RE-THINK

Sustainable growth in turbulent times.

wilo

Annual Report 2021

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WILO PROFILE

The Wilo Group is one of the **world's leading premium suppliers** 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 **8,200 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 a full-range supplier and customers' first choice.

BUILDING SERVICES COMMERCIAL

We are a market, innovation and smart solutions leader.

OEM

We are the preferred partner for smart integrated solutions.

WATER MANAGEMENT

We are a global market player and digital solutions provider.

INDUSTRY

We specialise in selected sectors and applications.

NET SALES

EUR **1,651.9** million

With net sales of EUR 1,651.9 million, the Wilo Group recorded a new all-time high in the past financial year. Net sales saw strong growth of 13.8 percent.

EBITDA

EUR **181.1** million

EBITDA also reached a new all-time high of EUR 181.1 million – up around 30 percent on the previous year.

KEY FIGURES

		2021	2020	2019	2018	2017
Net sales	EUR million	1,651.9	1,451.5	1,477.8	1,463.5	1,424.8
Net sales growth	%	15.1*/13.8	1.8*/-1.8	1.0	2.7	7.4
EBITDA	EUR million	181.1	141.2	180.1	153.5	160.6
Cash flow from operating activities	EUR million	126.7	161.5	168.5	81.7	140.4
Cash	EUR million	189.9	189.0	166.1	135.4	161.8
Investments**	EUR million	172.3	120.9	155.7	154.8	195.7
R&D costs***	EUR million	71.0	68.6	67.6	66.3	63.6
(as % of sales)	%	4.3	4.7	4.6	4.5	4.5
Equity	EUR million	836.8	764.9	792.4	738.4	707.0
Equity ratio	%	45.1	47.1	48.3	49.5	51.6
Employees (annual average)	Number	8,200	7,836	7,749	7,830	7,726

* Adjusted for exchange rate effects ** Investments in intangible assets, property, plant and equipment and company acquisitions *** Including capitalised development costs

EMPLOYEES

8,200

The Wilo Group's employees are the basis for and the driving force behind its business success. Wilo is meeting the challenges of the coronavirus crisis extremely well, not least thanks to the exemplary attitude of all its employees, their great sense of solidarity and their strong commitment. Wilo employed an average of 8,200 people across the year as a whole.

INVESTMENTS

EUR **172.3** million

The Wilo Group continued to make strategically important investments aimed at securing its future in 2021. Among other things, more than EUR 170 million was invested in the construction and expansion of new and existing sales and production locations, the modernisation and capacity expansion of production machinery and company acquisitions. New, state-of-the-art production and administrative buildings are being constructed in China, India and the USA.

RE-
THINK

Difficult times call time-honoured certainties into question. We are at a turning point that is characterised by increased regionalisation and growing international tension. Wilo is addressing the current challenges with entrepreneurship. We are investing in resilience to make us even better equipped for future crises, and we are consistently expanding our global network. This will allow the Wilo Group to continue to enjoy sustainable growth.

The Executive Board at the Wilo industry conference "Decoupling – Rethink Value Chains" in September 2021, from left to right: Mathias Weyers, Dr Patrick Niehr, Oliver Hermes, Georg Weber

Oliver Hermes, President & CEO of the Wilo Group

EDITORIAL BY THE EXECUTIVE BOARD

Dear Readers,

We are looking back on another turbulent year. The coronavirus pandemic continues to dominate the world and impede the smooth international flow of goods and people alike.

At the time this report on 2021 and this editorial were being written, there was more than enough tension in the world. However, we could not have imagined that a conflict could reach a level of escalation like that seen in Ukraine in 2022. The violence and suffering that is being endured by people in the heart of Europe is shocking and deserves all the compassion and aid we can give. As a company that is represented in both Ukraine and Russia, we have a responsibility to do everything in our power to protect and support our employees and their families. All employees who have fled the war are being offered employment at Wilo subsidiaries in other companies in order to safeguard their income and their successful social integration.

"The Wilo Group increased its net sales to EUR 1.7 billion – a new record."

The Wilo-Foundation is also making a donation to support the humanitarian aid that SOS Children's Villages, Habitat, Fundacja Happy Kids and Save the Children are provid-ing to children, young people and families. However, our concern also extends to the Wilo subsidiary and our employees in Russia. They, too, are part of the Wilo family.

Supply chain bottlenecks have driven energy and com-modity prices to unimaginable heights, and important precursors are only available to a limited extent. Coercive economic measures are increasingly being employed as a foreign policy tool. At the same time, Europe is finding itself sandwiched between the world powers of the USA and China to an ever greater degree. All in all, the brutal violence at the heart of Europe and the pandemic that has now been in progress for 2.5 years have reinforced the global trend towards isolationism and a focus on national solutions. Many people are talking in terms of the egoism of nation states, and an increasing number of German and European companies are caught between the fronts of geopolitical disputes.

In this adverse environment, we succeeded in recording substantial growth and continuing to satisfy customer requirements in 2021. The Wilo Group increased its net sales by 13.8 percent to around EUR 1.7 billion – a new record. We also recorded an all-time high in terms of our operating earnings (EBITDA), which exceeded EUR 181 million, while consolidated net income almost doubled year-on-year to EUR 49 million. Wilo still has a strong internal financing capacity, with net cash from operating activities remaining high at EUR 127 million. These encouraging results speak for themselves: The Wilo Group is excellently positioned to generate sus-tainably profitable growth even in difficult times and in unfavourable economic conditions.

Wilo takes responsibility

Unfortunately, parts of the world economy will con-tinue to be shaped in particular by protectionism and efforts to become self-sufficient. We are experiencing "Globalisation 2.0", a turning point that will be char-acterised by the more pronounced regionalisation of value chains in the three major economic centres of North America, the EU and Asia.

Decoupling, i.e. the – politically motivated – separation of global developments, will lead to a further reduction in multinational cooperation, crumbling alliances, and the tearing down of economic bridges between nations, and hence between different political systems. Wars, trade sanctions, extraterritorial sanctions, technology embargoes and supply chain decoupling instigated at a political level will have devastating consequences for the hyper-globalised world economy.

Companies like the Wilo Group are now having to prepare for this rampant decoupling in its various forms and opposing it through foresighted entrepreneurship, especially with a view to our societal and social responsibility to our global workforce of around 8,200 employees. We firmly believe that the economy has a part to play in counteracting the process of decoupling. The economy cannot replace politics, but it can use its specific channels for dialogue. After all, economic dependency and interconnectivity can encourage de-escalation and make parties more willing to com-promise, especially in geopolitical conflict situations.

"We firmly believe that the economy has a part to play in counteracting the process of decou-pling."

With its global network of more than 80 production and sales companies, Wilo has a worldwide presence and helps to turn reliable market partners into friends. Through our work every day, we lay the foundations for trust and mutual recogni-tion across national bound-aries and at all levels – from management positions to the employees in our plants and offices. This is the long-standing, hard-won basis for peaceful and successful cooperation in the future. After all, trust is built by people, not governments.

Systematic implementation of the "region-for-region" approach

The reason we were able to achieve such a successful financial year in 2021 was because we laid the right strategic groundwork many years ago. Under our long-established region-for-region approach, we meet regional and local customer requirements with products that are manufactured regionally or locally. For example, we opened an additional production site for the Southeast Asia region in Kuala Lumpur (Malaysia) in the past year, while 2022 will see the inauguration of a newly constructed production site in Cedarburg (USA) and the further strengthening of our presence in the Middle East.

North America has become one of our most important sales markets in recent years. With the acquisition of Weil and Scot in 2017 and American-Marsh Pumps in 2019, the Wilo Group has expanded its application expertise and strengthened its US activities in the Building Services Commercial, Industry and OEM market segments. The additional production capacities will allow us to serve customer requirements on the US market quickly and accurately and offer a wider range of high-quality products made in the USA. The acquisition of the operating business of QuantumFlo, Inc., a specialist for pressure-boosting systems and intelligent pump systems, in the past financial year will strengthen our market position even further. The company, which is based in Sanford, Florida/USA, offers high-quality products and innovative, user-friendly software solutions for the design and control of pressure-boosting systems.

> **“A wide range of high-quality products made in the USA.”**

Reflecting the geopolitical importance of the USA and the outstanding business development of our own US activities, we will establish an additional regional headquarters in Chicago/Cedarburg in the medium term. As the integration of the acquired US companies continues, this will also allow us to offer selected US products in other markets and regions served by Wilo.

As previously, we also see considerable growth potential in Asia. Accordingly, Wilo will open a third headquarters in Beijing for our Emerging Markets sales region in 2023, as well as construct additional production sites in China and India.

Accordingly, our organisation is designed to allow as much decentralisation as possible and as little centralisation as necessary. At the same time, we want to make greater use of global standards and products. All these measures will make the Wilo Group even more flexible and resilient, thereby delivering even greater security for our market partners and increased proximity to our customers.

From a hidden champion to a visible and connected champion

The 2021 financial year saw the conclusion of a number of new and intensified strategic partnerships as well as other highlights.

Having already won the German Sustainability Award in 2021, our efforts in the field of climate protection gained external recognition when the Handelsblatt newspaper crowned us as a “climate pioneer”. There is absolutely no doubt that climate change is and remains a major issue of our times. Wilo can make a hugely positive contribution with its highly efficient and sustainable products and solutions. As an innovation leader in the industry, Wilo has always been a pioneer when it comes to energy efficiency. Our goal is to contribute 50 million tonnes in CO_2 savings towards emissions reductions by 2025 and to facilitate better access to clean water for 100 million people.

Wilo is actively driving the energy transition

From industry to transport and buildings, our society needs climate-neutral energy in all areas of life. Enabling this requires a solution that is CO_2-free and that can be stored and transported: hydrogen. As the energy source of the future, it has huge potential with a view to the megatrend of energy shortage in particular.

Wilo is a pioneer in the development of products, systems and solutions for the hydrogen age. We have set up a hydrogen team with the aim of turning Wilo into a global player for the generation, storage, distribution and use of climate-neutral hydrogen. Green hydrogen in particular will be a fundamental technology of the future if the Paris climate targets are to be achieved.

Together with our industrial partners, we will shortly be constructing a safe, compact and sustainable energy system of the future in the shape of our “H_2 Powerplant” at the Wilopark in Dortmund. By doing this, Wilo is laying the foundations for a self-sufficient, decentralised and renewable power grid and demonstrating how industrial companies can use pioneering, technology-neutral solutions to make an essential contribution to climate protection and sustainability.

> **“As an innovation leader in the industry, Wilo was and still is a pioneer when it comes to energy efficiency.”**

My own personal highlight was the digital opening ceremony for the Wilopark, which saw the participation of more than 1,500 high-ranking international guests from the world of business, science and politics as well as our global Wilo workforce. I would like to reiterate my gratitude to our main guest speaker, then German Chancellor Dr. Angela Merkel.

We also welcomed international guests at our industry conference in September 2021. Participants at the event, which was held under the motto “Decoupling – Rethink Value Chains”, included Sigmar Gabriel, former German Vice-Chancellor and current Chairman of Atlantik-Brücke e.V. Following the positive response and demand, we will organize another industry conference this year.

Thanks and acknowledgements

Looking back, we are full of respect for what was achieved in 2021, a year in which we again met our social commitment of being systemically relevant and serving critical infrastructures. In particular, this was demonstrated in the flood-hit German regions of North Rhine-Westphalia and Rhineland-Palatinate as well as in China, where it was extremely important for Wilo to support the affected regions with pump technology. On behalf of the entire Executive Board, we would like to thank our dedicated employees around the world, without whom we would have been unable to master all of these challenges. You all deserve the highest degree of recognition for your commitment in times that are demanding not only flexibility, but also mental strength from each and every one of us.

150 years of Wilo

We are entering the new year with great concern, but also with a sense of optimism. 2022 is the year in which we will celebrate 150 years of the Wilo Group. The locally focused “Kupfer- und Messingwarenfabrik Louis Opländer” in the south of Dortmund has long become a world-leading premium supplier of pumps, systems and solutions. Tradition and innovation have always shaped the way we think and act. All of you – our market partners and our more than 8,200 employees worldwide – play a big part in this, and we would like to thank you sincerely.

We are proud of having continuously embodied the entrepreneurial values and inventiveness of the founding family in the 150 years of the company’s history to date. We have developed solutions for the new technological and social challenges of our time, supplied millions of people around the world with clean water, and helped to intelligently equip the buildings of tomorrow. In future, we will continue to make an important global contribution to shaping the rapid process of urbanisation, counteracting energy and water shortages, and slowing the pace of climate change. Always with the aim of making people’s lives easier and better.

> **“In future, we will continue to make an important global contribution to shaping the rapid process of urbanisation, counteracting energy and water shortages, and slowing the pace of climate change.”**

We look forward to continuing the success story we have written together and celebrating our 150th anniversary with you.

Yours,

Oliver Hermes
President & CEO, Wilo Group

THE DIMENSIONS OF DECOUPLING

International cooperation declines, alliances crumble, economic bridges between nations are torn down – decoupling is one of the greatest business challenges of our time. It affects the economy and society at four different levels and requires decisive entrepreneurial action.

GEOGRAPHICAL

Geographical decoupling describes the isolation of countries due to political motivations. This makes it harder for companies to pursue cross-border economic activities. As a result, the pressure on supply chains and organisational structures is increased.

TECHNOLOGICAL

A growing number of markets have different standards for products, systems and solutions. This is particularly true of smart and intelligent products that use and exchange data.

FINANCIAL

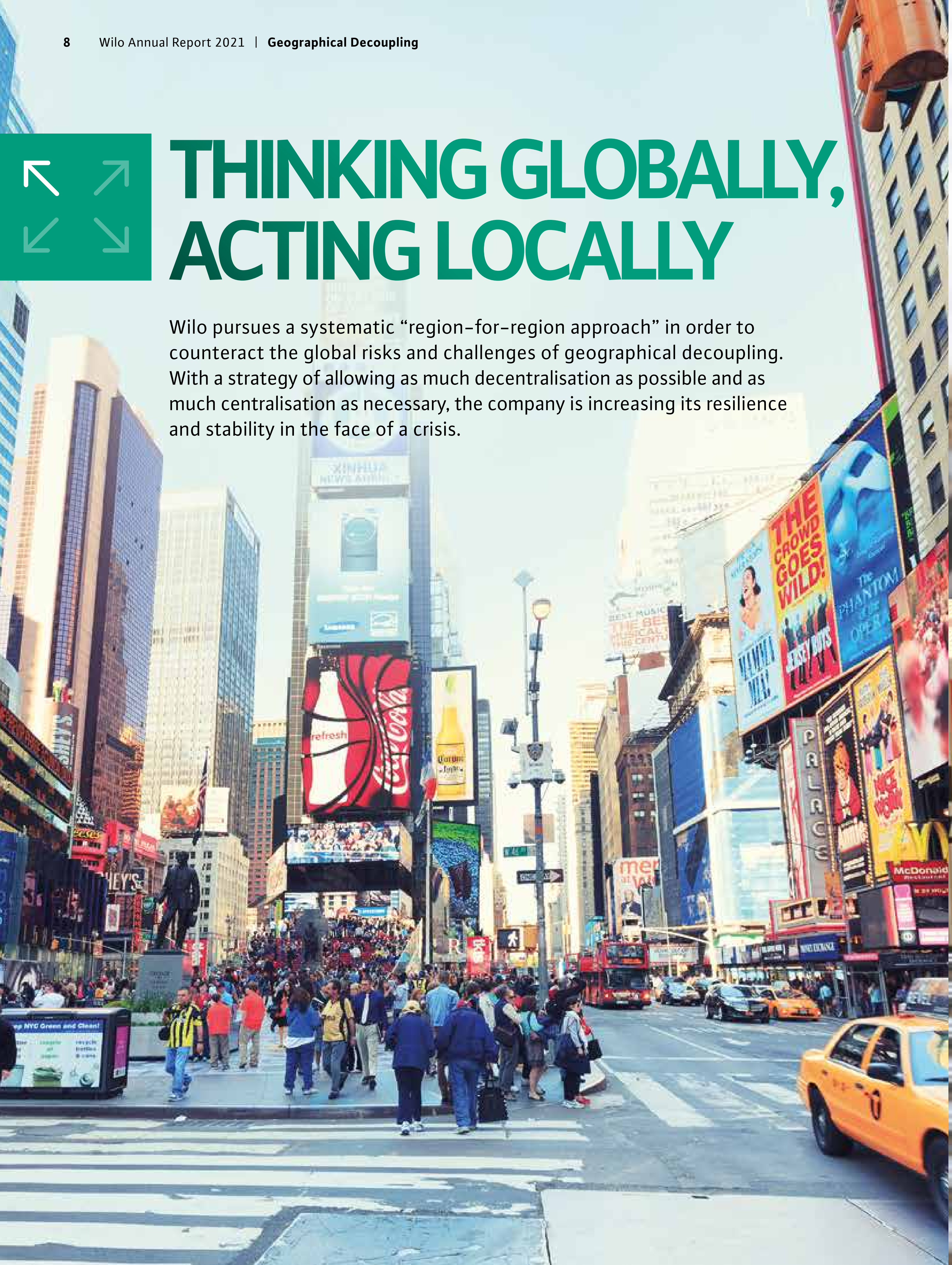
Financial decoupling describes the separation of networks of global financial and capital markets as well as currency and operating payment systems. This can impair overall economic growth.

ENVIRONMENTAL

Environmental decoupling describes the situation in which there are no standardised international regulations on sustainable action. To date, green deals have been concluded on a national or regional basis – but global challenges require global solutions.

THINKING GLOBALLY, ACTING LOCALLY

Wilo pursues a systematic “region-for-region approach” in order to counteract the global risks and challenges of geographical decoupling. With a strategy of allowing as much decentralisation as possible and as much centralisation as necessary, the company is increasing its resilience and stability in the face of a crisis.



Major rivals
The most important geostrategic conflict in the world is the rivalry between China and the USA. The world’s major nations are pursuing policies of self-sufficiency and confrontation even while their economies are closely intertwined. A decoupling of these two key markets would trigger a domino effect that would lead to a significant loss in global prosperity.

A GLOBAL PRESENCE

Primary production locations

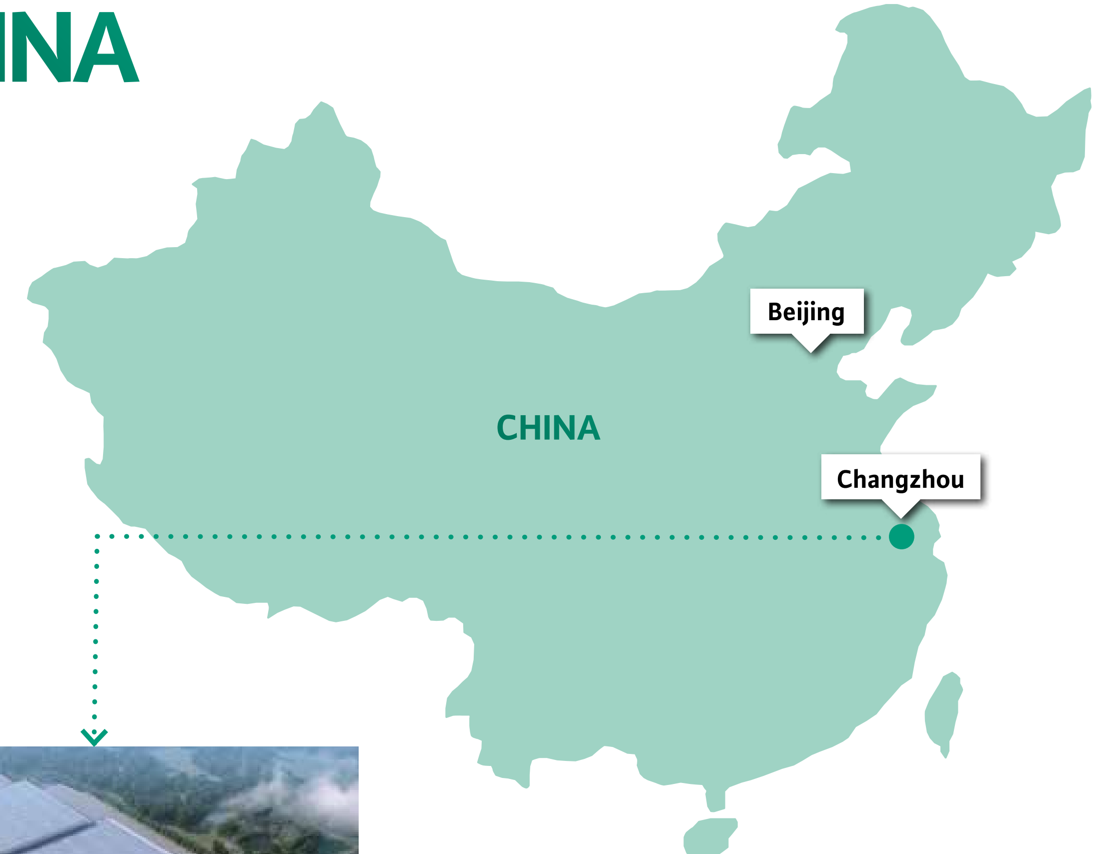
Wilo is continuously increasing its degree of vertical integration, and hence its value added. The company currently has 15 primary production locations around the world, and further sites will be added in the coming years. This is enabling Wilo to secure its local production activities, get closer to its customers and ensure unbroken supply chains. New headquarters are being built in China, and another will follow in the USA in the medium term. In future, the Wilo Group will manage its global business from three headquarters: Germany, China and the USA.

A CAMPUS IN THE USA

Combining our strengths

In Cedarburg near Chicago, Wilo has combined the business activities of the three subsidiaries Scot Pump, Weil Pump and Wilo USA at a single production and administrative site. Around 23,000 square metres in size, the “Cedarburg Campus” encompasses the production and administrative facilities as well as a research and development department, a training centre and warehouse and logistics facilities.

A PLANT IN CHINA



Modern production

Wilo is constructing a new, state-of-the-art plant in Changzhou, China, that is scheduled for completion at the end of 2022. Around 650 people will work in the production, administration, research and development at the site with an area of more than 30,000 square metres.

SEMICONDUCTORS MADE IN GERMANY

Reliable, quick, efficient

Wilo has delivered seven IL pumps for the chip manufacturer Infineon's new wafer plant in Dresden. They are part of the internal cooling water network that is required to produce the millimetre-thin wafers that are the essential basis for chip production. One of the reasons Wilo was awarded this important contract was its ability to supply the pumps in little more than half the usual delivery time.

DIFFERENT MARKETS, DIFFERENT STANDARDS

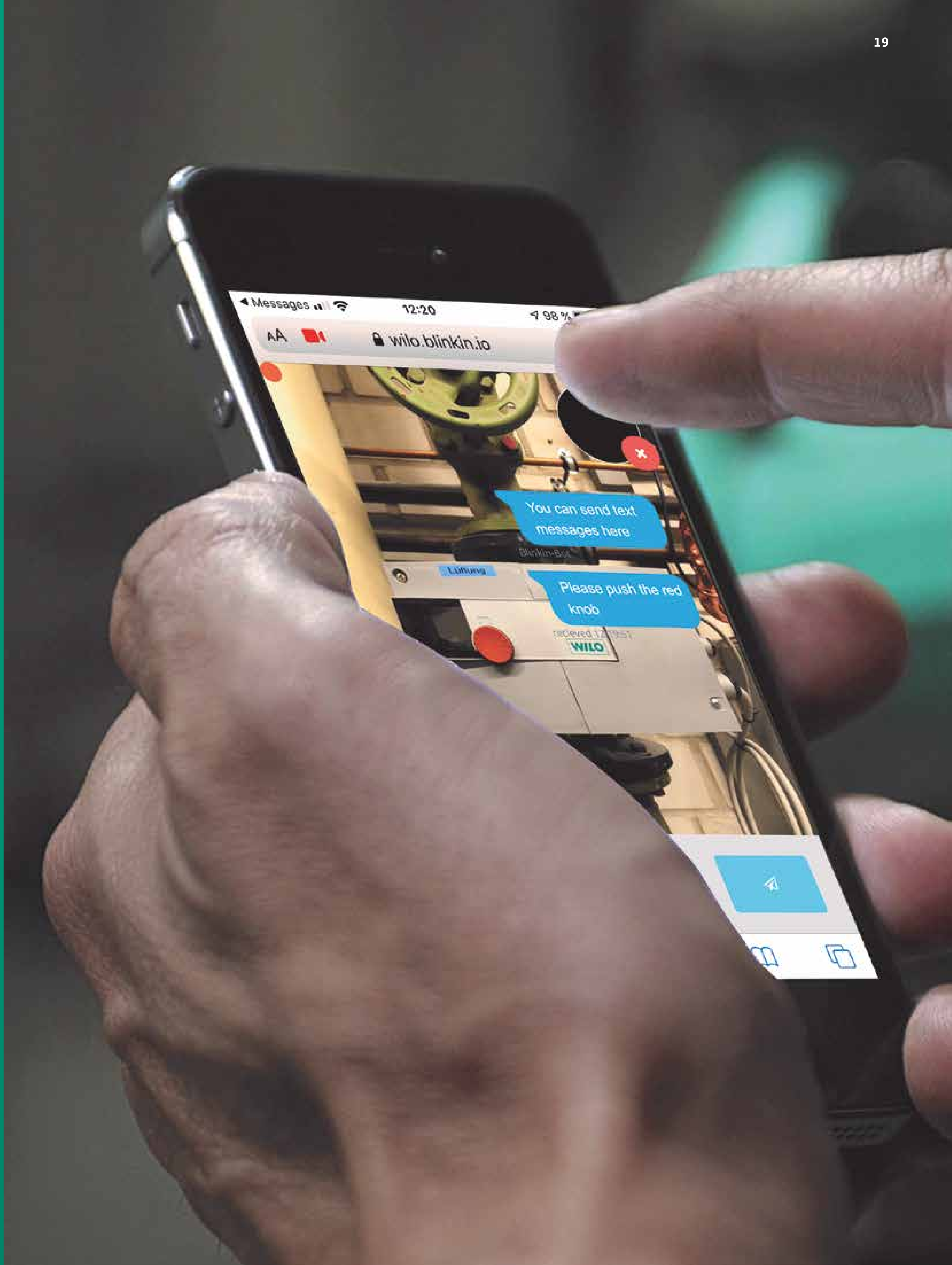
Wilo develops products, systems and solutions that are already compatible with a wide range of standards. Wilo is also decentralising not only its production and administration, but also its research and development departments. This will enable the company to respond even more quickly and flexibly in future so that it can serve its customers' needs with optimal accuracy and master the challenges resulting from technological decoupling.

Clouds on the horizon
In the area of data-driven digital technologies, communicable standards are required in order for systems to interact across national borders. Isolation as a result of technological decoupling could lead to international companies needing to make additional adjustments.

MAXIMUM FLEXIBILITY

Adaptable

Wilo adapts its products, solutions and services to reflect a wide range of different requirements. This helps to overcome the new virtual barriers of technological decoupling. Wilo pumps not only meet the respective regional standards, but are also capable of interacting with various cloud systems. One example is the Wilo-Live Assistant. The digital and mobile service is now used in more than 50 countries.



DIGITAL SERVICES FOR OPTIMISED WORKFLOWS

Smooth thanks to WiloCare

Shanghai Pudong Airport began operations in 1999 and is now one of China's biggest airports. In addition to the pump systems installed by Wilo, a WiloCare contract was concluded for the airport. The digital service package encompasses the real-time monitoring of different parameters. This helps to further optimise the operational reliability and lifespan of the systems.

A LOCAL PARTNER

By making targeted investments, Wilo is laying the groundwork for participating in growth in the different markets around the world. Wilo is extremely well positioned for potential financial decoupling thanks to its extensive network of global and local financial partners.

Proficient, individual, trustworthy

When it comes to financing solutions for local project business, Wilo is increasingly working with experienced local partners who are familiar with the economic, legal and cultural conditions in the respective country in line with its region-for-region approach. These investments are supported by a well-positioned network of international banks and financing partners. The Wilo Group can rely on long-term global financing agreements. Local financing facilities adapted to the individual conditions are also available at the local subsidiaries.

GROWING TOGETHER

Investing in India
A new, state-of-the-art production and administrative building is currently being built in Kesurdi, India. The large-scale construction project is being realised with a local financing partner. With the investment, Wilo is strengthening its presence in the emerging billion-dollar market of India.

Mumbai, India's biggest metropolis

EXTREME WEATHER, CLEAN SOLUTIONS

Climate protection forms part of Wilo's business model. Working with the precious resources of water and energy requires sustainable thinking and action. Wilo is systematically pursuing a global sustainability strategy. To achieve the goals it has set itself, Wilo supports local climate protection initiatives and national green deals.

Too dry – too wet

The consequences of climate change vary considerably from region to region, but the causes are the same – and they can only be combated with a global, cross-border approach. Effectively slowing climate change also means preventing environmental decoupling and turning climate protection into a competitive advantage.

COMMITTED TO SUSTAINABILITY

Pilot project

A pilot project to research the potential of hydrogen for sustainable energy supply is being constructed at the Wilopark. “Hydrogen technologies and systems have been defined as a value chain of strategic interest,” says Oliver Hermes. “Wilo services are therefore systemically relevant in this area, too. Our products and systems will make an essential contribution to the generation, distribution and use of climate-neutral hydrogen in future.”

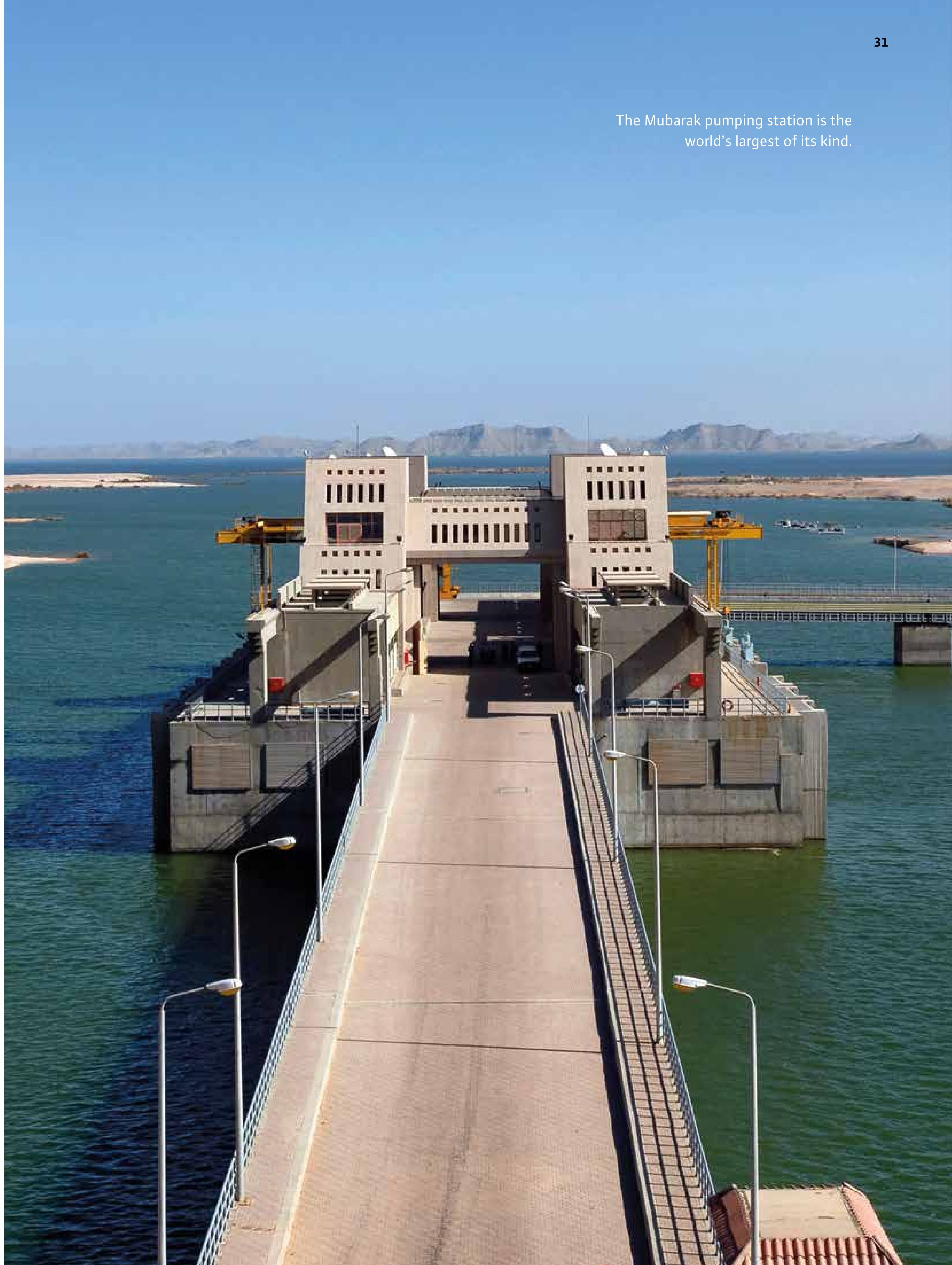
Climate-neutral headquarters

The construction of Wilo’s new headquarters in Dortmund is the biggest investment project in the company’s history. Thanks to a comprehensive sustainability concept, production at the Wilopark is already climate-neutral. Reflecting this, Wilo obtained TÜV certification as a “climate-neutral company in Dortmund”. In addition, the “Pioneer Cube” administrative building was awarded LEED Gold certification as well as Gold certification from the German Sustainable Building Council (DGNB).

WATER IN THE DESERT

An outstanding success

Egypt is undertaking a once-in-a-century project whose scope is comparable to the construction of the Aswan Dam: the Toshka project. The world's biggest pumping station is diverting millions of cubic meters of water every day in order to irrigate the desert and relieve the overpopulated Nile Valley. Wilo was awarded a contract to deliver 117 axially split case pumps with an output of between 200 and 450 kilowatts as part of construction phases 3 and 4. This major order represents an outstanding success for the Wilo subsidiary in Egypt, which was only founded in 2016.



