445	554
Government grants	2,298	2,099
Insurance compensation	328	608
Rental income	150	97
Income from deconsolidation	0	1,029
Other	4,398	4,550
Total	**14,231**	**14,932**

The foreign-currency gains from operating activities of EUR 5,612 thousand (previous year: EUR 5,995 thousand) mainly consist of gains due to exchange rate changes between the inception and settlement of foreign-currency receivables and liabilities, and foreign-currency gains resulting from measurement at the exchange rate as at the end of the reporting period. Foreign-currency losses of EUR 5,987 thousand (previous year: EUR 8,888 thousand) from these items are reported under other operating expenses (see note (8.6)). As subsidiaries mostly trade with customers and suppliers in local currency, these foreign-currency gains and losses mainly arise on intragroup transactions.

(8.6) Other operating expenses

Other operating expenses

EUR thousand	**2019**	2018
Foreign-currency losses from operating activities	-5,987	-8,888
Losses on disposals of intangible assets and property, plant and equipment	-992	-498
Other	-1,937	-11,425
Total	**-8,916**	**-20,811**

(8.7) Net finance costs

Net finance costs break down as follows:

Net finance costs EUR thousand	2019	2018
Net interest costs	-5,087	-3,252
Other net finance costs	-466	-5,305
Total	**-5,553**	**-8,557**

Net interest costs consists of the following interest income and expenses:

Net interest costs EUR thousand	2019	2018
Interest income from cash and cash equivalents	2,503	2,279
Interest income	**2,503**	**2,279**
Interest expenses from financial liabilities	-9,034	-7,923
Interest on leases	-1,400	-612
Capitalised borrowing costs	2,844	3,004
Interest expenses	**-7,590**	**-5,531**
Total	**-5,087**	**-3,252**

Other net finance costs breaks down as follows:

Other net finance costs EUR thousand	2019	2018
Gains on derivative financial instruments	2,440	797
Foreign-currency gains from financing activities	435	1,131
Other	577	149
Other financial income	**3,452**	**2,077**
Losses on derivative financial instruments	-993	-4,277
Foreign-currency losses from financing activities	-1,218	-1,352
Interest rate effects from pensions, non-current liabilities and receivables	-1,707	-1,753
Other financial expenses	**-3,918**	**-7,382**
Total	**-466**	**-5,305**

The foreign-currency gains and losses from financing activities result from the translation of intragroup foreign-currency loans.

In the current financial year, the gains and losses on derivative financial instruments resulted primarily from positive and negative utilisation and measurement effects of forward exchange contracts. In addition, positive and negative utilisation and measurement effects resulted from commodity derivatives used to hedge prices for commodities within the Wilo Group.

(8.8) Income taxes

The income tax expense contained in consolidated net income is composed as follows:

Income taxes EUR thousand	2019	2018
Current tax expenses/income		
– Reporting year	-25,404	-25,980
– Adjustments for prior periods	232	-148
Current income taxes	**-25,172**	**-26,128**
Deferred tax income/expense		
– from unutilised loss carryforwards	5,917	12,288
– from changes in tax rates	253	-286
– from the creation and reversal of temporary differences	-5,671	-4,802
– from write-downs and reversals of write-downs on deferred tax assets	-540	-230
Deferred tax income/expense	**-41**	**6,970**
Income taxes	**-25,213**	**-19,158**

Deferred taxes are determined according to local income tax rates. For Germany, this is a combined tax rate of 32.1 percent (previous year: 30.8 percent) consisting of corporation tax, solidarity surcharge and trade tax. As in the previous year, local income tax rates for foreign entities range 9.0 percent to 34.0 percent (previous year: from 9.0 percent to 34.9 percent).

Deferred taxes by item in the statement of financial position

Deferred tax assets and liabilities are recognised as follows in relation to measurement differences on individual items of the statement of financial position and tax loss carryforwards:

Deferred taxes by item in the statement of financial position

	Deferred tax assets		Deferred tax liabilities	
EUR thousand	**2019**	2018	**2019**	2018
Intangible assets	2,399	858	30,922	25,602
Property, plant and equipment	1,022	2,138	16,605	10,524
Inventories	4,639	5,228	885	419
Receivables and other assets	6,373	7,843	2,349	2,920
	14,433	**16,067**	**50,761**	**39,465**
Financial liabilities	19	0	457	686
Trade payables	1,400	677	264	5
Pensions and similar obligations	17,649	14,213	0	0
Other provisions and liabilities	11,072	7,073	7,447	9,534
Tax loss carryforwards	41,159	35,242	0	0
	71,299	**57,205**	**8,168**	**10,225**
Carrying amount	**85,732**	**73,272**	**58,929**	**49,690**

The change in deferred tax assets and liabilities in the reporting year was as follows:

Change in deferred taxes

EUR thousand	Net amount of deferred tax assets/liabilities as at 31 Dec. 2018	Recognised in profit or loss	Recognised in other comprehensive income	**Net amount of deferred tax assets/liabilities as at 31 Dec. 2019**
Intangible assets	-24,744	-3,779	0	-28,523
Property, plant and equipment	-8,386	-7,177	-20	-15,583
Inventories	4,808	-1,054	0	3,754
Receivables and other assets	4,899	-899	0	4,000
Financial liabilities	-686	248	0	-438
Trade payables	673	463	0	1,136
Pensions and similar obligations	14,213	154	3,282	17,649
Other provisions and liabilities	-2,857	6,086	0	3,229
Initial application of IFRS 9 and IFRS 15	420	0	0	420
Tax loss carryforwards	35,242	5,917	0	41,159
Total	**23,582**	**-41**	**3,262**	**26,803**

The change in deferred tax assets and liabilities in the previous year was as follows:

Change in deferred taxes

EUR thousand	Net amount of deferred tax assets/liabilities as at 31 Dec. 2017	Recognised in profit or loss	Recognised in other comprehensive income	Net amount of deferred tax assets/liabilities as at 31 Dec. 2018
Intangible assets	–20,328	–4,416	0	–24,744
Property, plant and equipment	–6,435	–2,133	182	–8,386
Inventories	4,697	111	0	4,808
Receivables and other assets	4,691	176	32	4,899
Financial liabilities	–1,145	459	0	–686
Trade payables	75	598	0	673
Pensions and similar obligations	14,093	227	–107	14,213
Other provisions and liabilities	–2,516	–341	0	–2,857
Initial application of IFRS 9 and IFRS 15	0	0	420	420
Tax loss carryforwards	22,953	12,289	0	35,242
Total	**16,085**	**6,970**	**527**	**23,582**

EUR –20 thousand of the deferred tax income of EUR 3,262 thousand recognised in other comprehensive income relates to currency differences. The remaining EUR 3,282 thousand relates to the actuarial changes in the present value of the pension obligations and the remeasurement of the related plan assets.

Unutilised tax loss carryforwards amounted to EUR 171,266 thousand (previous year: EUR 152,945 thousand) as at the end of the reporting period, EUR 125,623 thousand of which (previous year: EUR 102,286 thousand) can be carried forward indefinitely. The limited tax loss carryforwards amount to EUR 45,643 thousand (previous year: EUR 50,659 thousand) and can be carried forward between five and 20 years.

Applying local income tax rates, deferred tax assets on loss carryforwards of EUR 41,159 thousand (previous year: EUR 35,242 thousand) were recognised as at the end of the reporting period.

A potential deferred tax asset on loss carryforwards of EUR 8,901 thousand (previous year: EUR 8,426 thousand) was not recognised on the remaining loss carryforwards as future utilisation did not seem sufficiently likely at the end of the reporting period.

As WILO SE is anticipating profit distributions from its consolidated subsidiaries next year, deferred tax liabilities of EUR 2,486 thousand (previous year: EUR 3,096 thousand) have been recognised on these distributions.

In addition, there were retained profits of EUR 177,628 thousand at subsidiaries as at 31 December 2019 (previous year: EUR 150,796 thousand) intended for long-term investment, for which no deferred tax liabilities were therefore recognised.

RECONCILIATION OF INCOME TAXES The combined statutory tax rate of 15.8 percent consisting of corporation tax and the solidarity surcharge plus the trade tax rate of approximately 16.3 percent was used in the reconciliation of income taxes in the 2019 financial year. This corresponds to a total tax rate of 32.1 percent (previous year: 30.8 percent). The Wilo Group reported tax expenses of EUR 25,213 thousand (previous year: EUR 19,158 thousand) in its consolidated income statement for 2019. This is EUR 6,128 thousand lower (previous year: EUR 6,523 thousand lower) than the expected tax expense of EUR 31,341 thousand (previous year: EUR 25,681 thousand) that results from applying the domestic rate of 32.1 percent (previous year: 30.8 percent) at Group level.

The difference is attributable to the following causes:

Tax reconciliation

EUR thousand	**2019**	2018
Consolidated net income before taxes	97,635	83,380
Expected tax expense	**-31,341**	**-25,681**
Tax rate changes	253	-286
Difference from current tax rates	12,750	9,856
Temporary differences arising on consolidation	-128	-85
Other permanent differences	-7,523	-2,797
Tax-free income	2,855	3,597
Change in unrecognised deferred taxes on loss carryforwards	-475	147
Withholding tax	-2,342	-3,292
Prior-period taxes	175	-148
Other	563	-469
Current tax expense	**-25,213**	**-19,158**

(8.9) Earnings per share

Earnings per share are determined by dividing consolidated net income attributable to WILO SE shareholders by the weighted average number of shares outstanding in the financial year. Both basic and diluted earnings per ordinary share amounted to EUR 7.38 (previous year: EUR 6.55).

Earnings per share

	2019	2018
Consolidated net income in EUR thousand	72,422	64,222
Number of ordinary shares as at 31 Dec.	9,808,760	9,808,760
Weighted average number of ordinary shares outstanding	9,808,760	9,808,760
Earnings per ordinary share (EUR)	**7.38**	**6.55**

(9.) Notes to the consolidated statement of financial position

(9.1) Intangible assets

Intangible assets developed as follows in the financial years 2019 and 2018:

Intangible assets

EUR thousand	Patents, property rights and customer base	Goodwill	Capitalised development costs	Advance payments	**Total**
Cumulative cost					
As at 1 January 2018	75,867	107,939	63,478	12,599	259,883
Currency translation	655	1,871	0	0	2,526
Additions	4,559	43	16,868	3,392	24,862
Disposals	–313	0	0	–7	–320
Reclassifications	6,801	0	0	–6,801	0
As at 31 December 2018	**87,569**	**109,853**	**80,346**	**9,183**	**286,951**
As at 1 January 2019	87,569	109,853	80,346	9,183	286,951
Currency translation	356	631	8	0	979
Additions	3,454	0	17,741	1,788	22,983
Disposals	–3,192	0	0	–3	–3,195
Reclassifications	520	0	–6	–514	0
As at 31 December 2019	**88,707**	**110,484**	**98,073**	**10,454**	**307,718**
Cumulative depreciation					
As at 1 January 2018	49,216	5,671	47	0	54,934
Currency translation	34	3	0	0	37
Depreciation in the financial year	7,903	0	2,327	0	10,230
Disposals	–255	0	0	0	–255
As at 31 December 2018	**56,898**	**5,674**	**2,374**	**0**	**64,946**
As at 1 January 2019	56,898	5,674	2,374	0	64,946
Currency translation	44	–30	0	0	14
Depreciation in the financial year	8,326	0	4,435	0	12,761
Disposals	–3,143	0	0	0	–3,143
As at 31 December 2019	**62,125**	**5,644**	**6,809**	**0**	**74,578**
Residual carrying amounts					
As at 1 January 2018	26,651	102,268	63,431	12,599	204,949
As at 31 December 2018	**30,671**	**104,179**	**77,972**	**9,183**	**222,005**
As at 1 January 2019	30,671	104,179	77,972	9,183	222,005
As at 31 December 2019	**26,582**	**104,840**	**91,264**	**10,454**	**233,140**

Goodwill is tested for impairment at least annually. Detailed information on impairment testing is provided in note (7).

