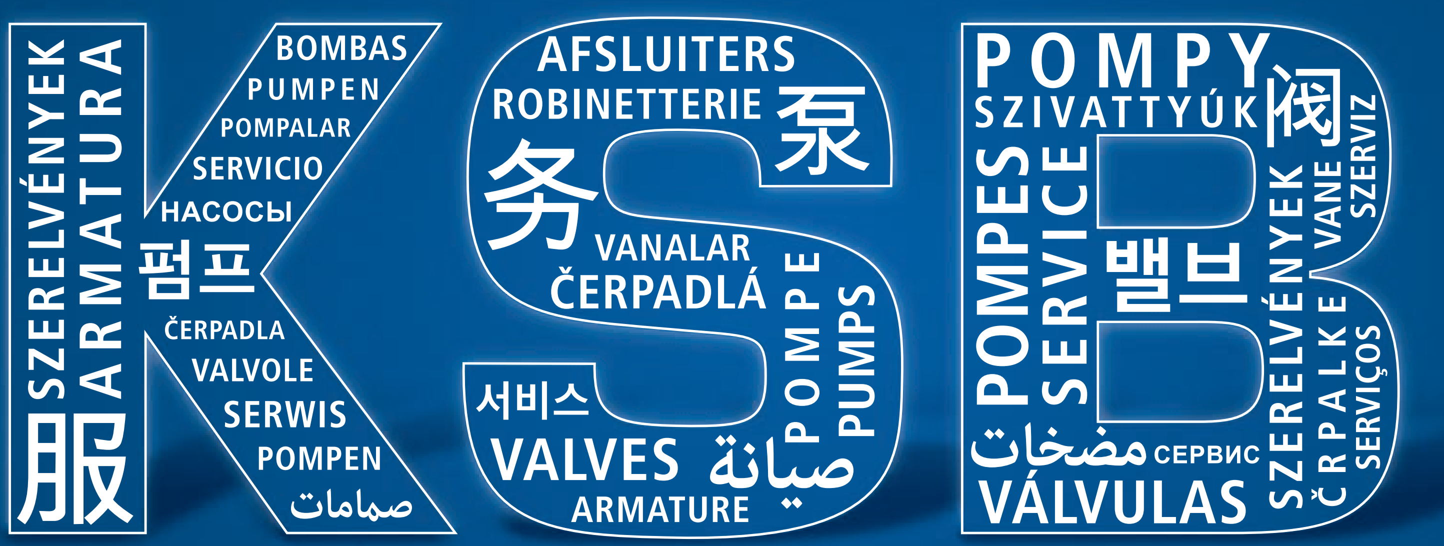
KSB Group

Annual Report 2018



KSB Profile: KSB is a leading supplier of pumps, valves and related support services. 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, 170 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.

Group Financial Highlights

BUSINESS DEVELOPMENT AND EARNINGS

		2018	2017	2016	2015	2014
Order intake	€ m	2,303.5	2,265.3	2,156.6	2,261.2	2,321.2
Sales revenue	€ m	2,245.9	2,205.0	2,165.7	2,334.8	2,181.7
Orders on hand	€ m	1,353.9	1,260.8	1,200.6	1,209.7	1,283.3
Earnings before finance income / expense, income tax, depreciation and amortisation (EBITDA)	€ m	179.2	186.9	162.6	176.5	155.6
Earnings before finance income / expense and income tax (EBIT)	€ m	74.7	116.4*	90.0*	103.7*	89.4#*
Earnings before income tax (EBT)	€ m	65.6	104.2	74.6	93.4	72.8#
Earnings after income tax	€ m	23.9	52.1	47.8	52.2	46.3#
Free cash flow (cash flows from operating activities + cash flows from investing activities)	€ m	– 29.1	112.5	20.5	82.1	– 9.3

BALANCE SHEET

		2018	2017	2016	2015	2014
Balance sheet total	€ m	2,242.2	2,253.4	2,350.2	2,291.1	2,277.9#
Capital expenditure	€ m	79.6	101.9	82.2	82.8	85.1
Depreciation and amortisation	€ m	104.5	70.6	72.6	72.8	66.2
Net financial position	€ m	255.0	288.0	259.5	211.3	185.5
Equity (incl. non-controlling interests)	€ m	856.8	885.4	890.3	870.2	819.7#
Equity ratio (incl. non-controlling interests)	%	38.2	39.3	37.9	38.0	36.0#