The Mubarak pumping station is the world's largest of its kind.

INTERVIEW WITH SIGMAR GABRIEL

In January 2022, we spoke to the former German Vice-Chancellor and current Chairman of Atlantik-Brücke about hybrid globalisation, competition between the USA and China, and how important it is for companies to ensure that they keep informed about geopolitics.

Mr Gabriel, you are the Chairman of Atlantik-Brücke, an organisation whose mission is to maintain and intensify the relationship between Germany and Europe on the one hand and the USA on the other. What are the challenges of these transatlantic relations?
When we talk about transatlantic relations nowadays, we mean more than just the Atlantic. For example, we mean how western democracies should respond to the challenges posed by authoritarian states, especially China. The USA has viewed China, not Russia, as its greatest rival for some time now. As they increasingly focus on competition with China, one could almost say the Indo-Pacific is the new Atlantic. At the same time, the USA has a sense of imperial overstretch. In other words, it feels it is no longer able to be both a leading economic power and the protector of the global political order. The USA is saying that it needs to focus on remaining an economic leader, which is why it is withdrawing from parts of the world and concentrating its forces on the competition with China.

What are the consequences of this change in focus for Europe?
In the past, Europeans delegated a large portion of their international interests to the USA. In the current conflict with Russia, too, we can see that Europe is again attempting to shift the responsibility for crisis leadership onto the USA. This shows that Europe is not remotely prepared for the shift in the Americans' attitude towards their global presence, even though it will have dramatic consequences. The power vacuum that the Americans leave behind tends to be filled by authoritarian states: by Iran in the Middle East, by Turkey, by Russia, and by China.

> "America wants to be the leader of the democratic world, but it no longer wants to be solely responsible."

The Europeans are spectators. America wants to be the leader of the democratic world, but it no longer wants to be solely responsible. When US President Joe Biden says "America is back", he means in the role of the leading nation in the democratic world. He is not talking about a return to the allencompassing responsibility of the past.

In order to maintain its economic leadership, the USA is continuing to pursue a protectionist approach under Joe Biden, at least to a certain extent. Germany has been one of the big winners of globalisation over the past two decades. How will we be affected by these isolationist tendencies, which are by no means only being observed in the USA?
We need to get used to something that could be called hybrid globalisation. Some parts of globalisation will undoubtedly remain in place. Commodity markets, large parts of the movement of goods and services – much of this is organised through the international division of labour, and this will still be the case in the future. But there will be other areas in which companies are confronted with the question of which system they want to choose. This applies in particular to the digital world, the world of artificial intelligence and digital business models. The competition between the USA and China in this area is particularly tough, and it might be good for there to be a part of the international value chain that does not rely on the international division of labour in future.

Do you believe German industry is taking the right steps to address this challenge?
The German Federal Government provided a good description of the situation in its Indo-Pacific strategy last year. The German economy as a whole is excessively focused on China to the detriment of other nations in the region. We rarely think about Indonesia. And we think of India as being too complex. We have at least discovered Vietnam to an extent. But looking more at the wider region and concentrating less on China is one of the answers. Another aspect is that we are seeing a process of relocalisation that is also driven by the digital transformation. The outsourcing of labour-intensive work processes will become increasingly attractive as the digitalisation of production chains continues. The price of work will become less important as a competitive factor, and other economic conditions will become more important – such as stability, secure energy supply, and the availability of skilled staff.

“Neither party would benefit from the other party collapsing.”

When you say that companies in the digital sphere will have to choose between two systems, does this mean the sector will also see a fight between these systems?
It is hard to say. I suspect the next ten years will see efforts to balance out three different areas. The first is the course of confrontation between Europe and the USA on the one hand and China on the other. This relates in particular to human rights issues, Taiwan, and the extent to which free navigation in the China Seas is secured. A confrontation with China on these matters will be unavoidable. The second area is economic competition. I believe the USA and China are making progress towards establishing conditions for hard but fair competition. Neither party would benefit from the other party collapsing. There is a battle for top spot and technology leadership, but it is not a question of winning or losing. Nor is total isolation the goal. The two economies are far too closely intertwined for that. When it comes to digitalisation, however, European companies may well find themselves having to either maintain a presence on both sides or choose one of the two digital systems. And then there is the third area, which is where cross-border cooperation is required: This includes the pandemic, climate protection and nuclear arms control.

“I can only encourage Wilo to press ahead with its approach.”

Within its organisational structure, Wilo has established “Corporate Political Responsibility” as a dedicated unit so that it can keep abreast of geopolitical developments as a globally active group and further intensify its cooperation with relevant stakeholders around the world. What would be your advice to a company looking to position itself correctly in this multipolar world?
I can only encourage Wilo to press ahead with its approach. The German business model benefits from us being more or less the most open economy in the world, but our prosperity is also built on the openness of the global markets. The German economy has a trade openness indicator of over 90 percent. By contrast, France comes in at around 60 percent and the USA at roughly 30 percent. Anything that involves increased protectionism, trade disputes and geopolitical rivalry is a risk to our business model. That is why I think it would be smart for German companies to start doing what has long been commonplace for American and British companies: finding out about geopolitical changes and ensuring that they always have the latest information. This is still something of a rarity in Germany. It is practised by just a few large companies, even though the ramifications for SMEs can also be huge. As far as I am concerned, the correct approach is for companies to include the risk of global power shifts and political changes in their non-financial risks and to seek to take corresponding precautions.

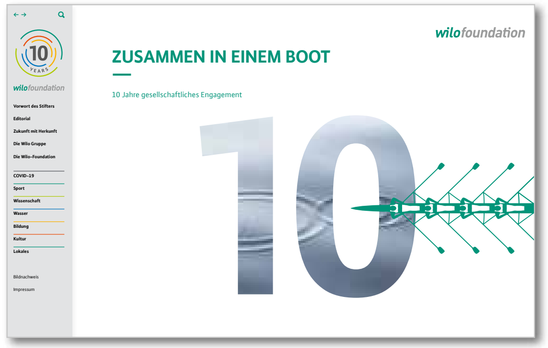
Sigmar Gabriel was born in Goslar in 1959. He was the leader of the Social Democratic Party of Germany (SPD) from 2009 to 2017 and the Vice-Chancellor of the Federal Republic of Germany from 2013 to 2018. He has also served as the Minister-President of Lower Saxony, the Federal Minister of the Environment, the Federal Minister for Economic Affairs and Energy, and the Federal Minister for Foreign Affairs. He was elected as the Chairman of Atlantik-Brücke e.V. in 2019.

CORPORATE POLITICAL RESPONSIBILITY

“Corporate Political Responsibility” (CPR) describes the political activities of companies that use the interface between politics and business as an opportunity to help shape the socio-political framework. One of the most significant indirect economic factors is a free political environment. This forms the basis for economic success. It is essential that companies like Wilo also support stable and efficient democratic institutions, the rule of law and an informed and vibrant civil society.

We believe we are obliged to take a firm stance and counteract political threats and regulatory deficiencies. In conjunction with politically sustainable corporate governance, Wilo plays an active role and utilises the interdependence of business and politics to create a public space and thereby bolster the liberal-democratic state. General issues such as stable infrastructures, multilateralism and the cohesion of the EU serve as fixed points for our CPR commitment. Wilo has therefore taken a clear stance on climate protection, the efficiency of energy and resources and on digital transformation – global trends that will shape life and human society in the decades to come. Together with our network partners, we promote future-oriented, climate-friendly solutions and proactively encourage dialogue with politics, NGOs, associations and partner companies.

HIGHLIGHTS 2021



January
Wilo-Foundation celebrates 10th anniversary

The Wilo-Foundation celebrates its 10th anniversary. The family-run foundation holds the majority of the shares in the Wilo Group. It supports projects in the areas of science, education and social welfare, culture and sport. Its funding priorities include the future issues of water, the environment and climate protection, technology and digitalisation, and talent development.

ABIONIK
AIR WATER LIFE
A WILO COMPANY

February
Acquisition of the ABIONIK Group

On 8 February 2021, the Wilo Group successfully completed the acquisition of the Berlin-based ABIONIK Group from the private equity company BID Equity as well as other shareholders. In doing so, it is expanding its expertise as a solutions provider for clean water treatment.

February
Ceremonial opening of the Wilopark

Over 1,500 high-ranking international guests from the world of business and politics as well as Wilo employees took part in the event on 4 February, which is held digitally because of the coronavirus pandemic. Guests of honour who sent a video message for the occasion included then German Chancellor Angela Merkel.

February
Wilo and Hellmann sign contract for global cooperation

The two companies sign a contract for the management of the Dortmund-based company's global movement of goods. From 2022 onwards, Hellmann will operate a new central warehouse for production materials and finished goods in the Dortmund area in order to ensure global distribution for Wilo and production supply for the new Smart Factory in Dortmund.

LEED GOLD 2021 DGNB

March
Wilo achieves climate neutrality and receives LEED Gold and DGNB Gold certification

The Wilo Group celebrates no fewer than three sustainability milestones in March: The successful completion of TÜV certification as a "climate-neutral company in Dortmund" as well as the Leadership in Energy and Environmental Design (LEED) Gold certification award from the U.S. Green Building Council (USGBC) and Gold certification from the German Sustainable Building Council (DGNB), both for the "Pioneer Cube" administrative building.

March
Wilo at the digital ISH 2021

Marking the start of the trade fair, Wilo sets a new benchmark in customer experience with the launch of its new, virtual point of contact, the "Wilo World". This is a virtual world in which every detail is captured with photographic precision. At this year's digital ISH, Wilo also focused on applications for water and sewage transport, an area that is becoming increasingly important not least because of the advance of globalisation around the world and the global water shortage.

April
Wilo and Enapter sign statement of intent

The Wilo Group and the electrolyser producer Enapter agree a partnership with the aim of defining potential areas of cooperation in the hydrogen sector and generating synergies that benefit both parties.

May
French minister visits Laval

On 6 May 2021, Franck Riester, the Minister Delegate for Foreign Trade and Economic Attractiveness, attached to the Minister for Europe and Foreign Affairs, visits Wilo in Laval (France).

DESIGN AWARD 2021

May
IF Design Award for Wilo-Rexa MINI3

In its statement, the jury praised not only the good and functional design of technology specialist Wilo's submersible pump, but also its technical advantages, especially in times of increasing water shortages.

June
Oliver Hermes meets Polish Prime Minister

On 9 June 2021, Oliver Hermes, in his capacity as Chairman of the Committee on Eastern European Economic Relations, welcomes the Polish Prime Minister Mateusz Morawiecki as this year's guest speaker at the traditional annual event.

June
Wilo opens new plant in Kuala Lumpur

As one of the world's most important growth regions, Southeast Asia offers huge expansion potential for the Wilo Group in the Building Services, Water Management and Industry market segments. The opening of the plant forms part of the systematic implementation of the "region-for-region" approach in Southeast Asia.

July
Wilo donates pumps to flood-hit region

Many people in North Rhine-Westphalia and Rhineland-Palatinate lost their homes and livelihoods in the devastating floods. The fire service, the Federal Agency for Technical Relief and other support organisations worked tirelessly to help people in need. With a spontaneous and unbureaucratic donation of almost 50 pumps, Wilo was keen to provide flood-hit regions with the necessary support in the form of its pump technology. Wilo also donated suitable pumps in the wake of the serious flooding in Henan province in China. Many employees of Wilo China also worked hard to provide on-site assistance.

June
Wilo wins German Brand Award for sixth consecutive year

For the sixth year running, Wilo receives the renowned German Brand Award – and this time, it does it twice. The company comes out on top in the "Brand Behaviour" category for its 2019 Annual Report and the "Excellence in Brand Strategy and Creation" category for the innovative Wilo work clothing created with Puma Workwear.

June
Wilo and Goldbeck sign partnership agreement

"Goldbeck and Wilo are united by their roots as Westphalian family companies, but above all by their focus on innovation with the determined will to rethink and improve the established," says Jan-Hendrik Goldbeck, Managing Partner of GOLDBECK GmbH.

August

Round table with Uzbek ambassador

On 18 August, the German Eastern Business Association and the Wilo Group play host to a round table at the Wilopark. Company representatives from various industries and the Ambassador of Uzbekistan to Germany, S.E. Nabijon Kasimov, discuss their concerns and identify potential areas of German-Uzbek cooperation.

August

Red Dot Design Award for signage and pictograms at the Wilopark

The Wilopark, the global headquarters of the technology specialist, receives an award that is not exactly ordinary: The renowned Red Dot Design Award in the Brands & Communication Design category is presented for the signage and pictograms at the Smart Factory and the Pioneer Cube.

August

Oliver Hermes named Honorary Consul of the Republic of Kazakhstan

On 25 August, the ceremonial appointment of the new Honorary Consul and the opening of the newly created honorary consular office at the Wilopark take place in the presence of the Ambassador of Kazakhstan to Germany, S.E. Dauren Karipov. The event is also attended by mayor Thomas Westphal, representatives of NRW Global Business and Dr.-Ing. E.h. Jochen Opländer, shareholder, Honorary Chairman of the Supervisory Board of WILO SE and founder of the Wilo-Foundation, as well as the entire Wilo Executive Board. Kazakhstan is Germany's most important economic partner in Central Asia. Kazakhstan has also played an important role for the Wilo Group for more than 20 years.

September

Reception at Wilo for the German Men's Eight rowing team

Four weeks on from the memorable final race in Tokyo, Wilo welcomes the silver medal winners at its new headquarters in Dortmund on 26 August 2021. At an exclusive event, the entire Executive Board together with Dr.-Ing. E.h. Jochen Opländer, shareholder and Honorary Chairman of the Supervisory Board of WILO SE and founder of the Wilo-Foundation, and Evi Hoch, Chairwoman of the Wilo-Foundation, congratulates the team, coach Uwe Bender and managing director Carsten Oberhagemann on behalf of the entire company.

September

International Wilo industry conference 2021 and IMGM (International Meeting of General Management)

An increasing number of companies are caught between the fronts of geopolitical disputes. For this reason, the Wilo Group organised an international industry conference on the topic of "Decoupling – Rethink Value Chains" on 9 September 2021 for around 150 high-ranking guests from business, science and politics. Around 80 guests gathered at the Wilopark in Dortmund for the hybrid event, including Sigmar Gabriel, former German Vice-Chancellor and current Chairman of Atlantik-Brücke e.V.

October

Wilo acquires US specialist for pressure-boosting systems

WILO USA LLC, a subsidiary of WILO SE, acquires the operating business of QuantumFlo, Inc., a specialist for pressure-boosting systems and intelligent pump systems as part of an asset deal. The company, which is based in Sanford, Florida/USA, offers high-quality products and innovative, user-friendly software solutions for the design and control of pressure-boosting systems.

October

24th Arab-German Business Forum

The Business Forum organised by the Ghorfa Arab-German Chamber of Commerce and Industry has long been a fixture in the annual calendar. This year's event is held in Berlin in early October 2021. Moderated by Ghorfa President and former Federal Minister Dr. Peter Ramsauer, the event is held in person again and sees a lively exchange of opinions. Georg Weber, Member of the Executive Board & CTO of the Wilo Group, presents the company's expertise as part of a panel discussion on urban infrastructure and smart cities.

October

Wilo and Schneider Electric intensify collaboration

Wilo and Schneider Electric, the leader in the digital transformation of energy management and automation, enter into a strategic partnership to jointly develop digital solutions for water shortage, water recycling and infrastructure efficiency in order to address the existing challenges in sustainable water management.

GROUP MANAGEMENT REPORT 2021

Wilo is looking back on another turbulent financial year in the shadow of the coronavirus pandemic. As vaccination campaigns gradually picked up pace around the world in early 2021, the end of the pandemic appeared to be in sight. However, the emergence of new virus variants and waves of infection meant a return to uncertainty dominating everyday life and the economy. This was accompanied by massive supply chain disruption, severe material bottlenecks and in some cases exorbitant cost increases on the raw material and logistics markets.
Even in the face of these numerous challenges, the Wilo Group recorded strong growth and significantly increased its profitability in 2021. Key projects and measures to ensure the future viability of the Wilo Group were initiated or continued. In addition, Wilo expanded and sustainably strengthened the foundations for continued dynamic and profitable growth by making targeted investments and successful company acquisitions to expand its technological spectrum and geographical presence. As a result, the Wilo Group is entering its 150th year full of confidence.

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THE 2021 FINANCIAL YEAR AT A GLANCE

NET SALES

EUR **1,651.9** million

↗ **13.8** %

With net sales of EUR 1,651.9 million, the Wilo Group recorded a new all-time high in the past financial year. Net sales saw strong growth of 13.8 percent.

CONSOLIDATED NET INCOME

EUR **49.0** million

Consolidated net income also increased significantly, growing by nearly 100 percent year-on-year to EUR 49.0 million.

EBITDA

EUR **181.1** million

EBITDA also reached a new all-time high of EUR 181.1 million – up around 30 percent on the previous year.

RESEARCH AND DEVELOPMENT

EUR **71.0** million

Wilo intends to establish itself as the digital pioneer of the pump industry and set new standards as an innovation leader. Accordingly, research and development have always played an important role. In 2021, research and development costs amounted to EUR 71.0 million or 4.3 percent of net sales.

INVESTMENTS

EUR **172.3** million

The Wilo Group continued to make strategically important investments aimed at securing its future in 2021. Among other things, more than EUR 170 million was invested in the construction and expansion of new and existing sales and production locations, the modernisation and capacity expansion of production machinery and company acquisitions. New, state-of-the-art production and administrative buildings are being constructed in China, India and the USA. As well as meeting the requirements of modern digital factories, they have been designed with sustainability as a guiding principle in order to make an important contribution to climate protection in future.

CASH FLOW

EUR **126.7** million

The Wilo Group's consistently strong cash flow provides solid foundations for its considerable financial strength and flexibility. It remained at a high level of EUR 126.7 million in 2021.

EMPLOYEES

8,200

The Wilo Group's employees are the basis for and the driving force behind its business success. Wilo is meeting the challenges of the coronavirus crisis extremely well, not least thanks to the exemplary attitude of all its employees, their great sense of solidarity and their strong commitment. Wilo employed an average of 8,200 people across the year as a whole.

MERGERS & ACQUISITIONS

A long-term financing structure and a solid equity base allow Wilo to realise external growth opportunities even in uncertain conditions. The acquisition of the ABIONIK Group supplements the Wilo Group's portfolio in the area of water treatment and extends its expertise as a solutions provider. The acquisition of QuantumFlo's operating activities is consistent with the established region-for-region approach and will accelerate market development in the USA.

BASIC INFORMATION ON THE WILO GROUP

- → **A premium provider of products, system solutions and services for building services, water management and industry, the Wilo Group is represented in all major markets**
- → **A global production and distribution network of 8,200 employees ensures proximity to customers**
- → **Targeted acquisitions in Germany, the USA, the Netherlands and the United Arab Emirates strengthen the foundations for continued profitable growth**
- → **Research and development activities continue to play an important role at Wilo and remain at a high level**

Customers and products

Wilo is a premium supplier of pumps and pump systems for heating, ventilation and air-conditioning, water supply and wastewater disposal around the world. As a full-service provider, the Wilo Group meets all of its customers' needs with its portfolio of products, system solutions and services. The extensive product portfolio ranges from high-efficiency pumps designed for houses, apartment blocks and public and commercial buildings, via special pumps, agitators and wastewater treatment solutions for water management, through to specific products and solutions for industrial applications or flood control.

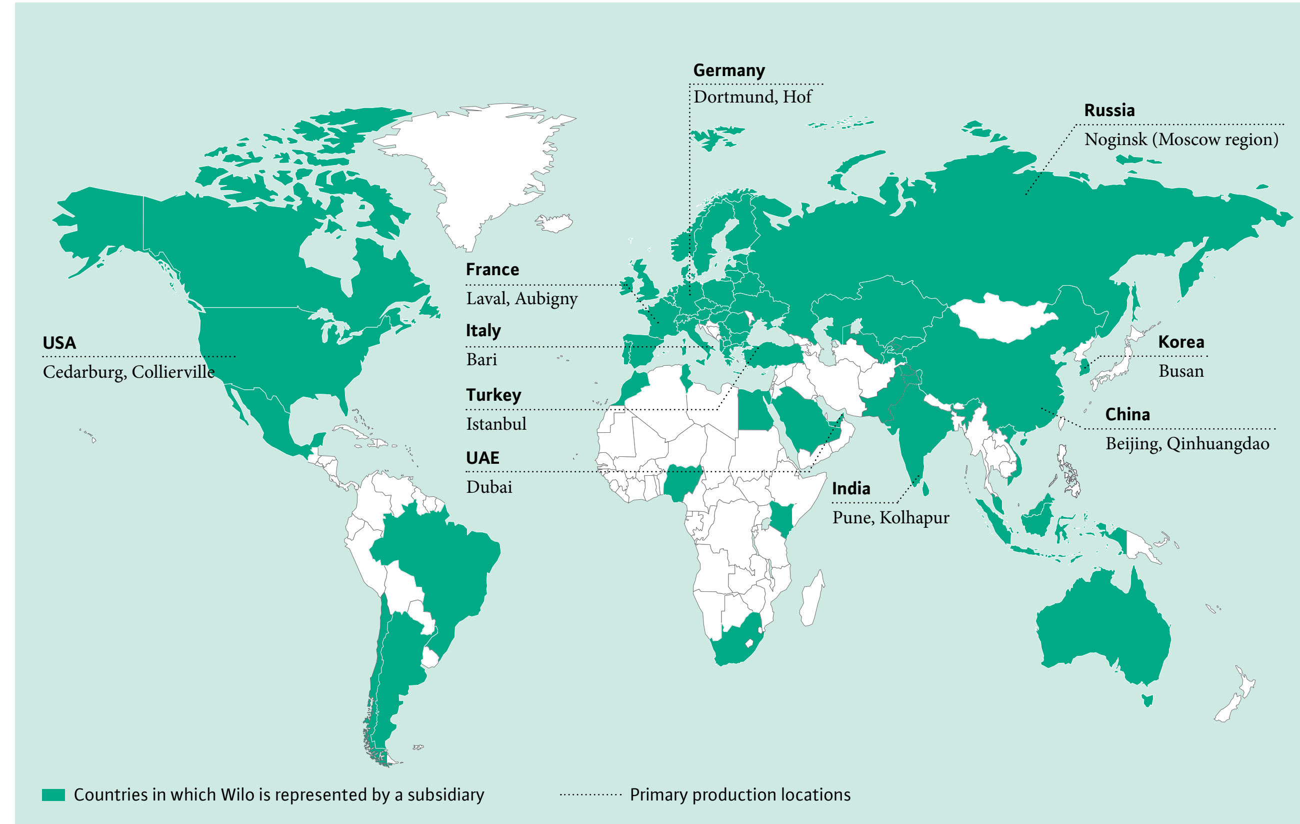
The Group's corporate strategy and the operational focus of its 8,200 employees are systematically geared towards one central point of orientation: Wilo's customers and their specific needs and requirements for products, applications and services. The foundation of the Wilo Group's market success is 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 now 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 Wilo's production network in the narrower sense. They are coordinated and managed accordingly.

The Wilo Group also has other, smaller locations – such as Sonneberg, Brüsewitz, Lich, Taunusstein, Wülfrath and Chemnitz in Germany or Sanford, Florida, in the USA – at which it develops and manufactures highly specialised products such as water supply, wastewater treatment and flood control systems. In addition, products for local markets are assembled at a variety of locations.

With this structure, the Wilo Group has an efficient, customer-oriented network of more than 80 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 in reliably excellent 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 clear focus, the Group's traditionally high innovative strength and proximity to customers thanks to its local presence are key factors in its success. Thanks to targeted combination in the respective markets, the Wilo Group is able 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 economic reasons. Accordingly, the aspects of economic efficiency and sustainability are both playing a stronger role when it comes to commercial and domestic building use. This makes it increasingly necessary to use innovative systems incorporating optimally coordinated components – not only for new builds, but especially also for the conversion and modernisation of buildings with a view to more stringent climate targets. Wilo offers the necessary energy-efficient concepts for 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, the Wilo Group's product and system solutions find applications in houses and apartment blocks, public buildings, industrial and office buildings, hospitals and hotels.

OEM
Wilo is a strong partner of leading OEMs and manufacturers of boilers, heat pumps and air-conditioning systems. The Wilo Group's pumps and hydraulic systems offer maximum 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 an innovative 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 the respective customers and markets. 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 an increasingly scarce and precious commodity around the world. Providing the rapidly growing global population with sufficient clean drinking water is already a fundamental problem in many regions of the world. In addition, the demand for water from agriculture and industry is rising very sharply around the world. The safe and sufficient purification and supply of water involves extensive global challenges, not least since this problem is intensifying continuously and rapidly. As an expert 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 or flood control. 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. Every industrial sector has its own individual and often highly specific requirements in terms of pumps and peripherals. Wilo develops tailored concepts and solutions to ensure smooth installation, safe operation and efficient maintenance. The Wilo Group's pumps and system solutions are used around the world for applications such as pumping cooling water in power plants or wastewater treatment on board ships. Other important areas of application include data centre cooling, dewatering in the mining industry and food production.

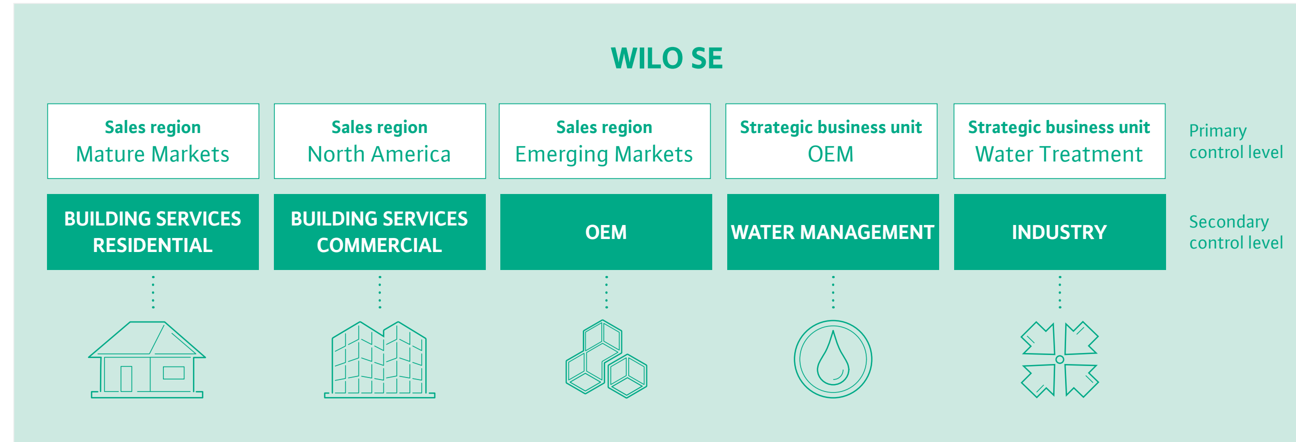
Group organisation and management

Wilo can look back on a long and successful history. The Wilo Group is celebrating its 150th anniversary in 2022. Founded in Dortmund in 1872 as "Kupfer- und Messingwarenfabrik Louis Opländer", today's WILO SE is a European stock corporation (Societas Europaea). The company is still headquartered 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 2021, the Wilo Group encompassed WILO SE and more than 80 production and sales companies worldwide. WILO SE holds a direct majority interest in most of its subsidiaries.

In February 2021, WILO SE acquired all shares in ABIONIK Group GmbH, Berlin, Germany. With the Martin Systems, Likusta and Steinhardt product brands, the ABIONIK Group has an innovative and sophisticated product portfolio in the area of water and air treatment for municipal, industrial and maritime applications as well as rainwater and wastewater treatment and flood control. ABIONIK has locations in Europe, China and India. The acquisition supplements the Wilo Group's

Organisation and management structure of the Wilo Group



portfolio in a targeted manner and further extends its expertise as a solutions provider for water management.

In February 2021, Wilo Middle East FZE also acquired the operating business of PumpsPro, Dubai, United Arab Emirates. PumpsPro offers servicing and maintenance as well as complete solutions for pumps and pump systems.

In July 2021, WILO Nederland BV acquired 100 percent of the shares in the service company WRI-TECH Industrial Services Holland B.V., Uitgeest, Netherlands. WRI-TECH is an established provider of servicing, maintenance and repair services for pumps and pump systems.

In October 2021, WILO USA LLC acquired the operating business of QuantumFlo, Inc., a specialist for pressure-boosting systems and intelligent pump systems, as part of an asset deal. The company, which is based in Sanford, Florida/USA, offers high-quality products and innovative, user-friendly software solutions for the design and control of pressure-boosting systems.

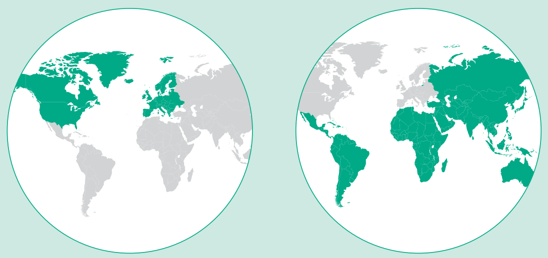
As part of strategic planning for the implementation of Ambition 2025, the functional organisational structure was enhanced in 2021 in order to leverage additional optimisation potential. The three sales regions of Mature Markets, Emerging Markets and North America and the Strategic Business Units OEM and Water Treatment are now the top-level organisational and management units by which the Wilo Group is primarily controlled in its current alignment. These units in the primary control level are each headed by an experienced manager who reports directly to the Executive Board. The Wilo Group also manages its business via the market segments that make up the secondary control level. These two levels, which are aligned as part of a matrix organisation, allow sales activities to be closely and flexibly geared towards the different requirements of the respective markets and regions.

The primary control level was enhanced as follows in the year under review: Firstly, the strengthening of the North America sales region, which is becoming steadily more important for the Wilo Group as a whole, was identified as critical for success. Following an intensive critical review of the structure of the sales regions with a view to future requirements and opportunities, the sales organisations in the USA and Canada are no longer managed as a part of Mature Markets, but as the separate North America sales region. With the acquisition of the ABIONIK Group, the Wilo Group also extended its water management portfolio in 2021, thereby systematically pressing ahead with its strategic alignment as a provider of solutions for water and wastewater treatment. In order to reflect their increased importance and complexity, all Wilo Group's activities in the area of water treatment will be bundled in the Strategic Business Unit Water Treatment in future.

The five specific market segments continue to make up the secondary control level. The management and controlling of the Building Services Residential, Building Services Commercial, Water Management and Industry market segments are covered by the managers of the Group Market Segment

Management function. Due to the specific nature of business with original equipment manufacturers, the management and controlling of the OEM market segment is organised directly in the Strategic Business Unit OEM.

Composition of established markets and growth markets
as at 31 December 2021



Established markets Growth markets

As previously, external reporting differentiates between established markets and growth markets. The North America sales region continues to be allocated to the established markets for this purpose. In the 2021 financial year, 58.3 percent of consolidated net sales were generated in the established markets and 41.7 percent in the growth markets.

The organisational structure has an entirely functional alignment. The management and controlling of the Wilo Group are the responsibility of the Executive Board of WILO SE, which consists of four members. The following schedule of responsibilities reflects the allocation of functional responsibilities within the Executive Board.

Net sales
by region in 2021

The Supervisory Board of WILO SE appoints, controls and monitors the Executive Board. The Supervisory Board, which 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[1)] in this Annual Report.

In managing the Wilo Group, the Executive Board focuses on the development of net sales and earnings power. Earnings power is primarily measured on the basis of EBITDA (operating earnings before interest, taxes, depreciation and amortisation) and the EBITDA margin as a percentage of net sales. 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, leverage is applied as an additional performance indicator. Leverage describes the ratio of consolidated net debt (financial liabilities and lease liabilities less cash) to consolidated EBITDA, adjusted for any restructuring costs. Net sales, EBITDA, the EBITDA margin and leverage are the central financial 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 the cash flow from operating activities, i.e. the liquidity generated by the Wilo Group in the course of its operating business. A constantly positive cash flow from operating activities serves to ensure the financial independence and liquidity of the company and is an important indicator of internal financing strength. The main levers for improving the cash flow from operating activities are increases in net sales and EBITDA. The development of the operating cash flow is also aided by the systematic management of working capital.

Schedule of responsibilities

President & CEO
Oliver Hermes

- Government & Public Affairs
- Sales Regions Mature & Emerging Markets, North America
- Strategic Business Unit OEM
- Group Service
- Digitization 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
- Strategic Business Unit Water Treatment

CTO
Georg Weber

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

CFO
Mathias Weyers

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

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, this relates in particular to 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 2021.

All 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 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.*[2)]

[1)] The report of the Supervisory Board does not form part of this Group management report. In line with the statutory provisions, KPMG AG Wirtschaftsprüfungsgesellschaft has not audited the report of the Supervisory Board, and consequently does not express an opinion or any other form of assurance conclusion thereon.

[2)] 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, and consequently does not express an opinion or any other form of assurance conclusion thereon.

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 a full-range supplier and customers' first choice.	We are a market, innovation and smart solutions leader.	We are a preferred partner for smart integrated solutions.	We are a global market player and digital solutions provider.	We are a specialist in selected branches and applications.