Goodwill allocated to the product divisions developed as follows in the 2019 financial year:

Development of goodwill by product division

EUR thousand		1 Jan. 2019	Currency translation	**31 Dec. 2019**
Product division				
Heating, Ventilation, Air-Conditioning		7,639	–20	7,619
Clean and Waste Water		96,540	681	97,221
Total		**104,179**	**661**	**104,840**

(9.2) Property, plant and equipment

Property, plant and equipment developed as follows in the 2019 and 2018 financial years:

Property, plant and equipment

EUR thousand	Land and buildings	Technical equipment and machinery	Operating and office equipment	Advance payments and assets under construction	**Total**
Cumulative cost					
As at 1 January 2018	250,897	223,494	313,198	52,208	839,797
Currency translation	–3,782	–541	–1,056	59	–5,320
Additions	21,470	8,820	21,464	78,309	130,063
Reclassifications	1,188	10,869	8,021	–20,078	0
Disposals	–1,107	–12,438	–6,546	–744	–20,835
As at 31 December 2018	**268,666**	**230,204**	**335,081**	**109,754**	**943,705**
As at 1 January 2019	268,666	230,204	335,081	109,754	943,705
Initial application of IFRS 16	29,718	1,048	8,425	0	39,191
Currency translation	2,430	–117	943	192	3,448
Additions	13,660	10,557	24,009	93,884	142,110
Additions from business combinations	2,967	0	445	0	3,412
Reclassifications	110,520	4,620	4,950	–120,090	0
Disposals	–3,296	–1,904	–9,941	–470	–15,611
As at 31 December 2019	**424,665**	**244,408**	**363,912**	**83,270**	**1,116,255**
Cumulative depreciation					
As at 1 January 2018	69,090	155,223	232,499	0	456,812
Currency translation	164	–329	–307	0	–472
Depreciation in the financial year	10,086	14,103	27,138	0	51,327
Disposals	–490	–8,657	–6,029	0	–15,176
As at 31 December 2018	**78,850**	**160,340**	**253,301**	**0**	**492,491**
As at 1 January 2019	78,850	160,340	253,301	0	492,491
Currency translation	–29	–94	269	0	146
Depreciation in the financial year	17,490	15,191	31,464	0	64,145
Reclassifications	0	–1	1	0	0
Disposals	–1,479	–1,679	–8,591	0	–11,749
As at 31 December 2019	**94,832**	**173,757**	**276,444**	**0**	**545,033**
Residual carrying amounts					
As at 1 January 2018	181,807	68,271	80,699	52,208	382,985
As at 31 December 2018	**189,816**	**69,864**	**81,780**	**109,754**	**451,214**
As at 1 January 2019	189,816	69,864	81,780	109,754	451,214
As at 31 December 2019	**329,833**	**70,651**	**87,468**	**83,270**	**571,222**

LEASES The sales companies of the Wilo Group mainly lease office and warehouse space. The terms of the leases are typically up to five years. Most of these leases were previously classified as operating leases in accordance with IAS 17.

There are also material leases in the area of operating and office equipment. These relate in particular to IT equipment and vehicles and have terms of up to three years. Most of these leases were also previously classified as operating leases in accordance with IAS 17.

There are leases for low-value assets in the area of operating and office equipment in particular (e.g. laptops and mobile phones). In accordance with the expedients provided by IFRS 16, no right-of-use assets or lease liabilities are recognised in the statement of financial position for these leases.

The carrying amounts of property, plant and equipment as at 31 December 2019 contained right-of-use assets in the amount of EUR 41,834 thousand that were recognised in 2019 in accordance with IFRS 16. In the previous year, the carrying amounts of property, plant and equipment contained leased assets in the amount of EUR 5,278 thousand that were classified as finance leases within the meaning of IAS 17. The net carrying amounts of the recognised right-of-use assets are composed as follows:

Right-of-use lease assets

EUR thousand	**IFRS 16 31 Dec. 2019**	IAS 17 31 Dec. 2018
Land and buildings	29,444	512
Technical equipment and machinery	1,179	0
Operating and office equipment	11,211	4,766
Total	**41,834**	**5,278**

The right-of-use assets recognised as property, plant and equipment in the 2019 financial year in accordance with IFRS 16 developed as follows:

Development of right-of-use lease assets

EUR thousand	Land and buildings	Technical equipment and machinery	Operating and office equipment	**Total**
As at 31 December 2018	512	0	4,766	**5,278**
Initial application of IFRS 16	29,718	1,048	8,425	**39,191**
As at 1 January 2019	**30,230**	**1,048**	**13,191**	**44,469**
Currency translation	8	0	-25	**-17**
Additions to right-of-use assets	10,067	490	4,711	**15,268**
Reclassifications	-397	0	-9	**-406**
Disposals of right-of-use assets	-1,006	0	-522	**-1,528**
Depreciation in the financial year	-9,458	-359	-6,135	**-15,952**
As at 31 December 2019	**29,444**	**1,179**	**11,211**	**41,834**

Wilo applies the exemptions provided by IFRS 16 for leases relating to low-value assets and for short-term leases. In addition to interest expenses for lease liabilities, the following leases not recognised in the statement of financial position are reported in the income statement:

Amounts reported in the income statement

EUR thousand	**IFRS 16 2019**	IAS 17 2018
Interest expenses for lease liabilities	1,400	0
Expenses for leases of low-value assets	1,739	0
Expenses for short-term leases	5,807	0
Expenses for variable lease payments not included in the measurement of the lease liability	489	0
Expenses for IAS 17 operating leases	0	22,071
Total	**9,435**	**22,071**

The consolidated statement of cash flows includes cash outflows of EUR 15,986 thousand for leases for which right-of-use assets have been recognised in accordance with IFRS 16.

(9.3) Inventories

Inventories

EUR thousand	**31 Dec. 2019**	31 Dec. 2018
Raw materials and supplies	89,918	106,823
Work in progress	27,867	20,481
Finished goods and goods for resale	124,494	136,347
Advance payments	833	807
Total	**243,112**	**264,458**

As at 31 December 2019, the write-down on inventories amounted to EUR 22,281 thousand (previous year: EUR 24,503 thousand) with a gross carrying amount of EUR 265,393 thousand (previous year: EUR 288,961 thousand). Inventories are not subject to any restrictions on title beyond the suppliers' customary retention of title.

(9.4) Trade receivables

The trade receivables result from normal goods and services transactions of the Wilo Group. Current trade receivables of EUR 288,535 thousand (previous year: EUR 283,932 thousand) are due in the 2020 financial year. Non-current trade receivables of EUR 1,976 thousand (previous year: EUR 2,299 thousand) are due after more than one year. There are no restrictions on title on trade receivables.

The Executive Board is of the opinion that the carrying amounts of trade receivables are approximately equal to their fair values. Adequate provision is made for default risk by write-downs in the form of specific and valuation allowances and the expected credit loss. Specific valuation allowances are recognised on the basis of information available in a specific case as at the end of the reporting period. Specific valuation allowances are recognised in an appropriate amount in relation to any legal, collection or insolvency proceedings against debtors, overdue payments, complaints, third-party collateral, changes in agreed terms of payment and all other transactions or information affecting the collectability of trade receivables.

If trade receivables are past due, assumptions are made regarding the expected settlement date. If a long-range settlement date is assumed, the receivables are discounted accordingly.

Specific valuation allowances and the expected credit loss on trade receivables changed as follows in the 2019 and 2018 financial years:

Specific valuation allowances

EUR thousand	**2019**	2018
As at 1 January	**16,379**	**15,006**
Currency translation	30	-306
Additions	4,203	4,083
Utilisation	-816	-1,130
Reversals	-2,427	-1,274
As at 31 December	**17,369**	**16,379**

IFRS 9 expected credit loss 31 Dec. 2019

EUR thousand	Expected loss rate	Gross carrying amount	Risk provision
Europe	0.2–1.0%	132,063	892
Asia Pacific	0.5–13.1%	97,870	5,790
MEA	2.8%	18,226	467
Others	0.5–1.0%	27,669	183
As at 31 December 2019		**275,828**	**7,332**

IFRS 9 expected credit loss 31 Dec. 2018

EUR thousand	Expected loss rate	Gross carrying amount	Risk provision
Europe	0.2–1.0%	129,812	770
Asia Pacific	0.5–9.8%	98,884	4,173
MEA	1.4%	13,220	185
Others	0.5–1.0%	24,175	193
As at 31 December 2018		**266,091**	**5,321**

The regions Europe, Asia Pacific, MEA and Others, consist of the following countries:
- **Europe:** All European states except Russia and Belarus
- **Asia Pacific:** India, China, South Korea, Southeast Asian nations, Australia and Oceania
- **MEA:** Near East and Middle East nations, Turkey and African nations
- **Others:** Nations of the American continent, Russia and Belarus, Caucasian nations

Further information on the expected credit loss is provided in note (11.) “Risk management and derivative finance instruments”.

Income and expenses from valuation allowances, recoveries and the derecognition of trade receivables are recognised in note (8.3) Selling expenses.

(9.5) Other financial assets

Other financial assets break down as follows as at 31 December 2019 and 2018:

Other financial assets

EUR thousand	31 Dec. 2019 of which with a remaining term			31 Dec. 2018 of which with a remaining term		
	Total	**of less than one year**	**of more than one year**	Total	of less than one year	of more than one year
Receivables from unconsolidated subsidiaries, jointly controlled entities and associates	215	215	0	127	127	0
Receivables from derivative financial instruments	500	499	1	1,418	558	860
Loans	212	0	212	25	0	25
Equity instruments	1,994	0	1,994	1,957	0	1,957
Miscellaneous other financial receivables	8,415	3,315	5,100	10,105	6,438	3,667
Total	**11,336**	**4,029**	**7,307**	**13,632**	**7,123**	**6,509**

Equity instruments in the amount of EUR 1,994 thousand (previous year: EUR 1,957 thousand) are measured at fair value. As the fair value could not be derived from stock exchange or market prices, or from discounting reliably determined future cash flows, the fair value is estimated on a cost basis.

The carrying amounts of other financial assets are approximately equal to their fair values. There are no restrictions on other financial assets.

(9.6) Other receivables and assets

Other receivables and assets are composed as follows as at 31 December 2019 and 2018:

Other receivables and assets

EUR thousand	31 Dec. 2019 of which with a remaining term			31 Dec. 2018 of which with a remaining term		
	Total	**of less than one year**	**of more than one year**	Total	of less than one year	of more than one year
Tax receivables	22,370	16,646	5,724	26,112	19,375	6,737
Advance payments	7,581	7,568	13	7,145	7,132	13
Employer pension liability assets	1,477	0	1,477	1,813	0	1,813
Prepaid expenses	5,448	5,406	42	4,003	3,946	57
Non-consolidated subsidiaries	51	0	51	652	0	652
Receivables from employees	418	403	15	389	380	9
Total	**37,345**	**30,023**	**7,322**	**40,114**	**30,833**	**9,281**

(9.7) Cash

The cash of EUR 166,056 thousand (previous year: EUR 135,412 thousand) mainly comprises cash and sight deposits at banks. There are restrictions on title of EUR 645 thousand (previous year: EUR 663 thousand).

(9.8) Assets held for sale

Assets held for sale of EUR 307 thousand (previous year: EUR 1,811 thousand) relate to a building of Wilo Italia S.r.l. in Milan that is being sold to a third party. The disposal process for the asset was started in 2019, but had not been concluded as at the reporting date.

(9.9) Equity

ISSUED CAPITAL As in the previous year, the issued capital of WILO SE amounted to EUR 26,980 thousand as at the end of the reporting period and is fully paid in. It is divided into 10,117,331 no-par-value ordinary registered shares and 259,418 no-par-value preferred registered shares without voting rights. There were 9,808,760 ordinary shares (previous year: 9,808,760) and, as in the previous year, no preferred shares in circulation as at 31 December 2019.

