KSB Group

Annual Report 2019

KSB Profile

KSB is a leading supplier of pumps, valves and related service. Our reliable, high-efficiency products are used in applications worldwide where fluids need to be transported or shut off, covering everything from building services, industry and water transport to waste water treatment, power plant processes and mining. Wherever our customers are in the world, 190 service centres are on hand to provide local inspection, servicing, maintenance and repair services under the KSB SupremeServ brand. Innovative technology that is the fruit of KSB's research and development activities forms the basis for the company's success and that of our customers.

GENERAL INDUSTRY

CHEMICALS / PETROCHEMICALS

WATER / WASTE WATER

ENERGY

MINING

CONSTRUCTION / BUILDING SERVICES

Fields of application for our products

KSB pumps and valves are primarily used to transport or shut off all kinds of fluid. Their efficient and reliable operation is taken care of by 3,500 service specialists worldwide offering inspection, servicing, maintenance, repairs and consultancy services.

2019 in Figures

Order intake

€ **2,454** million
↗ € + 150 m | + 6.5 %

Sales revenue

€ **2,383** million
↗ € + 137 m | + 6.1 %

EBIT

€ **113.6** million
↗ € + 38.9 m | + 52.1 %

Employees

15,645 at 31 December 2019

↗ Compared with 2018

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Management and Issues 2019

Dr Stephan Bross

As Managing Director of KSB Management SE, Stephan Bross is responsible for Production, Technology and Digital Transformation.

Ralf Kannefass

In his role as Managing Director of KSB Management SE, Ralf Kannefass is responsible for Sales, Service and Marketing.

Management

Dr Stephan Timmermann

In his position as Managing Director of KSB Management SE and CEO, Stephan Timmermann's responsibilities include Strategy, Human Resources, Communications, Legal and Compliance, and Internal Audits.

Dr Matthias Schmitz

As Managing Director of KSB Management SE, Matthias Schmitz is in charge of Finance, Controlling, Taxes, Information Technology and Procurement.

Dr Stephan Timmermann

Dear Shareholders and Business Partners,

Our review of 2019 leaves us very satisfied. The targets we set ourselves as Management have been achieved; all key performance indicators fall within the scope of our ambitious forecast. Compared with 2018, order intake increased by € 150.2 million to € 2,453.8 million (+ 6.5%). Sales revenue rose by € 137.2 million to € 2,383.2 million (+ 6.1%). Our net financial position has also improved. EBIT development has been extremely positive: After € 74.7 million in the previous year, the current figure of € 113.6 million is in line with the target value that we had set ourselves. All of this is ultimately a result of the numerous measures undertaken to make the company sustainably profitable.

The main focuses of the past year included our Climb 21 strategic project, the important issue of sustainability, and continuing the development of our corporate culture as a cornerstone to secure the company's future.

We are focusing on sustainable and profitable growth

Climb 21 is a medium- and long-term strategic project which seeks to orientate our company toward growth markets capable of generating sustainable earnings for KSB. Working alongside the measures and projects already initiated, it also aims to reduce costs.

As part of Climb 21, we analysed KSB's fields of activity in detail and classified the business alternatives open to us into three categories. Firstly: Markets with clear growth potential, which must be expanded and strengthened. Secondly: Stagnating markets whose remaining potential we aim to exploit to the full while increasing profitability. And thirdly: Markets that are shrinking or no longer profitable from which we plan to withdraw in a structured manner.

On the basis of these findings, we have developed a future model for a new, market-geared organisational structure based on the three pillars of pumps, valves and service (now offered under the KSB SupremeServ brand).

Within the pumps domain, we will make an additional distinction between engineered business and standard business. The Mining and Energy market segments, in which our engineered products feature predominantly, require a fundamentally different business approach than the Oil & Gas – in future Chemicals / Petrochemicals –, Water and Waste Water, General Industry and Building Services market segments, which are primarily focused on business with standard products. In future, all segments will be responsible for global business development in their markets, while the Regions will work in close coordination to implement operative business.

We will strengthen the valves business and establish it as an independent organisation with its own sales force. The aim is to put this business on a path toward growth and improve its profitability.

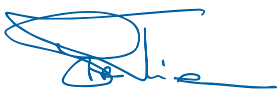
Putting Climb 21 into practice requires us to change work processes and responsibilities. Having implemented initial measures at the end of 2019, 2020 will be a year of transformation for us, which will see us emerge as a market-oriented and more profitable company.

We are committed to sustainable business

KSB strives for growth that is both profitable and sustainable. So our actions need to be entrepreneurial, holistic, ecological and socially responsible. Sustainability is an indispensable pillar of our corporate strategy – and has been for almost 150 years. Acting responsibly means striking a balance between profitable growth and social responsibility. This is why we signed the UN Global Compact in 2010 and are committed to the 17 sustainability goals of the United Nations. Optimised for energy efficiency, our pumps have been making an important contribution to saving energy and reducing the carbon footprint of our customers for decades. We have set ourselves ambitious goals – starting with the sustainability of the supply chain and extending to the responsible use of resources and the health of our employees. And last but not least, we support over 100 social initiatives and projects worldwide, all aiming to improve people's lives.

We are strengthening our corporate culture

A motivating corporate culture that sets us apart from the competition is the basis for economic success. It plays an essential role in enthusing employees for KSB and enabling the company and its staff to unite in responding quickly and flexibly to future challenges. This is why corporate culture is one of our key strategic development areas. The KSB Voice employee engagement survey – which we conducted once again in 2019 – indicates that we are on the right track. We measured significant improvements in all key areas and increased the engagement index by twelve percentage points. The level of improvement is above average when compared with the previous survey. This outstanding result was achieved thanks to the numerous measures taken by our employees and managers. But we will not become complacent. We have set ourselves the goal of significantly increasing the index again to 80 percent by 2025.



Dr Stephan Timmermann, CEO

Report of the Supervisory Board

Dr Bernd Flohr (Chairman of the Supervisory Board)

In the 2019 financial year (the "year under review" or "reporting year"), the Supervisory Board of KSB SE & Co. KGaA performed its tasks as set out by the law, the Articles of Association and the Rules of Procedure with the greatest of diligence. We advised the general partner, KSB Management SE, acting through its Managing Directors, on corporate management issues and monitored its work. The Managing Directors informed us about current developments, including but not limited to the company's business, financial and staffing situation, planned investments, and corporate planning and strategy via written and oral reports prepared regularly and on an ad hoc basis in a comprehensive and timely manner. The Supervisory Board met regularly, with and without the Management, to discuss selected issues.

We discussed all business transactions that were significant for the company in depth on the basis of reports from the Managing Directors. Any departures in business developments from the plans and targets were explored by us and commented on in detail by the Managing Directors. Beyond the intensive work in plenary sessions and in the committees, the Chairman of the Supervisory Board in particular and other members of the Supervisory Board were in constant contact with the Managing Directors. There was an ongoing exchange of information with the Administrative Board of KSB Management SE, including but not limited to its Chairman, on current business developments and on material transactions, as well as on questions of strategy, planning, risk situations, risk management and compliance.

The Chairman of the Administrative Board also took part in the Supervisory Board meetings. The Chairman of the Supervisory Board and his deputy were guests of the Administrative Board on selected issues.

Conflicts of interest of Supervisory Board member Klaus Kühborth have been disclosed to the Supervisory Board. They concerned the supply of services of the company to its majority shareholder, Johannes und Jacob Klein GmbH, Frankenthal (Pfalz), as well as other related parties in the past, as discussed in the reports of previous years. Klaus Kühborth did not participate in discussions and the taking of resolutions on this subject area. In the reporting period, no other conflicts of interest arose involving members of the Supervisory Board.

The members of the Supervisory Board take part in training required for their tasks under their own responsibility. They are adequately supported in this by the company and regularly – also in the year under review – receive information on the rights, obligations and office of the Supervisory Board. For new members, the information provided includes an in-depth look at the company's internal processes.

Main Focus of Work in the Supervisory Board Plenary Sessions

Four regular Supervisory Board meetings were held in the 2019 financial year. The performance of the company and the KSB Group was the key subject of all Supervisory Board meetings, primarily with regard to their business and employment situation, major investment projects and the strategic direction.

Our regular consultations with the Managing Directors relating to business development included an analysis of developments in the segments and regions as well as the results of operations. Suitable measures to improve them were discussed, as were the growth initiatives presented by the Managing Directors. The Managing Directors also provided information on the development of ongoing major investments in our manufacturing facilities at various sites at all meetings. One focus was on the extension of production capacities at our factory in Grovetown, Georgia, which specialises in the manufacture of large pumps for mining. Work on the second stage of the expansion project at the US site began in the year under review. The construction of a new production hall as well as its equipment with machinery for mechanical processing and assembly are planned to contribute to the elimination of existing production bottlenecks and will be completed in 2021. The Supervisory Board was also involved in decisions on the founding of a service joint venture in Egypt as well as the acquisition of a service company in Slovakia. Both measures are intended to expand the service activities with which we operate on the international markets under the KSB SupremeServ brand. We also endorsed the plans to establish companies in sub-Saharan Africa in order to continue to strengthen the KSB Group's position in this challenging region. In addition, at all meetings the Supervisory Board received detailed reports on the progress made in developing the strategy for the Climb 21 project.

This earnings-driven, Group-wide programme, which began last year, entails not only a market-oriented realignment of the pump business but also a focused further development of the service and valve businesses in particular. The relevant growth priorities have been identified and achievement of the ambitious goals will be supported in the current financial year by correlated organisational measures, including an organisational structure based on market segments.

The following topics were also discussed at the individual Supervisory Board meetings:

The meeting in March 2019 particularly addressed the audit and approval of the annual financial statements for the 2018 financial year, including the management report and the combined separate non-financial report for the company and the KSB Group in accordance with Sections 315b, 315c and 289c to 289e HGB [*Handelsgesetzbuch* – German Commercial Code]; the auditors also explained the key audit areas and results. The Chairman of the Audit Committee produced an extensive report on the audit carried out on accounting processes for the period. We agreed to the proposal on the appropriation of the net retained earnings presented by the general partner for the 2018 financial year.

In May 2019, the Supervisory Board received a detailed report on the development to date and the expected growth of the Chinese nuclear market. The sophisticated prototype of a new reactor coolant pump, developed and built specifically for this purpose, was tested successfully in the year under review and obtained a recommendation by a Chinese panel of experts for use in the latest generation of nuclear power plants. The Managing Directors now see good opportunities for further orders.

The September meeting of the Supervisory Board was held at the offices of KSB Italia S.p.A. in Concorezzo in northern Italy. This company is one of the largest sales companies in Europe and also has several service sites. Its Managing Director reported on the main areas of activities there and on the development of the business figures. Business development at the Brazilian subsidiary KSB Brasil Ltda., based in Várzea Paulista, was also explained in detail at this meeting. The market leader in Brazil has managed to increase its profitability significantly since 2017 following successful cost-cutting and growth measures.

Planning for the 2020 financial year was a focal point of the meeting in December. The Managing Directors reported at length on the relevant targets, notably on order intake, sales revenue and earnings. Particular focus was on setting the investment budget; this has largely been earmarked for the extension of production capacities in growth markets and the modernisation of machinery. With regard to the ongoing strategy project and the associated future reorganisation, the first market segments provided a progress report on their devised measures at this meeting. The Supervisory Board also dealt with the Internal Audits report on a problematic legacy project in London, which had also been reported on at this point in the previous year. The reasons for its development issues, the additional costs incurred and the conclusions drawn were explained and discussed in detail. The precautions taken to avoid similar project risks in the future were outlined to the Supervisory Board. In the year under review, the Supervisory Board, supported by the Personnel Committee, also discussed the appointments of the Managing Directors Dr Stephan J. Timmermann, Dr Matthias Schmitz and Ralf Kannefass, which were set to expire in 2020, and endorsed their extension for a further three years respectively, as subsequently resolved by the Administrative Board.

We also made significant progress again in the year under review with the continued review of the company's past problematic supply of services to its majority shareholder and other related parties. We succeeded in concluding an extra-judicial settlement agreement which provides, by mutual agreement, for compensation claims on the part of the company against certain parties, some of which were already asserted in 2018. The settlement agreement is subject to approval by this year's Annual General Meeting. As stated in last year's Report of the Supervisory Board, significant compensation payments were also received from relevant recipients of the services in recent years.

Main Focus of Work in the Committees

In order to enable it to fulfil its duties efficiently, the Supervisory Board worked with four committees during the year under review. These prepared the Supervisory Board's resolutions and the special topics to be discussed in the plenary sessions. In addition, they also made their own decisions – to the extent that this is legally permissible – within the scope of their areas of responsibility. This allocation has proved worthwhile in practice. The Chairs of the committees regularly and comprehensively reported in the plenary sessions on the content and results of the work carried out in the committees.

The **Nomination Committee** recommends to the Supervisory Board suitable nominees for election as Supervisory Board members, whom the Supervisory Board then proposes to the Annual General Meeting. In looking for and evaluating suitable candidates with the requisite expertise and experience of the industry, long-term succession planning is a key factor. The committee met twice in the year under review.

The **Corporate Development Committee** deals with strategic development in the fields of technology, production and sales, among other things. It had four meetings in the year under review. The committee heard reports on the cloud-based KSB Guard pump monitoring system, which was released for sale in early 2019. This system records the performance and status parameters of pumps and thereby contributes to operating reliability and cost reduction in our customers' systems. It is an example of the potential of digitalisation in our industry. In order to promote the culture of innovation in general, the company held Global Innovation Days in 2019, and the committee was given information on how this went and what it achieved. The

SUPERVISORY BOARD COMMITTEES
and their Chairs, as well as number of meetings in the year under review

CORPORATE DEVELOPMENT COMMITTEE
Klaus Kühborth
Meetings: 4

NOMINATION COMMITTEE
Dr Bernd Flohr,
Klaus Kühborth
Meetings: 2

PERSONNEL COMMITTEE
Dr Bernd Flohr
Meetings: 2

AUDIT COMMITTEE
Klaus Burchards
Meetings: 6

Attendance at meeting

	Supervisory Board	Nomination Committee	Corporate Development Committee	Personnel Committee	Audit Committee
Dr. Bernd Flohr, Chair	4/4	2/2		2/2	6/6
Alois Lautner, Deputy Chair	3/4			2/2	3/6
Claudia Augustin	3/4			2/2	
Klaus Burchards	4/4				6/6
Arturo Esquinca	4/4		4/4		
René Klotz	4/4		4/4		
Klaus Kühborth	4/4	2/2	4/4		
Birgit Mohme	4/4				6/6
Thomas Pabst	4/4		4/4		
Prof. Dr. Corinna Salander	4/4		4/4		
Volker Seidel	4/4		4/4		
Gabriele Sommer	3/4			2/2	

committee was also informed about how production by the former Bochum plant was progressing following its relocation to the Pegnitz factory in 2018. The figures presented revealed significant savings in purchasing and production costs, supported by synergy effects and streamlining of processes. Examples of sales topics covered include measures to increase the service business as well as processes and organisation in the specific sales areas.

The **Personnel Committee** held two meetings in the year under review. It focuses on subjects and challenges relating to Human Resources activities within the Group. It also decides in particular on the conducting of transactions for which the Supervisory Board has been appointed to represent the company pursuant to Section 112 AktG [*Aktiengesetz* – German Public Companies Act] as well as on matters relating to the remuneration of the Supervisory Board members. In the year under review, the committee discussed with the relevant specialist department the status of the group-wide introduction of personnel administration and management software. Also on the agenda were the generally pleasing results of the employee engagement survey carried out in the year under review. According to this, satisfaction among employees increased significantly on the whole compared with the first survey in 2016. The committee received a detailed explanation of the analysis, including the need for action in certain isolated areas as well as the proposed measures. Another key topic at the meetings was the extension of the expiring appointments of the Managing Directors, as mentioned above.

The six meetings of the **Audit Committee** during the year under review were generally attended by the Managing Directors involved and the managers of the relevant specialist departments, plus, on multiple occasions, the auditors. The Audit Committee discussed the 2018 annual and consolidated financial statements and the relevant audit reports submitted by the auditors. The combined separate non-financial report was also discussed in detail. The committee prepared the independent examination by the Supervisory Board of the financial statements, the management reports and the proposal on the appropriation of the net retained earnings. In addition, the Audit Committee submitted a recommendation for the selection of auditors by last year's Annual General Meeting to the plenary session. The Audit Committee also commissioned the auditors with auditing the annual and consolidated financial statements for the 2019 financial year and defined specific key areas for the audit. The declaration of independence by the auditors was obtained, and the auditors' continued independence and performance of non-audit services were monitored. The committee also discussed the half-year financial report for the year under review with the Managing Directors.

In addition, the committee focused on monitoring accounting, the accounting process, the risk management system and the effectiveness of the internal control system, including compliance and the auditing of the annual financial statements. The reports by Internal Audits were also explained regularly. The report on the aforementioned critical legacy project in London was of central importance. Its impact on the 2018 annual financial statements gave cause for a separate meeting in the 2019 financial year to analyse the situation and the resulting measures. The issues also addressed by the committee included the handling of currency management as well as advice on the development of selected subsidiaries.

Corporate Governance and Statement of Compliance

The Supervisory Board continuously monitored developments in corporate governance standards throughout the year under review. The general partner, acting through its Managing Directors, and the Supervisory Board reported on corporate governance at the company as part of the Corporate Governance Statement pursuant to Sections 289f (2 and 3) and 315d HGB. On 19 December 2019, they issued a joint updated statement of compliance in accordance with Section 161 AktG and made it permanently available to shareholders on the company's web site. The company complies with the German Corporate Governance Code's recommendations subject to a few justified exceptions.

Audit of the 2019 Annual and Consolidated Financial Statements

The Supervisory Board examined the annual financial statements of KSB SE & Co. KGaA for the year ended 31 December 2019, which were prepared in accordance with the provisions of the *Handelsgesetzbuch* (HGB), as well as the consolidated financial statements and the combined management report for both financial statements for the year ended 31 December 2019, which were prepared in accordance with the International Financial Reporting Standards (IFRSs), and the proposal by the general partner on the appropriation of net retained earnings. This also applies to the separate combined non-financial report.

PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, based in Frankfurt am Main with an office in Mannheim, audited the annual financial statements of KSB SE & Co. KGaA for the year ended 31 December 2019, as well as the consolidated financial statements and the combined management report for the company and the Group for the year ended 31 December 2019, and issued an unqualified opinion. The key audit areas defined for the auditors by the Audit Committee for the year under review mainly included the annual impairment test for goodwill, intangible assets and items of property, plant and equipment in the consolidated financial statements as well as the annual impairment test for software made in-house in the annual financial statements. The separate combined non-financial report was reviewed. The auditors reported on their findings both orally and in writing.

The accounting documentation, the proposal by the general partner on the appropriation of the net retained earnings, the non-financial report and the audit reports submitted by the auditors were provided in good time to all members of the Supervisory Board. They were discussed in detail by the Audit Committee on 6 March 2020 and on 12 March 2020, as well as in the Supervisory Board plenary session on 19 March 2020, and explained in depth by the Managing Directors of the general partner. The auditors attended the meetings of both bodies, reported on the findings of the audit and were available to provide additional information.

The Supervisory Board concurs with the auditors' findings. Following the final result of the examination by the Audit Committee and its own review, the Supervisory Board raised no objections to the annual financial statements, consolidated financial statements, management report and Group management report, as well as the separate combined non-financial report. In accordance with the recommendation of the Audit Committee, the Supervisory Board approved the financial statements prepared by the general partner. The proposal of the general partner on the appropriation of the net retained earnings of KSB SE & Co. KGaA, and in particular the increase in the dividend to EUR 8.50 per ordinary no-par-value share and EUR 8.76 per preference no-par-value share, is deemed to be appropriate by the Supervisory Board in accordance with its own review; it concurs with the proposal.

Changes to the Supervisory Board

Alois Lautner resigned from his office as a member of the Supervisory Board on 31 December 2019 due to his retirement. He had been a member of the Supervisory Board since 2001 and its Deputy Chairman since 2013. The Supervisory Board would like to thank Alois Lautner for his many years of successful contribution to this body. He was succeeded on 1 January 2020 by Harald Schöberl, who was elected to the Supervisory Board by the employees. The Supervisory Board elected René Klotz as its Deputy Chairman on 17 January 2020.

The Supervisory Board would like to thank the Managing Directors and the Administrative Board of the general partner, as well as the employees and employee representatives of all Group companies for their constructive and committed work during the past financial year.

Frankenthal, 19 March 2020

The Supervisory Board

A look back at 2019

Q1

Young Researchers

KSB hosts the regional finals of the “Jugend forscht” youth science competition in Frankenthal for the seventh time. 90 pupils present their projects in science and technology to a panel of experts and the public under the motto “Ask yourself”. Sustainability and environmental protection were the key project themes.

Measurement Valves for Drinking Water

ISH sees KSB showcase its new BOA-Control EKB and BOA-Control IMS EKB type series for the first time. The valves feature an ultrasonic sensor allowing them to offer shut-off, balancing and measuring functions all in a single valve. The new valves are intended for use in drinking water supply, air conditioning and cooling circuits.

Slovak Republic

Slovakian KSB Čerpadlá a Armatúry, s.r.o. celebrates its 25th anniversary. Over this period the original team of four has grown to include15 employees.

Major Order

KSB wins a contract worth 70 million euros to supply six reactor coolant pumps and spare parts for a Chinese nuclear power plant. The order is a milestone for the company’s China strategy. The customer was convinced by high quality technology which meets the highest safety standards.

Service in Taiwan

KSB has been operating in Taiwan since 1993. In order to expand its service business, KSB opens a new, larger service centre equipped with the latest machinery at a central location in New Taipei. It is to ensure customer support that is better and faster than ever before.

Q2

Award

KSB is ranked one of “Germany’s best training companies” for the third time in a row. This is the result of a study commissioned by Deutschland Test and the Focus Money business magazine which evaluated the training quality of 20,000 companies in different industries.

New Site

Around 200 guests, including customers, representatives of the German embassy, the German Mechanical Engineering Industry Association (VDMA), trade associations and the German-Russian Chamber of Commerce celebrate the inauguration of a new production, sales and service location in Moscow. KSB has invested more than ten million euros to build its largest site in Eastern Europe covering 5,000 square metres.

Digital Transformation

The company’s first Digital Come Together takes place in Frankenthal. KSB experts and managers brought employees up to date on current and upcoming measures to implement digitalisation across the Group. Further events were held later in the year in Halle and Pegnitz.

Additive Manufacturing

TÜV Süd certifies KSB as the first manufacturer for additive manufacturing of pressure equipment. This is an important competitive advantage that documents the high quality of 3D printing technology at the company.

Q3

Business Innovation Lab

The Business Innovation Lab in Ludwigshafen is recognised as one of the best facilities of its kind in Germany for the third time in a row. The Capital magazine analysed think tanks using the categories of inventing innovations, developing innovations and scaling innovations. KSB's Business Innovation Lab made it onto the list of winners in all three categories.

Digital Education

This year's new apprentices at the Frankenthal, Halle and Pegnitz sites are the first to receive tablets so that they can access teaching content online at any time. The measure is is one of many toward digitalising training at KSB.

Switzerland

KSB inaugurates a new service workshop in Oftringen. The Swiss subsidiary's activities focus on the installed base and general business sales channels and on the expansion of service activities under the KSB SupremeServ brand.

An Informative Visit

As part of her press trip, Minister President of Rhineland-Palatinate Malu Dreyer visits the Frankenthal site to learn about sustainability in the company. For KSB, this means implementing a responsible approach to resources and the environment, but also taking responsibility for our employees and corporate social commitment.

Certification

KSB is the first manufacturer of reactor coolant pumps to receive certification for use in the latest generation of Chinese nuclear power stations (CAP1400). The RUV unit developed especially for this purpose had to undergo a test run lasting more than 700 hours at temperatures of almost 300 °C.

Q4

Valve Order

KSB receives a major order for 5,500 valves for a chemical plant in Finland. The factory produces batteries for electric cars.

Strategic Direction

October sees more than 100 managers meet to discuss KSB's strategic orientation. As well as focusing on six markets and the business in valves and spare parts, a new organisational structure will be established at the beginning of 2020. The aim is to make KSB sustainably profitable and improve its positioning in the competitive landscape.

Largest Boiler Feed Pump

A boiler feed pump with the world's highest drive rating is dispatched by KSB in late December to be used in the Chinese Pingshan II power station. The feed pump of the CHTD type series manufactured in Frankenthal will have to cope with extremely challenging conditions.

Global Innovation Days

Around 100 experts from various specialist departments and 17 countries take part in the company's first Global Innovation Days. In the course of the three-day meeting they develop topics for the future to support KSB's business success.

Separate Combined Non-financial Report

Sustainably successful companies act responsibly in the interests of future generations. KSB takes this principle to heart. Our business activities have always been determined by ecological and social criteria as well as economic factors. This means adopting a responsible approach to resources and the environment while embracing responsibility for our employees and our social commitments. We present these topics in this separate combined non-financial report pursuant to Sections 289b(3) and 315b(3) HGB [*Handelsgesetzbuch* – German Commercial Code]. The report fulfils the requirements of the CSR Directive Implementation Act [*CSR-Richtlinie-Umsetzungsgesetz*] and combines the statement at company level with the Group statement outside of the management report.

In accordance with our business model, we aim to supply customers worldwide with high-quality pumps and valves, as well as related service. The vast majority of our products are developed in-house and are manufactured in factories on four continents. Our products are sold via our own sales organisation, supported by dealer networks comprising selected partners. KSB's business model is presented in our combined management report on page 36.

By joining the UN Global Compact in 2010, we committed ourselves to aligning our business activities with ten universal principles. But it is not only our managers and employees who endorse the principles of the Global Compact – our suppliers and business partners also share these commitments.

Our sustainability profile

We have formulated our own corporate sustainability principles in a Group-wide sustainability policy. These are binding for all locations and all companies within the KSB Group. A committee chaired by the CEO regularly reviews progress on topics related to sustainability. Management also receives a compliance report twice a year as well as an annual review of management issues relating to quality, the environment and occupational health and safety.

2019 has seen us boost commitment by increasing the number of members on our Sustainability Committee. In addition to the CEO, the committee also includes the heads of Human Resources, Legal & Compliance, Production, Product Management, Purchasing, Communications and Integrated Management.

KSB operates a global integrated management system in order to fulfil consistently high standards worldwide with regard to quality, risk, environment, occupational health and safety, and sustainability. It is process-oriented and complies with the requirements of the international ISO 9001, ISO 14001, ISO 26000 and ISO 45001 standards as well as the UN Global Compact. The management system governs organisational processes and workflows, responsibilities, procedures and processes at Group level and at our individual locations.

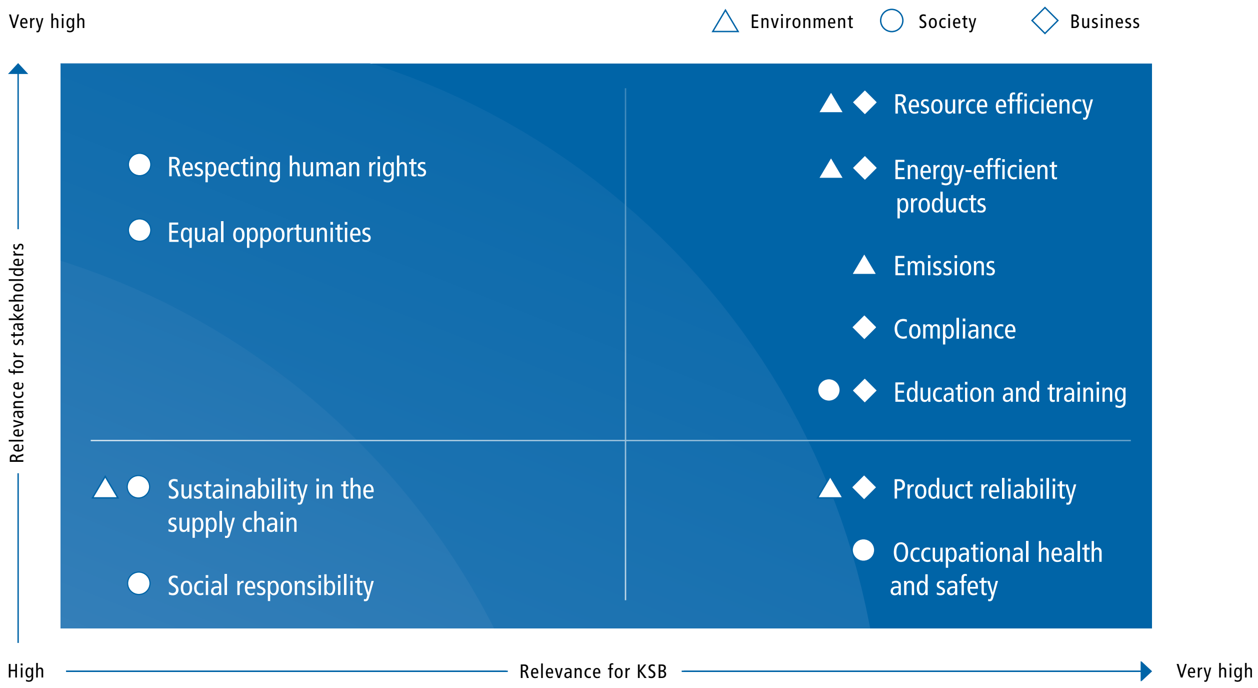
Our sustainability reporting

The management concepts relating to key issues outlined here apply to both the Group and to KSB SE & Co. KGaA; any instances where this is not the case are duly indicated. All information in the non-financial report relates to KSB SE & Co. KGaA and the Group in 2019. References to information not included in the group management report in this section represent supplementary information and are not part of the separate non-financial report. PricewaterhouseCoopers GmbH performed a limited assurance engagement on the information in this report in accordance with ISAE 3000 (Revised) and issued an independent assurance report, see page 31.

In the areas of human rights, labour standards, the environment and anti-corruption, the concepts and activities set out in this report follow the principles of the UN Global Compact.

The non-financial report covers 29 material Group companies, unless otherwise stated. We have selected these on the basis of their impact on aspects such as energy consumption and number of employees.

Key sustainability topics for KSB



The 29 Group companies include all consolidated subsidiaries with production plants and two service companies with energy-intensive workshops.

KSB's corporate responsibility includes our commitment to society. This section is an entirely voluntary report on our social engagement activities which do not have any direct or material impact on our business success.

Key issues

KSB engages in ongoing consultation with various stakeholders in order to determine their demands and expectations of our company. Since 2017, these consultations have served as the basis for determining KSB's priorities in terms of sustainability, see materiality matrix on this page.

In the year under review, specialist departments and our Sustainability Committee worked together with Management to review and finalise the materiality matrix. The aspects and factors necessary for understanding the development and performance of the business and the position of the company as well as the impact of our activities on the following issues remain the same:

- Environment (resource efficiency, manufacturing of energy-efficient products, emissions and product safety)
- Combating corruption and bribery (compliance)
- Respecting human rights (sustainability in the supply chain)
- Employee concerns (training and development, equal opportunities, occupational health and safety)

Non-financial objectives up to 2025 and performance indicators

Topics	Objectives up to 2025	Performance indicators	SDGs*
Environment			
Resource efficiency	We will report on the environmental impact of our new product developments.	Number of development projects	13
Energy-efficient products	Our water pumps will save an annual 850,000 tonnes of CO_2.	CO_2 savings for KSB water pumps with variable speed drives	13
Emissions	We will reduce global CO_2 emissions from our production plants by 30 %.	CO_2 emissions at production sites	13
Employees			
Education	Each employee will undertake at least 30 hours of training and development per year.	Number of training hours per employee per year	8
Equal opportunities	At least 20 % of our managers will be women.	Proportion of women in management positions	5
Engagement	We will increase employee satisfaction to 80 %.	Engagement score according to employee survey	8
Occupational health and safety	We will reduce time lost due to occupational accidents to less than 0.3 days per employee per year.	Number of days lost due to accidents (lost time accidents)	3
Society			
Social commitment	We will support at least 25 social projects worldwide.	Number of CSR projects	1, 2, 3, 4, 6
General issues			
Sustainability in the supply chain	We will evaluate the sustainability performance of 90 % of our key suppliers.	Proportion of evaluated suppliers	8, 12

* The United Nations' 17 Sustainable Development Goals encompass the three dimensions of sustainability: social, environmental and economic aspects. KSB's key sustainability topics relate to the goals addressing poverty (1), hunger (2), health and well-being (3), quality education (4), gender equality (5), clean water and sanitation (6), decent work and economic growth (8), sustainable consumption and production (12) and climate action (13).

These issues are directly related to our manufacturing activities, our products, our business partners and our employees. Our products also directly contribute towards protecting the environment, for example, by saving energy or through their use in waste water treatment applications.

Risks related to non-financial factors

KSB does not see any material risks, as assessed based on the net evaluation method, associated with our own business or the business relations of the company, its products and services which have or could have a serious negative impact on non-financial aspects, such as the environment, anti-corruption, human rights, employee concerns and social issues. All other risks affecting our business activities are described in the combined management report from page 54.

Our goals for 2025

We are committed to the United Nations' 17 sustainable development goals. In the year under review, we derived nine concrete sustainability targets from these sustainable development goals and the issues most important to us. We are aiming to achieve each individual goal by 2025 at the latest.

The nine targets adopted by Management cover environmental, employee, social and supply chain sustainability topics. They focus on climate protection, the promotion of decent working conditions and sustainable economic growth, and health and well-being. We have also committed ourselves to making more progress on gender equality. Additionally, we intend to gather more comprehensive information on how our suppliers deal with sustainability topics. With our social projects we are dedicated to the fight against poverty and hunger, and the provision of clean water and education. We have also set ourselves the binding goal of supporting our employees' professional development. You can find out more about the individual objectives in the overview on page 22 and in the respective sections of this non-financial report.

The implementation of these initiatives in the current financial year is coordinated by the relevant specialist managers from Production, Product Management, Human Resources, Procurement, Communications and Integrated Management. The respective specialist departments are tasked with developing appropriate measures to achieve the targets by 2025. The Sustainability Committee will assess the status of these projects twice a year and monitor the agreed implementation steps.

Environment

ENERGY CONSUMPTION, CO_2 EMISSIONS AND RESOURCE EFFICIENCY

Targets

As a manufacturing company, we strive to be responsible in our use of natural resources. For this reason, we aim to reduce our consumption of energy and raw materials as far as possible. This allows us to reduce our impact on the environment while increasing the profitability of our company. Furthermore, we avoid economic and legal risks which could potentially result from environmental damage and failure to comply with laws and regulations.

By 2025, we intend to assess the environmental impact of more than 50 % of our development projects in accordance with the international ISO 14040 standard. This concerns new product developments and significant design modifications to existing type series. This process will yield detailed information regarding the life cycle assessments of our new products.

We have also set ourselves the goal of reducing the global CO_2 emissions of our manufacturing plants by 30 % (based on 2018) by 2025.

Organisation, processes and measures

KSB follows the internationally recognised ISO 14001 environmental management system to continuously improve its environmental performance. We have so far established the

Energy consumption

	Total	KSB SE & Co. KGaA	Europe**	Asia / Pacific	Americas	Middle East / Africa
Total energy consumption*	294,726 MWh***	99,163 MWh	147,518 MWh	38,931 MWh	94,489 MWh	13,789 MWh
Total electricity	157,467 MWh***	37,112 MWh	58,066 MWh	30,309 MWh	58,323 MWh	10,770 MWh
Electricity from renewables	54,208 MWh	20,919 MWh	26,604 MWh	5,292 MWh	19,773 MWh	2,535 MWh
CO_2 emissions	99,047 t	21,142 t	30,121 t	29,413 t	31,269 t	8,244 t

* Electricity, gas, fuel oil, district heating, wood, etc.
** Including KSB SE & Co. KGaA
*** Total deviates due to rounding

Percentage of renewable energy in our power consumption:

34.4

(KSB SE & Co. KGaA: 56.4 %)

environmental management system at 37 production and assembly locations (KSB SE & Co. KGaA: 3 locations); this means 90 percent of our locations are covered.

We carry out regular energy audits at our major European locations to reduce energy consumption and CO_2 emissions. The resulting measures include the energy-efficient refurbishment of our buildings and foundries.

We regularly record and evaluate energy consumption and CO_2 emissions. In the year under review, our energy consumption was 294,726 megawatt hours (KSB SE & Co. KGaA: 99,163 megawatt hours). 34.4 % (KSB SE & Co. KGaA: 56.4 %) of the energy we consumed came from renewable sources. This percentage rose by 2.6 compared with the previous year across the Group due to the sharp increase at KSB SE & Co. KGaA (+ 5.1 %). We calculate the CO_2 emissions in accordance with Scope 1 and Scope 2 of the GHG protocol.

The Group's emissions in the year under review amounted to 99,047 tonnes of CO_2 (previous year: 101,339 tonnes of CO_2 / KSB SE & Co. KGaA: 21,142 tonnes of CO_2, previous year: 21,215 tonnes of CO_2). This means that emissions of this climate-critical greenhouse gas decreased compared with 2018.

By gradually modernising our systems, we are reducing the amount of hazardous substances used in our manufacturing processes. If we discover any environmental contamination at our locations, we set aside provisions to meet the liabilities for the necessary clean-up work. Provisions totalling € 921 thousand have therefore been recognised in the financial statements for KSB SE & Co. KGaA.

Digitalisation enables us to save valuable raw materials in many company processes. This includes the use of paper, for example.

The digital factory – which we have already implemented in a pilot plant – operates without paper, as do several spare parts warehouses in Europe and Asia. In the year under review, we began equipping our trainees in Germany with tablets so that they can access teaching content online.

Results

- In 2019, several follow-up audits were carried out at German locations in accordance with the German Energy Services Act [*Energiedienstleistungsgesetz*]. The auditors reviewed the measures resulting from the initial audit in 2015. KSB also agreed on further measures to save even more energy.
- At the Frankenthal location, KSB converted the heating systems of about one third of the factory buildings for approx. € 1.6 million. Changing from air heaters to hot water radiant ceiling panels in production halls achieved energy savings of around 30 percent. Further energy-related measures were also implemented at other locations in the year under review.
- KSB has increased the share of renewable energy it uses, increasing this from 31.8 % to 34.4 % in the Group compared with the previous year.

PRODUCTS

Targets

Many of our products and service offerings contribute to the efficient and responsible operation of our customers' systems. We therefore strive to offer as many products as possible that consume little energy and offer many years of reliable operation.

By 2025, we aim to reduce the CO_2 emissions generated through the operation of our water pumps by 850,000 tonnes per year in Europe alone by using variable speed drives.

Organisation, processes and measures

We attach great importance to the quality and safety of our products in order to prevent accidents and environmental pollution. In production, we comply with recognised standards such as CE and implement an established quality management system in accordance with the international ISO 9001 standard. We are therefore able to design processes such that systematic errors during product manufacturing can be avoided. Furthermore, we have introduced the internal "Made by KSB" certification process. It ensures an equally high standard of quality at 13 locations which exceeds the requirements of the international quality management standard. Our internal certification stands for quality, short delivery times, professional service and optimised manufacturing processes.

Our specialists adopt an integrated approach to optimising energy consumption in our customers' plants, analysing the entire hydraulic system and the complete life cycle of the plant. In the year under review, KSB trained several employees so that this service can be offered more widely outside Europe.

Results

- The year under review saw KSB introduce multiple highly efficient products that reduce systems' energy consumption. These include pressure booster systems for use in buildings and industry as well as a new generation of circulators for heating, ventilation and air-conditioning systems. KSB has developed a special pump for cleaning exhaust gases on ships; the scrubbing of exhaust gases is intended to curb global marine and air pollution.

- To ensure the safety of our products, a total of 129 KSB locations are certified to the ISO 9001:2015 quality management standard. During the year under review, TÜV Rheinland audited 17 locations worldwide. In addition, internal audits are carried out annually at all locations.

Compliance

Targets

For KSB, lawful conduct is an important and indispensable part of corporate responsibility. Our customers and business partners expect KSB to act with integrity. That is why compliance with legal regulations and Group-wide directives is part of our core values.

Our goal is to train all relevant employees in cartel / anti-trust law and the prevention of corruption. Using a global matrix of requirements, we ensure for example that all personnel with customer or supplier contact are familiarised with these topics. The training is repeated every three years; in the year under review it was conducted throughout the Group. Any interim needs for training are covered twice a year.

Organisation, processes and measures

Aiming to support employee compliance, we have developed a binding compliance management system. It ensures that legal requirements and internal KSB rules are adhered to, securing the success of our business in the long term. The compliance system is designed to ensure that KSB and its employees always act in line with applicable laws and directives.

Group Management is responsible for organising compliance, monitored by the Supervisory Board's Audit Committee. A Group Compliance Officer is responsible for compliance management and reports to Group Management on relevant topics every six months. Support is provided by a Group Compliance Committee, consisting of top-level managers from the company.

Our Compliance Manual describes structures and processes designed to ensure compliant conduct, as well as setting out responsibilities and instruments.

A core element of our compliance system is the KSB Code of Conduct, which applies across the entire Group. It describes the key legal and business policy principles, providing our employees with guidance for their actions. The Code also sets forth the corporate values which govern our conduct in our day-to-day work: honesty, responsibility, professionalism, trust and appreciation. On this basis, we have formulated and communicated specific principles and rules of conduct.

In order to avoid risks resulting from a loss of reputation and legal repercussions, KSB issued two binding corporate directives, one covering compliance with cartel / anti-trust law and one dealing with the prevention of corruption. Both of these directives help to prevent potential violations. Employees receive appropriate training in recognising potential risks and practical guidance to ensure impeccable conduct.

In the event that employees become aware of violations or are unsure whether their actions are compliant, they refer the matter to the compliance organisation, and specifically to the designated Compliance Officer. If necessary, reports will be treated anonymously. In addition, any circumstances that give rise to legal or anti-trust concerns can be reported directly to an independent ombudsperson, who can process potential cases without naming informants. If reliable evidence is presented, then this is pursued.

KSB does not tolerate any violations of compliance by its employees. If investigations reveal sufficient evidence of a violation, this will have consequences for the individual concerned. Depending on the severity, sanctions range from a disciplinary warning to immediate termination of employment; law enforcement agencies may also be involved.

Results

- 2019 saw 3,780 employees successfully complete compliance training e-learning modules.

- In 2019, the ombudsperson received one notification of suspected compliance violation. However, a review revealed that this case did not constitute a compliance violation. In 2019, our Group Compliance Office also received five reports of suspected compliance violations. As a consequence, the responsible employees initiated the necessary steps and measures for clarifying the situation following a precisely defined three-stage procedure.

Human rights

Targets

KSB does not tolerate human rights violations. It is our declared goal to prevent all forms of discrimination on the basis of individual characteristics such as age, origin, religion, appearance, gender, sexual orientation, disability or marital status. We do not tolerate discrimination, harassment or reprisals of any kind in the working environment. We have also pledged not to indirectly tolerate violations of human rights, for example when it comes to selecting our suppliers.

Organisation, processes and measures

KSB respects and supports the protection of international human rights. To underline our commitment, we joined the UN Global Compact. As a company, we comply with the conventions of the International Labour Organisation (ILO). We furthermore respect the freedom of association and the right to collective bargaining in our companies. We also observe government sanctions such as embargoes and issue internal export control directives.

Basic conduct requirements among the workforce and with business partners are governed by the KSB Code of Conduct.

In 2019, KSB committed itself for the third time to abide by the UK Modern Slavery Act. We are thus committed to conducting our entire business – including our supply chain – free from all forms of forced labour, slavery or human trafficking.

In order to identify and avoid risks in the supply chain, we practice active supplier management. For every order we place, the supplier declares that it complies with the rules in our Code of Conduct, which corresponds with the human rights principles defined in the UN Global Compact. This enables us, for example, to ensure we avoid purchasing raw materials from areas of conflict where violations of human rights may have been involved in their production. We do not cooperate with companies that are known to have committed human rights violations.

Our employees can contact the compliance organisation or an ombudsperson regarding human rights issues, following the same procedure as for suspected compliance violations (see above).

Results

- In 2019 there were no reports of possible human rights violations at KSB.

