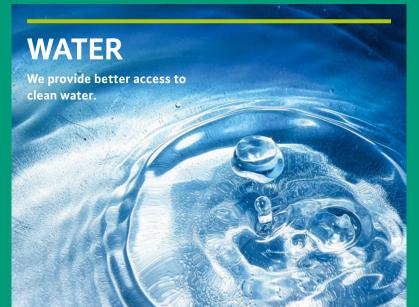
Wilo SUSTAINABILITY REPORT 2018









SUSTAINABILITY STRATEGY

Innovative and holistic.







CONTENTS

3 FOREWORD

5 COMPANY

- 5 About Wilo
- 6 Ambition 2025, megatrends
- 7 Materiality
- 8 Sustainability Strategy

10 WATER

- 11 Water solutions
- 14 Smart water systems
- 16 Water partnerships
- 19 Water in production and processes

20 ENERGY AND EMISSIONS

- 21 High-efficiency pumps
- 23 Energy solutions
- 25 Smart products
- 27 Emissions in production and processes

29 MATERIALS

- 30 Reuse of materials
- 32 Material efficiency
- 33 Product packaging
- 34 Materials in production and processes

35 EMPLOYEES AND SOCIETY

- 37 Employee development
- 39 Diversity
- 41 Occupational health and safety
- 43 Social programmes
- 47 Compliance

49 SUSTAINABLE MANAGEMENT

- 50 Sustainability organisation
- 51 Stakeholder dialogue
- 53 Value chain

55 APPENDIX

- 56 About this report
- 57 Additional key figures
- 60 Certification overview
- 61 GRI overview
- 66 Publishing information



> FOREWORD

COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

FOREWORD BY THE EXECUTIVE BOARD

DEAR LADIES AND GENTLEMEN.

As a leading international technology company that moves water in the building services, water management and industry segments, the Wilo Group creates sustainable value added through energy-efficient products, systems and solutions.

As a matter of principle, working with the precious resources of water and energy requires sustainable thinking and action, and this fact is firmly enshrined in Wilo's corporate culture. The Wilo Group is contributing to positive overall development through its commitment to sustainable action. Based on our Ambition 2025, we have developed a holistic sustainability strategy that takes all stakeholder groups into account and that is being implemented throughout the world of Wilo.

Energy and resource efficiency are essential components of climate protection. According to realistic estimates, pumps are thought

to account for around 10% of the world's electricity consumption. 90% of the pumps used are outdated and inefficient. Replacing the outdated technology could save up to 246 TWh in electricity for heating, cooling and air conditioning applications alone. This is equivalent to the capacity of around 80 medium-sized power plants that would no longer be required. Accordingly, the Wilo Group aims to significantly reduce energy consumption through the use of our system solutions.

Digitalisation is opening up new possibilities in this respect and giving us additional opportunities to realise energy savings. And the responsible use of water as a resource is more important now than ever before. The growing world population, global economic development and ongoing climate change are vastly increasing the pressure on the world water balance and its infrastructure. Our highly efficient technologies are contribut—



Oliver Hermes
President & Chief Executive Officer (CEO)
Wilo Group

ing to the more conservative use of the resources of water and energy around the world. This is the aspiration we pursue not only with our system solutions, but also in our production and distribution processes.



> FOREWORD

COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

Cooperation and dialogue in a spirit of partnership open up additional opportunities for sustainable action. We firmly believe that multilateralism and cross-border cooperation are essential elements of this process. Wilo seeks out and promotes cross-industry dialogue with business, politics and various NGOs and is involved in numerous international associations.

We are also represented at board level in organisations including the German Near and Middle East Association, the German Eastern Business Association and the German Engineering Federation (VDMA). Around the world, we also work with the likes of the European Water Association (EWA) and the development agency Gesellschaft für internationale Zusammenarbeit (GIZ) to support projects such as training centres in Argentina with the aim of establishing energy-efficient technologies. Wilo is a member of the UN Global Compact Network

"Energy and resource efficiency are essential components of climate protection. Our highly efficient technologies are contributing to the more conservative use of the resources of water and energy around the world."

and is committed to the 17 Sustainable Development Goals (SDGs) of the United Nations.

I am proud of what we have already achieved at Wilo. Diversity, inclusivity and openness are qualities that shape our corporate culture. Wilo's innovative products, systems and solutions, with their highly efficient technology that creates sustainability wherever it is used, are making a valuable contribution in light of global challenges like climate change. But there is still a lot to be done. I would like to take this report as an opportunity to invite

you to enter into a dialogue with us so that we can press ahead with the topic of sustainability together, both at Wilo and beyond.

Yours.

W ()

Oliver Hermes President & Chief Executive Officer (CEO) Wilo Group



COMPANY

> About Wilo

Ambition 2025, Megatrends Materiality Sustainability Strategy

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

ABOUT WILO

The Wilo Group is a global leading premium provider of pumps and pump systems for building services, water management and industry.

Using smart solutions that bring together people, products and services, the Wilo Group is on the path to becoming the digital pioneer in the sector. Around 7,800 employees support the company worldwide.

Net sales EUR 1.46 billion

With strong growth of 6.2 percent after adjustment for exchange rate effects, the Wilo Group increased its net sales for the ninth year in succession.

EBIT **91.9** million

The Wilo Group generated EBIT of EUR 91.9 million. The EBIT margin declined to 6.3 percent, largely as a result of the sharp rise in commodity prices as well as reorganisation measures aimed at cutting costs and securing future viability. Adjusted for non-recurring reorganisation expenses, the EBIT margin amounted to 7.7 percent.

Capital expenditure EUR 154.8 million

Wilo is investing in a modern and efficient corporate infrastructure in order to strengthen the foundations for its accelerated, profitable growth. Capital expenditure reached a new record in 2018.

7,830

The Wilo Group had over 7,800 employees worldwide in 2018. More than ever before!

Market segments



BUILDING SERVICES RESIDENTIAL

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



BUILDING SERVICES COMMERCIAL

We are market, innovation and smart solution leader.



OEM

We are preferred partner for smart integrated solutions.



WATER MANAGEMENT

We are global market player and digital solution provider.



INDUSTRY

We are specialist in selected branches and applications.



COMPANY

About Wilo

> Ambition 2025, Megatrends

Materiality

Sustainability Strategy

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

AMBITION 2025

OUR GROUP STRATEGY

We (net-)work in co-operation with our stakeholders across the value chain.

We achieve above-average growth with more than 10 percent profitability.

Our organic growth is supported by a boost of M&A activities.

We continue the implementation of our globalisation approach.

We intensify our development of full product ranges, smart systems, services and solutions.

MEGATRENDS

As part of its long-term strategy, Wilo has defined six global megatrends that will affect people's lives over the coming decades and that are crucial to the Group's current and future business.



Globalisation



Energy shortage



Climate change



Urbanisation



Digital transformation



Water shortage



COMPANY

About Wilo

Ambition 2025, Megatrends

> Materiality

Sustainability Strategy

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

MATERIALITY

Wilo applied a number of sources in identifying the material topics for its sustainability strategy:

- UN Sustainable Development Goals
- Topic-specific GRI standards
- Wilo megatrends
- Industry-specific challenges
- Statutory provisions
- Results of the stakeholder dialogue

The resulting topic lists were analysed by the sustainability department with the support of the specialist departments. Wilo's key stakeholder groups were compiled and an evaluation of the individual sustainability challenges was performed with a view to the future. A distinction was made between low and high relevance for internal and external stakeholders in order to reflect Wilo's positioning on the respective topic. In the next stage, the resulting picture was discussed with the Steering Committee and the prioritisation of the material sustainability topics was finalised. These form the basis for the sustainability strategy.

Materiality analysis





#	Topic
13	Occupational Health and Safety
14	Training and Education
15	Diversity and Equal Opportunity
16	Freedom of Association and Collective Bargaining
17	Child Labour
18	Forced Labour
19	Rights of Indigenous Peoples
20	Local Communities
21	Customer Health and Safety
22	Marketing and Labelling
23	Customer Privacy
24	Digital Transformation



COMPANY

About Wilo

Ambition 2025, Megatrends

Materiality

> Sustainability Strategy

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

SUSTAINABILITY STRATEGY

Wilo has developed an explicit sustainability strategy on the basis of Ambition 2025 and the key issues identified. The central tenet of this strategy is to provide more people with clean water while simultaneously reducing the ecological footprint. A total of 17 strategic objectives have been formulated within four strategic action areas. These objectives are integrated into the functional strategies of the individual departments and are therefore part of regular reporting. There are also reviews with the Sustainability Council twice every year to analyse the progress made in achieving these objectives. The following sections of this report provide detailed descriptions of the measures, results and successes for each strategic objective.

WATER

We are giving **100 million people** better access to clean water.

Increasing the range of innovative water solutions: Growth rate **7.5%**.

Extending the portfolio of smart-water-systems: Growth rate **35%**.

Expansion of strategic partnerships.

Reduction in drinking water consumption at Wilo sites: **20%**.

ENERGY & EMISSIONS

We are reducing CO₂ emissions by **50 million tonnes**.

Energy savings through high-efficiency pumps: **1.8 TWh** annually.

Increase energy solution projects: **10,000** projects annually.

Extending the portfolio of smart products: Growth rate **15%**.

Reduction of CO₂ emissions at Wilo sites: **climate-neutral production**.

MATERIAL & WASTE

We are reducing the consumption of raw materials by **250 tonnes**.

of responsibility towards staff and society.

Increasing the number of reusable parts: **30,000** items annually.

Reduction in material consumption:

12 tonnes annually.

Greater use of reusable packaging: **100%**.

Increasing the recycling rate at Wilo sites: **90%**.

Promotion of educational programmes: **20** new training centres.

EMPLOYEES & COMPANY

We act with a greater sense

Ensuring social compliance: **90%** training coverage.

Effective development programmes: **70%** of managers developed internally.

Reinforce the culture of variety: **20%** of women in management positions.

Ensuring a safe working environment: **0** accidents.



FORFWORD

COMPANY

About Wilo

Ambition 2025, Megatrends Materiality

> Sustainability Strategy

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

UN GLOBAL COMPACT AND SDGS

The United Nations Global Compact is the largest and most important initiative for responsible company management worldwide. Ten general principles and the Sustainable Development Goals (SDGs) promote the vision of an inclusive and sustainable world economy that delivers benefits to all people, communities and markets, both now and in the future. Wilo's Executive Board signed up to the UN Global Compact in 2018, thereby underlining its commitment to making a contribution to the international sustainability targets. Seven of the 17 SDGs are particularly relevant to Wilo:

SDG 6 – Clean water and sanitation: Sustainability is firmly enshrined in Wilo's core business. Our aim is to supply more people with clean water. In this way, we are making a substantial contribution to Goal 6, which involves expanding activities and programmes in the area of water and sanitation between now and 2030.



SDG 8 – Wilo is investing in comprehensive training and skills development programmes in the firm belief that this forms the basis for employability and sustainable economic growth.



SDG 9 – Industry, innovation and infrastructure: Goal 9 involves establishing robust infrastructures and promoting sustainable industrialisation and innovation. Wilo is contributing to this goal through the use of its environmentally friendly, highly efficient technologies and its innovations in the area of digitalisation.



SDG 11 - Sustainable cities and communities: Urbanisation is one of the key developments of the 21st century. More than half of the world's population lives in cities,

and this figure is expected to rise to 70% by 2050. Wilo is using smart technologies to meet this challenge.



SDG 12 – Responsible consumption and production: The world's population is currently consuming more resources than its ecosystems can provide. Wilo works resource-efficiently and supports initiatives to promote the circular economy. Wilo is continuously reducing its use of primary raw materials by expanding its infrastructure for the returning and recycling of old products.



SDG 13 – Climate action: Climate change is a central challenge for sustainable development. Wilo has always strived to optimise the energy consumption of its pumps.

Through the use of highly efficient pump technology, Wilo is helping to significantly reduce CO₂ emissions.



SDG 17 – The only way to achieve the sustainability goals is by working together. Companies, governments and other organisations will have to cooperate in order

to increase the leverage of their respective contributions. For Wilo, partnerships are an essential function of business success. The expertise gained in working with networks is also used in cooperation on sustainable topics.