Treasury shares in the notional amount of EUR 1,477 thousand (previous year: EUR 1,477 thousand) are openly deducted from issued capital.

CAPITAL RESERVES The capital reserves of EUR 26,161 thousand (previous year: EUR 26,161 thousand) result from the capital increase implemented in the 2011 financial year of EUR 15,507 thousand, EUR 14,527 thousand of which was appropriated to the capital reserves of WILO SE.

OTHER RESERVES In addition to retained earnings, other reserves include differences from the translation of the foreign-currency financial statements of the companies included in the consolidated financial statements, the actuarial gains and losses from pension obligations and the gains and losses from the revaluation of plan assets.

The legal reserve in retained earnings in accordance with section 150 (2) of the Aktiengesetz (AktG – German Stock Corporation Act) amounts to 10.0 percent of the issued capital of WILO SE.

Other reserves developed as follows in the financial years 2019 and 2018:

Other reserves

EUR thousand	**2019**	2018
As at 1 January	**716,458**	**685,018**
WILO SE shareholders' interest in:		
Consolidated net income	72,422	64,222
Other comprehensive income	–1,902	–12,473
Dividend payment	–14,811	–19,323
Other changes	–1,708	–986
As at 31 December	**770,459**	**716,458**

TREASURY SHARES As at 31 December 2019, the company held 567,989 treasury shares, or 5.5 percent of the share capital. As at 31 December 2019, the company reported 308,571 ordinary shares (previous year: 308,571) and 259,418 preference shares (previous year: 259,418) as treasury shares.

DIVIDENDS The Annual General Meeting on 2 April 2019 resolved to distribute EUR 14,811 thousand from the unappropriated surplus as at 31 December 2018 (previous year: EUR 19,323 thousand). This corresponds to a dividend per ordinary share of EUR 1.51.

CAPITAL MANAGEMENT A business objective of the Wilo Group is to sustain the strongest possible equity base in order to foster confidence in all key stakeholders and promote the Group's onward development. A sound equity base is also a key factor in ensuring a stable risk rating with lenders, which is important for obtaining acceptable borrowing terms for the Wilo Group. The Executive Board, the Supervisory Board and the shareholders of WILO SE ensure a responsible dividend policy and an appropriate return on invested capital to promote value growth and safeguard the company's future.

The Executive Board of WILO SE is kept informed about the equity position of the Wilo Group as part of monthly reporting. The equity positions of consolidated subsidiaries are also reviewed at regular intervals and on an ad hoc basis. Measures are implemented as necessary, taking the tax and legal frameworks into account, to sustain an appropriate capital base that enables each subsidiary to attain its operating targets and the Wilo Group to meet its strategic goals.

The total equity of the Wilo Group as at 31 December 2019 was EUR 792,357 thousand (previous year: EUR 738,356 thousand).This is mostly accounted for by EUR 844,464 thousand (previous year: EUR 788,561 thousand) in freely disposable retained earnings. The freely disposable retained earnings do not include the legal reserve of WILO SE of EUR 2,698 thousand (previous year: EUR 2,698 thousand). Taken together, the freely disposable retained earnings and the legal reserve make up the Group's retained earnings of EUR 847,162 thousand (previous year: EUR 791,259 thousand).

In the context of the borrowing of senior notes and promissory note loans, WILO SE is required to report a minimum equity ratio. The company satisfied this requirement in full in the 2019 and 2018 financial years. More detailed information on these senior notes and promissory note loans can be found in note (9.10).

(9.10) Financial liabilities

Financial liabilities break down as follows as at 31 December 2019 and 2018:

Financial liabilities

EUR thousand	**31 Dec. 2019**	31 Dec. 2018
Long-term borrowings		
with a remaining term		
of between one and five years	146,429	132,968
of more than five years	58,977	65,155
Total	**205,406**	**198,123**
Current financial liabilities		
with a remaining term		
of less than one year	113,503	70,357

WILO SE reported the following material financing agreements as at 31 December 2019:

- **USPP 2027** In May 2017, WILO SE issued a senior note of USD 30.0 million (EUR 27.5 million) maturing in 2027 with an interest rate of 3.22 percent p.a. as part of a US private placement ("USPP 2027"). It is not secured against real property or financial assets of WILO SE. The placement was part of a multi-currency shelf facility totalling USD 150.0 million. The senior note had a carrying amount of EUR 26.7 million as at 31 December 2019.

- **USPP 2023 & USPP 2021** In March 2013 and February 2011, WILO SE issued senior notes of EUR 37.0 million and EUR 75.0 million as US private placements. Both placements were implemented as part of a private shelf facility (non-binding debt commitment) in the amount of USD 150.0 million, which was thus fully utilised. The senior notes were both borrowed in euro and are not secured against real property or financial assets of the company. The senior note of EUR 37.0 million ("USPP 2023") matures in 2023 and bears interest at 3.1125 percent p.a. The senior note of EUR 75.0 million ("USPP 2021") matures in 2021 and has an interest coupon of 4.50 percent p.a.

- **PROMISSORY NOTE LOAN 2027** In June 2017, WILO SE took out a promissory note loan ("promissory note loan 2027") of EUR 50.0 million, maturing in 2027, at an interest rate of 1.35 percent p.a. The promissory note loan is repayable semi-annually from December 2022 in the amount of EUR 5.0 million. It is not secured against real property or financial assets of the company.

- **PROMISSORY NOTE LOAN 2020** In January 2011, WILO SE took out a promissory note loan ("promissory note loan 2020") of EUR 25.0 million, maturing in 2020, at an interest rate of 4.08 percent p.a. It has been repaid semi-annually in the amount of around EUR 1.25 million since 2011. The promissory note loan had a carrying amount of EUR 2.5 million (previous year: EUR 5.0 million) as at the end of the reporting period and is not secured against real property or financial assets of the company.

- **KFW DEVELOPMENT LOAN 2027** To finance the construction project at the Dortmund location, a KfW development loan of EUR 19.5 million with a term of ten years and an interest rate of 1.15 percent was concluded in November 2017 for the administrative building ("KfW development loan 2027") and secured by a land charge. The loan amount has been drawn down in instalments since 2018 according to the progress of construction. The KfW development loan had a full carrying amount of EUR 19.5 million as at 31 December 2019 (previous year: EUR 8.0 million). It will be repaid in instalments starting from 2020 after two redemption-free years.

- **SYNDICATED LOAN 2024** In July 2013, WILO SE entered into an agreement on a syndicated loan with a revolving credit facility with a volume of EUR 120 million and an original term of five years. In July 2017, the syndicated loan was extended ahead of schedule until 2022 and increased to EUR 200 million in line with the anticipated financing requirements. The contractually agreed option to increase the credit facility to EUR 300.0 million and to extend the term by a maximum of two years was subsequently exercised, meaning that the loan now has a term until 2024. The interest rate is calculated quarterly on the basis of leverage and the amount in which the credit facility has been utilised. The syndicated loan is not secured against real property or financial assets of the company. At the end of the reporting period, the credit facility had been utilised in the amount of EUR 105.0 million (previous year: EUR 65.0 million).

The company is required to satisfy certain standard financial ratios (ratio of consolidated EBITDA to consolidated interest expenses (interest cover ratio), ratio of consolidated net debt to consolidated EBITDA (leverage) and the equity ratio) for the senior notes and promissory note loans it has issued and the syndicated loan. WILO SE fully complied with this obligation in the 2019 and 2018 financial years. The agreements also include a number of standard grounds for termination.

Incidental costs were incurred in connection with these financing arrangements that are deducted from the financial liabilities and reported in profit or loss over the term of the financing arrangements using the effective interest method.

The incidental costs of acquisition outstanding as at the end of the reporting period amounted to EUR 595 thousand (previous year: EUR 824 thousand).

The fair value of the financial liabilities calculated using net present value models was EUR 330,417 thousand as at 31 December 2019 (previous year: EUR 281,974 thousand).

Current financial liabilities mainly consist of a syndicated loan and the current portion of non-current financial liabilities to be repaid in the 2020 financial year.

(9.11) Trade payables

Trade payables break down as follows as at 31 December 2019 and 2018:

Trade payables

EUR thousand	**31 Dec. 2019**	31 Dec. 2018
Trade payables		
with a remaining term		
of between one and five years	71	103
of less than one year	172,955	172,287
Total	**173,026**	**172,390**

Trade payables consist of outstanding obligations to suppliers. The Executive Board assumes that the carrying amounts of non-current trade payables are approximately equal to their fair values.

(9.12) Other financial liabilities

Other financial liabilities

EUR thousand	**31 Dec. 2019**	31 Dec. 2018
Non-current other financial liabilities	**32,464**	**7,196**
of which		
Lease liabilities		
with a remaining term of between one and five years	24,296	2,893
with a remaining term of more than five years	3,754	0
Liabilities from derivative financial instruments		
with a remaining term of between one and five years	246	0
Miscellaneous financial liabilities		
with a remaining term of between one and five years	4,168	4,303
Total	**32,464**	**7,196**
Current other financial liabilities	**42,299**	**35,912**
of which		
Bills payable	10,828	10,653
Liabilities to non-consolidated subsidiaries, jointly controlled entities or associates	2,650	6,150
Lease liabilities	13,482	2,117
Liabilities from derivative financial instruments	1,252	1,850
Miscellaneous financial liabilities	14,087	15,142
Total	**42,299**	**35,912**

Current other financial liabilities have a remaining term of less than one year. Miscellaneous financial liabilities include amounts for tax consulting, financial statement costs, commissions, del credere commissions and other financial obligations to external companies. The Executive Board assumes that the carrying amounts of other financial liabilities are approximately equal to their fair values.

(9.13) Other liabilities

Other liabilities break down as follows as at 31 December 2019 and 2018:

Other liabilities

EUR thousand	**31 Dec. 2019**	31 Dec. 2018
Non-current other liabilities		
Contract liabilities (IFRS 15)	2,096	2,223
Deferred income	1,691	1,345
Total	**3,787**	**3,568**
Current other liabilities		
Tax liabilities	21,948	25,548
Staff liabilities	29,463	32,761
Advance payments received	17,523	15,897
Social security liabilities	4,222	4,464
Deferred income	202	95
Miscellaneous other liabilities	5,454	12,792
Total	**78,812**	**91,557**

Non-current other liabilities have a remaining term of between one and five years. Current other liabilities have a remaining term of less than one year.

Staff liabilities include accumulated holiday pay, management bonuses and gratuities, outstanding salaries, employer's liability insurance contributions and severance pay.

(9.14) Provisions for pensions and similar obligations

Pension obligations and other post-employment benefits are composed as follows as at 31 December 2019 and 2018:

Provisions for pensions and similar obligations

EUR thousand	**31 Dec. 2019**	31 Dec. 2018
Provisions for pensions	87,172	76,425
Similar obligations	3,911	3,605
Total	**91,083**	**80,030**

Provisions for pensions are composed as follows:

Provisions for pensions EUR thousand	**31 Dec. 2019**	31 Dec. 2018
Present value of the pension obligation	99,367	87,771
Fair value of plan assets	–12,195	–11,346
Provisions for pensions	**87,172**	**76,425**

Pension obligations are recognised for accrued entitlements and current benefits under defined benefit plans for eligible active and former employees of the Wilo Group and their surviving dependants.

The benefit amount depends on country-specific circumstances and is generally based on years of service and pay level. The beneficiaries predominantly receive benefits in the form of lifetime old age, disability and surviving dependants' pensions. Benefits are granted to a smaller extent in the form of lump-sum payments on retirement.

The corresponding provisions are recognised on the basis of annual actuarial assessments of existing pension obligations.

Defined benefit obligations are recognised in accordance with the actuarial assessment over the service life of employees and consist of staff cost and interest cost. The staff costs are allocated to the relevant functional areas. The interest expense is reported in other net finance costs after netting against the interest income from plan assets. Actuarial gains and losses and the effects of the revaluation of plan assets are recognised in full in other comprehensive income.