Employees

A MOTIVATED AND CAPABLE WORKFORCE

Targets

Our more than 15,000 employees form the basis for sustainable economic success at KSB. This is why we need motivated and capable people who are committed to our customers. It is therefore our aim to increase the engagement score with which we measure the satisfaction of our employees to 80 % by 2025.

As an attractive employer, we want to retain our employees and attract new talent. We implement targeted professional development measures to continuously improve the skills of our workforce. By 2025, we intend to increase the number of training hours per employee per year to 30 hours (2019: 13.6 hours).

KSB is committed to providing equal opportunities. Our goal is to increase the proportion of women in management positions to at least 20 % by 2025 (2019: 13 %).

Organisation, processes and measures

Overall responsibility for our human resources work lies with the head of Human Resources, who reports directly to the CEO and coordinates Group-wide HR issues. Individual locations' human resources departments look after their local employees.

We use several channels when selecting our future employees. These include contacting potential applicants via online social networks. We also participate in recruiting fairs. A further channel for finding potential candidates is cooperation with universities and schools.

We continuously train young people in order to meet demand for specialist staff. At our German locations, 240 trainees and students participating in the country's dual work / degree programmes prepared for professional life. Training staff are particularly focused on qualifying young people for the digitalised world of work. In 2019, we invested almost € 7.2 million in vocational training.

KSB develops the skills and knowledge of its employees to prepare them for specialist and management positions. For this purpose, we have developed a three-stage concept. It distinguishes between Group-wide, departmental and individual professional training measures. Training requirements are agreed between line managers and employees at annual performance evaluation interviews. We offer training measures covering engineering, business administration, information technology, communication and leadership.

Workforce by gender

	Total	KSB SE & Co. KGaA	Europe*	Asia / Pacific	Americas	Middle East / Africa
Male employees	84 %	81 %	81 %	89 %	86 %	86 %
Female employees	16 %	19 %	19 %	11 %	14 %	14 %
Male managers	87 %	91 %	87 %	87 %	81 %	93 %
Female managers	13 %	9 %	13 %	13 %	19 %	7 %

Number of training hours

	Total	KSB SE & Co. KGaA	Europe*	Asia / Pacific	Americas	Middle East / Africa
Hours per employee	13.6	12	13	9	18	16

* Including KSB SE & Co. KGaA

In 2019, each of our employees completed an average of 13.6 hours of professional development activities (KSB SE & Co. KGaA: 12). Regional differences (see table on page 27) emerge above all due to varying qualification levels among new employees, meaning that more specialised training is required in some of our companies.

Our Internet-based learning platform launched in 2018 offers our employees the complete KSB training portfolio. In addition to greater use of e-learning, this platform also enables the direct exchange of knowledge and experience among users and thus supports mutual learning.

Diversity and equal opportunities form the basis upon which the people at KSB work together. Our binding human resources principles harmonise with the conventions of the ILO and apply to all KSB companies. In keeping with these principles, when recruiting we focus solely on the professional requirements of the role to be filled and the individual performance and potential of the candidate. Clear responsibilities have been established to ensure this. Management works to ensure that the principles of equal opportunities and diversity are realised in company practice. Our Human Resources department communicates these principles within the Group and adapts them where required. HR also fosters an awareness of this important topic and offers corresponding training and advice.

KSB offers women the same opportunities as men. We have been recording the proportion of female managers since 2017. In the year under review, this figure rose from 11 % to 13 % compared with 2018. Women account for 16 % of the total workforce. In order to support our female staff, we are strengthening the measures taken by KSB to reconcile the commitments of family and work. Such measures include offering childcare during the school holidays. We also offer advice on caring for family members, and both male and female staff can benefit from our flexible working time models. In order to increase the proportion of women in management positions, we will agree further measures in the current reporting year.

Number of training hours per employee:

13.6

(KSB SE & Co. KGaA: 9)

KSB is making great efforts to strengthen its position in a highly competitive market environment and to achieve profitable growth. This is only possible with employees who drive the company forward with commitment and passion. Employee satisfaction has a significant influence on the success of the company. We therefore measure the satisfaction of our staff by means of a survey conducted every three years. In the year under review, we were able to carry out these surveys in almost all Group companies for the first time. Compared with the 2016 survey, employee satisfaction increased by 12 percentage points. Managers discussed the results with their teams and collaborated on the development of measures to further improve the score.

Aiming to further increase satisfaction, we emphasise open exchange with our employees. The active engagement of staff contributes to KSB's ongoing development. Employees have the opportunity to participate in regular round-table discussions with members of Management.

Our efforts to balance work and private life include supporting sports and leisure activities that our employees undertake together. This not only motivates participants, but also promotes identification with KSB.

Results

- 13,889 professional development activities were conducted via our online learning platform in 2019.
- Employee performance evaluation was standardised throughout Europe.
- 14,966 employees were invited to take part in the employee engagement survey, meaning it was accessible to almost all employees worldwide. The response rate was 80 %. Participants evaluated the company, the Management, talent management, collaboration, training and professional development – and for the first time the leadership of their line managers. KSB has improved significantly in all areas evaluated compared with the 2016 survey. Line managers discussed the results with their staff and together developed new measures to achieve further improvements.

OCCUPATIONAL HEALTH AND SAFETY

Targets

KSB takes care of the health and safety of its employees. It is our goal to protect our employees from risks at work and to keep the number of occupational accidents as low as possible. By 2025, we aim to permanently reduce the number of days lost due to accidents to less than 0.3 days per employee (2019: 0.3 days). The measures we are undertaking to achieve this include the global “Vision Zero” concept from the International Social Security Association. In addition, we strive to offer our employees opportunities to support healthy living.

Organisation, processes and measures

Our efforts to prevent accidents in everyday working life are focused on production areas due to their increased risk. Appropriate training, instruction and other preventive measures are implemented regularly. In the year under review, 35 of our production and assembly sites (including all factories of KSB SE & Co. KGaA) were certified according to the ISO 45001 international occupational health and safety standard. This represents 85 % of our locations.

KSB adopts a transparent approach to accident awareness and prevention. We provide daily updates on key occupational health and safety figures in our locations’ entrance areas and production halls in order to raise employee awareness and facilitate constructive dialogue on the subject of accident prevention.

Health awareness at work is also an important topic for our administrative departments. We therefore offer training including an annual e-learning course on safety in the office.

We invest in the health and well-being of our employees. KSB takes a holistic approach to actively implementing its company health management system. This sees us fulfilling not only our company’s legal requirements in terms of occupational health, but also offering voluntary health care services such as colon cancer screening, skin cancer screening and flu vaccinations.

Results

- The number of accident-related days lost per employee and year was 0.3 in 2019 (lost time accident rate).
- 523 employees participated in colon cancer screening. 61 employees received a positive test result revealing abnormalities. They were advised to consult their family doctor and have the findings examined.

Society

Targets

KSB has traditionally linked economic success with working for the common good, which also includes providing financial assistance to socially active organisations. Through our philanthropic efforts, we aim to contribute to social development that is characterised by a desire to systematically shape the future, ensure social justice and achieve a high quality of life. By 2025, we intend to support 25 social projects.

Organisation, processes and measures

Our binding donation directive sets out for which purposes and under which conditions we may make financial or material commitments. In this context, we focus on supporting organisations and projects dedicated to the education, social support and protection of children and young people. We are also committed to supporting the disadvantaged. In the event of disasters we provide assistance to both people and organisations.

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In 2019, KSB contributed to more than 100 charitable initiatives and projects.

In 2019, we actively participated in 65 social initiatives in the areas around our locations. These included blood donation campaigns by our employees and material donations for those in need. In addition, we donated more than € 5,000 each to 51 projects whose aims include fighting poverty, promoting healthy living, providing education, clean water and sanitation, and eliminating inequalities.

With our social commitment we contribute to achieving the 17 goals for sustainable development set out by the United Nations. We have focused on the sustainable development goals of good health and well-being (goal 3), quality education (goal 4) and industry, innovation and infrastructure (goal 9).

The provision of financial support for aid projects has a long tradition at KSB. This includes ongoing support for social developments in the areas around our locations. We also make regular donations to projects seeking to supply people with clean drinking water, for which we also provide non-cash support such as pumps.

Results

- 2019 saw KSB contribute to 44 health projects. These included blood donation campaigns by our employees, preventative measures such as colon cancer screening and donations to hospitals.
- 40 activities focused on promoting quality education. For example, we supported schools with donations of equipment and financial aid.
- With a view to promoting industry, innovation culture and infrastructure, we lent our support to 32 projects. In 2019, for example, we modernised buildings of non-profit organisations that directly benefit people.

More information on our social commitment is available at **www.ksb.com/csr**

Limited Assurance Report on the Combined Non-financial Report

To KSB SE & Co. KGaA, Frankenthal

Independent Practitioner's Report on a Limited Assurance Engagement on Non-financial Reporting[1]

We have performed a limited assurance engagement on the combined separate non-financial report pursuant to §§ 289b Abs. 3 und 315b Abs. 3 HGB ("Handelsgesetzbuch": "German Commercial Code") of KSB SE & Co. KGaA, Frankenthal, (hereinafter the "Company") for the period from January 1, to December 31, 2019 (hereinafter the "Non-financial Report").

RESPONSIBILITIES OF THE EXECUTIVE DIRECTORS

The executive directors of the Company are responsible for the preparation of the Non-financial Report in accordance with §§ 315c in conjunction with 289c to 289e HGB.

This responsibility of Company's executive directors includes the selection and application of appropriate methods of non-financial reporting as well as making assumptions and estimates related to individual non-financial disclosures which are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as they have considered necessary to enable the preparation of a Non-financial Report that is free from material misstatement whether due to fraud or error.

INDEPENDENCE AND QUALITY CONTROL OF THE AUDIT FIRM

We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors ("Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer": "BS WP/vBP") as well as the Standard on Quality Control 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality control for audit firms (IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis - IDW QS 1) – and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

[1] PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the separate non-financial report and issued an independent assurance report in German language, which is authoritative. The following text is a translation of the independent assurance report.

PRACTITIONER´S RESPONSIBILITY

Our responsibility is to express a limited assurance conclusion on the Non-financial Report based on the assurance engagement we have performed.

Within the scope of our engagement we did not perform an audit on external sources of information or expert opinions, referred to in the Non-financial Report.

We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement to allow us to conclude with limited assurance that nothing has come to our attention that causes us to believe that the Company’s Non-financial Report for the period from from January 1, to December 31, 2019 has not been prepared, in all material aspects, in accordance with §§ 315c in conjunction with 289c to 289e HGB.

In a limited assurance engagement the assurance procedures are less in extent than for a reasonable assurance engagement, and therefore a substantially lower level of assurance is obtained. The assurance procedures selected depend on the practitioner’s judgment.

Within the scope of our assurance engagement, we performed amongst others the following assurance procedures and further activities:

- Obtaining an understanding of the structure of the sustainability organization
- Inquiries of management and relevant personnel involved in the preparation of the Non-financial Report regarding the preparation process, the internal control system relating to this process and selected disclosures in the Non-financial Report
- Identification of the likely risks of material misstatement of the Non-financial Report
- Analytical evaluation of selected disclosures in the Non-financial Report
- Comparison of selected disclosures with corresponding data in the consolidated financial statements and in the combined group management report
- Evaluation of the presentation of the non-financial information

ASSURANCE CONCLUSION

Based on the assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the Company’s Non-financial Report for the period from January 1, to December 31, 2019 has not been prepared, in all material aspects, in accordance with §§ 315c in conjunction with 289c to 289e HGB.

INTENDED USE OF THE ASSURANCE REPORT

We issue this report on the basis of the engagement agreed with the Company. The assurance engagement has been performed for purposes of the Company and the report is solely intended to inform the Company about the results of the limited assurance engagement. The report is not intended for any third parties to base any (financial) decision thereon. Our responsibility lies only with the Company. We do not assume any responsibility towards third parties.

Frankfurt a. Main, 12 March 2020

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Nicolette Behncke
Wirtschaftsprüfer
(German Public Auditor)

ppa. Barbara Wieler

2

Group Management Report

Basic Principles of the Group

Group Business Model

This management report for the first time combines the management reports for KSB SE & Co. KGaA, Frankenthal / Pfalz, Germany, and the KSB Group for the 2019 financial year (Combined Management Report).

The KSB Group's mission is to supply customers around the world with top-quality pumps and valves as well as related systems. It also offers a broad service portfolio to users of these products.

KSB SE & Co. KGaA, as the parent, directly or indirectly holds the shares in the companies belonging to the Group. Besides it, 9 domestic and 76 foreign companies are fully consolidated; 6 other companies are accounted for under the equity method. KSB is currently represented in more than 40 countries with its own subsidiaries.

As well as KSB SE & Co. KGaA itself, the companies in the KSB Group with the highest sales revenue are

- KSB S.A.S., Gennevilliers (Paris), France
- KSB Shanghai Pump Co., Ltd., Shanghai (China)
- GIW Industries, Inc., Grovetown / Georgia (USA)
- KSB Limited, Pimpri (Pune), India
- KSB Service GmbH, Frankenthal, Germany
- KSB BRASIL LTDA., Várzea Paulista, Brazil
- KSB Italia S.p.A., Milan, Italy

The basic business model has not changed during the year under review. External economic and political changes, however, have had a partial effect on business. These are – where relevant and material to KSB – described in the following sections.

ORGANISATION, MANAGEMENT AND CONTROL

KSB SE & Co. KGaA was formed from KSB Aktiengesellschaft by entry in the *Handelsregister* [German Commercial Register] on 17 January 2018. The partnership limited by shares (KGaA) [*Kommanditgesellschaft auf Aktien*] is a common legal form in Germany for companies with a family- and foundation-dominated ownership structure. The general partner is KSB Management SE, a European public limited company. The shares in this company are wholly owned (100 %) by Klein, Schanzlin & Becker GmbH, a subsidiary of the non-profit KSB Stiftung [KSB Foundation] and the Kühborth-Stiftung GmbH [Kühborth Foundation]. KSB SE & Co. KGaA and with it the KSB Group are managed via KSB Management SE, which has four Managing Directors and a five-member Administrative Board.

Managers and employees implement the strategy and instructions of the Managing Directors within an organisation that is structured according to responsibilities for product groups, corporate functions and regions.

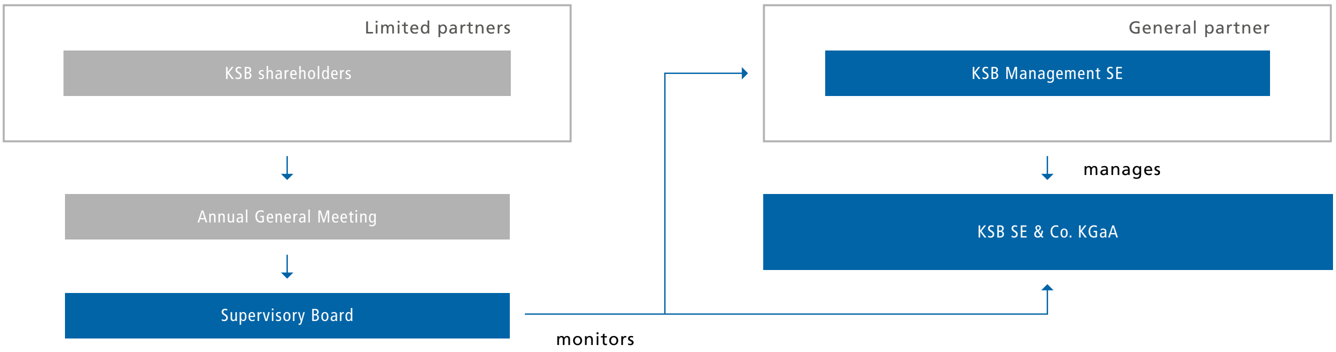
All organisational units in the KSB Group act with the aim of ensuring sustainable, profitable growth to secure both KSB's financial independence and its medium- and long-term future. KSB is monitored by a Supervisory Board consisting of twelve members. The Annual General Meeting of shareholders appoints six members of the Supervisory Board, with the remaining six being delegated by the employees under the terms of the *Mitbestimmungsgesetz* [German Co-determination Act].

The KSB Group organises its business activities in three segments based on product groups: Pumps, Valves and Service. The Pumps segment covers single- and multistage pumps, and associated control and drive systems. Applications are industry, chemicals / petrochemicals, energy supply, water transport and waste water treatment, construction / building services and the hydraulic transport of solids in mining. The Valves segment covers butterfly, globe, gate, control, diaphragm and ball valves, as well as associated actuators and control systems. The applications for these products are essentially identical to those for pumps. The Service segment, for which KSB launched its own brand, KSB SupremeServ, in the 2018 financial year, covers the installation, commissioning, start-up, inspection, servicing, maintenance and repair of pumps, related systems and valves for all these applications, as well as modular service concepts and system analyses for complete systems.

MARKETS AND LOCATIONS

Within the KSB Group, centrifugal pumps account for around two thirds of sales revenue. These pumps, as well as valves, are sold to engineering contractors, OEMs and end users or, in some cases, distributed via dealers.

Bodies / Structure



The former KSB AG is now managed in the legal form of a partnership limited by shares [*Kommanditgesellschaft auf Aktien* – KGaA]. Management is the responsibility of KSB Management SE, the individually liable general partner. The responsibilities of the bodies are governed by law and the Articles of Association. This is the basis for efficient corporate governance, which contributes to sustainable corporate growth.

The same applies to control and monitoring systems, and to package units with pumps and valves.

The largest and best developed sales market for these products is Europe, where KSB operates its main manufacturing facilities in Germany and France. The main plant of the present KSB SE & Co. KGaA in Frankenthal is its largest in Europe, ahead of the production sites in Pegnitz (Bavaria) and Halle (Saxony-Anhalt) in Germany, and La Roche-Chalais in France.

The second-largest market for KSB products is the Region Asia / Pacific, followed by the Region Americas and the Region Middle East / Africa. Outside Europe, KSB's biggest production sites are in Brazil, China, India and the USA.

KSB manufactures products and components in a total of 17 countries; they are sold through the Group's own companies or agencies in more than 100 countries. With their products, the Group companies serve customers in industry including the chemical and petrochemical industries, in the energy sector, in construction / building services, in water and waste water management, and in mining. In 2019 the largest markets continued to be general industry, energy and water / waste water.

As the largest company in the KSB Group, KSB SE & Co. KGaA serves all the Group's regions and markets.

In order to be able to offer KSB products at favourable prices, the Group's purchasing requirements are combined and affordable suppliers sourced around the world who meet the relevant quality standards. The KSB Group is able to maintain its market position as one of the leading pump and valve manufacturers through its good and long-term relationships with customers and suppliers. Highly trained and motivated employees as well as the high quality of products have also helped cement this reputation.

Control System

Based upon a matrix organisation, KSB determines its key financial performance indicators as follows:

KSB mainly makes management decisions for the Group as a whole and for the Pumps, Valves and Service segments on the basis of the following key indicators: order intake, sales revenue and EBIT. KSB defines EBIT to be earnings before finance income / expense and income tax. When specifying key indicators, KSB is guided on the one hand by developments in the market and on the other by its main competitors. In addition, KSB continues to monitor the key indicators of earnings before income taxes (EBT), pre-tax return on sales and net financial position, which since the 2019 financial year have no longer been considered significant performance indicators.

Management decisions for KSB SE & Co. KGaA are made on the basis of the same control metrics as for the Group.

No non-financial performance indicators are consulted for controlling the Group and for making decisions regarding management issues.

Research and Development

Innovations are a fundamental pillar of KSB's activities and are part of the core elements of its strategy. They are defined as solutions that create added value for customers and translate into new products, services or business models.

Finding creative solutions is the most successful where developers have a high degree of freedom in choosing the approaches or methods. With this objective in mind, KSB has set up the off-site Business Innovation Lab to abandon the traditional paths of research and development. In this think tank, digital natives work with experienced specialists on ideas for the digital transformation of the company and on new paths in the marketing of pumps, valves and hydraulic systems.

Beyond these innovation approaches, the integration of hydraulic and electronic systems is a focus of activities. It opens access to new business models. As many product components come into contact with fluids that are corrosive or abrasive, materials research is another key area of the developers' work.

50.5

Research and development expenses in € millions

In these activities, the KSB Group is primarily drawing on its strong research and development expertise in Europe and India. In addition, it cooperates with external institutes and research facilities. Overall, the Group spent around € 50 million on research and development in the year under review. This equates to about 2 % of our sales revenue. KSB SE & Co. KGaA invested € 34 million in research and development in the year under review, which equates to around 4 % of sales revenue. A large portion of the development work was on customer projects. Across the Group, 512 staff were employed in research and development on average over the year. At KSB SE & Co. KGaA, 271 staff worked in research and development in the year under review.

Economic Review

Macroeconomic Environment and Sector View

The world economy lost further steam over the course of the 2019 financial year. The International Monetary Fund (IMF), whose figures provide the basis for planning, predicted growth of 3.5 % at the start of 2019. Actual growth, at + 2.9 %, failed to meet this forecast and was at its lowest level since the global financial crisis in 2008 / 2009. The ongoing trade policy restrictions on the traffic of goods along with geopolitical tension led to a deterioration in the business climate and acted as a brake on capital investment decisions. Weaker growth affected both developed countries (+ 1.7 %) and emerging market and developing countries (+ 3.7 %).

Europe was once again of primary importance for the KSB business in 2019. However, compared with the IMF forecast, the growth of the economy in the home market weakened more sharply than it did on a global scale. The effects of the global restrictions on trade and a collapse in sales figures in the automotive industry were reflected in significantly weaker demand from abroad and pushed down economic growth in the euro zone to + 1.2 %. Exports declined in Germany in particular. In combination with lower industrial output, this caused the economy to grow by only + 0.5 %, just avoiding recession. France escaped the fall in growth largely unscathed on account of stable domestic demand, and recorded economic growth of + 1.3 %. In Italy, the drop in demand from abroad combined with political uncertainty and lower private consumption meant that the economy weakened to + 0.2 %. In the UK, economic growth slowed to + 1.3 %. Main reasons were the ongoing uncertainty about the consequences of the forthcoming exit from the EU and more circumspect capital investment behaviour as a result. The Spanish economy once again recorded above-average growth in international terms thanks to strong domestic demand. This improved the economic environment for sales in Spain as well as for production and service.

After posting strong growth in recent years, the US economy weakened in 2019. The decline was primarily attributable to higher customs duties and the waning effect of the tax-cutting policy. Overall, the US economy achieved growth of + 2.3 %, putting it slightly below the IMF forecasts at the beginning of the year.

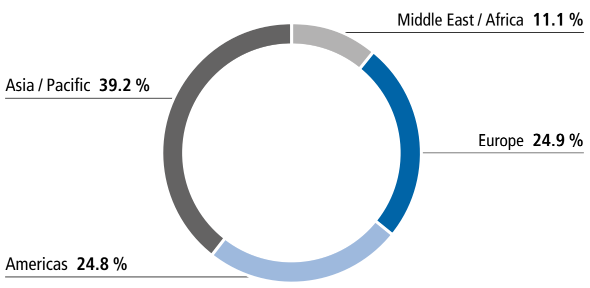
While economic growth in China and India remained above the average for the emerging economies of Asia, the increase was lower year on year, too. Despite stabilising fiscal policy and state infrastructure projects, economic growth in China slipped to + 6.1 %. Weaker exports and a fall in capital investment contributed to the slowdown. In India, economic growth declined to + 4.8 % because of weaker domestic demand.

The five economically most significant countries in South East Asia – Indonesia, Malaysia, the Philippines, Thailand and Vietnam – recorded a growth rate below the previous year's level at + 4.7 % overall. The IMF forecast for these countries – where KSB also has a presence through its own companies – was reduced in the course of the year.

The region South America, which includes important markets for KSB in Argentina, Brazil and Chile, was considerably weaker and well below the expectations at the beginning of the year. Here growth was a mere + 0.2 %. In Argentina, the currency crisis and the outflow of capital were exacerbated following the elections in August. The result was a further decline in the economy. In Brazil, structural reforms and improved conditions on the financial markets, accompanied by expansionary monetary policy, bolstered the economy. However, these measures were unable to prevent a slight slowdown in economic growth compared with the previous year.

The economic performance of the countries in the Region Middle East / Africa was marked above all by international tension and economic sanctions and by a falling oil price overall interrupted only by short-term and supply-driven price shocks. In South Africa, where KSB operates a factory in Johannesburg, political uncertainty, low capital investment and trade restrictions acted as a brake on economic growth.

World market of centrifugal pumps and valves



Source: KSB estimate (February 2020), European Industrial Forecasting

For Saudi Arabia, likewise a large sales market for KSB, the IMF revised its forecast significantly downwards in view of the drop in crude oil production and industrial output.

For Russia, the signs pointed to a further weakening in the economy owing to the continuing sanctions and the lack of foreign investment.

WEAKER DEMAND OVERALL

Over the course of the year, the restrictions on international trade put a brake on capital investment and industrial output worldwide. This meant that in the general industry market, which is important for KSB, growth in demand was also down overall.

The petrochemical industry faced challenges on a number of fronts in view of geopolitical tension, changing international supply chains, volatile crude oil prices and evolving demand. Oil refineries benefited from higher demand and capacity utilisation last year on account of the forthcoming switch to low-sulphur fuels in shipping from 2020. The International Maritime Organisation (IMO) regulation entering into force in 2020 requires a reduction in sulphur oxides from 3.5 % to 0.5 %.

According to estimates from the International Energy Agency (IEA), the consumption of natural gas rose further last year. A number of regionally varying factors contributed to this. In China, political measures to improve air quality took effect, while in the Middle East the efforts to reduce dependency on crude oil had an impact. In 2019, investment in liquid natural gas (LNG) technologies reached a record level.

The chemical industry fared less well. In China, which is the world's largest producer of chemicals, growth weakened in the sector. In the United States, the national trade association for the chemical industry cut its forecast for 2019. In Europe, growth was also down owing to the weakening in the manufacturing sector.

For the water and waste water industry, increasing industrialisation and urbanisation are the driving forces for stable growth. Market observers therefore anticipate a significant increase in capital investment in waste water facilities for 2019. Major capital investment projects were launched in the course of the year as a result of the development of rural regions in Africa and South America and efficiency improvements in countries in the Middle East, particularly Saudi Arabia.

The downward trend of recent years in capital investment in gas-powered and coal-fired power stations continued. In North America and Europe, the generating capacity represented by fossil-fuelled power stations has been continually reduced over recent years. Only Asia and the Middle East have increased capacity. As far as nuclear power stations are concerned, global capacity at the beginning of 2019 was slightly above the previous year's level. Almost all new reactors went on stream in China. Worldwide, more than 50 nuclear power plant reactors remain under construction. The largest expansion in capacity last year was in renewable energy. With regard to total energy consumption, the IEA's monthly statistics for the OECD (Organisation for Economic Cooperation and Development) countries up to and including October 2019 showed a reduction.

In mining the economic slowdown made itself felt. Coal production rose only slightly globally, bolstered by higher demand mainly in China, India and Australia. In the USA, Canada and a number of European countries – among them Germany in particular – the coal industry is facing change in view of emissions regulations. The mining of metals such as iron and copper was also subdued last year. Producers of precious metals benefited from higher prices last year.

The construction / building services industry is at a turning point globally after years of strong growth. As a result, growth rates in energy-efficient building and heating are also down. On the other hand, significant impetus for refrigeration and air conditioning technology had been expected in Asia in particular. With support from public infrastructure projects, growth in the construction / building services industry is expected to be strongest in China. The German construction / building services sector also continued to show strong growth rates across all areas of construction equally, despite the overall economy weakening.

MECHANICAL ENGINEERING IN A DOWNTURN

According to information from the German Mechanical Engineering Industry Association (VDMA), politically motivated upheaval unsettled investors, while the transformation process in the automotive industry hit demand. Global sales revenue in mechanical engineering stagnated in 2019 at prior-year levels in real terms, according to VDMA. Among the top five locations (China, USA, Germany, Japan, Italy), which account for around 70 % of global sales revenue, only China is expected to show growth. Positive sales figures were also achieved in individual countries in the euro zone and in Sweden. In the UK, sales revenue in the mechanical engineering industry showed a negative development.

According to VDMA, sales revenue in the German mechanical engineering sector too dropped by 3.4 %. Real-terms production failed to match the previous year's level, contracting by 3.2 %, according to provisional calculations from the German Federal Statistical Office. Capacity utilisation fell below its long-term average.

In the liquid pumps sector, VDMA recorded real sales revenue growth of 2 % among German pump manufacturers. Industrial valves stagnated with real sales revenue growth of + / – 0 %. Sales revenue growth for building services valves was 1 %.

Business Development and Results of Operations

In the first seven months of the year, business continued to improve because of strong capital investment activity on the part of customers in important sales markets. This applied, in particular, to the energy, water / waste water and construction / building services markets. By contrast, the last five months of the year saw a significant cool-down of the capital goods market.

KSB made the most of market opportunities via the global KSB sales organisation, supported by its global manufacturing network, its service organisation and national dealership networks.

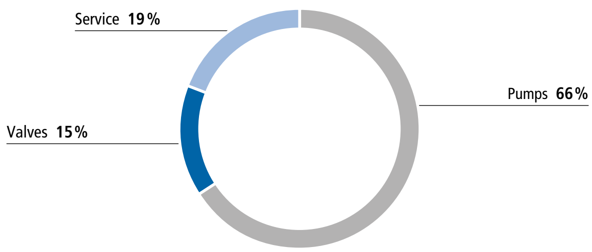
ORDER INTAKE

The volume of incoming orders was increased by a tangible € 150.2 million (+ 6.5 %) to € 2,453.8 million in the financial year.

Notable rises were recorded particularly with customers in the energy (€ + 43.4 million), general industry (€ + 25.4 million), water / waste water (€ + 23.3 million) and construction / building services (€ + 20.8 million) markets. This equates to growth of 6.5 % in total.

At regional level, almost every company posted a significantly higher order intake. The highest growth was achieved by the Region Asia / Pacific at € + 69.5 million (+ 13.6 %) and the Region Americas at € + 44.2 million (+ 12.3 %). Companies in the Region Middle East / Africa were up on the previous year by € 23.4 million (+ 16.3 %), and companies in Europe were up by € 13.1 million (+ 1.0 %) in a generally stagnating market. This growth was underpinned by nuclear orders from China, India, Canada and Northern Europe. The Region Middle East / Africa recorded a considerable recovery from its low position.

Sales revenue by segment



Segment reporting

€ thousands	Order intake		Sales revenue		EBIT	
	2019	2018	2019	2018	2019	2018
Pumps segment	1,617,825	1,506,248	1,562,462	1,469,443	84,823	90,563
Valves segment	361,878	355,618	364,365	340,771	2,266	– 37,373
Service segment	474,060	441,670	456,358	435,734	26,514	21,512
Total	**2,453,763**	**2,303,536**	**2,383,185**	**2,245,948**	**113,603**	**74,702**

Pumps

In the Pumps segment, order intake was € 1,617.8 million, up by a substantial € 111.6 million (+ 7.4 %). The main drivers were the nuclear and water / waste water markets in particular. The energy market grew by € 45.8 million (+ 25.5 %), construction / building services by € 19.1 million (+ 11.3 %), water / waste water by € 16.8 million (+ 5.2 %), mining by € 10.4 million (+ 5.0 %) and general industry by € 9.7 million (+ 2.1 %).

Valves

In the Valves segment, order intake was € 361.9 million, up by a moderate € 6.3 million (+ 1.8 %). The most significant growth came in the oil and gas market with € + 17.6 million (+ 21.8 %), followed by water / waste water with € + 4.2 million (+ 20.7 %). The general industry market also performed positively with growth of € 2.8 million (+ 2.7 %). The construction / building services and mining markets remained almost unchanged, while the energy market declined by € 9.1 million (– 11.4 %).

Service

Order intake in the Service segment totalled € 474.1 million, which was a substantial € 32.4 million (+ 7.3 %) above the previous year. The general industry market in particular recorded notable growth of € 12.9 million (+ 10.9 %). In addition, the energy market grew by € 6.6 million (+ 5.9 %), mining by € 5.6 million (+ 20.3 %), water / waste water by € 2.3 million (+ 4.2 %) and construction / building services by € 1.8 million (+ 5.0 %).

SALES REVENUE

Consolidated sales revenue rose significantly by € 137.2 million (+ 6.1 %) to € 2,383.2 million.

2.4

Consolidated sales revenue in € billions

Europe remains the region with the strongest sales revenue at 54.4 %. The European companies' sales revenue was up by a tangible 3.1 % from the previous year. The largest entity, KSB SE & Co. KGaA, which serves markets both in and outside Europe, improved its sales revenue by € 17.4 million to € 779.4 million. Major projects contributed to this growth. With the exception of the Region Middle East / Africa, where weak order intake from the previous year resulting from political factors made itself felt, all Regions contributed to growth. The companies in the Region Asia / Pacific recorded the strongest growth with an increase of € 59.5 million (+ 12.4 %) followed by the legal entities in the Americas with a gain of € 41.9 million (+ 12.1 %) and Europe with € + 38.9 million (+ 3.1 %). The companies in the Region Middle East / Africa, were down on the previous year with a decline of € 3.0 million (– 1.9 %).

Pumps

Sales revenue in the Pumps segment increased by a significant € 93.0 million (+ 6.3 %) to € 1,562.5 million. Substantial growth compared with the previous year was recorded by the Region Asia / Pacific with € + 40.4 million (+ 11.8 %) and the Region Americas with € + 31.7 million (+ 11.4 %). In the Region Europe sales revenue rose by a significant € 24.4 million (+ 3.4 %). Growth in the Region Americas was supported primarily by the US company GIW with its main business in the mining market. In Asia / Pacific, the business in India and China performed very positively.

Valves

In the Valves segment, order intake growth was translated into significantly increased sales revenue. It rose by € 23.6 million (+ 6.9 %). The financial year closed with sales revenue of € 364.4 million. While in some cases substantial growth was recorded by the companies in the Region Europe at € + 10.8 million (+ 4.9 %), the Region Asia / Pacific at € + 10.6 million (+ 11 %) and the Region Middle East / Africa at € + 2.6 million (+ 39.8 %), the Region Americas was marginally down on the previous year's level by € – 0.4 million (– 2.8 %).

Service

The Service segment saw a tangible upturn in sales revenue of € + 20.6 million (+ 4.7 %) to € 456.4 million. The Region Europe, by far the largest, was approximately level with the previous year at € + 3.7 million (+ 1.1 %), while the Region Americas was well above the previous year's level at € + 10.6 million (+ 20.0 %), as was the Region Asia / Pacific at € + 8.6 million (+ 20.0 %). Only the Region Middle East / Africa recorded a substantial decline of € 2.2 million (– 12.7 %), resulting from the economic and political environment.

EARNINGS BEFORE FINANCE INCOME / EXPENSE AND INCOME TAX (EBIT)

The KSB Group achieved earnings before finance income / expense and income tax (EBIT) of € 113.6 million (previous year: € 74.7 million). The Pumps segment contributed € 84.8 million to this figure, the Service segment € 26.5 million and the Valves segment € 2.3 million.

The previous year was marked by a number of extraordinary transactions, which impacted on EBIT in the amount of € – 22.8 million. After adjustment for extraordinary transactions, EBIT in 2018 would have been € 97.5 million. The significant improvement in EBIT recorded in 2019 was thus attributable both to the extraordinary transactions ceasing to have an effect and to improved operational business activity. Individually, the segments contributed as follows:

Pumps

EBIT in the Pumps segment, at € 84.8 million, was a significant € 5.7 million below the previous year's EBIT figure of € 90.6 million, despite growth in sales revenue of € 93.0 million (+ 6.3 %). The decline was principally caused by the one-off income of € 32.4 million recognised in the previous year as a result of the introduction of a lump-sum option for pension payouts. This option means employees can choose to receive a lump-sum payment, either as a one-time payment or in ten annual instalments, instead of a monthly pension for life. In contrast, EBIT was reduced in the previous year by provisions amounting to € 25.0 million for a legacy project in the UK and for risks in connection with the business in Iran of € 5.4 million. The forecast made in the previous year's report for EBIT (a slight decline) was not met owing to weaker-than-expected sales revenue particularly in the Region Europe and by weaker standard business.

Valves

In the Valves segment the forecast for EBIT (a substantial increase) was met, with an improvement from € – 37.4 million to € + 2.3 million. Like the Pumps segment, the Valves segment also felt the effect of extraordinary transactions in 2018.

113.6

Consolidated earnings (EBIT) in € millions

While the lump-sum pension payment option referred to above added € 5.9 million to EBIT in 2018, EBIT was weighed down in 2018 by a € 20.6 million impairment loss on the goodwill of KSB Seil Co., Ltd., South Korea, and by a write-down on property, plant and equipment in the amount of € 10.6 million. Thus, overall the Valves segment recorded a significant improvement in operational earnings, mainly attributable to the significant rise in sales revenue and higher margins.

Service

In the Service segment, the KSB Group achieved EBIT of € 26.5 million. The substantial rise of € 5.0 million (+ 23.3 %) was in line with the forecast from the previous year. The extraordinary transactions had only a marginal effect of € + 0.5 million on EBIT in the Service segment in 2018. The main factor in the improved earnings in this segment in 2019 was the increase in sales revenue of € 20.6 million. The expansion of the Service business under the KSB SupremeServ brand introduced in 2018 had a positive effect.

TOTAL OUTPUT OF OPERATIONS

The above-mentioned rise in sales revenue was also reflected in a higher total output of operations. This amounted to € 2,381.2 million, after € 2,275.8 million in the previous year, despite a reduction in work in progress and inventories of finished goods of € 9.3 million (previous year: increase of € 22.6 million). Other work performed and capitalised amounts to € 7.4 million and was therefore stable compared with the previous year.

INCOME AND EXPENSES

Other income was almost unchanged on the previous year at € 33.4 million (previous year: € 33.1 million). However, in the previous year the item included income of € 8.5 million from the reversal of provisions; since the 2019 financial year this income has been shown in the expense items in which the original addition to provisions was recognised. Without the effect of this, other income rose by € 8.8 million. This was primarily attributable to higher compensation payments from customers for cancelled orders in the amount of € + 3.5 million, higher income from asset disposals of € + 1.6 million and an increase of € 1.2 million in income from the reversal of impairment losses.

The cost of materials rose slightly in relation to the total output of operations, up from 41.1 % in the previous year to 41.4 % in the year under review. Thus, overall the cost of materials increased in step with the total output of operations to € 984.8 million compared with € 934.5 million in the previous year.

Staff costs rose significantly in the 2019 financial year, from € 765.5 million to € 848.3 million (a rise of € 82.8 million). In the 2018 financial year, staff costs were reduced by € 46.4 million on account of the lump-sum pension payment option referred to above. Without this factor, staff costs would have risen by 4.5 % instead of the actual rise of 10.8 %. On average in the year under review, the KSB Group had 233 employees (+ 1.5 %) more than in the previous year. Just under half the rise in headcount was accounted for by Europe, where on average 103 more staff were employed. Other notable increases were recorded in Asia and in the Region Middle East / Africa. With a 4.6 % increase in the total output of operations and a rise in staff numbers at the same time, the total output per employee increased further from € 148 thousand to € 153 thousand. An average of 15,591 people were employed in the reporting year (previous year: 15,358 employees).

Depreciation and amortisation fell by € 22.6 million to € 81.9 million compared with the prior-year period. In the previous year write-downs totalling € 38.8 million were recognised, comprised of impairment losses on the goodwill of KSB Seil Co., Ltd., South Korea, and of two French service companies, and of impairment losses on property, plant and equipment of the French production company KSB S.A.S., Gennevilliers (Paris). In the year under review, in contrast, depreciation / amortisation of € 15.9 million relating to right-of-use assets was shown under this item for the first time.

Other expenses fell by € 44.7 million to € 372.2 million compared with the prior-year period. The decline was mainly attributable to additions to provisions for a legacy project in the United Kingdom in the previous year as well as to the first-time adoption of IFRS 16 in the year under review. This standard requires that for leases in which KSB is the lessee lease liabilities and right-of-use assets (rights to use leased items) be recognised on the balance sheet. The expenses for rents and leases included in other expenses, which also included operative lease expenses, fell accordingly by € 14.1 million in the year under review. The right-of-use assets now recognised on the balance sheet had the effect of adding to depreciation and amortisation.

Finance income / expense declined by € 1.0 million. This reflects the lower income from equity investments recognised using the equity method.

EARNINGS

The KSB Group generated earnings before income tax (EBT) of € 103.4 million compared with € 65.6 million in 2018. Correspondingly, the return on sales before income tax rose from 2.9 % in the previous year to 4.3 %. The income tax rate fell from 63.5 % in the previous year to 43.4 % in the year under review. The very high income tax rate in the previous year, which remained high in the year under review, was again mainly the result of deferred taxes on loss carryforwards that cannot be capitalised. Overall, KSB more than doubled its earnings after income tax, with an increase from € 23.9 million in 2018 to € 58.5 million.

At € 15.4 million, earnings attributable to non-controlling interests rose by € 2.8 million compared with the previous year. Relative to earnings after income tax, there was therefore a change from 52.8 % to 26.4 %.

Earnings attributable to shareholders of KSB SE & Co. KGaA (€ 43.1 million) were € 31.8 million higher than in the previous year (€ 11.3 million).

Earnings per ordinary share were € 24.47, compared with € 6.26 in the previous year, and € 24.73 per preference share, compared with € 6.64 in 2018.

Financial Position and Net Assets

FINANCIAL POSITION

The KSB Group's financial position remained good. This was reflected in a consistently high equity ratio of 37.1 % (previous year: 38.2 %).

Liquidity

KSB recorded cash flows from operating activities of € 144.9 million, a year-on-year increase of € 83.6 million. The improvement was essentially achieved by a working capital initiative started in 2019. In particular, the increase in inventories usually associated with sales growth was avoided. Higher earnings after income tax also contributed to the sharp increase in cash flows. A reduction in liabilities had a countervailing effect.

The outflows from investing activities fell by € 16.5 million compared with 2018: cash flows from investing activities shrank from € – 90.5 million in the previous year to € – 74.0 million in the reporting year. The repayment of a loan extended to Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd., Shanghai, made a major contribution to this.

By contrast, the negative cash flows from financing activities increased, totalling € – 46.4 million compared with € – 9.4 million in the previous year. A key reason was the scheduled repayment on the loan against borrower's note in the amount of € 26.0 million. Furthermore, in the reporting year cash flows from financing activities included the repayment of lease liabilities in the amount of € 16.1 million from the first-time adoption of IFRS 16.

Overall, cash and cash equivalents increased sharply from € 255.5 million to € 280.9 million. Exchange rate effects amounting to € – 0.3 million (previous year: € + 4.6 million) were recorded.

The KSB Group assumes that, in future, it will continue to be able to meet its outgoing payments largely from operating cash flows. From the current perspective, its financial management is meeting the goal of ensuring its liquidity at all times essentially without any additional external financing measures. In addition, there has been a syndicated loan agreement of KSB SE & Co. KGaA and KSB FINANZ S.A., Luxembourg, since December 2018 to hedge liquidity risk and cover the need for bank guarantees of the KSB Group. The credit line can be used at any time and has a fixed term of five years with the option to renew twice by one year each time. In the reporting year KSB made use of this option for the first time and renewed the fixed term early until the end of 2024. For more information on liquidity management (such as credit lines) see the section on Risk Reporting on the Utilisation of Financial Instruments elsewhere in this group management report.

Investments

The additions to intangible assets amounting to € 15.2 million (previous year: € 13.0 million) mainly comprised internally generated intangible assets.

Investments in property, plant and equipment in the year under review, at € 78.9 million, were higher than the prior-year figure of € 66.6 million. The highest additions at € 29.3 million (previous year: € 16.1 million) related to advance payments and assets under construction. Another € 19.8 million related to plant and machinery (previous year: € 21.5 million), while € 19.6 million was accounted for by other plant, operating equipment and office equipment (previous year: € 20.3 million). As in 2018, the focus of capital investment activity was the Region Europe, mainly Germany and France. Outside Europe, the highest additions were made at the plants in the USA, India and China.