COMPANY

> WATER

Water solutions

Smart water systems

Water partnerships

Water in production and processes

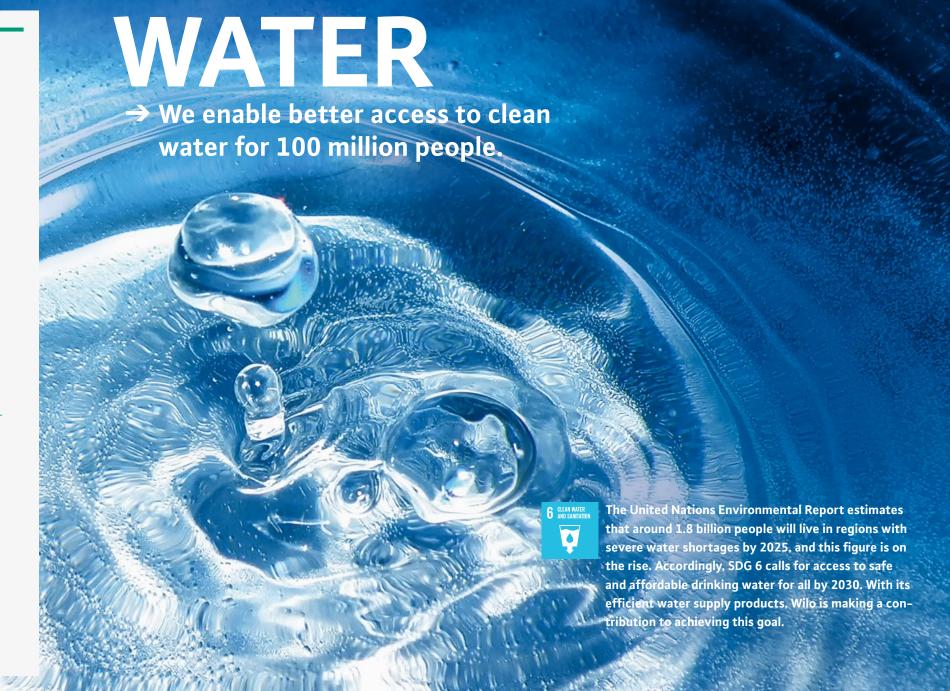
ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX





COMPANY

WATER

> Water solutions

Smart water systems

Water partnerships

Water in production and processes

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

WATER SOLUTIONS

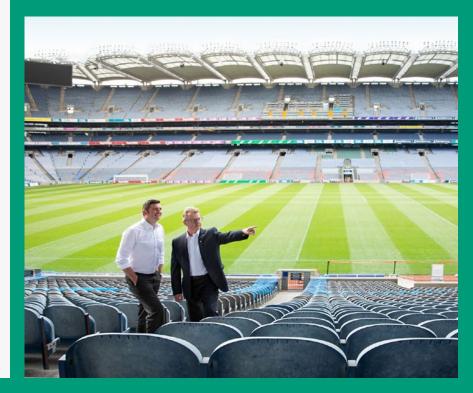
One of our overarching sustainability goals is to supply people with clean water. Achieving this aim requires a focus on the entire water cycle. Sustainable water management focuses on more than just the production and supply of drinking water. The disposal and treatment of wastewater is also of central importance. They help to ensure that the valuable resource of water is handled efficiently and prevent elevated levels of contamination.

Wilo offers an extensive range of products for all areas of water management and works continuously to enhance its product portfolio. In 2018, we increased our net sales in the water solutions segment by around 9%. Our aim is to achieve annual growth of at least 7.5%.

90/0
Growth in the water solutions segment in 2018



Wilo-SCP with high-efficiency IE4 motor for use in the public water supply





COMPANY

WATER

> Water solutions

Smart water systems Water partnerships

Water in production and processes

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

SOLUTIONS FOR ALL AREAS OF WATER MANAGEMENT

The global water shortage is turning water into one of the world's most precious commodities. The uninterrupted supply of clean water for drinking, for agriculture and for industry is one of the greatest challenges of the future. Wilo's aim is to offer tailored solutions for achieving this.

→ The reliable production of drinking water is one of the cornerstones of a functional society. Our products set standards in terms of efficiency and effectiveness. For example, the flexible submersible pump Wilo-Zetos achieves pump efficiency of up to 84.5%. It is also suitable for challenging raw water extraction processes and can transport up to 310 m³ of water an hour.

Resource scarcity and steadily growing demand for fresh water require efficient and dependable solutions for reliable water treatment. Different Wilo products are used in the reprocessing of service water, water recycling and sewage treatment plants. The Wilo-EMU TRE 312 submersible mixer meets these requirements with a high-efficiency motor and low-wearing materials that are tailored to the harsh operating environment.



- → Progressive urbanisation is placing considerable demands on the water supply. This makes ensuring the security of supply a matter for technology in terms of both reliability and growth in water volumes. Products like the Wilo–SCP are used wherever it is necessary to move large volumes of water and absolute reliability and constant efficiency are required. The Wilo–SCP transports up to 17,000 m³/h with energy efficiency of up to 90%.
- → Pumping untreated wastewater is becoming increasingly demanding due to the growing prevalence of solids and the retention time in the network are rising, which is making the medium to be pumped more aggressive and problematic. With motor efficiency of up to 92.3% and hydraulic efficiency of up to 75%, our new Wilo-Rexa SOLID-Q with Nexos intelligence, the first digital submersible wastewater pump with IE5 PM motor technology, allows us to pump 360 m³/h of water with an extremely high degree of efficiency and reliability.



COMPANY

WATER

> Water solutions

Smart water systems

Water partnerships

Water in production and processes

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX



With around 10 million inhabitants, Ho Chi Minh City is Vietnam's largest conurbation. The Hoa Phu pumping station lies at the heart of the metropolis, guaranteeing its water supply. Two Wilo vertical tubular casing pumps with a height of almost 14 metres and a weight of nearly 20 tonnes have been in operation here since 2016. They offer significantly higher capacities than their predecessors while also consuming less energy. This helps to ensure an efficient and sustainable water supply for the city.

1,850 litres of water per second





COMPANY

WATER

Water solutions

> Smart water systems

Water partnerships

Water in production and processes

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

SMART WATER SYSTEMS

DIGITAL SOLUTIONS FOR THE URBAN WATER INFRASTRUCTURE

Digital transformation goes hand in hand with numerous changes. Advantages and opportunities, but also new challenges and uncertainties. **Wilo is a digital pioneer in the pump industry** that is harnessing the possibilities of growing digitalisation and using smart water systems to help meet the future requirements in terms of drinking water extraction, water pumping and transportation and wastewater treatment.

The complexity of the challenges to the water infrastructure in urban agglomerations requires modern, holistic solutions in which urban infrastructures and many areas of life are connected with each other digitally and intelligently. Monitoring, modelling and managing the vast infrastructures is impossible without intelligently connected digital solutions. The comprehensive introduction of information and communication technologies and smart applications plays a key role in this respect. Wilo seeks to develop smart systems and solutions for these requirements. This enables the efficient operation of products in order to protect resources and prevent potential outages in advance. Wilo launches new products, systems and solutions on the market with a pioneering spirit

that allows it to provide answers to the complex tasks of tomorrow today. In 2018, we increased our growth in the area of smart water systems by 300% — a clear sign that there is significant demand for future—oriented technology.

One of our product highlights is a solar-powered borehole pump that enables a self-sufficient water supply in dry regions that are not connected to the power grid. With a view to the growing water shortage around the world in particular, this innovation forms part of Wilo's contribution to ensuring access to clean drinking water.



> 300%

Growth in smart water systems in 2018





COMPANY

WATER

Water solutions

> Smart water systems

Water partnerships

Water in production and processes

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX





Nexos intelligence uses up to 30% less energy

Pumping untreated wastewater is always difficult due to changeable discharge conditions and often leads to blockages in the pressure pipeline network. The innovative pressure drainage system with Nexos intelligence connects the individual pumping stations and monitors and controls them to ensure reliable, energy–efficient pressure drainage.

Tczow is the first municipality to install a pressure drainage system with Nexos intelligence. 185 pumping stations are now connected using the Wilo software. This ensures the optimal flow rate, minimises the risk of sediment build-up and uses up to 30% less energy.



COMPANY

WATER

Water solutions

Smart water systems

> Water partnerships

Water in production and processes

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

WATER PARTNERSHIPS

Strategic partnerships are of central importance at Wilo. In a world of increasingly complex and multifaceted challenges, they are the key to successful action. Our aim is to establish a global network of political institutions, NGOs, associations and relevant partner companies in order to work together to promote the sustainable use of water and nature through holistic and innovative solutions. Wilo already has a leading role in numerous associations. We are actively shaping the political dialogue by participating in the debate on sustainable discussion in the world. In 2018, for example, we were involved in delegation visits to Dubai and Zambia focusing on solutions to the challenges of growing globalisation, climate change and water shortage.

Dubai – Wilo strengthens cooperation with DEWA

The aim of DEWA (Dubai Electricity & Water Authority) is to establish Dubai as a global centre for efficient energy and water management systems by implementing development projects and strategic initiatives. The Wilo delegation, headed by Oliver Hermes (CEO and Chairman of the Executive Board of the Wilo Group) and the German ambassador, showed considerable interest in cooperating with DEWA projects in the area of efficient and intelligent energy and water management. "Dubai is taking the lead in the smartification of urban regions. We have the right solutions to make a contribution in the area of building services and energy and water management," comments Oliver Hermes.





Oliver Hermes and the German ambassador at a meeting with Sheikh Mohammed bin Rashid Al Maktoum in Dubai.



COMPANY

WATER

Water solutions

Smart water systems

> Water partnerships

Water in production and processes

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

ZAMBIA

ZAMBIAN-GERMAN WATER PARTNERSHIP DAY IN LUSAKA

German Water Partnership and the Southern African–German Chamber of Commerce and Industry were delighted to arrange the Zambian–German Water Partnership Day in Lusaka on 11 October 2018 in order to promote bilateral cooperation between Zambia and Germany in the areas of investment and trade. As an overarching topic for economic cooperation, the environment and sustainability, water is essential to human development. The main themes of this high–level networking event were municipal water and wastewater management and industrial water management. As the main challenges of the Zambian stakeholder groups involve reducing water losses and wastewater treatment, technologies and the transfer of expertise are essential in order to ensure sustainable resource management.





GHANA

We welcomed the President of the Republic of Ghana in February 2018. The visit focused on the issues of drinking water supply and wastewater treatment for the African nation's growing population. During the meeting, the President of the Republic of Ghana, Nana Addo Dankwa Akufo-Addo, and a delegation of his ministers were informed about the latest technological developments and solutions and Wilo's activities in Africa and especially in Ghana. "In our country, the topics of wastewater treatment and drinking water quality are of paramount importance," explains President Nana Addo Dankwa Akufo-Addo.



COMPANY

WATER

Water solutions

Smart water systems

> Water partnerships

Water in production and processes

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX



Another key element of our networking is organising and attending international congresses and events. These represent an ideal platform for promoting the transfer of knowledge and initiating new partnerships. The outstanding events for us in 2018 were the German–African Agribusiness Forum and the German–African Energy Forum.

"Every drop counts"

The fourth German–African Agribusiness Forum was held in Berlin in early 2018. This event is organised by the German–African Business Association, which provides information on economic and political events in Africa. The agricultural sector uses 70% of the world's

available drinking water – twice as much as industry and private households combined. According to United Nations calculations, the world population is set to rise from 7.6 billion at present to 9.8 billion by 2050. Almost all this population growth will take place in developing nations.

More than 300 million hectares of land are irrigated around the world, a third of which involves the use of pumps. However, most of the pumps used are outdated and inefficient. "Solar-powered high-efficiency pumps for precision irrigation save water and energy. These savings are then available for other uses," says Gero Böhmer, Director Government & Public Affairs, explaining the relevance of Wilo's state-of-the-art technology. This ensures maximum efficiency and protects the human right to water, hygiene and food.

The 12th German-African Energy Forum

The 12th German–African Energy Forum was held in Hamburg in March 2018. It was organised by the German–African Business Association, which provides information on economic and political events in Africa. Wilo supported the podium discussion "Energy efficiency as the first fuel".