WILO SE's defined benefit plan was discontinued on 31 December 2005. A defined contribution plan has been set up in its place for WILO SE employees for whom a pension obligation has existed from 1 January 2006. An expense of EUR 2,853 thousand (previous year: EUR 2,951 thousand) was recognised in the reporting year for defined contribution plans in the Wilo Group.

The present value of the pension obligation developed as follows:

Present value of pension obligations EUR thousand	**2019**	2018
As at 1 January	**87,771**	**87,849**
Current service cost	3,118	3,093
Past service cost	51	42
Interest expense	1,537	1,801
Remeasurement		
Actuarial gains/losses from the change in demographic assumptions	393	–524
Actuarial gains/losses from the change in financial assumptions	9,351	–93
Actuarial gains/losses from experience adjustments	550	–300
Pension payments	–3,361	–4,047
Currency effects and other changes	–43	–50
As at 31 December	**99,367**	**87,771**

The pension obligation breaks down among the beneficiaries as follows:

- Active members: EUR 55,383 thousand (previous year: EUR 48,409 thousand)
- Deferred members: EUR 9,800 thousand (previous year: EUR 7,684 thousand)
- Pensioners: EUR 34,184 thousand (previous year: EUR 31,677 thousand)

The measurement of pension obligations is based on actuarial assumptions. Accordingly, the Wilo Group is exposed to certain actuarial risks. In particular, these include interest risks, risks of rising pensions, salary risks and longevity risks.

Changes in the significant actuarial assumptions would have affected the present value of pension obligations as follows:

Sensitivity analysis

		Present value of the pension obligation Change in %	
		31 Dec. 2019	31 Dec. 2018
Discount rate	+0.5%	–7.5	–6.7
	–0.5%	7.6	7.6
Pension factor	+0.25%	2.6	2.4
	–0.25%	–2.5	–2.3
Salary factor	+0.25%	0.6	0.6
	–0.25%	–0.6	–0.9
Life expectancy	+10%	6.7	6.2

Sensitivities are calculated assuming a change in just one individual factor with the other actuarial assumptions remaining constant. The assumed deviations are realistic assumptions based on past experience and future market forecasts.

As at 31 December 2019, the weighted average duration of the defined benefit obligation was 16.2 years (previous year: 15.8 years).

73.2 percent of the pension obligations of EUR 99,367 thousand (previous year: EUR 87,771 thousand) relate to Germany (previous year: 72.2 percent).

The fair value of plan assets changed as follows:

Fair value of plan assets

EUR thousand	**2019**	2018
As at 1 January	**11,346**	**12,173**
Interest income	243	311
Remeasurement		
Gain/loss on plan assets (excluding interest income)	48	–703
Payments	–524	–1,556
Amounts paid in by employer	1,221	1,081
Currency effects and other changes	–139	40
As at 31 December	**12,195**	**11,346**

Plan assets comprise the following:

Composition of plan assets

EUR thousand	**2019**	2018
Cash	10,307	9,625
Qualifying insurance policies	1,482	1,333
Investment funds	406	388
As at 31 December	**12,195**	**11,346**

Furthermore, there are employee pension liability policies to cover provision-funded pension obligations in the amount of EUR 1,477 thousand (previous year: EUR 1,442 thousand) though these do not satisfy the requirements for classification as plan assets under IAS 19.

The company is not currently assuming any further payments into plan assets in the coming years.

SIMILAR OBLIGATIONS Similar obligations for post-employment benefits amount to EUR 3,911 thousand for 2019 (previous year: EUR 3,605 thousand). They include gross obligations for WILO SE of EUR 5,617 thousand (previous year: EUR 4,164 thousand). The EUR 3,882 thousand (previous year: EUR 2,830 thousand) fair value of plan assets as at the end of the reporting period is deducted insofar as it relates to obligations under the partial retirement scheme. There were no excess plan assets in the past financial year (previous year: EUR 371 thousand). In the previous year, the amount not attributable to obligations under the partial retirement scheme was reported under employer pension liability assets in non-current other assets. The present value of the obligations under the partial retirement scheme at 31 December 2019 was determined using a discount rate of 1.20 percent (previous year: 2.00 percent). Furthermore, an annual wage and salary increase of 3.30 percent was assumed (previous year: 3.10 percent).

(9.15) Other provisions

Non-current and current provisions for guarantees are recognised for potential warranty claims on the basis of past experience and planned measures.

The provision for bonuses and rebates relates to customer reimbursement for the 2019 financial year. The Wilo Group expects that the corresponding repayments of EUR 22,325 thousand (previous year: EUR 17,541 thousand) will be almost fully paid to customers by the middle of 2020.

Other provisions EUR thousand	1 Jan. 2019	Currency translation	Utilisation	Reversal	Addition	31 Dec. 2019
Non-current						
Guarantees	3,571	-2	249	34	457	3,743
Current						
Guarantees	15,323	57	1,437	2,005	2,923	14,861
Bonuses and rebates	17,541	124	16,313	790	21,763	22,325
Other	7,175	21	1,735	473	3,818	8,806
Total	**40,039**	**202**	**19,485**	**3,268**	**28,504**	**45,992**

(10.) Notes to the consolidated statement of cash flows

The consolidated statement of cash flows is broken down according to cash flows from operating, investing and financing activities. Cash flows from operating activities are calculated using the indirect method and reported after adjustment for currencies. The effects of exchange rate changes and changes in the composition of the consolidated group on cash are shown separately. Cash as at 31 December 2019 consisted of EUR 166,056 thousand (previous year: EUR 135,412 thousand) in cash and sight deposits with banks, EUR 645 thousand (previous year: EUR 663 thousand) of which was subject to restrictions on title.

The changes in cash due to exchange rate changes of EUR 826 thousand (previous year: EUR -753 thousand) relate to the effect of translating foreign-currency items of cash into the reporting currency. Purchases of intangible assets include payments in connection with capitalised development costs of EUR 17,741 thousand (previous year: EUR 16,844 thousand).

The cash flow from financing activities shows the following changes in financial liabilities:

Changes in financial liabilities EUR thousand	1 Jan. 2019	Proceeds from assuming financial liabilities	Repayment of financial liabilities	31 Dec. 2019
Financial liabilities (non-current)	198,123	9,786	2,503	205,406
Financial liabilities (current)	70,357	43,793	647	113,503
Financial liabilities	**268,480**			**318,909**
Cash flow from financing activities		**53,579**	**3,150**	

Interest received, like interest paid, is allocated to net cash flow from financing activities because the interest received mainly includes payments in connection with the short-term reinvestment of funds borrowed but not yet required.

(11.) Disclosures on financial instruments

(11.1) Derivative financial instruments

The following table shows the fair values of derivative financial instruments as at 31 December 2019 and the changes as against the previous year:

Derivative financial instruments

	Fair value				Nominal amount	
	Maturity from 31 Dec. 2019					
EUR thousand	of less than one year	Between one and five years	Previous year	Total change	**31 Dec. 2019**	31 Dec. 2018
Forward exchange contracts	-956	-245	1,254	-2,455	89,671	61,037
Commodity derivatives	203	0	-1,686	1,889	10,598	16,825

Net finance costs include gains of EUR 2,440 thousand (previous year: EUR 797 thousand) and losses of EUR 993 thousand (previous year: EUR 4,277 thousand) (see note (8.7)).

CASH FLOW HEDGE ACCOUNTING FOR LONG-TERM LOAN

On 28 April 2017, WILO SE extended a Group loan for USD 45 million to WILO USA LLC. EUR 23.5 million was recognised as of the end of the reporting period (previous year: EUR 32.5 million). The loan agreement provides for interest and principal payments and has a final maturity date of 28 April 2022. Even though the loan (hedged item) is eliminated in the consolidation process, from the currency translation of the Group loan in the financial statements of WILO SE, there remains a currency risk and net foreign-currency result in net financial income in the consolidated financial statements. The risk relates to the variable value of the USD cash flow for repayments at the respective repayment dates in the EUR required.

For this reason, WILO SE held five (previous year: seven) external forward exchange contracts (hedging instruments) as at 31 December 2019; these hedge the repayment tranches of this loan to 28 April 2022 and are designated as cash flow hedges. As at the reporting date, the fair value of these derivatives was EUR -358 thousand (previous year: EUR 1,140 thousand) and was recognised in other financial liabilities.

In future periods, the following amounts are to be reclassified from other comprehensive income to net foreign-currency income.

2019	Carrying amount		Expected reclassification		
EUR thousand			2020	2021	2022
Other comprehensive income	1,350		507	548	295
Nominal amount in USD million			9.0	9.5	5.0
Average exchange rate hedge USD/EUR			1.1541	1.1817	1.2020
Fair value	–358		–127	–147	–84

2018	Carrying amount	Expected reclassification			
EUR thousand		2019	2020	2021	2022
Other comprehensive income	769	249	208	204	108
Nominal amount in USD million		9.0	9.0	9.5	5.0
Average exchange rate hedge USD/EUR		1.1268	1.1541	1.1817	1.2020
Fair value	1,140	280	321	354	185

In the financial year, a result for the market performance of the derivatives of EUR –1,217 thousand (previous year: EUR –1,605 thousand was recognised in other comprehensive income. In the same period, part of the deferred result of EUR 387 thousand (previous year: EUR 1,333 thousand) for existing derivatives and EUR 170 thousand (previous year: EUR 249 thousand) for settled derivatives was reclassified to the net foreign-currency income. This resulted in the same amount of net foreign-currency income of the Group loan being compensated. There was no ineffectiveness in the financial year. Hedge effectiveness results from matching the value-critical parameters of hedged item and hedging instrument and a “dollar-offset measurement” for accounting recognition on the reporting date.

CASH FLOW HEDGES – PURCHASES AND SALES OF GOODS
In addition, Wilo has used hedge accounting in accordance with IAS 39 to hedge currency risks relating to the purchase and sale of inventories since the 2019 financial year. The hedging strategy gives rise to the quarterly rolling hedging of currency risks at the level of individual monthly tranches. The hedge ratio for a specific future date increases over time and is continuously reviewed against current forecasts. This allows ineffectiveness and over-hedging to be fundamentally avoided to the greatest possible extent. Any ineffectiveness or over-hedging is reported in operating net foreign-currency income. As at 31 December 2019, the Group held the following instruments for hedging exchange rate risks:

Forward exchange contracts for hedging operating currency risks

	1–6 months	6–12 months	More than one year
Nominal amount CHF: EUR in EUR million	10.5	5.4	2.2
Average forward exchange rate CHF:EUR	0.9098	0.9122	0.9223
Nominal amount GBP: EUR in EUR million	10.3	4.8	0.9
Average forward exchange rate GBP:EUR	1.1356	1.1361	1.1561
Nominal amount PLN: EUR in EUR million	7.9	2.4	0.0
Average forward exchange rate PLN:EUR	0.2321	0.2298	0
Nominal amount RUB: EUR in EUR million	15.6	3.2	0.0
Average forward exchange rate RUB:EUR	0.0138	0.0137	0

Rolling FX hedging of cash inflows/supplier payments

2019 exchange rate risk in EUR thousand	Forward exchange contracts for sales	Forward exchange contracts for purchases
Change in other comprehensive income[1]	1,614	48
Reclassification from other comprehensive income to profit and loss	–684	–48
Carrying amount of other comprehensive income	**930**	**0**
of which:		
Carrying amount of forward exchange contract asset[2]	5	0
Carrying amount of forward exchange contract liability[2]	–935	0
Nominal amount at the reporting date	53,596	0

[1] The amount corresponds to the change in the value of the hedged items use to determine the ineffectiveness. With a reversed sign, the amount corresponds to the change in the value of the hedging instruments use to determine the ineffectiveness.

[2] The carrying amounts of the hedging instruments are reported in “Other financial assets” (9.5) or “Other financial liabilities” (9.12). The cash flow hedge reserve is reported in other comprehensive income (equity).

(11.2) Disclosures on the carrying amounts and fair values of financial instruments

The following tables show the financial assets and liabilities with their carrying amounts as at 31 December 2019 per measurement category under IFRS 9 and statement of financial position category.