246.3

Net financial position in € millions

Net financial position

The net financial position, at € 246.3 million, fell by € 8.7 million after € 255.0 million in the previous year. This reduction was brought about by the first-time adoption of IFRS 16. The lease liabilities included in the net financial position rose by a considerable € 47.1 million. After adjustment for the lease liabilities recognised under IFRS 16, the net financial position in the year under review would have amounted to € 293.4 million (previous year: € 255.0 million).

Contingent liabilities and other financial obligations

The contingent liabilities as at the reporting date totalled € 19.0 million (previous year: € 35.9 million). This decline was mainly the result of the revised assessment of a lawsuit pending in France, for which the likelihood of a conviction was downgraded to remote.

There are no other extraordinary obligations and commitments beyond the reporting date. Further financial obligations arise only within the normal scope from purchase commitments amounting to € 29.5 million (previous year: € 12.4 million).

NET ASSETS

Around 33.6 % of funds is attributable to non-current assets (previous year: 31.1 %). Intangible assets and property, plant and equipment with a historical cost of € 1,507.8 million (previous year: € 1,476.2 million) have carrying amounts of € 608.4 million (previous year: € 587.7 million). Total intangible assets rose from € 91.1 million to € 97.1 million. The main increase, at € 9.2 million, came from internally generated intangible assets, relating primarily to the KSBase sales software, which was made operational in December 2019 as a selection software for the standard pump range, and to the implementation of a project aimed at introducing an end-to-end e-sales process. Property, plant and equipment rose from € 496.7 million to € 511.3 million as a result of capital expenditure (€ 78.9 million) in excess of depreciation of € 61.5 million.

The adoption of IFRS 16, which requires right-of-use assets for leases to be recognised on the balance sheet, resulted in an increase of € 50.1 million.

The carrying amount of financial assets, investments accounted for using the equity method and non-current other non-financial assets rose overall by € 0.5 million to € 29.0 million. The investments accounted for using the equity method made up € + 0.3 million. Deferred tax assets rose to € 95.1 million (previous year: € 80.4 million).

Inventories were recognised in the amount of € 544.7 million, almost unchanged on the previous year (€ 544.4 million) despite a higher volume of business. This reflected the positive effect of the working capital project referred to above. Contract assets edged up from € 74.5 million in the previous year to € 76.4 million.

Trade receivables decreased from € 518.1 million at the end of the previous year to € 504.1 million. This decline was basically the result of measures to reduce receivables in Germany, France and Sweden.

Other financial assets were down from € 103.4 million to € 90.9 million. This change essentially resulted from reduced other receivables (€ – 12.3 million). Other non-financial assets likewise showed a reduction (€ 9.9 million). The main factor was the drop in recoverable taxes, particularly in Germany and India, which were down by € 8.9 million at € 31.2 million.

Cash and cash equivalents account for around 12 % of assets, totalling € 280.9 million (previous year: € 255.5 million).

Assets held for sale in the amount of € 7.8 million relate to the company SPI Energie S.A.S., France, in the Service segment, the shares in which were sold in January 2020.

Total assets increased by 3.8 % to € 2,327.0 million, above all as a result of non-current assets, which since 2019 have also included right-of-use assets for leases pursuant to IFRS 16.

37.1

Equity ratio in percent

EQUITY

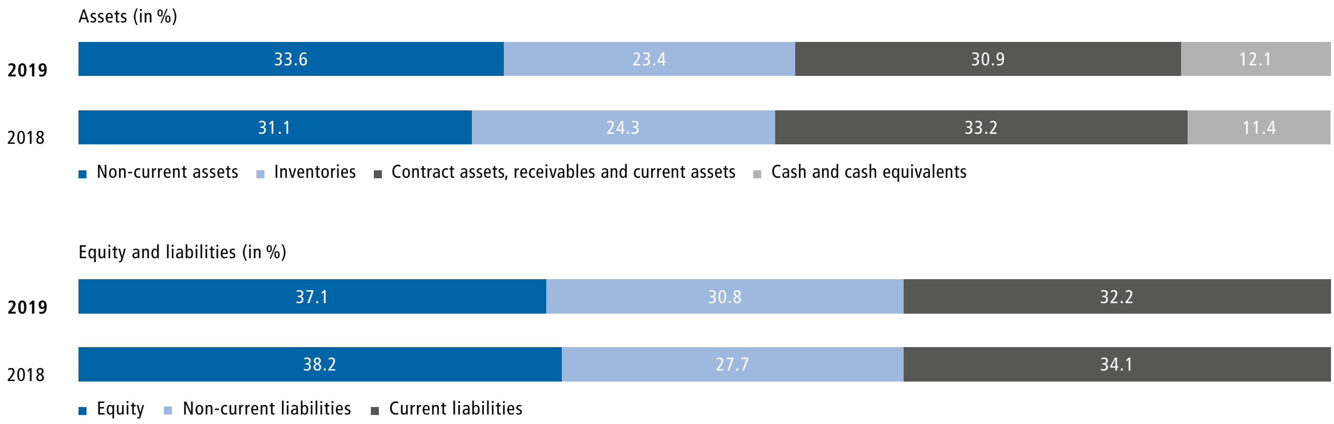
The KSB Group’s equity amounts to € 862.6 million (previous year: € 856.8 million). This includes KSB SE & Co. KGaA’s subscribed capital of € 44.8 million as in the previous year. The capital reserve remains unchanged at € 66.7 million. Revenue reserves contracted by a total of € 8.8 million. This reflected the effect of the significant increase in earnings after income tax and the fall in discount rates for pension provisions, resulting in actuarial losses after deferred taxes in the amount of € 49.1 million. The revenue reserves include the proportion of earnings after income tax attributable to KSB SE & Co. KGaA shareholders, at € 43.1 million (previous year: € 11.3 million). Out of total equity, € 182.2 million (previous year: € 167.6 million) is attributable to non-controlling interests. Due to the higher total equity and liabilities, the equity ratio contracted to 37.1 % (previous year: 38.2 %).

The non-controlling interests mainly relate to the following companies: KSB Limited, India, and KSB Shanghai Pump Co., Ltd., China, as well as the PAB subgroup. The latter consists of Pumpen- und Armaturen-Beteiligungsgesellschaft mbH, Frankenthal, and its US subsidiaries.

Inflation and exchange rate effects

Of the Group’s consolidated companies only the annual financial statements of an Argentinian company had to be adjusted for the effects of inflation. As in the previous year, this did not result in any material impact on the net assets, financial position or results of operations.

Balance sheet structure



The translation of financial statements of consolidated companies that are not prepared in euro gave rise to a difference of € + 3.8 million (previous year: € – 13.8 million). The total of currency translation differences was taken directly to equity.

Liabilities

The largest item under liabilities continues to be provisions for employee benefits, including, also as the largest item, pension provisions, which rose by € 76.0 million, from € 553.6 million to € 629.6 million, of which € 70.5 million (previous year: € 10.7 million) alone was caused by the decrease in discount rates referred to above. Obligations for current pensioners and vested benefits of employees who have left the company account for about 45 % of the amount recognised in the balance sheet. The rest relates to defined benefit obligations for current employees.

Non-current financial liabilities rose by € 26.7 million to € 56.8 million, mainly because of the € 31.2 million in additional lease liabilities resulting from the first-time adoption of IFRS 16. The loan against borrower's note, which still amounts to € 22.0 million, is expected to be repaid in 2021.

The other non-current and current provisions for employee benefits dropped to € 28.9 million (previous year: € 34.4 million) because of the reduction in partial retirement provisions.

Other non-current and current provisions also decreased from € 84.9 million in 2018 to € 69.7 million. This was mainly the consequence of lower provisions for expected losses (€ – 12.7 million).

Current liabilities fell overall by € 16.1 million to € 748.9 million, after € 765.0 million at the close of 2018, following the repayment on the loan against borrower's note. Taking into account the increase in total equity and liabilities, the share of current liabilities in total equity was 32.1 % (previous year: 34.1 %).

Trade payables fell to € 252.7 million (previous year: € 270.2 million). Other non-financial liabilities increased by € 6.8 million. Contract liabilities rose from € 157.4 million in the previous year to € 165.5 million. Current financial liabilities declined by € 4.5 million.

Liabilities in connection with assets held for sale in the amount of € 4.0 million relate to the company SPI Energie S.A.S., La Ravoire, France, in the Service segment, the shares in which were sold in January 2020.

Summary of the Performance in the Financial Year

The order intake forecast in the previous year, expected to be in a range between € 2,350 million and € 2,500 million, was achieved. In the Pumps and Service segments, where a substantial increase was anticipated, the forecast was confirmed. In the Valves segment only a slight increase was recorded. This segment therefore failed to match the tangible increase expected, which was attributable to the energy market.

As with order intake, the forecast for sales revenue, expected to be in a range between € 2,300 million and € 2,450 million, was achieved. Sales revenue in the Pumps segment rose only tangibly rather than substantially, as a result of lower-than-expected growth in the Region Europe. The Valves segment likewise failed to match expectations, with a tangible rise rather than the substantial one forecast. In this segment, too, growth in Europe was weaker than anticipated. In the Service segment the forecast of tangible growth was confirmed.

The range between € 95 million and € 115 million forecast for EBIT was also attained. In the Values segment, the forecast of a substantial rise was met. KSB also recorded substantial growth in the Service segment, as anticipated. By contrast, the forecast for the Pumps segment, where a slight decline was expected, was not matched, as there was a tangible decrease. Detailed information on the reasons for the EBIT performance is provided in the “Earnings before finance income / expense and income tax (EBIT)” section.

The forecasts on ranges for order intake, sales revenue and EBIT reaffirmed in the 2019 half-year report were fulfilled for all key indicators.

The Management of the KSB Group is satisfied overall with business performance in the year under review.

KSB continues to have a healthy financial basis for the future.

Report on Expected Developments

The International Monetary Fund has lowered its forecast for global economic growth in 2020 only slightly to 3.2 % in real terms. Compared with the previous year, growth is expected to pick up on the basis of economic recovery anticipated in a number of emerging economies and developing countries, such as Brazil, Mexico, Saudi Arabia and Turkey. In India, the growth rate is expected to rise to 5.8 %. For the advanced industrialised countries, the expansion in activity is likely to remain level with last year, at 1.6 %. There are prospects of a boost to growth momentum from the phase 1 deal in the trade dispute between China and the USA.

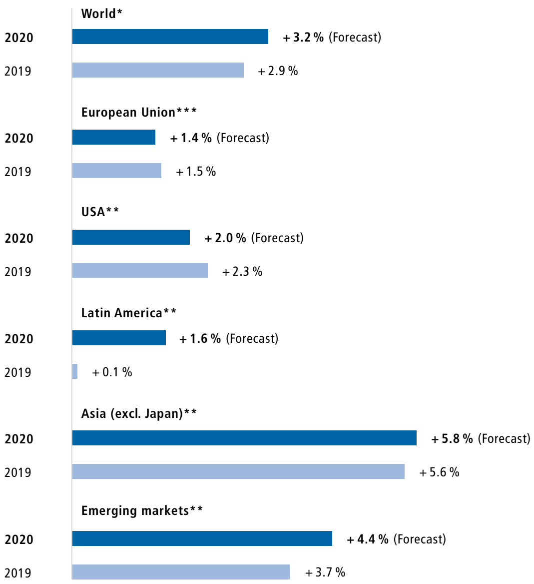
The IMF forecasts a drop in growth for the USA at + 2.0 %. This can be attributed to the waning effect of the 2017 tax cuts, international trade restrictions, falling capital expenditure and lower consumption spending. However, in comparison to the industrialised nations as a whole, growth in the USA will once again be above average. The Canadian economy is also likely to post a slightly above-average performance at + 1.8 %.

For the euro zone, growth of + 1.3 % is expected, which would be a slight improvement on last year. In Germany, economic activity is set to accelerate significantly to + 1.1 %. However, in comparison to other industrialised nations this growth level is once again below the average.

For the emerging markets and developing countries, the IMF is projecting an overall growth rate of + 4.4 %, i.e. well above the previous year's level. Turkey, which suffered a significant drag on growth in the course of 2019, will recover in 2020 and contribute to accelerated growth. In Russia, too, a recovery in growth momentum is to be expected.

For Asia the IMF expects the economy to perform only a little better than last year, which is accounted for both by the stagnation in economically developed countries and by only a slight pick-up in growth in the emerging markets and developing countries. In China, the IMF anticipates a further weakening in momentum to + 5.6 % as a consequence of a further slowdown in industrial production and capital investment activity.

Gross domestic product growth



*Source: International Monetary Fund (February 2020)
**Source: International Monetary Fund (January 2020)
***Source: EU Commission (February 2020);
Additional information: Euro zone +1.2 % (2019), +1.2 % (2020)

However, this forecast does not factor in upward potential from an easing in customs duties or the negative impact on the economy of the spread of the coronavirus at the beginning of 2020. In India, an acceleration in economic growth to + 5.8 % is expected. This is attributable to the after-effects of monetary policy easing and of the cut in corporate taxes. A slight pick-up in growth to + 4.8 % is projected for the ASEAN countries, which also include important KSB sales markets.

In Latin America a significant improvement in growth is anticipated at + 1.6 %. In Brazil, the expectation is that the effect of expansionary monetary policy and of structural reforms will be felt and lead to growth of + 2.2 %.

On the assumption that the current bottoming out of business climate indicators for the manufacturing industry will be sustained, then an initial, though slow, rise in demand for capital goods over the course of 2020 could be expected. However, VDMA expects global sales of plant and machinery to stagnate again in 2020 in real terms. While growth of + 2 % is expected in China, sales in the USA and other industrialised countries will probably shrink by 1 %. In Germany, the decline, at 2 %, will be somewhat more marked.

For manufacturers of liquid pumps in Germany, VDMA foresees a stagnation in sales in nominal terms in the current year (+ / - 0 %). The same applies to industrial valves, for which VDMA likewise anticipates a nominal growth rate of 0 %. Sales of building services valves are expected to rise by + 1 % in nominal terms.

SUMMARY OF EXPECTED DEVELOPMENT

Despite the weaker global economic growth, the economic environment is, generally speaking, expected to be good for an expansion of business in Europe and Asia. In the Middle East / Africa, too, positive growth impetus is expected. Overall, the KSB Group will seek to achieve renewed growth in order intake and sales revenue in the current year.

Expected development

€ millions	Actual 2019	Forecast 2020
Order intake	2,453.8	2,320 – 2,520
Pumps	1,617.8	Up to + 5 %
Valves	361.9	Up to + 5 %
Service	474.1	Down to – 5 %
Sales revenue	2,383.2	2,260 – 2,460
Pumps	1,562.5	Up to + 5 %
Valves	364.4	Up to + 5 %
Service	456.3	Down to – 10 %
EBIT	113.6	100 – 130
Pumps	84.8	Up to + 20 %
Valves	2.3	Up to + 40 %
Service	26.5	Up to + 5 %

The drivers of growth will be standard products, service and spare parts, as well as various major projects. However, a negative impact may be felt from geopolitical risks, such as a continuation in the US-Chinese trade conflict and an exacerbation of the political situation in the Middle East. In addition, this forecast does not take account of the impact of the coronavirus. The scale and duration of any adverse effect on production as well as on KSB's procurement and sales markets both in China and in the Asian, European and American economies are impossible to predict and therefore quantify right now at the time of preparation of the consolidated financial statements. KSB assumes that the spread of the coronavirus will have a negative impact on the Group.

On the basis of these underlying conditions, order intake of between € 2,320 million and € 2,520 million and sales revenue of between € 2,260 million and € 2,460 million are expected for 2020.

Taking into consideration the uncertainties referred to above, KSB anticipates EBIT in a range between € 100 million and € 130 million for the 2020 financial year. This range appropriately reflects the opportunities and risks in the current financial year.

In 2020 and subsequent years, the KSB Group intends to implement its Climb 21 strategic project. This is expected to result in one-off burdens on EBIT. Since the exact impact on EBIT is not known at present, it is not factored into the above forecast for EBIT in 2020.

FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements and information that are based upon the assumptions of Management. They express current forecasts and expectations with regard to future events. As a result, these forward-looking statements and information are exposed to risks and uncertainties that lie outside the Management's sphere of influence. KSB wishes to point out that actual events or results may differ materially from the forward-looking statements and information presented, if one or more of the following opportunities or risks, or other opportunities, risks and uncertainties should materialise, or if the assumptions underlying the statements prove to be inaccurate.

Opportunities and Risks Report

As an organisation that operates throughout the world, the KSB Group is exposed to macroeconomic, sector-typical, financial and company-specific risks. The risk policy is designed to enable KSB to grow sustainably and profitably. The KSB Group aims to reduce the risks associated with its business and where possible avoid them completely. At the same time its global alignment and extensive product range offer a wealth of opportunities. This includes but is not limited to any opportunities that arise on the basis of research and development activities, as well as any that are linked to the quality and cost effectiveness of products. KSB's competitive position is also being strengthened by optimising the global sales and production network. KSB always reviews opportunities to expand its global presence and is able to achieve this through start-ups and acquisition projects.

The Group sees opportunities and risks as possible future developments or events that may lead to departures from forecast or targets. The departure can be both positive and negative. In order to manage the varied opportunities and risks professionally and efficiently, the Group aligns its actions accordingly and focuses upon the respective situation when selecting the persons responsible. In doing so, Controlling, Finance and Accounting as well as Internal Audits perform important monitoring tasks.

RISK MANAGEMENT SYSTEM

KSB has implemented a Group-wide risk management system for identifying and assessing relevant risks in the different areas of responsibility and reporting these to Group headquarters. The risk management process of the KSB Group consists of the successive phases of identification, assessment, management, control, documentation and communication of risks. The six phases form a continuous and IT-based closed-loop system. This is documented in KSB's risk management manual as well as the management responsibility and the description of all relevant tasks.

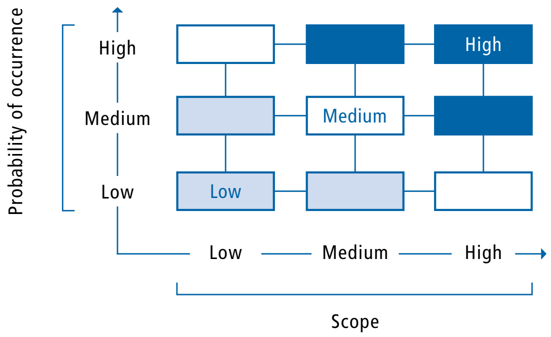
Managers are encouraged to take timely action to define and implement measures to limit or avoid damage that may result from the occurrence of risk events. All corporate and central functions and Group companies, including Group companies that are not consolidated, are included in the risk management system. The responsible managers are required to supply their relevant key business and financial indicators each month. As well as creating quarterly forecasts on business performance, they also report twice a year to the Risk Managers on all recognised risks for the next 24 months from the reporting date for the categories of market and competitive risks, technological risks, project- and product-related risks, financial risks and procurement risks. Other business risks (environmental, human resources, etc.) are also reported in this cycle to the Risk Managers at the Group headquarters. The regular identification and updating of risks in the Group companies and in the corporate and central functions ensure that risk awareness within the KSB Group remains at a high level across the board. A distinction is made between qualitative risks and quantitative risks, not considering any action that has been taken or planned.

Qualitative risks are long-term developments that could have a negative impact on the KSB Group and which cannot or cannot yet be thoroughly quantified due to a lack of precise information. In order to be able to evaluate them all the same, however, estimates of the probability of occurrence and scope are made using defined evaluation categories. With respect to probability of occurrence, the extent to which the information indicating the potential risk is detailed must be determined.

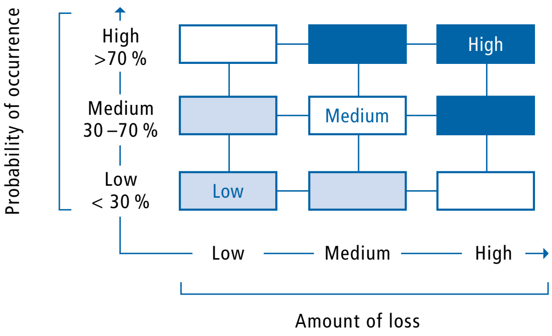
Quantitative risks are risks for which a potential monetary impact on the earnings of the KSB Group or of the respective Group company can be estimated. They are evaluated taking into account the specifically calculated probability of occurrence in combination with the potential amount of loss.

The scope or amount of loss describes the potential influence of the individual risk on the key indicator of earnings before finance income / expense and income tax (EBIT) of the KSB Group or the respective Group company, not considering any action that has been taken or planned.

Qualitative risks



Quantitative risks



Classification of amount of loss

		Amount of loss in € thousands		
Magnitude	**Sales revenue**	**Low**	**Medium**	**High**
Small companies	Up to € 20m	50 – 125	125 – 250	> 250
Medium-sized companies	€ 20m to € 80m	75 – 250	250 – 500	> 500
Large companies, holding companies, organisational units	From € 80m	100 – 500	500 – 1,000	> 1,000

In order to assess whether qualitative and quantitative individual risks are material for KSB, they are classified as low, medium or high risks. All individual risks categorised as medium or high that are detailed in the Individually Assessed Opportunities and Risks section are considered to be material for the KSB Group. The relevant classification can be determined from the above matrices.

→ Qualitative risks – Quantitative risks

In evaluating the amount of loss and the probability of occurrence, KSB limits itself to three possible classifications: low, medium and high. The following criteria apply:

→ Classification of amount of loss

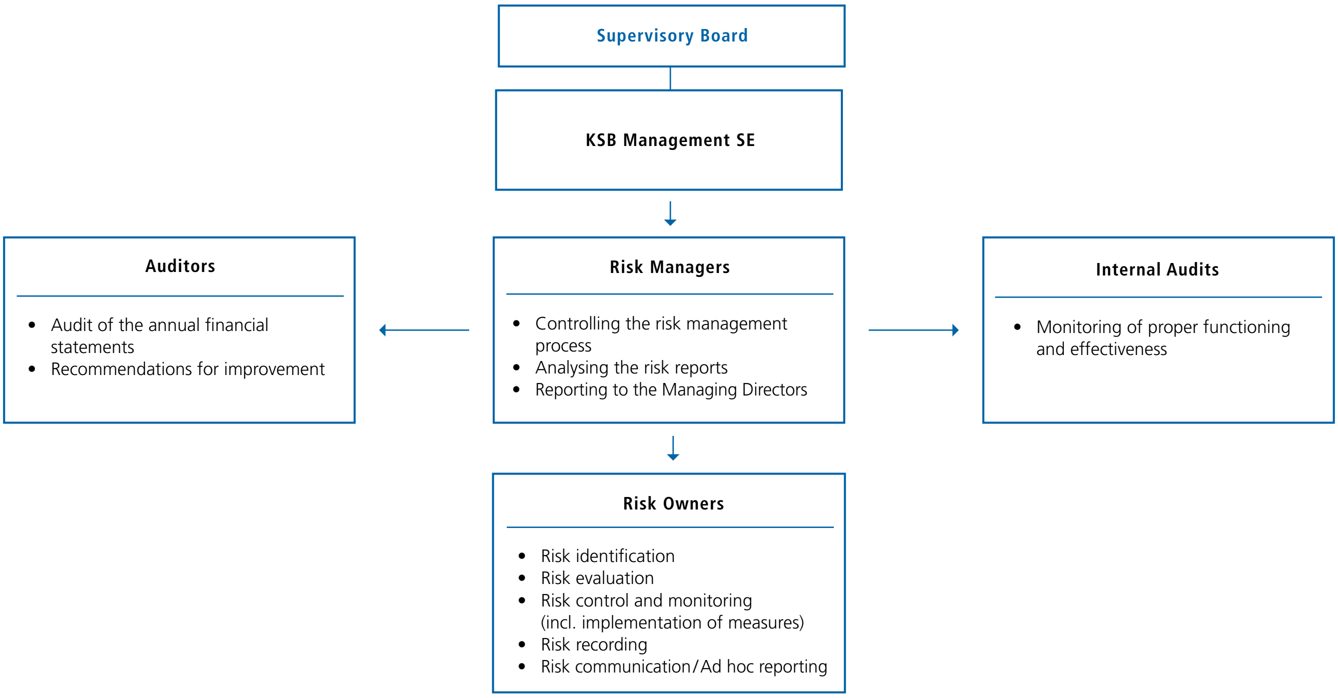
This approach offers the necessary transparency to identify risks in their entirety and to manage them effectively, professionally and in an economically responsible manner.

The bodies to which specific responsibilities and competencies were assigned in KSB's risk management system in the reporting year are shown and explained in the diagram below.

→ Risk management system of the KSB Group

As the legal representative, KSB Management SE assumes overall responsibility for risk management. KSB Management SE reports to the Supervisory Board of KSE SE & Co. KGaA via its Managing Directors during regular Audit Committee meetings and is monitored by the latter. The Managing Directors are supported by the Chief Compliance Officer and the Group Finance and Accounting department of KSB SE & Co. KGaA. The latter coordinates the risk management process at Group level and checks all risks reported for relevance to the preparation of financial statements. This ensures that there is a systematic link with the Group accounting process. The Managing Directors and the Supervisory Board's Audit Committee receive at least two risk reports per financial year. These reports include all the risks that are classed as medium or high that exceed pre-defined threshold values individually or collectively, not considering any action that has been taken or planned (gross risk). Particularly critical topics are reported on an ad-hoc basis by the managers in charge. In contrast, opportunities are not taken into account in KSB's current risk management system. They are reported separately by the Risk Managers of the Group headquarters and regional managers purely in qualitative terms, without further quantification.

Risk management at KSB



With regard to financial risks KSB makes use of additional risk identification, assessment, management and communication. The central Finance department is responsible for this task which is described in further detail later in this section.

Compliance risks are dealt with by the Chief Compliance Officer, who is assigned to the Legal and Compliance, Patents and Trademarks staff function. The Chief Compliance Officer is supported by the members of the Compliance Committee and the Compliance Managers of the individual companies.

The Internal Audits department is integrated into the risk management system as part of the internal control system. When planning audits, it prioritises areas according to potential risks and is provided with all the necessary information. The auditors ensure that all audited units adhere to the applicable guidelines, actively participate in the risk management system, and control or avoid their risks. Information obtained by Internal Audits on both the identified risks and the countermeasures initiated in response forms an integral part of the reporting to the Managing Directors and to the Audit Committee of the Supervisory Board. The risk management system is updated promptly if need be, for example in the event of relevant legal or organisational changes. In addition, the auditors examine within the scope of the annual audit the early risk detection system, establishing that it is present and checking that it is fit for purpose.

INTERNAL CONTROL SYSTEM AND RISK MANAGEMENT SYSTEM WITH REGARD TO THE GROUP ACCOUNTING PROCESS

The accounting-related internal control system (ICS) contributes towards ensuring proper financial reporting. The aim is to ensure that the consolidated financial statements and group management report comply with all relevant regulations. Key elements of the ICS are – as well as the risk management system described above – guidelines and regulations, which include standard accounting and measurement policies. They must be applied to the full extent by all Group companies. There is a separation of functions and the four-eye principle is applied. This is ensured by the audits carried out by the Internal Audits department.

In addition, Accounting and Controlling carry out regular analytical plausibility checks of time series analyses and actual / budget variance analyses. This enables KSB to identify significant changes early on, which are examined for accounting and measurement discrepancies. The resulting findings are then discussed at management level.

The responsibility for Group accounting lies with the employees in the central Accounting KSB Group department. KSB employs the services of qualified external reviewers for certain calculations as part of financial reporting (such as the calculation of complex pension obligations using actuarial assumptions).

Binding schedules and guidelines apply to accounting within the KSB Group and to accounting at each individual subsidiary. The accounting and measurement methods that must be applied to compile the consolidated financial statements are defined in writing in a manual that is updated and revised on a continual basis. This also includes the guidelines for posting intra-Group transactions. New accounting principles and other official announcements are continually analysed with regard to their relevance and impact on the consolidated financial statements. Guidelines and manual are adapted where necessary and any changes communicated immediately to the companies. Group Accounting likewise monitors compliance with requirements. This reduces the risk of compiling inappropriate financial statements or failing to publish them by the defined deadlines.

The financial statement information for all Group companies is automatically processed using certified and tested standard consolidation software. Systematic checks are implemented to help validate the data. Employees in Accounting KSB Group verify any warning signals that arise before using the data. The sequence of the processing steps is strictly specified through the use of the consolidation monitor within the IT system. This ensures the correct processing of data.

To enable a seamless and accurate accounting process, only employees who have the appropriate specialist know-how are assigned to this task. These employees are trained on a regular basis to make sure that their expert knowledge remains up to date.

Access authorisations have been defined for the accounting-related IT system. This protects the data against unauthorised access as well as improper usage and modification. The data is checked at many stages, helping to ensure the processing quality. Alongside regular system reviews by the auditors, these checks contribute to limiting operational risks.

INDIVIDUALLY ASSESSED OPPORTUNITIES AND RISKS

The categories presented below include the qualitative and quantitative gross risks classed as medium or high and the main opportunities for business development as at 31 December 2019. Where risks are not flagged as high, they are classed as medium risks.

Markets / Competition

▪ Risks

The business opportunities of KSB are again affected by changes in the economic and political environments in the current reporting year. Risks arise for the business model if positive impetus from the world economy and from the markets relevant to KSB fails to materialise and growth rates fail to match the macroeconomic forecasts. The Group manages the risk of fluctuations in the economy and in demand by remaining active in several markets and industries with different economic cycles. Furthermore KSB monitors the development of the economic environment for its markets. If necessary, capacities are adjusted, production facilities relocated and cost-cutting measures implemented.

The outlook for the global economy remains a highly uncertain one. At present, risks arise in particular through geopolitical uncertainty resulting from trade conflicts and a number of global flashpoints. The most important factors in this context are the ongoing trade conflict between the USA and China and the development of relations between the United States and Iran. Owing to the US sanctions against Iran, there are no opportunities to continue ongoing projects in Iran. Consequently, there is a high risk that the costs already incurred for the projects in that country will have to be borne without appropriate consideration. Expected losses have already been recognised through impairment losses and provisions. The protectionist customs policy of the United States is also a drag on business as a result of the associated contraction in world trade. The worsening of the conflict in the Middle East, especially in Saudi Arabia, Qatar, Iran and Israel, as well as the development of the political situation in Turkey, may have a negative impact on business. In addition, the East / West relations that are under considerable strain given the political differences between Russia and the USA, and between Russia and most European countries, continue to be significant. This also becomes apparent in the Russian government's import substitution programme. Russian companies have been requested to order more products that are made in the country itself or include a high proportion of local value creation.

The coronavirus outbreak may have macroeconomic risks which may entail significant damage to business not just in China and other Asian economies, but also in Europe and North America. Risks to KSB comprise a potential adverse effect on production, the procurement market including the supply industry, and the global sales markets.

The departure of the United Kingdom from the European Union harbours risks both for the local sales and service company and for the other units with business partners in the United Kingdom. Uncertainty still prevails regarding future regulations. This may lead to delays in the trade of goods through increased border controls and have a negative impact on the willingness to undertake capital investment – particularly in the UK but also in the other countries of the European Union.

▪ **Opportunities**

With an increased focus on the six markets of Mining, Energy, Building Services, General Industry, Chemicals / Petrochemicals and Water / Waste Water in the Pumps segment and the realignment of the Valves segment, KSB expects better market access and thus higher order intake and sales revenue.

In the two large Asian growth markets of China and India, some major infrastructure projects are expected to be commissioned in 2020, particularly in energy and fresh water, areas that are important for KSB. Due to KSB's strong presence in these countries, there is a good chance that it will be involved as a supplier of pumps, valves and services. The expansion of nuclear energy continues in China and India, for which local plant engineering contractors require high-safety pumps. In addition, owing to targeted activities in the service market KSB expects to continue to be able to sell more services and spare parts in China in particular. In India, expansion of the supply of fresh water and the construction of flue gas desulphurisation plants for coal-fired power stations will be factors.

By broadening the portfolio of pumps made to API specifications, the KSB Group has steadily improved its position in the oil processing industry and expects further expansion through its increased focus on the chemicals / petrochemicals market.

From 2020, new regulations from the International Maritime Organisation (IMO) will come into force. According to this specialised UN agency, all ships on the high seas will have to use fuel with a substantially lower sulphur content to reduce air pollution from ships worldwide. Refineries will continue to invest in the technology for the processes to produce this fuel. This is likely to boost demand for refinery pumps. Moreover, ships which continue to use fuel with a high sulphur content will be retrofitted with exhaust gas desulphurisation systems. This would have a correspondingly positive impact on order intake.

Projects / Products

▪ **Risks**

The markets' requirements for the products of the KSB Group are constantly changing. The Group will only succeed if it meets its delivery deadlines and offers technically advanced products in good quality at affordable prices. To minimise the high risk of delays in delivery, which may lead to a diminished reputation with the customer as well as to penalty payments, KSB keeps a constant eye on its sale and production processes. If it discovers that machinery needs to be renewed or capacities expanded, these investment projects are examined as part of a step-by-step approval process. In this way, KSB counters the risk of schedule and cost overruns.

Regular market analysis and monitoring minimise the risk that products will become technically obsolete or are offered at prices not acceptable in the market. At the same time KSB is exposed to the risk that rival products from countries with lower wage costs, mainly in the regions of eastern Europe and Asia, will compete with KSB's product range. This calls for continuous quality management, which has been introduced across the Group.

In KSB's business, there are special requirements when it comes to the processing of large-scale projects with long contract terms. There are also always associated risks. There may be cost overruns, tighter import regulations, staff shortages, technical difficulties or quality problems – including possible contractual penalties – that reduce margins. KSB therefore trains its employees in project management and equips them with specialist knowledge. This enables them to identify the risks associated with longer-term orders at an early stage. In addition, project managers are provided with appropriate management tools. Decisions are made in conjunction with clearly structured authorisation processes. Furthermore, there is central monitoring of projects exposed to risk across all KSB companies.

There are also technical and financial risks to orders with newly designed products. Technical risks are limited to the extent that intermediate steps for development work are defined and partial solutions are subjected to assessments. Commercial risks are minimised by using appropriate contractual clauses, Care is taken to ensure that advance payments and collateral provided by customers at least cover the costs incurred. Suitable provisions are set aside for warranty obligations and contractual penalty risks. In the 2019 consolidated financial statements, these amounted to € 44 million for the Group, of which KSB SE & Co. KGaA accounted for € 26 million. In the previous year, the total was € 46 million, with € 26 million accounted for by KSB SE & Co. KGaA. Beyond this KSB sees no further material residual risk (net risk).

▪ **Opportunities**

The increasing integration of hydraulic, drive and IoT solutions for pumps will in future enable innovative business models, such as the activation of chargeable functionalities via app, cloud connections for maintenance, and the use of operational data for the purpose of plant and product optimisation.

KSB uses agile methods. Through interdisciplinary and simultaneous product development, these methods enable customer requirements for ever shorter development times to be met and allow developments to be geared with even greater focus towards market requirements.

At the same time, consistent and intensified use of simulation techniques and engineering methods such as statistical design of experiments and impact analyses enable development risks to be reduced.

Certification by a Chinese customer of the largest seal-less reactor coolant pump ever built for a newly developed reactor type raises the prospect of follow-on orders.

Finance / Liquidity

▪ Risks

The Group's international focus is associated with exchange rate risks. Besides the euro, the most important currencies for KSB are the US dollar, the Indian rupee, the Brazilian real and the Chinese yuan. The liquidity risk arising from foreign currency transactions is hedged by using derivative financial instruments. These hedges are based on fixed contracts and on forecasts about future payment streams the occurrence of which is uncertain. Thus, exchange rate fluctuations may have a negative effect on earnings despite hedging.

Risks regarding margins and liquidity are typical of the project business. As well as the continued pressure on selling prices, which is reducing profit margins, these include unfavourable contract conditions such as reduced advances and tougher contractual penalties. As KSB complies exactly with the approval processes in the quotation phase, this risk is minimised. At the same time, this enables KSB to recognise and avoid liquidity shortages. Where necessary, sufficient liquidity is secured by agreeing appropriate credit lines early on.

Persistent recessions or newly emerging crisis may adversely affect the financial situation of customers. Resulting payment delays and defaults on receivables, which were classed as a high risk in the year under review, would impact on the results of operations. The same effect might occur if the foreign exchange regulations become stricter for individual countries. KSB counters this by means of a strict receivables management system and intensive customer contacts.

Changing market conditions mean that business models need to be fundamentally reviewed and the product range adjusted accordingly time and again. This may lead to inventories losing value, which was classed as a high risk in the year under review. KSB seeks to counter this risk through a working capital initiative started in 2019, with the focus on increasing the turnover rate of inventories and receivables. A further potential consequence of market developments that exert a permanent strain is an impairment loss on goodwill and assets. If impairment testing in accordance with IAS 36 shows a need for impairment, KSB recognises a corresponding expense in the financial year. There is also a residual risk with regard to the development of premises that cannot be controlled and on which the earnings are based. For companies with goodwill, KSB has taken into account the risk assessment through sensitivity analyses to estimate the risk of impairment. Further information is provided in the Notes to the consolidated financial statements in section IV. Balance Sheet Disclosures under "Intangible assets".

As regards tax matters, the global orientation of the activities of the KSB Group must be taken into consideration. Based on its operative activities in numerous countries with varying tax laws and administrative interpretation, differentiated assessment is required for measuring tax obligations. Uncertainty may arise due to different interpretations by taxable entities on the one hand and local finance authorities on the other. These may come to light during audits. By cooperating closely with external local tax specialists, KSB counteracts the risk of having to pay back taxes. As KSB continually monitors unclear issues, it can generally classify the probability of occurrence. Should a need for subsequent payment arise, the corresponding provisions are created in good time. The consolidated financial statements for 2019, as in the previous year, do not include any provision for such matters, which are classed as a medium or high risk. In addition, there are contingent liabilities in the expected amount of € 8.4 million, of which € 0 million is accounted for by KSB SE & Co. KGaA (previous year: € 1.5 million, with € 0 million accounted for by KSB SE & Co. KGaA).

Concentration on a small number of customers entails dependencies which, in the event of the loss of a customer, could result in a material slump in order intake and sales revenue and thus to a burden on earnings for smaller service companies. The pressure which individual customers can exert on the company in these cases rises and may result in increasing concessions having to be made by the supplier. If individual Group entities find themselves in such a situation, losses are in part offset by their parent company. If the situation continues, KSB will consider reviewing the business model of the company affected or selling it.

Procurement

▪ Risks

Commodity prices and procurement times are subject to strong market-related fluctuations. This may adversely affect KSB's earnings situation if it does not manage to make up for cost increases or pass them onto its customers. Delays or bottlenecks in the supply chain for raw materials and components may negatively impact KSB's business operations. If KSB does not benefit promptly from declining procurement prices, the persistent pressure on the selling price of products would have a negative impact on earnings.

In its procurement strategy KSB seeks to prevent dependencies on suppliers and thereby counter the risk of a supplier failing. If local conditions mean that it is impossible to ensure sufficient diversification in this regard, KSB will make use of additional foreign business partners.

▪ Opportunities
In the year under review, a reorganisation of Global Procurement launched in 2018 continued to be developed systematically, and further process adjustments were made. These included, among other things, new reporting guidelines, the elaboration of material group strategies and very early involvement of the procurement team in projects. This enables a clear increase in global transparency, the implementation of a global material group strategy, and cost-optimised procurement, while at the same time improving security of supply.

These changes strengthen KSB's competitiveness while creating the basis for successfully digitalising procurement. In this way KSB secures the opportunities for having permanent access to the best suppliers. It also enhances its appeal to talented buyers who help achieve KSB's corporate goals.

Technology / Research and Development

▪ Risks
It is essential to future success to have a product and service range that is suited to the market in terms of technology, price and delivery time. The changing needs of customers and new standards and regulations – especially in promising markets such as China – require the continuous development and improvement of products and services. Research and development required for adjustments consumes significant financial and human resources, with no guarantee of success in either the medium or the long term.

To avoid any negative impact on earnings, it is important to recognise the market-related or technical risks early on. To this end, the KSB Group is constantly updating the development process, which incorporates various control levels. As sales employees are regularly included in this process, risks arising from changes in markets or applications can be taken into account in good time in the evaluation.

▪ Opportunities
Through a new idea-to-market process, KSB seeks to meet the challenge presented by the fact that the centres of growth have shifted to Asia and South America in particular and will, it is expected, also shift to Africa. For that reason, internal and external actors around the world are connected up on a single platform.

Ideas undergo a stringent process of evaluation, in order to identify new trends and technologies more systematically and more quickly. Direct, personal discussion at all levels also enables us to play an active part in the increasing pace of change in our sector. Through crowd solutions, the experience and skills of employees worldwide can be accessed directly. Decisions are prepared by the experts in a way that is more decentralised than before.

The business decision to digitalise production processes progressively opens up opportunities to optimise manufacturing processes in terms of resource use, to shorten throughput times, to meet customer expectations better and to continue to improve the quality of parts and products.

Through additive manufacturing, cost-intensive, manual processes and production steps can be avoided, particularly for small quantities and complex individual production, and competitiveness in global and regional markets can be increased.

As well as technical innovation, service, application and process innovations are growing in importance. That means that developments need to be closely coordinated with local suppliers, customers and employees. Established innovation methods, business innovation labs, hackathons and start-up events are systematically being rolled out globally in order to strengthen the ability to innovate at the local level.

By this means, KSB is enhancing its abilities in developing forward-looking products, business models and services more quickly and more closely in line with customer requirements.

Other business-specific risks – Environment

▪ Risks
KSB's business activities, primarily in the area of production, are subject to numerous environmental protection laws and regulations. Environmental damage of any kind (for example, groundwater contamination, renovation needed due to outdated construction materials or unpleasant odours arising from the use of chemicals) may result in losses not covered by an insurance policy. Therefore, at all company sites officers monitor compliance with laws and regulations as well as with internal KSB rules. If KSB discovers any contamination, it sets aside provisions to meet the liabilities for the necessary clean-up work. In the 2019 consolidated financial statements, these provisions, as in the previous year, totalled just under € 0.2 million for medium or high risks, of which € 0.2 million was accounted for by KSB SE & Co. KGaA.

As part of acquisition projects, KSB examines properties for possible contamination before purchase. Critical issues are taken into account by way of corresponding contractual regulations with the seller and appropriate measures are implemented in consultation with the seller.

In markets with tightening environmental regulations, there is a general risk that KSB products and its in-house or purchased services might infringe against the regulations and that as a result the necessary authorisation for the relevant business might be lost and KSB's reputation might be damaged. A change in rules on liability in environmental protection can also increase the risks for business success. As a member of national and international professional associations the KSB Group becomes aware of imminent changes in environmental law early on. The legal frameworks that are in place in its Operational Units are continually updated, enabling KSB to ensure that its employees always abide by the applicable law. This is also monitored by external auditors as part of the management certifications.

▪ Opportunities

At KSB, environmental management is combined with an active and forward-looking approach as well as internal processes that enable permanent cost reductions. This applies, for instance, to all measures that reduce energy consumption in production, service and administration. Inversely, the KSB Group offers the users of its products the opportunity to reduce their electricity costs by selecting energy-efficient KSB products.

The successful introduction, maintenance and ongoing development of global environmental and occupational health and safety management systems (ISO 14001 and ISO 45001) open up opportunities for identifying any risks or deviations at an early stage and initiating protective measures. In this way, not only is damage to the environment, to the company's image and to employees' health prevented, but also financial risks are avoided.

Investments in plant and machinery are made on the basis of resource efficiency and environmental and health protection in order to optimise energy costs throughout the entire use phase as well as to prevent any follow-on costs incurred through damage to the environment and/or to health.

With its certified environmental management system, KSB also meets a requirement stipulated by many public sector customers, large companies and entire sectors such as the automotive industry. For them, evidence of an environmental management system is an increasingly important criterion in the selection of suppliers. By ensuring that production and service locations are checked by auditors and certified to international standards, both the KSB Group and its customers attain a high level of certainty that KSB operations are acting with respect for the environment. KSB's commitment to the UN Global Compact also meets the expectations of its customers and improves order opportunities with companies that pick their suppliers with a view to their responsibility for the environment and society, among other things.