The first law of the energy transition is not to use energy at all. A buzzword in energy efficiency, "first fuel" describes an energy source that offers security of supply, reduces energy costs and facilitates the achievement of climate protection targets. Energy efficiency is already our most important energy source.



FORFWORD

COMPANY

WATER

Water solutions

Smart water systems

Water partnerships

> Water in production and processes

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

WATER IN PRODUCTION **AND PROCESSES**

Water is our core topic. Accordingly, we ensure that our production sites also use this resource conservatively. Water is primarily consumed in sanitation. Pump production is not particularly water-intensive. The exception is locations at which particularly high-performance pumps for water supply are manufactured, like in Hof or in India. Here, water is required for hydraulic product testing.

We have set ourselves the target of continuously reducing our annual water consumption per employee by 20% between now and 2025. The main measures are the use of rainwater, water purification and projects aimed at saving water. In 2018, we achieved a reduction of 2% compared with the previous year.



Example: Reduction in drinking water consumption at our site in Istanbul, Turkey

At our site in Istanbul, we looked for a solution to curb the rise in drinking water consumption. A lot of water is required for watering the facility grounds in particular, but it does not necessarily need to be of drinking water quality. The idea of using water from the on-site well was raised. "We examined the water quality and it absolutely satisfies the requirements," explains Nurcan Celic, site production and QHSEE manager. The water is now extracted using one of the company's own borehole pumps and used for irrigation and other peripheral processes, such as the fire extinguisher system. This is saving around 2,000 m³ of drinking water every year. "We are proud to have achieved a win-win result like this: We are cutting costs while also doing something good for the environment," summarises Nurcan Celic.

Key sustainability indicators	2016	2017	2018
Water consumption (m³)	98,222	93,091	94,209
Water consumption per employee (m³/employee)	19.6	17.9	17.5



COMPANY

WATER

> ENERGY AND EMISSIONS

High-efficiency pumps

Energy solutions

Smart products

Emissions in production and processes

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

ENERGY AND EMISSIONS

→ We are reducing CO₂ emissions by 50 million tonnes.



Climate change is becoming increasingly visible and tangible thanks to global warming and the accompanying extreme weather conditions. Action is required worldwide to stop, or at least limit, climate change and its consequences. One important measure is the reduction of greenhouse gases. Wilo is also making a significant contribution in this area with its products.





COMPANY

WATER

ENERGY AND EMISSIONS

> High-efficiency pumps

Energy solutions

Smart products

Emissions in production and processes

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

HIGH-EFFICIENCY PUMPS

Water consumption is increasing around the world due to megatrends including urbanisation, progressive climate change and rising population pressure. This is also leading to increased demand for energy for the exploration, transportation, collection and treatment of water. Inefficient pump systems drive up energy consumption: According to realistic estimates, pumps are thought to account for around 10% of the world's electricity consumption. Energy costs alone make up 93% of a pump's lifecycle costs.

Wilo was and remains the industry pioneer when it comes to energy efficiency. Compared with old, uncontrolled pumps, our highefficiency pumps generate savings of up to 80%. Assuming utilisation of around 60%, this means our high-efficiency pumps save

at least 1.8 TWh in energy every year – the equivalent of being able to shut off a medium–sized coal power plant every two years. In this way, Wilo is making an essential contribution to the achievement of the global climate targets.

Wilo's high-efficiency pumps make use of state-of-the-art technology. It is not individual components that make the pumps so efficient, but the overall system of hydraulics with maximum efficiency, intelligent control electronics, specially adapted sensors and extremely efficient motor technology. Wilo is taking advantage of the advance in digitalisation in particular to contribute to environmental and climate protection with smart solutions.



Wilo-Stratos GIGA Heating pump for commercial use



Wilo-Stratos
PICO
Heating pump
for private use
in detached and
semi-detached
houses

SUSTAINABILITY REPORT 2018

FOREWORD

COMPANY

WATER

ENERGY AND EMISSIONS

> High-efficiency pumps

Energy solutions

Smart products

Emissions in production and processes

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPFNDIX

FRANKFURT/MAIN

In business for the past 800 years, Messe Frankfurt is now the world's largest trade fair, congress and event organiser with its own grounds. Hall 12, which was inaugurated in 2018, sets new standards in terms of modern heating, air conditioning and cooling technology using high-efficiency products from Wilo.

Messe Frankfurt seeks to protect resources in order to ensure sustainable trade fairs. On the roof of Hall 12, a photovoltaic system with 5,300 solar modules generates energy equivalent to the annual consumption of 241 four-person households. In the hall itself, various Wilo solutions ensure energy-saving operations.

More than 70 Wilo pumps are in use at Messe Frankfurt. Optimal heating in Hall 12 is provided by high–efficiency Wilo–Stratos and Wilo–Stratos GIGA pumps. The Wilo–Stratos GIGA uses up to 70% less energy than conventional uncontrolled pumps. This corresponds to up to eight tonnes of CO_2 for every pump, every year. Single–stage, low–pressure centrifugal pumps are used for cooling. In conjunction with a Wilo control unit, pump performance can be controlled steplessly in order to ensure optimal and economic operation.



Up to
8 tonnes
of CO₂ is saved
by every
Wilo-Stratos
GIGA pump
every year.





FORFWORD

COMPANY

WATER

ENERGY AND EMISSIONS

High-efficiency pumps

> Energy solutions

Smart products

Emissions in production and processes

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPFNDIX

ENERGY SOLUTIONS

Wilo has been engaged with the topic of energy efficiency for many decades. The majority of all pumps in use worldwide are technologically outdated. Vast savings potential can be tapped by exchanging old, uncontrolled pumps for modern, highly-efficient equivalents. This could sustainably reduce global CO₂ emissions.

The initiative for greater economic efficiency and sustainability

Wilo-Energy Solutions is an initiative that involves the proactive replacement of still functioning but uncontrolled pumps with Wilo high-efficiency pumps. We inform operators of public, commercial and industrial buildings, plants and properties about all of the benefits of an early switch. In addition to the environmental benefit, arguments in favour include an 80% reduction in energy costs, future-proofing, security of supply and hygiene safety.

Initiating the energy transition with proactive efficiency measures

Our aim is to identify the savings potential in terms of energy and CO₂ for the pumps installed in the respective markets using professional measurements and to offer solutions for optimisation, e.g. a lifecycle cost calculation, in order to illustrate the savings potential. Optimising the existing systems or exchanging the installed pumps for new, highly efficient solutions has a



Wilo-Verol ine IP-F

> 10,000 energy solution projects in 2019



Wilo-Helix EXCEL: Highly efficient high-pressure centrifugal pump for water supply and pressure boosting

positive impact on operating costs, operational reliability and the carbon footprint. In 2018, the number of our global projects grew from 6,786 to 8,381. Our aim is to continue to increase this to 10,000 projects a year. The need for a sustainable approach to energy resources is indisputable in the face of climate change.

COMPANY

WATER

ENERGY AND EMISSIONS

High-efficiency pumps

> Energy solutions

Smart products

Emissions in production and processes

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPFNDIX





1549.3 MWh

energy saved every year

Sharjah Electricity and Water Authority distributes and markets electricity, water and natural gas to residents of the Emirate of Sharjah. The Al Falaj pumping station is one of numerous projects aimed at improving energy efficiency. As a provider of holistic solution systems, Wilo ensures that all customer requirements are satisfied.





COMPANY

WATER

ENERGY AND EMISSIONS

High-efficiency pumps
Energy solutions

> Smart products

Emissions in production and processes

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPFNDIX

SMART PRODUCTS

In order to further improve the system efficiency of its products, Wilo is focusing on digitalisation and began developing and launching smart products, particularly smart pumps, some years ago.

We set high standards for this new product category. Wilo only describes a product as smart when it offers a combination of state-of-the-art sensor technology, innovative control functions, bidirectional connectivity and excellent user friendliness. It goes without saying that the product must also meet and exceed the existing standards in terms of high efficiency and resilience.

Smart urban areas are springing up all around the world – conurbations in which infrastructures and areas of life are connected with each other digitally, not least with a view to countering the challenges of climate change and leveraging previously unattainable energy–saving potential.

Smart, intelligent, communication–enabled components are essential elements of these connected urban spaces. This is why Wilo is on its way to becoming the digital pioneer for the pump industry.

Wilo-Stratos MAXO heating pump. The world's first smart pump*



* We define smart pumps as an entirely new pump category that goes far beyond our high-efficiency pumps or pumps with pump intelligence. The combination of state-of-the-art sensors and innovative control functions (e.g. Dynamic Adapt plus and Multi-Flow Adaptation), b-idirectional connectivity (e.g. Bluetooth, integrated analogue inputs, binary inputs and outputs, interface to the Wilo Net), software updates and outstanding ease of use (e.g. through a set-up guide, the preview principle for anticipatory navigation and the proven Green Button technology) mean that these pumps are truly smart pumps.

10 MWh energy saved by each pump every year.





COMPANY

WATER

ENERGY AND EMISSIONS

High-efficiency pumps
Energy solutions

> Smart products

Emissions in production and processes

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPFNDIX



10
connected
Wilo-Stratos
MAXO pumps
form part of
EBZ's smart
boiler room.

EFFICIENCY THROUGH CONNECTIVITY

The European Education Centre for the Housing and Real Estate Industry (EBZ) is Europe's largest provider of training and further education in the industry. In 2018, the EBZ commissioned a new training and research centre. It includes a "smart boiler room", where research is being conducted into the efficient generation and distribution

of heat and cooling in the building. In other words, the installation is not only improving the interior climate in the new building, but is also delivering concrete research results in the area of intelligent building management. Ten Wilo-Stratos MAXO pumps are contributing to the energy-efficient operation of the heating and cooling system in the new

EBZ building, as is state-of-the-art boiler technology. But the system is more than just the sum of its parts. Thanks to interfaces and networking options, the various components can communicate with each other in order to realise extensive energy-saving potential.



COMPANY

WATER

ENERGY AND EMISSIONS

High-efficiency pumps Energy solutions

Smart products

> Emissions in production and processes

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

EMISSIONS IN PRODUCTION AND PROCESSES

Energy consumption

Wilo is committed to energy-efficient, resource-conserving products. As such, it goes without saying that we also ensure maximum energy efficiency at our own plants. The office buildings at five plants already have the "LEED Gold" green building certification, while the German plants in Dortmund, Hof and Oschersleben are also certified in accordance with ISO 50001. We have set ourselves the target of a year-on-year reduction in energy consumption of at least 1%, and we have achieved this goal in recent years. Although our total energy consumption is increasing due to company acquisitions and the extension of our business portfolio, the various energy-saving projects are having the desired effect: in 2018, they generated an energy saving of 825 MWh or 1.2% of prior-year consumption.

CO₂ emissions

Our aim is to make our locations carbon–neutral in the medium term. Globally, we currently record Scope 1 and 2 emissions, which are essentially the emissions resulting from the consumption of primary energy. In 2018, these amounted to 17,311 t $\rm CO_2$ across all production sites. To date, savings have been primarily generated through our energy–saving projects. In addition, we only purchase green electricity at our locations in Germany and France. As these are the locations with the highest electricity consumption, this makes a huge contribution to $\rm CO_2$ reduction: 11,000 t in 2018 alone. The next step is to expand our measures to include Scope 3 emissions (mobility, transportation, business travel, etc.).



Example: Energy-saving project at the Wilo site in Busan (Korea)

In 2018, the lighting at our site in Busan was fully switched over to energy-efficient LED technology. This is expected to lower energy consumption by more than 300 MWh a year, meaning a reduction in CO₂ emissions of around 200 t.