PROFITABILITY

		2018	2017	2016	2015	2014
EBT margin (return on sales)	%	2.9	4.7	3.5	4.0	3.3
EBIT margin (sales revenue in relation to EBIT)	%	3.3	5.3	4.2	4.4	4.1

EMPLOYEES

		2018	2017	2016	2015	2014
Number of employees at 31 Dec.		15,713	15,455	15,572	16,196	16,309

SHARES

		2018	2017	2016	2015	2014
Market capitalisation at 31 Dec.	€ m	491.3	884.4	637.7	659.2	735.7
Earnings per ordinary no-par-value share (EPS)	€	6.26	21.10	18.68	22.30	21.97#
Earnings per preference no-par-value share (EPS)	€	6.64	21.36	18.94	22.56	22.23#
Dividend per ordinary no-par-value share	€	3.00	7.50	5.50	5.50	8.50
Dividend per preference no-par-value share	€	3.38	7.76	5.76	5.76	8.76

In the current year, the following key indicators were included in the overview: orders on hand, earnings before finance income / expense, income tax, depreciation and amortisation, free cash flow, net financial position and EBIT margin.
Cash flow, fixed assets, current assets, return on equity, return on capital employed and staff costs are no longer presented as key indicators.

Restated under IAS 8
* Restated retrospectively due to new definition of EBIT as earnings before finance income / expense and income tax (previously earnings before interest and income tax)
Further information is provided in the Notes to the consolidated financial statements.

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 3,000 service specialists worldwide offering inspection, servicing, maintenance, repairs and consultancy services. The most important fields of application for our products are:

GENERAL INDUSTRY

OIL & GAS

WATER / WASTE WATER

ENERGY

MINING

CONSTRUCTION / BUILDING SERVICES

KSB SupremeServ

The KSB SupremeServ brand is driven by the ambition to offer our customers the best quality service worldwide, including the prompt provision of all required spare parts. We develop innovative services based on digital technologies that increase the reliability and efficiency of systems for fluid transport.

Global Reach. KSB is a leading supplier of pumps, valves and related support services – around the world and in a wide variety of sectors. Whether used in industry and power plant engineering, water and waste water management, building services or mining: Our high-quality products and bespoke services support our customers in making everyday life easier for people all over the world. KSB is thus further expanding its leading position in attractive markets – for sustained profitable growth.

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Management and Issues 2018

Ralf Kannefass

In his role as Managing Director of KSB Management SE, Ralf Kannefass is responsible for Sales and Service worldwide and for the development of the KSB SupremeServ brand.

Dr Matthias Schmitz

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

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.

Dr Stephan Bross

As Managing Director of KSB Management SE, Stephan Bross is responsible for Technology as well as the Corporate Unit Pumps and the Corporate Unit Valves. His areas of responsibility also include Production.

Dr Stephan Timmermann

Dear Shareholders and Business Partners,

2018 was the first year in which we, the new Management team of KSB, took charge of shaping the future of our company. Unfortunately the earnings achieved by our company remained significantly below the targets we had set ourselves and were also very disappointing with regard to our performance for shareholders. However, in view of the political and economic environment and the measures initiated, we are generally satisfied with the 2018 financial year. KSB's order intake increased by € 38.2 million to € 2,303.5 million and sales revenue by € 41.0 million to € 2,245.9 million. Without currency translation effects, our order intake of € 2,399.5 million and sales revenue of € 2,338.5 million would have been significantly higher than in 2017 and in line with our forecasts.

2018 was also the year in which we had to make high provisions and write-downs to account for both impairment risks and and current political developments. In addition to the previously reported provisions for a large project in Great Britain, these included impairment losses on part of our activities in South Korea and France and provisions for the current Iran business.

We are charting a course for sustainable growth.