Financial assets and liabilities as at 31 December 2019

EUR thousand	Measurement category under IFRS 9	Carrying amount under IFRS 9: Amortised cost	Carrying amount under IFRS 9: Fair value	Derivatives used in hedge accounting
Current and non-current financial assets				
Trade receivables	Amortised cost	290,511		
Other financial assets				
Receivables from subsidiaries, jointly controlled entities and associates	Amortised cost	215		
Receivables from derivative financial instruments not used in hedge accounting	FVTPL		495	
Receivables from derivative financial instruments used in hedge accounting	n/a			5
Loans	Amortised cost	212		
Equity instruments	FVOCI in equity		1,994	
Miscellaneous financial receivables	Amortised cost	8,415		
Cash	Amortised cost	166,056		
Current and non-current financial liabilities				
Financial liabilities	Amortised cost	318,909		
Trade payables	Amortised cost	173,026		
Other financial liabilities				
Bills payable	Amortised cost	10,828		
Liabilities to subsidiaries, jointly controlled entities and associates	Amortised cost	2,650		
Liabilities from derivative financial instruments not used in hedge accounting	FVTPL		204	
Liabilities from derivative financial instruments used in hedge accounting	n/a			1,294
Miscellaneous financial liabilities	Amortised cost	18,255		
of which aggregated by measurement category under IFRS 9				
Amortised cost		989,077		
FVOCI in equity			1,994	
FVTPL			699	
Derivatives used in hedge accounting				1,299

Financial assets and liabilities as at 31 December 2018

EUR thousand	Measurement category under IFRS 9	Carrying amount under IFRS 9: Amortised cost	Carrying amount under IFRS 9: Fair value	Derivatives used in hedge accounting
Current and non-current financial assets				
Trade receivables	Amortised cost	286,231		
Other financial assets				
Receivables from subsidiaries, jointly controlled entities and associates	Amortised cost	127		
Receivables from derivative financial instruments not used in hedge accounting	FVTPL		278	
Receivables from derivative financial instruments used in hedge accounting	n/a			1,140
Loans	Amortised cost	25		
Equity instruments	FVOCI in equity		1,957	
Miscellaneous financial receivables	Amortised cost	10,105		
Cash	Amortised cost	135,412		
Current and non-current financial liabilities				
Financial liabilities	Amortised cost	269,480		
Trade payables	Amortised cost	172,390		
Other financial liabilities				
Bills payable	Amortised cost	10,653		
Liabilities to subsidiaries, jointly controlled entities and associates	Amortised cost	6,150		
Liabilities from derivative financial instruments not used in hedge accounting	FVTPL		1,850	
Miscellaneous financial liabilities	Amortised cost	19,445		
of which aggregated by measurement category under IFRS 9				
Amortised cost		910,018		
FVOCI in equity			1,957	
FVTPL			2,128	
Derivatives used in hedge accounting				1,140

The carrying amounts of the financial assets and liabilities in the scope of IFRS 7 are the same as their fair value per class. This is not the case only for financial liabilities, which have a carrying amount of EUR 318,909 thousand (previous year: EUR 268,480 thousand) and a fair value of EUR 330,417 thousand (previous year: EUR 281,974 thousand). The fair values of financial liabilities were calculated using net present value methods.

Since 2018, the Group has had two minority interests which are measured at fair value in other comprehensive income and whose fair value of EUR 1,994 thousand (previous year: EUR 1,957 thousand) corresponds to hierarchy Level 3.

WILO SE holds an 8 percent stake in EUROCARBO S.P.A., Corropoli/Italy, in the context of a strategic investment. The value of the stake is measured in line with strategic considerations largely based on the value of the equity stake and the hidden reserves in property, plant and equipment. The indicative valuation is based on the continuation of the investment decision. On the basis of all available information, in our view cost and fair value have the same measurement as at 31 December 2019.

WILO SE also holds a 2.6 percent stake in HydroPoint Data Systems, Inc., Petaluma/USA. The company is a specialist on the US smart water management market. This highly innovative and new business area involves considerable planning uncertainties. As a result of this uncertainty, fair value is determined based on cost.

However, neither impacts earnings or other comprehensive income. Sensitivity can be determined only on the basis of the overall value. An increase (reduction) of the respective value by 10 percent results in an increase (decrease) of other comprehensive income by EUR 199 thousand (previous year: EUR 196 thousand).

The calculation of the fair values of the receivables and liabilities from derivative financial instruments, which are assigned to the FVTPL category, of EUR 495 thousand (previous year: EUR 278 thousand) and EUR 204 thousand (previous year: EUR 1,850 thousand) respectively, is shown under note (7).

(11.3) Net gains and losses by measurement category

The table below shows the net earnings reported under profit and loss for the 2019 financial year in line with IFRS 7, consisting of interest, dividends, changes in fair value, impairment, impairment reversals and the effects of currency translation on each measurement category of financial assets and liabilities. This does not include the earnings effects of leases, as leases do not belong to any IFRS 9 measurement category.

Net gains and losses by measurement category
2019 financial year

Measurement category	Carrying amount 31 Dec.	Interest and dividends	Change in fair value	Impairments	Impairment reversals	Effects of currency translation	Net gains/ losses
Financial assets							
Amortised cost	465,409	5,347	0	–6,696	2,782	637	2,070
FVOCI in equity	1,994	0	0	0	0	0	0
FVTPL	495	0	0	0	0	0	0
Total financial assets		**5,347**	**0**	**–6,696**	**2,782**	**637**	**2,070**
Financial liabilities							
Amortised cost	523,668	–9,034	0	0	0	–1,795	–10,829
FVTPL	204	0	0	0	0	0	0
Total financial liabilities		**–9,034**	**0**	**0**	**0**	**–1,795**	**–10,829**

Net gains and losses by measurement category 2018 financial year

Measurement category	Carrying amount 31 Dec.	Interest and dividends	Change in fair value	Impairments	Impairment reversals	Effects of currency translation	Net gains/ losses
Financial assets							
Amortised cost	431,900	5,283	0	–5,918	1,377	2,660	3,402
FVOCI in equity	1,957	0	0	0	0	0	0
FVTPL	278	0	797	0	0	0	797
Total financial assets		**5,283**	**797**	**–5,918**	**1,377**	**2,660**	**4,199**
Financial liabilities							
Amortised cost	478,118	–7,923	0	0	0	–5,773	–13,696
FVTPL	1,850	0	–4,277	0	0	0	–4,277
Total financial liabilities		**–7,923**	**–4,277**	**0**	**0**	**–5,773**	**–17,973**

(11.4) Fair value hierarchy of financial assets and liabilities

Financial assets and liabilities accounted for at fair value are divided into the following three levels in accordance with IFRS 13 on the basis of the measurement of their fair value:

Level 1: The fair value for an asset or liability is calculated using quoted market prices on active markets for identical assets and liabilities.

Level 2: The fair value for an asset or liability is based on value factors for this asset or liability that are observed directly or indirectly on a market.

Level 3: The fair value for an asset or liability is based on value factors for this asset or liability that do not refer to observable market data.

The following table shows the allocation of financial assets and liabilities that existed within the Wilo Group as at 31 December 2019 and 2018 that were recognised at fair value or for which the fair value was disclosed.

Fair value hierarchy

	31 Dec. 2019 Level 2	31 Dec. 2018 Level 2
Receivables from derivative financial instruments used in hedge accounting	5	1,140
Receivables from derivative financial instruments not used in hedge accounting (FVTPL)	495	278
Liabilities from derivative financial instruments used in hedge accounting	1,294	0
Liabilities from derivative financial instruments not used in hedge accounting (FVTPL)	204	1,850
Financial liabilities (amortised cost)	330,417	281,974
	Level 3	**Level 3**
Equity instruments (FVOCI in equity)	1,994	1,957

The Wilo Group did not report any financial assets or liabilities classified as Level 1 based on the method by which their fair value was determined as at 31 December 2019 and 2018. More detailed information on equity instruments (FVOCI in equity) can be found in note (11.2).

If reclassifications to another level in the valuation hierarchy are required these are made as at the end of the financial year in which the event occurs that results in reclassification being required.

(12.) Risk management and derivative financial instruments

RISK MANAGEMENT PRINCIPLES Due to the international nature of its business activities, the assets, liabilities and planned transactions of the Wilo Group are subject to market risks from changes in exchange rates, interest rates and commodity prices in particular. The objective of financial risk management is to mitigate this risk from operating and financial activities. This is achieved using derivative and primary hedging instruments selected according to estimated risk. Derivative financial instruments are solely used to hedge risk. They are not used for trading or other speculative purposes. The general credit risk on these derivative financial instruments is low because they are only entered into with banks of excellent credit standing. The Group is also subject to credit and default risk and liquidity risk.

The basic principles of financial policy and strategy are determined by the Executive Board and monitored by the Supervisory Board. Responsibility for implementing financial policy and strategy lies with Group Finance. Further information on risks and risk management can be found in the opportunities and risk report section of the Group management report.

CURRENCY RISK The Wilo Group faces currency risk primarily in its financing and operating activities. Currency risk in financing activities relates to foreign-currency borrowing from external lenders and foreign-currency lending to finance Group companies. Currency risk in operating activities mainly relates to the supply of goods and provision of services to Group companies. Currency risk exposure on such transactions is countered by the use of same-currency offsetting transactions and derivative financial instruments. The currency risk on operating business between Group companies and external customers and suppliers is estimated to be low as most of such business is transacted in the functional currency of the Group companies.

The following table shows the foreign-currency risk position of the Wilo Group as at 31 December 2019 and 2018 in the respective foreign currency. This consists of foreign-currency transactions in operating activities and foreign-currency financing activities up to 31 December 2019 and 2018, as well as expected foreign-currency transactions in operating activities in 2020 and 2019. This analysis does not take into account the effects of the translation of the financial statements of subsidiaries into reporting currency (translation risk). The gross risk is before hedges.

Foreign-currency risk position as at 31 December 2019

in EUR million	EUR	USD	CNY	GBP	PLN	RON	RUB
Cash	6.3	3.0	13.0	1.8	0.0	0.0	175.6
Trade and other receivables	16.3	4.5	0.0	0.0	0.0	0.0	0.0
Receivables from affiliated companies	2.4	11.6	61.1	1.5	8.7	4.1	44.9
Trade and other payables	–2.6	–8.0	–3.8	0.0	0.0	0.0	–0.1
Liabilities due to affiliated companies	–25.0	–2.0	–30.9	0.0	–0.1	0.0	–16.4
Financial liabilities	–2.3	–0.1	0.0	0.0	0.0	0.0	0.0
Currency risk from assets and liabilities (gross)	**–4.9**	**9.0**	**39.4**	**3.3**	**8.6**	**4.1**	**204.0**
Expected sales in 2020	79.8	31.2	175.0	15.1	129.5	35.0	3,850.0
Expected acquisitions in 2020	–102.2	–55.6	–261.5	–0.5	0.0	0.0	–101.1
Currency risk from expected transactions in operating activities in 2020 (gross)	**–22.4**	**–24.4**	**–86.5**	**14.6**	**129.5**	**35.0**	**3,748.9**
Hedging	0.0	0.9	–12.3	–9.1	–34.1	–11.0	–1,131.0
Currency risk (net)	**–27.3**	**–14.5**	**–59.4**	**8.8**	**104.0**	**28.1**	**2,821.9**