Other business-specific risks – Human resources, legal aspects and IT

▪ Risks

To achieve its growth and profitability business objectives, KSB needs qualified employees at all locations, including technical specialists. Due to the demographic change in some countries, the competition for these and other highly skilled professionals is increasing, and will intensify in the course of the economic recovery. KSB counters this risk with demand-oriented measures, systematic human resources planning and international recruitment processes.

Changes to our processes and organisational structure, such as the introduction of shared services centres, require clearly defined project responsibilities and valid project plans, as well as the selection of suitably qualified external partners. This helps to avoid inefficiencies when changing organisational structures and processes, which might otherwise reduce the expected cost benefits.

Other potential risks associated with the activities of KSB's employees include dishonest conduct or violations of laws, which could damage the image of KSB. The KSB Group counters these risks and safeguards its reputation among customers by organising regular compliance training and through individual initiatives in critical regions.

Legal disputes cannot always be avoided within the framework of business activities. These are usually disputes arising from operations, generally involving unclear warranty issues. If as a result of these issues KSB expects negative effects on the success of its business, corresponding provisions are set aside, which cover not only the anticipated amount of loss, but also the costs of proceedings. In order to exclude any net risk, the 2019 consolidated financial statements include about € 2 million for those cases classified as medium or high risks. Of this total, KSB SE & Co. KGaA accounted for € 1 million (previous year: € 2 million, of which € 1 million attributable to KSB SE & Co. KGaA). Furthermore, provisions were created for disputes with authorities and for staff matters, once again totalling just under € 2 million, of which KSB SE & Co. KGaA accounted for € 0 million (previous year: € 2 million, of which € 0 million attributable to KSB SE & Co. KGaA), where these have been classified as medium or high risks in the risk assessment.

The manipulation and loss of electronic data can lead to serious commercial disadvantages. KSB limits this risk by means of adequate security systems and access procedures. An increased centralisation of the IT systems of the various operating units assists KSB in this. In this way, high security standards are implemented and the risk of data loss or corruption is reduced.

KSB seeks to counter increased external fraud activities by raising awareness of fraud attempts. At the same time, KSB is increasing its compliance requirements.

▪ **Opportunities**

At the end of 2019 work began on introducing the "Workday" global HR management system. This will form the basis for strategic personnel planning. The improved transparency of employee-related data will enable KSB to deploy people in an optimum way, taking into account their individual knowledge and skills, and to open new career opportunities for them, including in other countries. At the same time the program harmonises and standardises HR processes across the globe, with due consideration for local legal regimes.

Through investments in IT, particularly through new end devices and broader bandwidths, support is provided for the digital transformation of the company. The expansion of IT security and of cloud-based solutions forms the basis for making the infrastructure and internal processes as well as the processes for dealing with customers, suppliers and partners secure and seamless and thus swifter, more efficient and more uniform.

IMPORTANT OPPORTUNITIES AND RISKS BY SEGMENT

As in the previous year, the opportunities and risks for the Pumps, Valves and Service segments are most influenced by economic development. The future development of China remains important to KSB. Geopolitical uncertainty arising from trade conflicts and a number of global flashpoints remains of material importance for Pumps and Valves and to a lesser extent for Service. A high level of risk for the KSB Group's business continues to be presented by policy decisions in China regarding energy projects, the ongoing trade conflict between the USA and China, the continuation of very strained East-West relations and the US sanctions against Iran. KSB adjusted its strategy accordingly and discontinued its business with Iran. Worsening payment morale also bears corresponding risk potential for future business. The economic development in general continues to be the most significant risk due to the difficulty of assessability. By contrast, the KSB Group continues to hope that the measures intended to foster growth will provide it with considerable support in achieving its goals. KSB's customers are also often affected by recessions and more intense competition, which can decrease their ability to pay in individual cases.

Negative currency changes in growth countries could threaten exports, in particular those from KSB's European plants. But this would also enable the production facilities in the countries affected to benefit from such developments and to increase their export volumes.

RISK REPORT ON THE UTILISATION OF FINANCIAL INSTRUMENTS

Central financial management in the KSB Group performs its duties within the framework of the guidelines laid down by KSB Management SE as the legal representative. The KSB Group bases the nature and scope of all financial transactions exclusively on the requirements of its business. It does not lend itself to business of a speculative nature. The aim is to ensure liquidity at all times and to finance activities under optimal conditions. With respect to the export business, foreign exchange and credit risks are hedged to the greatest extent possible. KSB continuously improves its receivables management methods with the goal of settling outstanding amounts by their due dates.

KSB is exposed to the following financial risks as a consequence of its business activities.

KSB is firstly exposed to credit risk. which is defined as potential default or delays in the receipt of contractually agreed payments. It is also exposed to liquidity risk, which is the risk that an entity will be unable to meet its financial obligations, or will be unable to meet them in full. In addition, KSB is exposed to market price risk. Exchange rate or interest rate changes may adversely affect the economic position of the Group. Risks from fluctuations in the prices of financial instruments are not material.

Foreign exchange hedges are used to reduce the risks from transactions involving different currencies. These are generally currency forwards, which KSB uses both for transactions that have already been recognised and for future cash flows from orders still to be processed. At year end, the notional volume of currency forwards used to hedge exchange rate risks was € 251.9 million, with KSB SE & Co. KGaA accounting for € 187.9 million (previous year: € 238.3 million, of which € 177.2 million attributable to KSB SE & Co. KGaA). Foreign currency items denominated in US dollars account for the major volume hedged by forwards. A global network of production sites in the local sales markets reduces potential currency risks.

All these risks are limited through an appropriate risk management system, defining how these risks are addressed through guidelines and work instructions. In addition, the current risk characteristics are continuously monitored and the information obtained in this way is provided to the Managing Directors and the Supervisory Board in the form of standardised reports and individual analyses.

For more information on the three risk areas and the impact on the balance sheet, see the Notes, section VI. Additional Disclosures on Financial Instruments.

OVERALL ASSESSMENT OF OPPORTUNITIES AND RISKS

The opportunities and risks for the KSB Group are mainly derived from macroeconomic influencing factors and their effects on the global mechanical engineering markets and the competition.

The overall risk situation on the reporting date 31 December 2019 remains tense. This is due to the political developments described in the risk situation by segment and their impact on the markets. Moreover, geopolitical instabilities, decisions on sanctions and volatile currencies had a negative impact on business volume and on planned earnings. Overall, KSB expects an economic performance in line with the IMF forecast for next year.

In this environment, the KSB Group continues to rely on its ability to match capacities and resources to the changing market conditions. A solid financial position and an efficient cost structure are vital in order to maintain long-term competitiveness. KSB is convinced that it can continue to successfully overcome the risks arising from the above-mentioned challenges.

The potential of opportunities has not changed materially since the previous year.

The risk management system in place as well as the related organisational measures allow KSB Management SE as the legal representative to identify risks in a timely manner and to take adequate measures. In view of the somewhat uncertain situation, the focus of activities in 2020 will continue to be on the management of market risks. The legal representative states that, based on the risk management system established by the KSB Group, at present there are no risks that threaten business continuity and could lead to a lasting and material impact on the net assets, financial position and results of the KSB Group.

Disclosures Relating to KSB SE & Co. KGaA (HGB)

Balance Sheet

Assets

€ thousands	31 Dec. 2019	31 Dec. 2018
Fixed assets		
Intangible assets	50,163	39,141
Property, plant and equipment	117,844	111,605
Financial assets	292,864	288,763
	460,871	**439,509**
Current assets		
Inventories	251,978	248,853
Advances received from customers	– 85,298	– 92,701
	166,680	**156,152**
Receivables and other assets	308,664	322,669
Current financial instruments	–	19,990
Cash and balances with credit institutions	44,864	78,286
	520,208	**577,097**
Prepaid expenses	**1,816**	**2,275**
	982,895	**1,018,881**

Equity and liabilities

€ thousands	31 Dec.2019	31 Dec. 2018
Equity		
Subscribed capital	44,772	44,772
Capital reserve	66,663	66,663
Revenue reserves	136,180	136,180
Net retained profits	67,364	90,179
	314,979	**337,794**
Provisions		
Pensions and similar obligations	415,998	386,489
Miscellaneous other provisions	106,798	123,284
	522,796	**509,773**
Liabilities	**140,080**	**165,014**
Deferred income	**5,040**	**6,300**
	982,895	**1,018,881**

Income statement

Income statement

€ thousands	2019	2018
Sales revenue	**841,693**	**807,142**
Changes in inventories	– 1,262	– 2,007
Work performed and capitalised	6,833	6,871
Total output of operations	**847,264**	**812,006**
Other operating income	27,599	25,396
Cost of materials	– 388,604	– 365,802
Staff costs	– 324,747	– 303,598
Depreciation and amortisation expense	– 17,801	– 17,089
Other operating expenses	– 160,920	– 188,813
	– 17,209	**– 37,900**
Income from equity investments	40,991	281,625
Other financial income / expense	– 38,454	– 61,435
	2,537	**220,190**
Taxes on income	– 1,369	– 1,192
Earnings after taxes	– 16,041	181,098
Other taxes	– 1,191	– 919
Net profit / loss for the year	**– 17,232**	**180,179**
Profit carried forward from the previous year	84,596	–
Transfer to other revenue reserves	–	– 90,000
Net retained profits	**67,364**	**90,179**

Business Model

KSB SE & Co. KGaA, as the parent, directly or indirectly holds the shares in the companies belonging to the KSB Group. The KSB Group is managed via KSB SE & Co. KGaA. The latter is at the same time the Group's largest operative company. The central administrative offices are located at the company's seat (registered office) in Frankenthal; branch operations are located in Bremen, Halle and Pegnitz.

KSB SE & Co. KGaA is associated via control and profit pooling agreements with the three service companies KSB Service GmbH, Frankenthal, KSB Service GmbH, Schwedt, and Uder Elektromechanik GmbH, Friedrichsthal. Thus, these companies are under single management by KSB SE & Co. KGaA. Their annual earnings are transferred to KSB SE & Co. KGaA.

The annual financial statements of KSB SE & Co. KGaA have been prepared in accordance with the provisions of the *Handelsgesetzbuch* (HGB) [German Commercial Code] and the *Aktiengesetz* (AktG) [German Public Companies Act] including the German principles of proper accounting.

Differences between the accounting policies under HGB and the International Financial Reporting Standards (IFRS), which are the basis of preparation of the consolidated financial statements of KSB, arise primarily from the recognition over time of revenue from production contracts under IFRS 15, in the calculation of pension provisions, from the recognition of leases under IFRS 16, and in the capitalisation of deferred taxes. Furthermore, differences arise in the recognition of assets and liabilities and of income statement items; under the German Accounting Directive Implementation Act [*Bilanzrichtlinie-Umsetzungsgesetz* – BilRuG] there is expanded scope for the recognition of sales revenue.

Business Development and Results of Operations

Overall, in the first seven months of the year business further improved for KSB SE & Co. KGaA because of strong capital investment activity on the part of customers in important sales markets. This applied, in particular, to the energy and water / waste water markets. By contrast, the last five months of the year saw a significant cool-down of the capital goods market.

ORDER INTAKE

The volume of orders received by KSB SE & Co. KGaA rose in the year under review by € 29.6 million to € 796.5 million, an increase of 3.9 %.

SALES REVENUE

Total sales revenue under HGB was € 841.7 million (previous year: € 807.1 million), a year-on-year increase of € 34.6 million.

The disclosures below refer only to sales revenue from the sale of pumps, valves and cast products, and from related service. The 2019 sales revenue of € 788.3 million represents an increase over the previous year of € 26.9 million (3.5 %). Pumps accounted for 86 % of the sales revenue (previous year: 86 %), while valves made up 12 % (previous year: 13 %).

Under IFRS, sales revenue rose from € 762.0 million in the previous year to € 779.4 million. The main driver of sales revenue was the engineered pumps project business.

INCOME AND EXPENSES

Other operating income increased from € 25.4 million to € 27.6 million, principally because of higher income from exchange rate gains.

The cost of materials, at € 388.6 million, was well above the previous year's level of € 365.8 million. The cost of materials in relation to the total output of operations rose from 45.0 % in the previous year to 45.9 % in the year under review.

Staff costs increased in absolute terms by € 21.1 million to € 324.7 million. This significant rise resulted from one-off income in the previous year amounting to € 20.4 million because of the introduction of a lump-sum option for pension plans. General staff cost increases also contributed to raising the total. Staff costs as a percentage of total output of operations were 38.3 % (previous year: 37.4 %).

At € 160.9 million after € 188.8 million in the previous year, other operating expenses showed a considerable reduction of € 27.9 million. This was primarily caused by one-off effects in the previous year arising from the recognition of provisions for expected losses and the recognition of the remaining allocation amount for pension provisions under the German Accounting Law Modernisation Act [*Bilanzrechtsmodernisierungsgesetz* – BilMoG]. A large part of other expenses relates to third-party services and other selling costs.

Overall, the income from equity investments, at € 41.0 million, was sharply down on the prior-year level (€ 281.6 million). This includes profit transfers from the three German service companies of € 11.5 million (previous year: € 10.5 million) and dividend income from affiliates and equity investments of € 29.5 million. In the previous year, as well as the usual dividend income, a special dividend and the recognition of hidden reserves as part of the transfer of an equity investment to KSB FINANZ S.A., Luxembourg, at € 262.6 million overall, led to an extraordinarily high level of income from equity investments.

NET PROFIT / LOSS FOR THE YEAR UNDER HGB

Because of the changes to income statement items referred to above, KSB SE & Co. KGaA recorded a net loss for the year in the 2019 financial year of € 17.2 million after a net profit for the year of € 180.2 million in the previous year. This is attributable to a sharp drop in income from equity investments.

EARNINGS BEFORE FINANCE INCOME / EXPENSE AND INCOME TAX (EBIT) UNDER IFRS

The EBIT calculated under IFRS rules was € – 32.5 million in 2019, well below the previous year's EBIT of € – 10.3 million. Higher staff costs made themselves felt in particular. In the previous year the effects of the exercise of a lump-sum option in the pension plans were included here.

Financial Position and Net Assets

FINANCIAL POSITION

KSB SE & Co. KGaA is embedded within central financial management at the KSB Group. The latter works within the framework of the guidelines laid down by KSB Management SE as the legal representative and bases the nature and scope of all financial transactions exclusively on the requirements of the business. The objective of financial management is to guarantee liquidity at all times and to ensure the financing of activities on optimum terms. In financing export transactions, KSB SE & Co. KGaA hedges foreign exchange and credit risks to the greatest extent possible. KSB continuously improves its receivables management methods with the goal of settling outstanding amounts by their due dates.

LIABILITIES AND PROVISIONS

The largest liabilities item, as in the previous year, is pension provisions, which had grown by € 29.5 million to € 416.0 million on the reporting date. This increase is explained by the addition of interest to pension obligations at € 40.4 million. Other provisions amounted to € 106.8 million (previous year: € 123.3 million). The lower figure is mainly attributable to a reduction in partial retirement obligations and in provisions for expected losses.

Of liabilities totalling € 140.1 million (previous year: € 165.0 million), € 22.0 million were accounted for by liabilities from a loan against borrower's note that was placed on the market in 2012 to secure medium-term liquidity. A tranche of € 26.0 million was repaid in 2019. Trade payables at year end were € 0.7 million above the previous year's level. Liabilities to affiliates and equity investments were almost unchanged on the previous year at € 55.1 million. They include € 30.0 million (previous year: € 24.7 million) for intercompany loans and cash investments.

NET ASSETS

Total assets, at € 982.9 million, were 3.5 % below the prior-year figure of € 1,018.9 million. Reductions in receivables and other assets, in financial instruments, in cash and balances with credit institutions contrasted with higher fixed assets.

In the year under review, fixed assets made up 47 % (previous year: 43 %) of total assets. The share accounted for by current assets was 53 % after 57 % in 2018. Inventories including advance payments received totalled € 166.7 million after € 156.2 million in the previous year.

EQUITY

The share capital of KSB SE & Co. KGaA remained at € 44.8 million. The capital reserve was unchanged at € 66.7 million. At year end, € 136.2 million (previous year: € 136.2 million) was assigned to other revenue reserves. Out of the 2018 net earnings for the year of € 90.2 million, a dividend totalling € 5.6 million (dividend of € 3.00 per ordinary share and € 3.38 per preference share) was distributed by resolution of the Annual General Meeting of 29 May 2019. The remaining amount of € 84.6 million was carried forward to new account.

Summary of the Performance in the Financial Year

In the first seven months of the year, business continued to improve because of strong capital investment activity on the part of customers in important sales markets. This applied, in particular, to the energy, water / waste water and construction / building services markets. By contrast, the last five months of the year saw a significant cool-down of the capital goods market.

The forecasts made at the beginning of the year were only partially fulfilled. In terms of order intake, the significant increase anticipated materialised, while sales revenue under IFRS grew only slightly as against the substantial rise forecast. Project business registered increases, while standard business failed to meet expectations. The anticipated sharp drop in EBIT under IFRS did occur.

Opportunities and Risks

The business performance of KSB SE & Co. KGaA depends significantly on the risks and opportunities faced by the KSB Group, which are set out in detail in the Report on Expected Developments and the Opportunities and Risks Report in the Combined Management Report. KSB SE & Co. KGaA generally shares in the risks of its equity investments and subsidiaries in line with its equity interest.

Report on Expected Developments

Despite the weaker global economic growth, the economic environment is, generally speaking, expected to be good for an expansion of business in Europe and Asia. In the Region Middle East / Africa, too, positive growth impetus is expected. Overall, KSB SE & Co. KGaA thus foresees tangible growth in order intake in 2020, largely owing to the energy market. Sales revenue and EBIT under IFRS are expected to rise substantially, owing to good order intake in the energy market in the 2019 financial year.

This forecast does not take account of the impact of the coronavirus. The scale and duration of any adverse effect on production as well as on the procurement and sales markets of KSB SE & Co. KGaA both in China and in the Asian, European and American economies are impossible to predict and therefore quantify right now at the time of preparation of the consolidated financial statements. KSB assumes that the spread of the coronavirus will have a negative impact on the Group.

In 2020 and subsequent years, the KSB Group intends to implement its Climb 21 strategic project. This is expected to result in one-off burdens on EBIT. Since the exact impact on EBIT is not known at present, it is not factored into the above forecast for EBIT in 2020.

The forecast horizon for the above-mentioned information and statements is the 2020 financial year.

Acquisition-related Disclosures

A summary of the acquisition-related disclosures required by section 315a HGB is given below and explanatory information is provided pursuant to sections 175(2) and section 176(1) AktG.

The share capital of KSB SE & Co. KGaA (the company) amounts to € 44.8 million, of which € 22.7 million is represented by 886,615 no-par-value ordinary shares and € 22.1 million by 864,712 no-par-value preference shares. Each no-par-value share represents an equal notional amount of the share capital. All shares are bearer shares. They are listed for trading on the regulated market and are traded in the General Standard segment of the Frankfurt Stock Exchange.

Each ordinary share entitles the holder to one vote at KSB SE & Co. KGaA's Annual General Meeting. Johannes und Jacob Klein GmbH, Frankenthal, holds approximately 84 % of the ordinary shares; the KSB Stiftung [KSB Foundation], Stuttgart, holds the majority of the shares of Johannes und Jacob Klein GmbH. The preference shares carry separate cumulative preferred dividend rights and progressive additional dividend rights. Detailed information on the share capital and shareholders holding an interest of more than 10 % is provided in the Notes to the Consolidated Financial Statements. Holders of preference shares are entitled to voting rights only in the cases prescribed by law. The issue of additional ordinary shares does not require the consent of the preference shareholders. Similarly, the issue of additional preference shares does not require the consent of the preference shareholders provided that the subscription rights do not exclude newly issued senior or pari passu preference shares.

The company is authorised by a resolution passed at the Annual General Meeting on 6 May 2015 to purchase, until 5 May 2020, company shares of any type totalling up to 10 % of the current share capital or, if lower, of the share capital at the time of this authorisation being exercised. The Board of Management shall be entitled to: (1) sell company shares purchased on the basis of this authorisation either on the stock exchange or by another means that safeguards the rule of equal treatment of all shareholders, for example by means of an offer to all of the company's shareholders; (2) sell the acquired shares of the company with the consent of the Supervisory Board, excluding shareholders' subscription rights, if the shares are sold for cash and at a price that is not materially lower than the market price for company shares of the same type and with the same features at the time of the sale. This authorisation is limited to the sale of shares that overall represent no more than 10 % of the existing share capital on the date on which such authorisation becomes effective or, if the amount is lower, the date this authorisation is exercised. The 10 % limit shall be reduced by the proportional amount of share capital for shares (i) issued within the scope of a capital increase during the term of the authorisation excluding subscription rights pursuant to section 186(3) sentence 4 of the AktG or (ii) to be issued for the purpose of servicing warrants and convertible bonds, provided that the bonds were issued during the term of the authorisation excluding subscription rights pursuant to section 186(3) sentence 4 of the AktG; (3) sell the shares with the consent of the Supervisory Board, excluding shareholders' subscription rights, to third parties for the purpose of acquiring companies, parts thereof and/or financial interests in companies as well as within the scope of corporate mergers or (4) redeem the acquired shares without any further resolution of the Annual General Meeting in full or in part, including in several partial steps. The redemption may also take place without a capital reduction by adjusting the proportional amount of the other no-par-value shares in the company's share capital. In this case, the Board of Management has been authorised by the Articles of Association to adjust the number of no-par-value shares. The company has not yet made use of this authorisation to purchase treasury shares.

There are no resolutions by the Annual General Meeting authorising the company's individually liable general partner to increase the share capital (authorised capital).

The company's business is managed by KSB Management SE, which acts through the four Managing Directors.

Amendments to the company's Articles of Association are resolved by the Annual General Meeting. If the amendments only affect the wording of the Articles of Association, they can be made by the Supervisory Board, which operates and is formed in accordance with the regulations of the German Co-determination Act.

Corporate Governance Statement (Section 315d HGB in Conjunction with Section 289f HGB)

The Corporate Governance Statement pursuant to section 315d HGB in conjunction with section 289f HGB [*Handelsgesetzbuch* – German Commercial Code] dated 11 March 2020 is accessible to the public at www.ksb.com > Investor Relations > Corporate Governance / Corporate Governance Statement. In addition to the Corporate Governance Report (including the Statement of Compliance in accordance with section 161 *Aktiengesetz* [German Public Companies Act]), the Corporate Governance Statement includes relevant information on corporate governance practices applied at KSB SE & Co. KGaA that go above and beyond statutory requirements. Also described are the working methods of KSB Management SE as the general partner and of the Supervisory Board, and the composition and working methods of the committees of the Supervisory Board.

Statement on the Non-financial Report (Section 315c in Conjunction with Sections 289c to 289e HGB)

The separate combined non-financial report is prepared in accordance with section 315c in conjunction with sections 289b to 289e HGB and disclosed together with the combined management report in accordance with section 325 HGB. The report can be viewed at:
www.non-financial-report2019.ksb.com

Under the same address the limited assurance report for the separate combined non-financial report is also disclosed.

Remuneration Report

The remuneration report provides information on the principles of the remuneration system for the general partner (KSB Management SE) including its Managing Directors and Administrative Board. It is prepared in accordance with the recommendations of the German Corporate Governance Code in its version dated 7 February 2017.

1. REMUNERATION OF THE GENERAL PARTNER

In accordance with the Articles of Association of KSB SE & Co. KGaA (the "company"), the general partner receives annual remuneration not based on profit and loss in the amount of 4 % of the share capital for the management and assumption of personal liability. Accordingly, € 20 thousand was spent on this by the company in the 2019 financial year.

According to the Articles of Association, the company additionally reimburses the general partner for any expenses incurred in connection with the management of business operations; this relates but is not limited to the remuneration of the members of the governing bodies of the general partner.

2. REMUNERATION OF THE MANAGING DIRECTORS

The general partner is responsible for the management of the company. The Administrative Board of KSB Management SE appoints its Managing Directors and is responsible for the contracts of service of the Managing Directors. This responsibility includes the structure of the remuneration arrangements, the amount of remuneration and their regular review.

The remuneration arrangements for the Managing Directors are structured as transparently as possible. The total amount of remuneration for the individual Managing Directors is determined based on various parameters. Criteria for assessing the appropriateness of the remuneration include the responsibilities of the individual Managing Directors, their personal performance, the economic situation, the company's success and customary remuneration amounts when taking peer companies and the remuneration structure used elsewhere within the company into consideration.

The remuneration of the Managing Directors consists of fixed and variable components. Fixed components are granted regardless of performance and consist of a fixed sum plus benefits, as well as pension commitments (retirement, disability, widow's or orphan's pension). The fixed sum makes up 60 % of the normal annual salary and is paid out as a monthly basic remuneration. All Managing Directors are equally entitled to the accompanying fringe benefits which include the private use of a company car, payment of insurance premiums and any payments associated with a post-contractual non-competition clause. No loans or advance payments were granted to Managing Directors in the past financial year.

To ensure the sustainability of the nature of the remuneration, the variable remuneration component includes a long-term component, which accounts for around two thirds of the variable remuneration. It is calculated on the basis of the net profit of the KSB Group plus depreciation / amortisation. Its calculation in the form of a rolling, weighted three-year average essentially includes the effect of the future financial years over the contract term. The short-term variable portion of remuneration is linked to three reference values in equal part. In addition to the Group's key indicators of EBIT margin and sales revenue, the calculation is based on the personal goals of the Managing Directors. These goals are set in such a way that their fulfilment has a positive impact on the relevant performance area beyond the year under review.

The total amount of the variable remuneration components is limited in order to take extraordinary, unforeseen developments into account.

The weighting factors above do not reflect the additional possibility of a bonus, to be paid out in individual cases at the discretion of the Administrative Board, of no more than three monthly salary payments per financial year in recognition of any special performance of individual Managing Directors. Such decisions are only made on an irregular basis, meaning that they do not necessarily have to be made annually.

Furthermore, when contracts of service are concluded, care is taken to ensure, in accordance with item 4.2.3 of the German Corporate Governance Code, that payments made to a Managing Director in the event of his or her tenure being terminated prematurely without good reason shall not exceed the value of two years' remuneration including fringe benefits (settlement cap) and shall not exceed the remuneration due for the remaining term of the contract of service. No other payments have been promised to any Managing Director in the event of termination of service; similarly no compensation will be paid in the event of a takeover offer. If the contract of service of a Managing Director is terminated for cause, the company shall not make any severance payments. On 6 May 2015 – using a legally permissible option – the Annual General Meeting resolved not to disclose the details of the compensation for a period of five years.

3. REMUNERATION OF THE ADMINISTRATIVE BOARD

The shareholder of KSB Management SE, Klein, Schanzlin & Becker GmbH, decides on the remuneration of the Administrative Board. The remuneration essentially consists of a fixed sum which covers the time spent attending up to 15 meetings of the Administrative Board. A daily or hourly rate in line with usual market rates is agreed for any extra time spent. Fringe benefits for the Administrative Board have not been agreed and will not be granted. Its members are, however, covered by directors' and officers' (D&O) liability insurance [*Vermögensschaden-Haftpflichtversicherung*] taken out by the company under usual market conditions in favour of the Administrative Board.

Frankenthal, 12 March 2020

KSB Management SE

The Managing Directors

3

Consolidated Financial Statements

Balance Sheet

Assets

€ thousands	Notes	31 Dec. 2019	31 Dec. 2018
Non-current assets			
Intangible assets	1	97,128	91,089
Right-of-use assets	2	50,096 *	–
Property, plant and equipment	3	511,281	496,659
Non-current financial assets	4	1,962	1,773
Other non-financial assets	5	2,840	2,914
Investments accounted for using the equity method	6	24,203	23,855
Deferred tax assets	20	95,101	80,391
		782,611	**696,681**
Current assets			
Inventories	7	544,703	544,430
Contract assets	8	76,428	74,499
Trade receivables	8	504,101	518,116
Other financial assets	8	90,938	103,388
Other non-financial assets	8	39,613	49,504
Cash and cash equivalents	9	280,875	255,545
Assets held for sale	10	7,753	–
		1,544,411	**1,545,482**
		2,327,022	**2,242,163**

* The new balance sheet item "Right-of-use assets" (rights of use to leased assets) results from the first-time adoption of IFRS 16 in the year under review. Further information is provided in the Notes to the consolidated financial statements.

Equity and Liabilities

€ thousands	Notes	31 Dec. 2019	31 Dec. 2018
Equity	**11**		
Subscribed capital		44,772	44,772
Capital reserve		66,663	66,663
Revenue reserves		568,916	577,756
Equity attributable to shareholders of KSB SE & Co. KGaA		680,351	689,191
Non-controlling interests		182,210	167,600
		862,562	**856,791**
Non-current liabilities			
Deferred tax liabilities	20	11,146	10,252
Provisions for employee benefits	12	646,340	578,640
Other provisions	12	1,366	1,377
Financial liabilities	13	56,750 *	30,099
		715,602	**620,368**
Current liabilities			
Provisions for employee benefits	12	12,190	9,287
Other provisions	12	68,376	83,557
Financial liabilities	13	44,318 *	48,777
Contract liabilities	13	165,463	157,389
Trade payables	13	252,741	270,212
Other financial liabilities	13	31,226	32,767
Other non-financial liabilities	13	161,528	154,689
Income tax liabilities	13	9,050	8,326
Liabilities in connection with assets held for sale	10, 13	3,967	–
		748,858	**765,004**
		2,327,022	**2,242,163**

* The first-time adoption of IFRS 16 in the year under review had a material effect on the lease liabilities included in the financial liabilities.
Further information is provided in the Notes to the consolidated financial statements.

Statement of Comprehensive Income

Income statement

€ thousands	Notes	2019	2018
Sales revenue	**14**	**2,383,185**	**2,245,948**
Changes in inventories		− 9,316	22,554
Work performed and capitalised		7,354	7,332
Total output of operations		**2,381,223**	**2,275,834**
Other income	15	33,413	33,050
Cost of materials	16	− 984,787	− 934,545
Staff costs	17	− 848,295	− 765,462
Depreciation and amortisation	1 - 3	− 81,851	− 104,491
Other expenses	18	− 372,198	− 416,869
Other taxes		− 13,902	− 12,815
Earnings before finance income / expense and income tax (EBIT)		**113,603**	**74,702**
Finance income	19	5,741	4,893
Finance expense	19	− 17,098	− 16,544
Income from / expense to investments accounted for using the equity method	19	1,186	2,510
Finance income / expense		**− 10,171**	**− 9,141**
Earnings before income tax (EBT)		**103,432**	**65,561**
Taxes on income	20	− 44,932	− 41,644
Earnings after income tax		**58,500**	**23,917**
Attributable to:			
Non-controlling interests	21	15,415	12,618
Shareholders of KSB SE & Co. KGaA		**43,085**	**11,299**
Diluted and basic earnings per ordinary share (€)	22	24.47	6.26
Diluted and basic earnings per preference share (€)	22	24.73	6.64

Statement of income and expense recognised in equity

€ thousands	Notes	2019	2018
Earnings after income tax		**58,500**	**23,917**
Remeasurement of defined benefit plans	12	– 70,479	– 10,736
Taxes on income		21,389	3,341
Expense and income recognised directly in equity and not reclassified to profit or loss in subsequent periods		**– 49,090**	**– 7,395**
Currency translation differences		3,982	– 13,276
Attributable to: Expense and income recognised directly in equity attributable to investments accounted for using the equity method		209	451
Changes in the fair value of financial instruments: Hedging reserve		– 530	– 5,571
Taxes on income		162	1,665
Attributable to: Expense and income recognised directly in equity attributable to investments accounted for using the equity method		–	– 37
Changes in the fair value of financial instruments: Hedging cost reserve		– 45	– 53
Taxes on income		13	18
Expense and income recognised directly in equity and reclassified to profit or loss in subsequent periods		**3,582**	**– 17,217**
Other comprehensive income		**– 45,508**	**– 24,612**
Total comprehensive income		**12,992**	**– 695**
Attributable to:			
Non-controlling interests		16,593	12,983
Shareholders of KSB SE & Co. KGaA		**– 3,601**	**– 13,678**

Further information is provided in the Notes to the consolidated financial statements.

Statement of Changes in Equity

€ thousands	Subscribed capital of KSB SE & Co. KGaA	Capital reserve of KSB SE & Co. KGaA
31 Dec. 2017	44,772	66,663
Impact of transition to IFRS 9 and IFRS 15	–	–
1 Jan. 2018 (restated under IFRS 9 and IFRS 15)	**44,772**	**66,663**
Other comprehensive income	–	–
Earnings after income tax	–	–
Total comprehensive income	**–**	**–**
Dividends paid	–	–
Capital increase / decrease	–	–
Change in consolidated Group / Step acquisitions	–	–
Other	–	–
31 Dec. 2018	**44,772**	**66,663**

€ thousands	Subscribed capital of KSB SE & Co. KGaA	Capital reserve of KSB SE & Co. KGaA
1 Jan. 2019	44,772	66,663
Other comprehensive income	–	–
Earnings after income tax	–	–
Total comprehensive income	**–**	**–**
Dividends paid	–	–
Capital increase / decrease	–	–
Change in consolidated Group / Step acquisitions	–	–
Other	–	–
31 Dec. 2019	**44,772**	**66,663**

Accumulated currency translation differences (€ thousands)	Equity attributable to shareholders of KSB SE & Co. KGaA	Non-controlling interests	Total equity
1 Jan. 2018	– 83,769	– 20,145	– 103,914
Change in 2018	– 14,501	652	– 13,849
31 Dec. 2018	**– 98,270**	**– 19,493**	**– 117,763**
1 Jan. 2019	– 98,270	– 19,493	– 117,763
Change in 2019	2,505	1,318	3,823
31 Dec. 2019	**– 95,765**	**– 18,175**	**– 113,940**

	Revenue reserves							
		Other comprehensive income						
	Other revenue reserves	Currency translation differences	Changes in the fair value of financial instruments: Hedging reserve	Changes in the fair value of financial instruments: Hedging cost reserve	Remeasurement of defined benefit plans	Equity attributable to shareholders of KSB SE & Co. KGaA	Non-controlling interests	Total equity
	862,874	– 83,769	976	– 539	– 167,687	723,290	162,108	885,398
	– 9,218	–	–	–	–	– 9,218	– 7	– 9,225
	853,656	**– 83,769**	**976**	**– 539**	**– 167,687**	**714,072**	**162,101**	**876,173**
	–	– 13,686	– 3,906	– 35	– 7,350	– 24,977	365	– 24,612
	11,299	–	–	–	–	11,299	12,618	23,917
	11,299	**– 13,686**	**– 3,906**	**– 35**	**– 7,350**	**– 13,678**	**12,983**	**– 695**
	– 13,360	–	–	–	–	– 13,360	– 2,506	– 15,866
	–	–	–	–	–	–	–	–
	3,032	– 815	–	–	– 80	2,137	– 4,978	– 2,841
	20	–	–	–	–	20	–	20
	854,647	– 98,270	– 2,930	– 574	– 175,117	689,191	167,600	856,791

	Revenue reserves							
		Other comprehensive income						
	Other revenue reserves	Currency translation differences	Changes in the fair value of financial instruments: Hedging reserve	Changes in the fair value of financial instruments: Hedging cost reserve	Remeasurement of defined benefit plans	Equity attributable to shareholders of KSB SE & Co. KGaA	Non-controlling interests	Total equity
	854,647	**– 98,270**	**– 2,930**	**– 574**	**– 175,117**	**689,191**	**167,600**	**856,791**
	–	2,664	– 368	– 32	– 48,950	– 46,686	1,178	– 45,508
	43,085	–	–	–	–	43,085	15,415	58,500
	43,085	**2,664**	**– 368**	**– 32**	**– 48,950**	**– 3,601**	**16,593**	**12,992**
	– 5,583	–	–	–	–	– 5,583	– 1,983	– 7,566
	–	–	–	–	–	–	–	–
	503	– 159	–	–	–	344	–	344
	–	–	–	–	–	–	–	–
	892,652	– 95,765	– 3,298	– 606	– 224,067	680,351	182,210	862,562

* Accumulated income and expenses recognised under other comprehensive income as at the reporting date amounted to € – 143 thousand and resulted from provisions for pensions and similar obligations, which represent a disposal group classified as held for sale under IFRS 5.

Statement of Cash Flows

€ thousands	2019	2018
Earnings after income tax	58,500	23,917
Depreciation and amortisation / Write-ups	81,851	104,491
Increase / decrease in non-current provisions	1,791	– 41,305
Gain / loss on disposal of fixed assets	– 2,736	– 957
Other non-cash expenses / income	– 138	– 455
Cash flow	**139,268**	**85,691**
Increase / Decrease in inventories	– 1,215	– 50,834
Increase / Decrease in trade receivables and other assets	30,626	– 7,522
Increase / Decrease in contract assets	– 2,347	– 6,606
Increase / Decrease in current provisions	– 16,138	10,320
Increase / Decrease in liabilities (excluding financial liabilities)	– 11,725	35,997
Increase / Decrease in contract liabilities	7,720	– 4,433
Other non-cash expenses (operating)	– 1,260	– 1,260
	5,661	**– 24,338**
Cash flows from operating activities	**144,929**	**61,353**
Proceeds from disposal of intangible assets	9	1,778
Payments to acquire intangible assets	– 14,447	– 13,932
Proceeds from disposal of property, plant and equipment	5,654	2,263
Payments to acquire property, plant and equipment	– 76,595	– 69,203
Proceeds from disposal of non-current financial assets	531	6
Payments to acquire non-current financial assets	– 749	– 843
Payments to acquire consolidated companies	–	– 5,650
Proceeds from investments in Group companies that are not fully consolidated	12,063	681
Payments for investments in Group companies that are not fully consolidated	– 346	–
Proceeds from commercial papers	19,990	29,979
Payments for commercial papers	–	– 19,990
Proceeds from term deposits (maturity of more than 3 and up to 12 months)	–	596
Payments for term deposits (maturity of more than 3 and up to 12 months)	– 20,116	– 16,180
Other non-cash expenses / income	–	–
Cash flows from investing activities	**– 74,006**	**– 90,495**
Dividends paid for prior year – Shareholders of KSB SE & Co. KGaA (Notes No. 11)	– 5,583	– 13,360
Dividends paid for prior year – Non-controlling interests	– 1,983	– 2,506
Payments for loan against borrower's note	– 26,000	–
Proceeds from financial liabilities	8,230	23,702
Payments for financial liabilities	– 21,094	– 15,757
Payments to acquire non-controlling interests	–	– 1,512
Cash flows from financing activities	**– 46,430**	**– 9,433**
Changes in cash and cash equivalents	24,493	– 38,575
Effects of exchange rate changes on cash and cash equivalents	– 364	4,585
Effects of changes in consolidated Group	1,201	–
Cash and cash equivalents at beginning of period	255,545	289,535
Cash and cash equivalents at end of period	**280,875**	**255,545**

Cash flows from operating activities include cash flows from interest received amounting to € 5,638 thousand (previous year: € 4,618 thousand) and cash flows from income taxes totalling € – 36,754 thousand (previous year: € – 23,780 thousand). Cash flows from investing activities for the 2019 financial year include cash flows from dividends received amounting to € 575 thousand (previous year: € 1,029 thousand). Cash flows from financing activities include cash flows from interest expense of € – 5,322 thousand (previous year: € – 4,888 thousand).

Cash flows from operating activities and cash flows from financing activities were impacted by the first-time adoption of IFRS 16 in the year under review. Accordingly, cash flows from operating activities in the 2019 financial year include payments for expenses for leases of low-value assets of € 2,347 thousand, for expenses for short-term leases of € 7,591 thousand, for variable lease payments of € 668 thousand, and payments for interest expenses from the subsequent measurement of lease liabilities of € 1,556 thousand. Cash flows from financing activities include payments for the repayment of lease liabilities of € 16,142 thousand.

For more information see the Notes, section VII. Statement of Cash Flows.

Notes

I. GENERAL INFORMATION ON THE GROUP

KSB SE & Co. KGaA, Frankenthal / Pfalz, Germany, is a capital market-oriented partnership limited by shares [*Kommanditgesellschaft auf Aktien*] under the law of the Federal Republic of Germany. The company is registered with the *Handelsregister* [German Commercial Register] of the *Amtsgericht* [Local Court] Ludwigshafen am Rhein, registration No. HRB 65657, and has its registered office in Frankenthal / Pfalz, Germany. KSB SE & Co. KGaA was formed from KSB Aktiengesellschaft by entry in the German Commercial Register on 17 January 2018. The general partner is KSB Management SE, a European public limited company. The shares in this company are wholly owned (100 %) by Klein, Schanzlin & Becker GmbH, Frankenthal / Pfalz, a subsidiary of the non-profit KSB Stiftung [KSB Foundation] and the non-profit Kühborth-Stiftung GmbH [Kühborth Foundation]. KSB SE & Co. KGaA and thus the KSB Group are managed via KSB Management SE, which has four Managing Directors and a five-member Administrative Board.

KSB SE & Co. KGaA is the ultimate and immediate parent company whose consolidated financial statements include the single-entity financial statements of KSB SE & Co. KGaA. The consolidated financial statements of KSB SE & Co. KGaA prepared in accordance with International Financial Reporting Standards as adopted by the EU are published in the *Bundesanzeiger* [German Federal Gazette].

The KSB Group is a global supplier of high-quality pumps, valves and related systems and also provides a wide range of support services to users of these products. The Group's operations are divided into three segments: Pumps, Valves and Service.

Basis of preparation of the consolidated financial statements

The accompanying consolidated financial statements of KSB SE & Co. KGaA were prepared in accordance with the International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU) and the additional requirements of German commercial law under section 315e(1) of the HGB [*Handelsgesetzbuch* – German Commercial Code]. To do so, the Conceptual Framework and all Standards applicable at the reporting date and adopted by the European Commission for use in the EU that are of relevance to the KSB Group as well as the interpretations of the IFRS Interpretations Committee were applied. For the purposes of this document, the term IFRSs includes applicable International Accounting Standards (IASs). The consolidated financial statements of KSB SE & Co. KGaA therefore meet the requirements of the IFRSs as adopted by the EU. The consolidated financial statements were prepared on a going concern basis in accordance with IAS 1.25. On principle, the historical cost is the measurement basis used for the consolidated financial statements, unless Section III. Accounting Policies provides otherwise.

Amounts in this report are generally presented in thousands of euros (€ thousands) using standard commercial rounding rules. Due to rounding, there may be minor differences in the totals and percentages presented in this report.

The financial year of the companies consolidated is the calendar year.

The income statement as part of the statement of comprehensive income has been prepared using the nature of expense method.

All material items of the balance sheet and the income statement are presented separately and explained in these Notes.

The main accounting policies used to prepare the consolidated financial statements are presented below. The policies described were applied consistently for the reporting periods presented unless stated otherwise.

The consolidated financial statements, the annual financial statements and the combined management report are submitted to and published in the *Bundesanzeiger*.

These consolidated financial statements will be approved by the Managing Directors of KSB Management SE on 12 March 2020 for forwarding to the Supervisory Board. The Supervisory Board is expected to approve the financial statements on 19 March 2020.

New accounting principles

a) Accounting principles applied for the first time in the 2019 financial year

The new or revised accounting Standards and Interpretations listed below which were adopted for the first time in the reporting year had no or no material impact on the Group's net assets, financial position and results of operations, except for IFRS 16 Leases. The effects resulting from the first-time adoption of IFRS 16 Leases are presented in Section III. Accounting Policies in the "Changes in accounting policies due to the first-time adoption of IFRS 16" sub-section.

b) Accounting principles that have been published but that are not yet mandatory

The new or revised Accounting Standards and Interpretations listed below were not yet mandatory and were not applied in the 2019 financial year.

As a matter of principle, the new or revised Standards or Interpretations shown in the table have not been adopted early. We expect no or no material effects on our net assets, financial position or results of operations from these amendments.