We are confident that by sharpening our focus as a company, we will be able to achieve long-term growth. Therefore, we are currently analysing our markets with the objective of better aligning our product portfolio with the segments that offer us the greatest potential for profitable growth. On this basis, we will develop an ambitious structural and growth programme in order to sustainably increase our profitability.

This includes measures for improving our efficiency and quality as well as for modernising the image and appearance of our locations. By investing in our infrastructure, we are also making ourselves a more attractive employer.

Our aim is for 2019 to be a year in which we can make further progress with our financial figures.

We are improving structures and processes.

We will initiate a series of measures to sustainably improve our cost situation. To this end, we will be continuing to consolidate our production network, streamline our production units and reduce the large variety of type series. Our goal is to scale down the high complexity of our product portfolio in order to cut costs, however without significantly limiting what we offer our customers.

In the field of electronic sales, we already have a Web Shop which sets the standard in our industry. A 70-strong e-sales team is currently working on implementing an end-to-end sales process for our standard products which will cover the entire customer journey. From summer 2019, we will then have an integrated platform solution with product catalogues and configurators allowing our customers to easily and conveniently select and order their products, all in a digital environment. This system will put us in a leading position ahead of our competitors in the area of electronic sales.

We offer innovative services.

Under the KSB SupremeServ brand name, we are taking our global service to a new professional level that goes far beyond the standard services of inspection, maintenance and repair while placing a greater strategic focus on our spare parts business. Retrofit measures for high energy savings, reverse engineering solutions for efficiently reproducing components without design drawings, additive manufacturing of spare parts via 3D printing and data glasses for remote guidance with service work – these methods and processes are a testimony to our position as technology leader for activities in the Service segment. This is what our our new brand name, KSB SupremeServ, stands for.

Our Business Innovation Lab, which was ranked by a German business magazine as one of the “Best German digital labs” in 2017, supports KSB SupremeServ with new product ideas and business models. Digital technologies and smart sensors provide the basis for our customers to check the status of their pumps and valves using cloud-based system data. They can then make informed decisions about scheduling professional service work and replacing spare parts.

We work with the best worldwide.

The KSB brand stands for technical excellence, but it is above all our employees that play the decisive role in customer satisfaction. Highly qualified and committed, they ensure that new customers become regular customers – and remain so. By pursuing this goal, we are stepping up our commitment to strengthening the professional qualifications and training of our employees around the world. At the same time, we are creating an inspiring and motivating work environment. This will also help us to recruit young skilled personnel to meet the challenges of the future. In 2018, our training programme once again resulted in us being ranked as one of “Germany’s best training companies” among 600 training companies.

We intend to conquer the market with the best employees and the best products. Combined with our new growth programme, over the coming years we will expand our business worldwide and increase profitability. We would like to take this opportunity to show you – our shareholders and business partners – that it is clearly worth investing in KSB. We are confident that the measures initiated will ensure that our company continues to develop successfully and sustainably.

Dr Stephan Timmermann, CEO

Report of the Supervisory Board

Dr Bernd Flohr (Chairman of the Supervisory Board)

Following the conversion of KSB Aktiengesellschaft into a partnership limited by shares (KGaA) [*Kommanditgesellschaft auf Aktien*], which was decided at the Annual General Meeting on 10 May 2017 and became effective on 17 January 2018, KSB SE & Co. KGaA, Frankenthal (Pfalz), (hereinafter referred to as the "company" or "KSB") can now look back on almost an entire year in the new legal form. The management is the responsibility of the general partner, KSB Management SE, Frankenthal (Pfalz), acting through its Managing Directors. After the change in legal form, the Supervisory Board continued to extensively monitor the position and development of the company. We performed our 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 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, corporate planning and strategy via written and oral reports prepared regularly and on an ad hoc basis in a comprehensive and timely manner. We met regularly to discuss selected issues without the Management.

We discussed all business transactions which 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. The Supervisory Board involved external consultants in the treatment and assessment of special matters, and all decisions made by the Supervisory Board were based on thorough review and consultation. 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 a regular exchange of information with the Administrative Board of KSB Management SE, including but not limited to its Chairman, on current business developments and significant 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 some of 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 the Supervisory Board members Klaus Kühborth and Monika Kühborth within the scope of the relations covering the supply of services of KSB AG to its majority shareholder, Johannes und Jacob Klein GmbH, Frankenthal (Pfalz), as well as to other related parties, as discussed in the previous year's report, have been disclosed to the Supervisory Board; both 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 or the Management that would have been subject to disclosure in the Report of the Supervisory Board.