> 825 MWh energy saved in 2018

Key sustainability indicators	2016	2017	2018
CO ₂ emissions (t)	14,960	15,738	17,311
CO₂ emissions (kg)/ net sales (€ thousand)	11.27	11.05	11.83



COMPANY

WATER

ENERGY AND EMISSIONS

High-efficiency pumps
Energy solutions
Smart products

> Emissions in production and processes

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

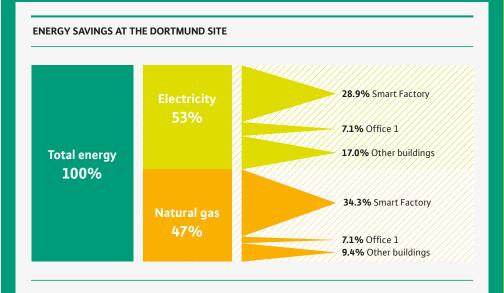
APPENDIX

WILO ENERGY MANAGEMENT

DORTMUND SITE

Presentation of the energy concept 2020+

WiloPark Dortmund is the largest construction project in the company's history. Over the coming years, we will build a state–of–the–art production location, expanding the company headquarters to become the leading digital location in the world of Wilo. The energy efficiency of the systems and installations is given high priority in planning and execution with a view to conserving resources and the environment. The office buildings are being constructed in accordance with the "LEED Gold" green building standard. The expected energy consumption of the new location will be around 40% lower than that of the existing buildings. CO_2 emissions will also be reduced significantly.





The following technologies, systems and solutions are being used:

- In-house electricity generation using a photovoltaic system
- Cogeneration using a natural gas-fired cogeneration plant
- Refrigeration, incl. using an absorption chiller and large cold buffer tanks
- Heat recovery through compressed air generation
- Roof greening on the factory building
- High proportion of natural light thanks to "open architecture"
- Technical lighting entirely using energy-efficient LED technology
- Building control system with innovative control functions, e.g. concrete core activation depending on the weather forecast
- Purchase of certified green electricity from renewable sources

Wilo SUSTAINABILITY REPORT 2018

FOREWORD

COMPANY

WATER

ENERGY AND EMISSIONS

> MATERIALS

Reuse of materials

Material efficiency

Product packaging

Materials in production and processes

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

MATERIALS

→ We are reducing the consumption of raw materials by 250 tonnes.



The megatrends of globalisation and urbanisation are continuing to progress. The population is growing steadily, as is the consumption of resources. Accordingly, one of the key tasks of sustainable economic activity is to reduce the use of raw materials. Wilo is aware of this responsibility and places great value on a resource-conserving product lifecycle.



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

> Reuse of materials

Material efficiency

Product packaging

Materials in production and processes

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

REUSE OF MATERIALS

Based on the principle of "prevention and use before recycling and disposal", our primary objective is to continuously increase the reuse rate of components and materials in order to conserve resources to the greatest possible extent. In 2018, we reused 30,000 components and products at our largest production site in Dortmund alone. We place particular emphasis on the reuse of resource-critical rare earth permanent magnets, 20,000 of which were kept in circulation.



> 30,000

components recycled every year

To date, most of the potential for reuse has been generated from internal processes. This is why it is extremely important for Wilo to recover more old products from the market in future. Our aim is to increase the number of product returns from 30,000 at present to 40,000 by 2020. To achieve this, we have participated in a research project supported by the German Federal Environmental Foundation (DBU) and worked with customers on the voluntary return of old pumps.

Recycling-friendly product design

Wilo thinks about the potential "end of life" of a product even in the design and production phase. In addition to their general environmental compatibility, all the materials and components used are examined in terms of their reusability or recyclability after the end of use.

At our in-house "analysis, repair and recycling centre", we not only process customer returns, but also perform targeted quality analyses of returned old products. This analysis involves the complete disassembly of the pumps and the start of clean material separation for the reusable material cycle. The potential recycling rate for a Wilo pump is almost 100%. Almost the entire pump can be returned to the material cycle.



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

> Reuse of materials

Material efficiency

Product packaging

Materials in production and processes

EMPLOYEES AND SOCIETY

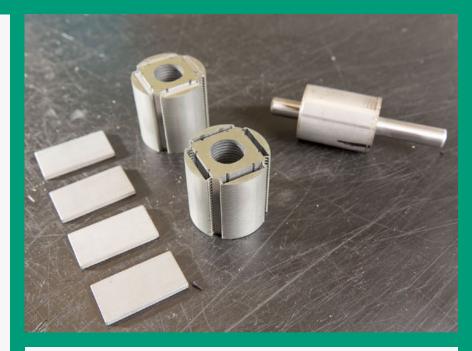
SUSTAINABLE MANAGEMENT

APPENDIX

Since 2014, the scope of recycled materials has been increased by over 40% to 215 tonnes a year. This growth has been recorded across all component groups. This serves as confirmation of Wilo's holistic approach to recycling and its efforts to achieve permanent improvement in this area.

Component	Material	Recyclability
Stators	Stainless steel, copper, plastic	99%
Impellers	Composite	99%
Impellers	Stainless steel	99%
Screws	Steel	99%
Rotors	lron, copper or stainless steel	90-99%
Drive shaft	Stainless steel	99%
Bearings	Carbon	98%
Bearing plates	Brass or stainless steel	99%
Motor housings	Aluminium	99%
Pump housings	Iron	99%
Seals	Rubber	Thermal recovery
Type plates	Iron	98%
Terminal strips	Composite & metal	99%
Housings	Metal or composite	99%
Circuit boards	Various	Electronic recycling
Connection cables	Copper and plastic	98%
	Impellers Impellers Impellers Screws Rotors Drive shaft Bearings Bearing plates Motor housings Pump housings Seals Type plates Terminal strips Housings Circuit boards	Stators Stainless steel, copper, plastic Impellers Composite Impellers Stainless steel Screws Steel Rotors Iron, copper or stainless steel Drive shaft Stainless steel Bearings Carbon Bearing plates Brass or stainless steel Motor housings Aluminium Pump housings Iron Seals Rubber Type plates Iron Terminal strips Composite & metal Housings Metal or composite Circuit boards Various

20,000 rare earth magnets reused



Rare earth recycling

Built into permanent magnets, rare earth elements form the basis of the energy-saving potential of Wilo's high-efficiency pumps. Wilo places particular emphasis on ensuring that these materials are handled carefully and sustainably. The number of magnets reused in 2018 – around 20,000 – shows that we are on the right track. The valuable raw materials can also be recovered using recycling processes. However, this requires special expertise – and, of course, the availability of corresponding recycled materials. With this in mind, Wilo has launched a research project in which various partners are investigating the technological and logistical conditions for the efficient and effective recycling of rare earth magnets.



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

Reuse of materials

> Material efficiency

Product packaging

Materials in production and processes

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPFNDIX

MATERIAL EFFICIENCY

We are aware of our responsibility to conserve natural resources. One of the main contributions we can make in this respect is to use as few resources as possible in manufacturing our products. The mechanical design of our pumps is performed using state-of-the-art numerical methods in which only the materials strictly required are used. Together with the wide-scale use of traditional materials that are also predestined for the sustainable material cycle on account of their recyclability, such as cast iron, this represents a unique symbiosis in the sense of a conservation-oriented product philosophy.

Reducing the consumption of raw materials

Our aim is to continuously optimise the use of materials in our products. Key criteria include the weight proportion, the environmental impact and the procurement cost. Accordingly, we consider materials such as copper, aluminium and rare earth elements. Technological development means the consumption of raw materials has decreased significantly across all product groups. Today's pumps weigh only a fraction of their predecessors while delivering the same performance. This effect is particularly clear when it comes to specific materials such as copper, which is required for the manufacture of electric motors. The use of high-efficiency permanent magnets has reduced copper consumption in our glanded pumps alone by more than 12 tonnes a year and rising.



Wilo-Stratos GIGA 44 kg

The Wilo-Stratos GIGA is a high-efficiency inline pump with an IE5 EC motor. It is one of the most efficient pumps in its class.



The Wilo-VeroLine IP-E is an electronically controlled single inline pump.



Key sustainability indicators	2016	2017	2018
Annual copper saving (t)	11.57	12.17	13.60



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

Reuse of materials

Material efficiency

> Product packaging

Materials in production and processes

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

PRODUCT PACKAGING

CONSERVING RESOURCES IN PACKAGING

Wilo is committed to using packaging in a resource–friendly and environmentally friendly manner to the greatest possible extent. This means that, when selecting packaging variants, we always take into account reusability, the reduction or substitution of (certain) materials and recyclability.

Inbound logistics and intralogistics

Wilo designs and is gradually introducing reusable packaging for inbound and intralogistics goods flows. The benefits are twofold. Firstly, it means significantly lower resource consumption and less packaging waste. And secondly, it makes it easier for us to handle materials in production and supports our vision of a "5+1 Lean Production" philosophy at our smart factories. This involves realising production support processes with limited inventories (5 days in stock plus 1 day in production). In this concept, our reusable packaging, improved stackability and the use of foldable containers are supporting the optimisation of transportation and CO_2 emissions.

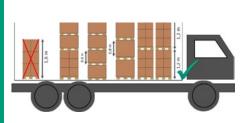
The proportion of reusable packaging for semi-finished products between individual production phases has been increased to 77%. Concepts have already been devised for 93% of all materials and are being implemented in a timely manner.

Outbound logistics

In the area of outbound logistics, too, Wilo is continuously working on resource-conserving, environmentally friendly packaging. One important step is optimising product utilisation per palette. Storage space and transportation counts have been significantly reduced thanks to improved stackability and the coordination of individual packaging sizes. In converting packaging, Wilo also took care to use sustainable materials and, for example, to use fully recyclable materials or materials that are already made of recycled material (e.g. cardboard) instead of non-recyclable dual-component foam. In addition, Wilo is pursuing developments that will allow it to essentially do without films and plastics or to replace them with biodegradable alternatives.



Use of reusable modular containers and foldable load carriers



Increase in utilisation thanks to the introduction of modular sizes and improved stackability

77% reusable packaging in 2018



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

Reuse of materials

Material efficiency

Product packaging

> Materials in production and processes

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

MATERIALS IN PRODUCTION AND PROCESSES

Resource conservation in terms of materials also plays a significant role at our production sites. Waste management is an established element of the local environmental programmes and one of the conditions for ISO 14001 certification, which is mandatory for all Wilo's larger locations. In addition, development forms part of the Group-wide sustainability strategy and is subject to quarterly reporting.

Our aim is to generate as little waste as possible at our production sites. This means not only waste from the manufacturing process for our products, but also packaging waste, paper and residual waste from administrative functions and canteens. The key indicators we observe in this respect are the total waste volume, the recycling rate and the proportion of hazardous materials.

In the past year, the total waste volume increased from 8,008 t (2017) to 8,253 t (2018). This was due to the expansion of our business activities and the addition of new sites. Significant measures to reduce waste include the increased material efficiency of our products and the optimisation of packaging.

The second indicator after the total waste volume is the recycling rate. Recycling allows us to keep materials in the reusable material cycle. Our aim is to achieve a Group-wide recycling rate in excess of 90%. Key measures to achieve this include the use of recyclable materials and the systematic separation of all materials obtained.

Case study: Increase in the recycling rate in Laval, France

In 2018, we initiated a project to improve the recycling rate for plastic packaging at our production site in Laval. In a widescale action, we established a separation and collection system together with the local waste disposal company and informed the employees accordingly. The result is clear: The recycling volume has increased by more than 3 tonnes. Waste that was previously incinerated or dumped is now returned to the material cycle.



83.4% recycling rate in 2018

wito SUSTAINABILITY REPORT 2018

FOREWORD

COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

> EMPLOYEES AND SOCIETY

Employee development

Diversity

Arbeits- und Gesundheitsschutz

Social programmes

Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

EMPLOYEES AND SOCIETY

→ We act in a humane manner and contribute to society.



By people, for people. As a global company, we accept responsibility – for our employees, customers, society and the environment. Therefore, in our eyes, responsible behaviour and social commitment go hand in hand with successful corporate development. We focus on promoting training and skills development in the firm belief that this forms the basis for employability and sustainable economic growth in accordance with SDG 8.



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

> EMPLOYEES AND SOCIETY

Employee development

Diversity

Occupational health and safety

Social programmes

Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

EMPLOYEES AND SOCIETY

Global responsibility

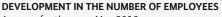
With 60 different locations and around 7,800 employees, the Wilo Group is one of the world's leading manufacturers in the field of high-tech pumps. Megatrends like globalisation and digitalisation not only affect our business activities, but also pose new challenges in terms of HR management.