Foreign-currency risk position as at 31 December 2018

in EUR million	EUR	USD	CNY	GBP	PLN	RON	RUB
Cash	6.8	4.0	8.8	1.7	0.1	0.0	0.0
Trade and other receivables	12.7	9.2	0.0	0.0	0.0	0.0	0.0
Receivables from affiliated companies	3.5	13.4	40.5	0.3	10.3	13.8	118.7
Trade and other payables	–2.9	–11.3	–2.9	0.0	0.0	0.0	–0.1
Liabilities due to affiliated companies	–20.7	–10.4	–23.5	–0.4	0.0	0.0	–22.6
Financial liabilities	–3.9	–0.1	0.0	0.0	0.0	0.0	0.0
Currency risk from assets and liabilities (gross)	**–4.5**	**4.8**	**22.9**	**1.6**	**10.4**	**13.8**	**96.0**
Expected sales in 2019	78.7	44.9	257.1	15.8	117.2	42.1	4,000.0
Expected acquisitions in 2019	–107.2	–73.5	–214.4	–0.4	0.0	0.0	–108.7
Currency risk from expected transactions in operating activities in 2019 (gross)	**–28.5**	**–28.6**	**42.7**	**15.4**	**117.2**	**42.1**	**3,891.3**
Hedging	0.0	1.5	0.0	–8.0	–7.0	–3.0	–250.0
Currency risk (net)	**–33.0**	**–22.3**	**65.6**	**9.0**	**120.6**	**52.9**	**3,737.3**

The foreign-currency receivables and liabilities, expected foreign-currency transactions and derivative financial instruments in the form of cross-currency interest rate swaps and forward exchange contracts have certain sensitivities to currency fluctuations. A 10.0 percent appreciation or depreciation in the respective currency compared with the other currencies as at 31 December would have the following hypothetical impact on earnings:

Sensitivity analysis

	2019		2018	
EUR million	**+10%**	**-10%**	+10%	-10%
EUR	-3.0	2.5	-3.7	3.0
USD	-1.4	1.1	-2.2	1.8
CNY	-0.9	0.7	0.7	-0.6
GBP	1.2	-0.9	1.1	-0.9
PLN	2.7	-2.2	3.1	-2.6
RON	0.7	-0.5	1.3	-1.0
RUB	4.5	-3.7	5.2	-4.3

In addition to a long-term Group loan in USD, Wilo began hedging exchange rate risks in connection with sales of products and purchases of inventories in the 2019 financial year. These derivative financial instruments used in hedge accounting have sensitivities to currency fluctuations. A 10.0 percent appreciation or depreciation in the respective currency compared with the other currencies as at 31 December would have the following hypothetical impact on earnings:

Sensitivity analysis

	2019	
EUR million	**+10%**	**-10%**
USD	2.8	-3.9
CHF	0.8	-1.4
GBP	0.7	-1.5
PLN	0.7	-0.9
RUB	1.2	-2.0

The sensitivity analysis assumes that all other factors influencing value remain constant and that the figures at the reporting date are representative for the year as a whole.

INTEREST RATE RISK The Wilo Group faces interest rate risk mainly on floating rate financial liabilities and on invested cash. Both a rise and a fall in the yield curve result in interest rate exposure. The Wilo Group mitigates adverse changes in value from unexpected interest rate movements by using derivative financial instruments. Interest rate risk as defined in IFRS 7 is considered to be low as the financial liabilities have long-term fixed interest rates. The remaining interest rate risk from variable-interest financial instruments, and in particular from the utilisation of bank overdrafts, is negligible.

If interest rates declined with the consequence of negative interest rates on deposits, Wilo would align its investment strategy accordingly in order to minimise the negative impact on net interest costs.

COMMODITY PRICE RISK The Wilo Group is subject to commodity price risk primarily from price fluctuations on the global markets for copper and aluminium and their alloys. The Wilo Group uses commodity derivatives in a targeted manner to control this risk. The prices for most of the copper procurement volume for the 2019 financial year have already been fixed. Currently, the Wilo Group's result of operations would be influenced by price fluctuations on the global markets for copper and aluminium and their alloys from the 2020 financial year onwards.

In accordance with IFRS, commodity price risks are shown using sensitivity analyses. These show the impact of a change in commodity prices. A 10.0 percent increase (decrease) in the price of copper and aluminium as at 31 December would have the following impact on earnings:

Sensitivity analysis	Copper		Aluminium		Total	
EUR thousand	**2019**	2018	**2019**	2018	**2019**	2018
Price increase (10%)						
Impact on earnings	-633	-323	-418	-405	-1,051	-728
Price decrease (10%)						
Impact on earnings	633	323	418	405	1,051	728

The calculation takes into account all copper and aluminium derivatives at the reporting date and the planned procurement volume for the next year in each case.

CREDIT RISK Customer credit risk is countered with a uniform and effective Group-wide system for systematic receivables management and the monitoring of payment behaviour. Dependency on individual customers is limited because Wilo does not generate more than 10.0 percent of its total revenues with any one customer.

The maximum credit risk is equal to the carrying amount of financial instruments.

Trade receivables are secured with retentions of title. The fair value of these retentions of title is equal to the carrying amount of trade receivables. The carrying amount of trade receivables before write-downs is EUR 315,212 thousand (previous year: EUR 307,931 thousand). As at 31 December 2019, EUR 17,369 thousand (previous year: EUR 16,379 thousand) in specific write-downs was recognised on past due trade receivables of EUR 36,112 thousand (previous year: EUR 35,795 thousand).

Wilo applies a central approach to the expected credit loss concept in accordance with IFRS 9. Four different risk groups were formed on the basis of regions. The probability of a future credit loss is determined on the basis of actual credit losses of the last three years for each region. For each region, time buckets are used to examine in which maturity period the receivable was when the credit loss occurred. In addition, indicators (e.g. gross domestic product, industry outlook) are used to assess the probability of a future credit loss. This data is used to determine a credit loss probability per region as a percentage. As at the reporting date, the Wilo Group recognised impairments of EUR 7,332 thousand using the expected credit loss model (previous year: EUR 5,321 thousand). Further information can be found in note (9.4) Trade receivables.

In addition, there is a maximum credit risk of EUR 1,994 thousand (previous year: EUR 1,957 thousand) for financial assets in the “fair value through OCI (FVOCI in equity)” measurement category and of EUR 699 thousand (previous year: EUR 2,128 thousand) for financial assets in the “fair value through profit or loss (FVTPL)” measurement category resulting exclusively from derivative financial instruments. With regard to other financial assets that are neither impaired nor past due, there are no indications as at the end of the reporting period that debtors will fail to make payment. As in the previous year, no impairment was recognised on other financial assets as at 31 December 2019.

Master agreements for financial futures have been concluded with various globally operating banks. Among other things, these agreements state that amounts in the same currency payable between parties on the same date are offset and therefore only the remaining net amount is paid by one party to the other. They also stipulate that, under certain circumstances, such as a party’s default, all transactions still outstanding are cancelled. In the event of this happening, all transactions still outstanding will be offset.

These agreements do not satisfy the criteria for the netting of the corresponding assets and liabilities in the statement of financial position as they did not give rise to a legal right to offset the respective assets and liabilities at the current time. This right will only exist on the occurrence of future events, such as the default of one of the two parties.

The following financial assets and liabilities were reported in the statement of financial position without netting as the criteria of IAS 32.42 required to offset them were not met. However, they are subject to the agreements described above that allow offsetting given certain future events.

Offsetting financial assets and liabilities

EUR thousand	Carrying amount	Assets and liabilities before offsetting[1]	Net values
31 December 2019			
Receivables from derivative financial instruments	500	–346	154
Liabilities from derivative financial instruments	–1,498	346	–1,152
31 December 2018			
Receivables from derivative financial instruments	1,418	–150	1,268
Liabilities from derivative financial instruments	–1,850	150	–1,700

[1] Assets and liabilities with a right of set-off but that do not meet the criteria for offsetting in the statement of financial position.

LIQUIDITY RISK The Wilo Group strives to cover its financial requirements for the operating business of its Group companies at all times and at low cost. Various instruments available on the financial market are used for these purposes. These instruments include committed and non-committed cash credit, guarantee and margin facilities from various reputable national and international banks with a volume of more than EUR 390 million. The cash credit facilities were utilised in the amount of EUR 108.3 million (previous year: EUR 67.3 million) and the guarantee and margin facilities were utilised in the amount of EUR 24.9 million (previous year: EUR 21.3 million). In addition, WILO SE has secured its long-term financial requirements by issuing promissory note loans, which were also placed with financially sound, reputable financial partners (see note (9.10)).

As a result of existing short- and medium-term credit facilities with various prominent banks, the long-term coverage of financial requirements with the promissory note loans and other refinancing options, the Wilo Group is not currently exposed to material credit, concentration or liquidity risk. There are also cash pooling and financing arrangements with Group companies where appropriate and permitted under local commercial and tax law.

The following overview shows the remaining contractual maturities and corresponding cash outflows, including estimated interest payments, for financial liabilities as at 31 December 2019 and 2018:

Cash outflows for financial liabilities as at 31 Dec. 2019

			Maturities		
31 Dec. 2019	Carrying amount	Agreed payments	of less than one year	Between 1 and 5 years	More than 5 years
Financial liabilities					
Non-current	205,406	–223,896	–6,398	–155,761	–61,737
Current	113,503	–113,503	–113,503	0	0
Trade payables	173,026	–173,026	–172,955	–71	0
Lease liabilities	41,532	–41,532	–13,482	–24,296	–3,754
Other financial liabilities	31,733	–31,733	–27,565	–4,168	0
Derivative financial instruments	1,498	–1,498	–1,252	–246	0
Total	**566,698**	**–585,188**	**–335,155**	**–188,296**	**–61,737**

Cash outflows for financial liabilities as at 31 Dec. 2018

			Maturities		
31 Dec. 2018	Carrying amount	Agreed payments	of less than one year	Between 1 and 5 years	More than 5 years
Financial liabilities					
Non-current	198,123	–221,964	–6,295	–150,663	–65,006
Current	70,357	–70,357	–70,357	0	0
Trade payables	172,390	–172,390	–172,287	–103	0
Lease liabilities	5,010	–5,010	–2,117	–2,893	0
Other financial liabilities	36,248	–36,248	–31,945	–4,303	0
Derivative financial instruments	1,850	–1,850	–1,850	0	0
Total	**483,978**	**–507,819**	**–284,851**	**–157,962**	**–65,006**

(13.) Other disclosures

(13.1) Waiver of disclosure

The following Group companies waived disclosure in accordance with section 264 (3) HGB: WILO-Mitarbeiter-Beteiligungsgesellschaft mbH, Dortmund, WILO Nord Amerika GmbH, Dortmund, WILO IndustrieSysteme GmbH, Chemnitz, and WILO Mitarbeiter Invest GmbH, Dortmund.

(13.2) Contingent liabilities and other financial obligations

The company reported contingent liabilities from warranties of EUR 3,193 thousand as at 31 December 2019 (previous year: EUR 2,993 thousand). No provisions have been recognised for contingent liabilities carried at nominal amount as the probability of the risk is estimated as low.

The contingent liabilities from warranties essentially result from operating activities with the customers and suppliers of the Wilo Group. Warranties with a nominal obligation of EUR 363 thousand (previous year: EUR 38 thousand) had an agreed remaining term of less than one year as at 31 December 2019, while nominal obligations of EUR 228 thousand (previous year: EUR 360 thousand) with an agreed remaining term of more than one year have been contractually stipulated. There are also indefinite guarantees with a nominal obligation of EUR 2,602 thousand (previous year: EUR 2,595 thousand).

Purchase commitments for planned capital expenditure on property, plant and equipment amounted to EUR 53,913 thousand as at 31 December 2019 (previous year: EUR 81,877 thousand). It is not practicable to disclose estimates of the financial effect of contingent liabilities, the uncertainties relating to the amount or timing of any outflows or the possibility of any reimbursement.

(13.3) Average number of employees over the year

Average employee numbers for the year were as follows:

Employees	2019	2018
Production	4,346	4,435
Sales and administration	3,403	3,395
Total	**7,749**	**7,830**
Germany	2,642	2,689
Abroad	5,107	5,141
Total	**7,749**	**7,830**

The average number of employees fell by 1.0 percent year-on-year (previous year: +1.3 percent).