Accounting principles applied for the first time in the 2019 financial year

	First-time adoption in the EU
IFRS 16 Leases	1 Jan. 2019
Amendments to IFRS 9 Financial Instruments – Prepayment Features with Negative Compensation	1 Jan. 2019
Amendments to IAS 28 Investments in Associates and Joint Ventures – Long-term Interests in Associates and Joint Ventures	1 Jan. 2019
Amendments to IAS 19 Employee Benefits – Plan Amendment, Curtailment or Settlement	1 Jan. 2019
Annual improvements to IFRSs (2015-2017 cycle) with respect to amendments to IFRS 3 Business Combinations, IFRS 11 Joint Arrangements, IAS 12 Income Taxes and IAS 23 Borrowing Costs	1 Jan. 2019
IFRIC 23 Uncertainty over Income Tax Treatment	1 Jan. 2019

Accounting principles that have been published but that are not yet mandatory

	First-time adoption in the EU
Amendments to the cross-references in the Conceptual Framework in IFRS	1 Jan. 2020
Revision of IFRS 3 Business Combinations	1 Jan. 2020
Amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies	1 Jan. 2020
Amendments to IFRS 9 Financial Instruments, IAS 39 Financial Instruments: Recognition and Measurement and IFRS 7 Financial Instruments: Disclosures (Interest Rate Benchmark Reform)	1 Jan. 2020
IFRS 17 Insurance Contracts	1 Jan. 2021

II. CONSOLIDATION PRINCIPLES

Consolidated Group
In addition to KSB SE & Co. KGaA, 9 German and 76 foreign companies (previous year: 9 German and 74 foreign companies) were fully consolidated. A majority interest is held, either directly or indirectly, in the voting power of these subsidiaries which the KSB Group has the option to control under IFRS 10.

Subsidiaries are companies controlled by the Group. The Group controls a company if it is exposed, or has rights, to variable returns from its involvement with the company and has the ability to affect those returns through its power of disposition over the company. The financial statements of subsidiaries are included in the Group's financial statements from the date on which control begins until the date on which control ends. Changes in the investment ratio that do not result in a loss of control are treated as a transaction between shareholders and recognised directly in equity. Such transactions do not result in the recognition of goodwill or the realisation of disposal profits.

The consolidation principles apply accordingly to joint ventures and associates accounted for using the equity method. Upon the loss of joint control or significant influence any retained interest in the investee is remeasured at fair value through profit or loss.

Associates are companies in which the Group has significant influence but does not have control or joint control over financial and business policy. A joint venture is an agreement through which the Group exercises joint control, in that it has rights to the net assets of the agreement rather than rights to its assets and obligations for its liabilities. The shares in companies included at-equity are measured at cost of acquisition plus or minus cumulative changes in net assets, with recognised goodwill reported in the carrying amount of the investment.

The Thai company KSB Pumps Co. Ltd., Bangkok, and the Indian company KSB Limited, Pimpri (Pune), are included in the group of fully consolidated affiliates despite the fact that KSB holds less than 50 % of the voting rights. KSB does, however, have the power to determine their business and financial policies and thus the level of variable returns.

KSB gained control over KSB Limited, Pimpri (Pune), in which KSB owns 40.54 % of the shares, through contractual agreements with other shareholders. These agreements ensure that KSB has the majority of voting rights in management committees and also exer-cises control over the budget.

Likewise, KSB exercises control over KSB Pumps Co. Ltd., Bangkok, in which it owns 40 % of the shares, through additional agreements which give KSB the majority of voting rights in management committees and control over the budget.

Companies that were not consolidated due to there being no material impact are reported as other investments under non-current other financial assets.

The following table shows the subsidiaries with non-controlling interests that are material subsidiaries of the KSB Group. "Seat" refers to the country in which the main activity is performed.

→ Material subsidiaries with non-controlling interests

Material subsidiaries with non-controlling interests

Name and seat	Non-controlling interest in capital	Earnings after income tax attributable to non-controlling interests		Accumulated non-controlling interests	
€ thousands	**2019 / 2018**	**31 Dec. 2019**	**31 Dec. 2018**	**31 Dec. 2019**	**31 Dec. 2018**
PAB, Germany / USA (subgroup)	49.00 %	5,604	6,312	89,340	81,920
KSB Limited, India	59.46 %	7,435	5,059	60,284	55,116
KSB Shanghai Pump Co., Ltd., China	20.00 %	626	– 254	10,913	10,222
Individually immaterial fully consolidated subsidiaries with non-controlling interests		1,750	1,501	21,673	20,342
Total amount of non-controlling interests		**15,415**	**12,618**	**182,210**	**167,600**

Composition of the PAB subgroup as at 31 Dec. 2019

Cons. No.	Name and seat	Country	Capital share in %	Held by No.
1	PAB Pumpen- und Armaturen-Beteiligungsges. mbH, Frankenthal	Germany	51.00	–
2	KSB America Corporation, Richmond / Virginia	USA	100.00	1
3	GIW Industries, Inc., Grovetown / Georgia	USA	100.00	2
4	KSB Dubric, Inc., Comstock Park / Michigan	USA	100.00	2
5	KSB, Inc., Richmond / Virginia	USA	100.00	2
6	KSB, Inc. – Western Division, Bakersfield / California	USA	100.00	2
7	Standard Alloys Incorporated, Port Arthur / Texas	USA	100.00	2

Information on the subgroup that comprised the subsidiaries of the KSB Group listed in the following table as at 31 December 2019 is summarised under the name “PAB”.

→ Composition of the PAB subgroup as at 31 Dec. 2019

The summarised financial information regarding the KSB Group’s material subsidiaries with non-controlling interests and the PAB subgroup considered here is provided below. Except for the details on the PAB subgroup, this information corresponds to the amounts shown in the subsidiaries’ financial statements prepared in accordance with IFRS prior to intercompany eliminations.

The required intercompany eliminations were taken into consideration for the PAB subgroup. The details on the PAB subgroup in the 2018 financial year also included financial information of KSB AMRI Inc., Houston / Texas, in which KSB America Corporation, Richmond / Virginia, held an 89.97 % stake until the company was liquidated on 6 December 2018.

→ Summarised balance sheet

→ Summarised statement of comprehensive income

→ Condensed statement of cash flows

Summarised balance sheet

	PAB		KSB Limited		KSB Shanghai Pump Co., Ltd.	
€ thousands / 31 Dec.	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
Non-current assets	85,024	69,422	49,374	47,404	28,485	27,851
Current assets	154,508	150,681	128,272	107,463	125,965	145,085
Non-current liabilities	– 17,764	– 13,140	– 2,794	– 2,340	– 768	–
Current liabilities	– 39,442	– 39,779	– 73,466	– 59,832	– 99,116	– 121,824
Net assets	**182,326**	**167,184**	**101,386**	**92,695**	**54,566**	**51,112**

Summarised statement of comprehensive income

	PAB		KSB Limited		KSB Shanghai Pump Co., Ltd.	
€ thousands	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
Sales revenue	243,635	212,570	163,138	133,180	168,006	158,278
Earnings after income tax	11,436	12,882	12,820	9,365	3,132	– 1,269
Other comprehensive income	3,706	8,496	– 1,480	– 3,890	322	2,934
Comprehensive income	15,142	21,378	11,340	5,475	3,454	1,665
Other comprehensive income attributable to non-controlling interests	1,816	4,163	– 880	– 2,313	64	587
Comprehensive income attributable to non-controlling interests	7,420	10,475	6,555	3,255	691	333
Dividends paid to non-controlling interests	–	–	– 1,575	– 1,538	–	–

Condensed statement of cash flows

	PAB		KSB Limited		KSB Shanghai Pump Co., Ltd.	
€ thousands	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
Cash flows from operating activities	20,264	9,286	24,398	9,883	6,896	11,210
Cash flows from investing activities	– 19,995	– 20,722	– 4,660	– 7,597	10,740	2,250
Cash flows from financing activities	– 1,270	– 1,178	– 163	325	1,340	– 3,179
Changes in cash and cash equivalents	**– 1,001**	**– 12,614**	**19,575**	**2,611**	**18,976**	**10,281**
Cash and cash equivalents at beginning of period	7,400	19,486	12,493	10,264	12,730	2,258
Effects of exchange rate changes	145	528	– 404	– 382	– 84	191
Cash and cash equivalents at end of period	**6,544**	**7,400**	**31,664**	**12,493**	**31,622**	**12,730**

Changes in the consolidated Group

TOV "KSB Ukraine", Kiev, Ukraine, IOOO "KSB BEL", Minsk, Belarus and KSB Ltd., Tokyo, Japan, previously not consolidated due to there being no material impact, were included in the group of consolidated companies on 1 January 2019. These affiliates, which were consolidated for the first time, were established in previous years. First-time consolidations contributed € 4,682 thousand to sales revenue and also had the following impact on the consolidated balance sheet:

First-time consolidations – Impact on balance sheet

€ thousands	2019
Non-current assets	– 306
Current assets	1,790
Assets	**1,484**
Equity	344
Non-current liabilities	–
Current liabilities	1,140
Equity and liabilities	**1,484**

The contribution by the three aforementioned companies to consolidated earnings after income tax for the consolidation period was € 759 thousand. Other effects resulting from the consolidation of companies were not material.

The 2019 financial year saw the establishment of the new company KSB PUMPS AND VALVES LIMITED, Nairobi, Kenya. KSB Pumps (S.A.) (Pty) Ltd., Germiston (Johannesburg), South Africa, which is already fully consolidated, holds 100 % of the shares. Due to reasons of materiality the newly established company will not be consolidated.

The previously fully consolidated company KSB Verwaltung (Schweiz) AG, Reinach, Switzerland, was liquidated in November 2019. This did not have any material impact on the consolidated financial statements.

A full list of the shareholdings held by the KSB Group is provided at the end of these Notes to the Consolidated Financial Statements.

Consolidation methods

For the purposes of consolidation, the effects of any intercompany transactions are eliminated in full. Any receivables and liabilities between the consolidated companies are offset against each other, and any unrealised gains and losses recognised in fixed assets and inventories are eliminated. Any revenues from intercompany sales are offset against the corresponding expenses.

Capital consolidation is based on the purchase method of accounting pursuant to IFRS 3. This means that the amortised cost of the parent's shares in the subsidiary is eliminated against the remeasured equity attributable to the parent at the date of acquisition.

Any goodwill created from the application of the purchase method denominated in a currency other than the functional currency of the KSB Group is measured at the relevant current closing rate. Goodwill is reported under intangible assets and tested for impairment at least once a year. If an impairment is identified, an impairment loss is recognised. Any excess of our interest in the fair values of net assets acquired over cost remaining after reassessment is recognised in profit or loss in the year it occurred.

Those shares of subsidiaries' equity not attributable to KSB SE & Co. KGaA are reported as non-controlling interests.

Currency translation

The consolidated financial statements have been prepared in euro (€). Unless otherwise stated, amounts in this report are presented in thousands of euros (€ thousands) using standard commercial rounding rules.

Currency translation is effected on the basis of the functional currency of the consolidated companies. As in the previous year, the functional currency is exclusively the local currency of the company consolidated, as it operates as a financially, economically and organisationally independent entity.

Transactions denominated in foreign currencies are translated at the individual companies at the rate prevailing when the transaction is initially recognised. Monetary assets and liabilities are subsequently measured at the closing rate. Measurement effects are recognised in the income statement.

When translating financial statements of consolidated companies that are not prepared in euro, assets and liabilities are translated at the closing rate; the income statement accounts are translated at average exchange rates (modified closing rate method). The sole exception as at 31 December 2019 was the translation of the financial statements of KSB Compañía Sudamericana de Bombas S.A., Carapachay (Buenos Aires), Argentina, where income statement items were translated at the closing rate, as in the previous year. Gains and losses from the translation of items of assets and liabilities compared with their translation in the previous year are taken directly to equity in other comprehensive income and reported under currency translation differences. They amount to € – 113,940 thousand (previous year: € – 117,763 thousand). The effect of currency translation adjustments taken directly to equity on intangible assets, property, plant and equipment, and non-current financial assets was € 4,434 thousand (previous year: loss of € 6,885 thousand).

→ Exchange rates for the most important currencies

Exchange rates for the most important currencies

	Closing rate		Average rate	
	31 Dec. 2019	31 Dec. 2018	2019	2018
US dollar	1.1234	1.1450	1.1195	1.1810
Brazilian real	4.5157	4.4440	4.4126	4.3085
Indian rupee	80.1870	79.7298	78.8269	80.7332
Chinese yuan	7.8205	7.8751	7.7348	7.8081

Hyperinflation

Argentina has been rated as a hyperinflation country for accounting purposes since 2018. As such, KSB is following the information of the International Practices Task Force (IPTF) of the Center of Audit Quality (CAQ). Based on this assessment, activities in Argentina have been reported under IAS 29 Financial Reporting in Hyperinflationary Countries. No further information was provided as the impact on the Group's net assets, financial position and result of operations was not material.

III. ACCOUNTING POLICIES

Acquisition and production costs

In addition to the purchase price, acquisition cost includes attributable incidental costs (except for costs associated with the acquisition of a company) and subsequent expenditure. Purchase price reductions are deducted.

As well as directly allocated costs, production costs also include reasonable proportions of material and production overheads based on standard capacity utilisation of the relevant production facilities, if and to the extent these were incurred as part of the production process. This also includes production-related administrative expenses. General administrative expenses, research costs and selling expenses are not capitalised.

Borrowing costs as defined in IAS 23 that can be directly allocated to the acquisition or production of qualifying assets are capitalised. As in the previous year no such borrowing costs were incurred.

Fair value

Fair value is the price that independent market participants would, under standard market conditions, receive when selling an asset or pay when transferring a liability at the measurement date. This applies irrespectively of whether the price is directly observable or has been estimated using a measurement method.

The KSB Group defined a monitoring framework concept for determining fair value. This includes the monitoring of all material measurements at fair value and the direct communication of material facts to Management and, if necessary, to the audit committee. For the purposes of calculating fair value, KSB makes use wherever possible of estimates from market participants or estimates derived from these. As an initial step, regular checks are made to ascertain if there are current prices on active markets for an identical transaction. If no quoted market prices are available, the preference is to use the market-based approach (deriving the fair value from the market or transaction prices of comparable assets, for example multipliers) or the income-based approach (calculation of fair value as a future value by discounting future cash surpluses).

Based upon the input factors used in the measurement methods, fair values are assigned to different levels of the fair value hierarchy.

- Level 1: Quoted prices (unadjusted) on active markets for identical assets and liabilities

- Level 2: Measurement parameters that are not the quoted prices taken into account for level 1, but that are observable for the asset or the liability either directly as a price or indirectly derived from prices
- Level 3: Measurement parameters for assets or liabilities that are not based on observable market data

If input factors categorised into different levels are included in the fair value measurement, the measurement must be categorised in its entirety in the level of the lowest level input factor that is material for the entire measurement.

Reclassifications between different levels in the fair value hierarchy are recognised at the end of the reporting period during which the change has occurred. There were no reclassifications carried out in the year under review.

Financial assets and financial liabilities

A financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets and financial liabilities are recognised in the consolidated balance sheet at the time when KSB becomes a contractual party. When the contractual right to payments from financial assets expires, these are derecognised. Financial liabilities are derecognised at the time when the contractual obligations are settled or cancelled or have expired. The acquisition and sale of financial instruments on an arm's length basis are recognised at the value at the date of settlement. This applies to primary financial instruments, such as trade receivables and financial receivables. Only derivative financial instruments are recognised at the value at the trade date.

a) Primary financial instruments

In the KSB Group, primary financial instruments are allocated to the following measurement categories as financial assets and financial liabilities based on the requirements of IFRS 9:

Financial assets:

- Financial assets at amortised cost – Receivables, credits, cash and cash equivalents, loans and other financial assets
- Financial assets at fair value through profit or loss (FVPL) – Financial instruments

Financial liabilities:

- Financial liabilities at amortised cost – Loans, trade payables and other financial liabilities

Financial assets and liabilities are reported at fair value on initial recognition. Financial assets and liabilities that are not measured at fair value are recognised after adjustment for transaction costs. Subsequent measurement is in line with the measurement category allocated to the financial asset or financial liability.

The fair value option is not being used at the moment.

b) Derivatives

Derivatives are exclusively used for hedging purposes. Future cash flows and existing recognised underlyings are hedged against foreign currency and interest rate risks (cash flow hedges). The hedging instruments used are exclusively currency forwards and interest rate derivatives entered into with prime-rated banks. Currency risks are hedged primarily for transactions in US dollars (USD). Interest rate risks are minimised for long-term borrowings at floating rates of interest. Group guidelines govern the use of these instruments. These transactions are also subject to continuous risk monitoring.

In the case of cash flow hedges, changes in the fair value of the effective portions of the currency derivatives are recognised under other comprehensive income and reported under "Changes in the fair value of financial instruments" in equity for as long as the underlying transaction is not recognised in the income statement. Only the spot element of the derivative hedging instrument is designated, while the forward element and currency basis spreads are excluded from the hedge and reported separately in the hedging cost reserve in other comprehensive income. Any hedge ineffectiveness is reported through the income statement.

Changes in the fair value of interest rate derivatives used to hedge against interest rate risks in liabilities are recognised under other comprehensive income and reported under "Changes in the fair value of financial instruments" in equity.

The carrying amounts equal fair value and are determined on the basis of input factors observable either directly (as a price) or indirectly (derived from prices). Fair values may be positive or negative. Fair value is the amount that KSB would receive or have to pay at the reporting date to settle the financial instrument. This amount is determined using the relevant exchange rates, interest rates and counterparty credit ratings at the reporting date. Information is obtained solely from recognised external sources.

Currency forwards and interest rate swaps are reported under other financial assets, and under other financial liabilities.

As in the previous year, maturities of the currency derivatives used are mostly between one and two years; there are no interest rate derivatives for the financial year in the Group. The maturities of the hedging instruments are matched to the period in which the forecast transactions are expected to occur. In the year under review, almost all hedged forecast transactions occurred as expected.

Intangible assets

Intangible assets are measured at (acquisition or production) cost and reduced by straight-line amortisation. Depreciation / amortisation is reported under "Depreciation / amortisation" in the income statement. The underlying useful lives of intangible assets – excluding goodwill (indefinite useful life) – is between 2 and 15 years. If the reasons for an impairment loss in a previous period no longer apply, it is reversed (write-up) up to a maximum of amortised cost.

Goodwill is tested for impairment once a year. The test relates to cash-generating units (CGUs), which at KSB are generally the legal entities. Occasionally a group of cash-generating units may also serve as the basis, provided these units reflect the lowest level on which goodwill is monitored. The goodwill (and, if necessary, other assets) is reduced by the difference in value if the value in use is lower than the carrying amount of the CGU. Reversal of an impairment loss from an earlier period is not possible. In addition, a review of impairment is always carried out when events or circumstances ("trigger events") suggest that the value could be impaired.

The discounted cash flow model is used to determine the recoverable amount (value in use). The future earnings (EBIT in accordance with IFRS) applied were taken from a multi-year financial plan (covering a maximum of five years), based on the 30 September reporting date taking into account the medium-term strategy approved by Management for the respective cash-generating unit. This planning was carried out based on certain assumptions which were drawn from both forecasts from external sources, e.g. current German Mechanical Engineering Industry Association (VDMA) publications, and our own experience-based knowledge of markets and competitors. The earnings of the last plan year were consistently extrapolated as a constant, considering that level to be achievable in the long term. Growth rates were derived taking account of the estimates with regard to economic circumstances. The Group regularly tests goodwill for impairment in the fourth quarter of every year based on the figures as per 30 September of the year in question.

As part of the assessment, the Group conducts sensitivity analyses to estimate the risk of impairment. The following assumptions are used in the process: a 15 % increase in the cost of capital (Sensitivity 1), a reduction of the growth rate to 0.00 % (Sensitivity 2; previous year: 0.25 % reduction in the growth rate) and a 10 % reduction in sales revenue with the corresponding impact on expense items and performance indicators (Sensitivity 3). Sensitivity 3 is only applied to the material goodwills of the KSB Group.

When companies are acquired, purchase price allocations are made and the fair value of the assets and liabilities acquired is determined. In addition to the assets and liabilities already recognised by the selling party, account is also taken of marketing-related aspects (primarily brands or trademarks and competitive restrictions), customer-related aspects (primarily customer lists, customer relations and orders on hand), contract-related aspects (mainly particularly advantageous service, work, purchasing and employment contracts) as well as technology-related aspects (primarily patents, know-how and databases). The residual value method, the excess earnings method and cost-oriented procedures are primarily applied to determine values.

Development costs are capitalised as internally generated intangible assets at cost where the criteria described in IAS 38 are met and reduced by straight-line amortisation as from the time the asset becomes operational. Research costs are expensed as incurred. Where research and development costs cannot be reliably distinguished within a project, no costs are capitalised.

Leases

In the reporting year, KSB applied the new provisions of IFRS 16 Leases for the first time.

For leases where KSB is the lessee this requires that lease liabilities and right-of-use assets (rights to use leased assets) be recognised on the balance sheet. Leases of low value assets and short-term leases are exempt from this provision as KSB has elected to make use of the practical expedient of accounting for lease payments as an expense.

Further details on the effects resulting from the first-time adoption of IFRS 16 and the associated accounting policies are presented in the following sub-section "Changes in accounting policies due to the first-time adoption of IFRS 16".

Property, plant and equipment

In accordance with IAS 16, property, plant and equipment is measured at cost and reduced by straight-line depreciation over its useful life. If an asset's recoverable amount is lower than its carrying amount, an impairment loss is recognised. If the reasons for an impairment loss recognised in a previous period no longer apply, the impairment loss is reversed (write-up) up to a maximum of amortised cost.

Government grants relating to property, plant and equipment are transferred to an adjustment item on the liabilities side. This adjustment item is reversed over a defined utilisation period. As far as government grants recognised which are to be held for specific periods of time are concerned, these periods are expected to be complied with.

Maintenance expenses are recognised as an expense in the period in which they are incurred, unless they lead to the expansion or material improvement of the asset concerned.

The following useful lives are applied:

Useful life of property, plant and equipment

Buildings	10 to 50 years
Plant and machinery	5 to 25 years
Other equipment, operating and office equipment	3 to 25 years

Non-current financial assets

Interest-bearing loans are recognised at amortised cost, whereas non-current financial instruments are reported in the income statement at fair value on the balance sheet date. Financial assets such other cash deposits are subject to an expected default risk. The impairment loss is calculated based on the loan amount on the closing or balance sheet date, the loss ratio of the loan amount and the term-weighted credit default spreads as a benchmark for probability of failure. Furthermore, partial or complete impairment is recognised as soon as there are signs of an increase in default risk. No significant default risks of counterparties were determined during the year. They were within investment grade as a whole.

Non-current other non-financial assets

Investments in non-consolidated subsidiaries are measured at amortised cost.

Investments accounted for using the equity method

Investments accounted for using the equity method are companies in which the parties exercise joint control (joint venture) or have the power to exercise significant influence over the companies' operating and financial policies (associate); this is usually the case where an entity holds between 20 % and 50 % of the voting power. These assets are recognised at cost at the time of acquisition. If the costs of acquisition exceed the share of the net assets, adjustments are made on the basis of the fair value (pro rata hidden reserves and liabilities). The remaining amount is recognised as goodwill. It forms part of the carrying amount of the joint venture or associate and is not amortised. For subsequent measurement, the carrying amounts are increased / reduced annually by the pro-rata earnings, distributed dividends or other changes in equity of the joint venture or the associate. If local accounting principles differ from the Group's standard accounting policies, adjustments are made accordingly. The share of earnings is reported in the consolidated income statement in a separate line (earnings from investments accounted for using the equity method), and changes such as currency translation effects are taken directly to Group equity. If the losses attributable to the KSB Group correspond to the carrying amount of the company or exceed this, they are not recognised unless KSB has entered into obligations or has made payments for the company. Intercompany gains and losses from transactions between Group companies and investments accounted for using the equity method are offset against the carrying amount in profit or loss. At each reporting date, a review is carried out to determine whether there are any objective indications of impairment, and the amount of such impairment is calculated if required. If the carrying amount exceeds the recoverable amount of an investment, it is written down to the recoverable amount. Any impairments or reversals of impairments are reported in the consolidated income statement under finance income / expense.

Inventories

Pursuant to IAS 2, inventories are recognised at the lower of cost and net realisable value as at the reporting date. Cost is measured using the weighted average method. KSB takes account of the inventory risks resulting from slow-moving goods or impaired marketability through write-downs to the net realisable value. This also applies if the selling price is lower than production cost plus costs still to be incurred. If the reasons for an impairment loss charged in a previous period no longer apply, the impairment loss is reversed (write-up).

Advance payments made on inventories are also presented under inventories because of the correlation and expected realisation of these advances (through conversion into inventories) within the normal business cycle.

Contract assets and contract liabilities

A contract asset shows KSB's claim to consideration in exchange for goods or services transferred to customers, with the right to payment being not only conditional on the passage of time but also on the satisfaction of an overall contractual performance obligation by KSB. By contrast, receivables reflect KSB's unqualified claim to consideration. A contract liability also represents KSB's obligation to transfer goods or services to a customer. However, in these cases KSB has already received consideration from a customer that exceeds the amount of the goods or services provided. Any impairment of contract assets is recognised using the simplified impairment model. Contract assets relate to ongoing projects that have not yet been invoiced and are subject to similar credit risks as trade receivables for the same types of contract. Against this background, the expected loss rates of trade receivables are also applied to the impairment of contract assets.

Trade receivables

Trade receivables and other current assets are subsequently recognised at amortised cost. Low-interest or non-interest-bearing receivables are discounted. In addition, identifiable risks are taken into account by charging individual impairment losses. Individual impairment allowances are to be applied if insolvency or collection proceedings have been instigated, on the default or failure to meet agreed repayment plans and on overdue payments. Receivables are derecognised if it is reasonably certain that payment cannot be expected. A risk provision for expected credit losses (ECL) is set aside under the simplified impairment model according to IFRS 9 for receivables that are not individually impaired. To measure expected credit losses, trade receivables are summarised on the basis of common credit risk features (risk classes) and number of days overdue. The expected default rates stem from the historic payment profiles of sales revenues over the last three financial years before the reporting date. The historic and forward-looking information forms the basis for the expected probability of failure, adjusted for future-oriented macroeconomic factors.

Most of the default risk exposure of trade receivables is hedged. For more information, please refer to Section VI. Additional Information on Financial Instruments" – sub-section "Financial risks – Credit risk".

Trade receivables for which collateral, such as credit insurance, has been provided or letters of credit have been opened are recognised as impaired, taking account of default risks of the provider of the security and the company's macroeconomic factors.

If the reasons for an impairment loss charged in a previous period no longer apply, the impairment loss is reversed (write-up).

Other non-financial assets

The prepayments made that are presented in this item relate to accrued expenditure prior to the reporting date that will only be classified as an expense after the reporting date.

Cash and cash equivalents

Cash (cash and sight deposits) and cash equivalents (short-term, highly liquid financial investments that are readily convertible to defined amounts of cash, and that are subject to only immaterial fluctuations in terms of their value) are recognised at amortised cost. Cash and cash equivalents are subject to an expected credit default risk. The impairment allowance under IFRS 9 is calculated based on the loan amount on the closing date, the loss ratio of the loan amount and the term-weighted credit default spreads as a benchmark for probability of failure. Furthermore, partial or complete impairment allowances are recognised as soon as there are signs of an increase in default risk. No significant default risks of counterparties were determined during the year. They were within investment grade as a whole.

Non-current assets and disposal groups held for sale

Pursuant to IFRS 5, non-current assets or disposal groups are classified as held for sale if it is highly likely that the carrying amount will be realised primarily by a sales transaction and not through continued use of that asset. It must be assumed that the sale will be completed within one year. If the Group is committed to a sale that involves loss of control of a subsidiary, all assets and liabilities of that subsidiary will be classified as held for sale, provided the above conditions are met. The intangible assets, right-of-use assets for leases, and property, plant and equipment of the held-for-sale assets are no longer amortised / depreciated, but instead are recognised at the lower of the carrying amount and fair value less costs to sell.

Taxes on income

Current taxes on income are recognised in income tax liabilities to the extent that they have not yet been paid. If the amount already paid exceeds the amount owed, an income tax receivable is recognised and reported in other tax assets under other non-financial assets.

Deferred taxes are accounted for in accordance with IAS 12 using the balance sheet liability method on the basis of the enacted or substantively enacted local tax rates. This means that deferred tax assets and liabilities generally arise when the tax base of assets and liabilities differs from their carrying amount in the IFRS financial statements, and this leads to future tax expense or income. Deferred tax assets from tax loss carry-forwards are recognised in those cases where it is more likely than not that there will be sufficient taxable profit available in the near future against which these tax loss carryforwards can be utilised. Deferred taxes are also recognised for consolidation adjustments. Deferred taxes are not discounted. Deferred tax assets and liabilities are always offset where they relate to the same tax authority. Changes to deferred taxes in the consolidated balance sheet generally result in deferred tax expense or income. If, however, a direct entry is made in other comprehensive income in equity, the change in deferred taxes is also taken directly to equity.

Provisions

a) Provisions for pensions and similar obligations

Provisions for pensions and similar obligations pursuant to IAS 19 are calculated on the basis of actuarial reports. They are based on defined benefit pension plans. They are measured using the projected unit credit method.

Actuarial gains and losses are taken directly to other comprehensive income and reported in equity under "Remeasurement of defined benefit plans". The actuarial demographic assumptions and the setting of the discount rate (based on senior, fixed-income corporate bonds) and other measurement parameters (for example income and pension trends) are based on best estimates.

Net interest is calculated by multiplying the discount rate with the net liability (pension obligation minus plan assets) or the net asset value that results if the plan assets exceed the pension obligation.

The defined benefit costs include the service cost, which is included in staff costs under pension costs, and the net interest income or expense on the net liability or net asset value, which is recognised in finance income / expense under interest and similar expenses or under interest and similar income.

No provisions are set aside for defined contribution pension plans. In these cases, the premium payments are recognised directly in the income statement as pension costs in the staff costs. Other than an obligation to pay premiums, KSB has no further obligations. Consequently, the insurance risk remains with the insured parties.

b) Other provisions

Provisions are recognised if a past event results in a present legal or constructive external obligation that the company has no realistic alternative to settling, where settlement of this obligation is expected to result in an outflow of resources embodying economic benefits, and the amount of the obligation can be estimated reliably. The amount of the provision corresponds to the best estimate of the settlement amount of the current obligation on the reporting date. Any more or less secure recourse or reimbursement claims are recognised as separate assets.

If customer contracts are expected to be loss-making, a gross statement is drawn up of contract assets and provisions for the expected losses.

Provisions for restructurings are recognised only if the criteria set out in IAS 37 are met.

Non-current provisions are discounted if the effects are material.

Contingent liabilities

Contingent liabilities, which are not recognised, are potential obligations that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of uncertain future events. Contingent liabilities may also be present obligations that arise from past events where it is possible but not probable that there will be an outflow of resources embodying economic benefits.

Contingent liabilities correspond to the extent of liability at the reporting date.

Revenue from contracts with customers

KSB generates sales revenue from the sale of goods and goods purchased and held for resale from the production, sale and trade of machinery, systems and other industrial products, particularly pumps and valves and related support services. KSB generates most of its sales revenue in the Pumps segment. The breadth of these orders ranges from the supply of an individual pump to customised pump sets, including drive and control systems. These goods and services are sold to engineering contractors, OEMs and end users or, in some cases, distributed via dealers. Some customer contracts contain several service components, such as manufacture of a pump and the related installation and commissioning. These installation services cover integration services and can only be carried out by specifically trained and qualified staff. They are not accounted for as independent performance obligations and the transaction price is not split.

Sales revenue is recognised in the amount of the consideration expected by KSB based on the transfer of goods or provision of services to the customer. Depending on the type of performance and contractual structure, sales revenue is recognised either over time or at a point in time in line with satisfaction of the performance obligation by KSB.

If a performance obligation meets the criteria for recognising sales revenue over time under IFRS 15 and the progress towards completion and expected consideration can be reliably estimated, the sales revenue is recognised based on progress towards complete satisfaction of the performance obligation. KSB specifically recognises sales revenue over time for contracts covering the production of customised pumps and valves as well as contracts for the provision of services. By contrast, standard products in the pumps and valves areas are typically subject to sales revenue recognition at a point in time. KSB applies the input-oriented method to determine progress that is measured by the factors used. The percentage of completion of contracts is determined on the basis of the proportion that contract costs incurred for work performed up to the reporting date bear to the estimated total contract costs at the reporting date and thus follows the cost-to-cost method. Contract revenue consists of all contractually agreed revenues, as well as additional claims and incentive payments that are likely to result in revenue and are capable of being reliably measured. Contract revenue may vary, for instance because of cost escalation clauses, renegotiations or penalties. Sales revenue is accounted for based on the amount fixed in the contract less expected consideration. Variable considerations (cost escalation clauses, penalties, bonuses) are estimated at the most likely value. Restrictions on estimate options are taken into account. Estimates on costs and contract progress are corrected if circumstances change. Any resultant increases or reductions in the estimated proceeds or costs are reflected in the profit and loss account for the period in which the circumstances giving rise to the correction occurred. If the earnings from a service or production order with sales revenue recognition over time cannot be reliably estimated, revenue will only be recognised in the amount of the contract costs incurred that are likely to be covered and the contract costs recognised as an expense for the period in which they are incurred.

Sales revenue is recognised at a point in time for performance obligations that do not meet the criteria for recognising sales revenue over time under IFRS 15. At KSB, this typically applies in particular to standard products without any significant customer-specific characteristic in the Pumps and Valves segments. The point in time at which KSB satisfies its performance obligations from contracts with customers subject to sales revenue recognition at a point in time is based on the agreed supply terms and conditions or acceptance by the customers. At the time of revenue recognition, receipt of the consideration must be probable and the amount of sales revenue must be reliably measurable. A reliable estimation of the associated costs and potential return of the goods must also be possible. Sales revenue from delivery is as a rule recognised in line with the agreed INCOTERMS. For standard products, FCA or EXW terms and conditions apply in most cases. For some international deliveries, the contractual risk transfer takes place when the goods are loaded onto a cargo ship in the port or delivered to the customer in the destination country. In these cases, sales revenue is also recognised on the basis of the contractually agreed INCOTERMS. For certain deliveries and services, a declaration of acceptance by the customer is required for the recognition of sales revenue. For customer contracts based on sales revenue recognised at a point in time, sales reductions also reduce sales revenue.

KSB agrees payment terms and conditions for customer contracts that allow for payment in a reasonable period after the invoice has been issued. Extended payment terms are not usually granted to customers. There are usually no long-term financing components.

In individual cases and in compliance with the statutory requirements of IFRS 15, a customer may ask to obtain control of a product prior to delivery of the goods (bill-and-hold arrangements). This can result in earlier sales revenue recognition.

For regular fixed-price contracts, the customer pays a fixed amount using a payment plan. Depending on the ratio of the customer payments received to the claim to consideration acquired by KSB based on the transfer of goods and services to the customer, there is an advance or subsequent type of payment on the reporting date for the respective customer contract. Contract assets are reported reduced by advances received, if the amount of the goods and services provided by KSB exceed the payment amount. Payments received from the customer that exceed the amount of the goods and services provided by KSB for the respective customer contract result in the reporting of a contract liability.

Interest income and expense are recognised in the period in which they occur. **Dividend income** from investments is collected when the legal entitlement to payment is created. **Operating expenses** are recognised when they are incurred or when the services are utilised. **Income tax** is calculated in accordance with the statutory tax rules in the countries in which the Group operates. Deferred taxes are accounted for on the basis of the enacted or substantively enacted income tax rates.

Estimates and assumptions

The preparation of consolidated financial statements in accordance with the IFRSs as adopted by the EU requires management to make estimates and assumptions that affect the accounting policies to be applied. When implementing such accounting policies, estimates and assumptions affect the assets, liabilities, income and expenses recognised in the consolidated financial statements, and their presentation. These estimates and assumptions are based on past experience and a variety of other factors deemed appropriate under the circumstances. Actual amounts may differ from these estimates and assumptions. The estimates and assumptions made are constantly reviewed. If more recent information and additional knowledge are available, recognised amounts are adjusted to reflect the new circumstances. Any changes in estimates and assumptions that result in material differences are explained separately.

Impairment tests for goodwill, which are conducted at least once per year, require an estimate of the recoverable amounts for each cash-generating unit (CGU). These correspond to the higher amount from the fair value less costs to sell and value in use. The earnings forecast on the basis of these estimates are affected by various factors, which may include exchange rate fluctuations, progress in Group integration or the expectations for the economic development of these units. Although management believes that the assumptions used to calculate the recoverable amount are appropriate, any unforeseen changes in these assumptions could lead to an impairment loss.

Estimates and assumptions must also be made to review the value of assets. For each asset it must be verified to what extent there are indications of an impairment. When determining the recoverable amount of property, plant and equipment, the estimation of the relevant useful life is subject to uncertainty.

Contract assets are subject to the impairment rules of IFRS 9. Any impairment of contract assets is recognised using the simplified impairment model. Contract assets relate to ongoing projects that have not yet been invoiced and are subject to similar credit risks as trade receivables for the same types of contract. Against this background, the expected loss rates of trade receivables are also applied to the impairment of contract assets.

If performance obligations meet the relevant criteria of IFRS 15, KSB recognises revenue from customer contracts over time in line with progress towards completion. The latter is determined according to the percentage of completion. This requires estimates regarding the total contract costs and revenue (including the variable considerations based on experience), contract risks as well as other relevant factors. These estimates are reviewed regularly by those with operative responsibility and adjusted where necessary.

Provisions for employee benefits, especially pensions and similar obligations, are determined according to actuarial principles which are based on statistical and other factors so as to anticipate future events. Material factors are the reported market discount rates and life expectancy. The actuarial assumptions made may differ from actual developments as a result of changing market and economic conditions, and this can have material effects on the amount of provisions and thus on the company's overall net assets, financial position and results of operations. For the material pension plans of the German companies, every employee is entitled to apply at any time during the ongoing employment contract for payment in annual instalments, as a one-time payment or as a pension for life. KSB's estimate as to how the specific workforce is likely to decide on exercising the lump-sum option remains unchanged over the previous year and is reflected accordingly in the measurement of pension provisions.

Other provisions are recognised for uncertain liabilities with a probability of occurrence of more than 50 %. The provision corresponds to the best estimate of the expenditure to fulfil the current obligation on the reporting date. The later, actual outflow can, however, differ from the estimate as a result of changed economic, political or legal conditions. This will be reflected in additional expenses or income from reversals.

The global scope of activities must be taken into account in relation to taxes on income. Based on operative activities in numerous countries with varying tax laws and administrative interpretation, differentiated assessment is required for determining tax liabilities. Uncertainty may arise due to different interpretations by taxable entities on the one hand and local finance authorities on the other. Uncertain tax assets and liabilities are recognised if their probability of occurrence exceeds 50 %. The best estimate of the expected tax payment is used for reporting purposes; depending on the case in question this will take the form of the most probable result or of the expected value. Although KSB believes it has made a reasonable estimate regarding any tax uncertainties, it is possible that the actual tax obligation will differ from the original estimate. With regard to future tax benefits, KSB assesses their realisability as of every reporting date. For this reason, deferred tax assets are only recognised if sufficient taxable income is available in future. In assessing this future taxable income within the planning horizon of three to five years it must be taken into account that expected future business developments are subject to uncertainties and are in some cases excluded from control by company management (for example changes to applicable tax legislation). If KSB comes to the conclusion that previously reported deferred tax assets cannot be realised because of changed assumptions, then the assets will be written down by the appropriate amount.

Maturities
Maturities of up to one year are classified as current.

Assets that can only be realised after more than twelve months, as well as liabilities that only become due after more than twelve months, are also classified as current if they are attributable to the operating cycle defined in IAS 1. An operating cycle of more than 12 months typically applies to made-to-order production (construction contracts).

Assets and liabilities not classified as current are non-current.

Changes in accounting policies and the impact resulting from the first-time adoption of IFRS 16 Leases
In January 2016, the IASB published the IFRS 16 Leases accounting standard superseding IAS 17 Leases, IFRIC 4 Determining Whether an Arrangement Contains a Lease, SIC 15 Operating Leases – Incentives and SIC 27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. IFRS 16 includes new rules on recognising, measuring, presenting and disclosing leases on a more detailed basis compared with IAS 17. According to IFRS 16, a contract is, or contains, a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Under IFRS 16, all leases must be presented by the lessee on the balance sheet in the form of a right-of-use asset (right to use the leased asset) and a corresponding lease liability (liability from lease obligations) for the payment of lease instalments. The interest expense for the lease liability and depreciation / amortisation expense for the right-of-use asset must be recognised separately.

KSB applied IFRS 16 for the first time as of 1 January 2019 using the modified retrospective method without restatement of prior periods, which continue to be presented in accordance with IAS 17. The capitalised right of use was taken into account in the amount of the lease liability, which had no effect on equity. Initial direct costs were excluded when measuring the right of use at the time of first-time adoption. KSB has made use of the practical expedient in connection with lease agreements for low-value assets and for contracts with a term of up to twelve months, i.e. for short-term leases. Existing lease agreements with a lease term ending in 2019 were also classified as short-term leases irrespective of their original total term. Accordingly, no right-of-use assets and lease liabilities were recognised for such leases. Leased assets with a fair value of up to € 5,000 were defined as low-value assets. For existing agreements classified as finance leases, only property, plant and equipment capitalised to date was reclassified as right-of-use assets. The related lease liabilities continued to be recognised without change.
The effects resulting from the first-time adoption of IFRS 16 on the opening balance sheet are presented in summary form in the following table:
→ Restatement of opening balance sheet as at 1 January 2019

A reconciliation of obligations from operating leases as at 31 December 2018 to lease liabilities as at 1 January 2019 is presented in the following table:
→ Reconciliation of lease obligations

The weighted average incremental borrowing rate at which the lease liabilities were discounted as at 1 January 2019 was 2.5 %. This interest rate is used as the basis for determining the discounting effect in the reconciliation from 31 December 2018 to 1 January 2019.

Lease liabilities and right-of-use assets are generally recognised at the time at which the leased asset is made available to KSB by the lessor for use. The carrying amount of the two items is essentially based on the present value of the future minimum lease payments. It is discounted using the incremental borrowing rate of KSB if no interest rate implicitly underlying the lease is available. Extension and termination options are included in the term and the carrying amounts of a lease if it is deemed reasonably certain that they will be exercised by KSB. Only lease components and in particular no separate service components are taken into account in the measurement of lease payments. The right-of-use assets are depreciated over the economic useful life of the leased asset or over the term of the lease, whichever is shorter. Lease liabilities are subsequently measured at amortised cost using the effective interest rate method in the form of a redemption and interest portion. Changes in lease payments are taken into account through remeasurements of lease liabilities. Moreover, the practical expedients for leases with low-value underlying assets and short-term leases are applied unchanged beyond the date of first adoption. The result is that for these leases the lease payments are recognised as an expense in the income statement.

There was no material effect on KSB's EBIT from the amended presentation in the income statement showing interest expenses from lease liabilities and depreciation of the right-of-use assets compared with the expenses for operating leases shown under IAS 17 in the previous year.

The redemption component included in the lease payments is allocated to cash flows from financing activities. The interest component is recognised in cash flows from operating activities, as is the case for lease payments for short-term leases, leases for low-value assets and variable lease payments.

The new rules for lessors under IFRS 16 have minor significance for KSB and did not have any material effect on the consolidated financial statements.