Corporate strategy

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

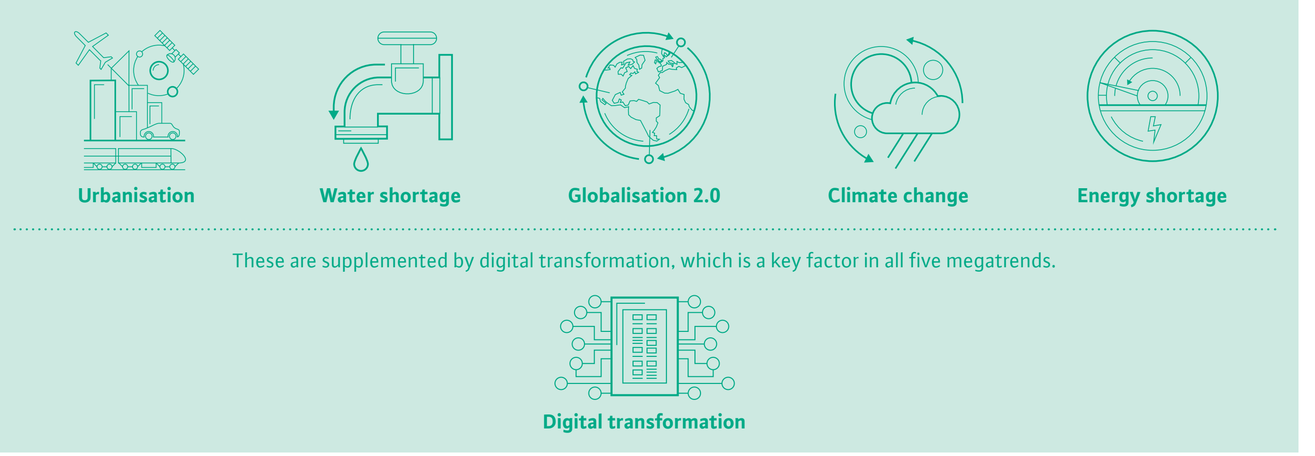
"Together we accelerate our profitable growth as a worldwide solutions provider" summarises the main strategic objectives and underlines the particular importance of international cooperation with various stakeholders across sector and industry boundaries. Accordingly, the Wilo Group is actively pressing ahead with its established globalisation strategy and intensifying cooperation and networking among all stakeholders along the entire value chain in a targeted manner. This centres on Wilo's aspiration to systematically pursue its development from a component manufacturer into a digital pioneer and provider of integrated solutions for the pump industry. Accordingly, the Wilo Group is intensifying the development of smart products, systems, services and solutions and actively pressing ahead with its digital transformation.

This strategy of accelerated, profitable growth is based 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 an innovation leader.
Wilo develops into the digital pioneer in the pump industry.	Wilo stands for business excellence.	Wilo remains an independent and responsible company.

Megatrends



To achieve the strategic objectives, the fundamental strategic directions were defined for each of the five market segments that make up the Wilo Group's secondary control level. 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 solutions provider. In the OEM market segment, Wilo is reinforcing its position 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. The Industry market segment will continue to focus on selected sectors and applications in future.

At business level, Ambition 2025 is being implemented via the primary control level, i.e. the sales regions (Mature & Emerging Markets, North America) and the Strategic Business Units (OEM, Water Treatment). These units are each headed by an experienced manager who reports directly to the Executive Board. To support this strategic implementation, specific ten-point plans have been created for the established markets and growth markets and a five-point plan has been created for the Strategic Business Unit OEM. These plans set out clearly defined, action-based, project-driven measures that will be implemented over the coming years. The steering committee meets regularly to discuss the current implementation status of the respective measures.

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. The core elements of these extensive Group-wide projects are the analysis and optimisation of significant cost structures and drivers.

Five megatrends relevant for the company have been defined in the context of long-term strategic planning. Globalisation, urbanisation, energy shortage, climate change and water shortage will significantly influence the Wilo Group's business in the future and are already having a visible impact on the company's current development. An important megatrend in its own right, digital transformation will play a central role when it comes to managing the various challenges the aforementioned megatrends will entail for the company and for society, business and politics, as well as helping to support the targeted and efficient implementation of solutions.

In the corporate foresight process, both risks and opportunities are derived and analysed from forecast future developments with respect to the global megatrends. In this way, the results are systematically taken into account in the ongoing development of the corporate strategy. This process also supports the enhancement of existing business areas and growth areas, as well as the development of new ones. Areas on which the Wilo Group is focusing include water technology, renewable energies and, in particular, hydrogen technologies and systems.

The coronavirus pandemic has illustrated the risks of the current world economic order and its tightly intertwined value chains all too clearly, providing further fuel for the movement towards the regionalisation and relocalisation of production networks. The pandemic has magnified existing protectionist tendencies and the desire of individual countries and regions to isolate themselves and become self-reliant, thereby clearly illustrating the ongoing decoupling of international economic relations. Thanks to its well-established region-for-region approach, the Wilo Group is excellently positioned to counteract these challenges and minimise the risk of major upheaval, business interruptions and delivery failures in times of crisis. The approach is designed to allow the individual regions as much decentralisation as possible and as much centralisation as necessary, allowing Wilo to manufacture locally for domestic and regional markets in an efficient and customer-oriented manner. In 2020, the Executive Board decided to intensify the process of further localisation that had already been initiated prior to the pandemic. This included scrutinising the existing make-or-buy strategies and redefining the appropriate degree of vertical integration for Wilo in the individual regions and countries. Insourcing activities for critical components were broadly intensified. To this end, the value chains were critically evaluated and the degree of vertical integration in selected areas has already been increased. Further elements of risk minimisation include multiple sourcing to reduce dependency on individual suppliers and redefining the necessary stock buffers in the warehouses. Wilo is systematically pursuing this approach with the establishment of a new head office for the Emerging Markets sales region in Beijing and the construction of new, state-of-the-art production sites in China, India and the USA. In the medium term, a new head office will also be established in the USA to reflect the growing importance of the entire Americas region for the Wilo Group.

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 current and future challenges. The Wilo Group wants to use its products and the pertinent system solutions and services to make people's lives easier all 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.

Ambition 2025 also forms the basis for the Wilo Group's sustainability strategy. The central tenet of this strategy is to supply 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 & Society". These objectives are integrated into the functional strategies of the individual departments and hence form part of regular reporting and corporate governance. → *More information can be found in Wilo's Sustainability Report, which is available at wilo.com/sustainability-report.*[3)]

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.

Research and development

Strategy and direction

Research and development activities are firmly enshrined in Ambition 2025 and the corporate objectives, meaning that the overarching R&D framework is defined directly in accordance with the corporate strategy. The primary aim remains to further expand the Wilo Group's leading position with regard to technology, innovation and quality. To this end, clear risks and opportunities were derived from the megatrends relevant to Wilo using the corporate foresight process. The following strategic action areas were defined for research and development on this basis: energy and resource efficiency, systems technology, solutions expertise, and digital technologies.

In some cases, the strategic action areas are addressed in close cooperation with outside partners and other industrial companies, as well as with universities and innovative start-ups. The aim is to enrich and expand internal know-how with external expertise. With this in mind, 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 part of the digitalisation process, Wilo is increasingly also shifting its development focus to new business models and complementary services.

Guided by the principle of "green solutions for a better climate", the Wilo Group's innovative and energy-efficient products, systems and solutions are helping to create sustainable value added for the environment. Based on the holistic sustainability strategy derived from Ambition 2025, Wilo continued to intensify its work in the areas of climate, energy savings and sustainability in product development in the 2021 financial year. One of the goals formulated in the sustainability strategy is to substantially reduce CO_2 emissions and generate significant energy savings of around 1.8 TWh every year through the use of highly efficient, environmentally friendly technologies in Wilo products. This target was actually exceeded in 2021, with Wilo's high-efficiency pumps delivering global energy savings of 2.1 TWh. This figure represents the electricity saved by using high-efficiency pumps compared with the corresponding uncontrolled previous models.

The central research and development organisation is responsible for managing all research and development activities. Traditional areas of development, such as engines, hydraulics, microelectronics and software, are addressed by dedicated central developer teams. This ensures that the challenges arising from aspects such as the digital transformation of products and processes in areas of the company are brought together and tackled efficiently. 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 two-tier organisation enables global, cross-divisional and interdisciplinary cooperation with the optimal transfer of knowledge. Product development places particular weight on the growth markets in Asia.

[3)] 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, and consequently does not express an opinion or any other form of assurance conclusion thereon.

Results

The modular global platform concept developed with the support of external partners was rolled out continuously in the year under review. The platform concept uses the results and development components of the various projects across divisions and projects with the aim of ensuring the lasting global transfer of technology and knowledge within the Wilo Group. This approach permanently lowers development costs and significantly reduces the time to market. Multi-project management was another key focal point in 2021. Numerous structural measures were implemented in this area in the year under review, leading to further significant process optimisations.

Supplying water for heating, air-conditioning and cooling applications in large buildings is highly complex and must allow for no compromises in terms of operational reliability. In 2021, Wilo launched the highly efficient smart glanded pump Wilo-Stratos GIGA2.0-I for these purposes. It is suited for a wide range of applications and offers high flexibility for future requirements thanks to its updatability. The smart glanded pump features several interfaces that enable multi-pump control, can be integrated into building automation systems, and offers operating data acquisition capacities and options for mobile access via Wilo-Smart Connect. The pump's entirely new drive technology combined with tried-and-tested pump hydraulics enable maximum reliability when it comes to pumping heating water, cold water and water-glycol mixtures without abrasive substances in heating, air-conditioning and cooling systems.

In the OEM segment, 2021 saw the launch of the Wilo-Para MAXO series, another high-efficiency glandless circulator pump with high flow for heating and solar applications. It offers an extremely high degree of comfort when it comes to electrical installation, commissioning, settings and diagnostics. In its Wilo-Para MAXO R variant, the circulator can be used in all kinds of heat pump systems as well as for cooling and geothermal applications. Thanks to its special construction, it is suitable for using propane as a refrigerant gas, which has significantly lower greenhouse gas potential than conventional gases. As the pump is highly energy-efficient, it also expands the range of climate protection products for the OEM segment.

2021 saw the launch of the Wilo-Medana CH1-L, a improved horizontal multistage pump series for efficient system integration. It is suitable for drinking water applications as well as use in ambient temperatures up to 50° C.

The launch of the Wilo Monitor in 2021 represented another milestone in product digitalisation. Connecting Wilo pumps and pump systems with the Wilo-Smart Cloud enables customer-friendly, comfortable remote monitoring from any location as well as remote signalling of faults and warnings in real time.

Employees

With a slightly lower headcount, the employee structure in research and development remained largely unchanged in 2021 compared with the previous year. The needs-driven recruitment of qualified young candidates in the disciplines of technology and the natural sciences represents a growing challenge, including internationally. 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 examples of measures aimed at achieving this goal. These measures are also focusing on Asia to a growing extent. 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 innovative unique selling propositions against competitors through patents and other property rights. Almost half the Group's net sales are generated from products involving at least one solution that is patented or for which a patent application has been submitted. Protection means that products, techniques and solutions can be used exclusively by Wilo, thereby supporting the company's profitable growth. In addition to the high usage rate – i.e. the ratio of net sales from patent-protected products to total net sales – the patent application approval rate (number of patents successfully obtained) has been comfortably in excess of 80 percent for many years, thereby underlining the particular quality of Wilo's patent portfolio. In 2021, Wilo further increased its applications and patent portfolio compared with the previous year.

Investment and expenditure

In the 2021 financial year, investment in research and development again focused on the further expansion of the laboratory infrastructure and automation with a view to establishing a worldwide network with a shared infrastructure and globally interlinked processes.

Total research and development costs including capitalised development costs amounted to EUR 71.0 million in the 2021 financial year (previous year: EUR 68.6 million). The ratio of research and development costs to net sales remained high at 4.3 percent. Development costs (including borrowing costs) were capitalised in the amount of EUR 16.1 million (previous year: EUR 17.3 million). Research and development costs in the amount of EUR 55.8 million (previous year: EUR 52.0 million) were recognised in profit or loss. Amortisation of capitalised development costs amounted to EUR 6.2 million in the year under review (previous year: EUR 4.8 million).

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

* including capitalised development costs

BUSINESS REPORT

- → **World economy and construction industry recover in 2021 despite headwinds**
- → **Wilo's profitable growth path continues with substantial net sales growth of 13.8 percent**
- → **Substantial improvement in profitability, operating cash flow remains at high level**
- → **Significant disruption to global value chains and upheaval on the procurement markets pose particular challenges**

General economic and industry-specific conditions

World economy: Pandemic and global supply bottlenecks prevent a more lively recovery in 2021

The coronavirus pandemic continued to have a tangible impact on the world economy in 2021, although the waves of infection and the measures taken by governments to curb the spread were less consistent from region to region than in the previous year. Having started the year with a strong recovery, the world economy found itself bogged down again from midway through the year. Infection rates in Asia increased in the summer, while the global value chains were hit by extensive disruption. Severe supply bottlenecks going far beyond the shortage of microchips, combined with a sharp rise in the cost of important raw materials, precursors and transport, curbed the upturn in industrial production around the world. Monetary policy also saw varied development in 2021 against this global economic backdrop and as a result of the substantial increase in inflation. While the US Federal Reserve laid the foundations for a turnaround in interest rate policy in the USA, the European Central Bank (ECB) stuck to its extremely expansive path for the euro area. The United Kingdom, Norway, South Korea and many emerging economies also raised their key interest rates, in some cases significantly. In spite of the dampening effects, the Kiel Institute for the World Economy (IfW) estimates global economic growth at 5.7 percent in 2021. The International Monetary Fund (IMF) expects the world economy to have expanded by 5.9 percent following a contraction of 3.1 percent in the previous year. Economic output in the industrialised nations increased by 5.0 percent in 2021 (previous year: -4.5 percent), while economic output in the emerging economies rose by 6.5 percent (previous year: -2.0 percent).

The following section presents the macroeconomic and industry-specific developments in 2021 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 as well as the water and wastewater industries.

Established markets – Construction industry on growth path in Europe and the USA in 2021 despite the pandemic and temporary supply bottlenecks

EUROPE. Having contracted in the first quarter under the pressure of strict lockdowns, the European economy enjoyed a broad-based recovery in the spring and summer as the coronavirus restrictions were eased. In addition to lively exports, private consumption in particular benefited considerably from pent-up demand and high purchasing power. The industrial sector also gained momentum again, although manufacturing output and investment activity were substantially affected by unexpectedly extensive supply bottlenecks as the year continued. According to the Eurostat statistical office, the euro area economy expanded by 5.2 percent in 2021 (previous year: -6.4 percent). All the countries in the euro area enjoyed positive economic development, with Italy, Spain, France, Portugal and Austria seeing a substantial recovery. However, the upturn in Scandinavia and Eastern Europe was more moderate than the euro area average. Switzerland saw robust growth in 2021, while the United Kingdom continued to recover from the slump in the previous year.

The German economy also benefited from the relaxation of pandemic-related restrictions in 2021, with private consumer spending seeing a strong recovery on the back of pent-up demand. By contrast, the upturn in the industrial sector was slowed considerably by supply chain problems and the pronounced rise in precursor and transportation costs from the summer onwards, with investment in equipment suffering as a result. The fourth wave of infection and the new measures to curb the spread of the virus meant that the recovery in consumer spending also came to a halt in late 2021. According to the German Federal Statistical Office, gross domestic product (GDP) in Germany increased by just 2.7 percent overall in 2021 (previous year: -4.6 percent), lower than was anticipated one year previously.

The European construction industry outperformed expectations during the pandemic. According to preliminary calculations by the Euroconstruct industry network (including the ifo Institute), construction output in the 19 most important European countries increased by 5.6 percent in real terms to EUR 1.74 trillion in 2021 (previous year: -4.7 percent). Growth was driven in particular by residential construction, although other building construction and civil engineering also enjoyed a tangible recovery. However, there was considerable regional variation within this development. For example, Italy and Belgium saw double-digit growth in construction output, while France and Spain also recovered strongly from the downturns in the previous year, with growth coming in at a good 6 percent. The Scandinavian markets continued their robust upturn, and construction output in Austria increased by 5.4 percent. By contrast, growth in Switzerland and the Netherlands was extremely muted at 1.5 percent and 0.8 percent respectively. However, the construction industry in the United Kingdom enjoyed a strong recovery, recording growth of 13.4 percent. All in all, construction output in Western Europe rose by 5.9 percent in real terms. Growth in Eastern Europe amounted to just 2.0 percent, although the construction industry in Hungary and Poland saw solid growth rates of 3.3 percent and 3.0 percent respectively.

Although the German construction industry also felt the impact of delays due to supply bottlenecks, significant cost increases for construction materials and the shortage of skilled workers, it enjoyed robust performance in 2021 thanks to lively demand. According to the German Federal Statistical Office, construction investment increased by 0.5 percent in real terms. According to the German Institute for Economic Research (DIW), the broadly defined nominal construction volume grew by 10.1 percent, not least thanks to the pronounced price rises of 8.5 percent. The volume of new residential construction increased by 10.5 percent to EUR 87,8 billion (previous year: 5.7 percent). The construction volume for other buildings (industrial, commercial, public) climbed 7.0 percent to EUR 49.3 billion (previous year: 3.1 percent). At around two-thirds of the total building construction volume, however, the lion's share is attributable not to new builds, but to construction work in existing buildings – especially expansion, conversion, maintenance and modernisation. This construction activity also saw growth in 2021, increasing by 11.8 percent to EUR 196.6 billion for residential buildings (previous year: 4.6 percent) and by 9.4 percent to EUR 70.4 billion for non-residential buildings (previous year: 0.8 percent).

Driven by the high level of construction activity and lively demand for modernisation, the German sanitary industry again enjoyed extremely healthy performance in 2021. According to the German Federal Statistical Office, net sales from the installation of gas, water, heating, ventilation and air-conditioning systems grew by 6.5 percent in the first three quarters of 2021 (previous full year: 7.0 percent). However, advance purchasing ahead of the introduction of new technical thresholds are likely to have played a role, and this is increasingly also true for targeted investments in more climate-friendly heating systems. According to preliminary figures from the professional associations, the German heating industry increased its domestic net sales by a further 10.6 percent to EUR 35.5 billion in 2021 (previous year: 8.4 percent).

USA. Industrial production increased significantly in 2021 following two weak years, with capacity utilisation also improving. Despite a brief dip in the third quarter, the economy saw a substantial recovery on the whole, driven in particular by private consumer spending and investment. According to the first official data, the US economy is expected to have grown by 5.7 percent in 2021 (previous year: -3.4 percent).

The positive trend in the US construction industry continued, with construction investment enjoying above-average growth in real terms on the back of the substantial upturn in residential construction. In terms of nominal expenditure, construction output in the USA rose by 8.2 percent. The growth rate for private apartments was as high as 23.2 percent, with the figure for private apartment blocks coming in at 15.6 percent. Commercial construction increased slightly, although office buildings saw lower investment than in the previous year. Public-sector construction also declined by 4.2 percent. Public-sector construction spending expenditure in the water supply sector increased slightly by 1.2 percent in 2021, while the figure for the broadly defined wastewater/waste disposal sector saw growth of 4.5 percent.

Growth markets – Construction industry encounters strong headwind in almost all markets in 2021, high level of investment in apartments and infrastructure

CHINA. In 2021, the Chinese economy suffered from the repeated imposition of regional lockdowns as part of the country's extremely strict zero-Covid policy. The nationwide crisis in coal-based energy supply and financial difficulties in the real estate sector also impacted economic growth. Chinese industrial production saw only moderate growth of a good 3 percent from autumn onwards, while steel production actually declined on a full-year basis. Following a strong start to 2021 due to base effects, economic growth increasingly slowed as the year continued. According to the NBS statistical office, China's GDP nevertheless increased by 8.1 percent in 2021 (previous year, revised: 2.2 percent).

The construction industry is an important pillar of the Chinese economy. The dynamic development of the urban megacentres goes hand in hand with huge demand for housing, commercial and administrative buildings and modern infrastructure. This includes the supply of energy and drinking water as well as waste and wastewater disposal. Despite the financial crisis in the real estate sector (including Evergrande), construction investment increased by 4.4 percent in nominal terms in 2021 (previous year: 7.0 percent), with the dominant residential construction segment recording growth of 6.4 percent (previous year: 7.6 percent). At the same time, China increased its capital expenditure on water management by a further 1.3 percent.

SOUTH KOREA. The South Korean economy enjoyed a broad-based recovery in 2021. The semiconductor, pharmaceutical and steel industries benefited from the upturn in international demand, as did mechanical engineering and shipbuilding. Private consumer spending also increased tangibly as the vaccine roll-out continued and coronavirus restrictions were lifted. The central bank (Bank of Korea) raised the key interest rate to 1.0 percent in two moderate steps in 2021. According to its current estimate, the economy grew by 4.0 percent in 2021 (previous year: -0.9 percent).

However, the construction industry remained under pressure in the first half of the year despite an improvement in the order situation, only gradually stabilising as the year continued. On a full-year basis, construction investment is likely to have again declined slightly by -0.7 percent in real terms in 2021 according to the Bank of Korea (previous year: -0.4 percent).

INDIA. After a difficult wave of the pandemic in the spring, the Indian economy saw a substantial recovery throughout the rest of 2021. The government used financial incentives to stabilise the economy in some cases. This benefited private consumer spending in particular. By contrast, industrial production suffered to an extent from rising raw material prices and supply bottlenecks, with the result that capacity utilisation in manufacturing hit an all-time low. For example, the utilisation rate in August was just 60 percent. As a consequence, investment activity was muted in spite of a subsidy programme. Nevertheless, the IMF expects the Indian economy to have recovered strongly from the huge slump in the previous year, with full-year growth estimated at 9.0 percent (previous year: -7.3 percent).

This pronounced economic upturn is being driven to a large extent by the construction sector. Investments in infrastructure are an important factor in this development, while urbanisation and government housing construction programmes are providing the construction industry with long-term structural impetus. Despite new setbacks and restrictions in response to the pandemic, the construction industry recovered strongly from the slump of around 9 percent in the previous year. Although there was still a lack of momentum when it came to office and retail buildings, government investment programmes in water management and social housing continued. Residential construction starts increased by 71 percent in the first half of 2021, with sales rising by 67 percent.

SOUTHEAST ASIA. The most important countries in this region (ASEAN-5 and Singapore) saw an economic recovery in 2021 on the back of the global upturn, although new waves of the pandemic meant that growth was comparatively moderate. According to the IMF, the ASEAN-5 economies grew by just 3.1 percent overall, having contracted by 3.4 percent in the previous year. In light of the importance of the tourism sector, the pandemic meant that the recovery in Thailand remained extremely muted. By contrast, Vietnam again saw the highest growth among the ASEAN-5 nations. Singapore also enjoyed a particularly strong recovery in 2021.

Against this backdrop, the construction industry in Southeast Asia saw a tangible recovery in 2021, although some projects were subject to delays, such as the construction of the new capital city in Indonesia. The upturn in the construction industry was driven in particular by higher infrastructure investments. For example, the Philippines increased its construction budget for 2021 by 50 percent. Another key factor was residential construction, especially in Malaysia and the Philippines. The construction industry in both countries is likely to have grown by around 13 percent in 2021 following the slump in the previous year. According to Global Data, the Vietnamese construction industry continued on its path of steady expansion with growth of 8.2 percent in 2021. By contrast, development in Indonesia was moderate.

RUSSIA. The Russian economy enjoyed a strong recovery in 2021. The main driver of the lively upturn was private consumer spending, which benefited from a booming employment market and one-off government payments. Investment activity also picked up significantly. Industrial production increased, although a pandemic-related shortage of workers limited the growth potential considerably. In response to the sharp rise in inflation, the central bank raised the key interest rate to 8.5 percent in seven steps in 2021, thus also strengthening the external value of the rouble. According to IMF estimates, the Russian economy grew by 4.5 percent in 2021 (previous year: -2.7 percent).

Despite the shortage of workers, the resulting delays in construction projects and the dramatic rise in the cost of construction materials, the Russian construction industry has been enjoying an upturn since the second quarter of 2021. Large-scale public infrastructure projects and residential construction were the main drivers of growth in the industry. According to the consulting firm CBRE, investments in real estate reached new highs during the course of the year. Data from the Rosstat statistical office shows that residential construction grew by 12.7 percent in 2021 in terms of the surface area under construction. The boom in demand is being supported by the granting of subsidised mortgage loans on a large scale. According to the central bank, the volume of all mortgage loans to private households increased by a good 20 percent year-on-year. The pandemic meant that the market for air-conditioning and heating systems was still subject to contrasting influences in 2021, with higher demand for air-conditioning systems in hospitals and pharmaceutical and IT companies being offset by a downturn in shopping, leisure and sports centres. Heating systems did not yet benefit from the new construction boom in 2021 as installation typically takes place at the end of the construction phase.

TURKEY. The Turkish economy began 2021 with pronounced growth on the back of higher exports and lively consumer spending. The progress of the vaccine roll-out, the lifting of pandemic-related restrictions and a recovery in tourism were accompanied by an upturn in domestic demand over the course of the year. Although the industrial sector enjoyed positive underlying performance, it was significantly impacted by the global supply bottlenecks in some cases. In late 2021, Turkey found itself in a domestic crisis triggered by the repeated and significant political pressure on the central bank to lower the key interest rate. The exchange rate of the Turkish lira collapsed in the wake of a substantial loss of confidence, leading to an explosion in consumer prices. The rate of inflation in December was around 36 percent. Despite this, the World Bank expects the Turkish economy to have recorded net growth of 9.5 percent in 2021 (previous year: 1.8 percent).

The Turkish construction industry also continued to recover on the back of the general economic upturn in the first half of 2021, albeit relatively moderately. In the previous year, building construction – and residential construction in particular – was boosted by the availability of affordable loans. In 2021, this effect turned around as a result of higher interest rates and construction costs, with the result that development on the residential construction market cooled. Although the number of building permits increased, it remains well below the level recorded in the construction boom years of 2012–2017. According to a preliminary estimate by the industry association IMSAD, the construction industry is set to have grown by 3.0 percent in 2021 (previous year: –3.5 percent).

MIDDLE EAST & AFRICA. The entire region saw an economic recovery in 2021 in spite of the pandemic. This development was driven by the sharp rise in commodity prices and the upturn in global demand. The World Bank estimates economic growth in the Middle East and North Africa at 3.1 percent (previous year: –4.0 percent). Oil-exporting states like Saudi Arabia, the United Arab Emirates and Algeria enjoyed a robust recovery. Among the oil-importing nations, Morocco enjoyed a particularly strong economic recovery of 5.3 percent. By contrast, the Tunisian economy suffered from the local political crisis. Having recorded growth in the previous year even in the face of the coronavirus crisis, Egypt, which is economically important for the region as a whole, saw a further upturn of 3.3 percent in 2021. The Sub-Saharan region also saw an economic recovery. The growth rate in Nigeria was 2.4 percent (previous year: –1.8 percent). Despite the emergence of social unrest, South Africa recovered on the back of a broad-based upturn in mining, industry and services. According to the World Bank, gross domestic product (GDP) increased by 4.6 percent after a contraction of 6.4 percent in the previous year.

Driven by the wider economic upturn, the construction industry also recovered in most countries in the region in 2021 with the exception of Tunisia. As previously, investments in infrastructure were the main driver of this development, with residential construction also playing a significant role once again in some countries. The construction industry in Egypt enjoyed particularly strong growth and proved to be a significant pillar of the economy once again in 2021. The rating agency Fitch estimates the growth rate at 10 percent (previous year: 5.5 percent). Egypt is also set to invest around USD 50 billion in water management between now and 2037 in a bid to combat water shortages.

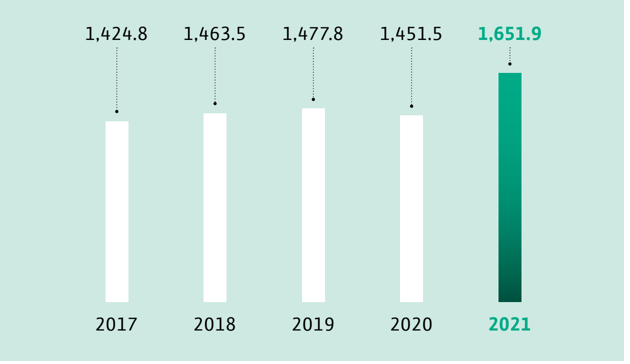
LATIN AMERICA. The regional economy enjoyed a substantial recovery on the back of the vaccine roll-out, higher commodity prices and the positive development of the export markets in particular. Lively investment, higher exports and private consumption were the drivers of this upturn. Almost all central banks in the region raised interest rates in response to rising inflation. According to the World Bank, economic output in Latin America is estimated to have grown by 6.7 percent overall in 2021 (previous year: –6.4 percent). Mexico and Brazil saw a robust upturn of 5.7 percent and 4.9 percent respectively. With double digit growth rates of around 10–13 percent, Argentina, Peru and Chile enjoyed a particularly dynamic economic recovery.

Results of operations

Net sales development

Even in the face of an adverse environment characterised by considerable uncertainty, the Wilo Group successfully continued on its profitable growth path in 2021. Net sales increased strongly by 13.8 percent or EUR 200.4 million to EUR 1,651.9 million despite significant disruptions to global supply chains and the negative impact of the ongoing coronavirus pandemic. Net sales growth adjusted for exchange rate effects was as high as 15.1 percent. Organic net sales growth, i.e. growth adjusted for exchange rate and acquisition effects, amounted to 12.8 percent. This strong growth is all the more remarkable in light of the fact that net sales in 2020, the first year of the pandemic, actually increased slightly after adjustment for exchange rate effects, meaning that the basis of comparison in 2021 was a challenging one. Thus the growth in the year under review wasn't driven by catch-up effects, but by market success and strong operational performance.

Net sales development
in EUR million



Net sales development in the individual sales regions was as follows in the 2021 and 2020 financial years:

Net sales development by region

EUR million	2021	2020	Change in %	Change after adjustment for exchange rate effects in %
Established markets	963.3	853.9	12.8	13.0
Growth markets	688.6	597.6	15.2	18.0
Total	**1,651.9**	**1,451.5**	**13.8**	**15.1**

The established markets and growth markets consisted of the following countries as at 31 December 2021:
– Established markets: All European nations, USA and Canada
– Growth markets: China, India, South Korea, the Southeast Asian nations, Australia and Oceania, Russia, Belarus, the Caucasian nations, Turkey, the Middle East, Africa, Latin America

ESTABLISHED MARKETS. Net sales in the established markets increased by 12.8 percent or EUR 109.4 million to EUR 963.3 million.

Germany, the Wilo Group's largest individual market, saw substantial year-on-year net sales growth of 8.4 percent in 2021. The OEM and Building Services Residential market segments recorded particularly strong growth. This extremely positive development underlines the Wilo Group's strong market position in its domestic market. Additional impetus was provided by government subsidy programmes for improving the energy efficiency of residential properties and a change in the spending patterns of private households. Growth is also likely to have been boosted by some customers building up stock buffers in response to the pressure on supply chains. The first-time consolidation of the ABIONIK Group also contributed to the highly positive business development in Germany.

In France, net sales increased by 11.0 percent, with more stringent requirements for the energy quality of buildings accompanied by corresponding government subsidies boosting sales of small circulators and OEM products in particular. In addition, a heightened focus on specific industrial applications – especially for cooling – led to growth in the Industry market segment. Service business also developed extremely well.

Net sales in Southern Europe climbed by 21.9 percent, with all the countries in the sales region contributing to this result. Many projects in the tourism sector that were postponed in the previous year were realised with a view to the prospects for opening in summer 2021. The project backlog in the Water Management segment was also worked through as restrictions were gradually lifted. The pronounced net sales growth of 20.4 percent in Italy was due in particular to a successful cold water campaign and strong project business. Impressive growth in OEM business also contributed to this extremely positive development.

Net sales in Eastern Europe increased by 10.2 percent, with lively development in Austria – the largest market in the region – as well as Slovakia, Hungary, Ukraine and Bulgaria being partially offset by lower net sales in Poland and muted sales performance in Romania. The OEM market segment was the main driver of this positive development. In addition, many projects and maintenance orders that had been postponed due to the coronavirus pandemic were successively realised in 2021. Industrial customers were particularly hard hit by the official measures imposed in order to curb the spread of the coronavirus, which included factory shutdowns. As these restrictions were gradually relaxed, business in the industrial segment also picked up tangibly.

In the Benelux nations, net sales increased by around 20 percent year-on-year overall. The main growth driver in the Netherlands was OEM business. Strong project business in the Water Management market segment also supported growth, while both Belgium and the Netherlands saw substantial upturns in service business. The realignment and the acquisition of WRI-TECH also contributed to this development.

Net sales in the Nordic states increased by more than 16 percent year-on-year. Sweden recorded particularly strong growth, with positive net sales performance being driven in particular by the Building Services Residential market segment thanks to the upturn in wholesale business as small and medium-sized installation companies began realising a growing number of projects again. OEM business also provided significant impetus. The other Nordic nations also recorded positive business development.

Meanwhile, the Baltic states enjoyed a substantial recovery with year-on-year net sales growth of more than 20 percent. Latvia saw particularly strong sales performance following the lockdowns and on the back of an improved economic outlook. Growth was also recorded in Lithuania as construction projects increasingly resumed activity.

Net sales in the United Kingdom rose by around 7 percent thanks to a recovery in Industry business as well as growth in the Building Services Commercial and OEM market segments. By contrast, net sales in Ireland were down slightly on the previous year. Business activity in Ireland was substantially impaired by extensive lockdowns, which meant that construction sites were shut down until early May.

Net sales on the North American market increased by an impressive 17.4 percent. After adjustment for exchange rate effects, net sales rose by as much as 20.6 percent. The US economy recovered as the vaccine roll-out continued and restrictions were gradually lifted, which had a substantially positive impact on business development. Net sales at American-Marsh Pumps increased significantly compared with the previous year following the successful realignment of the company's business. Having suffered to a large extent from the impact of the pandemic in the previous year, OEM business also enjoyed a strong recovery. In Canada, net sales were up significantly on the previous year thanks to strong project business. With the acquisition of QuantumFlo – a specialist for pressure-boosting systems and intelligent pump systems – the Wilo Group expanded its portfolio of local products at the end of the third quarter of 2021 and extended its customer base with a view to accelerating its market development in the USA.