Our aim is to develop high-performing employees and diverse teams within a consistent, people-oriented corporate culture. The basis is provided by our global Wilo values and internal standards like the Code of Conduct and the Wilo Labour Relations Policy. Fair treatment, upholding employees' rights at an international level and assuming social responsibility are key aspects of our global HR policy. The Wilo Group is committed to implementing worldwide standards when it comes to remuneration. This is based on clearly documented job profiles that are formulated uniformly throughout the Group. The Wilo Group assists its employees in their pension

Results of the 2017 employee survey

78% attachment to Wilo

82% performance motivation







The Wilo Group had over 7,830 employees worldwide in 2018.

More than ever before!

provision and offers pension benefits in line with the specific circumstances and regulations of individual countries. Relationships based on trust and close cooperation with social partners and employee representatives go without saying as far as we are concerned.

Attractive employer

Wilo's perception as an attractive employer is reflected in the employee satisfaction rate and, by extension, in the employee fluctuation rate, which amounted to 5.9% in 2018. Every two years, Wilo's entire global workforce is invited to take part in an employee survey in order to identify areas in which we can improve as an employer. In 2017, around 7,200 employees responded to the survey and provided their feedback. The unusually high participation rate of 83% illustrates the degree of employee interest in shaping the future development of our company as well as the importance that is placed on a culture of open and constructive feedback and learning.



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

> Employee development

Diversity

Occupational health and safety
Social programmes

Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

EMPLOYEE DEVELOPMENT

As a global employer, the Wilo Group is shaping the future together with its employees. Our innovative strength is based on the people who work with motivation, responsibility and creativity. Our aim is to establish a culture of learning in which each and every person takes responsibility for their own development and the tasks they need to perform in order to achieve the defined goals within their team. This is why we encourage employee development and lifelong learning at all hierarchical levels.

The Group Academy

The Group Academy is the global platform for comprehensive training in the form of e-learning, e-training, face-to-face training, blended learning and more. Well over 700 modules are currently offered. In 2018, around 4,000 employees worldwide participated in one or more training courses. This represents a significant increase compared with 2017 (+35%) and illustrates the degree of acceptance enjoyed by these measures.

Fit for the digital future

Making employees fit for the digital future is one of the main objectives of employee development. The Wilo e-academy already provides extensive services in the area of digitalisation tools and

STATUS AFTER PROGRAMME COMPLETION - 2018



75% of participants take up a higher position after completing the programme

processes. In the production environment, a smart training room has also been established at the Dortmund site in order to bring Industry 4.0 to life in the form of an action–oriented training programme. 37 training sessions were held in 2018 with the participation of more than 360 employees. Following a successful pilot phase, the programme is being rolled out to additional locations.

Targeted talent promotion

The talented employees and managers of tomorrow are identified at an early stage and developed as part of global and regional management development pools. Our analyses show that more than 75% of the participants in our talent pools take up higher positions within two years.

70% of managers are recruited internally



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

> Employee development

Diversity

Occupational health and safety

Social programmes

Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

Leadership principles

Demanding outstanding performance while seeing and appreciating employees as individuals — this is what the Wilo Group requires of its managers. A clearly defined, international management culture based on values is becoming increasingly important as the digitalisation strategy requires a different kind of management than in previous years. Wilo has taken a big step in this direction with the development of specific management guidelines.

More than 50 international managers and participants from the global development pools discussed and evaluated the Wilo management values and formulated them in such a way as to enable the content to be realised in different cultures.

The new management guidelines will help to encourage innovation and outstanding performance in an era of growing digitalisation while ensuring a focus on human values.

Leadership labs are being organised at international level in order to transfer the guidelines into everyday practice. The aim is to operationalise the values for day-to-day management in cross-location training groups and to integrate them into existing processes. All global managers are required to participate in the leadership labs in order to ensure a uniform leadership culture. 17 labs have been held to date with the participation of managers from 23 different countries and a participation rate of 88%.

The Wilo Leadership Principles











PEOPLE

Give guidance, empower our people and show their contribution to our success

CREATIVITY

Broaden the scope, create an inspiring environment and encourage innovation



CULTURE

Value our traditions, challenge the existing and shape the tomorrow

PERFOMANCE

Be ambitious, set clear targets and accelerate our profitable growth

COOPERATION

Establish diverse teams and build trust through fairness, integrity and respect



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

Employee development

> Diversity

Occupational health and safety
Social programmes
Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

DIVERSITY

DIVERSITY IN DAY-TO-DAY BUSINESS

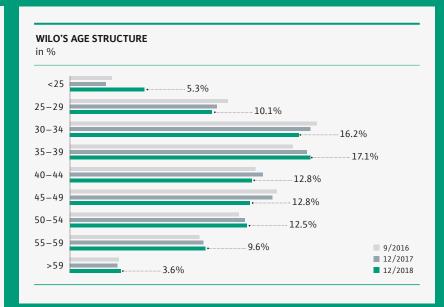
Globalisation and the growing diversity of a workforce with 99 different nationalities are presenting the Wilo Group with wide-ranging potential in terms of cooperation. Wilo firmly believes that a diverse workforce is an important factor in the company's economic success. Accordingly, the Wilo Group's global HR policy places particular emphasis on appreciating and encouraging individuality and variety among employees.

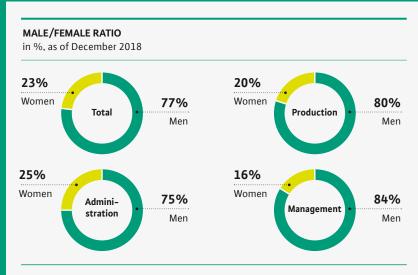
Total Equality Award

In 2016, WILO SE received the Total Equality seal of approval. This certification is awarded to companies whose HR and organisational policy is geared towards ensuring equal opportunity in employment, with a particular focus on promoting women to management positions and equal opportunity in recruitment and staff development. The award requires a high degree of transparency, commitment and concrete results and serves as confirmation that we are on the right track. We were successfully recertified last year.



99
nationalities
work together





Total employees: 7,830
Part-time employees:
279 > of which 193 women and 86 men
Full-time employees:
7,551 > of which 1,608 women and 5,943 men

Proportion of employees with severe disabilities: 3.10% (Germany)
Proportion of temporary staff:

8.40% (Germany)



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

Employee development

> Diversity

Occupational health and safety
Social programmes
Compliance

SUSTAINABLE MANAGEMENT

APPFNDIX

Diversity Charter

In order to highlight the importance of diversity to Wilo, the Executive Board signed the Diversity Charter in 2016. Among other things, this means Wilo undertakes to uphold a corporate culture that is characterised by mutual appreciation and respect for all individuals and to ensure compliance with and the implementation of the Charter.

Culture of diversity

However, Wilo performs various activities with a view to raising awareness of fairness, tolerance and openness not only among management, but also with and among its employees in order to create a communal working atmosphere and corporate culture based on mutual appreciation. The first "Diversity Day" was held in 2017 at numerous Wilo locations around the world. Employees used a world map to exchange experiences of international travel and their home countries, international dishes were served at the canteens and flags were raised as a sign of colourful diversity. The second edition in 2018 was another big success. A global hands-on campaign was held under the title "United in Diversity". The diversity film created by employees serves to illustrate just how diverse Wilo is.

https://www.youtube.com/watch?v=YMUG9DzqaCU

Wilo also offers training such as "Intercultural Awareness", which communicates the national, professional and cultural practices of various countries in order to sharpen participants' intercultural awareness. The two-day training course delivers content in the dimensions of culture, diversity, socialisation and management styles.

Pioneering for You





In the framework of this Charter we are committed to

- fostering a corporate culture characterised by mutual respect and appreciation of every single individual. We seek to create conditions such that everyone (superiors and co-workers) respects, practices and acknowledges these values. This will require explicit support from leaders and superiors.
- 2. validating and ensuring that our human resource processes are compatible with the diverse competencies, abilities and talents of our employees, as well as with our own performance standards.
- 3. recognising the diversity of society inside and outside our organisation, appreciating the intrinsic potential residing in it, and endeavouring to utilise it profitably for our business or organisation.
- 4. ensuring that the implementation of the Charter will be a subject of internal and external communication.
- 5. publicizing on an annual basis our own activities and progress in promoting diversity.
- 6. and keeping our own employees and colleagues informed about diversity and actively involved in implementing the Charter.



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

Employee development

Diversity

> Occupational health and safety

Social programmes

Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

OCCUPATIONAL HEALTH AND SAFETY

The "Vision 0" programme represents Wilo's commitment in the area of occupational health and safety: Our aim is zero accidents and the prevention of all work-related damage or impairment to health. To achieve this goal, we pursue Group-wide standards, the intensive communication and processing of events and the exchange of best practices. The Group-wide standards are broken down across all locations and subject to monthly progress reports. A continuous reduction in accident frequency has been achieved in the past three years.

Key sustainability indicators	2016	2017	2018
Accident rate (LTIR*) *Number of accidents per 1 million hours worked	10.2	9.8	9.2

Risk prevention

Over 90% of Wilo's production sites have a certified occupational safety management system and a local occupational safety and environmental protection programme. We implement Group-wide standards in high-risk areas or in the case of tried-and-tested best practices for accident prevention. These include standards concerning forklift trucks, using cranes or working with electricity.



Accident rate: 9.2 in 2018

Behavioural prevention: Safe behaviour

However, we consider behavioural prevention to be an even bigger lever when it comes to improving the accident rate. In 2018, we installed a wide range of measures to heighten awareness and the safety culture. Accident numbers are visualised at all locations. The daily GEMBA walks start with the topic of occupational safety and the discussion of accidents and critical situations. A monthly safety light highlights current risks. All accidents are communicated and displayed at all locations within 24 hours. Regular safety walkabouts by managers underline the importance of safe behaviour and management's commitment to the topic.



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

Employee development

Diversity

> Occupational health and safety

Social programmes

Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

Health protection

In the area of health protection, extensive preventive measures such as cardio fitness programmes, back training and vaccinations are conducted at all locations. Ergonomics is a topic that is particularly important when it comes to preventing work-related illness. At our site in Laval, we simulate all new work processes virtually and optimise them with the participation of our employees. The result: The number of work-related illnesses was reduced to zero in 2018.

The annual occupational health and safety days are a standout event at Wilo's locations. They provide the opportunity to address specific issues in detail outside of the everyday working environment. The focal points are defined locally and tailored to current needs. In 2018, for example, all activities at our Aubigny site related to the topic of mobility–related safety. 450 took part in a rally, a quiz and driver safety training.



Example: Vision 0 programme at the Laval site

A local Vision 0 programme was launched at Wilo's production site in Laval (France) in 2017. The aim was to bring fresh impetus to the established system

and take new approaches to hazard prevention. The core aim of the programme is to improve the safety culture. In a first phase, an internal safety policy was developed together with the employees. Improvements around five central pillars were identified and implemented in interdisciplinary project groups. All employees completed

"play safe®" training, which improves awareness of safety at work Olivier Minaud, Operation Manager in Laval: "The journey to Vision 0 never ends. Reporting zero accidents requires a culture in which workplace safety is a value to live by. This takes continuous commitment, a high degree of attention on the part of managers and intensive support for employees."

The project is having the desired effect: Occupational safety is visible to all and has established itself as a natural part of the culture. The Laval site is a benchmark for occupational safety within the Wilo Group and living proof that Vision 0 can be achieved.





COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

Employee development

Diversity

Occupational health and safety

> Social programmes

Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

SOCIAL PROGRAMMES

By people, for people. As a global company, we accept responsibility – for our customers, society, common welfare and the environment. Therefore, in our eyes, responsible behaviour and social commitment go hand in hand with successful corporate development. As a market leader with over 60 subsidiaries on every continent, we think and act both globally and locally in equal measure. Hence, we take part in various international and national corporate citizenship programmes aimed at culture, science, education and development aid.

Our aim is to support programmes and projects that promote the sustainable development of people, organisations and municipalities. This is why we primarily engage in educational initiatives with a focus on our core topics of water, energy and infrastructure. This allows us to pass on our experience, knowledge and pioneering spirit in the area of water management to those who need it the most. We intend to establish at least 25 training centres around the world by 2025.