Restatement of opening balance sheet as at 1 January 2019

€ thousands	31 Dec. 2018	Additions	Reclassification	1 Jan. 2019
Assets				
Rights of use to land and buildings	–	34,631	4,137	38,768
Rights of use to plant and machinery	–	1,660	–	1,660
Rights of use to other equipment, operating and office equipment	–	13,596	816	14,412
Intangible assets	91,089	–	– 3,489	87,600
Property, plant and equipment	496,659	–	– 1,464	495,195
Total	**587,748**	**49,887**	**–**	**637,635**

€ thousands	31 Dec. 2018	Additions	Reclassification	1 Jan. 2019
Equity and liabilities				
Equity	856,791	–	–	856,791
Liabilities from lease obligations	1,230	49,887	–	51,117
Total	**858,021**	**49,887**	**–**	**907,908**

Reconciliation of lease obligations

€ thousands	
Obligations from operating leases as at 31 Dec. 2018	63,060
- Practical expedient for leases of low-value assets	– 8,470
- Practical expedient for short-term leases	– 2,445
- Discounting	– 2,258
+ Liabilities from lease obligations (finance leases) as at 31 Dec. 2018	1,230
Liabilities from lease obligations as at 1 Jan. 2019	51,117
of which current liabilities from lease obligations	12,972
of which non-current liabilities from lease obligations	38,145

IV. BALANCE SHEET DISCLOSURES

1. Intangible assets

Statement of changes in intangible assets

€ thousands	Concessions, industrial property and similar rights and assets, as well as licences in such rights and assets		Goodwill		Internally generated intangible assets		Advance payments		Intangible assets Total	
Historical cost	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Balance at 1 Jan. (application of IAS 17)	74,781	71,883	105,571	103,210	30,745	–	773	25,311	211,870	200,404
Restatement under IFRS 16	– 5,572	–	–	–	–	–	–	–	– 5,572	–
Balance at 1 Jan. (application of IFRS 16)	69,209	71,883	105,571	103,210	30,745	–	773	25,311	206,298	200,404
Changes in consolidated Group	2	1,241	–	2,254	–	–	–	–	2	3,495
Currency translation adjustments	74	– 552	– 283	– 167	–	–	–	–	– 209	– 719
Other	158	2,093	–	274	–	–	–	– 72	158	2,295
Additions	2,844	2,596	–	–	9,585	9,187	2,735	1,228	15,164	13,011
Disposals	– 499	– 5,780	– 33,713	–	–	–	–	– 1,000	– 34,212	– 6,780
Reclassifications	774	3,300	1	–	– 175	21,558	– 600	– 24,694	–	164
Reclassification to assets held for sale	– 29	–	– 1,376	–	–	–	–	–	– 1,405	–
Balance at 31 Dec.	72,533	74,781	70,200	105,571	40,155	30,745	2,908	773	185,796	211,870
Accumulated depreciation and amortisation	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Balance at 1 Jan. (application of IAS 17)	59,027	59,680	61,191	32,670	563	–	–	–	120,781	92,350
Restatement under IFRS 16	– 2,083	–	–	–	–	–	–	–	– 2,083	–
Balance at 1 Jan. (application of IFRS 16)	56,944	59,680	61,191	32,670	563	–	–	–	118,698	92,350
Currency translation adjustments	37	– 481	– 353	395	1	–	–	–	– 315	– 86
Other	41	301	–	– 68	–	–	–	–	41	233
Additions	4,309	4,513	–	28,194	163	563	–	–	4,472	33,270
Disposals	– 488	– 5,002	– 33,711	–	–	–	–	–	– 34,199	– 5,002
Reclassifications	–	16	–	–	–	–	–	–	–	16
Reclassification to assets held for sale	– 29	–	–	–	–	–	–	–	– 29	–
Balance at 31 Dec.	60,814	59,027	27,127	61,191	727	563	–	–	88,668	120,781
Carrying amount at 31 Dec.	11,719	15,754	43,073	44,380	39,428	30,182	2,908	773	97,128	91,089

In the context of the first-time adoption of IFRS 16 in the reporting year contractual rights of use to land and building elements were reclassified from intangible assets to right-of-use assets for leases. These reclassifications are presented in the “Statement of changes in intangible assets” table as “Restatement under IFRS 16”.

The additions to intangible assets amounting to € 15.2 million (previous year: € 13.0 million) primarily concerned, as in the previous year, own work capitalised and advance payments. The own work capitalised relates in particular to the KSBase sales software, which is the new selection software for the standard pump programme.

The “Concessions, industrial property and similar rights and assets, as well as licences in such rights and assets” item includes € 10.0 million (previous year: € 10.6 million) of software including software licences valid for a limited period. As in the previous year, there are no restrictions on ownership or use.

KSB reported internally generated intangible assets of € 39,428 thousand (previous year: € 30,182 thousand). This resulted essentially from the above-mentioned KSBase selection software, which was made operational in December 2019.

In the year under review, no impairment losses were recognised on intangible assets. In the previous year, advance payments for intangible assets of € 1,000 thousand were derecognised; in addition to this, no impairment losses were recognised on intangible assets.

As in the previous year, no product-related development costs were capitalised in the year under review because not all of the comprehensive recognition criteria defined in IAS 38 were met.

Further information on the reclassification from intangible assets to held-for-sale assets in the year under review is provided in Note 10 “Assets held for sale and liabilities in connection with assets held for sale”.

When assessing the indications for impairment of assets as at 31 December 2019, it was found that the carrying amount of net assets at KSB exceeds market capitalisation. As a result, the assets within the scope of IAS 36 were tested for impairment. As at 31 December 2019 this test did not show a need for impairment.

Goodwill impairment test

The carrying amounts of the cash-generating units in connection with the impairment testing of goodwill do not contain any items relating to taxes or financing activities.

To determine the discount factor, the weighted average cost of capital (WACC) method is applied in conjunction with the capital asset pricing model (CAPM), taking into account a peer group. Under this method, first the cost of equity is determined using CAPM and the borrowing costs are defined, and then the individual capital components are weighted in accordance with the capital structure taking account of the peer group. The peer group information includes aspects like beta factors, capital structure data and borrowing costs. The peer group includes companies that are similar to the KSB Group in terms of industry, size and activity. To account for changes in market parameters, the composition of the peer group is reviewed at regular intervals and adjusted if necessary (e.g. changes in the business model of either the company, the cash-generating unit or the comparable company being looked at).

The interest rate for risk-free 30-year Bunds was used as a base rate. This rate was 0.1 % in the year under review (previous year: 1.0 %). The market risk premium was set at 6.75 % (previous year: 5.75 %), with a beta factor of 1.04 (previous year: 0.90). In addition, country-specific tax rates and country risk premiums are taken into account individually for each cash-generating unit (CGU). The growth rate in the year under review for all companies was set at 0.5 % (previous year: 0.00 % to 1.25 %). The regular review of the peer group did not generate any new findings in relation to the business models of comparative companies. The peer group for examining the weighted capital cost factor therefore remained the same as in the previous year.

Discount rates

Before taxes in % (value in use)	30 Sep. 2019	30 Sep. 2018
Companies in Germany	9.5 – 9.9	7.9 – 8.4
Companies in The Netherlands	9.3	7.7
Companies in the USA	8.6 – 9.7	7.8
Companies in South Africa	14.4	11.4
Companies in South Korea	9.6	8.2
Companies in the other European countries	8.8 – 15.7	7.5 – 11.1

Goodwill

Name of CGU / € thousands	31 Dec. 2019	31 Dec. 2018
DP industries B. V., The Netherlands	18,285	18,285
Dynamik-Pumpen GmbH, Germany	3,150	3,150
Uder Elektromechanik GmbH, Germany	2,980	2,980
KSB Finland Oy, Finland	2,603	2,603
KSB Dubric, Inc. (USA)	2,451	2,405
KSB Pumps (S.A.) (Pty) Ltd., South Africa	1,886	1,808
	31,355	**31,231**
Other 15 (previous year: 18) companies	11,718	13,149
Total	**43,073**	**44,380**

The reference date for carrying out the goodwill impairment test is 30 September every year. The impairment test as at 30 September 2019 did not show a need for impairment.

For the goodwill impairment test, the assumptions listed in the “Detailed information on key goodwill items (30 September 2019)” and “Basic assumptions for goodwill considered material” tables were made for the goodwill considered material. Among other things, this relates to the assumptions made regarding order intake figures, sales revenue and operating earnings.

→ Detailed information on material goodwill items (30 September 2019)

→ Basic assumptions for goodwill considered material

As well as impairment testing, sensitivity analyses were conducted for each cash-generating unit. No need for impairment would have resulted here for any cash-generating units in the year under review.

After adjusting all required parameters, the discount factors as at 31 December 2019 were within the range of the sensitivity calculations performed as at 30 September 2019.

The need for goodwill impairment as at 31 December of the previous year is shown in the “Impairment loss on goodwill (31 December 2018)” table.

→ Impairment loss on goodwill (31 December 2018)

The “Sensitivities” table shows the amounts of goodwill that would have resulted from the sensitivity analyses as at 31 December of the previous year.

→ Sensitivities

Detailed information on material goodwill items (30 September 2019)

Name of CGU	Method	Carrying amount of goodwill (€ million)	Percentage of total goodwill	Discount rate	Growth rate	Underlying assumptions, corporate planning	Method for assessing the value of the underlying assumption
DP industries B.V., The Netherlands	Value in use	18.3	42 %	9.3 % before tax	0.50 %	Low to significant market growth rates	Consideration of macroeconomic key data and internal estimates of the relevant purchasing and sales departments.

Basic assumptions for goodwill considered material

Name of CGU	Order intake	Sales revenue	EBIT	Planning time horizon
DP industries B.V., The Netherlands	Constant growth, on average	Constant growth, on average	Moderate growth, on average, as a result of sales revenue and cost planning	5 years

Impairment loss on goodwill (31 December 2018)

Name of CGU	Segment	Discount factor	Recoverable amount € thousands	Impairment loss € thousands
Total 31 Dec. 2018				
Société de travaux et Ingénierie Industrielle (ST II) / KSB SERVICE COTUMER, France	Service	8.8 %	1,433	6,188
KSB Service Energie S.A.S.U., France	Service	8.7 %	4,538	1,412
KSB Seil Co., Ltd., South Korea	Valves	8.7 %	16,371	20,599

In the 2019 financial year, no need for impairment relating to goodwill was identified.

Sensitivities

Name of CGU / € thousands	Sensitivity 1	Sensitivity 2	Sensitivity 3
31 Dec. 2018			
Société de travaux et Ingénierie Industrielle (ST II) / KSB SERVICE COTUMER, France	6,676	6,257	n / a
KSB Service Energie, France	2,040	1,466	n / a
KSB Seil, Busan, South Korea	23,290	21,066	31,714
KSB Italia S.p.A., Italy	2,737	–	n / a
SPI Energie, France	332	–	n / a
Dynamik-Pumpen GmbH, Germany	132	–	n / a
KAGEMA Industrieausrüstungen GmbH, Germany	135	–	n / a

The sensitivity analyses for the 2019 financial year did not reveal any imputed impairment losses for goodwill.

2. Right-of-use assets

€ thousands	31 Dec. 2019	31 Dec. 2018
Right-of-use assets for leases	**50,096**	**–**
of which land and buildings	34,210	–
of which technical equipment and machinery	1,139	–
of which other equipment, operating and office equipment	14,747	–

The new balance sheet item “Right-of-use assets” results from the first-time adoption of IFRS 16 in the year under review.

Additions to right-of-use assets in the reporting year amounted to € 12,956 thousand.

Depreciation on right-of-use assets in the year under review was as follows:

€ thousands	2019	2018
Depreciation on right-of-use assets	**15,893**	**–**
of which land and buildings	8,807	–
of which technical equipment and machinery	604	–
of which other equipment, operating and office equipment	6,482	–

3. Property, plant and equipment

Statement of changes in property, plant and equipment

€ thousands	Land and buildings		Plant and machinery		Other equipment, operating and office equipment		Advance payments and assets under construction		Property, plant and equipment	
Historical cost	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Balance at 1 Jan. (application of IAS 17)	416,831	381,587	594,186	593,154	228,153	225,103	25,125	24,071	1,264,295	1,223,915
Restatement under IFRS 16	– 1,100	–	–	–	– 1,861	–	–	–	– 2,961	–
Balance at 1 Jan. (application of IFRS 16)	**415,731**	**381,587**	**594,186**	**593,154**	**226,292**	**225,103**	**25,125**	**24,071**	**1,261,334**	**1,223,915**
Changes in consolidated Group	–	1,282	–	25	325	109	–	–	325	1,416
Currency translation adjustments	1,394	– 1,991	874	– 822	304	– 3,481	607	– 1,092	3,179	– 7,386
Other	823	25,324	–	– 22,901	486	225	–	– 4	1,309	2,644
Additions	10,130	8,660	19,794	21,472	19,615	20,315	29,322	16,146	78,861	66,593
Disposals	– 3,983	– 641	– 6,913	– 9,168	– 9,183	– 12,894	– 52	– 20	– 20,131	– 22,723
Reclassifications	10,960	2,610	6,948	12,426	2,365	– 1,224	– 20,273	– 13,976	–	– 164
Reclassification to assets held for sale	–	–	– 2,555	–	– 289	–	–	–	– 2,844	–
Balance at 31 Dec.	**435,055**	**416,831**	**612,334**	**594,186**	**239,915**	**228,153**	**34,729**	**25,125**	**1,322,033**	**1,264,295**
Accumulated depreciation and amortisation	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Balance at 1 Jan. (application of IAS 17)	188,906	156,455	416,445	402,104	162,285	159,142	–	–	767,636	717,701
Restatement under IFRS 16	– 452	–	–	–	– 1,045	–	–	–	– 1,497	–
Balance at 1 Jan. (application of IFRS 16)	**188,454**	**156,455**	**416,445**	**402,104**	**161,240**	**159,142**	–	–	**766,139**	**717,701**
Currency translation adjustments	516	315	680	1,013	254	– 2,152	–	–	1,450	– 824
Other	514	18,540	– 62	– 17,846	568	277	–	–	1,020	971
Additions	11,484	13,712	31,343	38,417	18,659	19,092	–	–	61,486	71,221
Disposals	– 2,181	– 285	– 6,454	– 8,685	– 8,579	– 12,447	–	–	– 17,214	– 21,417
Reclassifications	702	169	– 862	1,442	160	– 1,627	–	–	–	– 16
Reclassification to assets held for sale	–	–	– 1,975	–	– 154	–	–	–	– 2,129	–
Balance at 31 Dec.	**199,489**	**188,906**	**439,115**	**416,445**	**172,148**	**162,285**	–	–	**810,752**	**767,636**
Carrying amount at 31 Dec.	**235,566**	**227,925**	**173,219**	**177,741**	**67,767**	**65,868**	**34,729**	**25,125**	**511,281**	**496,659**

Assets resulting from finance leases were capitalised under property, plant and equipment in the previous year pursuant to IAS 17. With the first-time adoption of IFRS 16 at the start of 2019 they were reclassified as right-of-use assets. These reclassifications are presented in the "Statement of changes in property, plant and equipment" table as "Restatement under IFRS 16".

Disposals of intangible assets and items of property, plant and equipment resulted in book gains of € 3,190 thousand (previous year: € 1,618 thousand) and book losses of € 453 thousand (previous year: € 661 thousand). The book gains and losses are reported in the income statement under other income and other expenses.

In the year under review, impairment losses of € 512 thousand (previous year: € 10,580 thousand) were recognised on property, plant and equipment to take account of lower expected cash inflows from a foundry. This impairment is reported in the income statement under depreciation and amortisation. The impairment loss recorded in the year under review relates to the Pumps segment. The impairments in the previous year related to two valve ranges in the Valves segment.

Further information on the reclassification from property, plant and equipment to held-for-sale assets in the year under review is provided in Note 10 "Assets held for sale and liabilities in connection assets held for sale".

4. Financial assets

€ thousands	31 Dec. 2019	31 Dec. 2018
Loans	1,265	1,113
Financial instruments	697	660
	1,962	1,773

€ 778 thousand of the loans are loans to equity investments (previous year: € 535 thousand).

5. Other non-financial assets

€ thousands	31 Dec. 2019	31 Dec. 2018
Other investments	2,840	2,914
	2,840	2,914

Other investments are investments in affiliates that were not consolidated due to there being no material impact. As in the previous year, there was no depreciation / amortisation applied in the year under review.

6. Investments accounted for using the equity method

The following table lists the KSB Group's material joint ventures. "Seat" refers to the country in which the main activity is performed. All joint ventures and associates are accounted for using the equity method and can also be found in the list of shareholdings in these Notes to the Consolidated Financial Statements. The share of capital corresponds to the share of voting rights.

→ Material joint ventures

Neither of the two material joint ventures is listed on a stock market, which is why there is no active market.

Summarised financial information on these material joint ventures of the KSB Group and a combined summary for all the individually immaterial joint ventures and associated companies are provided in the following tables:

→ Summarised balance sheet

→ Summarised statement of comprehensive income

→ Reconciliation to carrying amount of Group share in joint ventures

→ Summarised information on joint ventures and associates that are immaterial individually

As in the previous year, there are no pro rata losses that have not been recognised from the consolidation at equity.

Material joint ventures

Name and seat	Capital share	Nature of the entity's relationship
KSB Pumps Arabia Ltd., Saudi Arabia	50.00 %	KSB Pumps Arabia Ltd. in Riyadh, Saudi Arabia, offers a wide range of services and activities for the energy market as well as in water, waste water and building services applications. The portfolio includes business development and marketing, supply chain management, production of pressure booster systems and pump sets, sale of pumps, valves and systems and technical service activities. KSB Pumps Arabia Ltd. is important for the growth of the Group in the Saudi Arabian market.
Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd. (China)	45.00 %	Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd. in Shanghai, China, produces suitable auxiliary pumps for the secondary coolant circuits and modern reactor coolant pumps for the primary cooling circuits of nuclear power stations. Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd. is a strategic partnership on the part of the Group, through which KSB is participating in the expansion of energy capacity in China and other Asian markets.

Summarised balance sheet

	KSB Pumps Arabia Ltd.		Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd.	
€ thousands	**2019**	**2018**	**2019**	**2018**
Non-current assets	10,718	10,678	81,209	73,907
Current assets	38,101	39,143	125,483	126,679
of which cash and cash equivalents	3,115	263	28,718	17,928
Non-current liabilities	– 2,981	– 4,896	– 21,733	– 25,523
of which non-current financial liabilities (excluding trade payables and provisions)	– 1,189	– 3,487	– 12,787	– 25,523
Current liabilities	– 27,889	– 26,634	– 154,337	– 145,667
of which current financial liabilities (excluding trade payables and provisions)	– 7,172	– 5,090	– 19,321	– 26,793
Net assets	**17,949**	**18,291**	**30,622**	**29,396**

Summarised statement of comprehensive income

	KSB Pumps Arabia Ltd.		Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd.	
€ thousands	**2019**	**2018**	**2019**	**2018**
Sales revenue	33,572	34,916	61,934	55,840
Depreciation / amortisation	989	782	4,323	4,116
Interest income	–	–	70	62
Interest expense	– 397	– 553	– 2,149	– 2,613
Earnings from continuing operations	– 755	2,591	1,032	775
Taxes on income	–	– 46	–	–
Earnings after taxes from continuing operations	**– 755**	**2,545**	**1,032**	**775**
Earnings after taxes from discontinued operations	–	–	–	–
Other comprehensive income	413	861	194	– 266
Comprehensive income	**– 342**	**3,406**	**1,226**	**509**
Dividends received from joint ventures	**–**	**201**	**–**	**–**

Reconciliation to carrying amount of Group share in joint ventures

	KSB Pumps Arabia Ltd.		Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd.	
€ thousands	**2019**	**2018**	**2019**	**2018**
Net carrying amount at 1 January	18,291	15,287	29,396	28,887
Earnings after income tax	– 755	2,545	1,032	775
Distribution of dividends	–	– 402	–	–
Other comprehensive income	413	861	194	– 266
Net carrying amount at 31 December	**17,949**	**18,291**	**30,622**	**29,396**
Investment in joint venture (50 % / 45 %)	8,975	9,145	13,780	13,228
Elimination of intercompany profit and loss	–	–	– 3,874	– 3,349
Goodwill	–	–	–	–
Carrying amount at 31 December	**8,975**	**9,145**	**9,906**	**9,879**

Summarised information on joint ventures and associates that are immaterial individually

€ thousands	**Joint ventures 2019**	**Associates 2019**	**Total 2019**	**Joint ventures 2018**	**Associates 2018**	**Total 2018**
Group share of earnings from continuing operations	241	751	**992**	140	592	732
Group share of other comprehensive income	74	–	**74**	144	23	167
Group share of comprehensive income	315	751	**1,066**	284	615	899
Total carrying amounts of Group shares in these companies	**3,946**	**1,376**	**5,322**	**3,631**	**1,200**	**4,831**

7. Inventories

€ thousands	**31 Dec. 2019**	**31 Dec. 2018**
Raw materials and production supplies	192,740	182,134
Work in progress	168,871	184,158
Finished goods and goods purchased and held for resale	165,221	162,128
Advance payments	17,871	16,010
	544,703	**544,430**

€ 88,827 thousand (previous year: € 61,614 thousand) of the inventories is carried at net realisable value. The impairment losses recognised as an expense in the reporting period amount to € 12,426 thousand (previous year: € 10,513 thousand). Due to new estimates, write-downs totalling € 649 thousand (previous year: € 810 thousand) were reversed where the current net realisable value was higher than the prior-period value. Inventories amounting to € 994,103 thousand (previous year: € 911,991 thousand) were recognised as an expense in the reporting period.

8. Contract assets, trade receivables and other financial and non-financial assets

€ thousands	31 Dec. 2019	31 Dec. 2018
Contract assets	**76,428**	**74,499**
Trade receivables	**504,101**	**518,116**
Trade receivables from third parties	473,873	483,626
Trade receivables from other investments, associates and joint ventures	30,228	34,490
thereof from other investments	5,800	5,384
thereof from associates	460	7
thereof from joint ventures	23,968	29,098
Other financial assets	**90,938**	**103,388**
Receivables from loans to other investments, associates and joint ventures	348	12,661
Currency forwards	850	1,070
Other receivables and other current assets	89,740	89,657
Other non-financial assets	**39,613**	**49,504**
Other tax assets	31,237	40,124
Deferred income	8,376	9,380

At € 76,428 thousand (previous year: € 74,499 thousand), the balance of contract assets at the end of the reporting year was at a comparable level to the previous year. Impairment losses on contract assets amounted to € 204 thousand (previous year: € 190 thousand).

In addition, impairment losses on trade receivables from third parties amounted to € 35,000 thousand (previous year: € 33,943 thousand). There were no impairment losses on trade receivables from other investments (previous year: € 499 thousand).

Impairment losses on receivables from loans to other investments amounted to € 320 thousand (previous year: € 3.172 thousand). No impairment losses were applied on receivables from joint ventures or associates, as in the previous year.

Impairment losses on trade receivables include the individual impairment allowance (EWB) and risk provisions for expected credit losses (ECL). For contract assets, impairment losses include risk provisions for expected credit losses (ECL).

→ Reconciliation of impairment losses

Reconciliation of impairment losses 2019

	Trade receivables from third parties			Contract assets
€ thousands	Total	EWB	ECL	ECL
Opening balance at 1 January	**– 33,943**	**– 29,359**	**– 4,584**	**– 190**
Additions	– 9,493	– 8,107	– 1,386	– 30
Utilised	1,561	1,561	–	–
Reversals	6,478	4,306	2,172	15
Currency translation	396	371	26	1
Closing balance at 31 December	**– 35,000**	**– 31,228**	**– 3,772**	**– 204**

Reconciliation of impairment losses 2018

	Trade receivables from third parties			Contract assets
€ thousands	Total	EWB	ECL	ECL
Opening balance at 1 January	**– 35,481**	**– 27,746**	**– 7,735**	**– 79**
Additions	– 7,399	– 7,399	–	– 111
Utilised	3,616	3,616	–	–
Reversals	5,321	2,170	3,151	–
Currency translation	–	–	–	–
Closing balance at 31 December	**– 33,943**	**– 29,359**	**– 4,584**	**– 190**

Risk provisions for expected credit losses of contract assets are determined as follows:

Risk provisions for expected credit losses of contract assets

		Not overdue	
		31 Dec. 2019	31 Dec. 2018
Expected default risk	in %	0.3	0.3
Gross contract assets	€ thousands	76,632	74,689
ECL	€ thousands	– 204	– 190

The expected default risk of trade receivables from third parties, calculated using the simplified impairment model, is distributed across the age structure of the unhedged gross trade receivables, as shown in the “Risk provision for expected credit losses by maturity of trade receivables” table.

→ Risk provision for expected credit losses by maturity of trade receivables

Furthermore, the balance of risk provisions for expected credit losses from trade receivables against third parties includes an amount of € 407 thousand (previous year: € 555 thousand) which relates to hedged receivables.

Risk provision for expected credit losses by maturity of trade receivables

31 Dec. 2019		Not overdue	Up to 30 days	Up to 90 days	Up to 180 days	Up to 360 days	Over 360 days	Total
Expected default risk	in %	0.2	1.3	1.8	2.1	2.6	2.9	–
Gross trade receivables from third parties excluding hedged receivables	€ thousands	336,985	38,129	25,232	14,430	16,913	33,898	465,587
ECL	€ thousands	– 682	– 504	– 462	– 307	– 437	– 973	– 3,365
31 Dec. 2018								
Expected default risk	in %	0.3	1.1	2.0	3.0	3.2	4.2	–
Gross trade receivables from third parties excluding hedged receivables	€ thousands	323,241	52,016	37,208	18,870	13,754	21,254	466,343
ECL	€ thousands	– 830	– 554	– 753	– 560	– 439	– 893	– 4,029

Other receivables and other current assets include hedges of credit balances prescribed by law for partial retirement arrangements and long-term working time accounts of the German Group companies in the amount of € 19,600 thousand.

€ 29,242 thousand (previous year: € 20,964 thousand) of total provisions and other assets are due after more than one year.

9. Cash and cash equivalents

Cash and cash equivalents are term deposits with short maturities and call deposits, and also current account balances.

10. Assets held for sale and liabilities in connection with assets held for sale

Assets held for sale

€ thousands	31 Dec. 2019	31 Dec. 2018
Non-current assets	**3,455**	**–**
Intangible assets	1,376	–
Right-of-use assets	1,208	–
Property, plant and equipment	715	–
Non-current financial assets	41	–
Deferred tax assets	115	–
Current assets	**4,298**	**–**
Inventories	1,036	–
Trade receivables	2,375	–
Other financial assets	597	–
Other non-financial assets	97	–
Cash and cash equivalents	193	–
Total	**7,753**	**–**

Liabilities in connection with assets held for sale

€ thousands	31 Dec. 2019	31 Dec. 2018
Non-current liabilities	**1,361**	**–**
Provisions for employee benefits	398	–
Financial liabilities	963	–
Current liabilities	**2,606**	**–**
Other provisions	7	–
Financial liabilities	252	–
Contract liabilities	35	–
Trade payables	1,030	–
Other financial liabilities	6	–
Other non-financial liabilities	1,237	–
Income tax liabilities	39	–
Total	**3,967**	**–**

As far as the assets and liabilities of subsidiary SPI Energie S.A.S., La Ravoire, France, from the Service segment were concerned, KSB as at the reporting date expected a highly likely disposal as defined by IFRS 5 through the sale of shares. This assessment was based on advanced negotiations with a potential buyer. Accordingly, the assets and liabilities of this subsidiary are presented as a disposal group held for sale in the reporting year and recognised in separate balance sheet items.

Within the scope of reclassification, no impairment losses were recognised for the assets of the disposal group because the net carrying amount of the assets and liabilities in question was below the fair value less costs to sell.

The sale of assets and liabilities took place as part of the sale of shares in January 2020.

11. Equity

There was no change in the share capital of KSB as against the previous year. In accordance with the Articles of Association, it totals € 44,771,963.82 and, as in the previous year, is composed of 886,615 ordinary shares and 864,712 preference shares. Each no-par-value share represents an equal notional amount of the share capital. The preference shares carry separate cumulative preferred dividend rights and progressive additional dividend rights. All shares are no-par-value bearer shares. The individual shares have no par value.

The capital reserve results from the appropriation of premiums from capital increases in previous years.

In addition to revenue reserves from previous years, the revenue reserves include currency translation adjustments, consolidation effects, remeasurements of defined benefit plans under IAS 19 and changes in the fair value of interest rate derivatives taken directly to equity. These issues resulted in deferred tax assets in the amount of € 96,957 thousand (previous year: € 75,366 thousand) and deferred tax liabilities in the amount of € 8 thousand (previous year: € 24 thousand).

A total of € 5,583 thousand (dividend of € 3.00 per ordinary share and € 3.38 per preference share) was paid from equity by resolution of the Annual General Meeting of the Group's parent company KSB SE & Co. KGaA, Frankenthal, on 29 May 2019.

Non-controlling interests relate primarily to PAB GmbH, Frankenthal / Pfalz, and the interests it holds, as well as to the companies in India and China. KSB FINANZ S.A., Echternach, Luxembourg, holds a 51 % interest in PAB GmbH, while Johannes und Jacob Klein GmbH, Frankenthal, holds a 49 % interest.

Details of the changes in equity accounts and non-controlling interests are presented in the Statement of Changes in Equity.

The proposal on the appropriation of the net retained earnings of KSB SE & Co. KGaA calculated in accordance with HGB [*Handelsgesetzbuch* – German Commercial Code] is shown at the end of these Notes.

Capital disclosures

Sufficient financial independence is a key requirement for safeguarding KSB's continued existence in the long term. Obtaining the necessary funds for ongoing business operations is also extremely important for KSB. KSB regularly monitors the development of the net financial position that is derived from the balance of interest-bearing financial liabilities and interest-bearing financial assets (current and non-current financial instruments, interest-bearing loans to companies accounted for using the equity method as well as companies that were not consolidated due to there being no material impact, cash and cash equivalents and receivables from deposits). One objective is to avoid net debt. The net financial position at the end of the year under review was € 246 million (previous year: € 255 million). The decline over the previous year is due, in particular, to the rise in lease liabilities from the first-time adoption of IFRS 16 in the year under review.

12. Provisions

Composition of provisions

	31 Dec. 2019			31 Dec. 2018		
€ thousands	Total	Non-current	Current	Total	Non-current	Current
Employee benefits	**658,529**	**646,340**	**12,190**	**587,927**	**578,640**	**9,287**
Pensions and similar obligations	629,617	629,617	–	553,573	553,573	–
Other employee benefits	28,912	16,722	12,190	34,354	25,067	9,287
Other provisions	**69,742**	**1,366**	**68,376**	**84,934**	**1,377**	**83,557**
Warranty obligations and contractual penalties	44,304	–	44,304	45,582	–	45,582
Provisions for restructuring	410	–	410	1,023	–	1,023
Miscellaneous other provisions	25,028	1,366	23,662	38,329	1,377	36,952
	728,271	**647,706**	**80,565**	**672,861**	**580,017**	**92,844**

Development of individual provision categories

€ thousands	1 Jan. 2019	Changes in consolidated Group / CTA* / Other	Utilisation / Prepayments	Reversals	Additions	31 Dec. 2019
Employee benefits	**587,927**	**– 238**	**– 30,770**	**– 151**	**101,761**	**658,529**
Pensions and similar obligations	553,573	– 218	– 17,379	– 10	93,652	629,617
Other employee benefits	34,354	– 21	– 13,390	– 141	8,109	28,912
Other provisions	**84,934**	**– 449**	**– 35,945**	**– 4,235**	**25,439**	**69,742**
Warranty obligations and contractual penalties	45,582	99	– 19,508	– 3,030	21,162	44,304
Provisions for restructuring	1,023	3	– 610	– 13	7	410
Miscellaneous other provisions	38,329	– 551	– 15,827	– 1,192	4,270	25,028
	672,861	**– 688**	**– 66,715**	**– 4,386**	**127,200**	**728,271**

* CTA = Currency translation adjustments

Provisions for pensions and similar obligations

The pension obligations in the KSB Group include defined contribution and defined benefit plans and contain both obligations from current pensions and future pension benefit entitlements.

Total expenses for defined benefit pension plans in the year under review amounted to € 41,138 thousand (previous year: € 34,655 thousand). Of this figure, € 27,655 thousand (previous year: € 26,778 thousand) resulted from contributions into the statutory pension insurance scheme in Germany.

The obligations for defined benefit pension plans for employees of the Group are mainly due to pension obligations in Germany, as well as in France, the United States and Switzerland.

More than 90 % of the defined benefit pension plans are attributable to the German Group companies. These relate to direct commitments by the companies to their employees. The commitments are based on salary and length of service. Contributions from employees themselves are also considered. This pension provision can be broken down into purely company-financed basic provision and the top-up provision from the employer. The latter is based on the amount of own contributions and the generated return on sales before taxes on income. Both components take account of the general pension contribution (the amount of which partially depends on company performance), personal income (the relationship between pensionable income and maximum income threshold) and the annuity conversion factor (based on age). For the material pension plans of the German companies, every employee is entitled to apply at any time during the ongoing employment contract for payment in annual instalments, as a one-time payment or as a pension for life.

Pension schemes in France are governed by the provisions of the respective collective agreements. The obligations are basically covered by assets that have been paid in to an external fund. At the beginning of the final quarter of each year, an actuarial report is prepared to calculate the current scope of obligation. If there is a shortfall, a compensation payment is made to the fund. Differences in the calculation parameters under local and international law ultimately result in a surplus of obligations in the Group. Upon retirement, the employees concerned receive a one-off payment from the fund.

The defined benefit pension plans in the United States are closed to new entrants. The pension benefit amount is derived from the average salary and years of service before closure of the plan. The retirement age is 65 years; from this point a monthly payment is made to the beneficiaries. The pension benefits are financed by external funds.

Pension obligations in Switzerland are predominantly based on statutory obligations. This also includes details on a minimum pension which all employees with uninterrupted contributions are entitled to by law. The employer is therefore required to pay in contributions which are high enough for the respective pension fund or insurance company to pay out these minimum amounts. As well as pension benefits, the plans encompass other benefits such as disability or survivors' benefits. Both employer and employee contributions are paid to the pension fund, with the company having to make contributions that at least match the employee contributions specified in the terms and conditions of the plan. The retirement benefits are paid out in monthly instalments, but all employees have the option to receive a (partial) capital payment.

In addition, employees in other countries are also entitled to a limited extent to retirement and partly to medical care benefits, depending mainly on the length of service and salary.

These defined benefit plans harbour actuarial risks, such as the longevity risk and interest rate risk. The payments associated with the pension obligations are mostly serviced through liquidity. Plan assets are also partially available for financing these obligations. Most of the plan assets are managed by insurers who set their own appropriate investment policies.

The actuarial valuations of the present value of the defined benefit obligation (and the related current service cost and the past service cost) are measured and calculated annually on the basis of actuarial reports using the projected unit credit method (IAS 19). Plan assets are measured at fair value.

→ Balance sheet figures for defined benefit plans

→ Change in cash value of defined benefit obligations

Balance sheet figures for defined benefit plans

	Defined benefit obligations (DBOs)	Fair value of plan assets	Net liability from defined benefit plans	Defined benefit obligations (DBOs)	Fair value of plan assets	Net liability from defined benefit plans
€ thousands	**31 Dec. 2019**	**31 Dec. 2019**	**31 Dec. 2019**	**31 Dec. 2018**	**31 Dec. 2018**	**31 Dec. 2018**
Germany	599,720	–	599,720	529,188	–	529,188
France	18,150	5,373	12,777	16,332	7,279	9,053
USA	14,278	13,237	1,041	13,411	11,253	2,158
Switzerland	13,890	12,364	1,526	12,794	11,721	1,073
Other countries	41,462	26,909	14,553	39,458	27,357	12,101
Balance sheet values	**687,500**	**57,883**	**629,617**	**611,183**	**57,610**	**553,573**

Change in cash value of defined benefit obligations

€ thousands	2019	2018
Opening balance of the defined benefit obligation (DBO) – 1 Jan.	**611,183**	**650,465**
Current service cost	12,236	8,011
Interest cost	11,735	12,837
Employee contributions	265	3,190
Remeasurements		
– / + Gain / loss from the change in demographic assumptions	490	4,718
– / + Gain / loss from the change in financial assumptions	75,323	1,278
– / + Experience-based gain / loss	– 1,024	818
Benefit payments	– 20,357	– 20,935
Past service cost (incl. effects of settlements and curtailments)	– 20	– 46,174
Transfer of assets	14	– 433
Currency translation differences	1,642	192
Changes in consolidated Group / Other	– 3,987	– 2,784
Closing balance of the defined benefit obligation (DBO) – 31 Dec.	**687,500**	**611,183**

The current and past service cost is recognised in staff costs under pension costs, and the interest cost is recognised in finance income / expense under interest and similar expenses.

The past service cost amounting to € 46,174 thousand reported in the previous year essentially resulted from the introduction of a lump-sum option in the pension plans of German companies concluded before 2009.

In the following year, employer contributions to plan assets are expected to be at the level seen in the 2019 financial year. The amounts in 2019 came to € 1,638 thousand.

➔ Changes in the fair value of the plan assets

Interest income is recognised in the income statement net of the DBO interest expense under interest and similar expenses and thus reported under finance income / expense.

➔ Changes to the net liability of the defined benefit obligations

➔ Composition of plan assets

The pension funds are endowed with the amount needed to meet the respective statutory minimum requirements.

The actual income from plan assets amounted to € 6,266 thousand (previous year: expense of € 1,093 thousand).

➔ Actuarial assumptions

A mean fluctuation rate (2.0 %) continues to be applied to staff turnover for the German plans, as in the previous year. The biometric assumptions are based on the 2018G mortality tables published by Prof. Klaus Heubeck, and the retirement age used for the calculations is based on the *Rentenversicherungs-Altersgrenzenanpassungsgesetz* 2007 [RVAGAnpG – German Act Adapting the Standard Retirement Age for the Statutory Pension Insurance System]. Other measurement parameters (e.g. cost trends in the medical care area) are not material.

The discount rate and future mortality were identified as key actuarial assumptions. As in the previous year the basis for the calculation of the sensitivities is the same method which was used for the calculation of the provisions for pensions and similar obligations.

Were the discount factor to increase by 100 basis points, the DBO would fall by € 84,718 thousand (previous year: € 86,364 thousand). A 100 basis point reduction in the discount factor would increase the DBO by € 143,166 thousand (previous year: € 113,422 thousand). It should be noted that a change in the discount factor due to particular financial effects (such as compound interest) does not affect the development of the DBO on a straight-line basis. Were life expectancy to increase by 1 year, the DBO would increase by € 20,554 thousand (previous year: € 22,242 thousand).

Additionally, the individual actuarial assumptions are mutually dependent, but these interdependencies are not taken into account in the sensitivity analysis.

On 31 December 2019 the weighted average term of the DBO was 25 years (previous year: 24 years).

Changes in the fair value of the plan assets

€ thousands	2019	2018
Opening balance of the plan assets measured at fair value – 1 Jan.	**57,610**	**63,604**
Interest income	1,711	2,019
Remeasurements		
+ / – Gain / loss from plan assets excluding amounts already recognised in interest income	4,310	– 3,922
Contributions by the employer	1,638	1,787
Contributions by the beneficiary employees	191	197
Currency translation differences	1,111	131
Paid benefits	– 3,788	– 4,096
Changes in consolidated Group / Other	– 4,900	– 2,110
Closing balance of the plan assets measured at fair value – 31 Dec.	**57,883**	**57,610**

Changes to the net liability of the defined benefit obligations

€ thousands	2019	2018
Opening balance of the net liability from defined benefit plans – 1 Jan.	**553,573**	**586,861**
Current service cost	12,236	8,011
Net interest expense	10,024	10,818
Employee contributions	74	2,993
Contributions by the employer	– 1,638	– 1,787
Remeasurements		
– / + Gain / loss from plan assets excluding amounts already recognised in interest income	– 4,310	3,922
– / + Gain / loss from the change in demographic assumptions	490	4,718
– / + Gain / loss from the change in financial assumptions	75,323	1,278
– / + Experience-based gain / loss	– 1,024	818
Benefit payments	– 16,569	– 16,839
Past service cost (incl. effects of settlements and curtailments)	– 20	– 46,174
Transfer of assets	14	– 433
Currency translation differences	531	61
Changes in consolidated Group / Other	913	– 674
Closing balance of the net liability from defined benefit plans – 31 Dec.	**629,617**	**553,573**

Composition of plan assets

€ thousands	Quoted market price in an active market 31 Dec. 2019	No quoted market price in an active market 31 Dec. 2019	Total 31 Dec. 2019	Quoted market price in an active market 31 Dec. 2018	No quoted market price in an active market 31 Dec. 2018	Total 31 Dec. 2018
Equity instruments (shares)	23,777	–	**23,777**	20,746	–	**20,746**
Debt instruments (loans)	19,822	–	**19,822**	21,824	70	**21,894**
Government bonds	5,031	–	**5,031**	6,625	–	**6,625**
Corporate bonds	14,791	–	**14,791**	15,199	70	**15,269**
Currency forwards	–	–	**–**	–	–	**–**
Money market investments	285	327	**612**	1,606	277	**1,883**
Real estate	3,785	–	**3,785**	3,377	–	**3,377**
Insurance contracts	–	7,175	**7,175**	–	6,098	**6,098**
Bank credit balances	1,484	–	**1,484**	792	12	**804**
Other investments	1,228	–	**1,228**	1,528	1,280	**2,808**
	50,381	**7,502**	**57,883**	**49,873**	**7,737**	**57,610**

Actuarial assumptions

	Discount rate		Assumed rate of salary increase		Assumed rate of pension increase	
in %	31 Dec. 2019	31 Dec. 2018	31 Dec. 2019	31 Dec. 2018	31 Dec. 2019	31 Dec. 2018
Germany	1.1	1.8	2.7	2.7	1.9	1.9
France	0.9	1.6	2.8	2.8	1.9	–
USA	3.0	4.0	–	–	–	–
Switzerland	0.2	1.0	1.0	1.0	–	–

Expected pension benefit payments

€ thousands at 31 Dec. 2019	2020	2021	2022	2023	2024
Expected payments	22,759	26,055	23,133	23,687	23,852

€ thousands at 31 Dec. 2018	2019	2020	2021	2022	2023
Expected payments	27,711	23,953	25,900	23,630	25,576

Other employee benefits

Provisions for other employee benefits relate primarily to anniversary and partial retirement obligations.

Other provisions

The provisions for warranty obligations and contractual penalties cover the statutory and contractual obligations to customers and are based on estimates prepared using historical data for similar products and services. They amount to € 44,304 thousand (previous year: € 45,582 thousand) in the year under review.

Other provisions primarily contain provisions for expected losses of € 13,226 thousand (previous year: € 25,900 thousand). These include, as in the previous year, provisions for a legacy project in the United Kingdom as well as provisions set aside due to the political situation in Iran. Furthermore, to a lesser extent provisions for litigation risks amounting to € 1,771 thousand are included in miscellaneous other provisions.

€ 16,134 thousand (previous year: € 16,571 thousand) of the other provisions are expected to become cash-effective after more than one year.

13. Liabilities

Non-current liabilities

€ thousands	31 Dec. 2019	31 Dec. 2018
Financial liabilities	**56,750**	**30,099**
Loan against borrower's note	21,988	21,976
Bank loans and overdrafts	2,410	6,967
Finance lease liabilities	32,036	826
Other	316	330

Current liabilities

€ thousands	31 Dec. 2019	31 Dec. 2018
Financial liabilities	**44,318**	**48,777**
Loan against borrower's note	–	26,000
Bank loans and overdrafts	28,698	21,990
Finance lease liabilities	15,015	404
Liabilities to other investments, associates and joint ventures	–	320
Other	605	63
Contract liabilities	**165,463**	**157,389**
Trade payables	**252,741**	**270,212**
Trade payables to third parties	251,382	264,675
Liabilities to other investments, associates and joint ventures	1,359	5,537
Other financial liabilities	**31,226**	**32,767**
Currency forwards	3,336	3,731
Miscellaneous other financial liabilities	27,890	29,036
Other non-financial liabilities	**161,528**	**154,689**
Social security and liabilities to employees	126,117	116,674
Tax liabilities (excluding income tax)	23,760	23,734
Prepaid expenses	6,419	9,629
Investment grants and subsidies	5,232	4,652
Income tax liabilities	**9,050**	**8,326**
Liabilities in connection with assets held for sale	**3,967**	–

In 2012, to safeguard liquidity in the medium term, KSB SE & Co. KGaA took the precaution of placing a loan against borrower's note with a total volume of € 175 million. This loan is divided into repayment tranches of 3, 5, 7 and 10 years. Tranches of € 127 million in total were repaid in 2017 and 2015, some early. As the different repayment tranches have different terms, different rates of interest apply, some of which are fixed and some variable. A repayment of € 26 million was made in the year under review. € 13.5 million (previous year: € 27.5 million) of the liabilities arising from the loan against borrower's note are classified as bank loans and overdrafts, and € 8.5 million (previous year: € 20.5 million) as other financial liabilities.