GROWTH MARKETS. Net sales in the growth markets increased by 15.2 percent or EUR 91.0 million to EUR 688.6 million. After adjustment for exchange rate effects, net sales rose by 18.0 percent.

In China, net sales increased by an impressive 29.0 percent on the back of OEM business as well as the Building Services segment. Following the relaxation of coronavirus restrictions, project business picked up again and postponed orders were realised. Among other things, data centres serving the ever-growing number of internet companies in China were fitted with cooling pumps, while the expansion of the distribution network and the increased use of e-commerce channels provided additional positive impetus.

Wilo generated net sales growth of 8.9 percent on the South Korean market. Targeted sales promotion campaigns, the acquisition of new distributors and strong project business all made a substantial contribution to the upturn in business activity. Service business and OEM business also saw considerable growth.

In India, net sales increased by 7.9 percent on a full-year basis despite the severe second wave of the pandemic that began in March. Thanks to an optimised product portfolio, Building Services recorded particularly strong growth, with Wilo fitting its products in buildings including hospitals and educational institutions. The Indian sales organisation has been expanded in recent years with the aim of achieving greater diversification between market segments, including by extending the dealer network. In this way, Wilo has sustainably strengthened the foundations for accelerated growth in the areas of Building Services and Water Management. These measures had a positive impact in the year under review.

Net sales in Southeast Asia and Oceania climbed by 21.6 percent year-on-year, with sharp rises in Indonesia, Vietnam and Singapore more than offsetting the downturns in Australia and Malaysia. Growth was driven in particular by strong project business in the Building Services Commercial market segment and a major drainage project in the mining industry.

Net sales in the Eurasian region increased by 6.3 percent. After adjustment for exchange rate effects, net sales rose by as much as 11.5 percent. The main growth drivers were Russia and Belarus. Growth was supported by major infrastructure projects. The relaxation of government-mandated pandemic restrictions also led to an upturn in the number of industrial projects being realised. Furthermore, there was growing demand for local products. The production site in Noginsk, near Moscow, enables the Wilo Group to serve the local market efficiently and in line with customer requirements while also benefiting from the growing trend towards localisation.

Net sales growth in Turkey amounted to 3.5 percent, or more than 30 percent after adjustment for exchange rate effects. Business development in Group currency was impacted by the increasingly strained political and economic situation from the fourth quarter onwards and the significant depreciation of the Turkish lira. Rising financing costs and material prices led to a substantial downturn in the construction sector and government infrastructure projects. Growth was mainly generated in the Water Management market segment, where a major project for wastewater treatment was invoiced. The Building Services Residential market segment also saw positive development thanks to growth with major distributors. By contrast, business development in the OEM segment declined.

In the Middle East and North Africa, net sales increased significantly by 23.5 percent. The main growth driver was Egypt, where a major project was acquired in the Water Management market segment. Wilo is delivering the pumps for the Toshka project, which involves the construction of a system of canals to irrigate the Western Desert of Egypt. Morocco also saw substantial growth in net sales on the back of strong project business in the Building Services Commercial market segment and some infrastructure projects in the Water Management market segment. In Saudi Arabia, the Water Management market segment made a significant contribution to the extremely positive net sales performance thanks to a major infrastructure project.

Net sales in Central and Southern Africa declined by 2.1 percent. Because the Wilo Group's business in this region is largely characterised by project business, it is typically subject to more pronounced fluctuations and was impacted by the coronavirus pandemic to an above-average extent. Project delays were also caused by obstacles to payment transactions.

Net sales in the Latin American nations saw strong growth of 47.3 percent. The growth in Argentina on the back of healthy project business in the Building Services Commercial market segment and further growth in Industry projects in Panama, Water Management projects in Peru and Mexico and Building Services projects in Chile served to more than offset the downturn in net sales in Brazil, a market that was especially hard hit by the coronavirus pandemic in 2021.

Earnings development

Results of operations

EUR million		2021	2020	Change in %
Net sales	in EUR million	1,651.9	1,451.5	13.8
Gross profit	in EUR million	529.6	474.2	11.7
Gross margin	*in %*	*32.1*	*32.7*	*-1.8*
Earnings before interest, taxes, depreciation and amortisation (EBITDA)	in EUR million	181.1	141.2	28.3
EBITDA as a percentage of net sales (EBITDA margin)	*in %*	*11.0*	*9.7*	*13.4*
Depreciation and amortisation	in EUR million	88.6	79.9	10.9
Earnings before interest and taxes (EBIT)	in EUR million	92.5	61.4	50.7
EBIT as a percentage of net sales (EBIT margin)	*in %*	*5.6*	*4.2*	*33.3*
Net finance costs	in EUR million	-8.6	-8.0	-7.5
Consolidated net income before taxes	in EUR million	83.9	53.4	57.1
Consolidated net income	in EUR million	49.0	24.9	96.8

Gross profit increased by EUR 55.4 million year-on-year to EUR 529.6 million, largely as a result of the positive net sales development. However, the gross margin declined by 0.6 percentage points to 32.1 percent. This was primarily due to higher production costs on the back of the massive rise in material and freight costs, which could not be passed on to the market in full. In addition, above-average growth was recorded in OEM business and in the growth markets, both of which generate a lower margin than the Group average.

Selling and administrative expenses increased by 13.3 percent or EUR 45.4 million year-on-year to EUR 387.6 million. Among other things, this was due to higher staff costs following the workforce expansion as well as regular salary increases. In addition to the company acquisitions conducted in the year under review, the number of employees increased due to the fact that the Group particularly strengthened its global sales and service structures. This will allow Wilo to participate in the expected future growth in the respective regions to an even greater extent. Furthermore, vacant positions in administrative and support functions around the world were gradually filled in 2021 after being left empty in the previous year due to the strict cost targets in connection with the uncertainty surrounding the coronavirus pandemic. The cost of outgoing shipments also increased significantly year-on-year as a result of the net sales growth and the massive price rises in the logistics sector. In addition, there were non-recurring effects from personnel measures and write-downs of buildings that are no longer in use.

As a customer-oriented premium provider, the Wilo Group relies on pioneering, innovative products and technologies. Research and development therefore play a central role at Wilo. In the year under review, the Wilo Group continued its activities in this area unabated and with intensity. Total spending on research and development, i.e. all research and development costs including capitalised development costs, amounted to EUR 71.0 million in the year under review (previous year: EUR 68.6 million). At 4.3 percent of net sales (previous year: 4.7 percent), this figure remained at a high level. Research costs recognised in profit or loss and non-capitalised development costs amounted to EUR 55.8 million (previous year: EUR 52.0 million). This equates to an increase of 7.3 percent.

Other operating income improved significantly from minus EUR 18.6 million to EUR 6.3 million. However, it should be noted that the prior-year figure was impacted to the tune of EUR 17.7 million by the restructuring measures initiated by the Wilo Group with the aim of further reducing its cost base. Net foreign-currency income from operating activities also improved by EUR 5.0 million, from minus EUR 3.7 million to plus EUR 1.3 million.

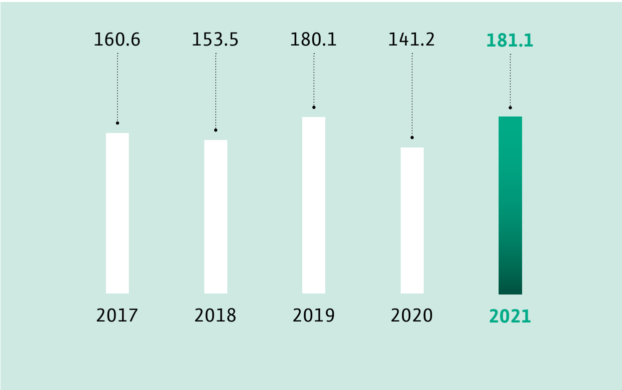
Earnings before interest, taxes, depreciation and amortisation (EBITDA) therefore increased significantly by EUR 39.9 million or 28.3 percent to EUR 181.1 million. The EBITDA margin (ratio of EBITDA to net sales) improved from 9.7 percent in the previous year to 11.0 percent.

The net finance costs of the Wilo Group deteriorated slightly by EUR 0.6 million, from minus EUR 8.0 million in the previous year to minus EUR 8.6 million in the year under review. While net interest costs improved by EUR 1.4 million to minus EUR 6.4 million, net income from the utilisation and measurement of derivative financial instruments declined by EUR 3.3 million. The improvement in net interest costs was primarily attributable to a reduction in the average interest rate for the credit portfolio following the scheduled repayment of a senior note in February 2021.

Income taxes amounted to EUR 34.9 million (previous year: EUR 28.5 million). Current tax expense increased only slightly, from EUR 28.1 million to EUR 28.9 million. Deferred tax expenses increased from EUR 5.6 million to EUR 6.0 million. This was due in particular to the reversal of deferred tax assets in connection with the restructuring provisions recognised in the previous year.

Consolidated net income almost doubled, increasing by EUR 24.1 million to EUR 49.0 million. The return on sales, which describes the Wilo Group's ratio of consolidated net income to net sales, climbed from 1.7 percent in the previous year to 3.0 percent in the year under review as a result.

EBITDA
in EUR million

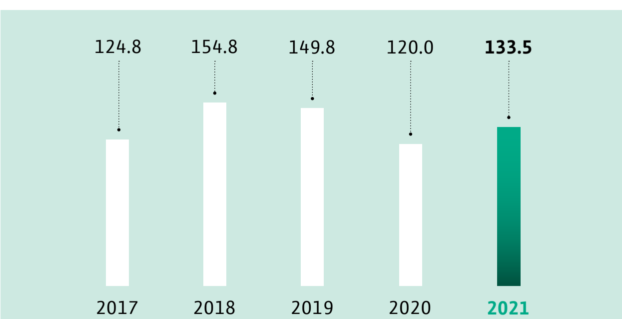


Cash flows

Capital expenditure

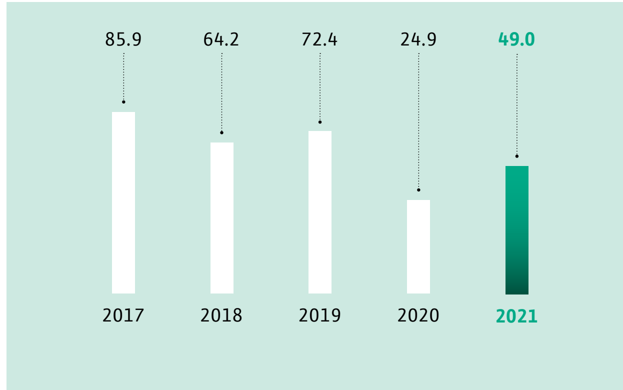
Capital expenditure on intangible assets and property, plant and equipment (not including company acquisitions and leases) increased by EUR 13.5 million year-on-year to EUR 133.5 million in 2021. In line with the strategic objective of long-term profitable growth, the focus in the year under review was on the further development of global capacities and structures for production and sales as well as the implementation of new technologies.

Capital expenditure on intangible assets and property, plant and equipment*
in EUR million



* not including company acquisitions and leases

Consolidated net income
in EUR million



In the year under review, capital expenditure again primarily related to the strategic location development project in Dortmund and the modernisation and adjustment of the corresponding production capacities. Investment in this area totalled over EUR 40 million in 2021. As part of the transformation of Wilo's headquarters – the Wilopark – a state-of-the-art production facility has been constructed that integrates key elements of the Industry 4.0 vision. This was completed in 2019, with production subsequently commencing as planned. In 2020, the Group moved into the Pioneer Cube, a modern office building that is home to around 500 head office employees. Construction continued as scheduled in the year under review. The old production and administrative buildings were demolished and preparatory construction work began on the further expansion of the Wilopark. Among other things, this is where the Networking Cube, a new centre for customers, training, events and seminars, is being built. The Group is also constructing the Innovation Cube, a state-of-the-art complex that will be home to the research and development department including a test laboratory from the end of 2023.

With a view to current and future changes in the product portfolio, growing market demand 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 automated THT assembly for electronics production, which will increase capacity. Through-hole technology (THT) is used to connect components to a PCB. A system for the automated manufacturing of parts for engine production was also purchased as part of the increase in vertical integration. These systems are characterised by superior manufacturing technology thanks to a high degree of automation and efficiency gains. As part of localisation activities, the conditions for the in-house production of pump housings in Noginsk, Russia, were put in place, thereby further increasing local value added.

Further substantial investments were made in new and existing sales and production locations around the world. New, state-of-the-art production and administrative buildings are being constructed in Cedarburg, USA, Changzhou, China, and Kesurdi, India. In this way, the Wilo Group is establishing the conditions for participating in the significant growth potential of these markets in a targeted manner. As well as meeting the requirements of modern digital factories, the new smart production sites have been designed with sustainability as a guiding principle in order to make an important contribution to climate protection in future. Construction work in Cedarburg, USA, is largely complete. The new buildings are gradually being moved into and production is ramped up. Construction activity in India and China is expected to be completed during 2022 and in the first quarter of 2023 respectively.

Development costs including borrowing costs were capitalised in the amount of EUR 16.1 million (previous year: EUR 17.3 million). In addition, a large portion of the investments again went on the expansion of IT infrastructure as part of the Wilo Group's digital transformation.

Further information on purchase commitments for planned capital expenditure on property, plant and equipment can be found in the notes to the financial statements under (13.2) "Contingent liabilities and other financial obligations".

Capital expenditure on intangible assets and property, plant and equipment (not including company acquisitions and leases) broke down as follows in the 2021 and 2020 financial years:

Capital expenditure on intangible assets and property, plant and equipment

EUR million	2021	2020	Change
Capital expenditure on intangible assets	**25.2**	**22.8**	**2.4**
Land and buildings	16.6	51.2	-34.6
Technical equipment and machinery	15.4	10.2	5.2
Operating and office equipment	17.5	20.3	-2.8
Advance payments and assets under construction	58.8	15.5	43.3
Capital expenditure on property, plant and equipment	**108.3**	**97.2**	**11.1**
Total	**133.5**	**120.0**	**13.5**

As part of its M&A activities, the Wilo Group acquired all the shares in the ABIONIK Group, Germany, and WRI-TECH BV, Netherlands. In addition, the operating business of Quantum-Flo in the USA and PumpsPro in the United Arab Emirates was acquired in two asset deals. Including company acquisitions, investments amounted to EUR 172.3 million in the past financial year.

Cash flow and liquidity

In the 2021 financial year, cash flow from operating activities declined by EUR 34.8 million but remained high at EUR 126.7 million. This was largely due to the increase in working capital of EUR 33.6 million after adjustment for exchange rate effects. Inventories increased by EUR 70.2 million on the back of the net sales growth as well as the creation of stock buffers in response to the ongoing supply chain restrictions and bottlenecks. Although trade payables also rose sharply by EUR 41.9 million, this development was less pronounced than the growth in inventories.

Cash flow from operating activities
in EUR million

Net cash used in investing activities increased by EUR 51.9 million to EUR 168.4 million in the year under review. At EUR 108.3 million, payments for capital expenditure on property, plant and equipment were EUR 11.1 million higher than in the previous year. Construction work on the Wilopark n Dortmund and new production and administrative buildings in China, India and the USA continued in 2021. Investments were also made in the expansion and modernisation of production capacity. Cash payments of EUR 38.8 million were made in connection with the various company acquisitions in the past financial year.

Net cash from financing activities amounted to EUR 32.9 million. A senior note in the amount of EUR 75.0 million was repaid in the 2021 financial year. On the other hand, utilisation of the syndicated loan facility increased by EUR 110.0 million. A cash inflow of EUR 15.1 million resulted from the sale of treasury shares, while the dividend payment to the shareholders of WILO SE resulted in a cash outflow of EUR 8.1 million (previous year: EUR 15.9 million). In addition, repayments of lease liabilities and the corresponding interest payments reduced the cash flow from financing activities by EUR 16.5 million (previous year: EUR 16.8 million).

The individual cash flows for the 2021 and 2020 financial years were as follows:

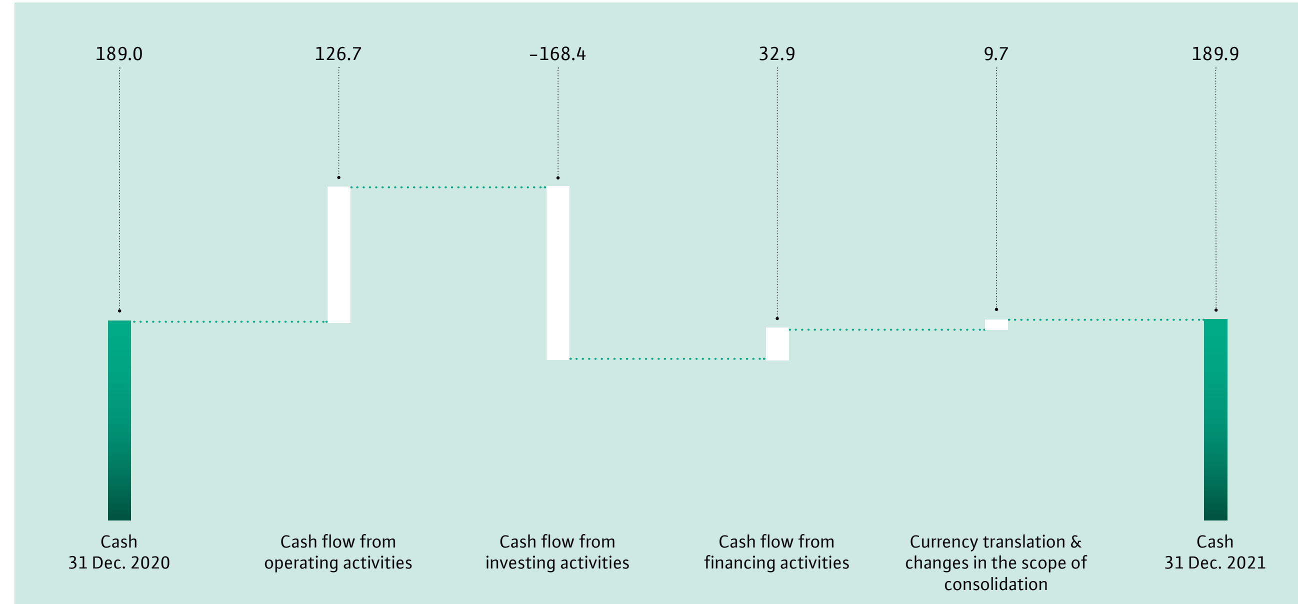
Cash flows

EUR million	**2021**	2020	Change
Cash flow from operating activities	126.7	161.5	–34.8
Cash flow from investing activities	–168.4	–116.4	–52.0
Cash flow from financing activities	32.9	–13.7	46.6
Change in cash	**–8.8**	**31.4**	**–40.2**
Cash at the end of the financial year	189.9	189.0	0.9
Free cash flow	–49.3	35.6	–84.9

Due to higher level of capital expenditure on intangible assets and property, plant and equipment and the purchase price payments for the various company acquisitions, the Wilo Group generated a negative free cash flow of minus EUR 49.3 million. This is calculated as the difference between the cash flows from operating and investing activities including interest income and expenses. Adjusted for the payments for company acquisitions, the free cash flow amounted to minus EUR 10.5 million.

Including the positive net effects of currency translation in the amount of EUR 9.5 million and changes resulting from the basis of consolidation in the amount of EUR 0.2 million, cash increased slightly by EUR 0.9 million to EUR 189.9 million as at 31 December 2021.

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 around EUR 430 million. This includes a syndicated loan with a credit facility of EUR 300.0 million and a term to 2024. Overall, EUR 175.6 million (previous year: EUR 36.3 million) of the cash credit facilities were utilised as at 31 December 2021, of which EUR 140.0 million (previous year: EUR 30.0 million) related to the syndicated loan. Guarantee and margin facilities were utilised in the amount of EUR 27.9 million (previous year: EUR 34.5 million).

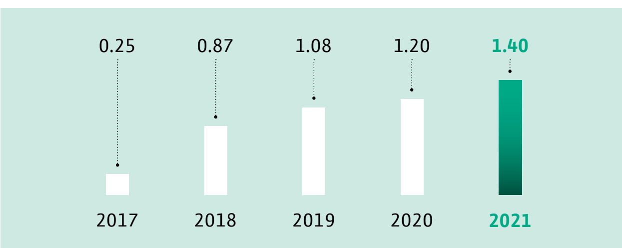
The Wilo Group's financial liabilities increased by EUR 67.8 million to EUR 414.0 million as at 31 December 2021.

Financial liabilities primarily comprise senior notes in the amount of EUR 37.0 million and USD 30.0 million. These senior notes, each of which has a ten-year term, were issued by WILO SE in US private placements in 2013 and 2017. Another senior note of EUR 90.0 million maturing in 2035 was issued as part of a US private placement. The Group also has a promissory note loan with a volume of EUR 50.0 million and a term of ten years that was taken out in 2017. This loan will be repaid in instalments from 2022. An additional promissory note loan with a volume of EUR 15.0 million and a term to 2030 was taken out in 2020 and will be repaid in instalments. Furthermore, 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 had a carrying amount of EUR 14.6 million as at 31 December 2021 (previous year: EUR 17.1 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 time 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 2021, cash amounted to EUR 189.9 million (previous year: EUR 189.0 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 (adjusted for restructuring costs), increased from 1.20 at the end of the previous year to 1.40 as at 31 December 2021. This was largely due to the higher level of financial liabilities.

Leverage



➔ *More detailed information on the financing structure can be found in note (9.11) of the notes to the consolidated financial statements on* ***S. 136*** *et seq.*

Financial position

The Wilo Group's total assets increased considerably by 14.3 percent or EUR 232.5 million year-on-year to EUR 1,855.9 million as at 31 December 2021. Non-current assets rose by 13.6 percent or EUR 121.6 million to EUR 1,014.1 million. This was attributable in particular to capital expenditure on intangible assets and property, plant and equipment in the amount of EUR 133.5 million. Capital expenditure on property, plant and equipment amounted to EUR 108.3 million and primarily related to location development in Dortmund, China, India and the USA, as well as new manufacturing technologies. The Wilo Group also invested EUR 25.2 million in intangible assets, of which EUR 15.2 million related to capitalised development costs plus capitalised borrowing costs of EUR 0.9 million. The acquisition of all shares in the ABIONIK Group and the operating business of QuantumFlo resulted in derivative goodwill of EUR 39.5 million in the year under review. In addition, right-of-use lease assets in the amount of EUR 16.8 million were recognised in the year under review.

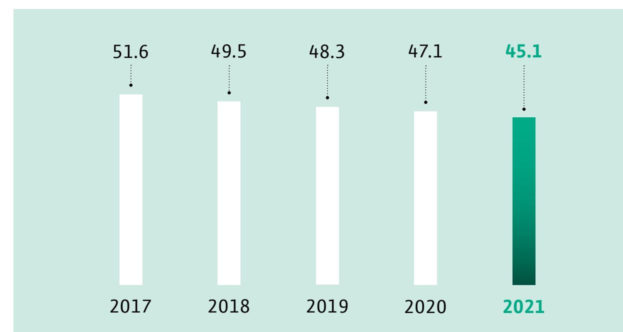
Amortisation of intangible assets and depreciation of property, plant and equipment amounted to EUR 88.6 million in the year under review. In addition, positive exchange rate effects resulted from the remeasurement of intangible assets and property, plant and equipment originally held in foreign currency in the amount of EUR 11.0 million. Intangible assets and property, plant and equipment therefore increased by EUR 120.6 million in total.

The carrying amount of current assets also rose sharply by 15.2 percent or EUR 110.9 million to EUR 841.8 million. This was mainly due to the EUR 86.1 million increase in inventories to EUR 322.0 million, which largely resulted from the strong net sales growth. Stock buffers were also established to counteract restrictions and bottlenecks resulting from the coronavirus pandemic. Stocks of finished goods were also increased ahead of the relocation of US production to the new factory in Cedarburg and in anticipation of production restrictions during the Winter Olympics in China. A further EUR 12.2 million related to the first-time consolidation of the companies acquired in the year under review.

Current trade receivables increased only slightly by 4.3 percent or EUR 11.6 million to EUR 284.1 million as a result of the net sales development. Working capital, which is defined as current and non-current trade receivables plus inventories less current and non-current trade payables, increased by 13.3 percent overall to EUR 381.2 million. Other current receivables rose by EUR 12.3 million, largely as a result of an increase in advance payments and tax assets. Cash amounted to EUR 189.9 million as at 31 December 2021 and was thus EUR 0.9 million higher than at the end of the previous year.

The Wilo Group's equity increased by 9.4 percent or EUR 71.9 million year-on-year to EUR 836.8 million as at 31 December 2021. This was mainly due to the consolidated net income in the amount of EUR 49.0 million. WILO SE also sold treasury shares in the amount of EUR 15.1 million in December 2021. Equity was also increased by the positive effects of the translation of the foreign-currency financial statements of subsidiaries into the Group currency in the amount of EUR 13.9 million. The dividend payment to the shareholders reduced equity by EUR 8.1 million. Due to the relatively stronger increase in liabilities the equity ratio declined slightly from 47.1 percent to 45.1 percent.

Equity ratio
in %



As at 31 December 2021, non-current liabilities in the amount of EUR 527.6 million primarily consisted of financial liabilities in the amount of EUR 388.2 million and provisions for pensions and similar obligations of EUR 90.8 million. Non-current financial liabilities increased by EUR 159.0 million in the year under review. This was mainly due to the increased utilisation of the syndicated loan, including to finance the company acquisitions conducted in the financial year and to refinance the senior note that was repaid in February 2021. Financial liabilities of around EUR 20 million were assumed in connection with the acquisition of the ABIONIK Group. Deferred tax liabilities increased slightly by EUR 1.6 million to EUR 13.9 million. This was largely due to capitalised development costs for which corresponding deferred tax liabilities were recognised.

The carrying amount of current liabilities rose by EUR 3.5 million year-on-year to EUR 491.5 million as at 31 December 2021. Current financial liabilities declined by EUR 91.3 million to EUR 25.8 million, largely as a result of the scheduled repayment of a senior note in the amount of EUR 75.0 million. By contrast, other current liabilities rose by EUR 32.7 million. This was mainly due to advance payments received and liabilities to employees, which increased by EUR 21.1 million and EUR 7.9 million respectively.

The net assets of the Wilo Group were as follows as at 31 December 2021 and 2020:

Financial position

EUR million	**2021**	**%**	2020	%
Non-current assets	1,014.1	54.6	892.5	55.0
Inventories	322.0	17.4	235.9	14.5
Current trade receivables	284.1	15.3	272.5	16.8
Cash	189.9	10.2	189.0	11.6
Other current assets	45.8	2.5	33.5	2.1
Total assets	**1,855.9**	**100.0**	**1,623.4**	**100.0**
Equity	836.8	45.1	764.9	47.1
Non-current liabilities	527.6	28.4	370.5	22.8
Current trade payables	233.5	12.6	178.8	11.0
Other current liabilities	258.0	13.9	309.2	19.1
Total equity and liabilities	**1,855.9**	**100.0**	**1,623.4**	**100.0**

Statement by the Executive Board on the economic situation

The 2021 financial year was again dominated by the coronavirus pandemic and the new virus variants and waves of infection. Global economic activity was also impacted by huge upheaval within the global value and supply chains and the rapid and dramatic growth in costs, including for energy and transportation services. In other words, 2021 was a year of extraordinary challenges that demanded considerable effort. Against this backdrop, Wilo successfully continued specific measures and implemented new ones in a targeted manner. This included the pandemic management that was established in the previous year and adapted to the respective local situation. In light of the risk of material bottlenecks, Wilo also secured its production by adjusting its inventories and pressing ahead with insourcing activities where economically viable. In taking all of these steps, the health of employees, customers, suppliers and other business partners enjoyed top priority at all times. At the same time, the economic consequences of the pandemic had to be minimized for Wilo. The huge efforts were a success. In a volatile environment characterised by growing uncertainty, the Wilo Group recorded strong growth and substantially improved its profitability. This success was attributable to key parameters of the Ambition 2025 corporate strategy, such as flexibility, the ability to take rapid action, a local focus, and a balanced approach to risk. The Wilo Group also benefited from its strong financial position and a high degree of financing strength. Thus, in addition to mastering these short-term efforts, Wilo laid the foundations for the future by continuing to invest and perform development activity at a high level.

Wilo successfully continued on its profitable growth path in 2021. Net sales increased by almost 14 percent to over EUR 1.65 billion. Organic sales growth, i.e. growth adjusted for the effects of exchange rates and first-time consolidation, amounted to around 13 percent – well in excess of the target of up to 4.5 percent had been set at the start of the year. This outstanding result is not least thanks to the Wilo Group's strong global market position, excellent customer retention and loyalty, and the foresight and flexibility demonstrated by its management. At the onset of the coronavirus crisis, when many industries scaled back their capacities and introduced short-time work, the Executive Board actively expanded capacities and secured supply chains in order to allow the Group to serve existing and expected future customer demand.

This forward-looking action was rewarded by customers. The construction industry, which determines the Wilo Group's economic development to a considerable extent, also proved to be highly crisis-resistant. Furthermore, the increasingly stringent climate protection requirements around the world, regulations on CO_2 reduction and corresponding government subsidies are stimulating demand for energy-efficient products. Wilo regards itself as a climate protection company and aspires to help create sustainable value added for the environment with its innovative and energy-efficient products, systems and solutions. Thanks to its broad range of high-efficiency pumps, the Wilo Group is in an ideal position to serve the respective markets quickly and comprehensively.

Over the course of the year under review, however, the Wilo Group's business performance was increasingly impacted by the pronounced shortage of components, raw materials and freight capacities that emerged for the first time in the year under review and the resulting sharp rise in prices. This development affected and continues to affect almost all components to a differing degree. Despite extensive measures to safeguard and stabilise supply chains, the extreme upheaval on the relevant markets and massive bottlenecks in the logistics sector resulted in disruption to production processes and hence to delays in delivery.

Nevertheless, operating earnings before interest, taxes, depreciation and amortisation (EBITDA) exceeded both the prior-year figure and the pre-crisis level to reach a new all-time high of over EUR 181 million. This was attributable in particular to the strong growth in net sales. The EBITDA margin improved to 11.0 percent. This meant that EBITDA and the EBITDA margin fell within the target corridor, increasing significantly in line with the Executive Board's expectations. However, the positive effects of the higher net sales volume were offset by the aforementioned massive rise in material and freight costs, the extent of which was unforeseeable. This prevented EBITDA and the EBITDA margin from performing even more strongly and exceeding expectations.

The Wilo Group's leverage increased to 1.40. The assumption of additional financial liabilities – including to take advantage of external opportunities like the acquisition of the ABIONIK Group and QuantumFlo – meant that leverage increased to a slightly higher degree than anticipated. However, it remains at a low level and significantly below the limits set out in the respective financing agreements.

Even with all the challenges posed by the economy and the competition, upheaval within the globally interconnected economy and the extraordinary impact of the pandemic, the Wilo Group continues to prioritise the health and safety of its employees in addition to its economic success. The Go-Ahead Task Force, a team of experienced managers established by the Executive Board, again coordinated all the measures relating to the coronavirus pandemic in 2021, as well as enhancing them quickly and flexibly as required. For example, voluntary self-testing was made possible for all employees at the German locations. A dedicated test centre was created in Dortmund and an efficient internal software solution was developed for supporting testing procedures. In addition to the vaccination campaigns at its sites in Germany, Wilo organised workplace vaccination programmes for employees in Russia, China and South Korea. Employees in India were offered vaccinations in partnership with local hospitals.

Despite increased uncertainty, the Wilo Group again made substantial investments in the future-oriented extension of production capacities, the expansion of the sales infrastructure and the acquisition of companies in various countries in 2021. Including company acquisitions, capital expenditure amounted to over EUR 170 million.

State-of-the-art production and administrative buildings that meet the highest industrial and environmental standards are being constructed in the USA, China and India. The long-term financing structure, the high equity ratio, the high level of unrestricted cash and credit facilities and a high degree of debt sustainability allow the Wilo Group to operate from a position of strength. This also provides solid foundations for purposefully pursuing external growth opportunities. The acquisition of the ABIONIK Group will make a logical contribution to Wilo's strategic alignment as a solutions provider for water and wastewater treatment. With the acquisition of QuantumFlo, the Wilo Group is strengthening its presence in the USA in line with its region-for-region approach, allowing it to serve specific local customer requirements with locally manufactured products in an even more targeted manner in future. This acquisition also serves to extend Wilo's customer base with a view to accelerating its market development in the USA. The acquisition of PumpsPro in the United Arab Emirates and WRI-TECH in the Netherlands will support the expansion of service business in the respective markets.

The functional organisational structure of the Wilo Group was developed further in 2021 to reflect the integration of the ABIONIK Group. The primary control level was expanded to include the Strategic Business Unit Water Treatment. All Wilo Group's activities in the area of water and exhaust air treatment are now bundled in this unit under common management, reflecting the increased complexity of this core business area and enabling additional optimisation potential to be leveraged. Business in North America has also been further strengthened with the construction of the new production facility and the acquisition of QuantumFlo. As this region has become more important for the Wilo Group as a whole, the USA and Canada are no longer managed as a part of Mature Markets, but as the separate North America sales region. The medium-term objective is to establish an additional global head office in the USA for the entire Americas region. With this targeted strengthening and expansion of its regional presence, the Wilo Group is acting in line with its established region-for-region approach and addressing the challenges of the growing decoupling of the economy.

In light of the unusual circumstances resulting from the ongoing coronavirus pandemic and the specific factors for the Wilo Group's business, the Executive Board has an exceptionally positive assessment of the company's business performance and economic situation in terms of the substantial growth generated, the significant increase in EBITDA and consolidated net income, its improved profitability, its strong market presence and innovative capacity, and its solid financing structure.