AFRIKA KOMMT!

One excellent example is our participation in the AFRIKA KOMMT! initiative of the development agency Gesellschaft für internationale Zusammenarbeit (GIZ). As part of this initiative, leading German companies are demonstrating their commitment to Africa by providing young managers from sub-Saharan nations with insights into

their work processes and management methods. The twelve–month programme allows both parties to make important contacts for long–term partnership and successful economic cooperation. Up–and–coming African managers are prepared for the challenges of the future at German companies.

In 2018, 30 managers from Africa came to spend a weekend at our headquarters in Dortmund. Various seminar units, site visits and discussion panels were held under the motto "The power of digital transformation".





COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

Employee development

Diversity

Occupational health and safety

> Social programmes

Compliance

SUSTAINABLE MANAGEMENT

APPENDIX



Training centre in Mongolia

We have laid the foundations for a training centre for tradespeople in the Mongolian steppe. A ceremony in June 2017 marked the start of construction work on the joint project between Wilo and

the partner cities of Murun, north of the capital Ulan Bator, and Baruth/Mark. The reason: The partnership recognised at an early stage just how important this training and education centre is for young Mongolians who do not want to leave their country. It is not only skilled employees that are in short supply, but the conditions to train them in the first place. As such, the aim of the partnership is to secure jobs in the respective cities through local support and training. Wilo is assisting the project with solar well pumps, high-efficiency heating pumps, and training materials and tools.

developpe: Promoting energy efficiency through the dissemination of efficient pump systems and heat pump solutions in Argentina

The Argentinian government aims to increase the share of renewable energies in total energy consumption from the current level of 2% to 25%. However, there is a shortage of specialist staff and expertise to sustainably implement new technologies in particular. The introduction of new technologies in the Latin American market is more or less impossible without the prior transfer of knowledge. This project is being conducted as part of the develoPPP programme of the German Federal Ministry of Economic Cooperation and Development (BMZ). To date, this has involved six training courses each with between 40 and 60 participants. We have also completed the

planning work for two training centres with demonstration systems at two educational institutions. 2019 will see the practical implementation and installation of the training systems. Basic seminars communicate the theoretical tools for project implementation in the respective interdisciplinary technologies. This knowledge can then be trained in practice using the demonstration systems.

Each of the two educational institutions in Argentina will receive a converted Wilo-Brain Box to assist them with training. In addition to this functional training wall, Wilo regularly sends specialists to provide in-person training, consulting and support. Applying the "train the trainer" principle, local trainers are taught so that as many students as possible can be given access to energy-efficient technologies. This is contributing to the sustainable development of renewable energies, the reduction in greenhouse gases, and climate protection.





COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

Employee development

Diversity

Occupational health and safety

> Social programmes

Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

Wilo in cooperation with the Wilo-Foundation

Wilo is engaged in a range of social projects in partnership with the main shareholder of WILO SE, the Wilo–Foundation. In addition to ensuring continuity of the company, the family foundation is committed to the common good and provides financial support for projects in the funding areas of science, education and social welfare, culture and sport.

Geographically, the Wilo–Foundation supports projects around the world with a focus on the countries in which WILO SE is located. Under the motto empowering young people, it promotes promising young scientists, students, artists, competitive rowers, young people and children with opportunities to enhance their existing skills or discover new talents and aptitudes.

The Wilo–Foundation addresses future–oriented topics like the environment, water and technology, with a particular focus on the global issue of the environment regarding the responsible use of water as a resource. In view of the fact that around 1.3 billion people have insufficient access to safe drinking water and over 2.6 billion people worldwide have no adequate sanitation facilities, the Wilo–Foundation supports projects in developing countries. In the funding area of education, the primary focus is on STEM subjects, i.e. science, technology, engineering, maths and digitalityas well as professional orientation and entrepreneurship. Among other things, this takes the form of funding for scholarships, symposiums, conferences, labs, camps and awards.

Taking regional responsibility, particularly at the company's head-quarters in Dortmund, comes naturally to the family foundation. Together with partners from other foundations, science, business and the municipalities, projects are accompanied and supported with a view to sustainably promoting Dortmund and the Ruhr area and making them particularly good places to live.



Water quality lab in India

The Water Quality Center of Excellence at Vishwakarma University in Pune, India, was inaugurated on 14 June 2018. The Wilo-Foundation financially supported the technical equipment for measuring the water quality of rivers in India. From left to right: Prof. Wasudev Gade and Prof. Siddarth Jabade (Vishwakarma University), Evi Hoch (Wilo-Foundation), Bharat Agrarwal (Vishwakarma University), Thomas Lang (WILO SE), Hemant Watve (WILO Mather and Platt Pumps, India), Prof. Hans-Jörg Bullinger (Wilo-Foundation).



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

Employee development

Diversity

Occupational health and safety

> Social programmes

Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

THE WILO-FOUNDATION SUPPORTED NUMEROUS PROJECTS IN 2018. HERE ARE SOME HIGHLIGHTS FROM THE FUNDING AREAS OF SCIENCE, EDUCATION & SOCIAL WELFARE, CULTURE AND SPORT:

World University Challenge at IFAT

With the support of the Wilo–Foundation and the German Academic Exchange Service (DAAD), the German Association for Water, Wastewater and Waste (DWA) held the DWA World University Challenge at the IFAT 2018 water trade fair in Munich. Thanks to financial aid from the Wilo–Foundation, the winning teams from India, China, South Africa and Turkey were able to participate in the competition and attend the world's leading trade fair for the water industry.



SOS Children's Villages - Strong Youth

The SOS "Strong Youngsters" met the Wilo-sponsored German Eight-Men's team at the Rowing World Cup in Belgrade. True to the motto *empowering young people*, the Wilo-Foundation supports the SOS Children's Villages organisation in Russia and Serbia. The aim is to improve the professional entry prospects for particularly disadvantaged young people.



WASH project in Kenya

Starting in 2018, the Wilo–Foundation is supporting a WASH project organised by Habitat for Humanity Deutschland e.V., Cologne, for a period of two years. The project involves providing sustainable access to clean drinking water and improving sanitary provision, as well as a preventive programme in the area of hygiene. In Laikipia County in Kenya, the water, sanitary and hygiene facilities for local families are being extended and access improved.



Academy for "Theatre and Digitality"

To strengthen the cultural potential of Dortmund for the region and beyond, the Wilo-Foundation has supported to establish the new Academy for Theatre and Digitality at the Theatre Dortmund since 2018. It provided financial support during the research phase and the first conference, "Enjoy Complexity" on 23 February 2018, and is funding fellowships for research projects at the interface of theatre and the digital world. The project is supported in particular by the State of North Rhine-Westphalia, the German Federal Cultural Foundation, the European Regional Development Fund and the City of Dortmund.





COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

Employee development

Diversity

Occupational health and safety

Social programmes

> Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

COMPLIANCE

In times of growing globalisation, complying with all the applicable laws and regulations around the world is a major challenge. But compliance is a necessity, not an option. Accordingly, we have introduced a compliance management system that we are working to continuously enhance. The individual elements of our compliance management system intertwine to establish a shared culture of active compliance at Wilo on the basis of our values and management quidelines.

Compliance objectives

The risk-oriented focal points of our compliance objectives are currently anti-corruption and anti-trust/competition law, particularly with a view to the necessary formalisation with the aim of certification. In light of the heightened requirements resulting from the GDPR, our activities are also focused on data protection.

Compliance organisation

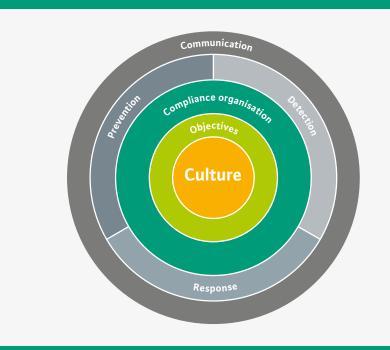
In addition to the four-man Compliance Office at the headquarters in Dortmund, Wilo's compliance organisation includes 36 local compliance coordinators who serve as decentralised contact persons

2,800

employees completed our compliance e-learning (2018)

36

local compliance coordinators are employed around the world



and multipliers. They also have knowledge of the regional practices and speak the language of the employees at their location.

These local compliance coordinators were named in the course of the year under review and were given face-to-face training lasting several days. They are connected via an intranet portal and are continuously informed about current topics.

Compliance programme

Our compliance programme consists of the elements of prevention, detection and response. Each of these elements involves different measures.



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

Employee development

Diversity

Occupational health and safety

Social programmes

> Compliance

SUSTAINABLE MANAGEMENT

APPENDIX

The most important element is prevention, which is shaped in particular by our Code of Conduct. The latter was implemented as a mandatory guideline at all Wilo companies as long ago as 2011. As the Wilo Group combines some very different cultures under one roof, the Code of Conduct provides a shared system of principles and values for all cultural areas.

It is accompanied by rules of conduct for suppliers, which ensure that our supply chain also complies with basic employment and ethical norms and health, safety and environmental standards in line with the respective ILO conventions. The Supplier Code of Conduct is an important and binding framework for supplier relationships. Compliance training is adjusted to reflect the different areas, as this is the only way to ensure an active compliance culture when it comes to the basic attitudes and behaviours of our employees. In 2018, we rolled out four e-learning courses for different target groups. Compliance is also a fixed element of face-to-face training for new employees and managers, for example.

In order to detect compliance violations, we provide a whistle-blower system (2018: BKMS®, from 2019: SpeakUp and AskMe)

56% of employees worldwide have been trained on compliance topics



that allows employees and third parties to report cases anonymously. In addition, it goes without saying that compliance topics are always covered by our internal audits.

Compliance communication

Compliance must be present if it is to be internalised by employees. The tone from the top plays an important role. Accordingly, our Executive Board regularly addresses compliance topics. Compliance is also an important component of management training. Furthermore, it is important for us to keep employees up to date regularly and across a wide range of media. Among other things, we report on current topics via the intranet, in the TeamApp and on Wilo TV, and employees receive training in the form of e-learning and face-to-face training.

COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

> SUSTAINABLE MANAGEMENT

Sustainability organisation Stakeholder dialogue Value chain

APPENDIX

SUSTAINABLE MANAGEMENT

→ We act responsibly along the entire value chain.





COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

> Sustainability organisation
Stakeholder dialogue
Value chain

APPENDIX

SUSTAINABILITY ORGANISATION

TOP-DOWN AND BOTTOM-UP

Wilo sees sustainability management as a cross-divisional function. Promoting integration, communication and dialogue between the specialist departments is the top priority. To facilitate efficient cooperation, Wilo has defined clear structures and responsibilities.

The Sustainability Steering Board is the central decision–making body. It comprises managers from selected specialist departments and is chaired by the Chief Technology Officer. This is where the strategic direction for sustainability management is defined. The Sustainability Council is responsible for developing the content of the sustainability strategy and ensuring its implementation within

the organisation. It has an interdisciplinary membership covering all of Wilo's specialist departments that are associated with the main sustainability challenges identified. The members of the Council serve as sustainability officers within their respective departments. The Council is coordinated by the Sustainability Director.

The sustainability network is not a specific body, but describes all the employees at Wilo's over 60 locations who are involved in the achievement of the sustainability targets in their daily activities. Their suggestions are taken into account in the further development of the sustainability strategy via their managers.



Sustainability network



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

Sustainability organisation

> Stakeholder dialogue

Value chain

APPENDIX

STAKEHOLDER DIALOGUE

Intensive contact with the relevant stakeholder is a central element of sustainability management at Wilo. In this era of growing digitalisation in particular, a company's success is closely linked to knowing the needs of its stakeholders and a continuous mutual dialogue. Wilo pursues the objective of anticipating future requirements and developments at an early stage.

Communication

The stakeholder dialogue is implemented via different specialist departments and channels. We pursue a particularly intensive dialogue with our customers. In addition to routine day-to-day communication along the sales channels, we focus on cooperation in associations, organising meetings and congresses, and participating in joint projects.

One particular highlight in the past year was IFAT, the international trade fair for the water management industry, at which international specialists gathered to discuss innovations for the digital future. The visitor survey carried out at the event showed that our customers were more than satisfied, rating the information and discussion offerings particularly highly. For Wilo, this serves as recognition and confirmation that customers appreciate the dialogue we seek to pursue with them.