The weighted average interest rate on bank loans and overdrafts as well as on an open-market credit (loan against borrower's note) was 5.34 % (previous year: 3.94 %).

The increase in current and non-current liabilities from lease obligations compared with the prior-year figures results from the first-time adoption of IFRS 16 in 2019. The maturity analysis of lease obligations at the reporting date is as follows:

Maturity analysis of liabilities from lease obligations

€ thousands	31 Dec. 2019
Due within 1 year	15,015
Due between 1 and 5 years	29,054
Due after more than 5 years	2,982
	47,051

At € 165,463 thousand (previous year: € 157,389 thousand), the balance of contract liabilities at the end of the year was at a comparable level to the previous year. In the year under review, KSB reported sales revenue of € 78,828 thousand (previous year: € 61,797 thousand) which was contained in the balance of contract liabilities at the beginning of the year under review.

The reported investment grants and subsidies largely comprise funding from the European Union and German entities for new buildings and development aid projects.

Assets amounting to € 10,168 thousand (previous year: € 11,939 thousand) have been pledged as security in the KSB Group for liabilities on the basis of standard terms and conditions. Of these, € 3,416 thousand (previous year: € 5,239 thousand) relate to property, plant and equipment, € 504 thousand (previous year: € 1,442 thousand) to cash and cash equivalents and € 6,248 thousand (previous year: € 5,258 thousand) to other securities.

As in the previous year, no liabilities were secured by land charges or similar rights in the year under review.

There were no covenant agreements for loans in the year under review, as was the case in the previous year.

Liabilities in connection with held-for-sale assets form part of the disposal group detailed in Note 10 "Assets held for sale and liabilities in connection with assets held for sale".

V. INCOME STATEMENT DISCLOSURES

14. Sales revenue

Sales revenue by contract type

€ thousands	2019	2018
Revenue from the sale of goods and goods purchased and held for resale	2,109,370	1,984,508
Services sales revenue	273,815	261,440
Sales revenue	**2,383,185**	**2,245,948**

KSB generates income from the transfer of goods and services over time or at a point in time in the segments presented.

Spare parts used for repairs are also included in the Service segment.

Unsatisfied performance obligations

€ thousands	2019	2018
Total transaction price of unsatisfied performance obligations as at the closing date (orders on hand)	**1,409,339**	**1,353,910**
of which expected sales revenue within the next 12 months	1,004,543	1,004,119
of which expected sales revenue in more than 12 months	404,796	349,791

Sales revenue by segment and timing of revenue recognition in 2019

€ thousands	Pumps segment	Valves segment	Service segment	Total
Revenue from contracts with customers	1,562,462	364,365	456,358	**2,383,185**
Timing of revenue recognition				
At a point in time	1,328,011	337,870	–	**1,665,881**
Over time	234,451	26,495	456,358	**717,304**

Sales revenue by segment and timing of revenue recognition in 2018

€ thousands	Pumps segment	Valves segment	Service segment	Total
Revenue from contracts with customers	1,469,443	340,771	435,734	**2,245,948**
Timing of revenue recognition				
At a point in time	1,307,639	319,957	–	**1,627,596**
Over time	161,804	20,814	435,734	**618,352**

15. Other income

€ thousands	2019	2018
Income from the reversal of provisions	–	8,507
Income from the reversal of impairment losses	6,533	5,321
Income from disposal of assets	3,190	1,618
Currency translation gains	740	1,146
Miscellaneous other income	22,950	16,458
	33,413	33,050

Income from current assets is primarily from the reversal of impairment losses on receivables. Other income includes income from government grants in the amount of € 4,177 thousand (previous year: € 3,855 thousand) and income from insurance compensations of € 2,745 thousand (previous year: € 2,549 thousand). Furthermore, income from claims for damages amounting to € 3,476 thousand was included in this item in the year under review.

In the 2019 financial year the presentation was changed and income from the reversal of provisions, which was previously reported under other income, is now shown under the expense items originally used to create the provisions. The reversal of provisions in the year under review totalled € 4,386 thousand.

16. Cost of materials

The cost of materials amounted to € 984,787 thousand (previous year: € 934,545 thousand) in the year under review. This item includes expenses for raw materials, consumables and supplies and for goods and services purchased.

17. Staff costs

€ thousands	2019	2018
Wages and salaries	685,412	655,614
Social security contributions and employee assistance costs	131,083	126,650
Pension costs	31,800	– 16,802
	848,295	765,462

Pension costs are reduced by the interest component included in the allocation of provisions that is reported in financial income / expense. In the previous year, pension costs included income from past service cost in the amount of € 46,434 thousand as a result of the introduction of a lump-sum option.
→ Employees

The first-time inclusion of the fully consolidated companies TOV “KSB Ukraine”, Kiev, Ukraine, IOOO “KSB BEL”, Minsk, Belarus, and KSB Ltd., Tokyo, Japan, led to an increase of 27 in the average number of employees over the year and to an increase of 26 at the closing date.

In the year under review the calculation of the average headcount and the headcount at the reporting date was changed in that employees are included irrespective of their level of employment. By contrast, the number of trainees is no longer included in the figure. The prior-year figures were restated accordingly.

Employees

	Average for the year		At reporting date	
	2019	2018*	31 Dec. 2019	31 Dec. 2018*
Wage earners	7,220	7,099	7,200	7,134
Salaried employees	8,371	8,259	8,445	8,348
	15,591	15,358	15,645	15,482

* Restated compared with presentation in the 2018 annual report

18. Other expenses

€ thousands	2019	2018
Repairs, maintenance, third-party services	129,012	118,983
Administrative expenses	97,793	89,703
Selling expenses	64,553	68,370
Rents and leases	12,547	26,640
Other staff costs	26,905	26,001
Impairment losses on trade receivables and contract assets	9,493	7,510
Currency translation losses	210	2,546
Losses from current assets	1,979	2,142
Losses from asset disposals	453	661
Miscellaneous other expenses	29,252	74,313
	372,198	**416,869**

The decline in expenses for rents and leases results from the first-time adoption of IFRS 16 in the year under review. In 2019, this item included expenses for leases with low-value underlying assets of € 2,347 thousand, expenses for short-term leases in the amount of € 7,591 thousand, expenses from variable lease payments of € 668 thousand and expenses for rents and other leases in the amount of € 1,941 thousand.

Other expenses essentially include expenses from the addition to provisions in connection with customer orders. Income from the reversal of such provisions is also included in this item in the year under review.

19. Finance income / expense

Interest and similar expenses include the net interest expense for pension provisions amounting to € 10,024 thousand (previous year: € 10,818 thousand). In 2019, the item included interest expense of € 1,556 thousand from the subsequent measurement of lease liabilities resulting from the adoption of IFRS 16. The negative performance of the finance income / expense compared with the previous year is principally attributable to this new feature.

Finance income / expense

€ thousands	2019	2018
Finance income	**5,741**	**4,893**
Income from equity investments	–	248
thereof from other investments	–	248
Interest and similar income	5,638	4,618
thereof from other investments	8	30
thereof from investments accounted for using the equity method	814	767
Other finance income	103	27
Finance expense	**– 17,098**	**– 16,544**
Interest and similar expenses	– 16,802	– 15,432
thereof to other investments	–	–
Write-downs on other investments	–	–
Other finance expense	– 296	– 1,112
Income / expense from / to investments accounted for using the equity method	**1,186**	**2,510**
Finance income / expense	**– 10,171**	**– 9,141**

20. Taxes on income

All income-related taxes of the consolidated companies and deferred taxes are reported in this item. Other taxes are reported in the income statement after other expenses.

Taxes on income

€ thousands	2019	2018
Effective taxes	37,478	27,663
Deferred taxes	7,454	13,981
	44,932	41,644

€ 289 thousand (previous year: € 1,376 thousand) of the effective taxes in the year under review relate to tax refunds and € 715 thousand (previous year: € 889 thousand) to tax arrears.

Contingent liabilities from income tax issues amount to € 2,627 thousand (previous year: € 1,536 thousand). At present, there are no indications that any claims will be asserted under these obligations.

Reconciliation of deferred taxes

€ thousands	2019	2018
Change in deferred tax assets	– 14,710	11,345
Change in deferred tax liabilities	894	– 4,451
Change in deferred taxes recognised in balance sheet	**– 13,816**	**6,894**
Change in deferred taxes taken directly to equity	21,564	5,024
Changes in consolidated Group / CTA* / Other	– 294	2,063
Deferred taxes recognised in income statement	**7,454**	**13,981**

* CTA = Currency translation adjustments

→ Allocation of deferred taxes

As at the reporting date, deferred tax assets of € 80,830 thousand (previous year: € 67,579 thousand) were recognised, arising from companies posting a loss in the year under review or previous year, whose realisation exclusively depends on the creation of future profit. Based on the planning figures available, KSB expects realisation to take place.

Income tax included under equity

€ thousands	2019	2018
Remeasurement of defined benefit plans	– 70,479	– 10,736
Taxes on income	21,389	3,341
Currency translation differences	3,982	– 13,276
Taxes on income	–	–
Changes in the fair value of financial instruments	– 575	– 5,624
Taxes on income	175	1,683
Other comprehensive income	**– 45,508**	**– 24,612**

Allocation of deferred taxes

	Deferred tax assets		Deferred tax liabilities	
€ thousands	**2019**	**2018**	**2019**	**2018**
Non-current assets	**3,882**	**4,191**	**49,408**	**36,708**
Intangible assets	412	608	11,978	9,089
Right-of-use assets	–	–	10,460	–
Property, plant and equipment	3,470	3,583	26,964	27,618
Non-current financial assets	–	–	6	1
Current assets	**40,408**	**41,999**	**20,801**	**20,957**
Inventories	35,147	34,997	318	51
Receivables and other current assets	5,268	7,002	20,821	20,906
Assets held for sale	– 7	–	– 338	–
Non-current liabilities	**112,271**	**84,364**	**68**	**7**
Provisions	105,127	84,167	68	–
Other liabilities	7,144 *	197	–	7
Current liabilities	**17,332**	**18,600**	**19,873**	**22,475**
Provisions	7,219	12,055	1,182	931
Other liabilities	10,559 *	6,545	18,691	21,544
Liabilities in connection with assets held for sale	– 446	–	–	–
Tax loss carryforwards	**212**	**1,132**	**–**	**–**
Gross deferred taxes – before offsetting	**174,105**	**150,286**	**90,150**	**80,147**
Offset under IAS 12.74	– 79,004	– 69,895	– 79,004	– 69,895
Net deferred taxes – after offsetting	**95,101**	**80,391**	**11,146**	**10,252**

* Deferred tax assets from non-current lease liabilities amount to ≈ 7,124 thousand and those from current lease liabilities total ≈ 3,449 thousand. They are reported under deferred taxes for other liabilities (non-current and current).

Reconciliation of income tax

€ thousands	**2019**	**2018**
Earnings before income tax (EBT)	103,432	65,561
Calculated income tax on the basis of the applicable Group tax rate (30 % as in the previous year)	31,030	19,668
Differences in tax rates	– 4,829	16
Unused tax loss carryforwards	13,852	14,124
Impairment losses on deferred taxes on tax loss carryforwards	950	–
Impairment loss on goodwill	–	6,659
Impairment losses on deferred taxes for temporary differences	–	–
Tax-exempt income	– 3,750	– 7,243
Non-deductible expenses	6,236	11,957
Prior-period taxes	1,761	– 1,587
Other tax credits	– 1,219	– 1,695
Non-deductible foreign income tax	2,746	2,471
Investments accounted for using the equity method	– 228	– 579
Miscellaneous	– 1,617	– 2,147
Current taxes on income	**44,932**	**41,644**
Current tax rate	43 %	64 %

The unchanged applicable tax rate of 30 % is a composite rate resulting from the current German corporation tax, solidarity surcharge and trade tax rates.

The introduction of new local taxes had no effects (previous year: minor effects) in the year under review. Changes in foreign tax rates led to an increase in the total tax expense of € 938 thousand (previous year: increase of € 185 thousand).

As far as net income from affiliates and other equity investments is concerned, withholding taxes incurred in connection with distributions and German taxes incurred are recognised as deferred taxes if these gains are expected to be subject to corresponding taxation, or there is no intention of reinvesting them in the long term. No deferred tax liabilities were recognised for temporary differences of € 83,098 thousand (previous year: € 71,440 thousand) in relation to affiliates and associates as it is unlikely that these temporary differences will be reversed in the foreseeable future.

No deferred tax assets were recognised for loss carryforwards amounting to € 147,818 thousand (previous year: € 124,041 thousand) because it is unlikely that there will be sufficient taxable profit available in the near future against which these deferred tax assets can be utilised. The loss carryforwards are largely available for an indefinite period. The income resulting from the use of loss carryforwards for which no deferred tax liabilities have been recognised was € 2,791 thousand (previous year: € 250 thousand).

Deductible temporary differences for which no deferred tax assets had to be set up amounted to € 32,586 thousand (previous year: € 34,339 thousand).

→ Reconciliation of income tax

21. Earnings after income tax – Non-controlling interests

The net profit attributable to non-controlling interests amounts to € 16,353 thousand (previous year: € 13,569 thousand) and the net loss attributable to non-controlling interests amounts to € 938 thousand (previous year: € 951 thousand). Non-controlling interests relate primarily to PAB GmbH, Frankenthal, and the interests it holds, as well as to the companies in India and China.

22. Earnings per share

Earnings per share are calculated using the weighted average number of shares as the denominator.

Earnings per share

		2019	2018
Earnings after income tax attributable to KSB SE & Co. KGaA shareholders	€ thousands	43,085	11,299
Additional dividend attributable to preference shareholders (€ 0.26 per preference share) (previous year: € 0.38 per preference share)	€ thousands	– 225	– 329
	€ thousands	**42,861**	**10,970**
Number of ordinary shares		886,615	886,615
Number of preference shares		864,712	864,712
Total number of shares		**1,751,327**	**1,751,327**
Diluted and basic earnings per ordinary share	**€**	**24.47**	**6.26**
Diluted and basic earnings per preference share	**€**	**24.73**	**6.64**

VI. ADDITIONAL DISCLOSURES ON FINANCIAL INSTRUMENTS

Financial instruments – Carrying amounts and fair values by measurement category:

Financial instruments by measurement category – Assets

Balance sheet item / Class € thousands	Measurement category	Carrying amount 31 Dec. 2019	Fair value 31 Dec. 2019	Carrying amount 31 Dec. 2018	Fair value 31 Dec. 2018
Non-current assets					
Non-current financial instruments	FVPL	697	697	660	660
Loans	Amortised cost	1,265	1,265	1,113	1,113
Current assets					
Trade receivables from third parties	Amortised cost	473,873	–	483,626	–
Trade receivables from other investments, associates and joint ventures	Amortised cost	30,228	–	34,490	–
Trade receivables from other investments, associates and joint ventures	Amortised cost	348	–	12,661	–
Currency forwards used as hedges	n / a	850	850	1,070	1,070
Other receivables and other current assets	Amortised cost	89,740	–	89,657	–
Cash and cash equivalents	Amortised cost	280,875	–	255,545	–

Financial instruments by measurement category – Equity and liabilities

Balance sheet item / Class € thousands	Measurement category	Carrying amount 31 Dec. 2019	Fair value 31 Dec. 2019	Carrying amount 31 Dec. 2018	Fair value 31 Dec. 2018
Non-current liabilities					
Financial liabilities excluding lease obligations	Amortised cost	24,714	26,510	29,274	31,621
Lease obligations	n / a	32,036	–	826	832
Current liabilities					
Financial liabilities excluding lease obligations	Amortised cost	29,303	–	48,373	–
Lease obligations	n / a	15,015	–	404	–
Trade payables	Amortised cost	252,741	–	270,211	–
Currency forwards used as hedges	n / a	3,336	3,336	3,731	3,731
Miscellaneous other financial liabilities	Amortised cost	27,890	–	29,036	–

Carrying amounts aggregated by category under IFRS 9

Balance sheet item / Class € thousands	Measurement category	31 Dec. 2019	31 Dec. 2018
Assets	Amortised cost	876,329	877,092
Equity and liabilities	Amortised cost	334,648	376,894
FVPL	FVPL	697	660

The carrying amount of financial assets measured at amortised cost approximates fair value. This is also the case for all financial liabilities shown on the balance sheet, with the exception of non-current financial liabilities. This is mainly due to the short maturities of these financial instruments.

The fair values of non-current financial liabilities and loans are determined as the present value of level 2 cash flows associated with the liabilities and loans. KSB applies an appropriate yield curve to arrive at this present value.

The fair values of the current and non-current financial instruments presented in the table above are based on prices quoted in active markets (level 1). Fair values within level 2 are determined based on a discounted cash flow method. Future cash flows from currency forwards are estimated on the basis of forward exchange rates (observable rates on the reporting date) and the contracted forward exchange rates, and are discounted with an adequate interest rate. Level 3 includes financial instruments whose fair value is determined on the basis of inputs not based on observable market data. Foreign exchange derivatives are measured using forward exchange rates. For interest rate swaps the fair value is determined through discounting the future expected cash flows based on the market interest rates and yield curves that apply to the remaining term of the contracts.

The following table shows the financial assets and liabilities measured at fair value on a recurring basis, broken down into measurement categories and the previously described hierarchy levels. There were no reclassifications carried out during the year under review.

→ Hierarchy levels

The net gains and losses from financial instruments, after taking into account the relevant tax effect, are presented in the following table:

→ Net results by measurement category

The interest shown is a component of finance income / expense. The effect from the application of the effective interest rate method is immaterial here as the interest expenses are virtually offset by the resulting interest income. The other gains and losses are partly reported in other income and other expenses.

The amount of financial assets and liabilities subject to offsetting agreements is not material.

Hierarchy levels 2019

€ thousands	Level 1	Level 2	Level 3	Total
Financial assets recognised at fair value				
Current financial instruments	697	–	–	697
Currency forwards	–	850	–	850
Financial liabilities recognised at fair value				
Currency forwards	–	3,336	–	3,336

Hierarchy levels 2018

€ thousands	Level 1	Level 2	Level 3	Total
Financial assets recognised at fair value				
Current financial instruments	660	–	–	660
Currency forwards	–	1,070	–	1,070
Financial liabilities recognised at fair value				
Currency forwards	–	3,731	–	3,731

Net results by measurement category in 2019

€ thousands	From interest and dividends	From subsequent measurement: At fair value	From subsequent measurement: Currency translation	From subsequent measurement: Impairment losses	From disposal	Net results
Amortised cost (assets)	5,741	–	– 286	– 3,395	–	2,060
Amortised cost (equity and liabilities)	– 6,819	–	– 427	–	–	– 7,246
FVPL	16	–	–	–	–	16
	– 1,062	**–**	**– 713**	**– 3,395**	**–**	**– 5,170**

Net results by measurement category in 2018

€ thousands	From interest and dividends	From subsequent measurement: At fair value	From subsequent measurement: Currency translation	From subsequent measurement: Impairment losses	From disposal	Net results
Amortised cost (assets)	4,645	–	500	– 1,997	–	3,148
Amortised cost (equity and liabilities)	– 5,992	–	43	–	–	– 5,949
FVPL	12	–	–	–	–	12
	– 1,335	**–**	**543**	**– 1,997**	**–**	**– 2,789**

Financial risks

KSB is exposed to certain financial risks as a consequence of its business activities. These risks can be classified into three areas:

KSB is firstly exposed to credit risk. Credit risk is defined as the potential default or delays in the receipt of contractually agreed payments. KSB is also exposed to liquidity risk which is the risk that an entity will be unable to meet its financial obligations, or will be unable to meet them in full. In addition, KSB is exposed to market price risk. The risk of exchange rate or interest rate changes may adversely affect the economic position of the Group. Risks from fluctuations in the prices of financial instruments are not material for KSB.

KSB limits all these risks through an appropriate risk management system, defining how these risks are addressed through guidelines and work instructions. In addition, KSB continuously monitors the current risk characteristics and regularly provides the information obtained in this way to the Managing Directors and the Supervisory Board in the form of standardised reports and individual analyses.

The three risk areas are described in detail in the following. Additional information is also provided in the group management report, in particular in the Economic Review, Report on Expected Developments, Opportunities and Risks Report sections.

Credit risk

The primary credit risk is that there is a delay in settling a receivable, or that it is not settled either in full or in part. KSB minimises this risk using a variety of measures. As a matter of principle, KSB runs credit checks on potential and existing counterparties. KSB only enters into business relationships if the results of these checks are positive. Additionally, European companies in particular take out trade credit insurance policies. As in the previous year, this applies to around 10 % of the Group's trade receivables in total. In exceptional cases KSB accepts other securities (collateral) such as guarantees. The insurance policies primarily cover the risk of loss of receivables. Moreover, cover is also taken out against political and commercial risks in the case of specific customers in selected countries. For both types of insurance, KSB has agreed deductibles, which represent significantly less than 50 % of the insured volume. As part of receivables management, KSB continuously monitors outstanding items, performs maturity analyses and establishes contact with customers at an early stage if delays in payment occur. In the case of major projects, the terms and conditions provide for prepayments, guarantees and – for export transactions – letters of credit. These also mitigate risk. KSB recognises impairment losses for the residual risk remaining in trade receivables. It regularly examines the extent to which individual receivables need to be written down for impairment. Indications of this are significant financial difficulties of the debtor, such as insolvency or bankruptcy. Receivables are derecognised when it is reasonably certain that payment cannot be expected.

The maximum default risk, excluding collateral received, corresponds to the carrying amount of the financial assets. These all have an investment grade rating.

There is no concentration of risk because the diversity of KSB's business means that it supplies a considerable number of customers in different sectors.

Liquidity risk

Liquidity management ensures that the liquidity risk is minimised in the Group and that solvency is ensured at all times. There are no concentrations of risk because KSB works with a number of credit institutions, on which strict creditworthiness requirements are imposed.

KSB generates its financial resources primarily from its operating business. These are used to finance investments in non-current assets. KSB also uses them to cover our working capital requirements. To keep these as low as possible, KSB monitors changes in inventories, contract assets, trade receivables, trade payables and contract liabilities regularly using a standardised Group reporting system.

The reporting system additionally ensures, with the help of monthly rolling cash flow planning , that the Group's centralised financial management is continuously informed about liquidity surpluses and requirements. This enables KSB to optimally meet the needs of the Group as a whole and of the individual companies. For selected companies KSB uses a cash pooling system to ensure that available cash is deployed optimally within the Group. A worldwide receivables netting procedure is also applied within the KSB Group so as to minimise both the volume of cash flows and the associated fees. In order to be able to provide the necessary collateral in the project business, KSB makes corresponding guarantee volumes available. In addition, it is always ensured that credit facilities are sufficient; KSB identifies the need for these on the basis of regular liquidity planning. This way, it can react at any time to fluctuating liquidity requirements. Approved cash loans and credit lines total approximately € 1,319.4 million (previous year: approx. € 1,283.9 million), of which € 814.9 million (previous year: € 1,012.4 million) has not yet been utilised.

Cash loans and credit lines included amounts from a syndicated loan agreement signed in December 2018 whose credit line can be used at any time. The credit line has a fixed term of five years with the option to renew twice by one year each time. In the year under review, KSB availed itself of this option for the first time and extended the fixed term of the line early, until the end of 2024.

The utilisation of cash loans and credit lines from the syndicated loan agreement by the Group was as follows at the end of the year under review:

€ thousands / Type of line	Maximum amount of line	Use as at 31 Dec. 2019
Loans	300,000	6,687
Sureties	350,000	90,723

The following tables show the contractually agreed non-discounted future cash flows of the financial liabilities (primary financial instruments) and derivative financial instruments. Interest payments on fixed-rate liabilities are determined on the basis of the fixed rate. Floating-rate interest payments are based on the last floating interest rates fixed before 31 December. Projections for future new liabilities are not included in the presentation. Based on the current state of knowledge, it is neither expected that the cash flows will take place significantly earlier, nor that the amounts will differ significantly.

Cash flows of financial liabilities 2019

€ thousands	Total	Up to 1 year	1 – 5 years	> 5 years
Financial liabilities	106,589	47,318	55,875	3,396
of which from lease obligations	49,803	16,211	30,357	3,235
Trade payables	252,741	252,741	–	–
Miscellaneous other financial liabilities	27,890	25,343	2,547	–
Derivative financial instruments – Incoming payments	– 849	– 750	– 99	–
Derivative financial instruments – Outgoing payments	3,335	3,081	254	–
	389,706	327,733	58,577	3,396

Cash flows of financial liabilities 2018

€ thousands	Total	Up to 1 year	1 – 5 years	> 5 years
Financial liabilities	**84,419**	56,101	28,005	313
Trade payables	**270,212**	270,212	–	–
Miscellaneous other financial liabilities	**29,036**	26,320	2,716	–
Derivative financial instruments – Incoming payments	**– 1,190**	– 1,062	– 128	–
Derivative financial instruments – Outgoing payments	**3,851**	3,498	353	–
	386,328	**355,069**	**30,946**	**313**

Market price risk

Global business activities expose KSB primarily to currency and interest rate risk. Any changes in market prices can affect fair values and future cash flows. Sensitivity analyses are used to determine the hypothetical impact of such market price fluctuations on earnings and equity. In doing so, KSB assumes that the portfolio at the reporting date is representative of the full year.

KSB reduces the risks resulting from changes in prices on the procurement side for orders with extended delivery dates by agreeing cost escalation clauses or, in the case of fixed-price contracts, by including the expected rate of cost increases in the sales price.

Currency risk mainly affects cash flows from operating activities. It arises when Group companies settle transactions in currencies that are not their functional currency. KSB minimises this risk using currency forwards. Further information is presented in Section III. Accounting Policies under “Financial assets and liabilities – b) Derivative financial instruments”. KSB uses micro hedges with regard to transactions already recognised and transactions that are expected in the future. The hedging instruments used share the essential terms and conditions with the underlying transactions, i.e. with regard to amount, term and quality. Internal guidelines govern the use of financial instruments. Such transactions are also subject to ongoing risk control measures. The effectiveness of hedges is determined at the beginning of the hedge and through regular prospective assessment. The aim is to ensure that there is a financial relationship between the hedge underlying and hedging instrument. The hedging instruments used are exclusively currency forwards entered into with prime-rated banks. To hedge forward exchange transactions, the Group takes out hedges where the contractual modalities of the hedging instrument essentially match those of the hedged underlying. The hedge ratio for hedges is 1:1, i.e. the volume of hedge transactions matches the designated underlyings. In order to measure the effectiveness or ineffectiveness of hedges, KSB compares the fair value of the underlying and the hedge transactions. Changes in the fair value of the derivatives are almost completely offset by changes in the fair value of the cash flows from the underlyings (dollar offset method). The change in fair value of the underlyings and hedges in the financial year therefore match the unrealised profits and losses recorded under equity. As a rule, KSB does not hedge currency risks from the translation of foreign operations into the Group currency (€). Ineffectiveness can arise from hedging currency risk if the material measurement parameters of the underlying and hedge no longer match. There was no ineffectiveness in the KSB Group in respect of currency hedges in the 2019 and 2018 financial years.

At the reporting date, the notional volume of all currency forwards was € 251,878 thousand (previous year: € 238,300 thousand). The contractual maturities of payments for currency forwards are as follows:

→ Notional volumes

The weighted average rate of hedging instruments for the main foreign currencies was:

Hedging of currency risk in 2019

Average rate USD / EUR	1.14
Average rate CNY / EUR	7.99
Average rate CHF / EUR	1.10

Hedging of currency risk in 2018

Average rate USD / EUR	1.19
Average rate GBP / EUR	0.90
Average rate SEK / EUR	10.32

The “Changes in the fair value of derivatives” table shows the change in the hedging reserve and in the cost of the hedging reserve for currency hedges before tax.

➞ Fair value changes in derivatives

Notional volumes in 2019

€ thousands	Total	Up to 1 year	1 - 5 years	> 5 years
Currency forwards	251,878	228,453	23,425	–

Notional volumes in 2018

€ thousands	Total	Up to 1 year	1 - 5 years	> 5 years
Currency forwards	238,300	231,947	6,353	–

Fair value changes in derivatives in 2019

	OCI	
€ thousands	Cash flow hedges – Hedging reserve	Cash flow hedges – Hedging cost reserve
Currency risk		
Opening balance at 1 January	– 4,149	– 823
Effective portion of changes in fair value	4,863	965
Realisation of underlying recognised in income	– 5,434	– 1,010
Closing balance at 31 December	**– 4,719**	**– 868**

Fair value changes in derivatives in 2018

	OCI	
€ thousands	Cash flow hedges – Hedging reserve	Cash flow hedges – Hedging cost reserve
Currency risk		
Opening balance at 1 January	1,384	– 770
Effective portion of changes in fair value	– 6,272	– 459
Realisation of underlying recognised in income	739	406
Closing balance at 31 December	**– 4,149**	**– 823**

The key foreign currencies in the KSB Group are the US dollar (USD) and Chinese yuan (CNY). For the currency sensitivity analysis, KSB simulates the effects based on the notional volume of existing foreign exchange derivatives and foreign currency receivables and liabilities at the reporting date. For the analysis, a 10 % increase (decrease) in the value of the euro versus the other currencies is assumed. In the reporting year, this would have amounted to approximately € – 1.6 million (previous year: € – 0.4 million) for CNY, € 1.7 million (previous year: € 2.4 million) for USD and € 3.0 million (previous year: € 1.5 million) for the remaining currencies.

→ Currency volumes

Based on the measurement of derivatives, at the reporting date, equity and the fair value of the derivatives would have been € 12.7 million lower (higher), with € 8.0 million resulting from USD and € 4.7 million from the other currencies. At the previous year's reporting date, equity and the fair value of the derivatives would have been € 11.2 million lower (higher), with € 8.1 million resulting from USD and € 3.1 million from the other currencies.

KSB regularly monitors the interest rate risks associated with its financing activities. To avoid the negative effects of interest rate fluctuations on the international capital markets, KSB concludes interest rate hedges (interest rate swaps) where necessary, generally for long-term loans. These are used exclusively to hedge floating rate loans against rising interest rates. In the year under review, as in the previous year, no such transactions or other interest rate derivatives were recognised.

As part of the interest rate sensitivity analysis, KSB simulates a 50 basis point increase (decrease) in market interest rates and analyses the impact on the floating rate financial instruments. In the 2019 reporting year, the net interest balance would have been € 1.6 million (€ 1.1 million) (previous year: € 1.5 million (€ 1.0 million)) higher (lower).

VII. STATEMENT OF CASH FLOWS

In the statement of cash flows, KSB classifies cash flows by operating, investing and financing activities. Effects of changes in the consolidated Group and in exchange rates are eliminated in the relevant items. The effect of exchange rate changes (based on annual average rates) and changes in the consolidated Group on cash and cash equivalents is presented separately.

Changes in the presentation of the cash flow statement compared with the previous year resulting from the first-time adoption of IFRS 16 in the year under review are explained in Section III. Accounting Policies in the "Changes in accounting policies due to the first-time adoption of IFRS 16" sub-section.

Cash flows from operating activities additionally include a "cash flow" subtotal that merely comprises the net profit for the year; depreciation, amortisation and impairment losses as well as reversals of impairment losses; changes in non-current provisions; and non-cash effects, for example, of the disposal of fixed assets. This subtotal is combined with the changes in the other operating components of assets (including current financial instruments) and liabilities to determine cash flows from operating activities. Only those changes that are recognised in the income statement are taken into account.

Cash flows from investing activities exclusively reflect cash-effective acquisitions and disposals of investments in intangible assets, property, plant and equipment, non-current financial assets, and changes in term deposits with a maturity of more than 3 months, including commercial papers.

In addition to cash flows resulting from equity items (capitalisation measures and dividend payments), cash flows from financing activities also comprise cash flows arising from changes in financial liabilities.

If cash and cash equivalents include restricted cash, this is reported separately. Cash equivalents include short-term deposits with an original maturity of less than three months.

→ Changes in cash flows from financing activities

Currency volumes

€ thousands	CNY 31 Dec. 2019	CNY 31 Dec. 2018	USD 31 Dec. 2019	USD 31 Dec. 2018
Trade receivables	49,508	53,335	26,584	22,740
Trade payables	33,676	49,074	13,326	15,558
Balance	**15,832**	**4,261**	**13,258**	**7,182**

Changes in cash flows from financing activities in 2019

		Cash-effective	Not cash-effective		
€ thousands	1 Jan. 2019		Additions / Disposals / Acquisitions / Other	Exchange-rate-related changes	31 Dec. 2019
Non-current liabilities	29,274	– 4,487	–	– 73	24,714
Current liabilities	48,053	– 18,229	–	– 521	29,303
Lease liabilities	51,117 *	– 16,142	12,104	– 28	47,051
Total liabilities from financing activities	**128,444**	**– 38,858**	**12,104**	**– 622**	**101,068**
Dividend payments	–	– 7,566	–	–	–
Salary conversion (provisions for pensions)	–	– 5	–	–	–
Total cash flows from financing activities	**–**	**– 46,429**	**–**	**–**	**–**

* Restated compared with 31 Dec. 2018 due to first-time adoption of IFRS 16.

Changes in cash flows from financing activities in 2018

		Cash-effective	Not cash-effective		
€ thousands	1 Jan. 2018		Additions / Disposals / Acquisitions / Other	Exchange-rate-related changes	31 Dec. 2018
Non-current liabilities	53,759	– 23,862	–	– 623	29,274
Current liabilities	21,285	28,479	–	– 1,711	48,053
Lease liabilities	927	335	–	– 32	1,230
Total liabilities from financing activities	**75,971**	**4,952**	**–**	**– 2,366**	**78,557**
Dividend payments	–	– 15,866	–	–	–
Salary conversion (provisions for pensions)	–	2,993	–	–	–
Acquisition of minority interests	–	– 1,512	–	–	–
Total cash flows from financing activities	**–**	**– 9,433**	**–**	**–**	**–**

VIII. SEGMENT REPORTING

Segment reporting is prepared in accordance with IFRS 8 based on the management approach and corresponds to the internal organisational and management structure as well as the reporting lines to the Managing Directors as the chief operating decision-makers. In KSB's matrix organisation, management decisions are primarily taken on the basis of the key performance indicators – order intake, external sales revenue and earnings before finance income / expense and income tax (EBIT) – determined for the Pumps, Valves and Service segments. Reporting the relevant assets, number of employees and inter-segment sales revenue for these segments is not part of internal reporting. The managers in charge of these segments, which are geared to product groups, have profit and loss responsibility. They identify business opportunities across markets and industries and assess the options based on current and future market requirements. They also proactively encourage the development of new products and improvements to the available range of products. In this context, they work closely with the Sales organisations and with Operations.

The **Pumps** segment includes single- and multistage pumps, submersible pumps and associated control and drive systems. Applications include process engineering, building services, water and waste water transport, energy conversion and solids transport.

The **Valves** segment covers butterfly, globe, gate, control, diaphragm and ball valves, as well as associated actuators and control systems. Applications primarily include process engineering, building services, energy conversion and solids transport.

The **Service** segment covers the installation, commissioning, start-up, inspection, servicing, maintenance and repair of pumps, related systems and valves for all applications; as well as modular service concepts and system analyses for complete systems.

The companies can be allocated to one or more segments based on their business activities.

The amounts disclosed for the individual segments have been established in compliance with the accounting policies of the underlying consolidated financial statements.

Transfer prices for intercompany sales are determined on an arm's length basis.

There were no discontinued operations in the period under review, as in the comparative period of the previous year.

The **order intake** by segment presents order intake generated with third parties.

The **sales revenue** by segment presents sales revenue generated with third parties.

The table shows **earnings before finance income / expense and income tax (EBIT)** including non-controlling interests.
→ Segment reporting

Segment reporting

	Order intake		Sales revenue		EBIT	
€ thousands	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
Pumps segment	1,617,825	1,506,248	1,562,462	1,469,443	84,823	90,563
Valves segment	361,878	355,618	364,365	340,771	2,266	– 37,373
Service segment	474,060	441,670	456,358	435,734	26,514	21,512
Total	**2,453,763**	**2,303,536**	**2,383,185**	**2,245,948**	**113,603**	**74,702**

The EBIT of the Pumps segment includes depreciation and amortisation expense of € 54,079 thousand (previous year: € 48,802 thousand), the EBIT of the Valves segment includes depreciation and amortisation expense of € 11,566 thousand (previous year: € 32,292 thousand) and the EBIT of the Service segment includes depreciation and amortisation expense of € 16,206 thousand (previous year: € 23,397 thousand). Following the adoption of IFRS 16, depreciation on right-of-use assets (rights of use to leased assets) is included for the first time in these amounts in 2019.

€ 561,803 thousand (previous year: € 562,147 thousand) of the sales revenue presented was generated by the companies based in Germany, € 239,353 thousand (previous year: € 241,476 thousand) was generated by the companies based in

France, € 212,876 thousand (previous year: € 188,989 thousand) by the companies based in the USA, and € 1,369,153 thousand (previous year: € 1,253,336 thousand) by the other Group companies.

There were no relationships with individual customers that accounted for a material proportion of Group sales revenue.

At the reporting date, the total non-current assets of the KSB Group amounted to € 682,708 thousand (previous year: € 611,603 thousand), with € 240,362 thousand (previous year: € 214,857 thousand) being attributable to the companies based in Germany and € 442,346 thousand (previous year: € 396,746 thousand) being attributable to the other Group companies. They include intangible assets, property, plant and equipment, investments accounted for using the equity method and since 2019 also right-of-use assets (rights of use to leased assets) under IFRS 16. Non-current financial instruments and deferred tax assets are not included.

IX. OTHER DISCLOSURES

Contingent liabilities

Contingent liabilities to third parties and other investments are as follows at the balance sheet date:

Contingent liabilities

€ thousands	2019	2018
From legal disputes	870	23,700
From warranty agreements	1,500	–
From other tax matters	5,730	–
From other contingent liabilities	479	393
	8,579	24,093

In the context of establishing the contingent liabilities, estimates are required in particular with regard to the existence of any obligations and in relation to the probability and amount of an outflow of resources.

For the contingent liabilities from legal disputes, material estimation uncertainties result for KSB with regard to the expected outcome of current court proceedings and the potentially resultant obligations and risks. There are no insurance claims to be covered, as in the previous year.

At present, KSB does not expect a payment obligation for the total of contingent liabilities listed in the table of that name.

In addition, the KSB Group has contingent liabilities towards associates and joint ventures of € 7,800 thousand (previous year: € 7,367 thousand). The extent to which these will result in a cash outflow depends on the future business performance of the respective company.

The contingent assets of KSB at the reporting date total € 1,200 thousand (previous year: none). They relate to a reimbursement claim for the full amount towards an insurance company due to a settlement agreement to be approved by the Annual General Meeting.

Other financial obligations

As in the previous year, there are no purchase price obligations from acquisitions of companies and no payment obligations from capitalisation measures at Group companies.

The aggregate purchase obligation for investments amounts to € 29,484 thousand (previous year: € 12,418 thousand). Most of the corresponding payments are due in 2020.

Leases

KSB as lessee

Lease agreements in which KSB is the lessee mainly relate to real estate and motor vehicles. The terms of leases and additional cancellation and renewal options for one or both contracting parties are agreed individually and at different conditions.

The total cash outflow from leases, in the form of the repayment of lease liabilities, outgoings for leases relating to low-value assets and for short-term leases as well as variable lease payments, totalled € 26,748 thousand in the year under review.

KSB as lessor

KSB acts as a lessor in the context of operating leases. This relates, among other things, to the leasing of real estate.

The maturity analysis of future lease payments from operating leases is as follows:

→ Maturity analysis of future operating lease payments

Maturity analysis of future operating lease payments

€ thousands	2019
Due within 1 year	1,682
Due between 1 and 2 years	1,377
Due between 2 and 3 years	979
Due between 3 and 4 years	584
Due between 4 and 5 years	390
Due after more than 5 years	350
	5,362

The financing leases where KSB acts as a lessor have minor sig-nificance for KSB and do not have any material effect on the consolidated financial statements.

Research and development costs

Research and development costs in the year under review amounted to € 50,529 thousand (previous year: € 49,228 thousand). Most of these costs are order-related expenses.

Related party disclosures

Pursuant to section 21(1) of the 28 Dec. 2007 version of the WpHG [*Wertpapierhandelsgesetz* – German Securities Trade Act], KSB Stiftung [KSB Foundation], Stuttgart, notified us on 21 May 2008 that its voting interest in KSB SE & Co. KGaA, Frankenthal / Pfalz exceeded the 75.00 % threshold on 5 May 2008 and amounted to 80.24 % (711,453 voting shares) on this date. 0.54 % of the voting rights (4,782 voting shares) were held directly by KSB Stiftung, Stuttgart, and 79.70 % (706,671 voting shares) were attributed to KSB Stiftung, Stuttgart, pursuant to section 22(1), sentence 1, No. 1 of the 28 Dec. 2007 version of the WpHG. The voting rights attributed to KSB Stiftung, Stuttgart, were held by Johannes und Jacob Klein GmbH, Frankenthal / Pfalz. In 2018, the voting interest of Johannes und Jacob Klein GmbH increased to 83.94 %.

Related parties are KSB Management SE as general partner, KSB Stiftung, Stuttgart, and Kühborth Stiftung GmbH, Stuttgart, each with their direct and indirect interests, joint ventures and associates. These are primarily Johannes und Jacob Klein GmbH, Frankenthal / Pfalz, Palatina Versicherungsservice GmbH, Frankenthal / Pfalz, and the companies of Abacus alpha GmbH, Frankenthal / Pfalz. Furthermore, related parties also include entities controlled or jointly controlled by the Managing Directors of Johannes und Jacob Klein GmbH, the Managing Directors or members of the Administrative Board of KSB Management SE or the Managing Directors or members of the Advisory Board of Klein, Schanzlin & Becker GmbH.

The members of the Supervisory Board, the Managing Directors of KSB Management SE and the members of the Administrative Board of KSB Management SE are deemed to be related parties of KSB SE & Co. KGaA. In the year under review, two members of the Administrative Board held an immaterial share of interests in KSB SE & Co. KGaA.

As part of normal business activities, the company maintains business relationships with numerous companies, including affiliates that are deemed to be related parties.

The company maintains relationships with affiliates in the following areas:

- Buying / selling assets
- Sourcing / providing services
- Usage / transferring usage of assets

Balances and transactions between KSB SE & Co. KGaA and its subsidiaries, which are related parties, have been eliminated during the consolidation process and are not explained in further detail. Details regarding transactions between the KSB Group and other related parties are provided below.

The following table shows services provided and used, as well as pending receivables and liabilities owed from and to related parties:

→ Services, receivables and liabilities in dealings with related parties

The liabilities to KSB Management SE are due in the short term. As the legal representative, KSB Management SE provides management services and accepts KSB's liability as general partner. It receives reimbursement of its costs as a management fee and 4 % of its share capital for acceptance of liability.

Further information on joint ventures and associates (related party disclosures) is presented in Section IV. Balance Sheet Disclosures – Notes No. 6 “Investments accounted for under the equity method”, Notes No. 8 “Contract assets, trade receivables and other financial and non-financial assets” and Notes No. 13 “Liabilities”, and in Section IX. Other Disclosures – Contingent Liabilities.

Services, receivables and liabilities in dealings with related parties

	Sales of goods and services		Purchases of goods and services		Receivables		Liabilities	
€ thousands	2019	2018	2019	2018	31 Dec. 2019	31 Dec. 2018	31 Dec. 2019	31 Dec. 2018
KSB Management SE	1	62	5,345	5,817	–	–	4,742	3,340
Klein, Schanzlin & Becker GmbH	–	–	–	–	–	–	–	–
KSB Stiftung and Kühborth-Stiftung GmbH	–	–	–	–	–	–	–	–
Johannes und Jacob Klein GmbH	–	222	–	23	–	1	–	1
Subsidiaries of Johannes und Jacob Klein GmbH	517	665	3,280	2,933	165	163	42	34
Associates / joint ventures of Johannes und Jakob Klein GmbH	–	–	7	142	–	–	–	1
Other related parties (corporate bodies), excluding "Management remuneration"	20	24	–	–	–	–	–	–

The transactions in relation to Johannes und Jacob Klein GmbH are based on a rental and services agreement. In addition, Johannes und Jacob Klein GmbH received dividend payments.