In summary, the Executive Board still considers the economic situation of the Wilo Group to be stable and sustainable. This assessment is based on the results in the consolidated financial statements and the separate financial statements of WILO SE for 2021 and takes into account business performance up until the preparation of the 2021 Group management report. At the time of this Group management report being prepared, business performance in early 2022 is in line with the Executive Board's expectations.

Wilo again demonstrated its resilience and crisis-resistance in the 2021 financial year. A clear strategic orientation, quick and prudent crisis management and the high level of commitment throughout the entire Wilo team were the key factors in its success. As a result, the Executive Board is entering Wilo's 150th year with confidence.

REPORT ON RISKS AND OPPORTUNITIES

- → **Integrated risk management system ensures transparency and security**
- → **Opportunities management enables systematic identification and realisation of operational and strategic opportunities**
- → **Change in overall risk situation compared with previous year due to procurement and IT risks**
- → **No going concern risks identified**

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 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 corporate foresight process is used to derive and analyse the risks and opportunities potentially arising from the relevant global megatrends and the accompanying future implications for the Wilo Group. 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 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 at regular intervals 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 comparability 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. The 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, Wilo analyses information on customers and suppliers in line with the respective data protection regulations and for internal purposes only. Furthermore, market and competition analyses are prepared and 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 already includes suitable 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. In line with the net risk analysis approach, suitable counter measures, hedges and the general conditions are already taken into account in calculating the respective probability of occurrence and potential loss resulting from risks.

The risks, their probabilities of occurrence and their possible financial impact on EBITDA 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 EBITDA	
Low	≤ 10 %
Medium	> 10 % ≤ 50 %
High	> 50 %

In the event of the assumed occurrence of a risk, the possible financial impact on EBITDA that can be derived is classified into one of the three categories low, medium or high based on the forecast percentage deterioration of EBITDA. An EBITDA 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 EBITDA of up to 10 percent, while a high financial impact would be an expected negative effect of more than 50 percent.

Overview of business risks

	Probability of occurrence	Potential negative impact on EBITDA
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
Procurement and production	Possible	Medium
Human resources	Possible	Low
Information technology	Possible	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.

The overarching risk classification in the Wilo Group's risk profile as summarised in the "Overview of business risks" table changed compared with the previous year insofar as risks in connection with "Production and procurement" and "Information technology" are now no longer classified as unlikely but as possible. Due to the massive upheaval on the procurement markets and in the logistics sector as well as the growth in cybercrime, there is a greater probability that the Wilo Group or one of its suppliers could be affected accordingly.

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, the sanitary industry and the water and wastewater industries 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 strong 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 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.

Although the pandemic was a dominant factor in the first months of 2021 once again, the world economy remained on an upward path. The impact of the pandemic was largely felt in the service sectors, whereas industrial production and world trade continued to see substantial growth. However, the economic upturn began to slow significantly from the middle of the year onwards. Supply bottlenecks combined with dramatic increases in the price of raw materials, precursors and transportation, as well as the erratic rise in energy costs, served to curb the upturn in industrial production around the world. Economic researchers expect the world economy to pick up during the course of 2022 as the pandemic is gradually overcome. However, the current forecasts are subject to extremely high risks. In addition to the pandemic-related uncertainty, sustained supply bottlenecks and high inflation are key factors that could have a significantly more adverse impact on the economy than is currently assumed. Furthermore, the potential turnaround in interest rate policy could lead to more pronounced upheaval on the currency and capital markets than expected. Geopolitical risks have also increased sharply of late. The further escalation of military conflicts, particularly in Ukraine, represents a significant risk for 2022 in light of the serious and unforeseeable nature of the potential consequences. 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 such extraordinary disruptions as possible.

The Wilo Group continues to face considerable challenges as a result of the coronavirus pandemic and its social and economic consequences. In 2021, the risks to employee health, supply chains, production and sales were again restricted thanks to targeted measures. The necessary measures were coordinated and implemented by the Go-Ahead Task Force, the interdisciplinary team of experienced managers specially established by the Executive Board in the previous year to manage the effects of the pandemic. To minimise the risk of infection, remote working was increasingly used for activities that lend themselves to it. In this way, the Wilo Group largely avoided production downtime as a result of officially mandated plant closures, including as a result of the extensive and carefully developed hygiene concepts for protecting its employees. Wilo was also classified as a systemically relevant producer in many countries. Critical supply chains were largely maintained in close cooperation with suppliers and, in some cases, at the expense of increased logistics costs. However, the considerable upheaval on the procurement and logistics market during the year meant it was not always possible to prevent delays, supply bottlenecks and the resulting inefficiencies.

Targeted measures have also been taken to proactively minimise the potential impact of 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. A global rise in protectionist tendencies and a general rejection of free trade and globalisation have been observable in recent years. In addition, stricter 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 stimulate 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 world population to increase from 7.9 billion at present to nearly 10 billion by 2050. At the same time, the proportion of the population living in urban conurbations is increasing rapidly all around the world. 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, entirely new major cities are being built in a short space of time in the emerging economies of Asia in particular. Although the ongoing coronavirus pandemic has the potential to slow this movement in the short term, the trend will not be permanently weakened. Cities will remain places of growth and innovation in future, making them the preferred destinations for international and national migration.

This dramatic urbanisation, particularly in the emerging economies, and sustained high population growth are accompanied by numerous ecological, economic and social challenges. Sustainable and intelligent urban development in these regions is therefore essential. 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. Smart cities and smart urban areas are being planned around the world. Connected digital infrastructures are being established to make these 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 the WHO (World Health Organisation) and UNICEF, around 785 million people currently have no access to a rudimentary supply of drinking water. More than two billion people live without basic sanitation. Water supply and wastewater disposal present a substantial problem, especially in the rapidly growing megacities in the emerging nations.

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 treatment. 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. With the integration of the ABIONIK Group, Wilo is strengthening its position as a solutions provider and expanding its portfolio in the area of water treatment in a targeted manner in order to allow it to participate in the attractive growth opportunities offered by this megatrend to a greater extent.

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 and Alpine mountain glaciers, rising sea levels and the clustering of droughts and storms even in temperate climate zones are just a few of the expected effects of climate change that are already relevant. 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 new 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 a heightened focus on developing and using more energy-efficient processes and technologies. At the same time, the long-term increase in world trade, the rapid growth of cities in the wake of urbanisation and the dynamic economic development of the emerging economies are triggering significant growth 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. This is why innovative urban infrastructures based on smart systems and digital solutions are now emerging all around the world. Demand for forward-looking, resource conserving products and system solutions will increase as a result of the tightening of minimum legal standards. Wilo products already offer customers improved 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, with modern information and communication technologies increasingly finding their way into all areas of life and commerce. New digital technologies are changing traditional production and business processes to an ever greater extent. Companies' complete value chains are being affected by the digital transformation (Internet of Things, Industry 4.0) and established business models are being called into question, while new and innovative business models and companies are emerging in the wake of this process. The digital transformation presents significant opportunities for the Wilo Group. The optimisation of existing business processes can result in significant efficiency and productivity improvements, while there is also the possibility of new and innovative business models for the pump industry. The Wilo Group leverages this potential with its smart products and system solutions, for example.

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 mitigates these risks by making increased use of product lines with unique selling propositions in particular. It also ensures a high level of competitive capability through its technological edge, especially in the area of energy efficiency and digitalisation, and through its outstanding product quality and close-knit global service 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 and office and commercial buildings with corresponding smart technology 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 in order to strengthen its market position and secure its profitable future growth. In 2021, research and development costs including capitalised development costs amounted to 4.3 percent of consolidated net sales. In order to allow the opportunities of new technologies to be identified 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. This serves 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 in this area. The occurrence of risks from research and development is possible, but the impact on the Wilo Group's EBITDA is considered to be low.

Procurement and production

The Wilo Group's business success depends not least on a reliable and efficient supply of materials, parts and components. Supply bottlenecks and capacity restrictions can lead to production downtime and delays in delivery to customers as well as cause additional costs. Similarly, the profitability of the Wilo Group can be negatively influenced by unexpectedly sharp price rises for components, raw materials or transportation services, whether due to market bottlenecks or other reasons. Wilo counters procurement risks by way of integrated procurement and supplier management. Supply bottlenecks are primarily prevented by ensuring the availability of second-source suppliers.

In light of the continuing coronavirus pandemic and the exacerbation of the crisis on the procurement and logistics markets in the course of the year under review, which was still ongoing at the turn of the year, the Wilo Group considers the risk of future supply chain disruption resulting in production restrictions or production downtime to be fundamentally possible.

In 2020, the Executive Board already decided to scrutinise the existing make-or-buy strategies and redefine the appropriate degree of vertical integration for Wilo in the individual regions and countries. In future, critical components will increasingly be produced in-house. The expansion of multiple sourcing will further reduce dependency on individual suppliers.

The Wilo Group also further professionalised the management of supply chain risks in the year under review. A comprehensive software-based solution was launched to improve risk transparency and allow the resulting countermeasures to be initiated as quickly as possible. Among other things, this tool enables the automated, real-time identification of relevant developments in the supply chain. The potential impact of loss events on the different elements of the supply chain is visualised with the support of modern AI technologies, making it easier to take targeted countermeasures quickly.

The company mitigates quality risk through the uniform Group-wide production standards of the Wilo Production System (WPS) and 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. Insurance is also taken out to offset the financial consequences of the aforementioned business risks. 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, as well as resulting in 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 the Group's results of operations 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. The growing threat of cybercrime along the entire value chain is particularly relevant for the Wilo Group's security of supply and demands the continuous protection of internal company data.

Wilo mitigates these IT risks with daily backups of critical business data and extensive preventive measures. 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 as well as at certified external providers. Coordinated processes and business recovery plans are also in place for the event of disasters. System downtime is further minimised by targeted utilisation of an in-house support team and outside service providers. With regard to cybercrime, the Wilo Group employs technical and organisational measures to identify security vulnerabilities and fend off attacks. Training and internal reporting on current threats are intended to increase employee awareness of the need to handle sensitive user data with care.

Given these measures, the occurrence of IT risks is fundamentally possible, but 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 seeks to realise external growth opportunities as part of its corporate strategy. The opportunities arising from acquisitions and strategic partnerships are varied and offer additional potential for growth and efficiency, as well as opening up 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.

Even with extremely careful examination, however, 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. An unexpectedly difficult and cost intensive integration process could also jeopardise the realisation of the planned goals and synergies. It may be necessary to recognise goodwill impairment if business develops more poorly than expected in the long term, while the weaker operational development of the acquired business and the countermeasures that may be necessary as a result could also have a direct impact on earnings.

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

Financial risks and opportunities

Exchange rates

The Wilo Group's global presence makes it important to manage changes in exchange rates. Currency risk for the company 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 considers the associated earnings impact to be low. These activities are predominantly transacted in local currency.

Currency risk from financing activities mainly results 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.

In summary, the occurrence of currency risks is considered likely, but the Wilo Group classes the associated impact on earnings as low. ➔ *Further information on exchange rate 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 151 et seq**. of the notes to the consolidated financial statements.*

Interest

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, but the impact on net finance costs is considered to be 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 153** 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. When it comes to minimising copper price risks, the Wilo Group ceased concluding commodity derivatives at the start of the 2021 financial year and instead enters into long-term purchase commitments. The purchase volume and price are fixed up to a maximum of twelve months in advance, thereby ensuring a high security of supply and counteracting price fluctuations.

The prices for a substantial proportion of the copper procurement volume for the 2022 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, Wilo actively refrains from hedging the prices for the procurement volume for aluminium and stainless steels and their alloys, as the available financial and other hedging instruments are not suitable for effectively minimising the risk of price changes for these specific commodities.

Commodity price risks are possible, but the Wilo Group classifies 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 153** 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 year under review. The possible effect on earnings of default is currently also considered low for 2022. The Wilo Group keep a close eye on ongoing developments and will take corresponding countermeasures as required.

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 around EUR 430 million with international banks of good to very good credit standing. EUR 175.6 million of the cash credit facilities and EUR 27.9 million of the guarantee and margin facilities were utilised as at 31 December 2021. Furthermore, there were promissory note loans of EUR 62.8 million and senior notes of EUR 153.5 million as at 31 December 2021 that were issued in US private placements, as well as a KfW development loan with a carrying amount of EUR 14.6 million as at 31 December 2021.

The Wilo Group's leverage, i.e. the ratio of the net financial position (financial liabilities and lease liabilities less cash) to consolidated EBITDA (adjusted for restructuring expenses), increased from 1.20 at the end of the previous year to 1.40 as at 31 December 2021.

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 2021, 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 were to fall short of certain minimum values in terms of these financial covenants, the lenders would be 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) on **page 144 et seq.** of the notes to the consolidated financial statements.*

Overall assessment

The Wilo Group's current risk situation has changed compared with the previous year insofar as procurement risks and risks in connection with IT security have increased. 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

→ **Upturn in global economic output in 2022 delayed by pandemic**

→ **Coronavirus pandemic, geopolitical crises and expansive monetary policy involve considerable risks**

→ **The Wilo Group will celebrate its 150th anniversary with confidence despite highly uncertain economic and geopolitical conditions**

→ **High single-digit net sales growth and a further improvement in profitability forecast for 2022**

General economic and industry-specific conditions

Further recovery in the world economy possible despite high risks

According to forecasts by leading economic institutes, all of which were prepared before the outbreak of the war in Ukraine, the world economy is set to continue to recover from the pandemic in 2022. However, the onset of the recovery will be later in the year, meaning that the full-year upturn will be less strong than originally assumed in autumn 2021. This will initially be due to new uncertainty concerning the rapid spread of the Omicron variant and the introduction of renewed pandemic-related restrictions in the affected countries, while high global inflation and sustained supply bottlenecks represent additional clouds on the horizon. However, the economists at the Kiel Institute for the World Economy (IfW) expect these effects to lessen as the vaccine roll-out among the population continues, with an economic recovery emerging in the course of 2022. As such, the IfW is currently forecasting growth in the world economy of 4.5 percent in 2022. In its January update, the IMF forecasts global economic growth of 4.4 percent.

It is not currently possible to predict the economic impact of the Russian attack on Ukraine, the sanctions imposed as a result or the potential for further escalation, either in terms of the world economy or individual regions.

Fiscal policy is likely to continue to support the economy for the time being. Although expenditure on pandemic support is likely to decrease significantly as economic activity continues to return to normal, the IfW expects the focus in the industrialised nations to shift to public investment and programmes aimed at combating the structural challenges of climate change, among other things. By contrast, central banks around the world are likely to gradually scale back their expansive monetary policy. For example, 2022 is expected to see the first interest rate hikes in the USA. This will increase the pressure on emerging economies to support their currencies with higher interest rates. Only the central banks in the euro area and Japan intend to continue with their highly expansionary monetary policy in 2022. The IMF is currently forecasting growth of 3.9 percent in the industrialised nations in 2022. The developing and emerging nations are expected to see economic growth of 4.8 percent.

However, the risks to the world economy are currently particularly high. In addition to the pandemic-related uncertainty surrounding the Omicron variant and the level of vaccination among the population, continued supply bottlenecks and high inflation are key factors that could have a more adverse impact on the economy than is currently assumed on the supply and demand side alike. Against this backdrop and in light of the turnaround in interest rate policy, 2022 could also see more pronounced upheaval on the currency and capital markets than expected. Geopolitical risks have also increased sharply of late. The risks and the potential impact of military conflicts, e.g. in Ukraine or potentially Taiwan, represent major risks for 2022 whose consequences are difficult to predict. The Executive Board of the Wilo Group is keeping a very close eye on all of the relevant developments so that it can take suitable measures to limit the negative impact on the company as necessary.

The following section presents the expected macroeconomic and industry-specific developments in 2022 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 as well as the water and wastewater industries. All the forecasts were prepared before the outbreak of the war in Ukraine and hence do not yet take into account the potential impact of sanctions or a further escalation in the conflict. As such, they are subject to a high degree of uncertainty.

Established markets – European construction industry set to recover strongly in 2022, more moderate upturn forecast in the USA following turnaround in interest rate policy

EUROPE. Early 2022 saw the imposition of new contact restrictions and other containment measures in response to the rapid spread of the Omicron variant in Europe. The supply bottlenecks that have been in place since 2021 also continued. Taken together, these factors are likely to initially curb the economic recovery in 2022. However, the economists from Deutsche Bundesbank and the Kiel Institute for the World Economy (IfW) are forecasting a recovery in economic activity in the euro area as the year progresses. Supply bottlenecks are expected to gradually be resolved, with global demand rising and the euro area emerging from the pandemic-related restrictions. Although inflation will remain high in 2022, private consumer spending is set to rise thanks to an upturn on the employment market and catch-up effects that will lead to additional spending. Investment activity is likely to increase, while capacity utilisation is expected to be high. Investment projects that were temporarily postponed due to the pandemic and supply bottlenecks are also expected to be realised. This trend is set to consolidate in 2022 before intensifying in the following year.

In January, the IMF updated its growth forecast for the euro area to 3.9 percent. The IfW and Deutsche Bundesbank are also anticipating a robust upturn in all countries in the euro area. The IfW is forecasting above-average growth in Spain, Portugal and Ireland, whereas the recovery in Belgium and the Netherlands is expected to be moderate. Outside the euro area, most of the EU countries in Scandinavia and Eastern Europe are expected to see strong growth. The economic recovery in Switzerland and the United Kingdom will continue at a slower pace than previously.

Deutsche Bundesbank expects the German economy to resume its strong recovery following a temporary interruption, with this momentum continuing until 2024. This is based on the assumption that supply bottlenecks will remain in place to some extent until the end of 2022 and the underlying inflation rate will remain high, but that financing conditions will be largely favourable. The Bundesbank experts are forecasting a substantial economic upturn from the second quarter of 2022 onwards. This development will be driven by private consumer spending, exports and corporate investment. The IfW expects Germany to see GDP growth of 4.0 percent in 2022, while the IMF forecast is 3.8 percent.

The Euroconstruct industry network expects the European construction industry to continue on its strong growth path for the time being, followed by a solid and steady upturn until 2024. Rising costs for construction materials and the growing shortage of skilled workers are likely to have an adverse effect. Construction output in Europe is expected to increase by 3.6 percent in real terms in 2022 (Western Europe +3.6 percent, Eastern Europe +4.1 percent). Euroconstruct expects the largest market segment, residential construction, to see steady but moderate growth of 1.6 percent p.a. in the period from 2022 to 2024. Construction of non-residential buildings is forecast to rise by 2.5 percent p.a., with civil engineering seeing annual growth of almost 3 percent. The general growth drivers for the construction industry are the international economic recovery, investments in infrastructure and substantial financial assistance for building renovation and modernisation as countries step up their climate policy. This is likely to provide additional impetus for better heat insulation in buildings and investments in the modernisation of heating and air-conditioning systems.

For Germany, the IfW expects total construction investment to increase by 2.9 percent in real terms in 2022 as the material bottlenecks are resolved (commercial construction +1.2 percent, residential construction +3.6 percent, public-sector construction +2.9 percent). This forecast is also supported by the healthy order situation in the German construction industry at present. On a price-adjusted basis, incoming orders in the main construction sector increased by 1.3 percent in the first eleven months of 2021. In the same period, the number of permits for residential construction was 2.8 percent higher than one year previously. This includes permits for new-build apartments as well as construction work in existing buildings. According to the industry experts from DIW, the growth in the total volume of new construction and work on existing buildings, such as expansion, conversion, maintenance and modernisation, is expected to accelerate in 2022 (12.7 percent in nominal terms, 2.7 percent in real terms), with residential and non-residential construction seeing similar growth rates (+12.7 percent to EUR 320.6 billion and +12.6 percent to EUR 134.8 billion respectively).

Stricter statutory climate protection provisions and subsidy programmes are aimed at supporting investments in efficient, environmentally friendly heating systems. The framework for this is provided by the European Green Deal, which embodies the EU's objective of becoming the first climate-neutral continent by 2050. Germany adopted a new Federal Climate Protection Act in 2021 that sets out a reduction in greenhouse gas emissions of 65 percent by 2030. This will require the CO_2 emissions of buildings alone to be reduced by 43 percent, from the current level of 118 million tonnes to 67 million tonnes. Modern heating systems are the key to achieving this: According to the industry association BDH, heating buildings and water accounts for around one-third of total energy consumption in Germany. Speeding up the modernisation of approximately twelve million outdated heating systems would achieve around 70 percent of the required CO_2 savings between now and 2030. This is likely to further stimulate growth in the heating industry.

USA. US fiscal policy is expected to remain expansive in 2022. In November, the government adopted a ten-year programme with a volume of USD 1.2 trillion to support the economy and cushion the impact of the coronavirus pandemic. Further programmes are planned. By contrast, the US Federal Reserve has indicated that 2022 will see a more rapid withdrawal from its bond purchase programme and the first interest rate hikes. All in all, the USA is expected to enjoy robust economic growth despite high inflation and the damping effects of the pandemic and global supply bottlenecks. The IMF is forecasting GDP growth of 4.0 percent in 2022.

At the turn of 2021/2022, the US construction industry reported strong momentum and a robust order situation. In residential construction, the volume of building permits and construction starts exceeded the number of completions, meaning that orders on hand are likely to have seen further growth. However, the turnaround in interest rate policy, material bottlenecks and high inflation could lead to a slowdown in the extremely strong growth in private construction activity of late. The IfW expects investment in US residential construction to largely stagnate in real terms in 2022 (-0.2 percent) before picking up significantly in 2023. By contrast, growth of 2.8 percent is forecast for commercial growth in 2022 following two years of decline. Public-sector construction activity is also expected to be lively thanks to rising government spending and the economic stimulus packages.

Growth markets: Economic and structural impetus for construction and water management expected in 2022

CHINA. A more expansive monetary and fiscal policy is being adopted in China in order to support the domestic economy. To this end, the central bank lowered the reserve requirement rate slightly in December 2021 and January 2022. Small and medium-sized enterprises are also being supported with relaxed lending conditions, tax cuts and reduced fees. The energy crisis in China also appears to have been overcome and no further production downtimes are anticipated. However, the coronavirus pandemic and the local real estate crisis represent downside factors. The IMF expects the pace of growth to flatten out at 5.6 percent in 2022. This means growth in China will be slightly lower than before the pandemic. However, China will continue to provide important impetus for the world economy if only due to its sheer size.

The current data suggests that the Chinese construction industry will see mixed development in 2022. The growth in projects under construction of 5.2 percent at the end of 2021 suggests that construction activity will remain lively in the first part of 2022. This development is being driven by residential construction with growth of 5.3 percent. By contrast, office buildings saw modest growth of just 1.7 percent, while commercial buildings contracted by 2.7 percent. Construction starts for new buildings have also fallen by 11.4 percent (residential construction: 10.9 percent). As well as causing a short-term crisis, the massive financial problems affecting Evergrande and other real estate giants could lead to a structural slowdown in the construction industry if a disorderly bankruptcy triggers a wave of insolvency in the construction and real estate sector. China is also feeling the impact of the extremely high level of debt and the restriction on property loans that was imposed in 2021. On the other hand, ongoing urbanisation is boosting residential construction as well as investments in public buildings such as schools, administrative buildings, hospitals and museums. This trend has slowed compared with recent years but remains intact. The government is also planning substantial measures to protect the climate and expand and modernise the water and wastewater industries.

SOUTH KOREA. According to the most recent forecast by the Bank of Korea, the economy is expected to continue its solid upturn in 2022 on the back of the further recovery in private consumer spending, higher exports and an upturn in investment activity. In particular, higher levels of investment are forecast for semiconductors, displays and e-mobility (cars, batteries). Based on these assumptions, the Bank of Korea is anticipating economic growth of 3.0 percent in 2022.

This forecast includes a gradual recovery in the construction industry following several weak years, with building construction and civil engineering both set to grow in 2022. The government is providing significant impetus in the form of extensive infrastructure projects. In the area of commercial construction, industrial and logistics properties are expected to see significant growth. Positive leading indicators suggest that residential construction will see moderate growth. On a full-year basis, construction investment is expected to increase by 2.6 percent in real terms in 2022.

INDIA. The growth potential of the Indian economy is being limited by the structural weakness of the financial sector and a high level of debt. However, the omens for 2022 are positive, and the Indian economy is likely to return to dynamic expansion as it gradually emerges from the pandemic. The IMF continues to forecast strong GDP growth of 9.0 percent. In addition to private households, government stimulus initiatives are set to increasingly boost the economy in 2022.

The construction industry is expected to see an upturn in 2022 as demand for housing and office space rises again. The planned investments in the industrial sector should provide additional impetus. Demand for retail space is also expected to increase in 2022. 100 million new apartments will be built in cities by 2050. According to the Indian industry association BAI, this will require the annual investment volume to double to USD 250 billion. Even if this target is only achieved in part, there is huge market potential for many years to come. According to the investment authority, the Indian construction industry will expand by around 7 percent p.a. to USD 800 billion between now and 2025. The Fitch rating agency is forecasting annual growth of 6.5 percent between now and 2030. Water management also offers considerable potential for the use of pumps. Between now and 2025, around 150 households will be connected to the drinking water supply. The annual budget for this programme was recently tripled. India is also planning to construct 500 sewage treatment plants by 2024.

SOUTHEAST ASIA. Because the most important countries in the region from an economic perspective (ASEAN-5 and Singapore) are closely integrated with the value chains worldwide and, in particular, in China, their economic development is likely to benefit from the international upturn in 2022 as long as the impact of the pandemic recedes, political conflicts in the region (e.g. Taiwan) can be prevented and there is no further disruption to global supply chains. The expected turnaround in interest rate policy in the USA in 2022 means there is a possibility that central banks in this region will also raise their interest rates. The IMF currently expects the economic recovery in the region to pick up pace in 2022. The economic output of the ASEAN-5 nations is set to increase by 5.6 percent, while the IMF is forecasting robust growth of 3.2 percent for Singapore.

The construction industry is expected to enjoy new impetus in 2022 on the back of the improved economic outlook in Southeast Asia. A young, growing population, urbanisation and high structural investments in infrastructure are key growth factors in the industry. This will benefit building construction, and hence air-conditioning and water management. For the Philippines, experts are forecasting average annual growth in the construction industry of 5.5 percent between now and 2030 (residential construction: +4.8 percent). Government investment in infrastructure is likely to further drive construction activity in Malaysia. Building construction in Indonesia is suffering from excess capacity on the housing and office market, but the market for air-conditioning systems is structurally attractive. The Indonesian government is supporting the construction industry with ambitious infrastructure plans. In Vietnam, the outlook for residential and office construction is positive, while industrial construction is benefiting from foreign investment.

RUSSIA. Having recently benefited from catch-up effects, the Bank of Russia expects the Russian economy to follow a stable and moderate growth path in 2022 and the subsequent years. Exports are likely to benefit from higher prices for raw materials in 2022. By contrast, the central bank is forecasting muted growth in domestic demand against the backdrop of high interest rates and exchange rates, as well as capacity bottlenecks due to a shortage of workers. The Bank of Russia is not ruling out the possibility of further interest rate hikes if this is required to stabilise inflation and the rouble. In its base scenario, it is forecasting economic growth of between 2.0 and 3.0 percent for 2022. The IMF forecasts growth of 2.8 percent. However, these forecasts were issued subject to the proviso of no serious escalation in Russia's geopolitical conflicts with the West and new, dramatic sanctions, particularly in connection with Ukraine and the Nord Stream 2 gas pipeline. In light of recent developments and the Russian invasion of Ukraine as well as the expected sanctions, it is likely that all the forecasts will have to be lowered significantly.

Construction is a key industry for Russia and housing construction and investments in infrastructure, including in water management, are supported with corresponding political stimulus measures. The national residential construction project that has been extended to 2030 involves the construction of new housing offering total space of 1 billion m^2, and the annual construction volume is increasing steadily (2022: 82 million m^2, 2023: 85 million m^2, 2024: 90 million m^2). One key driver is the construction of detached houses, with an annual volume of 60 million m^2 to 2030. Demand for housing is high, while supply is limited or of insufficient quality. More than 40 percent of apartment buildings are over 50 years old and will require renovation over the coming years. Among other things, the demolition or renovation of dilapidated buildings is supported by the law on "integrated territory development". The boom in residential construction is also expected to deliver increased impetus for air-conditioning and ventilation technology and the installation of heating systems. According to market researchers, sales of air-conditioning/ventilation systems in 2022 are set to return to the pre-crisis level of 1.9 million units recorded in 2019. Apartment buildings account for more than 40 percent of all air-conditioning systems sold.

TURKEY. Although exports are broadly benefiting from the recent depreciation of the Turkish lira, rising inflation is eating into domestic purchasing power dramatically and at a high speed. Domestic demand is also being impacted by the pandemic once again. Despite the latest interest rate cuts, the investment environment is likely to deteriorate further as it is currently unclear as to how and when the crisis will come to an end. The currency depreciation means the government's options for substantial economic aid packages are extremely limited. Higher interest rates and currency stabilisation would be required in order for international confidence to improve and inflation to be curbed. The World Bank expects the Turkish economy to record moderate growth of 2.0 percent in 2022.

Against this backdrop, the outlook for the Turkish construction industry for 2022 is mixed and characterised by uncertainty. On the one hand, building approvals saw further substantial growth across all building construction segments in the year to September 2021 and are likely to remain positive on a full-year basis. Approvals for detached houses and office buildings doubled in the first three quarters of the year. Despite the healthy order situation, it remains to be seen whether the planned projects will be realised in light of the sharp rise in construction costs and the crisis affecting the Turkish lira. The medium-term outlook for heating and air-conditioning systems is positive. Experts estimate that around 10 million combined single-storey heating and hot water systems are in use in households, around half of which are now outdated. These are expected to be swapped out for heating and hot water systems with modern condensing technology in the near future.

MIDDLE EAST & AFRICA. The individual countries in this region are extremely varied both politically and economically and must therefore be considered separately. Assuming that commodity prices remain high and there is no geopolitical tension in the region, the economic upturn in the Middle East and Africa is expected to continue in 2022. The World Bank is forecasting growth of 4.4 percent, with the oil-exporting nations of Saudi Arabia, the United Arab Emirates and Kuwait expected to enjoy a faster expansion. Egypt is set to see dynamic economic growth of 5.5 percent in 2022 according to the World Bank, whereas growth in Algeria and Morocco is likely to be more moderate. The upturn in the Sub-Saharan region is set to continue, although economic momentum will remain muted in both Nigeria and South Africa, at 2.5 percent and 2.1 percent respectively.

In terms of the region as a whole, the prospects for the construction industry remain uncertain and subject to risk. However, individual markets are structurally highly attractive when it comes to selected projects. Investments in infrastructure are an important growth driver, with opportunities being offered by the creation and expansion of functional water management. Strong population growth and urbanisation are likely to stimulate residential construction, which is also important to the wider economy. In most of the major countries in the region, the prospects for a further recovery in the construction industry in 2022 are at least cautiously positive. In some countries, such as Morocco and South Africa, the poor investment climate means that residential construction is recovering only slowly in spite of the high level of demand. The current political instability in Tunisia is preventing the recovery of the local construction industry. By contrast, the market in Egypt remains highly dynamic thanks to the continuation of extensive urban construction and infrastructure expansion projects.

LATIN AMERICA. The World Bank expects the economic upturn in Latin America to continue in 2022, with growth forecast at 2.6 percent. However, development is likely to be curbed by weakening momentum from commodity prices and international demand as well as more restrictive monetary policy. Brazil is set to see weak growth of just 1.4 percent in 2022 as a result of weak private consumption and limited tailwind for exports to China. In Mexico, growth is expected to slow to 3.0 percent as impetus from the USA wanes and interest rate hikes take effect. Growth in Argentina is also set to cool significantly to 2.6 percent. The core problem is inflation, which recently exceeded 50 percent and is having a corresponding adverse impact on investment and private consumer spending. The World Bank also expects Chile and Peru to record moderate growth of 2.2 percent and 3.2 percent respectively in 2022.

Outlook for the Wilo Group

Future orientation

Before the outbreak of the war in Ukraine, leading economic researchers had forecast a continued economic upturn in both the industrialised nations and the emerging economies in 2022 – despite the impact of the spread of the Omicron variant at the start of the year. However, the momentum of this upturn is likely to be lower than had been anticipated in autumn 2021. As far as the construction industry and the Wilo Group's market segments are concerned, however, the prospects for 2022 are broadly positive. At the same time, there are considerable challenges, and the specific risk factors have increased sharply of late. The economy is continuing to feel the impact of the pandemic, supply and logistics bottlenecks and the sharp rise in energy costs and consumer prices. Additionally, the turnaround in interest rate policy could lead to turbulence on the currency and capital markets and problems in the real economy in 2022. Geopolitical risks have also increased hugely following the Russian invasion of Ukraine in particular. The Executive Board of the Wilo Group is following these overarching external developments extremely closely and will take early action to limit the potential impact on the company as necessary.

The world economy enjoyed a tangible recovery last year. However, the setbacks caused by the development of the pandemic and, in particular, the massive and sustained disruption to global value chains served to slow the positive underlying development, illustrating just how vulnerable the globalised and connected world is in its current form. Furthermore, climate change and new geopolitical tensions are posing increasingly visible burdens. There can be no doubt that the world is currently in a state of upheaval. Due to the political desire for self-reliance and growing protectionist tendencies, companies with international operations are increasingly having to come to terms with the decoupling of previously tight-knit and efficient international economic relations based on networks and cooperation. In recent times, supply chain disruption, material bottlenecks and the substantial rise in energy and transportation costs have intensified the trend towards more regionalised production.

The Wilo Group recognised these developments at an early stage and positioned itself accordingly through the targeted strengthening and expansion of its regional presence and the insourcing of key components, among other things. This serves to improve the security of the production processes for the respective markets. With its region-for-region approach, Wilo seeks to achieve a balance between local and decentralised activities that is optimal for the company with the aim of limiting the additional costs and inefficiencies that are unavoidable as a result of decoupling. It seeks to manufacture locally for domestic and regional markets with a focus on the customer and the greatest possible efficiency. The Wilo Group is currently investing in new production facilities in the USA, China and India.