Cooperation

As a global company, we are a member of various national and international associations and organisations. The joint aim of most cooperations is a sustainable approach to water and nature with a view to protecting the available raw materials and moving together towards a brighter future.

For example, we are a member of the German Water Partnership, a



strong network that is a joint initiative of the public and private sector in Germany. Businesses, government and non–government organisations, scientific institutions and professional associations from the water industry use this platform to exchange information and bundle their activities with the aim of raising the global profile of German expertise.



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

Sustainability organisation

> Stakeholder dialogue

Value chain

APPENDIX

Partnership with suppliers

Intensive communication with suppliers starts during the selection process in the form of early integration and standardised processes. This contact in a spirit of mutual partnership is maintained through continuous supplier development. Regular supplier days are an opportunity for us to discuss topics, make contacts and, of course, recognise outstanding suppliers outside of day-to-day business.

Dialogue with employees

One key element of employee communication is constructive cooperation with employee representatives. Wilo places great value on a partnership-based dialogue that offers benefits for both parties. All the relevant guidelines are developed and realised in close cooperation, leading to significantly higher acceptance and faster implementation. Modern digital channels like the internal teamOne



Supplier Day 2017 in Beijing, China

are ways of informing employees about every aspect of the company in a timely and comprehensive manner. These media are also used intensively as collaboration platforms. Every two years, a global employee survey is conducted with the participation of over 7,000 employees. The results are an important mood barometer and identify areas with potential for improvement.

STAKEHOLDERS AND FORMS	S OF DIALOGUE
Customers	 Dialogue in daily sales and customer service discussions Work in associations Meetings, congresses, trade fairs Market research CUSAT (Customer Satisfaction Analysis)
Suppliers	 Early supplier integration Standardised supplier development Regular audits and training Supplier days, theme days
Employees	 Employee discussions Employee surveys Complaints procedure Internal corporate communication Digital collaboration platforms
Government organisations	 Contribution of expert knowledge in expert bodies Participation in standardisation committees
Research and development	 Participation in and initiation of research projects Cooperation with universities and educational institutions Support for scientific publications
Society	Involvement in local initiativesSupport for social programmes
Associations	 Membership of numerous business and professional associations



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

Sustainability organisation
Stakeholder dialogue

> Value chain

APPENDIX

VALUE CHAIN

Wilo's ecological footprint results less from its production processes and more from the products themselves. On the one hand, our products supply people with clean water; on the other hand, manufacturing products requires raw materials and pumps consume electricity all throughout their useful life and must be disposed of when they are no longer needed. This is why our sustainability strategy focuses on our products along the entire value chain and on measures to improve their ecological footprint.

Development is where the course is mainly set in terms of our products and their sustainability. From innovative solutions for the water supply of tomorrow and improvements to the energy efficiency of our products through to reducing the consumption of raw materials or increasing recyclability, all these goals are influenced in the first stage of the value creation process. As part of a standardised Group-wide development process, standards and methods are therefore implemented in order to ensure that these goals are taken into account.

The primary sustainability goal when it comes to procurement is to select suppliers that satisfy our social and ecological standards. All suppliers are required to sign the Supplier Code of Conduct and perform an HSE assessment. An approval committee examines the results and authorises only suppliers that exceed defined thresholds. Sustainable goals in production and at the production sites primarily

involve the careful use of the resources of energy and water as well as waste prevention. Quantities and consumption levels are reported on a company–wide basis and reduction measures are planned and implemented.

The key goals for logistics are to reduce the CO₂ consumption of our goods flow and to optimise the use of packaging materials. Key measures include bundling transport runs, selecting appropriate modes of transport, and optimising packaging to make it easier to transport. The proportion of reusable packaging has also increased.

In the use phase of our pumps, the main sustainability goal is to reduce energy consumption. Wilo has always been and remains a pioneer within the industry, with its high-efficiency pumps making a significant contribution in terms of reducing energy consumption and hence CO_2 emissions. The latest generation of smart pumps (Wilo-Stratos MAXO) represents the next step towards the future.

End of life: The aim is to increase the reuse rate and the recyclability of our products. Our pumps are already largely recyclable (> 95%). However, our high-efficiency pumps have placed the focus on specific materials: rare earth elements. These are needed to manufacture permanent magnets. Our aim is to recover these valuable materials at our in-house recycling centre and use them to produce new magnets.



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

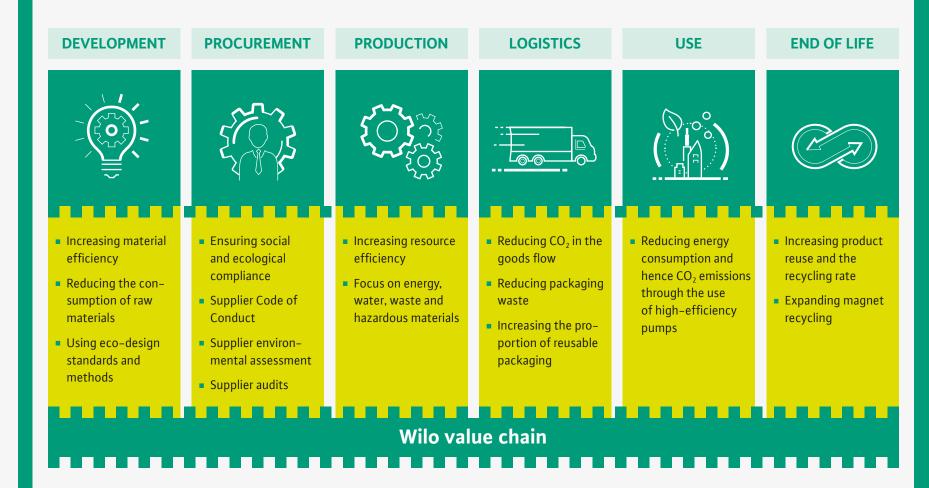
Sustainability organisation
Stakeholder dialogue

> Value chain

APPENDIX

SUSTAINABILITY ALONG THE VALUE CHAIN

The value creation process at Wilo can be broken down into the main phases of development, procurement, production, logistics, use and end of life. The illustration below shows the central sustainability goals and instruments in the individual phases.



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

> APPENDIX

About this report

Additional key figures

Certification overview

GRI overview

Publishing information

APPENDIX



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

> About this report

Additional key figures

Certification overview

GRI overview

Publishing information

ABOUT THIS REPORT

Format:

This report is published online. The content is available to download as a full document in PDF format.

Reporting standard: GRI

This report is based on the internationally recognised standards of the Global Reporting Initiative (GRI). The report has been prepared in accordance with the "core" GRI standard option. The GRI content index refers to the additional content in the sustainability report or other published sources. Wilo transparently reports all data and information that is relevant and material from a company perspective.

UN Global Compact

As a signatory of the UN Global Compact, we are obliged to report on our progress in terms of implementing the ten principles. This sustainability report also includes the required annual "Communication on Progress" (COP).

Sustainable Development Goals

The report also refers to the United Nations Sustainable Development Goals. The goals on which Wilo focuses and the company activities undertaken to achieve these goals are discussed in the respective sections.

Report frequency:

Wilo's sustainability report is published every year in fully revised form. The key indicators are updated every year.

Report content:

This Wilo sustainability report provides information on the strategic orientation and management of sustainability within the company. The target readers of this publication include customers, employees, suppliers, media representatives and other interested stakeholders.

We conducted a materiality analysis in order to define and evaluate the material sustainability topics for our business activities.

The report provides information on the material activities and impacts along the entire value chain, with a particular focus on the topics of "Water", "Materials", "Energy and emissions" and "Employees and society".

Targets and measures have been formulated as part of an extensive sustainability programme. These are presented in the report in a transparent and comprehensible manner.

The reporting period corresponds to Wilo's 2018 financial year (1 January 2018 to 31 December 2018). The editorial deadline for the report was 30 June 2019.

Some figures are rounded.

Terms used

We typically describe our workforce as "employees" and use gender-neutral terms to improve readability.

Contact

Your opinion is important to us. E-mail us with your questions and suggestions at: responsibility@wilo.com



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

About this report

> Additional key figures

Certification overview

GRI overview

Publishing information

ADDITIONAL KEY FIGURES

	Unit	2016	2017	2018	Note
Business metrics					
Net sales	€ million	1,327.1	1,424.8	1,463.5	
Net sales growth	%	0.8	7.4	6.2	
EBIT	€ million	107.1	106.3	91.9	
Consolidated net income	€ million	76	85.9	64.2	
Capital expenditure	€ million	109.5	124.8	154.8	
R&D costs	€ million	65	63.6	66.3	
Equity	€ million	653.6	707	738.4	
Equity ratio	%	53.6	51.6	49.5	
Water					
Water solutions growth rate		0.3	9.1	9.2	
Smart water systems growth rate	%			300	Launched in 2017
Water consumption	m ³	98,222	93,091	94,209	
Per capita water consumption	m³/employee	19.6	17.9	17.5	
Energy and Emissions					
Energy savings through high-efficiency products	TWh	1.80	1.82	1.81	
Energy solution projects completed	Number		6,786	8,381	
CO ₂ emissions	t	14,960	15,738	17,311	Scope 1 and 2
CO ₂ emissions / net sales	kg/€ thousand	11.27	11.05	11.83	
Total energy consumption	MWh	67,745	70,383	77,560	
Heating energy (oil and gas)	MWh	25,716	27,761	31,996	
Electricity consumption	MWh	42,029	42,622	45,564	
Proportion of green electricity		70	70	67	Green electricity purchased in Germany and France
CO ₂ savings (green electricity)	t	10,971	16,031	11,393	
LEED building certifications		14	21	35	Based on production locations



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

About this report

> Additional key figures

Certification overview

GRI overview

	Unit	2016	2017	2018	Note
Business travel					
By car	km	993,519	1,058,515	1,062,554	Rental cars booked in Germany
By air	km			4,832,139	Booked in Germany
By rail	km	641,506	687,493	560,154	Local and long-distance rail in Germany
Car/CO ₂	t	122	133	137	· · · · · · · · · · · · · · · · · · ·
Rail /CO ₂	t	4	4.2	3.4	Local rail only, long-distance rail is carbon-neutral
Air/CO ₂	t		_	1,446	
Material					
Components reused	 Number	38,000	35,000	32,000	Germany
Copper saved	t	11.57	12.17	13.6	
Reusable packaging (inbound)				77	
Waste recycled	t			6,882	
Total waste	t	7,558	8,008	8,253	
Proportion disposed of	t	_	_	1,370	
Employees and Society					
Employees trained on compliance issues			53	56	
Internally developed managers			_	70	
Women in management positions		11	17	16	
LTIR (accident rate)		10.2	9.8	9.2	
Total employees	Number	7,548	7,726	7,830	
Proportion of men	Number	5,812	5,949	6,029	
Proportion of women	Number	1,736	1,777	1,801	
Proportion of women		23	23	23	
Proportion of men		77	77	77	



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

About this report

> Additional key figures

Certification overview

GRI overview

	Unit	2016	2017	2018	Note
By contract type:					
Fixed-term	Number	948	983	1,009	
Of which women	Number	275	281	266	
Of which men	Number	666	705	745	
Permanent	Number	6,600	6,743	6,821	
Of which women	Number	1,482	1,521	1,574	
Of which men	Number	5,125	5,219	5,245	
By employment type:					
Part-time	Number	182	217	279	
Of which women	Number	139	166	193	
Of which men	Number	43	51	86	
Full-time	Number	7,366	7,509	7,551	
Of which women	Number	1,597	1,611	1,608	
Of which men	Number	5,769	5,898	5,943	
Trainees	Number	131	136	130	
Proportion of temporary staff:	%	2.5	6.2	8.4	Germany
Employees by region:					
Emerging Markets	Number	2,330	2,356	2,409	
Mature Markets	Number	5,218	5,370	5,421	
Fluctuation rate	%	4.74	5.63	5.91	
Proportion of employees with severe disabilities	%	3.04	3.2	3.1	Germany
Absenteeism due to illness	%	6.35	6.25	6.64	Germany
Employees covered by collective bargaining	%	83.6	82.7	83	Germany
Training hours	Hours	10,650	13,900	60,500	Germany