Transactions with subsidiaries of Johannes und Jacob Klein GmbH comprise transactions with Palatina Versicherungsservice GmbH, Abacus alpha GmbH, Abacus Resale GmbH, Abacus Experten GmbH, Salinnova GmbH and airinotec GmbH). There were minor transactions with associates or joint ventures of KSB with Johannes und Jacob Klein GmbH in the year under review.

A services agreement for insurances is in place between Palatina Versicherungsservice GmbH and KSB SE & Co. KGaA. Abacus Experten GmbH concluded a number of service agreements with KSB SE & Co. KGaA; there is a framework delivery and service agreement with Abacus Resale GmbH for the purchase of returns and the provision of additional related services. In addition, products were delivered to the company as part of the normal business activities. KSB SE & Co. KGaA and Abacus alpha GmbH have also concluded service agreements. KSB products were delivered to airinotec GmbH and Salinnova GmbH as part of normal business activities. KSB purchased spare parts from Salinnova GmbH.

Transactions with related parties are performed at arm’s length.

Pending balances at the year end are unsecured, do not accrue interest and are settled by means of payments. No guarantees were given or received. The receivables presented here, as in the previous year, are not subject to write-downs and no provisions have been created for this purpose.

Disclosures and information on affiliates and investments accounted for using the equity method provided in other section of these Notes refer to relations covering the supply of products and services on an arm’s length basis, unless stated otherwise.

Pursuant to IAS 24, the remuneration of key management personnel of the Group must be disclosed. The following table presents the relevant information for the KSB Group on remuneration paid to the Managing Directors and the members of the Administrative Board of KSB Management SE by KSB under an expense reimbursement agreement.

Management remuneration

€ thousands	31 Dec. 2019	31 Dec. 2018
Short-term benefits (total remuneration)	3,775	3,722
Post-employment benefits	1,374	1,929
Other long-term benefits	–	–
Termination benefits	–	–
Share-based payments	–	–
Total	**5,149**	**5,651**

In the year under review, KSB Management SE received from KSB SE & Co. KGaA reimbursed expenses of € 196 thousand (previous year: € 166 thousand) for managing KSB's business in addition to the aforementioned reimbursement of expenses for remunerating the members of the governing bodies of KSB Management SE.

KSB has set aside provisions of € 784 thousand (previous year: € 684 thousand) for pension obligations to current Managing Directors of KSB Management SE, and € 43,505 thousand (previous year: € 41,648 thousand) for pension obligations to former members of the Board of Management of KSB AG (excluding the Managing Directors of KSB Management SE) and their surviving dependants as at 31 December 2019; total benefits paid to these persons amounted to € 2,648 thousand in the year under review (previous year: € 2,548 thousand).

The short-term benefits paid to members of the Supervisory Board amount to € 798 thousand for the 2019 financial year (previous year: € 932 thousand). Provisions of € 452 thousand (previous year: € 482 thousand) were set aside for members of the Supervisory Board at the end of the financial year.

The members of the Supervisory Board, the Managing Directors and the members of the Administrative Board of the general partner are listed before the information on the proposal on the appropriation of net retained earnings for KSB SE & Co. KGaA.

Auditors

PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, based in Frankfurt am Main with an office in Mannheim, were appointed as auditors and group auditors for financial year 2019 at the Annual General Meeting of KSB SE & Co. KGaA on 29 May 2019. Overall, fees (including expenses) amounting to € 874 thousand were recognised as expenses. Of this, € 719 thousand relate to audit services, € 116 thousand to other certification services and € 39 thousand to other services.

The audit fees include costs for the audit of the consolidated financial statements and of the statutory annual financial statements of KSB SE & Co. KGaA and the German subsidiaries included in the consolidated financial statements. The fees for other certification services primarily include attestation services outside of the audit of the annual financial statements. The fees for other services mainly include fees for project-specific consultancy services in IT, risk management and compliance.

Use of exemption option

KSB Service GmbH, Frankenthal, KSB Service GmbH, Schwedt, and Uder Elektromechanik GmbH, Friedrichsthal, have made partial use of the exemption provision under section 264(3) of the HGB.

Events after the Reporting Period

The global spread of the novel coronavirus has increased steadily in the first few months of 2020. The scale and duration of any adverse effect on production as well as on KSB's procurement and sales markets both in China and in the Asian, European and American economies are impossible to predict and therefore quantify right now at the time of preparation of the consolidated financial statements. KSB assumes that the spread of the coronavirus will have a negative impact on the Group.

In addition, there were no events after the close of the financial year that are of particular significance for the Group's net assets, financial position and result of operations.

German Corporate Governance Code

The Managing Directors and the Supervisory Board of KSB SE & Co. KGaA issued the current Statement of Compliance with the recommendations of the Government Commission on the German Corporate Governance Code in accordance with section 161 AktG [*Aktiengesetz* – German Public Companies Act] on 19 December 2019. The Statement of Compliance is published on the KSB web site (www.ksb.com) and has thus been made permanently accessible.

List of Shareholdings

Affiliates (national and international)

Cons. No.	Name and seat	Country	Activity*	Capital share in %	Group share of capital in %	Held by No.
1	Canadian Kay Pump Limited, Mississauga / Ontario	Canada	H	100.00	100.00	
2	KSB Limited, Pimpri (Pune)	India	P	40.54	40.54	1
3	KSB MIL Controls Limited, Annamanada	India	P	49.00	19.86	2
				51.00	51.00	
4	Pofran Sales & Agency Limited, Pimpri (Pune)	India	S	100.00	40.54	2
5	Dynamik-Pumpen GmbH, Stuhr	Germany	SVC	100.00	100.00	
6	Hydroskepi GmbH, Amaroussion (Athens)	Greece	H	100.00	100.00	
7	KAGEMA Industrieausrüstungen GmbH, Pattensen	Germany	P	100.00	100.00	
8	KSB Armaturen Verwaltungs- und Beteiligungs-GmbH, Frankenthal	Germany	H	100.00	100.00	
9	OOO “KSB”, Moscow	Russia	S	100.00	100.00	8
10	IOOO “KSB BEL”, Minsk	Belarus	S	98.10	98.10	9
				1.90	1.90	8
11	TOV “KSB Ukraine”, Kiev	Ukraine	S	100.00	100.00	9
12	KSB, Bombas e Válvulas, SA, Albarraque	Portugal	S	92.00	92.00	
				1.00	1.00	26
				1.00	1.00	67
				1.00	1.00	15
13	KSB Chile S.A., Santiago	Chile	S	100.00	100.00	
14	KSB de Mexico, S.A. de C.V., Querétaro	Mexico	P	100.00	100.00	
15	KSB FINANZ S.A., Echternach	Luxembourg	H	100.00	100.00	
16	Aplicaciones Mecánicas Válvulas Industriales, S.A. (AMVI), Burgos	Spain	P	100.00	100.00	15
17	Dalian KSB AMRI Valves Co., Ltd., Dalian	China	P	100.00	100.00	15
18	KSB Australia Pty Ltd, Bundamba QLD	Australia	S	100.00	100.00	15
19	KSB New Zealand Limited, Albany / Auckland	New Zealand	S	100.00	100.00	18
20	KSB Belgium S.A., Bierges-lez-Wavre	Belgium	S	100.00	100.00	15
21	KSB Service Belgium S.A./N.V., Bierges-lez-Wavre	Belgium	SVC	100.00	100.00	20
22	KSB BRASIL LTDA., Várzea Paulista	Brazil	P	100.00	100.00	15
23	KSB Compañía Sudamericana de Bombas S.A., Carapachay (Buenos Aires)	Argentina	P	95.00	95.00	15
				5.00	5.00	
24	KSB Finance Nederland B.V., Zwanenburg	The Netherlands	H	100.00	100.00	15
25	DP industries B.V., Alphen aan den Rijn	The Netherlands	P	100.00	100.00	24
26	KSB Nederland B.V., Zwanenburg	The Netherlands	S	100.00	100.00	24
27	KSB Italia S.p.A., Milan	Italy	S	99.00	99.00	15
				1.00	1.00	
28	KSB ITUR Spain S.A., Zarautz	Spain	P	100.00	100.00	15
29	KSB Limited, Loughborough	United Kingdom	S	100.00	100.00	15
30	KSB Middle East FZE, Dubai	U.A.E.	S	100.00	100.00	15
31	KSB Österreich Gesellschaft mbH, Vienna	Austria	S	100.00	100.00	15
32	KSB-Pompa, Armatür Sanayi ve Ticaret A.S., Ankara	Turkey	P	100.00	100.00	15

* P = Production, S = Sales, SVC = Service, H = Holding

Cons. No.	Name and seat	Country	Activ-ity*	Capital share in %	Group share of capital in %	Held by No.
33	KSB Pumps and valves L.t.d., Dom«ale	Slovenia	S	100.00	100.00	15
34	KSB Pumps Inc., Mississauga / Ontario	Canada	S	100.00	100.00	15
35	KSB Pumps (S.A.) (Pty) Ltd., Germiston (Johannesburg)	South Africa	H	100.00	100.00	15
36	KSB Pumps and Valves (Pty) Ltd., Germiston (Johannesburg)	South Africa	P	70.00	70.00	35
37	FORTY FOUR ACTIVIA PARK (PTY) LTD, Germiston (Johannesburg)	South Africa		100.00	70.00	36
38	KSB S.A.S., Gennevilliers (Paris)	France	P	100.00	100.00	15
39	KSB POMPES ET ROBINETTERIES S.à.r.l. d'Associé unique, Casablanca	Morocco	S	100.00	100.00	38
40	KSB Service EITB-SITELEC S.A.S., Montfavet	France	SVC	100.00	100.00	38
41	KSB Service Energie S.A.S.U., Rambervillers	France	SVC	100.00	100.00	38
42	KSB SERVICE COTUMER S.A.S., Déville lès Rouen	France	SVC	100.00	100.00	41
43	Société de travaux et Ingénierie Industrielle S.A.S., Déville lès Rouen	France	SVC	100.00	100.00	42
44	SPI Energie S.A.S., La Ravoire	France	SVC	100.00	100.00	38
45	KSB Shanghai Pump Co., Ltd., Shanghai	China	P	80.00	80.00	15
46	PAB Pumpen- und Armaturen-Beteiligungsges. mbH, Frankenthal	Germany	H	51.00	51.00	15
47	KSB America Corporation, Richmond / Virginia	USA	H	100.00	51.00	46
48	GIW Industries, Inc., Grovetown / Georgia	USA	P	100.00	51.00	47
49	KSB Dubric, Inc., Comstock Park / Michigan	USA	SVC	100.00	51.00	47
50	KSB, Inc., Richmond / Virginia	USA	S	100.00	51.00	47
51	KSB, Inc. – Western Division, Bakersfield / California	USA	SVC	100.00	51.00	47
52	Standard Alloys Incorporated, Port Arthur / Texas	USA	SVC	100.00	51.00	47
53	PT. KSB Indonesia, Cibitung	Indonesia	P	94.06	94.10	15
				5.94	5.90	
54	PT. KSB Sales Indonesia, Cibitung	Indonesia	S	99.00	99.00	53
				1.00	1.00	
55	SISTO Armaturen S.A., Echternach	Luxembourg	P	52.85	52.85	15
56	KSB Finland Oy, Kerava	Finland	S	100.00	100.00	
57	KSB Hungary Kft., Budapest	Hungary	S	100.00	100.00	
58	KSB Korea Ltd., Seoul	South Korea	S	100.00	100.00	
59	KSB Limited, Hong Kong	China	S	100.00	100.00	
60	KSB Pump & Valve Technology Service (Tianjin) Co., Ltd, Tianjin	China	SVC	100.00	100.00	59
61	KSB Ltd., Tokyo	Japan	S	100.00	100.00	
62	KSB Norge AS, Ski	Norway	S	100.00	100.00	
63	KSB Polska Sp. z o.o., Ozarow-Mazowiecki	Poland	S	100.00	100.00	
64	KSB Pumps Co. Ltd., Bangkok	Thailand	S	40.00	40.00	
65	KSB Pumps Company Limited, Lahore	Pakistan	P	58.89	58.89	
66	KSB-Pumpy+Armatury s.r.o., koncern, Prague	Czech Republic	S	100.00	100.00	
67	KSB (Schweiz) AG, Oftringen	Switzerland	S	100.00	100.00	
68	KSB Seil Co., Ltd., Busan	South Korea	P	100.00	100.00	
69	KSB Service GmbH, Frankenthal	Germany	SVC	100.00	100.00	
70	KSB Service GmbH, Schwedt	Germany	SVC	100.00	100.00	
71	KSB Singapore (Asia Pacific) Pte Ltd, Singapore	Singapore	S	100.00	100.00	
72	KSB Malaysia Pumps & Valves Sdn. Bhd., Shah Alam	Malaysia	S	100.00	100.00	71
73	KSB PHILIPPINES, INC., Makati City	Philippines	S	100.00	100.00	71
74	KSB Vietnam Co., Ltd, Long Thanh District	Vietnam	S	100.00	100.00	71
75	KSB Sverige Aktiebolag AB, Gothenburg	Sweden	S	100.00	100.00	

* P = Production, S = Sales, SVC = Service, H = Holding

Cons. No.	Name and seat	Country	Activ-ity*	Capital share in %	Group share of capital in %	Held by No.
76	KSB Sverige Fastighets AB, Gothenburg	Sweden	S	100.00	100.00	75
77	PUMPHUSET Sverige AB, Sollentuna	Sweden	SVC	100.00	100.00	75
78	VM Pumpar AB, Gothenburg	Sweden	S	100.00	100.00	75
79	KSB Taiwan Co., Ltd., New Taipei City	Taiwan	S	100.00	100.00	
80	KSB Tech Pvt. Ltd., Pimpri (Pune)	India		100.00	100.00	
81	KSB Valves (Changzhou) Co., Ltd., Jiangsu	China	P	100.00	100.00	
82	PMS-BERCHEM GmbH, Neuss	Germany	SVC	100.00	100.00	
83	Pumpen-Service Bentz GmbH, Reinbek	Germany	SVC	100.00	100.00	
84	REEL s.r.l., Ponte di Nanto	Italy	P	100.00	100.00	
85	Uder Elektromechanik GmbH, Friedrichsthal	Germany	SVC	100.00	100.00	

Joint ventures (national and international)

Cons. No.	Name and seat	Country	Activ-ity*	Capital share in %	Group share of capital in %	Held by No.	Equity** € thousands	Net profit / loss for the year** € thousands
	National							
86	Nikkiso-KSB GmbH i.L., Pegnitz	Germany		50.00	50.00		–	–
	International							
87	KSB MOTOR TEKNOLOJİLERİ SANAYİ VE TİCARET ANONİM ŞİRKETİ, Ankara	Turkey	P	55.00	55.00	32	106	33
88	KSB Pumps Arabia Ltd., Riyadh	Saudi Arabia	S	50.00	50.00	15	17,949	– 755
89	KSB Service LLC, Abu Dhabi	U.A.E.	S	49.00	49.00		7,933	456
90	Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd., Shanghai	China	P	45.00	45.00		30,622	1,032

Associates (national and international)

Cons. No.	Name and seat	Country	Activ-ity*	Capital share in %	Group share of capital in %	Held by No.	Equity** € thousands	Net profit / loss for the year** € thousands
	International							
91	Motori Sommersi Riavvolgibili S.r.l., Cedegolo	Italy		25.00	25.00		5,506	3,007

* P = Production, S = Sales, SVC = Service, H = Holding
** Data according to latest annual financial statements under IFRS

Companies not consolidated because of immateriality – Affiliates (national and international)

Cons. No.	Name and seat	Country	Activ-ity*	Capital share in %	Group share of capital in %	Held by No.	Equity** € thousands	Net profit / loss for the year** € thousands	
	National								
92	FluidPartner GmbH, Stein	Germany	SVC	51.00	51.00	69	11	2	■
	International								
93	KSB Algérie Eurl, Bordj el Kifane (Alger)	Algeria	S	100.00	100.00	15	1,236	281	
94	KSB Čerpadlá a Armatúry, s.r.o., Bratislava	Slovakia	S	100.00	100.00		346	– 14	
95	KSB Colombia SAS, Funza (Cundinamarca)	Colombia	S	100.00	100.00	15	531	216	
96	KSB Perú S.A., Lurín	Peru	S	100.00	100.00		1,455	143	
97	KSB Pumpe i Armature d.o.o. Beograd, Belgrade	Serbia	S	100.00	100.00	33	149	13	
98	KSB pumpe i armature d.o.o., Rakov Potok	Croatia	S	100.00	100.00	33	202	– 2	
99	KSB ZAMBIA LIMITED, Kitwe	Zambia	SVC	80.00	80.00	35	11	– 24	
100	Techni Pompe Service Maroc (TPSM), Casablanca	Morocco	SVC	100.00	100.00	39	– 563	– 6	
101	TOO "KSB Kazakhstan", Almaty	Kazakhstan	S	100.00	100.00	9	202	29	
102	KSB PUMPS AND VALVES LIMITED, Nairobi	Kenya	S	100.00	100.00	35	–	0	

* P = Production, S = Sales, SVC = Service, H = Holding
** Data according to latest annual financial statements under IFRS
■ Prior-period figures

Supervisory Board

Dr Bernd Flohr, Dipl.-Kfm., Dipl.-Soz., Geislingen
Former Executive Board Member of WMF AG (Chair)

Alois Lautner, Lathe Operator, Kirchenthumbach
Deputy Chair of the Pegnitz Works Council of KSB SE & Co. KGaA
(Member and Deputy Chair of the Supervisory Board until 31 Dec. 2019)

René Klotz, NC Programmer, Heßheim
Chair of the General Works Council of KSB SE & Co. KGaA and KSB Service GmbH
(Deputy Chair of the Supervisory Board since 17 Jan. 2020)

Claudia Augustin, Office Management Assistant, Pegnitz
Deputy Chair of the Pegnitz Works Council of KSB SE & Co. KGaA

Klaus Burchards, Dipl.-Kfm., Stuttgart
Independent Auditor

Arturo Esquinca, Dipl.-Chemieing., MBA, Forch, Switzerland
M&A and Strategy Consultant

Klaus Kühborth, Dipl.-Wirtsch.-Ing., Frankenthal
Managing Director of Johannes und Jacob Klein GmbH

Birgit Mohme, Industrial Business Management Assistant, Frankenthal
2. Delegate of IG Metall Ludwigshafen / Frankenthal

Thomas Pabst, Dipl.-Ing., Freinsheim
Head of the Energy market segment of KSB SE & Co. KGaA

Prof. Dr.-Ing. Corinna Salander, Dipl.-Physikerin, Dresden
Director of the German Centre for Railway Traffic Research at Eisenbahn-Bundesamt [Federal Railway Authority]

Harald Schöberl, Industrial Business Management Assistant, Plech
Full-time Member of the Pegnitz Works Council of KSB SE & Co. KGaA

Volker Seidel, Electrical and Electronics Installer, Münchberg
1. Delegate of IG Metall Ostoberfranken

Gabriele Sommer, Dipl.-Geol., Wörthsee[1)]
Global Head of Human Resources TÜV SÜD AG

Mandates of KSB Supervisory Board members on the Supervisory Board / Board of Directors of other companies

1) TÜV SÜD Industrie Service GmbH, Munich, Germany
TÜV SÜD Auto Service GmbH, Stuttgart, Germany

Legal Representatives

Managing Directors of KSB Management SE

Dr Stephan Jörg Timmermann, CEO, Augsburg
Strategy, Human Resources, Communications, Internal Audits, Legal & Compliance, Patents & Trademarks, as well as the Region Europe

Area of responsibility since 10 February 2020: Spokesperson for Management. Strategy, Human Resources, Communications, Internal Audits, Legal & Compliance, Patents & Trademarks, the Mining and Valves market segments, as well as the Regions Europe West and Americas North

Dr Stephan Bross, Freinsheim[1)]
Global Operations, Research and Development / Technology / Complexity, Digital Transformation, Committees and Associations, the Corporate Units Pumps and Valves, as well as the Region Asia West and the Region Middle East / Africa

Area of responsibility since 10 February 2020: Global Operations, Research and Development, Technology and Processes, Digital Transformation, Committees and Associations, the Energy and Chemicals / Petrochemicals market segments, as well as the Regions Asia South / Pacific and Asia West

Ralf Kannefass, Regensburg[2)]
Sales and Marketing, Service, Project Management, as well as the Regions Asia North and Asia South / Pacific

Area of responsibility since 10 February 2020: Sales and Marketing, as well as the Water / Waste Water, General Industry, Building Services and KSB SupremeServ market segments, and the Regions Europe North / East, Asia North, Middle East / Africa and Americas South

Dr Matthias Schmitz, Frankenthal[3)]
Taxes, Controlling KSB Group, Finance / Accounting, Coordination Shared Services, Information Technology and Procurement, as well as the Regions Americas North and Americas South

Area of responsibility since 10 February 2020: Taxes, Controlling KSB Group, Finance, Accounting, Coordination Shared Services, Information Technology and Procurement, as well as the Region Europe Central.

Mandates of the Managing Directors on the Board of Directors of KSB companies

1) KSB Pumps (S.A.) (Pty) Ltd., Germiston (Johannesburg), South Africa
KSB Pumps and Valves (Pty) Ltd., Germiston (Johannesburg), South Africa
KSB Limited, Pimpri (Pune), India
KSB MOTOR TEKNOLOJİLERİ SANAYİ VE TİCARET ANONİM ŞİRKETİ, Ankara, Turkey

2) SISTO Armaturen S.A., Echternach, Luxembourg
KSB Shanghai Pump Co., Ltd., Shanghai, China
Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd., Shanghai, China

3) KSB FINANZ S.A., Echternach, Luxembourg
KSB Finance Nederland B.V., Zwanenburg, The Netherlands
Canadian Kay Pump Limited, Mississauga / Ontario, Canada
KSB America Corporation, Richmond / Virginia, USA
KSB Limited, Pimpri (Pune), India
KSB Shanghai Pump Co., Ltd., Shanghai, China
Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd., Shanghai, China
GIW Industries, Inc., Grovetown / Georgia, USA
KSB BRASIL LTDA., Várzea Paulista, Brazil
KSB Pumps Arabia Ltd., Riyadh, Saudi Arabia

Members of the Administrative Board of KSB Management SE

Oswald Bubel, Chair, Saarbrücken
Managing Director of Hager Electro GmbH & Co. KG

Monika Kühborth, Deputy Chair, Homburg
Managing Director of Klein, Schanzlin & Becker GmbH

Günther Koch, Ludwigshafen

Dr Harald Schwager, Speyer[1)]
Deputy Chairman of the Executive Board of Evonik Industries AG

Andrea Teutenberg, Berlin[2)]
Managing Director of Orange12 GmbH

Mandates on statutory Supervisory Boards

1) Evonik Nutrition & Care GmbH, Essen, Germany (Chair)
Evonik Resource Efficiency GmbH, Essen, Germany (Chair)
Evonik Performance Materials GmbH, Essen, Germany (Chair)

2) Bauer AG, Schrobenhausen, Germany

Proposal on the Appropriation of the Net Retained Earnings of KSB SE & Co. KGaA

We will propose to the Annual General Meeting on 13 May 2020 that the net retained earnings of € 67,363,764.33 of KSB SE & Co. KGaA be appropriated as follows:

Proposal for the appropriation of net retained earnings

€	
Dividend of € 8.50 per ordinary no-par-value share	7,536,227.50
Dividend of € 8.76 per preference no-par-value share	7,574,877.12
Total	**15,111,104.62**
Carried forward to new account	**52,252,659.71**
	67,363,764.33

Frankenthal, 12 March 2020

KSB Management SE

The Managing Directors

The annual financial statements of KSB SE & Co. KGaA were prepared in accordance with German accounting principles. They are published in the *Bundesanzeiger* [German Federal Gazette]. The annual financial statements can also be downloaded from our web site at www.ksb.com, or sent in print form on request.

4

General Information

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the combined management report for the Group and KSB SE & Co. KGaA includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Frankenthal, 12 March 2020

KSB Management SE

The Managing Directors

Independent Auditor´s Report

To KSB SE & Co. KGaA, Frankenthal

Report on the audit of the consolidated financial statements and of the group management report

AUDIT OPINION

We have audited the consolidated financial statements of KSB SE & Co. KGaA, Frankenthal, and its subsidiaries (the Group), which comprise the statement of financial position as at 31 December 2019, and the statement of comprehensive income, statement of changes in equity and statement of cash flows for the financial year from 1 January to 31 December 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of KSB SE & Co. KGaA for the financial year from 1 January to 31 December 2019. In accordance with the German legal requirements, we have not audited the content of those parts of the group management report listed in the "Other Information" section of our auditor's report.

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

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2019, and of its financial performance for the financial year from 1 January to 31 December 2019 and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of those parts of the group management report listed in the "Other Information" section of our auditor's report.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

BASIS FOR THE AUDIT OPINIONS

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW. Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

KEY AUDIT MATTERS IN THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2019. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the matters of most significance in our audit were as follows:

❶ Recoverability of goodwill
❷ Accounting treatment of project orders recognized over time
❸ Effects of the first-time application of IFRS 16 on the accounting of leases

Our presentation of these key audit matters has been structured in each case as follows:

① Matter and issue
② Audit approach and findings
③ Reference to further information

Hereinafter we present the key audit matters:

❶ Recoverability of goodwill

① In the Company's consolidated financial statements goodwill amounting in total to EUR 43.1 million is reported under the "Intangible assets" balance sheet item. Goodwill is tested for impairment by the Company once a year or when there are indications of impairment to determine any possible need for write-downs. Impairment testing is carried out at the level of the cash-generating units to which the relevant goodwill is allocated. The carrying amount of the relevant cash-generating unit, including goodwill, is compared with the corresponding recoverable amount in the context of the impairment test. The recoverable amount is generally calculated on the basis of the value in use. The present value of the future cash flows from the respective cash-generating unit normally serves as the basis of valuation. The present values are calculated using discounted cash flow models. For this purpose, the adopted medium-term business plan of the Group forms the starting point which is extrapolated based on assumptions about long-term rates of growth. Expectations relating to future market developments and assumptions about the development of macroeconomic factors are also taken into account. The discount rate used is the weighted average cost of capital for the relevant cash-generating unit. The impairment test determined that no write-downs were necessary. The outcome of this valuation is dependent to a large extent on the estimates made by the executive directors with respect to the future cash inflows from the respective cash-generating unit, on the discount rate used, the rate of growth as well as other assumptions, and is therefore subject to considerable uncertainty. Against this background and due to the complex nature of the valuation, this matter was of particular significance in the context of our audit.

② As part of our audit, we assessed the methodology employed for the purposes of performing the impairment test, among other things. After matching the future cash inflows used for the calculation against the adopted medium-term business plan of the Group, we assessed the appropriateness of the calculation, in particular by reconciling it with general and sector specific market expectations. We also assessed the appropriate consideration of the costs of Group functions. In the knowledge that even relatively small changes in the discount rate applied can have a material impact on the value of the entity calculated using this method, we focused our testing in particular on the parameters used to determine the discount rate applied, and assessed the calculation model. We evaluated the sensitivity analyses performed by the Company, in order to reflect the uncertainty inherent in the projections. Taking into account the information available, we determined that the carrying amounts of the cash-generating units, including the allocated goodwill, were adequately covered by the discounted future cash flows.

Overall, the measurement inputs and assumptions used by the executive directors are in line with our expectations and are also within the ranges considered by us to be reasonable.

③ The Company’s disclosures on goodwill are contained in section IV. “Balance sheet disclosures” note 1 of the notes to the consolidated financial statements.

❷ Accounting treatment of project orders recognized over time

① In the Company's consolidated financial statements revenue totaling EUR 2,383.2 million is reported in the consolidated income statement. The Company has put in place comprehensive systems and processes throughout the Group for the purposes of accurately recognizing and deferring revenue.

Revenue amounting to EUR 717.3 million is attributable to project orders recognized over time and the service business. In the case of project orders, the stage of completion is estimated based on the ratio of costs already incurred to budgeted total costs. IFRS 15 requires estimates and judgments to be made for certain areas, which were assessed for appropriateness in the context of our audit.

In particular, the estimation of the planned total costs of the project orders to be recognized over time and the appropriate allocation of costs incurred to the orders are based on the estimates and assumptions made by the executive directors. Against this background and due to the resulting estimation uncertainties and the complexity of the accounting treatment under Group-wide application of IFRS 15, this matter was of particular significance in the context of our audit.

② As part of our audit, among other things we assessed the processes and controls established by the Group for the recognition of revenue from project orders recognized over time, taking into account the stage of completion. In addition, with respect to project orders recognized over time we examined projects on a sample basis to determine whether they met the requirements for recognizing revenue over time in accordance with IFRS 15. We assessed the estimates and judgments made by the executive directors with respect to the recognition and deferral of revenue for the various business models of the Group com-panies.

Furthermore, we assessed the calculation of percentage of completion and the proportionate recognition of revenue and profit derived from this. In this connection we examined the calculation of both the budgeted total costs and the costs actually incurred. We assessed the progress of the respective projects, among other things based on interviews with project managers and by inspecting project documentation. In addition, we assessed the consistency of the methods used to calculate the costs incurred. We also addressed the inherent audit risk in this audit area by means of audit procedures that were consistently applied throughout the Group.

We were able to satisfy ourselves that the systems, processes and controls in place are appropriate and that the estimates and assumptions made by the executive directors are sufficiently documented and substantiated to ensure that revenue is appropriately accounted for.

③ The Company's disclosures on the accounting treatment of project orders recognized over time are contained in sections III. "Accounting policies", IV. "Notes to the balance sheet", nos. 8 and 13 and V. "Notes to the income statement", no. 14 of the notes to the consolidated financial statements.

❸ Impact of the initial application of IFRS 16 on lease accounting

① In the Company's consolidated financial statements right-of-use assets of EUR 50.1 million and lease liabilities of EUR 47.1 million are reported as of the balance sheet date. The initial application of the new accounting standard on leases (IFRS 16) had material effects on the carrying amounts in the opening balance sheet and subsequent measurement in the financial year. The Company transitioned to IFRS 16 using the modified retrospective approach. The comparative information for prior-year periods was not restated. For the purposes of applying the new IFRS 16, the Company has put in place Group-wide processes to fully and accurately recognize leases. Initial application also necessitated the implementation of a centralized IT system to report leases. The new IFRS 16 requires that the executive directors make estimates and judgments for certain areas, which were assessed for appropriateness in the context of our audit. This concerns in particular estimates regarding the exercise of options impacting the term of the lease. Against this background and due to the complexity of the new requirements of IFRS 16, lease accounting was of particular significance in the context of our audit.

② As part of our audit and with the assistance of our internal specialists from Capital Markets and Accounting Advisory Services and from Risk Assurance Services, among other things we assessed the appropriateness and effectiveness of the processes put in place by the Group to recognize leases. This also applies to the implementation of the centralized IT system to report leases and to the required modifications of existing systems in order to process the transactions. In addition, as part of our audit and with the assistance of our internal specialists we assessed the impact of the initial application of IFRS 16. Together we assessed the implementation work and evaluated the design of the processes set up to report the transactions in accordance with IFRS 16 and of the IT systems in place to support the implementation of the new requirements. We inspected the lease agreements on a test basis, verified the identification of lease components and assessed whether these were fully and accurately recorded in the centralized system newly implemented to report leases. In particular, we interviewed Company employees and inspected the appropriate evidence to assess the estimates regarding the exercise of options impacting the lease term.

We were able to satisfy ourselves that the systems and processes put in place and adapted to IFRS 16 are appropriate. Furthermore, we verified that the estimates and assumptions made by the executive directors are sufficiently documented and substantiated to ensure that leases are appropriately accounted for in accordance with IFRS 16 as applied for the first time.

③ The Company's disclosures on the impact of the initial application of IFRS 16 are contained in section I. "General information on the Group", and on the accounting treatment of leases in sections III. "Accounting policies", IV. "Notes to the balance sheet, nos. 2, 3 and 13, V. "Notes to the income statement", nos. 18 and 19, VII. "Statement of cash flows" and IX. "Other disclosures" of the notes to the consolidated financial statement.

OTHER INFORMATION

The executive directors are responsible for the other information. The other information comprises the following non-audited parts of the group management report:

- the statement on corporate governance pursuant to § 289f HGB and § 315d HGB included in section "Corporate Governance Statement" of the group management report
- the corporate governance report pursuant to No. 3.10 of the German Corporate Governance Code
- the separate non-financial report pursuant to § 289b Abs. 3 HGB and § 315b Abs. 3 HGB

The other information comprises further the remaining parts of the annual report – excluding cross-references to external information – with the exception of the audited consolidated financial statements, the audited group management report and our auditor's report.

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

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

RESPONSIBILITIES OF THE EXECUTIVE DIRECTORS AND THE SUPERVISORY BOARD FOR THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

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

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

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

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

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effective-ness of these systems.

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

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

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.

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

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

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

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

FURTHER INFORMATION PURSUANT TO ARTICLE 10 OF THE EU AUDIT REGULATION

We were elected as group auditor by the annual general meeting on 29 May 2019. We were engaged by the supervisory board on 29 August 2019. We have been the group auditor of KSB SE & Co. KGaA, Frankenthal, without interruption since the financial year 2015.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German public auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Dr. Ulrich Störk.

Mannheim, 12 March 2020

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Dr. Ulrich Störk
Wirtschaftsprüfer

Christina Pöpperl
Wirtschaftsprüferin

Glossary

ABBREVIATIONS

API
American Petroleum Institute

HR
Human Resources

IEA
International Energy Agency

IMO
International Maritime Organisation, a specialised UN agency

IoT
Internet of Things

IWF
International Monetary Fund

VDMA
Verband Deutscher Maschinen- und Anlagenbau e. V.
[Mechanical Engineering Industry Association]

KEY CORPORATE AND TECHNICAL TERMS

Additive Manufacturing
Previously referred to as rapid prototyping: a process which enables rapid and cost-effective production of patterns, samples, prototypes, tools and final products.

Business Innovation Lab
Think tank in which a KSB team develops future-oriented business models for the age of digitalisation

Greenhouse Gas Protocol
Standard for calculating CO_2 and greenhouse gas emissions

International Labour Organisation (ILO)
Specialised United Nations agency responsible for drawing up and overseeing international labour standards and social standards

Sustainable Development Goals
The United Nations' 17 goals for sustainable development

Stakeholders
Groups of people who are directly or indirectly affected by a company's activities; KSB's main stakeholders are customers, suppliers, investors, employees and the public.

UK Modern Slavery Act
British law combating modern slavery, forced labour and human trafficking

UN Global Compact
United Nations initiative for responsible corporate governance based on ten universal principles

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www.ksb.com

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THE GLOBAL COMPACT
WE SUPPORT

As a signatory to the United Nations Global Compact, KSB is committed to endorsing the ten principles of the international community in the areas of human rights, labour standards, environmental protection and anti-corruption.

A print version of the KSB Group's Annual Report is additionally available in German. We also publish German and English versions online in PDF format at
http://annualreport2019.ksb.com .

Climate neutral
Print product
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FSC
www.fsc.org
100%
From well-managed forests

A climate-neutral process was used to produce this Annual Report. This means that the carbon emissions resulting from production were offset through certified climate protection projects.

Group Financial Highlights

BUSINESS DEVELOPMENT AND EARNINGS

		2019	2018	2017	2016	2015
Order intake	€ m	2,453.8	2,303.5	2,265.3	2,156.6	2,261.2
Sales revenue	€ m	2,383.2	2,245.9	2,205.0	2,165.7	2,334.8
Orders on hand	€ m	1,409.3	1,353.9	1,260.8	1,200.6	1,209.7
Earnings before finance income / expense, income tax, depreciation and amortisation (EBITDA)	€ m	195.5	179.2	186.9	162.6	176.5
Earnings before finance income / expense and income tax (EBIT)	€ m	113.6	74.7	116.4*	90.0*	103.7*
Earnings before income tax (EBT)	€ m	103.4	65.6	104.2	74.6	93.4
Earnings after income tax	€ m	58.5	23.9	52.1	47.8	52.2
Free cash flow (cash flows from operating activities + cash flows from investing activities)	€ m	70.9	– 29.1	112.5	20.5	82.1

BALANCE SHEET

		2019	2018	2017	2016	2015
Balance sheet total	€ m	2,327.0	2,242.2	2,253.4	2,350.2	2,291.1
Capital expenditure	€ m	107.0	79.6	101.9	82.2	82.8
Depreciation and amortisation	€ m	81.9	104.5	70.6	72.6	72.8
Net financial position	€ m	246.3**	255.0	288.0	259.5	211.3
Equity (incl. non-controlling interests)	€ m	862.6	856.8	885.4	890.3	870.2
Equity ratio (incl. non-controlling interests)	%	37.1	38.2	39.3	37.9	38.0

PROFITABILITY

		2019	2018	2017	2016	2015
EBT margin (sales revenue in relation to EBT)	%	4.3	2.9	4.7	3.5	4.0
EBIT margin (sales revenue in relation to EBIT)	%	4.8	3.3	5.3	4.2	4.4

EMPLOYEES

		2019	2018	2017	2016	2015
Number of employees at 31 Dec.		15,645	15,482#	15,455	15,572	16,196

SHARES

		2019	2018	2017	2016	2015
Market capitalisation at 31 Dec.	€ m	536.1	491.3	884.4	637.7	659.2
Earnings per ordinary share (EPS)	€	24.47	6.26	21.10	18.68	22.30
Earnings per preference share (EPS)	€	24.73	6.64	21.36	18.94	22.56
Dividend per ordinary no-par-value share	€	8.50	3.00	7.50	5.50	5.50
Dividend per preference no-par-value share	€	8.76	3.38	7.76	5.76	5.76

* Restated retrospectively due to new definition of EBIT as earnings before finance income / expense and income tax (previously earnings before interest and income tax)

** 2019 amount includes lease liabilities of € 47.1 million from the first-time adoption of IFRS 16.

New definition of employee counting method in 2019 (2018 figures restated retrospectively; previous years are presented without adjustments)

Further information is provided in the Notes to the consolidated financial statements.

Global Presence

Backed up by production and assembly sites around the world, as well as a tight-knit sales and service network, KSB staff are always close at hand.

EUROPE

- □ Austria
- □ Belarus
- □ Belgium
- □ Croatia
- □ Czech Republic
- □ Estonia
- □ Finland
- ■ France
- ■ Germany
- □ Hungary
- ■ Italy
- □ Latvia
- ■ Luxembourg
- □ Norway
- □ Poland
- □ Portugal
- □ Russia
- □ Serbia
- □ Slovakia
- □ Slovenia
- ■ Spain
- □ Sweden
- □ Switzerland
- ■ The Netherlands
- □ Ukraine
- □ United Kingdom

MIDDLE EAST / AFRICA

- □ Algeria
- □ Egypt
- □ Ghana
- □ Kenya
- □ Morocco
- □ Oman
- □ Qatar
- □ Saudi Arabia
- ■ South Africa
- ■ Turkey
- □ United Arab Emirates
- □ Zambia

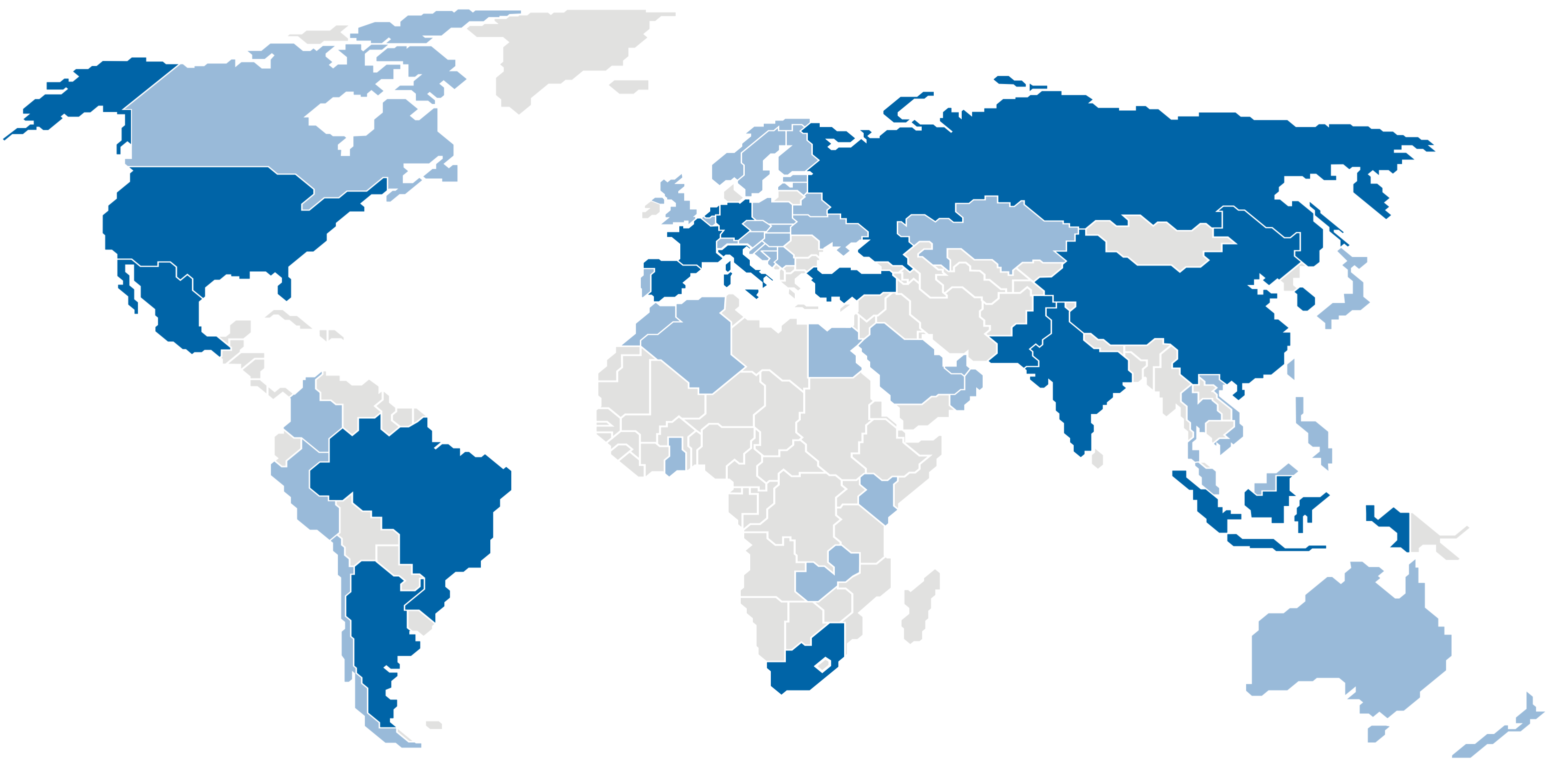
ASIA / PACIFIC

- □ Australia
- ■ China
- ■ India
- ■ Indonesia
- □ Japan
- □ Kazakhstan
- □ Malaysia
- □ New Zealand
- ■ Pakistan
- □ Philippines
- □ Singapore
- ■ South Korea
- □ Taiwan
- □ Thailand
- □ Vietnam

AMERICAS

- ■ Argentina
- ■ Brazil
- □ Canada
- □ Chile
- □ Columbia
- ■ Mexico
- □ Peru
- ■ USA

■ KSB production / assembly sites
□ KSB sales / service sites



Financial Calendar

26 March 2020
Financial press conference
10:00, Frankenthal, Germany

30 April 2020
Interim report
January – March 2020

13 August 2020
Half-year financial report
January – June 2020

12 November 2020
Interim report
January – September 2020

28 January 2021
Preliminary report on
financial year 2020

You will find the latest information on
the 2020 Annual General Meeting at:
www.ksb.com/agm

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