Irrespective of this, the key megatrends for the Wilo Group remain intact and continue to have a significant influence on the company's future business and current development, including in 2022. In particular, the digital transformation and measures to combat climate change are making companies and consumers more willing to invest, thereby systematically strengthening demand for highly efficient pumps and pump systems. This development is being supported by stricter environmental protection regulations and a wide range of government subsidy programmes.

All in all, the risk and opportunity profile for the world economy and the Wilo Group's specific markets in 2022 is extremely challenging but still positive from a current perspective.

Identifying trends and changes on the market at an early stage and analysing them quickly remains a fundamental management principle for Wilo. This allows alternative scenarios to be devised and implemented very quickly and countermeasures to be initiated at short notice. The particularly pronounced challenges for 2022 – especially the coronavirus pandemic, potential bottlenecks affecting precursors, and the massive rise in material, energy and transportation costs – require effective crisis management. The same is true in particular of considerable turbulence on the international financial and currency markets and the further escalation of geopolitical crises with negative consequences for the real economy. If necessary and possible, the Wilo Group will continue to initiate appropriate and prompt countermeasures from this position of strength in future.

These central factors for success in high-risk, challenging markets, namely a high degree of business flexibility and pronounced adaptability, are firmly enshrined in the Wilo Group's corporate culture, strategy and controlling. Their success is demonstrated by the profitable growth that the Wilo Group has achieved for many years even in a shifting environment and in the face of intense competition. The Ambition 2025 corporate strategy will also secure the success factors of flexibility and adaptability for the future. In order to leverage additional optimisation potential, the functional organisational structure was developed further in 2021 and the primary control level was expanded to include the Strategic Business Unit Water Treatment. Wilo has expanded its portfolio in the area of water treatment for the long term with the acquisition of the ABIONIK Group. In future, all the corresponding activities will be bundled in this strategic unit under common management. Wilo has also strengthened its business in North America and established it as a separate sales region.

The Wilo Group aspires to take targeted steps and measures to further its evolution into a solutions provider with a clear customer focus, irrespective of whatever short-term external economic and political influences 2022 may bring. To this end, Wilo is also making targeted, large-scale investments in the development of intelligent products, systems, services and solutions. The Group is also pressing ahead with its digital transformation as planned. Wilo is systematically expanding its product portfolio with a clear focus on core competencies in heating, air-conditioning and cooling, water supply and wastewater disposal. Thanks to this package of strategically defined core measures, the Wilo Group is fit for the future and enjoys a robust position. In addition to accelerated organic growth, acquisitions are an important component of the company's future development provided they make good strategic and economic sense.

The clear and sustainable implementation of the future-oriented business policy and a well-balanced internal risk position are extremely important for the Wilo Group. This is an established strength and will remain so in future. The Group's risk balancing measures include its successful customer orientation and its pronounced innovative ability with the continuous development of new technologies and products. In addition, the Wilo Group's broad international market presence and diversification in terms of regions and market and product segments typically enable it to offset individual risks and temporary market disruption to a certain extent.

The megatrends relevant to the Wilo Group are the pillars of its Ambition 2025 corporate strategy, regardless of short-term crises and fluctuations in demand. Climate change and digital transformation will be crucial factors in 2022 and beyond. With its modern high-efficiency pumps, the Wilo Group is already making an important contribution to slowing climate change and achieving the more stringent climate protection targets. The digital connectivity of pumps and pump systems offers additional potential for extensive energy savings. The Wilo Group is well positioned to benefit from this trend with its portfolio of smart, energy-efficient products, systems and solutions.

In addition, Wilo is systematically pursuing 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. The central element of this process is the IT-based, smart networking of production methods, logistics and products. This extensive internal digital transformation is strengthening the Wilo Group's competitiveness for the long term while also generating direct benefits for its customers, particularly in terms of quality standards, punctual deliveries and optimised service. In addition, the Wilo Group is focusing its innovative capacity on providing its customers with intelligent, connectable solutions.

Outlook for the regions

ESTABLISHED MARKETS. The rapid spread of the Omicron variant put Europe under renewed pressure at the start of 2022. However, leading economic researchers expect economic activity in the euro area to recover as the year progresses. Although inflation is likely to remain high, there are currently signs of a recovery in private consumer spending and investment activity. The strong upturn in the construction industry is expected to continue in 2022. In spite of the lively construction industry, however, Wilo's specific European markets vary considerably from region to region and are characterised by a high degree of maturity and intense competition.

On the whole, there is huge 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 in order to meet more stringent environmental protection requirements. Challenging statutory targets have been introduced recently in the form of the European Green Deal, which is aimed at making the EU climate-neutral by 2050, and the new German Federal Climate Protection Act, which sets out a reduction in greenhouse gas emissions of 65 percent by 2030. With regard to heating and air-conditioning systems, this will require significantly higher investment and a considerably higher pace of conversion. In Germany, the modernisation of outdated heating systems alone would be enough to achieve 70 percent of the required CO_2 savings by 2030. The recent intensification of European climate protection regulations in conjunction with corresponding subsidy programmes is set to give a substantial boost to investments in efficient, environmentally friendly heating systems in all European countries in 2022 already, not least since the financing environment is currently still favourable. This is also likely to benefit the modernisation of water and wastewater plants. Building renovation, modernisation and digitalisation are also becoming structurally more important throughout Europe. Smart, connected and digitally controllable devices and systems are playing a central role in this process. The Wilo Group therefore expects innovation-driven demand for high-quality energy-efficient pumps to continue to grow throughout Europe over the coming years.

Europe is a high-tech, high-volume market for pumps, pump systems and associated services that 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 available opportunities 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.

Despite rising interest rates, the USA is set to see robust growth in 2022 on the back of private consumer spending and lively investment. Fiscal policy remains expansive with a view to cushioning the impact of the pandemic and supporting the economy. The US government is also planning extensive concepts and measures in the area of climate protection and the decarbonisation of the economy. This is also likely to boost demand for efficient products and systems for heating, air-conditioning, water and wastewater. Wilo has expanded its presence in North America in recent years, including through targeted acquisitions, and the region is continuously growing in importance for the Wilo Group as a whole. To reflect this, the sales organisations in the USA and Canada are no longer managed as part of Mature Markets, but as the separate North America sales region. In line with this development, a third global head office will be established in the USA in the medium term. Thanks to Wilo's region-for-region approach, business in North America will also benefit in the medium term from the investment Wilo is currently making in new production facilities in the USA with the aim of accelerating its growth and becoming even more customer-oriented.

With the high level of capital expenditure in recent years and the successful launch of various innovative products and systems, Wilo has laid the foundations for continuing to serve the high-end demand in the established markets in future and reinforcing its market position. In light of the numerous risks to the economy, however, the Wilo Group's forecasts for 2022 are deliberately conservative. The company's diversified positioning in terms of regional and product- and service-specific markets allows it to continually balance different trends, including within individual regions.

GROWTH MARKETS. The sheer size of the economy means that China offers significant growth potential for companies, especially since the domestic economy is being systematically strengthened for the long term. There are various economic challenges in the immediate future, however, including the complete isolation of economic regions due to the zero-Covid policy, the high level of debt and the crisis affecting the real estate sector. Despite monetary and fiscal policy easing, China is expected to see a substantial slowdown in economic growth in 2022. However, the medium-term and long-term prospects for the construction industry are positive. Urbanisation is continuing to drive forward residential construction. In response to widespread environmental contamination, the government is also planning substantial investments in climate protection and the expansion and modernisation of the water and wastewater industries. These developments are extremely relevant for Wilo.

The Wilo Group also expects most of the other Asian markets to see positive and, in some cases, extremely dynamic performance in 2022. Following recent weakness, for example, the construction industry in South Korea is now seeing signs of a substantial upturn. The environment for the construction industry in India, the Philippines and Vietnam is also extremely positive. Urbanisation and a high level of government investment are stimulating the building construction, water and wastewater management markets, all of which are relevant for the Wilo Group. This is expected to deliver positive impetus for net sales in these countries in 2022.

Prior to the outbreak of the war in Ukraine, economic researchers had forecast moderate growth for the Russian economy in 2022. However, they did not rule out further interest rate hikes and they considered it likely that the shortage of workers would only be resolved gradually as the pandemic recedes. The government is promoting housing construction on a massive scale and making substantial investments in infrastructure, including water management. Various programmes suggest that residential construction will enjoy a boom in 2022 that will also deliver increased impetus for air-conditioning and ventilation technology and the installation of heating systems. As the Wilo Group has a local production facility near Moscow, its business is expected to benefit from this growing demand. However, the outlook for Russia for 2022 has deteriorated significantly in light of the continued escalation of the Ukraine conflict and the unforeseeable consequences of this development.

The Turkish economy is also likely to see comparatively moderate development in 2022, and the outlook for the construction industry is mixed and uncertain. Extremely high inflation and the weakness of the Turkish lira are posing considerable burdens. Despite the healthy medium-term prospects for heating and air-conditioning systems, the Wilo Group faces a difficult environment for its business in Turkey in 2022. By contrast, the Egyptian construction industry is set to continue its pronounced upturn. In Nigeria and South Africa, economic growth is extremely modest and the political environment remains delicate. Irrespective of the economic situation, individual projects in all of the aforementioned countries, i.e. Turkey, the Middle East and Africa, could be economically attractive and feasible for the Wilo Group taking into account the local risk situation. Accordingly, the corresponding potential will be harnessed selectively and monitored extremely closely.

The economic outlook for Latin America for 2022 is cautiously positive. The Wilo Group's business is likely to benefit from moderate but continued growth in Mexico, Brazil, Chile and Peru. However, high inflation means the environment in Argentina is problematic.

Wilo can largely absorb the varying trends within the region thanks to its broad-based regional presence and market-appropriate product mix. Countries seeing a temporary slowdown in demand or a less favourable financing environment for investments will again be offset by individual markets enjoying structural growth in 2022.

Statement by the Executive Board on forecast development

The year 2022 is dedicated to the 150th anniversary of Wilo. The Wilo Group can look back on a long and successful history in which it evolved from being a local specialist to a global player. Two principles have shaped the path of Wilo across five generations of entrepreneurs: consistency and adaptability.

In light of the uncertain economic and geopolitical conditions, these two qualities are all the more essential. Although economic researchers are unanimous that the economic upturn will continue in 2022, these forecasts are subject to considerable risks and imponderables as a result of the ongoing supply and logistics bottlenecks, the expected turnaround in interest rate policy and the unforeseeable consequences of the military conflict in Ukraine. This pronounced uncertainty in terms of economic development, and hence the Wilo Group's business development, requires particularly anticipatory, risk-conscious and flexible company management. Accordingly, current developments are continuously observed by the Executive Board and trends are anticipated, analysed and evaluated in a timely manner. This allows Wilo 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, the Executive Board is forecasting high single-digit net sales growth for the Wilo Group in the 2022 financial year. This is based on the underlying assumptions that the world economy will continue to recover as forecast and that there will be no major upheaval on the currency and capital markets and no massive and sustained disruption to supply chains.

The Wilo Group monitors its supply chain closely in order to ensure the availability of goods and services even during the pandemic. To this end, Wilo further professionalised the management of supply chain risks in the past financial year. To improve risk transparency, work began on the implementation of a comprehensive software-based solution that enables the automated, real-time identification of relevant developments in the supply chain. This allows countermeasures to be taken quickly and in a targeted manner in order to reduce disruptions and bottlenecks in the production process. However, it must be said that the upheaval on the procurement and logistics markets became markedly more pronounced in the past year and looks set to continue. As such, the possibility of supply chain disruption resulting in production restrictions or production downtime cannot be ruled out completely for 2022.

One particular focal point in 2022 will be to continue imposing strict hygiene and distancing rules in line with the pandemic situation in order to guarantee a safe workplace for all employees. This also serves to ensure safe and uninterrupted operations for the Wilo Group's business partners and customers to the greatest possible extent.

The Executive Board adopts strict profitability targets with a view to ensuring the Wilo Group's capacity for action, flexibility and independence at all times. This helped Wilo to achieve a new all-time high in terms of EBITDA in the past financial year despite the challenging macroeconomic environment and the massive rise in material and logistics costs during the course of the year, although it was not possible to pass them on to customers immediately or in full. Consolidated net income grew by nearly 100 percent. In light of the uncertain economic outlook and sustained disruption on the procurement markets, the Executive Board has adopted a policy of strict cost management for 2022. The Executive Board is also closely monitoring price development on the procurement and logistics markets in particular so that countermeasures can be taken at short notice as required. To this end, profitability is forecast to improve further in 2022. EBITDA is expected to increase moderately in absolute terms, with a slight rise forecast for the EBITDA margin. Leverage is expected to increase slightly compared with the year under review.

All in all, the risks and consequences of potential misjudgements concerning the development of the sales markets and, in particular, the procurement markets as well as the currency markets in the 2022 financial year are classified as extraordinarily high. The situation on the procurement markets remains strained and unclear. Another incalculable risk relates to the future development of the coronavirus pandemic and rising geopolitical tensions and the economic impact of these factors. Accordingly, the Wilo Group's net sales and EBITDA expectations are subject to even greater uncertainty than in the previous year. Although regional economic fluctuations can be partially offset by the Wilo Group's global orientation, the Wilo Group's growth and profitability targets could still be substantially affected by setbacks in combating the coronavirus pandemic, further military escalations or sustained and extensive disruption to value chains with a corresponding significant impact on the world economy.

The Wilo Group is synonymous with future-oriented, innovative products and system solutions and is evolving into a solutions 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 2022 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. The localisation efforts initiated prior to the pandemic have been intensified further and the appropriate degree of vertical integration for Wilo in the individual regions and countries has been redefined. Wilo is also broadly strengthening the degree of vertical integration along its value chains on a step-by-step basis. Multi-year projects like the strategic location development project at the headquarters in Dortmund and the construction work in China, India and the USA will be continued or completed in 2022. 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 line with Ambition 2025, the Group is also focusing on company acquisitions that are beneficial from a strategic and economic perspective. In addition, the Wilo Group's digital transformation will continue to be pursued at a fast pace. Therefore, 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 will again make extensive investments in 2022 with a focus on the modernisation and capacity expansion of production facilities around the world as well as the harmonisation of the IT infrastructure. Furthermore, the majority of investments will relate to site expansion in China, India and, in particular, Dortmund. As such, capital expenditure is expected to see another significant year-on-year increase.

The long-term financing structure, the very high equity ratio of around 45 percent and cash of almost EUR 190 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 2021, WILO SE is required to comply with certain standard financial ratios (covenants). WILO SE fully complied with these covenants at all times in the 2020 and 2021 financial years and there are currently no indications that it will be unable to comply with them in future.

The business targets for 2022 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 2022 assume an unchanged basis of consolidation and unchanged exchange rates compared with the previous year.

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Consolidated income statement

for the period 1 January to 31 December 2021

EUR thousand	Note	2021	2020
Net sales	(8.1)	1,651,889	1,451,494
Cost of sales	(8.2)	−1,122,339	−977,321
Gross profit		**529,550**	**474,173**
Selling expenses	(8.3)	−278,373	−252,998
Administrative expenses	(8.3)	−109,201	−89,216
Research and non-capitalised development costs	(8.4)	−55,765	−52,037
Other operating income	(8.5)	21,306	20,040
Other operating expenses	(8.6)	−15,008	−38,612
Earnings before interest and taxes (EBIT)		**92,509**	**61,350**
Financial income	(8.7)	5,200	5,824
Financial expenses	(8.8)	−13,832	−13,795
Consolidated net income before taxes		**83,877**	**53,379**
Income taxes	(8.9)	−34,860	−28,505
Consolidated net income		**49,017**	**24,874**
Basic and diluted EPS: EUR 5.00 (previous year: EUR 2.54) per ordinary share	(8.10)		

Consolidated statement of comprehensive income

for the period 1 January to 31 December 2021

EUR thousand	Note	2021	2020
Consolidated net income		**49,017**	**24,874**
Items not reclassified to profit or loss in the future			
Remeasurement of pension obligation and plan assets		2,130	−1,229
On which current income taxes	(8.9)	−567	318
		1,563	**−911**
Items that may be reclassified to profit or loss in the future			
Currency translation differences		13,490	−35,861
Currency translation differences deferred taxes	(8.9)	392	−312
		13,882	**−36,173**
Cash flow hedges – reclassified to consolidated income statement	(11.1)	1,001	624
Other comprehensive income		**16,446**	**−36,460**
Total comprehensive income		**65,463**	**−11,586**

Consolidated statement of financial position

as at 31 December 2021

Assets EUR thousand	Note	2021	2020
Non-current assets			
Intangible assets	(9.1)	303,538	238,961
Property, plant and equipment	(9.2)	646,881	590,870
Investments carried at equity	(7.)	2,640	2,640
Trade receivables	(9.4)	8,536	6,763
Other financial assets	(9.5)	9,016	8,178
Other receivables and assets	(9.7)	12,483	6,398
Deferred tax assets	(8.9)	31,020	38,686*
		1,014,114	**892,496**
Current assets			
Inventories	(9.3)	322,003	235,877
Trade receivables	(9.4)	284,133	272,513
Other financial assets	(9.5)	8,318	9,036
Tax receivables	(9.6)	304	329*
Other receivables and assets	(9.7)	35,797	23,549*
Cash	(9.8)	189,880	188,952
Assets held for sale	(9.9)	1,346	613
		841,781	**730,869**
Total assets		**1,855,895**	**1,623,365**

Equity and liabilities EUR thousand	Note	2021	2020
Equity	(9.10)		
Issued capital		26,980	26,980
./. Nominal amount of treasury shares		-1,207	-1,477
Subscribed capital		25,773	25,503
Capital reserves		35,680	26,161
Other reserves		799,707	742,956
Treasury share reserve		-24,410	-29,766
		836,750	**764,854**
Non-current liabilities			
Financial liabilities	(9.11)	388,192	229,160
Other financial liabilities	(9.13)	24,616	24,600
Other liabilities	(9.14)	3,671	3,572
Provisions for pensions and similar obligations	(9.15)	90,798	92,746
Other provisions	(9.16)	6,435	8,119**
Deferred tax liabilities	(8.9)	13,873	12,277*
		527,585	**370,474**
Current liabilities			
Financial liabilities	(9.11)	25,840	117,095
Trade payables	(9.12)	233,463	178,788**
Other financial liabilities	(9.13)	49,813	43,134**
Other liabilities	(9.14)	111,840	79,100*
Other provisions	(9.16)	62,772	61,931**
Tax liabilities	(9.17)	7,832	7,989*
		491,560	**488,037**
Total equity and liabilities		**1,855,895**	**1,623,365**

Prior-year figures were restated:
*) for current and deferred taxes, see notes (8.9), (9.6) and (9.17)
**) for liabilities and provisions, see notes (7.), (9.12), (9.13) and (9.16)

Consolidated statement of cash flows

for the period 1 January to 31 December 2021

EUR thousand	**2021**	2020	Change
Earnings before interest and taxes (EBIT)	**92,509**	**61,350**	**31,159**
Depreciation and amortisation of intangible assets and property, plant and equipment	88,595	79,870	8,725
Increase in provisions	–4,704	21,809	–26,513
Losses / gains on disposals of intangible assets and property, plant and equipment	–606	1,204	–1,810
Increase/decrease in inventories	–70,218	–2,913	–67,305
Increase in trade receivables	–5,276	–4,193	–1,083
Increase/decrease in trade payables	41,914	14,226	27,688
Increase/decrease in other assets and liabilities not related to investing or financing activities	15,241	10,995	4,246
Other non–cash expenses and income	–1,119	4,543	–5,662
Operating cash flow before income taxes	**156,336**	**186,891**	**–30,555**
Income taxes paid	–29,611	–25,345	–4,266
Cash flow from operating activities	**126,725**	**161,546**	**–34,821**
Purchases of intangible assets	–23,939	–21,147	–2,792
Disposals of property, plant and equipment	3,690	2,960	730
Purchases of property, plant and equipment	–108,285	–97,229	–11,056
Purchases of consolidated companies	–38,819	–937	–37,882
Dividends received	50	0	50
Other purchases attributable to investing activities	–1,095	–112	–983
Cash flow from investing activities	**–168,398**	**–116,465**	**–51,933**
Dividend payment	–8,141	–15,890	7,749
Proceeds from assuming financial liabilities	141,935	108,551	33,384
Repayment of financial liabilities	–92,738	–81,205	–11,533
Proceeds from the sale of treasury shares	15,145	0	15,145
Repayment of lease liabilities	–15,694	–15,706	12
Interest payments received	1,842	1,281	561
Interest payments made	–9,488	–10,743	1,255
Cash flow from financing activities	**32,861**	**–13,712**	**46,573**
Change in cash	–8,812	31,369	–40,181
Effects of exchange rate changes on cash	9,576	–8,763	18,339
Changes on cash resulting from the basis of consolidation	164	290	–126
Cash at beginning of period	188,952	166,056	22,896
Cash at end of period	**189,880**	**188,952**	**928**

Detailed information can be found in note (10).

Consolidated statement of changes in equity

for the period 1 January to 31 December 2021

	Subscribed capital			Other reserves						
EUR thousand	Issued capital	Nominal amount of treasury shares	Capital reserves	Retained earnings	Currency translation reserve	Hedging reserve	Reserve for remeasurement of pensions	Treasury share reserve	Equity attributable to the shareholders of WILO SE	**Equity**
1 January 2020	**26,980**	**–1,477**	**26,161**	**847,162**	**–46,780**	**–2,280**	**–27,643**	**–29,766**	**792,357**	**792,357**
Consolidated net income 2020	0	0	0	24,874	0	0	0	0	24,874	24,874
Other comprehensive income	0	0	0	0	–36,173	624	–911	0	–36,460	–36,460
Dividend payments	0	0	0	–15,890	0	0	0	0	–15,890	–15,890
Other changes	0	0	0	–27	0	0	0	0	–27	–27
31 December 2020	**26,980**	**–1,477**	**26,161**	**856,119**	**–82,953**	**–1,656**	**–28,554**	**–29,766**	**764,854**	**764,854**
1 January 2021	**26,980**	**–1,477**	**26,161**	**856,119**	**–82,953**	**–1,656**	**–28,554**	**–29,766**	**764,854**	**764,854**
Consolidated net income 2021	0	0	0	49,017	0	0	0	0	49,017	49,017
Other comprehensive income	0	0	0	0	13,882	1,001	1,563	0	16,446	16,446
Dividend payments	0	0	0	–8,141	0	0	0	0	–8,141	–8,141
Sales of treasury shares	0	270	9,519	0	0	0	0	5,356	15,145	15,145
Other changes	0	0	0	–571	0	0	0	0	–571	–571
31 December 2021	**26,980**	**–1,207**	**35,680**	**896,424**	**–69,071**	**–655**	**–26,991**	**–24,410**	**836,750**	**836,750**

Detailed information can be found in note (7) and note (9.10).

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(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 for the preparation of the consolidated financial statements

The consolidated financial statements of WILO SE as at 31 December 2021 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 2021 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).

The outbreak of the COVID-19 pandemic and the measures imposed by governments around the world to curb the spread of the virus did not significantly impact the Wilo Group either in the year under report or in 2020. The products manufactured and marketed by the Wilo Group for applications in building services, drinking water supply and polluted water and wastewater disposal are essential to everyday life. There are no uncertainties that could cast doubt as to the Wilo Group's ability to continue as a going concern.

(3.) Adoption of new and amended IFRS

The following standards, interpretations and amendments to existing standards were adopted for the first time in the 2021 financial year, but had no or no material effect on the consolidated financial statements of WILO SE:

- Interest Rate Benchmark Reform Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16)
- COVID-19-Related Rent Concessions (Amendment to IFRS 16)

The following standards, amendments to existing standards and interpretations issued by the IASB and the IFRS Interpretations Committee are not yet effective in the 2021 financial year or have not yet been endorsed by the European Union. However, they will have no impact or no material impact on the consolidated financial statements of WILO SE. WILO SE is not adopting early these standards, interpretations or amendments to existing standards or interpretations:

First-time adoption 1 January 2022:
- Onerous Contracts – Cost of Fulfilling a Contract (Amendments to IAS 37)
- Annual Improvements to IFRSs 2018– 2020
- Property, Plant and Equipment – Proceeds before Intended Use (Amendments to IAS 16)
- Reference to the Conceptual Framework (Amendments to IFRS 3)

First-time adoption 1 January 2023:
- Classification of Liabilities as Current or Non-current (Amendments to IAS 1)
- Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2)
- Definition of Accounting Estimates (Amendments to IAS 8)
- Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction (Amendments to IAS 12)
- IFRS 17 Insurance Contracts and Amendments to IFRS 17 Insurance Contracts
- Amendment IFRS 4 – Deferral of Effective Date of IFRS 9 to 2023

First-time adoption still open:

- Sale or Contribution of Assets between an Investor and its Associate or Joint Venture (Amendments to IFRS 10 and IAS 28)

(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.

Acquisitions

ABIONIK GROUP GMBH, DEUTSCHLAND On 8 February 2021, WILO SE acquired 100 percent of the shares in ABIONIK Group GmbH, Berlin/Germany, from BID Equity Investment IV GmbH & Co. KG, Hamburg/Germany, and other shareholders. The ABIONIK Group comprises primarily MARTIN Systems GmbH, Berlin/Germany, LIKUSTA Umwelttechnik GmbH, Lich/Germany, and Steinhardt Gesellschaft mit beschränkter Haftung, Taunusstein/Germany which specialise in wastewater and exhaust air treatment as well as rainwater treatment and flood control.

With the acquisition of the ABIONIK Group, the Wilo Group is expanding its portfolio in the water management segment, thus pursuing its strategic alignment as a provider of solutions for water and wastewater treatment.

The purchase price was paid fully by transferring cash and cash equivalents. 1 January 2021 is used as the measurement date.

Goodwill comprises essentially the synergies related to the company acquisition in connection with the previous business activities in drinking water treatment, organisation of the operations acquired, employee expertise, the very good reputation of the products, especially on the German and Chinese markets and the general earnings expectations connected with these factors. The goodwill is allocated to the Clean and Waste Water product division. It is not deductible for tax purposes.

The fair value of the acquired trade receivables corresponds to the gross amounts, taking account of valuation allowances. In the year under report, net sales included in the consolidated financial statements as a result of the acquisition of the ABIONIK Group totalled EUR 31,358 thousand. EBITDA amounted to EUR –367 thousand.

The fair values of the considerations transferred at the time of acquisition by main group were:

EUR thousand	1 January 2021
Intangible assets	
Goodwill	27,247
Brands	2,425
Customer base	4,359
Other	1,207
Property, plant and equipment	3,911
Other financial assets	2,208
Current assets	15,310
Other assets	95
Cash and cash equivalents	3,865
Deferred tax assets	92
Liabilities and provisions	–31,030
Deferred tax liabilities	–3,189
Total	**26,500**

QUANTUMFLO INCORPORATED, USA When obtaining control on 1 October 2021, WILO USA LLC, Rosemont, Illinois/USA made a company acquisition in line with IFRS 3 on the basis of an asset deal. The essential parts of QuantumFlo, Inc., Sanford, Florida/USA, were acquired. The acquired product portfolio consists of pressure-boosting systems with electronic control. The company acquisition comprises essential tangible and intangible assets (primarily customer base, brands, machines, inventories) and specific receivables and liabilities. In addition, the employee work contracts were taken over. The operating premises are leased. The corporate acquisition supplements the product portfolio already offered by the Wilo Group in the USA.

The purchase price was paid fully by transferring cash and cash equivalents. Goodwill comprises essentially the synergies related to the company acquisition, the employee expertise, the very good reputation of the products on the American market and the general earnings expectations connected with these factors. It is fully deductible for tax purposes.

Since the acquisition date, the consolidated result includes net sales of EUR 1,522 thousand and net income for the year of EUR 8 thousand from the corporate acquisition. If the acquisition date had been 1 January 2021, net sales of EUR 8.6 million and net income of the year of EUR 1.5 million would have been included in consolidated net income.

The fair values of the considerations transferred at the time of acquisition by main group were:

EUR thousand	1 October 2021
Intangible assets	
Goodwill	12,207
Brands	371
Customer base	1,501
Property, plant and equipment	48
Current assets	1,829
Liabilities and provisions	–296
Total	**15,660**

In addition to WILO SE, the consolidated financial statements as at 31 December 2021 include eleven (previous year: seven) German entities and 66 (previous year: 63) 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.

(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 at the acquisition date, 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 =	**2021**	2020	**2021**	2020
Pound sterling	GBP	0.8584	0.8893	0.8403	0.8990
Chinese yuan	CNY	7.6069	7.8975	7.1947	8.0225
Indian rupee	INR	87.3134	84.9444	84.2290	89.6604
Polish zloty	PLN	4.5720	4.4680	4.5969	4.5597
Russian rouble	RUB	87.3297	84.2246	85.3002	91.4670
Swedish krona	SEK	10.1562	10.4815	10.2503	10.0343
Swiss franc	CHF	1.0799	1.0709	1.0331	1.0802
South Korean won	KRW	1,354.6584	1,350.2378	1,346.3807	1,336.0000
Turkish lira	TRY	10.7071	8.0898	14.2793	9.0079
US dollar	USD	1.1816	1.1470	1.1326	1.2271

(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 The 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 (recognition of useful life)
- assessment of impairment on trade receivables
- assessment of impairment on deferred tax assets
- 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 long-term cash flows, average annual EBIT growth rates and the weighted average cost of capital. In particular, the planning premises take into account expected net sales and EBIT development and the development of sales markets. The forecast growth for the individual divisions also takes account of past growth rates. Future company acquisitions are not included in planning. 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 144,296 thousand as at the end of the reporting period (previous year: EUR 101,671 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 303,538 thousand (previous year: EUR 238,961 thousand) and property, plant and equipment of EUR 646,881 thousand (previous year: EUR 590,870 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 24,547 thousand (previous year: EUR 24,531 thousand) as at the end of the reporting period. Further information can be found under "Financial assets" (note (7)) and in note (9.5).

The recognition of deferred tax assets on tax loss carryforwards requires the expectation of future taxable profit. The assessment of whether deferred tax assets are impaired starts by taking into account deferred tax liabilities with the same taxable entity and the same taxation authority and the taxable profits that are sufficiently likely to occur in the future. The Executive Board makes a best estimate of the probability of future taxable profits on the basis of strategic corporate planning.

The calculation of provisions for pensions and similar post-employment obligations is based on key premises, such as the discount rates, salary trends, life expectancies and assumptions regarding trends in healthcare. The discount rates used are determined on the basis of the returns on prime fixed-income corporate 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 90,798 thousand (previous year: EUR 92,746 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 (9.15).

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, restructuring and provisions for bonuses and customer rebates under other provisions. In total, other provisions of EUR 68,707 thousand (previous year: EUR 70,050 thousand) were reported as at the end of the reporting period. Further information can be found under "Other provisions" (note (7)) and in note (9.16).

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:

- Judgements must be made 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).
- 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.

EXPENSE AND REVENUE RECOGNITION In accordance with IFRS 15, the Wilo Group realises net 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. Net sales correspond to the transaction price to which the Wilo Group expects to be entitled. At the Wilo Group 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 net sales to net financial costs. If a contract covers several distinct goods and/or 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, net sales are realised either at a point in time or over a specific period time. At the Wilo Group, depending on the relevant INCOTERMS, net sales are typically realised at a point in time. Exceptions relate in particular to warranty revenue, which is realised over a specific period of time using the input method. Net sales are presented net of sales-related 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 EXPENSES AND SELLING EXPENSES Administrative expenses and selling expenses include attributable labour and material costs as well as 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 report, development costs were capitalised in the amount of EUR 15,216 thousand (previous year: EUR 16,634 thousand). Furthermore, the addition to capitalised development costs also includes borrowing costs of EUR 903 thousand (previous year: EUR 714 thousand), meaning that the addition totals EUR 16,119 thousand (previous year: EUR 17,348 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 2021 financial year, borrowing costs were capitalised in the amount of EUR 1,227 thousand (previous year: EUR 1,638 thousand). The borrowing cost rate, which forms the basis for determining the capitalisable borrowing costs, was 2.10 percent in the year under review (previous year: 2.13 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). Amortisation is recognised in the cost of sales, selling and administrative expenses as well as the research and non-capitalised development costs.

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 on the individual components with a finite useful life are capitalised and amortised on a straight-line basis over their expected useful life of ten to 15 years. Capitalised development costs for intangible assets that are not yet available for use are tested for impairment annually.

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 The Wilo Group 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.

IMPAIRMENT OF NON-FINANCIAL ASSETS The recoverable amount is measured using the discounted cash flow method on the basis of the planning approved the Supervisory Board, which covers 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

2021 financial year **Product division**	Goodwill in EUR thousand	Long-term growth factor in %	Discount rate before income taxes in %
Heating, Ventilation, Air-conditioning	7,569	1.1	8.63
Clean and Waste Water	136,727	1.1	8.59

The sustained growth factor is based on economic targets, such as the European Central Bank inflation target for the business regions in which Wilo operates.

The discount rate before income taxes is calculated using the capital structure of a peer group and the parameters published by Deutsche Bundesbank to estimate interest rates for hypothetical zero-coupon bonds. The market risk premium is determined based on a recommendation of the Expert Committee for Company Valuations and Business.

Over the planning period, at constantly increasing net sales, slight to substantial EBIT growth is assumed depending on the product area.

Goodwill impairment testing confirmed that there was no need to recognise impairment losses. Furthermore, a potential change in the aforementioned parameters would not result in the impairment of the listed groups of cash-generating units. Goodwill is tested for impairment as part of the annual impairment test on 30 November of every year.

The impairment test for capitalised development costs performed in the 2021 financial year resulted in no impairment losses (previous year: EUR 0 thousand).