(13.4) Expenses using the nature of expense method

Staff costs according to section 315e in conjunction with section 314 (1) no. 4 HGB of the financial year break down as follows:

Staff costs EUR thousand	2019	2018
Wages and salaries	324,541	328,134
Social security contributions and expenses for retirement benefits	75,255	72,954
of which for retirement benefit expenses EUR 9,875 thousand (previous year: EUR 7,855 thousand)		
Total	**399,796**	**401,088**

Depreciation and amortisation for 2019, taking into account the initial application of IFRS 6, is calculated as follows:

Depreciation and amortisation EUR thousand	2019	2018
Depreciation and amortisation	76,906	61,557

(13.5) Proposal for the appropriation of profits

At the proposal of the Executive Board, the Annual General Meeting of WILO SE on 26 March 2020 shall resolve the payment of a dividend of EUR 1.62 per ordinary share, with the remaining unappropriated surplus of WILO SE being carried forward to new account.

(13.6) Events after the balance sheet date

The Executive Board of WILO SE approved the consolidated financial statements for submission to the Supervisory Board on 24 February 2020. It is the responsibility of the Supervisory Board to examine the consolidated financial statements and to state whether it adopts them.

(13.7) Related party disclosures

The Wilo Group has business transactions for the provision of goods and services to non-consolidated subsidiaries, jointly controlled entities and associates. The outstanding trade receivables from these companies amounted to EUR 215 thousand (previous year: EUR 127 thousand). Liabilities to these companies amounted to EUR 2,650 thousand at the reporting date (previous year: EUR 6,150 thousand), of which EUR 2,650 thousand related to joint ventures (previous year: EUR 2,650 thousand). Sales and services passed on to these companies amounted to EUR 874 thousand (previous year: EUR 725 thousand).

The balances outstanding at the end of the financial year are unsecured, do not bear interest and will be settled via payment.

Members of the Supervisory Board control or influence companies that provide consultancy services for WILO SE. WILO SE generated net sales totalling EUR 1,562 thousand (previous year: EUR 1,500 thousand) from these companies in the 2019 financial year.

One of the shareholders owns a heating and air conditioning installation company that purchases standard quantities of pumps from the reporting entity. The same company installs and maintains the heating and air conditioning systems of the reporting entity. Revenues of EUR 59 thousand (previous year: EUR 35 thousand) were generated with the heating and air conditioning installation company in the 2019 financial year. There were receivables from this company of EUR 2 thousand as at 31 December 2019 (previous year: EUR 9 thousand). At the same time, the Wilo Group procured goods and services in the amount of EUR 436 thousand (previous year: EUR 497 thousand) from this company. There were liabilities to this company of EUR 34 thousand as at 31 December 2019 (previous year: EUR 4 thousand).

There are also leases relating to land and buildings that are directly or indirectly owned by shareholders. Total lease payments of EUR 360 thousand were made to these shareholders in 2019 (previous year: EUR 353 thousand).

The Wilo-Foundation holds the majority of ordinary shares in WILO SE. There is a service agreement between WILO SE and the Foundation for administrative work. WILO SE generated income of EUR 39 thousand from this service agreement in 2019 (previous year: EUR 39 thousand). As in the previous year, there were no receivables from the Foundation as at 31 December 2019.

(13.8) Auditor's fees

The following fees were recognised as an expense in the 2019 financial year for services provided by the auditor of the consolidated financial statements, KPMG AG Wirtschaftsprüfungsgesellschaft:

Auditor's fees EUR thousand	**2019**	2018
Audits of financial statements		
of which for the previous year: EUR 0 thousand (2018: EUR 15 thousand)	422	443
Other assurance services		
of which for the previous year: EUR 12 thousand (2018: EUR 2 thousand)	166	92
Other services	250	93
Total	**838**	**628**

(13.9) Remuneration of the Executive Board and the Supervisory Board

The table below shows the remuneration of the Executive Board:

Remuneration of the Executive Board and the Supervisory Board EUR thousand	**2019**	2018
Total remuneration of the Executive Board	**3,339**	**3,885**
Short-term benefits	2,906	2,859
Post-employment benefits	433	392
Benefits under IAS 24.17 (d)	0	634

As at the end of the reporting period, EUR 0.7 million (previous year: EUR 0.5 million) was recognised as a liability that will not be paid out until the following financial year after approval of the consolidated financial statements.

The Supervisory Board has established a virtual management participation model for the members of the Executive Board of WILO SE under which the participating members contractually receive virtual shares entitling them to participate in the company's positive performance. This does not make them shareholders of the company with corresponding shareholders' rights (e.g. rights of information, voting rights at the Annual General Meeting, right to receive dividends). As at 31 December 2019, a total of 311,304 (previous year: 259,420) virtual shares have been granted to the Executive Board. As a matter of principle, the term of the individual virtual participation is unlimited. A participant's virtual participation ends automatically when he or she steps down from the respective management position on the Executive Board. The ordinary termination of the virtual participation ahead of schedule is excluded. The potential benefit earned by the participants of the management participation programme is calculated as the difference between the cost and the retransfer value of the virtual shares. Payment is made within a defined period after participation ends. The fair value (retransfer value) of the provisions recognised in connection with the virtual shares is calculated on the basis of historical averages. As in the previous year, no provision was reported as at 31 December 2019.

The total remuneration paid to former members of the Executive Board amounted to EUR 1.0 million in the 2019 financial year (previous year: EUR 1.0 million). As at the end of the reporting period, a pension provision of EUR 8.8 million (previous year: EUR 8.2 million) was recognised for former members of executive bodies, some of whom are also related parties.

The remuneration of the Supervisory Board amounted to EUR 0.6 million in the 2019 financial year (previous year: EUR 0.5 million).

(13.10) Executive bodies of the company

SUPERVISORY BOARD

Prof. Dr. Norbert Wieselhuber
– Chairman –
Managing Director of Dr. Wieselhuber & Partner GmbH
Management Consultancy
Planegg

Prof. Dr. Hans-Jörg Bullinger (until 2 April 2019)
– Deputy Chairman –
Former President of the Fraunhofer-Gesellschaft
Stuttgart

Lars Roßner
– Deputy Chairman –
Partner at Buse Heberer Fromm,
Rechtsanwälte Steuerberater PartG mbB
Dusseldorf

Jean-Francois Germerie
European Works Council
Laval, France

Prof. Dr. Dr. h.c. Michael ten Hompel (since 2 April 2019)
Managing Director
of the Fraunhofer-Gesellschaft
Dortmund

Dr. Hinrich Mählmann
Personally liable partner
and Managing Director of Otto Fuchs KG
Wiehl

Daniela Mohr
European Works Council
Dortmund

Dr.-Ing. E.h. Jochen Opländer
is the Honorary Chairman of the Supervisory Board.

EXECUTIVE BOARD

Oliver Hermes
– Chairman –
Essen

Dr. Patrick Niehr (since 1 January 2020)
Cologne

Georg Weber
Dusseldorf

Mathias Weyers
Essen

Dortmund, 24 February 2020

The Executive Board

Oliver Hermes | Dr. Patrick Niehr | Georg Weber | Mathias Weyers

Shareholdings

Shareholdings of WILO SE as at 31 December 2019
(Disclosure pursuant to section 315e HGB)

	Ownership interest in %
American-Marsh Pumps LLC, Collierville/USA	100.0
Circulating Pumps Ltd., King's Lynn, Norfolk/United Kingdom	100.0
EMU I.D.F. S.A.R.L., Ste. Geneviève-des-Bois/France**	50.0
Eurocarbo S.p.A., Corropoli/Italy*	8.0
HydroPoint Data Systems, Inc., Petaluma/USA*	2.6
Hydroserve GmbH, Leopoldsdorf/Austria*	100.0
PT. WILO Pumps Indonesia, Jakarta/Indonesia	100.0
S.E.S.E.M. S.A.S., Saint-Denis/France	100.0
STEMMA S.R.L., Trissino/Italy	100.0
WILO (Singapore) Pte. Ltd, Singapore/Singapore	100.0
WILO (UK) Ltd., Burton-on-Trent/United Kingdom	100.0
WILO Adriatic d.o.o., Ljubljana/Slovenia	100.0
WILO Australia PTY Ltd, Brisbane City QLD/Australia	100.0
WILO Baltic SIA, Riga/Latvia	100.0
WILO Bel o.o.o., Minsk/Belarus	100.0
WILO Beograd d.o.o., Belgrade/Serbia	100.0
WILO Bulgaria EOOD, Sofia/Bulgaria	100.0
WILO Canada Inc., Calgary/Canada	100.0
WILO Caspian LLC, Baku/Azerbaijan	100.0
WILO Central Asia TOO, Almaty/Kazakhstan	100.0
WILO Chile SpA, Santiago de Chile/Chile	100.0
WILO China Ltd., Beijing/China	100.0
WILO CS s.r.o., Prague/Czech Republic	100.0
WILO Danmark A/S, Karlslunde/Denmark	100.0
WILO Eesti OÜ, Tallinn/Estonia*	100.0
WILO Egypt LLC, Cairo/Egypt	100.0
WILO Egypt for Import LLC, Cairo/Egypt	100.0
WILO ELEC China Ltd., Qinhuangdao/China	100.0
WILO EMU Anlagenbau GmbH, Roth/Germany	100.0
WILO Engineering Ltd t/a Wilo Ireland, Limerick/Ireland	100.0
WILO East Africa Ltd., Nairobi/Kenya	100.0
WILO Finland OY, Espoo/Finland	100.0
WILO France S.A.S., Chatou/France (formerly WILO-SALMSON France S.A.S.; renamed on 1 January 2020)	100.0
WILO GVA GmbH, Wülfrath/Germany	100.0
WILO Hellas A.B.E.E., Athens/Greece	100.0
WILO Hrvatska d.o.o., Zagreb/Croatia	100.0
WILO Ibérica S.A., Alcalá de Henares/Spain	100.0
WILO Indústria, Comércio e Importação LTDA, City of São Paulo/Brazil	100.0
WILO Industriebeteiligungen GmbH, Dortmund/Germany	100.0
WILO IndustrieSysteme GmbH, Chemnitz/Germany	100.0

Shareholdings of WILO SE as at 31 December 2019
(Disclosure pursuant to section 315e HGB)

	Ownership interest in %
WILO Intec S.A.S., Aubigny/France	100.0
WILO Italia s.r.l., Peschiera Borromeo (Milan)/Italy	100.0
WILO Lebanon S.A.R.L., Beirut/Lebanon	100.0
WILO Lietuva UAB, Vilnius/Lithuania	100.0
WILO Logistic Nordic AB, Växjö/Sweden	100.0
WILO Magyarország Kft., Törökbálint/Hungary	100.0
WILO Malaysia Sdn. Bhd., Petaling Jaya/Malaysia	100.0
WILO Maroc S.A.R.L., Casablanca/Morocco	100.0
WILO Mather and Platt Pumps Private Ltd., Pune/India	100.0
WILO Mexico Bombas Centrifugas, S.A. de C.V., Querétaro/Mexico	100.0
WILO Middle East FZE, Dubai/United Arab Emirates	100.0
WILO Middle East LLC i.L., Riyadh/Saudi Arabia***	50.0
WILO Mitarbeiter Invest GmbH, Dortmund/Germany	100.0
WILO N.V./S.A., Ganshoren (Brussels)/Belgium	100.0
WILO Nasos Tizimlari LLC, Tashkent/Uzbekistan*	100.0
WILO Nederland b.v., Westzaan/Netherlands	100.0
WILO Nord Amerika GmbH, Dortmund/Germany	100.0
WILO Nordic AB, Växjö/Sweden	100.0
WILO Norge AS, Oslo/Norway	100.0
WILO Polska Sp. z o.o., Lesznowola/Poland	100.0
WILO Pompa Sistemleri San. Ve Tic. A.S., Istanbul/Turkey	100.0
Wilo Portugal, Lda, Porto/Portugal	100.0
WILO Pumpen Österreich GmbH, Wiener Neudorf/Austria	100.0
WILO Pumps Ltd., Busan/Korea	100.0
WILO Pumps Nigeria Ltd., Gbagada/Nigeria	100.0
WILO Pumps Pakistan (Pvt.) Limited, Islamabad/Pakistan*	100.0
WILO PUMPS SA (PTY) LTD, Johannesburg/South Africa	100.0
WILO Romania s.r.l., Bucharest/Romania	100.0
WILO Rus o.o.o., Moscow/Russia	100.0
WILO Safe Water LLP, Pune/India*	100.0
WILO SALMSON Argentina S.A., Buenos Aires/Argentina	100.0
WILO Saudi Arabia Ltd., Riyadh/Saudi Arabia*	100.0
WILO Schweiz AG, Rheinfelden/Switzerland	100.0
WILO SYSTEMS ITALIA S.R.L., Bari/Italy	100.0
WILO Taiwan Company Ltd., New Taipei/Taiwan	100.0
WILO Tunisia SUARL, Tunis/Tunisia*	49.0
WILO Ukrainia t.o.w., Kiev/Ukraine	100.0
WILO USA LLC, Rosemont, IL/USA	100.0
WILO Vietnam Co. Ltd., Ho Chi Minh City/Vietnam	100.0
WILO-Mitarbeiter-Beteiligungsgesellschaft mbH, Dortmund/Germany	100.0

* These companies were not included in the 2019 consolidated financial statements.
** This is an associate accounted for at cost.
*** This is a joint venture accounted for using the equity method.