Main Focus of Work in the Supervisory Board Plenary Sessions

In the 2018 financial year ("year under review"), four regular Supervisory Board meetings and a constituent meeting were held; in addition, the Supervisory Board met twice to discuss special topics. The performance of the company and the KSB Group was the subject of regular discussions, with a particular focus on their business and employment situation, major investment projects and the strategic direction.

Key topics of our consultations with the Managing Directors were the analysis of business developments in the different segments and regions and the company's economic position. Suitable measures to improve the net assets, financial position and results of operations and risk provisioning for major projects, and the growth initiatives presented by the Managing Directors were discussed. The Supervisory Board received regular reports on measures to increase efficiency, including expanding the group-wide shared services activities and harmonising the international accounting processes. The Managing Directors also provided information on the development of ongoing major investments in our production facilities at various sites, and on their completion, where applicable. For example, work on the second expansion phase of our new factory in Shirwal, India, is progressing well and the halls completed in the first expansion phase are already showing high capacity utilisation levels. The Supervisory Board was also involved in the decision on the acquisition of the US service company Dubric; the primary aim is that it will contribute to a stronger presence for the KSB range of services in the American Midwest. In line with the recommendations and suggestions of the German Corporate Governance Code, we looked into fundamental aspects of good corporate governance, which in the year under review included assessing the efficiency of the work of the Supervisory Board. Special emphasis was placed on the further development of our corporate culture; there are various initiatives which aim to help ensure that KSB is in a good position in the challenging competition for specialists and young talent.

Topics discussed at the individual Supervisory Board meetings included the following:

The meeting in **March 2018** focused on the audit and approval of the annual financial statements for the 2017 financial year, including the management report and the combined separate non-financial report for KSB and the KSB Group in accordance with Sections 315b, 315c and 289c to 289e HGB [*Handelsgesetzbuch* – German Commercial Code] (“non-financial report”); the auditors 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 2017 financial year.

In **May 2018**, we consulted on the current business situation and discussed in detail the risk provisioning for a major project in Great Britain which includes the supply of pumps for a deep waste water tunnel in London. The agenda included the progress on preparations for the certification of a newly developed large pump for the Chinese energy market and the potential for follow-up orders. A successful market launch for this kind of pump would strengthen KSB’s position there on a sustainable basis. Given the increasing significance of digital technologies, the Supervisory Board was also informed about the business models which have already been successfully implemented by KSB, and promising future opportunities.

The **September meeting** of the Supervisory Board was held at the Pegnitz site in Bavaria, Germany. The site manager and the Managing Directors reported on the financial situation at the factory there. We were able to gain our own impressions of the recent investments to modernise the foundry and of other production facilities at the site, which confirmed the high level of technical development of the plant. Our valves business was another subject of extensive discussion, as this market is much more fragmented than that for pumps. The planned project to review the company’s strategic direction, which will come into focus in the current 2019 financial year, was also discussed. The agenda for the September meeting also included the concept for the review of the efficiency of the Supervisory Board’s work, in the form of a self-evaluation which was subsequently implemented.

As well as the report on specific measures with impact on income in the 2018 financial year, the **December meeting** focused on planning for the 2019 financial year. The ways in which KSB can achieve the planned growth and increase profitability were presented in detail by the Managing Directors, including the basic methodological and strategic considerations.

In the **two special meetings** of the Supervisory Board, in particular, we covered the status on reviewing the company’s supply of services to its majority shareholder and other related parties. The relevant issues were clarified with the assistance of external solicitors and tax consultants. After preparation by the Audit Committee, they supported the Supervisory Board with the in-depth consultation and mandatory review of potential claims by the company and their assertion. Significant compensation payments for services which were not sufficiently remunerated were demanded from the relevant recipients of the services, and these were also paid.