INVESTMENTS CARRIED AT EQUITY Investments in jointly controlled entities are measured using the equity method and are recognised under the “Investments carried at equity” item There is no proportional consolidation.

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 receivables and contract assets, there is a simplified approach using an impairment matrix. These receivables are subject to the lifetime expected credit loss.

INVENTORIES Raw materials, 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, supplies, merchandise and products 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 TRANSACTIONS The Wilo Group uses derivatives solely to reduce exchange rate, interest rate and commodity price risk. These instruments are hedges from an economic perspective. The Wilo Group 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. To this end, a tax plan is derived from the five-year strategic planning approved by the Supervisory Board. The plans are based on past experience and projected market development, as well as the results of planned measures and measures that have already been initiated.

Deferred tax assets on loss carryforwards of EUR 40,810 thousand (previous year: EUR 40,203 thousand) were recognised as at the end of the reporting period. The Executive Board anticipates utilisation of these loss carryforwards in subsequent years, also at companies which reported a tax loss in the year under report.

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 offset against deferred tax liabilities if they relate to the same taxation authority and have matching terms. Previous year figures were restated accordingly. Information on the deferred taxes as at 31 December 2021 and offsetting is provided in note (8.9).

GOVERNMENT GRANTS In accordance with IAS 20, a government grant is recognised only 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. In response to the COVID-19 pandemic, wage subsidies (e.g. allowances for short-time work, waiver of social security contributions) were introduced in various countries in which Wilo subsidiaries are active. In the 2021 financial year, the Group received wage subsidies of EUR 156 thousand (previous year: EUR 2,594 thousand). The Wilo Group offsets these income-related subsidies against the staff costs of the individual functional areas.

EQUITY Treasury shares in the notional amount of EUR 1,207 thousand (previous year: EUR 1,477 thousand) are openly deducted from issued capital.

FINANCIAL LIABILITIES Financial liabilities primarily 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).

Financial liabilities are derecognised when the corresponding contractual obligations are settled or cancelled or have expired.

Financial assets and financial liabilities are generally reported without offsetting.

To a limited extent, the Wilo Group has set up supply chain financing (SCF) for a small group of suppliers. As a result, the suppliers concerned can have their liabilities settled by the participating bank before the actual maturity. In these cases, the Wilo Group reclassifies trade payables to other financial liabilities until the payment of the original bank takes place from the Wilo Group to the bank in line with the payment conditions agreed with the bank. In the 2021 financial year, transaction costs totalled EUR 9,494 thousand (previous year: EUR 7,387 thousand). As at 31 December 2021, other financial liabilities from the SCF of EUR 4,614 thousand were recognised (previous year: EUR 3,776 thousand). The previous year’s figures were restated accordingly.

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 2021**	31 December 2020
Discount rate	1.24	0.90
Pension adjustment	2.07	1.83
Salary increase	3.05	3.02

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 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	2021	%	2020	%
Established markets	963,308	58.3	853,850	58.8
Growth markets	688,581	41.7	597,644	41.2
Total	**1,651,889**	**100.0**	**1,451,494**	**100.0**

The established markets and growth markets consisted of the following countries as at 31 December 2021:

- Established markets: All European nations, USA and Canada
- Growth markets: China, India, South Korea, the Southeast Asian nations, Australia and Oceania, Russia, Belarus, the Caucasian nations, Turkey, the Middle East, Africa, Latin America

Net sales include revenue from the sale of goods of EUR 1,537,045 thousand (previous year: EUR 1,344,336 thousand) and service income of EUR 114,844 thousand (previous year: EUR 107,158 thousand).

(8.2) Cost of sales

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

Cost of sales

EUR thousand	2021	2020
Cost of materials	–794,686	–670,313
Miscellaneous costs	–327,653	–307,008
Total	**–1,122,339**	**–977,321**

(8.3) Selling and administrative expenses

Selling and administrative expenses

EUR thousand	2021	2020
Selling expenses	–278,373	–252,998
Administrative expenses	–109,201	–89,216
Total	**–387,574**	**–342,214**

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	2021	2020
Research and development costs	–70,981	–68,671
of which capitalised development costs	15,216	16,634
Total	**–55,765**	**–52,037**

(8.5) Other operating income

Other operating income

EUR thousand	2021	2020
Foreign-currency gains from operating activities	10,966	11,642
Government grants	3,038	3,049
Income from disposals of intangible assets and property, plant and equipment	1,055	854
Insurance compensation	790	307
Other	5,457	4,188
Total	**21,306**	**20,040**

The foreign-currency gains from operating activities of EUR 10,966 thousand (previous year: EUR 11,642 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 9,658 thousand (previous year: EUR 15,373 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. The prior-year figures for foreign-currency gains from operating activities and foreign-currency losses from operating activities have been restated to reflect exchange rate changes due to hedge accounting.

(8.6) Other operating expenses

Other operating expenses

EUR thousand	2021	2020
Foreign-currency losses from operating activities	–9,658	–15,373
Restructuring costs	–1,464	–17,681
Losses on disposals of intangible assets and property, plant and equipment	–449	–2,058
Other	–3,437	–3,500
Total	**–15,008**	**–38,612**

(8.7) Financial income

Financial income is composed as follows:

Financial income

EUR thousand	2021	2020
Foreign-currency gains from financing activities	1,923	2,530
Interest income from cash and cash equivalents	1,842	1,281
Gains on derivative financial instruments	414	1,706
Other	1,021	307
Total	**5,200**	**5,824**

(8.8) Financial expenses

Financial expenses are composed as follows:

Financial expenses

EUR thousand	2021	2020
Interest expenses on financial liabilities	–8,646	–9,623
Losses on derivative financial instruments	–2,641	–665
Foreign-currency losses from financing activities	–2,039	–3,471
Interest rate effects from pensions, non-current liabilities and receivables	–891	–554
Interest expenses for leases	–842	–1,120
Capitalised borrowing costs	1,227	1,638
Total	**–13,832**	**–13,795**

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.

(8.9) Income taxes

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

Income taxes

EUR thousand	2021	2020
Current tax expense/income		
– Year under report	–27,797	–26,246
– Adjustments for prior periods	–1,074	–1,859
Current income taxes	**–28,871**	**–28,105**
Deferred tax expense/income		
– from DTAs on loss carryforwards	607	–956
– from changes in tax rates	223	986
– from the creation and reversal of temporary differences	–6,254	–276
– from write-downs on and reversals of deferred tax assets	–565	–154
Deferred tax expense	**–5,989**	**–400**
Income taxes	**–34,860**	**–28,505**

Deferred taxes are determined according to local income tax rates. For Germany, this is a combined tax rate of 32.1 percent (previous year: 32.1 percent) consisting of corporation tax, solidarity surcharge and trade tax. As in the previous year, local income tax rates for foreign entities range from 9.0 percent to 34.0 percent (previous year: from 9.3 percent to 34.0 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	**2021**	2020	**2021**	2020
Intangible assets	5,466	3,754	41,785	35,653
Property, plant and equipment	3,222	1,345	16,227	16,579
Inventories	6,775	5,780	373	973
Receivables and other assets	6,646	8,507	3,116	3,305
	22,109	**19,386**	**61,501**	**56,510**
Financial liabilities	0	2	445	1,140
Trade payables	1,577	1,203	38	7
Pensions and similar obligations	16,369	17,471	316	0
Other provisions and liabilities	9,426	15,489	10,844	9,688
Tax loss carryforwards	40,810	40,203	0	0
	68,182	**74,368**	**11,643**	**10,835**
Offset	**–59,271**	**–55,068**	**–59,271**	**–55,068**
Carrying amount	**31,020**	**38,686**	**13,873**	**12,277**

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

Change in deferred taxes

EUR thousand	Net amount of deferred tax assets/liabilities as at 31 Dec. 2020	Recognised in profit or loss	Recognised in equity from initial consolidation of ABIONIK	Recognised in other comprehensive income	**Net amount of deferred tax assets/liabilities as at 31 Dec. 2021**
Intangible assets	–31,899	–2,105	–2,315	0	–36,319
Property, plant and equipment	–15,234	2,326	–188	91	–13,005
Inventories	4,808	2,281	–686	0	6,403
Receivables and other assets	5,180	–1,876	0	203	3,507
Financial liabilities	–1,139	694	0	0	–445
Trade payables	1,196	343	0	0	1,539
Pensions and similar obligations	17,471	–852	92	–659	16,052
Other provisions and liabilities	5,404	–7,408	0	190	–1,814
Initial application of IFRS 9 and IFRS 15	420	0	0	0	420
Tax loss carryforwards	40,203	607	0	0	40,810
Total	**26,409**	**–5,989**	**–3,097**	**–175**	**17,148**

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. 2019	Recognised in profit or loss	Recognised in other comprehensive income	Net amount of deferred tax assets/ liabilities as at 31 Dec. 2020
Intangible assets	–28,523	–3,376	0	–31,899
Property, plant and equipment	–15,583	367	–18	–15,234
Inventories	3,754	1,074	–20	4,808
Receivables and other assets	4,000	1,340	–160	5,180
Financial liabilities	–438	–701	0	–1,139
Trade payables	1,136	150	–90	1,196
Pensions and similar obligations	17,649	–496	318	17,471
Other provisions and liabilities	3,229	2,199	–24	5,404
Initial application of IFRS 9 and IFRS 15	420	0	0	420
Tax loss carryforwards	41,159	–956	0	40,203
Total	**26,803**	**–400**	**6**	**26,409**

EUR 392 thousand of the deferred tax expense of EUR –175 thousand recognised in other comprehensive income relates to currency differences. EUR –567 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 269,741 thousand (previous year: EUR 224,183 thousand) as at the end of the reporting period, EUR 235,075 thousand of which (previous year: EUR 184,058 thousand) can be carried forward indefinitely. The limited tax loss carryforwards amount to EUR 34,666 thousand (previous year: EUR 40,125 thousand) and can be carried forward between four and 20 years.

Applying local income tax rates, deferred tax assets on loss carryforwards of EUR 40,810 thousand (previous year: EUR 40,203 thousand) were recognised as at the end of the reporting period. The management anticipates utilisation of these loss carryforwards in subsequent years, also at companies which reported a tax loss in the year under report. No deferred tax assets were recognised for German and international tax loss carryforwards amounting to EUR 134,379 thousand (previous year: EUR 88,787 thousand) 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 2,100 thousand (previous year: EUR 2,368 thousand) have been recognised on these distributions.

In the case of dividends being distributed by subsidiaries or a possible disposal of subsidiaries, 5 percent of the dividend or disposal gains are subject to German taxation. Generally this results in an additional tax charge. As at 31 December 2021, there were retained profits of EUR 198,092 thousand at subsidiaries (previous year: EUR 222,523 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 2021 financial year. This corresponds to a total tax rate of 32.1 percent (previous year: 32.1 percent). The Wilo Group reported tax expenses of EUR 34,860 thousand (previous year: EUR 28,505 thousand) in its consolidated income statement for 2021. This is EUR 7,935 thousand higher (previous year: EUR 11,370 thousand higher) than the expected tax expense of EUR 26,925 thousand (previous year: EUR 17,135 thousand) that results from applying the domestic rate of 32.1 percent (previous year: 32.1 percent) at Group level.

The difference is attributable to the following causes:

Tax reconciliation

EUR thousand	**2021**	2020
Consolidated net income before taxes	83,877	53,379
Expected tax expense	**–26,925**	**–17,135**
Tax rate changes	218	986
Difference from current tax rates	12,265	11,293
Temporary differences arising on consolidation	–190	301
Other permanent differences	–2,707	–7,659
Tax-free income	–2,912	3,986
Change in unrecognised deferred taxes on loss carryforwards	–10,660	–14,581
Withholding tax	–3,223	–3,560
Prior-period taxes	–1,074	–1,859
Other	348	–277
Current tax expense	**–34,860**	**–28,505**

(8.10) 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. Both basic and diluted earnings per ordinary share amounted to EUR 5.00 (previous year: EUR 2.54).

Earnings per share

	2021	2020
Consolidated net income in EUR thousand	49,017	24,874
Number of ordinary shares as at 31 Dec.	9,912,527	9,808,760
Weighted average number of ordinary shares outstanding	9,813,084	9,808,760
Earnings per ordinary share (EUR)	**5.00**	**2.54**

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

(9.1) Intangible assets

Intangible assets developed as follows in the 2021 and 2020 financial years:

Intangible assets

EUR thousand	Patents, property rights and customer base	Goodwill	Capitalised development costs	Advance payments	**Total**
Cumulative cost					
As at 1 January 2020	88,707	110,484	98,073	10,454	307,718
Currency translation	–1,692	–3,891	–69	0	–5,652
Additions	2,201	644	17,348	3,266	23,459
Disposals	–753	0	0	–25	–778
Reclassifications	9,975	0	0	–9,975	0
As at 31 December 2020	**98,438**	**107,237**	**115,352**	**3,720**	**324,747**
As at 1 January 2021	98,438	107,237	115,352	3,720	324,747
Currency translation	1,842	3,057	339	0	5,238
Additions	2,981	97	16,119	6,066	25,263
Additions from business combinations	9,870	39,454	0	0	49,324
Disposals	–209	0	0	0	–209
Reclassifications	2,306	0	0	–2,306	0
As at 31 December 2021	**115,228**	**149,845**	**131,810**	**7,480**	**404,363**
Cumulative depreciation					
As at 1 January 2020	62,125	5,644	6,809	0	74,578
Currency translation	–724	–78	0	0	–802
Amortisation in the financial year	7,631	0	4,790	0	12,421
Disposals	–411	0	0	0	–411
As at 31 December 2020	**68,621**	**5,566**	**11,599**	**0**	**85,786**
As at 1 January 2021	68,621	5,566	11,599	0	85,786
Currency translation	752	–17	0	0	735
Amortisation in the financial year	8,620	0	6,228	0	14,848
Write-ups	–350	0	0	0	–350
Additions from business combinations	8	0	0	0	8
Disposals	–202	0	0	0	–202
As at 31 December 2021	**77,449**	**5,549**	**17,827**	**0**	**100,825**
Residual carrying amounts					
As at 1 January 2020	26,582	104,840	91,264	10,454	233,140
As at 31 December 2020	**29,817**	**101,671**	**103,753**	**3,720**	**238,961**
As at 1 January 2021	29,817	101,671	103,753	3,720	238,961
As at 31 December 2021	**37,779**	**144,296**	**113,983**	**7,480**	**303,538**

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 2021 financial year:

Development of goodwill by product division

EUR thousand	1.1.2021	Additions	Currency translation	**31.12.2021**
Product division				
Heating, Ventilation, Air-conditioning	7,579	0	–10	7,569
Clean and Waste Water	94,092	39,551	3,084	136,727
Total	**101,671**	**39,551**	**3,074**	**144,296**

(9.2) Property, plant and equipment

Property, plant and equipment developed as follows in the 2021 and 2020 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 2020	424,665	244,408	363,912	83,270	1,116,255
Currency translation	–13,112	–3,511	–5,654	–541	–22,818
Additions	53,812	10,686	27,713	15,540	107,751
Reclassifications	27,272	22,154	15,956	–65,382	0
Disposals	–37,036	–11,954	–18,094	–767	–67,851
As at 31 December 2020	**455,601**	**261,783**	**383,833**	**32,120**	**1,133,337**
As at 1 January 2020	455,601	261,783	383,833	32,120	1,133,337
Currency translation	5,500	3,698	4,250	332	13,780
Additions	23,974	17,061	25,185	58,788	125,008
Additions from business combinations	2,540	888	1,066	0	4,494
Reclassifications	879	6,169	15,680	–22,728	0
Reclassification to assets held for sale	–1,815	0	0	0	–1,815
Disposals	–2,122	–5,454	–11,752	–216	–19,544
As at 31 December 2021	**484,557**	**284,145**	**418,262**	**68,296**	**1,255,260**
Cumulative depreciation					
As at 1 January 2020	94,832	173,757	276,444	0	545,033
Currency translation	–2,201	–2,444	–3,461	0	–8,106
Depreciation in the financial year	18,686	16,405	32,358	0	67,449
Reclassifications	0	278	–278	0	0
Disposals	–35,529	–11,087	–15,293	0	–61,909
As at 31 December 2020	**75,788**	**176,909**	**289,770**	**0**	**542,467**
As at 1 January 2021	75,788	176,909	289,770	0	542,467
Currency translation	1,647	2,651	3,097	0	7,395
Depreciation in the financial year	23,491	17,434	32,482	340	73,747
Additions from business combinations	44	78	146	0	268
Reclassifications	3	1	234	–238	0
Reclassification to assets held for sale	–469	0	0	0	–469
Disposals	–1,129	–4,950	–8,950	0	–15,029
As at 31 December 2021	**99,375**	**192,123**	**316,779**	**102**	**608,379**
Residual carrying amounts					
As at 1 January 2020	329,833	70,651	87,468	83,270	571,222
As at 31 December 2020	**379,813**	**84,874**	**94,063**	**32,120**	**590,870**
As at 1 January 2021	379,813	84,874	94,063	32,120	590,870
As at 31 December 2021	**385,182**	**92,022**	**101,483**	**68,194**	**646,881**

LEASES 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 exemptions 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 2021 contained right-of-use assets in the amount of EUR 31,383 thousand. In the previous year, the carrying amounts of the right-of-use assets recognised in accordance with IFRS 16 amounted to EUR 32,884 thousand. 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. 2021	IFRS 16, 31 Dec. 2020
Land and buildings	19,762	21,988
Technical equipment and machinery	1,768	922
Operating and office equipment	9,853	9,974
Total	**31,383**	**32,884**

The right-of-use assets recognised as property, plant and equipment in the 2021 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 1 January 2021	**21,988**	**922**	**9,974**	**32,884**
Currency translation	412	1	-21	**392**
Additions to right-of-use assets	7,419	1,617	7,686	**16,722**
Additions from business combinations	50	0	26	**76**
Disposals of right-of-use assets	-797	-25	-1,961	**-2,783**
Depreciation in the financial year	-9,310	-747	-5,851	**-15,908**
As at 31 December 2021	**19,762**	**1,768**	**9,853**	**31,383**

Wilo applies the exemptions provided by IFRS 16 for leases relating to low-value assets and for short-term leases. The following amounts for leases are reported in the income statement:

Amounts reported in the income statement

EUR thousand	2021	2020
Interest expenses for lease liabilities	842	1,120
Lease expenses for low-value assets	3,192	2,627
Expenses for short-term leases	6,407	4,829
Expenses for variable lease payments not included in the measurement of lease liabilities	368	264
Total	**10,809**	**8,840**

The consolidated statement of cash flows includes cash outflows in the amount of EUR 15,694 thousand (previous year: EUR 15,706 thousand) in cash flow from financing activities for leases for which a lease liability has been recognised in accordance with IFRS 16.

(9.3) Inventories

Inventories

EUR thousand	31 Dec. 2021	31 Dec. 2020
Raw materials and supplies	110,847	79,558
Work in progress	35,931	23,605
Finished goods and merchandise	172,992	131,946
Advance payments	2,233	768
Total	**322,003**	**235,877**

As at 31 December 2021, the write-down on inventories amounted to EUR 24,847 thousand (previous year: EUR 23,660 thousand) with a gross carrying amount of EUR 346,850 thousand (previous year: EUR 259,537 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 284,133 thousand (previous year: EUR 272,513 thousand) are due in the 2022 financial year. Non-current trade receivables of EUR 8,536 thousand (previous year: EUR 6,763 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 2021 and 2020 financial years:

Specific valuation allowances

EUR thousand	2021	2020
As at 1.1.	18,064	17,369
Currency translation	774	-839
Additions	4,998	6,139
Utilisation	-935	-1,872
Reversals	-5,114	-2,733
As at 31.12.	**17,787**	**18,064**

IFRS 9 expected credit loss 31 December 2021

EUR thousand	Expected loss rate	Gross carrying amount	Risk provision
Europe	0.2% – 1.5%	139,277	996
Asia-Pacific	0.5% – 10.4%	90,355	5,045
MEA	2.2% – 3.0%	16,762	471
Others	0.5% – 4.0%	23,856	248
As at 31 December 2021		**270,250**	**6,760**

IFRS 9 expected credit loss 31 December 2020

EUR thousand	Expected loss rate	Gross carrying amount	Risk provision
Europe	0.2% – 1.5%	132,315	991
Asia-Pacific	1.5% – 8.4%	91,203	4,578
MEA	2.7% – 4.0%	19,659	680
Others	0.5% – 3.5%	19,505	218
As at 31 December 2020		**262,682**	**6,467**

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

Further information on the expected credit loss is provided in note (12.) "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 and administrative expenses.

(9.5) Other financial assets

Other financial assets break down as follows as at 31 December 2021 and 2020:

Other financial assets

EUR thousand	31.12.2021 of which with a remaining term Total	Less than 1 year	More than 1 year	31.12.2020 of which with a remaining term Total	Less than 1 year	More than 1 year
Receivables from unconsolidated subsidiaries, jointly controlled entities and associates	399	399	0	247	247	0
Receivables from derivative financial instruments	1,051	721	330	4,078	2,577	1,501
Loans	64	0	64	132	0	132
Equity instruments	4,159	0	4,159	1,994	0	1,994
Miscellaneous other financial receivables	11,661	7,198	4,463	10,763	6,212	4,551
Total	**17,334**	**8,318**	**9,016**	**17,214**	**9,036**	**8,178**

Equity instruments in the amount of EUR 4,159 thousand (previous year: EUR 1,994 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) Tax receivables

The Wilo Group reported receivables from income taxes of EUR 304 thousand as at the end of the reporting period (previous year: EUR 329 thousand).

(9.7) Other receivables and assets

Other receivables and assets are composed as follows as at 31 December 2021 and 2020:

Other receivables and assets

EUR thousand	31.12.2021 of which with a remaining term Total	Less than 1 year	More than 1 year	31.12.2020 of which with a remaining term Total	Less than 1 year	More than 1 year
Tax assets	25,709	18,098	7,611	16,134	11,360	4,774
Advance payments	12,615	10,644	1,971	7,147	7,132	15
Employer pension liability assets	2,676	0	2,676	1,510	0	1,510
Deferred expenses	6,723	6,621	102	4,771	4,740	31
Assets in unconsolidated subsidiaries	51	0	51	51	0	51
Receivables from employees	506	434	72	334	317	17
Total	**48,280**	**35,797**	**12,483**	**29,947**	**23,549**	**6,398**

(9.8) Cash and cash equivalents

Cash and cash equivalents in the amount of EUR 189,880 thousand (previous year: EUR 188,952 thousand) mainly comprises cash and sight deposits at banks. There are restrictions on title amounting to EUR 3,822 thousand (previous year: EUR 967 thousand).

(9.9) Assets held for sale

Assets held for sale of EUR 1,346 thousand (previous year: EUR 613 thousand) comprises a production and administrative building with land. The disposal process for the asset began in 2021 and closing is anticipated in the first quarter of 2022.

(9.10) 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 9,912,527 ordinary shares (previous year: 9,808,760) and, as in the previous year, no preferred shares in circulation as at 31 December 2021.

Treasury shares in the notional amount of EUR 1,207 thousand (previous year: EUR 1,477 thousand) are openly deducted from issued capital.

CAPITAL RESERVES The capital reserves of EUR 35,680 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.

In 2021 financial year, the sale of ordinary shares generated EUR 15,145 thousand, EUR 9,519 thousand of which was transferred to capital reserves.

OTHER PROVISIONS 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, actuarial gains and losses from pension obligations and gains and losses from the revaluation of plan assets. Retained earnings also include the legal reserve in accordance with section 150 (2) of the Aktiengesetz (AktG – German Stock Corporation Act) in the amount of 10.0 percent of the issued capital of WILO SE.

Other reserves developed as follows in the 2021 and 2020 financial years:

Other reserves

EUR thousand	2021	2020
As at 1.1.	**742,956**	**770,459**
Interest of the shareholders of WILO SE in:		
Consolidated net income	49,017	24,874
Other comprehensive income	16,446	–36,460
Dividend payment	–8,141	–15,890
Other changes	–571	–27
As at 31.12.	**799,707**	**742,956**

TREASURY SHARES In December 2021, WILO SE sold 103,767 ordinary shares, equivalent to 1.0 percent of the share capital at a price of EUR 145.95 each. As a result, as at 31 December 2021, the company held 464,222 treasury shares, or 4.5 percent of the share capital. As at 31 December 2021, the company reported 204,804 ordinary shares (previous year: 308,571) and 259,418 preference shares (previous year: 259,418) as treasury shares.

DIVIDENDS The Annual General Meeting on 15 April 2021 resolved to distribute EUR 8,141 thousand from the unappropriated surplus as at 31 December 2020 (previous year: EUR 15,890 thousand). This corresponds to a dividend per ordinary share of EUR 0.83.

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 2021 was EUR 836,750 thousand (previous year: EUR 764,854 thousand). This is mostly accounted for by EUR 893,726 thousand (previous year: EUR 853,421 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 896,424 thousand (previous year: EUR 856,119 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 2021 and 2020 financial years. More detailed information on these senior notes and promissory note loans can be found in note (9.10).

(9.11) Financial liabilities

Financial liabilities break down as follows as at 31 December 2021 and 2020:

Financial liabilities

EUR thousand	**31.12.2021**	31.12.2020
Long-term borrowings		
with a remaining term		
of between one and five years	259,035	88,121
of more than five years	129,157	141,039
Total	**388,192**	**229,160**
Current financial liabilities		
with a remaining term		
of less than one year	25,840	117,095

WILO SE reported the following material financing agreements as at 31 December 2021:

- **USPP 2035** In April 2020, WILO SE issued a senior note as part of a US private placement of EUR 90.0 million with a term of 15 years ("USPP 2035"). The senior note has bullet maturity, an interest rate of 1.55 percent p.a. and is not secured against real property or financial assets of WILO SE.

- **USPP 2027** In May 2017, WILO SE issued a senior note of USD 30.0 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 senior note had a carrying amount of EUR 26.5 million as at 31 December 2021.

- **USPP 2023** In March 2013, WILO SE issued a senior note of EUR 37.0 million as part of a US private placement. The senior note is not secured against real property or financial assets of the company. It matures in 2023 and bears interest at 3.1125 percent p.a.

- **PROMISSORY NOTE LOAN 2030** In June 2020, WILO SE took out a promissory note loan ("promissory note loan 2030") of EUR 15.0 million, maturing in 2030, at an interest rate of 1.50 percent p.a. The promissory note loan is repayable semi-annually from December 2020 in the amount of EUR 750 thousand. It is not secured against real property or financial assets of the company. The promissory note loan had a carrying amount of EUR 12.75 million at the reporting date.

- **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.

- **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 fully drawn down in instalments since 2018 according to the progress of construction. After two redemption-free years, repayment has taken place in instalments since 2020. The KfW development loan had a carrying amount of EUR 14.6 million at the reporting date.

- **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 120.0 million and an original term of five years ("syndicated loan 2024"). In July 2017, the syndicated loan was extended ahead of schedule until 2022 and increased to EUR 200.0 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. The syndicated loan is not secured against real property or financial assets of the company. At the reporting date, the credit facility had been utilised in the amount of EUR 140.0 million (previous year: EUR 30.0 million), meaning that EUR 160.0 million was still freely disposable (previous year: EUR 270.0 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. WILO SE fully complied with this obligation in the 2021 and 2020 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 198 thousand (previous year: EUR 383 thousand).

The fair value of the financial liabilities calculated using net present value models was EUR 430,273 thousand as at 31 December 2021 (previous year: EUR 356,703 thousand).

Current financial liabilities mainly consist of the tranches of non-current financial liabilities which are to be repaid in the 2022 financial year and the utilisation of credit facilities.

(9.12) Trade payables

Trade payables break down as follows as at 31 December 2021 and 2020:

Trade payables		
EUR thousand	**31.12.2021**	31.12.2020
Trade payables		
with a remaining term of less than one year	233,463	178,788
Total	**233,463**	**178,788**

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.

(9.13) Other financial liabilities

Other financial liabilities		
EUR thousand	**31.12.2021**	31.12.2020
Non-current other financial liabilities		
of which		
Lease liabilities		
with a remaining term of between one and five years	18,363	18,132
with a remaining term of more than five years	925	2,405
Liabilities from derivative financial instruments		
with a remaining term of between one and five years	899	18
Miscellaneous financial liabilities		
with a remaining term of between one and five years	4,429	4,045
Total	**24,616**	**24,600**

Other financial liabilities		
EUR thousand	**31.12.2021**	31.12.2020
Current other financial liabilities		
of which		
Bills payable	10,571	9,570
Liabilities to non-consolidated subsidiaries, jointly controlled entities or associates	2,729	2,650
Lease liabilities	12,385	12,368
Reverse factoring	4,614	3,776
Liabilities from derivative financial instruments	750	422
Miscellaneous financial liabilities	18,764	14,348
Total	**49,813**	**43,134**

As permitted under IFRS 15, no disclosures are made with regard to the remaining performance obligations as at 31 December 2021 or 31 December 2020, that have an expected original maturity of one year or less. 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.

(9.14) Other liabilities

Other liabilities break down as follows as at 31 December 2021 and 2020:

Other liabilities		
EUR thousand	**31.12.2021**	31.12.2020
Non-current other liabilities		
Contract liabilities (IFRS 15)	2,350	2,282
Deferred income	1,321	1,290
Total	**3,671**	**3,572**
Current other liabilities		
Tax liabilities	18,843	16,715
Staff liabilities	40,414	32,550
Advance payments received	42,500	21,437
Social security liabilities	5,076	4,533
Deferred income	192	161
Miscellaneous other liabilities	4,815	3,704
Total	**111,840**	**79,100**

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.

(9.15) Provisions for pensions and similar obligations

Pension obligations and other post-employment benefits are composed as follows as at 31 December 2021 and 2020:

Provisions for pensions and similar obligations		
EUR thousand	**31.12.2021**	31.12.2020
Provisions for pensions	87,053	88,927
Similar obligations	3,745	3,819
Total	**90,798**	**92,746**

Provisions for pensions are composed as follows:

Provisions for pensions		
EUR thousand	**31.12.2021**	31.12.2020
Present value of the pension obligation	101,197	101,556
Fair value of plan assets	-14,144	-12,629
Provisions for pensions	**87,053**	**88,927**

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 3,697 thousand (previous year: EUR 3,195 thousand) was recognised in the year under report 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	2021	2020
As at 1.1.	**101,556**	**99,367**
Current service cost	4,405	3,544
Past service cost	40	16
Interest expense	872	1,073
Remeasurement		
Actuarial gains/losses from the change in demographic assumptions	–913	499
Actuarial gains/losses from the change in financial assumptions	–1,014	1,020
Actuarial gains/losses from experience adjustments	–110	–247
Pension payments	–3,257	–3,065
Currency effects and other changes	–382	–651
As at 31.12.	**101,197**	**101,556**

The pension obligation breaks down among the beneficiaries as follows:

- Active members: EUR 56,885 thousand (previous year: EUR 57,751 thousand)
- Deferred members: EUR 10,381 thousand (previous year: EUR 10,060 thousand)
- Pensioners: EUR 33,931 thousand (previous year: EUR 33,745 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 %	
		2021	2020
Discount rate	+0.5%	–6.3	–7.3
	–0.5%	7.2	7.6
Pension factor	+0.25%	2.6	2.6
	–0.25%	–2.5	–2.5
Salary factor	+0.25%	0.2	0.3
	–0.25%	–0.2	0.0
Life expectancy	+10%	6.6	6.7

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 2021, the weighted average duration of the defined benefit obligation was 15.8 years (previous year: 16.1 years).

71.8 percent of the pension obligations of EUR 101,197 thousand (previous year: EUR 101,556 thousand) relate to Germany (previous year: 72.2 percent).

In Germany in particular, the Wilo Group has decided to use the internal financing effect of provisions for pensions and to back pension obligations with plan assets only to a relatively limited extent. The fair value of plan assets changed as follows:

Fair value of plan assets

EUR thousand	2021	2020
As at 1.1.	**12,629**	**12,195**
Interest income	196	185
Remeasurement		
Gain/loss on plan assets (excluding interest income)	93	43
Payments	–545	–416
Amounts paid in by employer	1,113	892
Currency effects and other changes	658	–270
As at 31.12.	**14,144**	**12,629**

Plan assets break down as follows:

Components of plan assets

EUR thousand	2021	2020
Cash	11,136	10,579
Qualifying insurance policies	2,574	1,634
Investment funds	434	416
As at 31.12.	**14,144**	**12,629**

Furthermore, there are employee pension liability policies to cover provision-funded pension obligations in the amount of EUR 2,676 thousand (previous year: EUR 1,510 thousand) though these do not satisfy the requirements for classification as plan assets under IAS 19.

The Wilo Group is not currently assuming any material payments into plan assets in the coming years.

SIMILAR OBLIGATIONS Similar obligations for post-employment benefits amount to EUR 3,745 thousand for 2021 (previous year: EUR 3,819 thousand). The gross obligation amounts to EUR 6,066 thousand (previous year: EUR 7,675 thousand and includes gross partial retirement obligations for WILO SE in the amount of EUR 4,989 thousand (previous year: EUR 5,751 thousand)). The EUR 3,441 thousand fair value of plan assets as at the end of the reporting period (previous year: EUR 3,983 thousand) is deducted insofar as it relates to obligations under the partial retirement scheme. Excess plan assets not attributable to obligations under the partial retirement scheme in the amount of EUR 1,120 thousand (previous year: EUR 127 thousand) are 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 2021 was determined using a discount rate of –0.15 percent (previous year: –0.13 percent). Furthermore, an annual wage and salary increase of 1.5 percent was assumed (previous year: 1.5 percent).

(9.16) 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 2021 financial year. The Wilo Group expects that the corresponding repayments of EUR 23,114 thousand (previous year: EUR 21,741 thousand) will be almost fully paid to customers by the middle of 2022.