INDEPENDENT AUDITOR'S REPORT

To WILO SE, Dortmund

Audit opinions

We have audited the consolidated financial statements of WILO SE, Dortmund, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2019, the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of cash flows and the consolidated statement of changes in equity for the financial year from 1 January to 31 December 2019 and the notes to the consolidated financial statements, including the accounting policies presented therein. In addition, we have audited the group management report of the Wilo Group for the financial year from 1 January to 31 December 2019. The Group management report contains references that are not required by law and that are marked as unaudited. In accordance with German statutory provisions, we have not audited the content of the references and the information to which they refer.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2019 and of its financial performance for the financial year from 1 January to 31 December 2019.
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. The Group management report contains references that are not required by law and that are marked as unaudited. Our audit opinion does not cover these references or the information to which they refer.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 HGB and the German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) [Institute of Public Auditors in Germany]. Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

Management is responsible for the preparation of consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they, in accordance with German Legally Required Accounting Principles, have determined 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, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

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 whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. 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 and this group management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, 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 opinions. 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 controls.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report 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 these systems.

- Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.

- 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 the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. 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 be able 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 present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.

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

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by management in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance 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.

Essen, 24 February 2020
KPMG AG
Wirtschaftsprüfungsgesellschaft

Beumer	Huperz
German Public Auditor	German Public Auditor

REPORT OF THE SUPERVISORY BOARD

The Supervisory Board monitored the work of the Executive Board on an ongoing basis while providing intensive support and advice throughout the 2019 financial year. At regular meetings, the Supervisory Board was kept fully informed about the development of the Wilo Group's business and all factors affecting it. Members of the Supervisory Board received regular written reports from the Executive Board on the current business situation and on current and planned Group activities. Measures requiring the approval of the Supervisory Board were discussed at length and submitted to the Supervisory Board for resolution. In addition, there was a direct exchange of information between the Chairman of the Supervisory Board and the CEO on important matters arising between the meetings.

The Supervisory Board held five meetings in person in 2019, including one extraordinary meeting.

The Supervisory Board meeting on 2 April 2019 focused on the annual financial statements and the consolidated financial statements as at 31 December 2018. The business performance of the Wilo Group was discussed in detail, particularly in light of the global economic situation. Another key topic at the meeting was the status of the location development project at the headquarters in Dortmund.

At the meeting on 27 June 2019, the Supervisory Board dealt in particular with the economic situation of the Wilo Group and the status of various sales efficiency and pricing projects. The most important development projects were also presented. In addition, the status of the location development project in Dortmund was again discussed.

At its meeting on 10 October 2019, the Supervisory Board dealt with current economic developments and the status of the Dortmund location development project. In addition, the results of the annual international executive conference were presented. Furthermore, the current status of ongoing M&A projects was discussed at the meeting.

At the extraordinary meeting on 21 November 2019, the Supervisory Board was informed about the planned acquisition of the operations of J-Line Pump Co. – d/b/a American-Marsh Pumps – and the corresponding business premises, which it approved.

At its meeting on 12 December 2019, the Supervisory Board approved the integrated planning for 2020–2024 and also discussed a strategy update, the current economic situation and the status of the Dortmund location development project.

Both the consolidated financial statements with the management report for the 2019 financial year presented with the annual report and the separate financial statements of WILO SE for the 2019 financial year, each comprising an income statement, statement of financial position and notes to the financial statements, have been audited and issued with an unqualified audit opinion by KPMG AG Wirtschaftsprüfungsgesellschaft, Essen, Germany. The auditor also ascertained that the internal control system (ICS) established by the Executive Board, the internal audit system and the compliance system are adequate and capable in their design and use of recognising developments that would jeopardise the company's continued existence in good time.

The above documents were submitted to the Supervisory Board for examination in good time and subjected to comprehensive scrutiny. The auditor took part in the discussion of the annual financial statements and the consolidated financial statements in the meeting of the Audit Committee on 25 March 2020 in order to report on key audit findings and provide comprehensive supplementary information. The Audit Committee performed preparatory work for the Supervisory Board and, in particular, also appraised the findings of the risk management system and the internal control system.

There are no other committees.

After thorough examination and discussion of the annual financial statements, the consolidated financial statements, the management report and the Group management report, the Supervisory Board endorsed the opinion of the auditor and approved the annual financial statements and the consolidated financial statements prepared by the Executive Board in its meeting on 26 March 2020, which was also attended by the auditor. The annual financial statements were thereby adopted. The Supervisory Board also approved the proposal for appropriation of the net profit of WILO SE.

The following personnel changes took place on the Supervisory and Executive Boards in the year under review:

The term in office of the Supervisory Board members ended at the end of the Annual General Meeting of WILO SE on 2 April 2019. The Supervisory Board members Prof. Norbert Wieselhuber, Dr. Hinrich Mählmann and Lars Roßner were re-elected for another term in office, as were the employee representatives Jean-François Germerie and Daniela Mohr. Prof. Hans-Jörg Bullinger stepped down as a member of the Supervisory Board and a member of the Audit Committee; Prof. Michael ten Hompel was appointed to replace him as a new member of the Supervisory Board.

The Supervisory Board re-elected Prof. Wieselhuber as its Chairman and Mr. Roßner as its Deputy Chairman.

Prof. ten Hompel, Dr. Mählmann and Mr. Roßner were elected as members of the Audit Committee. Dr. Mählmann was elected as the Chairman of the Audit Committee, while Mr. Roßner was elected as Deputy Chairman.

Mr. Oliver Hermes was reappointed as a member of the Executive Board of WILO SE and its Chairman for a period of six years with effect from 1 July 2019, i.e. until 30 June 2025.

In addition, Mathias Weyers and Georg Weber were reappointed as members of the Executive Board of WILO SE for a period of five years with effect from 1 January 2020, i.e. until 31 December 2024.

Dr. Patrick Niehr was appointed as an additional member of the Executive Board of WILO SE for a period of five years with effect from 1 January 2020, i.e. until 31 December 2024.

In the interests of good, responsible corporate governance, WILO SE and its executive bodies voluntarily comply with the current version of the German Corporate Governance Code. There are departures from the Code relating to the specific nature of the company (primarily as to the preparation and holding of Annual General Meetings, the publication of reports, Supervisory Board committees) on the one hand and the individual disclosure of Executive Board and Supervisory Board remuneration on the other, in which connection the statutory provisions are complied with. Detailed information on the few departures from the Code was again compiled in full for banks and institutional partners in a declaration of compliance in line with section 161 of the German Stock Corporation Act.

Subject to the above qualification, WILO SE intends to continue to comply with the recommendations of the Government Commission on the German Corporate Governance Code in future.

2019 was a good financial year for the Wilo Group in light of the difficult and challenging conditions. The Wilo Group is continuing on its profitable and sustainable growth path.

The Supervisory Board wishes to thank the members of the Executive Board, the employees and employee representatives of the Wilo Group for their work and the outstanding loyalty that has been a vital factor in this success.

Dortmund, March 2020

The Supervisory Board
Prof. Dr. Norbert Wieselhuber
Chairman

GLOSSARY

Asset deal
Form of company acquisition in which the assets of a company (e.g. land, buildings or machinery) are acquired separately and transferred to the buyer.

Cash flow
Net inflow of cash generated from business activities.

Cash pooling
Instrument for optimisation of liquidity management. Daily liquidity equalisation is performed within the Group by the parent company, whereby excess liquidity is siphoned from Group companies to cover liquidity shortages.

Corporate foresight process
In the corporate foresight process, both risks and opportunities are derived and analysed from forecast future developments with respect to the global megatrends, and hence systematically taken into account in the ongoing development of corporate strategy.

EBIT/EBIT margin
EBIT is earnings before net finance costs and income taxes. The EBIT margin describes the ratio of EBIT to net sales.

EBITDA/EBITDA margin
EBITDA is earnings before net finance costs, income taxes and depreciation and amortisation. The EBITDA margin describes the ratio of EBITDA to net sales.

Emerging Markets
As at 31 December 2019, the Emerging Markets sales region comprised China, India, Korea, the Southeast Asian nations, Australia and Oceania, Turkey, the Near East and Middle East, and Africa.

IFRS (International Financial Reporting Standards)
Collective term for all rules and interpretations of international financial reporting standards relevant to the Wilo Group: IAS (International Accounting Standards), IFRS (International Financial Reporting Standards), SIC rulings (Standing Interpretations Committee) and the interpretations of the IFRS Interpretations Committee.

Industry 4.0
The Industry 4.0 future project is part of the German government's high-tech strategy. Industry 4.0 stands for the fourth industrial revolution, in which the intelligent networking of machinery, products and storage systems finds its way into industrial value added. They exchange information autonomously, trigger actions and control each other independently. This allows the fundamental improvement of industrial processes in production and logistics.

Mature Markets
As at 31 December 2019, the Mature Markets sales region comprised Europe, Russia, Belarus, Ukraine, the Caucasus nations and the American continent.

Megatrend
This term describes far-reaching, long-lasting trends that have a significant impact on society, the economy, the environment and technology. Megatrends are long-term, i.e. observable over a period of decades, and tend to have a global effect. As part of our strategic management process, megatrends enable us to take a systematic view of the future and also help us identify opportunities and risks which inform the overall strategy.

Netting
Offsetting of receivables and liabilities between two or more partners. Payment, foreign-currency, credit or liquidity risks between partners can be reduced by way of netting agreements.

Second-source suppliers
In the materials management and manufacturing sector, the term second-source supplier (secondary supplier) is used to describe one or more alternative suppliers of a product that is structurally identical and therefore interchangeable or compatible with another product.

Smart home
This umbrella term refers to the intelligent networking of housing technology (heating, lighting, air conditioning, safety and security technology, etc.) and household appliances and the networking of consumer electronics components (audio/video). Intelligent management of these components using the internet and/or mobile devices can bring about significant efficiency gains in day-to-day life and increase comfort and safety.

* We understand a smart-pump as a new category of pumps, which goes far beyond our high-efficiency pumps or pumps with pump intelligence. Only the combination of the latest sensor technology and innovative control functions (e.g. Dynamic Adapt plus and Multi-Flow Adaptation), bidirectional connectivity (e.g. Bluetooth, integrated analogue inputs, binary inputs and outputs, Wilo Net interface), software updates and excellent usability (e.g. thanks to the Setup Guide, the preview principle for predictive navigation and the tried and tested Green Button Technology) make this pump a smart-pump.

MEDIA

This Annual Report was published on 31 March 2020 in German and English. Both versions can be downloaded at www.wilo.com.

The annual report is also available online

desktop

mobile

www.wilo.com/annual-report2019

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