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

About this report

Additional key figures

> Certification overview

GRI overview

Publishing information

CERTIFICATION OVERVIEW

Location		9001	14001	18001	50001
44263 Dortmund-Nortkirchenstr., Germany, central functions (admin)	Wilo SE	yes	yes	yes	yes
44263 Dortmund-Nortkirchenstr., Germany (production)	Wilo SE	yes	yes	yes	yes
44357 Dortmund-Strümpenbusch, Germany	Wilo SE	yes	yes	yes	yes
44263 Dortmund-Felicitasstr., Germany	Wilo SE	yes	yes	yes	yes
39387 Oschersleben, Germany	Wilo SE, Oschersleben plant	yes	yes	yes	yes
95030 Hof, Germany	Wilo SE, Hof plant	yes	yes	yes	yes
53005 Laval Cedex, France	Wilo Salmson France SAS	yes	yes	yes	no
53950 Louverné, France	Wilo Salmson France SAS	yes	yes	yes	no
69673 Bron, France	Wilo Salmson France SAS	yes	yes	no	no
78400 Chatou, France	Wilo Salmson France SAS	yes	yes	no	no
36070 Trissino, Italy	STEMMA S.R.L.	yes	no	no	no
18700 Aubigny-sur-Nère, France	Wilo INTEC SAS	yes	yes	no	no
91105 Trenčín, Slovakia	Wilo INTEC SAS organizačná zložka Slovakia	yes	no	no	no
Beijing 101300, P. R. China	Wilo China Ltd.	yes	yes	yes	no
Qinhuangdao City, Hebei Province, P.R.China 066004	Wilo China Ltd.	yes	yes	yes	no
Qinhuangdao City, Hebei Province, P.R.China 066004	Wilo ELEC CO.	yes	yes	yes	no
Busan 618–260, South Korea	Wilo Pumps Limited	yes	yes	yes	no
Pune – 411 019, India	Wilo Mather and Platt Pumps Private Limited	yes	yes	yes	no
Pune – 411 019, India (sales)	Wilo Mather and Platt Pumps Private Limited	yes	yes	yes	no
Kolhapur – 416 234, India	Wilo Mather and Platt Pumps Private Limited	yes	yes	yes	no
34956 Istanbul, Turkey	Wilo Pompa Sistemleri A.Ş.	yes	yes	yes	no
Noginsk, Russian Federation	Wilo RUS LLC	yes	no	no	no
A-2351 Wiener Neudorf, Austria	Wilo Pumpen Österreich GmbH	yes	no	no	no
352 45 Växjö, Sweden	Wilo Nordic AB	yes	no	no	no
1083 Ganshoren, Belgium	Wilo nv	yes	no	no	no
05–506 Lesznowola, Poland	Wilo Polska Sp. z o.o.	yes	no	no	no
H–2045, Törökbálint, Hungary	Wilo Magyarország Kft.	yes	no	no	no



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

About this report

Additional key figures

Certification overview

> GRI overview

Publishing information

GRI OVERVIEW

GRI stan	dard	Source	Page	UN Global Compact	SDG	Note
1. Organ	isational profile					
102-1	Name of the organisation	Publishing information	66			
102-2	Activities, brands, products and services	About Wilo	5			
102-3	Location of headquarters	Publishing information	66			
102-4	Location of operations	About Wilo	5			
102-5	Ownership and legal form	About Wilo	5			
102-6	Markets served	About Wilo	5			
102-7	Scale of the organisation	About Wilo	5			
102-8	Information on employees and other workers	Employees and Society	36	Principle 6		
102-9	Supply chain	Annual Report 2018				https://wilo.cdn.mediamid.com/cdndoc/wilo246382/2362126/ wilo246382.pdf
102-10	Significant changes to the organisation and its supply chain	Annual Report 2018				https://wilo.cdn.mediamid.com/cdndoc/wilo246382/2362126/ wilo246382.pdf
102-11	Precautionary principle or approach	Sustainability Strategy	8	Principle 7		
102-12	External initiatives	Water partnerships Stakeholder dialogue	16 51		SDG 17	



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

About this report

Additional key figures

Certification overview

> GRI overview

GRI stan	dard	Source	Page	UN Global Compact	SDG	Not
102-13	Membership of associations				SDG 17	Associations in the area of technical building services: German Engineering Federation (VDMA) German Federal Association of the Technical Building Services Industry (BTGA) German Energy Efficiency Association for Heating, Cooling and CHP (AGFW) German Federal Association of the Heating, Energy and Environmental Technology Industry (BDH) German Heat Pump Association (BWP) German Solar Industry Association (BSW) German Association for Air Conditioning and Ventilation in Buildings (FGK) German Association of Gas and Water Companies (figawa) German Professional Association for Efficient Energy Use (HEA) Association of the European Heating Industry (ehi) European Heat Pump Association (ehpa) European Solar Thermal Industry Federation (ESTIF) Associations in the area of water management: German Association of Gas and Water Companies (figawa) German Association for Gas and Water Companies (figawa) German Association for Gas and Water Companies (figawa)
2. Strate	gy					
102-14	Statements from senior decision-makers	Foreword	3			
3. Ethics	and integrity					
102-16	Values, principles, standards and norms of behaviour	Social compliance	47	Principle 10	SDG 8	 Our values: Integrity, fairness, respect, passion, responsibility. Code of Conduct Supplier Code of Conduct Our Relation Policy
4. Gover	nance					
102-18	Governance structure	Annual Report 2018			SDG 8	https://wilo.cdn.mediamid.com/cdndoc/wilo246382/2362126/wilo246382.pdf



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

About this report

Additional key figures

Certification overview

> GRI overview

GRI stan	dard	Source	Page	UN Global Compact	SDG	Note
5. Stakel	nolder engagement					
102-40	List of stakeholder groups	Stakeholder dialogue	51		SDG 17	
102-41	Collective bargaining agreements	Additional key figures	57–59	Principle 3	SDG 8	
102-42	Identifying and selecting stakeholders	Stakeholder dialogue	51			
102-43	Approach to stakeholder engagement	Stakeholder dialogue	51		SDG 17	
102-44	Key topics and concerns raised	Megatrends Materiality	6 7			
6. Repor	ting practice					
102-45	Entities included in the consolidated financial statements	Annual Report 2018				https://wilo.cdn.mediamid.com/cdndoc/wilo246382/2362126/wilo246382.pdf
102-46	Defining report content and topic boundaries	Materiality	7			
102-47	List of material topics	Materiality	7			
102-48	Restatements of information					
102-49	Changes in reporting					
102-50	Reporting period	About this report				
102-51	Date of most recent report	About this report	56			
102-52	Reporting cycle	About this report				
102-53	Contact point for questions regarding the report	Publishing information	66			
102-54	Claims of reporting in accordance with the GRI standards	About this report	56			
102-55	GRI content index	GRI overview	61-65			
102-56	External assurance	_				The report has not been reviewed externally



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

About this report

Additional key figures

Certification overview

> GRI overview

GRI star	dard	Source	Page	UN Global Compact	SDG	Note
103 Mai	nagement approach					
103-1	Explanation of the material topic and its boundary	Sustainability Strategy	8	-		
103-2	The management approach and its components			-		The management approach is discussed in the respective section
103-3	Evaluation of the management approach					
200 Eco	nomic disclosures					
201	Economic Performance	About Wilo Smart water systems Energy solutions Smart products	5 14 23 25	Principle 9	SDG 6, 8, 9, 13	
203	Indirect Economic Impacts	Water partnerships Social programmes	16 43	Principle 8, 9	SDG 6, 8, 9, 11, 13, 17	
204	Procurement Practices	Value chain	53			
205	Anti-corruption	Social compliance	47	Principle 10	SDG 8	
206	Anti-competitive Behaviour	Social compliance	47		SDG 8	
300 Env	ironmental disclosures					
301	Materials	Material	29-34	Principle 8	SDG 9, 12, 13	
302	Energy	Emissions	20-28	Principle 7, 8, 9	SDG 8, 13	
303	Water	Water	10-19	Principle 7, 8, 9	SDG 6, 8, 13	
305	Emissions	Emissions	20-28	Principle 7, 8, 9	SDG 8, 13	
306	Effluents and Waste	Water Materials	19 34	Principle 7, 8	SDG 12, 13	
308	Supplier Environmental Assessment	Value chain	53	Principle 7, 8	SDG 6, 13	



COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

APPENDIX

About this report

Additional key figures

Certification overview

> GRI overview

GRI sta	ndard	Source	Page	UN Global Compact	SDG	Note
400 So	cial disclosures					
401	Employment	Employees and Society Additional key figures	35-49 57-59		SDG 8	
402	Labour/ Management Relations	Employees and Society	35-49	Principle 6	SDG 8	
403	Occupational Health and Safety	Occupational health and safety	41		SDG 8	
404	Training and Education	Employee development	37		SDG 8	
405	Diversity and Equal Opportunity	Diversity	39	Principle 6	SDG 8	
406	Non-discrimination	Diversity Social compliance	39 47	Principle 6	SDG 8	
407	Freedom of Association and Collective Bargaining	Social compliance	47	Principle 3	SDG 8	
408	Child Labour	Social compliance	47	Principle 5	SDG 8	
409	Forced or Compulsory Labour	Social compliance	47	Principle 4	SDG 8	
412	Human Rights Assessment	Social compliance	47	Principle 1, 2	SDG 8	
414	Supplier Social Assessment	Value chain Social compliance	53 47	Principle 2	SDG 8	
419	Socioeconomic Compliance	Social compliance	47	Principle 1	SDG 8	

COMPANY

WATER

ENERGY AND EMISSIONS

MATERIALS

EMPLOYEES AND SOCIETY

SUSTAINABLE MANAGEMENT

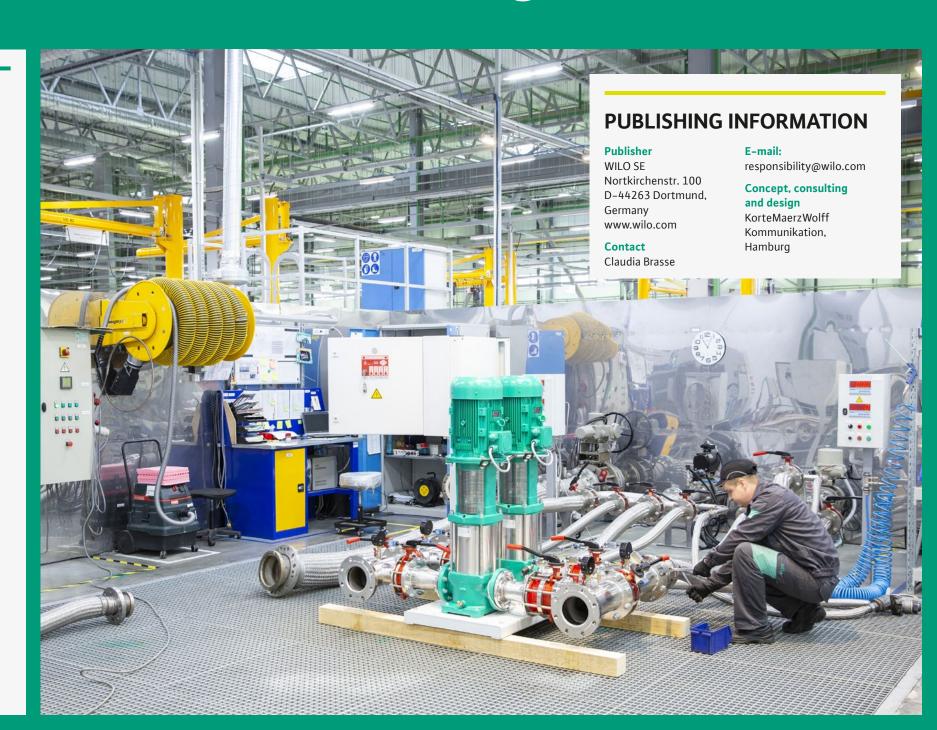
APPENDIX

About this report

Additional key figures

Certification overview

GRI overview



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