Other provisions

Current

EUR thousand	Bonuses and rebates	Guarantees	Restructuring	Other	**Total**
As at 1 January 2021	**21,741**	**14,935**	**14,848**	**10,407**	**61,931**
Currency translation	477	124	0	524	**1,125**
Utilisation	10,317	1,172	4,704	3,348	**19,541**
Reclassification	0	66	2,601	0	**2,667**
Reversal	671	2,766	3,729	1,567	**8,733**
Additions from business combinations	0	0	0	742	**742**
Addition	11,884	4,032	1,464	7,201	**24,581**
As at 31 December 2021	**23,114**	**15,219**	**10,480**	**13,959**	**62,772**

Non-current

EUR thousand	Guarantees	Restructuring	Anniversary	**Total**
As at 1 January 2021	**3,785**	**2,601**	**1,733**	**8,119**
Currency translation	14	0	0	**14**
Utilisation	364	0	0	**364**
Reclassification	–66	–2,601	0	**–2,667**
Reversal	231	0	0	**231**
Additions from business combinations	583	0	0	**583**
Addition	783	0	198	**981**
As at 31 December 2021	**4,504**	**0**	**1,931**	**6,435**

In the previous year, the Wilo Group initiated growth-oriented restructuring measures aimed at safeguarding the company's future by further reducing its cost base and increasing its independence from regional value chains. These measures relate to all areas of the company and also include the relocation of functions and the consolidation of locations. The measures are an important structural condition for profitable growth and will sustainably strengthen the Wilo Group's future viability. In the year under report, the follow-up planned measures negatively impacted other operating income by EUR 1.5 million.

(9.17) Tax liabilities

The Wilo Group reported tax liabilities of EUR 7,832 thousand as at the end of the reporting period (previous year: EUR 7,989 thousand).

(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 2021 consisted of EUR 189,880 thousand (previous year: EUR 188,952 thousand) in cash and sight deposits with banks, EUR 3,822 thousand (previous year: EUR 967 thousand) of which was subject to restrictions on title.

The changes in cash due to exchange rate changes of EUR 9,576 thousand (previous year: EUR –8,763 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 16,119 thousand (previous year: EUR 17,348 thousand).

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

Change in financial liabilities and lease liabilities

			Non-cash			
EUR thousand	**1.1.2021**	Cash flows	Addition from business combinations	Other non-cash changes	Currency translation	**31.12.2020**
Financial liabilities (non-current)	229,160	125,275	18,516	15,241	0	388,192
Financial liabilities (current)	117,095	–76,078	64	–15,241	0	25,840
Lease liabilities	32,905	–15,694	76	13,994	393	31,674
Total	**379,160**	**33,503**	**18,656**	**13,994**	**393**	**445,706**

			Non-cash		
EUR thousand	**1.1.2020**	Cash flows	Other non-cash changes	Currency translation	**31.12.2020**
Financial liabilities (non-current)	205,406	104,442	–80,688	0	229,160
Financial liabilities (current)	113,503	–77,096	80,688	0	117,095
Lease liabilities	41,532	–15,706	8,377	–1,298	32,905
Total	**360,441**	**11,640**	**8,377**	**–1,298**	**379,160**

Interest received for cash and interest paid is allocated to net cash flow from financing activities because the interest received includes mainly 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 2021 and the changes as against the previous year:

Derivative financial instruments	Fair value				Nominal amount	
	Maturity from 31 December 2021					
EUR thousand	Less than 1 year	Between 1 and 5 years	More than 5 years	Previous year	**31.12.2021**	31.12.2020
Forward exchange contracts	-354	-546	-22	1,585	81,699	57,955
Commodity derivatives	324	0	0	2,053	452	6,152

Net finance costs include gains of EUR 414 thousand (previous year: EUR 1,706 thousand) and losses of EUR 2,641 thousand (previous year: EUR 665 thousand) (see note (8.7) and note (8.8)).

CASH FLOW HEDGE ACCOUNTING FOR LONG-TERM LOANS
WILO SE has extended various long-term loans to WILO USA LLC with a total volume of USD 100.6 million (previous year: USD 65.0 million). USD 60.6 million was recognised as at the end of the reporting period (previous year: USD 34.5 million). The loan agreements provide for interest and principal payments. Even though the loans (hedged items) are eliminated in the consolidation process, there remains a currency risk and net foreign-currency result in net financial income in the consolidated financial statements from the currency translation of the Group loans in the financial statements of WILO SE. 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 a total of 33 (previous year: 16) external forward exchange contracts (hedging instruments) as at 31 December 2021; these hedge the repayment tranches of this loan to 2 August 2027 and are designated as cash flow hedges. As at the reporting date, the fair value of these derivatives was EUR -754 thousand (previous year: EUR 1,793 thousand) and was recognised in other current financial liabilities (previous year: other financial assets).

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

2021	Carrying amount	Expected reclassification		
EUR thousand		Less than 1 year	Between 1 and 5 years	More than 5 years
Other comprehensive income	453	501	78	-126
Nominal amount in USD million		11.8	44.4	4.3
Average exchange rate hedge USD/EUR		1.1680	1.2011	1.2379
Fair value	-754	-227	-504	-23

2020	Carrying amount	Expected reclassification		
EUR thousand		Less than 1 year	Between 1 and 5 years	More than 5 years
Other comprehensive income	1,512	816	654	42
Nominal amount in USD million		10.0	22.0	3.0
Average exchange rate hedge USD/ EUR		1.1816	1.1658	1.1732
Fair value	1,793	300	1,239	254

In the financial year, a result for the market performance of the derivatives of EUR -2,246 thousand (previous year: EUR 2,023 thousand) was recognised in other comprehensive income. In the same period, part of the deferred result of EUR 5,669 thousand (previous year: EUR -2,691 thousand) for existing derivatives and EUR 816 thousand (previous year: EUR 507 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 HEDGE ACCOUNTING – PURCHASES AND SALES OF GOODS In addition, Wilo uses hedge accounting in accordance with IAS 39 to hedge currency risks relating to the purchase and sale of inventories. 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. The Group held the following forward exchange contracts for hedging changes resulting from operating currency risks:

Forward exchange contracts for hedging operating currency risks 31.12.2021	1–6 months	6–12 months	More than one year
Nominal amount CHF: EUR in EUR million Average forward exchange rate CHF:EUR	3.0 0.9319	2.1 0.9301	1.1 0.9440
Nominal amount GBP: EUR in EUR million Average forward exchange rate GBP:EUR	4.0 1.1620	3.2 1.1552	0.8 1.1465
Nominal amount CNY: EUR in EUR million Average forward exchange rate CNY:EUR	1.7 0.1311	2.0 0.1355	0.0 0
Nominal amount RUB: EUR in EUR million Average forward exchange rate RUB:EUR	9.2 0.0118	0.0 0	0.0 0

31.12.2020	1–6 months	6–12 months	More than one year
Nominal amount CHF: EUR in EUR million Average forward exchange rate CHF:EUR	3.9 0.9304	2.2 0.9468	1.3 0.933
Nominal amount GBP: EUR in EUR million Average forward exchange rate GBP:EUR	5.9 1.1147	4.7 1.1072	0.0 0
Nominal amount PLN: EUR in EUR million Average forward exchange rate PLN:EUR	3.2 0.2255	0.7 0.2247	0.0 0
Nominal amount RON: EUR in EUR million Average forward exchange rate RON:EUR	2.5 0.2007	1.2 1.1984	0.0 0

Rolling FX hedging of cash inflows/supplier payments

2021 exchange rate risk in EUR thousand	Forward exchange contracts for sales	Forward exchange contracts for purchases
Carrying amount of other comprehensive income as at 1.1.	152	-8
Change in other comprehensive income[1]	2,290	-174
Reclassification from other comprehensive income to profit and loss	-2,133	75
Carrying amount of other comprehensive income as at 31.12.	**309**	**-107**
of which:		
Carrying amount of forward exchange contract asset[2]	277	49
Carrying amount of forward exchange contract liability[2]	-500	0
Nominal amount at the reporting date	22,359	-500

2020 exchange rate risk in EUR thousand	Forward exchange contracts for sales	Forward exchange contracts for purchases
Carrying amount of other comprehensive income as at 1.1.	930	0
Change in other comprehensive income[1]	-3,021	105
Reclassification from other comprehensive income to profit and loss	2,179	-49
Carrying amount of other comprehensive income as at 31.12.	**88**	**56**
of which:		
Carrying amount of forward exchange contract asset[2]	233	0
Carrying amount of forward exchange contract liability[2]	-322	-76
Nominal amount at the reporting date	18,169	-1,277

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

[2] The carrying amounts of the hedging instruments are reported in "Other financial assets" (9.5) or "Other financial liabilities" (9.13). 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 2021 for each IFRS 9 measurement category and statement of financial position category.

Financial assets and liabilities as at 31 December 2021		Carrying amount under IFRS 9		
EUR thousand	IFRS 9 measurement category	Amortised cost	Fair value	Derivatives used in hedge accounting
Current and non-current financial assets				
Trade receivables	Amortised cost	292,669		
Other financial assets				
Receivables from subsidiaries, jointly controlled entities and associates	Amortised cost	399		
Receivables from derivative financial instruments not used in hedge accounting	FVTPL		329	
Receivables from derivative financial instruments used in hedge accounting	n/a			722
Loans	Amortised cost	64		
Equity instruments	FVOCI in equity		4,159	
Miscellaneous financial assets	Amortised cost	11,661		
Cash	Amortised cost	189,880		
Current and non-current financial liabilities				
Financial liabilities	Amortised cost	414,032		
Trade payables	Amortised cost	233,463		
Other financial liabilities				
Bills payable	Amortised cost	10,571		
Liabilities to subsidiaries, jointly controlled entities and associates	Amortised cost	2,729		
Liabilities from derivative financial instruments not used in hedge accounting	FVTPL		0	
Liabilities from derivative financial instruments used in hedge accounting	n/a			1,649
Miscellaneous financial liabilities	Amortised cost	27,807		
of which aggregated by IFRS 9 measurement category				
Amortised cost		1,183,275		
FVOCI in equity			4,159	
FVTPL			329	
Derivatives used in hedge accounting				-927

Financial assets and liabilities as at 31 December 2020

EUR thousand	IFRS 9 measurement category	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	279,276		
Other financial assets				
Receivables from subsidiaries, jointly controlled entities and associates	Amortised cost	247		
Receivables from derivative financial instruments not used in hedge accounting	FVTPL		2,053	
Receivables from derivative financial instruments used in hedge accounting	n/a			2,025
Loans	Amortised cost	132		
Equity instruments	FVOCI in equity		1,994	
Miscellaneous financial assets	Amortised cost	10,763		
Cash	Amortised cost	188,952		
Current and non-current financial liabilities				
Financial liabilities	Amortised cost	346,255		
Trade payables	Amortised cost	178,788		
Other financial liabilities				
Bills payable	Amortised cost	9,570		
Liabilities to subsidiaries, jointly controlled entities and associates	Amortised cost	2,650		
Liabilities from derivative financial instruments not used in hedge accounting	FVTPL		42	
Liabilities from derivative financial instruments used in hedge accounting	n/a			398
Miscellaneous financial liabilities	Amortised cost	22,169		
of which aggregated by IFRS 9 measurement category				
Amortised cost		1,038,802		
FVOCI in equity			1,994	
FVTPL			2,011	
Derivatives used in hedge accounting				1,627

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 only exception is financial liabilities, which have a carrying amount of EUR 414,032 thousand (previous year: EUR 346,255 thousand) and a fair value of EUR 430,273 thousand (previous year: EUR 356,703 thousand). The fair values of financial liabilities were calculated using net present value methods.

The Group has four investments measured at fair value in other comprehensive income and whose fair value of EUR 4,159 thousand (previous year: EUR 1,994 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 2021.

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.

The acquisition of the shares in ABIONIK Group GmbH, Germany, in the year under report resulted in the acquisition of two sub-investments of ABIONIK Group GmbH in Guhong Environmental Engineering Equipment Co. Ltd., Shanghai / China and LIKU-TECH ENVIRONMENTAL SOLUTIONS INDIA PRIVATE LIMITED, Nolambur (Chennai) / India. The fair value of the investments corresponds to the cost of EUR 2,165 thousand.

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 416 thousand (previous year: EUR 199 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 329 thousand (previous year: EUR 2,053 thousand) and EUR 0 thousand (previous year: EUR 42 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 2021 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 2021 financial year

Measurement category	Carrying amount 31 Dec.	Interest and dividends	Impairments	Impairment reversals	Effects of currency translation	Net gains/losses
Financial assets						
Amortised cost	494,673	3,069	-5,227	5,621	23,114	26,577
FVOCI in equity	4,159	0	0	0	0	0
FVTPL	329	0	0	0	0	0
Total financial assets		**3,069**	**-5,227**	**5,621**	**23,114**	**26,577**
Financial liabilities						
Amortised cost	688,602	-8,646	0	0	-24,310	-32,956
Total financial liabilities		**-8,646**	**0**	**0**	**-24,310**	**-32,956**

Net gains and losses by measurement category 2020 financial year

Measurement category	Carrying amount 31 Dec.	Interest and dividends	Impairments	Impairment reversals	Effects of currency translation	Net gains/losses
Financial assets						
Amortised cost	479,370	2,919	-6,626	3,560	13,602	13,455
FVOCI in equity	1,994	0	0	0	0	0
FVTPL	2,053	0	0	0	0	0
Total financial assets		**2,919**	**-6,626**	**3,560**	**13,602**	**13,455**
Financial liabilities						
Amortised cost	559,432	-9,623	0	0	-8,930	-18,553
FVTPL	42	0	0	0	0	0
Total financial liabilities		**-9,623**	**0**	**0**	**-8,930**	**-18,553**

(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 2021 and 2020 that were recognised at fair value or for which the fair value was disclosed.

Fair value hierarchy

	31.12.2021 Level 2	31.12.2020 Level 2
Receivables from derivative financial instruments used in hedge accounting	722	2,025
Receivables from derivative financial instruments not used in hedge accounting (FVTPL)	329	2,053
Liabilities from derivative financial instruments used in hedge accounting	1,649	398
Liabilities from derivative financial instruments not used in hedge accounting (FVTPL)	0	42
Financial liabilities (fair value)	430,273	356,703
	Level 3	**Level 3**
Equity instruments (FVOCI in equity)	4,159	1,994

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 2021 and 2020. 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 used solely 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 report on risks and opportunities of the Group management report.

CURRENCY RISK The Wilo Group is exposed to 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 2021 and 2020 in the respective foreign currency. This consists of foreign-currency transactions in operating activities and foreign-currency financing activities up to 31 December 2021 and 2020 as well as expected foreign-currency transactions in operating activities in 2022 and 2021. 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 positions as at 31 December 2021

in EUR million	EUR	USD	CNY	GBP	PLN	RON	RUB
Cash	4.3	8.4	24.9	2.1	0.0	0.6	132.4
Trade and other receivables	15.3	5.6	2.2	0.0	0.0	0.0	0.2
Receivables from affiliated companies	3.5	16.6	136.4	1.1	9.9	7.2	96.3
Trade and other payables	-2.3	-9.4	-15.5	0.0	0.0	0.0	-0.1
Liabilities due to affiliated companies	-6.7	-0.1	0.0	0.0	0.0	0.0	0.0
Financial liabilities	-27.0	-3.3	-57.4	0.0	-0.3	0.0	-221.8
Currency risk from assets and liabilities – gross –	**-12.9**	**17.8**	**90.6**	**3.2**	**9.6**	**7.8**	**7.0**
Expected sales in 2022	87.3	40.1	296.9	7.6	133.0	31.3	4,031.0
Expected acquisitions in 2022	-107.9	-62.0	-366.9	-0.5	0.0	0.0	-1,104.0
Currency risk from expected transactions in operating activities in 2022 – gross –	**-20.6**	**-21.9**	**-70.0**	**7.1**	**133.0**	**31.3**	**2,927.0**
Hedging	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Currency risk – net –	**-33.5**	**-3.9**	**20.6**	**10.3**	**142.6**	**39.1**	**2,934.0**

Foreign-currency risk positions as at 31 December 2020

in EUR million	EUR	USD	CNY	GBP	PLN	RON	RUB
Cash	7.6	2.9	17.7	1.4	0.0	0.0	4.3
Trade and other receivables	14.4	3.3	22.7	0.0	0.0	0.0	0.0
Receivables from affiliated companies	2.5	11.6	67.9	0.5	5.4	2.1	52.8
Trade and other payables	-2.8	-6.7	-10.3	0.0	0.0	0.0	-0.1
Liabilities due to affiliated companies	-33.0	-0.1	0.0	0.0	0.0	0.0	0.0
Financial liabilities	-0.9	-2.1	-25.8	-1.3	-0.4	0.0	-94.9
Currency risk from assets and liabilities – gross –	**-12.2**	**8.9**	**72.2**	**0.6**	**5.0**	**2.1**	**-37.9**
Expected sales in 2021	67.1	37.2	138.0	4.9	95.3	17.2	4,000.0
Expected acquisitions in 2021	-94.3	-46.9	-215.9	-0.3	0.0	0.0	-829.9
Currency risk from expected transactions in operating activities in 2021 – gross –	**-27.2**	**-9.7**	**-77.9**	**4.6**	**95.3**	**17.2**	**3,170.1**
Hedging	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Currency risk – net –	**-39.4**	**-0.2**	**-5.7**	**5.2**	**100.3**	**19.3**	**3,132.2**

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

	2021		2020	
EUR million	**+10%**	**-10%**	+10%	-10%
EUR	-3.7	3.0	-4.3	3.6
USD	5.4	-4.5	2.9	-2.4
CNY	0.7	-0.6	0.1	-0.1
GBP	2.3	-1.7	1.8	-1.5
PLN	3.5	-2.9	2.9	-2.3
RON	1.1	-0.9	0.9	-0.7
RUB	4.8	-4.0	3.8	-3.1

In addition to a long-term Group loan in USD, exchange rate risks in connection with sales of products and purchases of inventories are hedged. 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 other comprehensive income:

Sensitivity analysis

	2021		2020	
EUR million	**+10%**	**-10%**	+10%	-10%
USD	4.0	-6.2	4.2	-1.1
CHF	0.7	-0.9	0.7	-0.7
GBP	0.7	-0.9	1.0	-1.2
PLN	0.1	-0.1	0.5	-0.3
RUB	1.2	-0.7	0.0	0.0

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 the copper risk.

As things currently stand, the Wilo Group's result of operations would be influenced by price fluctuations on the global markets for copper and aluminium in the 2021 financial year as follows:

Sensitivity analysis

EUR thousand	**2021**	2020
Fair value of risk position for commodity price changes –gross –	**39,921**	**23,165**
Fair value hedges	0	1,868
Fair value of risk position for commodity price changes – net ––	**39,921**	**21,297**
Earnings impact of 10% price increase	3,992	-1,575
Earnings impact of 10% price decrease	-3,992	1,575

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 AND DEFAULT 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 net sales 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 317,217 thousand (previous year: EUR 303,808 thousand). As at 31 December 2021, EUR 17,787 thousand (previous year: EUR 18,064 thousand) in specific write-downs was recognised on past due trade receivables of EUR 33,982 thousand (previous year: EUR 39,071 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 6,760 thousand using the expected credit loss model (previous year: EUR 6,467 thousand). Further information can be found in note (9.4) Trade receivables.

In addition, there is a maximum credit risk of EUR 4,159 thousand (previous year: EUR 1,994 thousand) for financial assets in the “fair value through OCI (FVOCI in equity)” measurement category and of EUR 329 thousand (previous year: EUR 2,011 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 2021.

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 2021			
Receivables from derivative financial instruments	1,051	–646	405
Liabilities from derivative financial instruments	–1,649	646	–1,003
31 December 2020			
Receivables from derivative financial instruments	4,078	–440	3,638
Liabilities from derivative financial instruments	–440	440	0

[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 430 million. The cash credit facilities were utilised in the amount of EUR 175.6 million (previous year: EUR 36.3 million) and the guarantee and margin facilities were utilised in the amount of EUR 27.9 million (previous year: EUR 34.5 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 (9.11)).

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 contractual maturities and corresponding cash outflows, including estimated interest payments, for financial liabilities as at 31 December 2021 and 2020:

Cash outflows for financial liabilities as at 31 December 2021

31.12.2021	Carrying amount	Agreed payments	Maturities Less than 1 year	Between 1 and 5 years	More than 5 years
Financial liabilities					
Non-current	388,192	-424,812	-7,094	-276,436	-141,282
Current	25,840	-25,840	-25,840	0	0
Trade payables	233,963	-233,963	-233,963	0	0
Lease liabilities	31,673	-31,673	-12,385	-18,363	-925
Other financial liabilities	41,107	-41,107	-36,678	-4,429	0
Derivative financial instruments	1,649	-1,649	-750	-899	0
Total	**722,424**	**-759,044**	**-316,710**	**-300,127**	**-142,207**

Cash outflows for financial liabilities as at 31 December 2020

31.12.2020	Carrying amount	Agreed payments	Maturities Less than 1 year	Between 1 and 5 years	More than 5 years
Financial liabilities					
Non-current	229,160	-262,052	-4,876	-101,475	-155,701
Current	117,095	-117,095	-117,095	0	0
Trade payables	182,564	-182,564	-182,564	0	0
Lease liabilities	32,905	-32,905	-12,368	-18,132	-2,405
Other financial liabilities	30,613	-30,613	-26,568	-4,045	0
Derivative financial instruments	440	-440	-422	-18	0
Total	**592,777**	**-625,669**	**-343,893**	**-123,670**	**-158,106**

(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 and sureties of EUR 9,658 thousand as at 31 December 2021 (previous year: EUR 7,498 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 result from operating activities with customers and suppliers of the Wilo Group and from obligations in connection with the Wilopark construction project. Contingent liabilities with a nominal obligation of EUR 1,237 thousand (previous year: EUR 125 thousand) had an agreed remaining term of less than one year as at 31 December 2021, while nominal obligations of EUR 987 thousand (previous year: EUR 64 thousand) with an agreed remaining term of more than one year have been contractually stipulated. There are also contingent liabilities with a nominal obligation of EUR 7,434 thousand (previous year: EUR 7,309 thousand).

Purchase commitments for planned capital expenditure on property, plant and equipment amounted to EUR 35,100 thousand as at 31 December 2021 (previous year: EUR 13,575 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

	2021	2020
Production	4,540	4,444
Sales and administration	3,660	3,392
Total	**8,200**	**7,836**
Germany	2,910	2,670
Outside Germany	5,290	5,166
Total	**8,200**	**7,836**

The average number of employees increased by 4.6 percent year-on-year (previous year: 1.1 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	2021	2020
Wages and salaries	368,383	333,630
Social security contributions and expenses for retirement benefits	79,662	72,252
of which for retirement benefit expenses EUR 6,879 thousand (previous year: EUR 8,082 thousand)		
Total	**448,045**	**405,882**

Wage subsidies due to the COVID-19 pandemic of EUR 156 thousand (previous year: EUR 2,594 thousand) were offset against staff costs.

Depreciation and amortisation for 2021, including leases in accordance with IFRS 16, is calculated as follows:

Depreciation and amortisation

EUR thousand	2021	2020
Depreciation and amortisation	88,596	79,869

(13.5) Proposal for the appropriation of profits

At the proposal of the Executive Board, the Annual General Meeting of WILO SE on 11 April 2022 will resolve the payment of a dividend of EUR 1.19 per ordinary share, with the remaining unappropriated surplus of WILO SE being carried forward to new account.

(13.6) Events after the end of the reporting period

Since the end of February, Russia has been waging war against the Ukraine. The outbreak of war is considered a non-adjusting event. There is thus no impact on the recognition and measurement of assets and liabilities as at the reporting date. The Wilo Group has subsidiaries in Russia and in the Ukraine. It is currently not possible to forecast how the Russian attack on Ukraine, the sanctions imposed as a result or further escalation will impact on the development of the subsidiaries or the Wilo Group.

The Executive Board of WILO SE approved the consolidated financial statements for submission to the Supervisory Board on 1 March 2022. 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 399 thousand (previous year: EUR 247 thousand). Liabilities to these companies amounted to EUR 2,729 thousand at the reporting date (previous year: EUR 2,650 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 986 thousand (previous year: EUR 758 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 1,535 thousand (previous year: EUR 1,353 thousand) from these companies in the 2021 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 33 thousand (previous year: EUR 34 thousand) were generated with the heating and air-conditioning installation company in the 2021 financial year. There were receivables from this company of EUR 4 thousand as at 31 December 2021 (previous year: EUR 10 thousand). At the same time, the Wilo Group procured goods and services in the amount of EUR 5 thousand (previous year: EUR 64 thousand) from this company. As in the previous year, there were no receivables from this company as at 31 December 2021.

There are also leases relating to land and buildings that are directly or indirectly owned by shareholders. Total lease payments of EUR 354 thousand were made to these shareholders in 2021 (previous year: EUR 296 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 2021 (previous year: EUR 39 thousand). As in the previous year, in this connection there were no receivables from the foundation as at 31 December 2021.

A member of the Executive Board utilised WILO SE services. In the year under report, the total amount was EUR 4 thousand.

(13.8) Auditor's fees

The following fees were recognised as an expense in the 2021 financial year for services provided by the auditor of the consolidated financial statements, KPMG AG Wirtschaftsprüfungsgesellschaft:

Auditor's fees

EUR thousand	2021	2020
Audits of financial statements		
of which for the previous year: EUR -46 thousand (2020: EUR 45 thousand)	445	550
Other assurance services		
of which for the previous year: EUR 11 thousand (2020: EUR 0 thousand)	192	704
Other services		
of which for the previous year: EUR 7 thousand (2020: EUR 6 thousand)	52	38
Total	**689**	**1,292**

(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

EUR thousand	2021	2020
Total remuneration of the Executive Board	**7,953**	**3,849**
IAS 24.17 (a)	6,552	3,212
IAS 24.17 (b)	1,241	637
IAS 24.17 (c)	160	0

As at the end of the reporting period, EUR 3.3 million (previous year: EUR 0.6 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 total remuneration paid to former members of the Executive Board amounted to EUR 1.0 million in the 2021 financial year (previous year: EUR 1.0 million). As at the end of the reporting period, a pension provision of EUR 8.2 million (previous year: EUR 8.5 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 0.5 million in the 2021 financial year (previous year: EUR 0.5 million).

(13.10) Executive bodies of the company

SUPERVISORY BOARD

Prof. Dr. Norbert Wieselhuber
(until 31 December 2021)
– Chairman –
Managing Director of Dr. Wieselhuber & Partner GmbH
Unternehmensberatung
Planegg

Lars Roßner
– Vice Chairman –
(since 1 January 2022 Chairman)
Partner at Buse, Rechtsanwälte
Steuerberater PartG mbH
Dusseldorf

Dr. Hinrich Mählmann
(since 1 January 2022 Deputy Chairman)
Personally liable partner
and Managing Director of Otto Fuchs KG
Wiehl

Vincent Baudry (since 15 April 2021)
European Works Council
Laval, France

Jean-Francois Germerie (until 31 January 2021)
European Works Council
Laval, France

Prof. Dr. Dr. h.c. Michael ten Hompel
Professor for Transportation and Warehouse Systems
at the Technical University of Dortmund
Managing Director of the Fraunhofer-Gesellschaft for
Material Flow and Logistics IML
Dortmund

Daniela Mohr
European Works Council
Dortmund

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

EXECUTIVE BOARD

Oliver Hermes
– Chairman –
Essen

Dr. Patrick Niehr
Dortmund

Georg Weber
Dusseldorf

Mathias Weyers
Essen

Dortmund, 1 March 2022

The Executive Board

Oliver Hermes Dr. Patrick Niehr Georg Weber Mathias Weyers

Shareholdings

Shareholdings of WILO SE as at 31 December 2021
(Disclosure pursuant to section 315e HGB)

	Ownership interest in %
ABIONIK Group GmbH, Berlin / Germany	100.0
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
Guhong Environmental Engineering Equipment Co.Ltd., Shanghai / China*	25.0
HydroPoint Data Systems, Inc., Petaluma / USA*	2.6
Hydroserve GmbH, Leopoldsdorf / Austria	100.0
LIKU-TECH ENVIRONMENTAL SOLUTIONS INDIA PRIVATE LIMITED, Nolambur (Chennai) / India*	51.0
LIKUSTA Umwelttechnik GmbH, Lich / Germany	100.0
MARTIN Systems GmbH, Berlin / Germany	100.0
Mating Membrance Technology Co. Ltd., Shanghai / China*	50.0
PT. WILO Pumps Indonesia, Jakarta / Indonesia	100.0
S.E.S.E.M. S.A.S., Saint-Denis / France	100.0
Steinhardt Gesellschaft mit beschränkter Haftung, Taunusstein / Germany	100.0
STEMMA S.R.L., Trissino / Italy	100.0
TUMAR bvba, Merelbeke / Belgium	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	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

Shareholdings of WILO SE as at 31 December 2021
(Disclosure pursuant to section 315e HGB)

	Ownership interest in %
WILO Indústria, Comércio e Importação LTDA, City of Sao Paulo / Brazil	100.0
WILO Industriebeteiligungen GmbH, Dortmund / Germany	100.0
WILO IndustrieSysteme GmbH, Chemnitz / Germany	100.0
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 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
WILO (Changzhou) Pump Co., Ltd, Changzhou / China	100.0
WRI-TECH Industrial Serv. B.V., Uitgeest / Netherlands	100.0

* These companies were not included in the 2021 consolidated financial statements.
** 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 2021, 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 2021 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 2021. In accordance with German statutory provisions, we did not audit the content of the elements of the Group management report set out in the “Other information” section of our auditor's report. 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 2021 and of its financial performance for the financial year from 1 January to 31 December 2021.

- 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. Our audit opinion on the Group management report does not extend to the content of the elements of the Group management report set out in the “Other information” section. 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.

Other information

The legal representatives and the Supervisory Board are responsible for the other information. Other information refers to the disclosures contained in the Group management report that constitute non-management report information and that are marked as unaudited.

Our opinions on the consolidated financial statements and on the Group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

As part of our audit, we have a responsibility to read the aforementioned other information and to evaluate whether it

- contains material discrepancies with the consolidated financial statements, the elements of the Group management report whose content we have audited or the knowledge we have obtained during our audit, or

- otherwise appears materially incorrect.

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. Furthermore, the legal representatives are responsible for the internal controls that they deemed 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, 1 March 2022
KPMG AG
Wirtschaftsprüfungsgesellschaft

Dr. Hain	Huperz
Wirtschaftsprüfer	Wirtschaftsprüfer
[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 2021 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 four regular meetings in person and one extraordinary resolution in 2021, although participation took the form of video and telephone conferences in some cases due to the restrictions on contact in connection with the measures to curb the coronavirus pandemic.

The Supervisory Board meeting on 15 April 2021 focused on the impact of the coronavirus pandemic as well as the annual financial statements and the consolidated financial statements as at 31 December 2020. The business performance of the Wilo Group was discussed in detail, particularly in light of the global economic situation. Another topic was the status of the location development project in Dortmund. Furthermore, the current status of ongoing M&A projects was discussed at the meeting.

At its meeting on 2 July 2021, the Supervisory Board dealt in particular with strategic implications of the coronavirus pandemic and the decoupling trend in the post-corona era. In addition, the current economic situation including M&A activities and the status of the location development project in Dortmund were discussed.

In the extraordinary resolution on 22 September 2021 the only item discussed was the resolution relating to the acquisition of the operating business of QuantumFlo, Inc., Florida, USA. The Supervisory Board unanimously approved the company acquisition.

At its meeting on 7 October 2021, the Supervisory Board dealt with current economic developments, with the focus on the results of the annual international executive conference.

At its meeting on 14 December 2021, the Supervisory Board approved the integrated planning for 2022–2026 and also discussed the impact of the coronavirus pandemic, a strategy update, the current economic situation, the current status of ongoing M&A projects, and the status of the Dortmund location development project.

Both the consolidated financial statements with the management report for the 2021 financial year presented with the annual report and the separate financial statements of WILO SE for the 2021 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 4 April 2022 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 11 April 2022, 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.

There were no changes to the composition of the Executive Board in the year under report. There were the following changes to the composition of the Supervisory Board:

Prof. Dr. Norbert Wieselhuber resigned his position as Chairman and member of the Supervisory Board effective 31 December 2021 for personal reasons. In the meeting on 14 December 2021, Herr Lars Roßner was elected as new Chairman of the Supervisory Board and Dr. Hinrich Mählmann as his deputy.

In the interests of good, responsible corporate governance, WILO SE and its executive bodies voluntarily comply with the current version of the 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.

In 2021, the coronavirus pandemic again sustainably shaped Wilo Group's business and activities. Despite these exceptionally challenging conditions, Wilo can again look back on a successful financial year in which it continued on its profitable growth path with considerable increases in net sales and earnings.

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 exemplary commitment and outstanding loyalty that has been a vital factor in this success.

Dortmund, April 2022

The Supervisory Board
Lars Roßner
Chairman

GLOSSARY

Asset deal
Form of corporate acquisition in which the assets of a company (e.g. land, buildings and machines) are acquired individually 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.

Established markets
For the purpose of external reporting, the Wilo Group differentiates between established markets and growth markets. As at 31 December 2021, the established markets comprised the European nations, the USA and Canada.

Growth markets
For the purpose of external reporting, the Wilo Group differentiates between established markets and growth markets. As at 31 December 2021, growth markets comprised China, India, Korea, the Southeast Asian nations, Australia and Oceania, Russia, Belarus, the Caucasian nations, Turkey, the Middle East, Africa and Latin America.

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.

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.

Smart urban areas
Wilo defines smart urban areas as 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.

MEDIA

This Annual Report was published on 12 April 2022 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/annualreport2021

PUBLISHING INFORMATION

Publisher
WILO SE
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44263 Dortmund

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Wilo uses FSC®-certified paper to produce its print products, thereby supporting sustainable forest management. Printing of this report was climate-neutral.

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