We additionally decided to assert claims against individual former members of the Board of Management and have taken the necessary steps to do this.

Main Focus of Work in the Committees

In order to perform 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 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** prepared proposals for the appointment of shareholder representatives to the Supervisory Board, for example the Supervisory Board's nominations for the election of Supervisory Board members by last year's Annual General Meeting. It met once during the year under review. In looking for and evaluating suitable candidates with the requisite expertise and experience of the industry, long-term succession planning is a key factor.

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

CORPORATE DEVELOPMENT COMMITTEE
Until 31 Jan. 2018
Chairman: Oswald Bubel
From 21 March 2018
Klaus Kühborth
Meetings: 4

NOMINATION COMMITTEE:
Dr Bernd Flohr,
Klaus Kühborth
Meetings: 1

PERSONNEL COMMITTEE
Chairman: Dr Bernd Flohr
Meetings: 3

AUDIT COMMITTEE:
Chairman: Klaus Burchards
Meetings: 9

The **Corporate Development Committee** deals with the strategic development in the fields of technology, production and sales, among other things. It had four meetings in the year under review. The opportunities presented by digitalisation were discussed in depth with a view to establishing and expanding relevant business models in order to leverage the potential with our customers and along our own value creation chain. Against the backdrop of the continued relevance of energy efficiency, the Committee dealt with drive technology and the increasing use of mechatronic solutions. The agenda also included considerations on the flexible use of manufacturing capacities so far reserved for serving the energy market. There was also extensive discussion of special sales initiatives in individual sales markets. These include the food and beverage industries, which have been recording high rates of growth. The pumps and valves employed in the production facilities in these industries have to comply with strict hygiene requirements and allow gentle transport of fluids. The Committee also heard reports on current strategic developments. The Managing Directors and the managers of the specialist departments responsible regularly attended the Committee meetings.

The **Personnel Committee** held three meetings in the year under review. It focuses on subjects and challenges relating to Human Resources activities within the Group. It also decides on the approval of any internal transactions with KSB Management SE, its Administrative Board members and / or its Managing Directors, on the consent to other activities of these persons, the granting of loans to them and on any matters related to the remuneration of the Supervisory Board members. In the year under review, the Committee discussed with the specialist department responsible the plan for and the approach to the group-wide introduction of personnel administration and management software as well as measures to further improve the corporate culture and employer attractiveness. It also reviewed and approved agreements for the provision and billing of services by the company to KSB Management SE.

The nine 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 2017 annual and consolidated financial statements and the relevant audit reports submitted by the auditors. The 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. The Committee also discussed the half-year financial report for the year under review with the Managing Directors. 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 commissioned the auditors with auditing the annual and consolidated financial statements for the 2018 financial year and defined specific key areas for the audit. The declaration of independence by the auditors was obtained in accordance with the recommendations of the German Corporate Governance Code (Section 7.2.1), and the auditors' continued independence and performance of non-audit services were monitored. The Committee also focused on monitoring accounting, the accounting process, the risk management system – taking into account the relevant reports from Internal Audits – and the effectiveness of the internal control and auditing system, including compliance and the auditing of the annual financial statements. In this context, the Committee dealt in detail with the company's supply of services to its majority shareholder and other related parties and prepared decisions in this respect to be put forward to the Supervisory Board. The agenda also included projects with a material impact on the net assets, financial position and results of operations as well as measures to increase efficiency.

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 KSB in accordance with Section 3.10 of the German Corporate Governance Code as part of the Corporate Governance Statement pursuant to Sections 289f (2 and 3) and 315d HGB. On 13 March 2019 they issued a joint updated Statement of Compliance in accordance with Section 161 AktG [*Aktiengesetz* – German Public Companies Act] and made it permanently available to shareholders on the company's web site. The company complied with the German Corporate Governance Code's recommendations subject to a few justified exceptions.

Audit of the 2018 Annual and Consolidated Financial Statements

The Supervisory Board examined the annual financial statements and the management report of KSB SE & Co. KGaA for the year ended 31 December 2018, which were prepared in accordance with the provisions of the *Handelsgesetzbuch* (HGB), as well as the consolidated financial statements and the Group management report for the year ended 31 December 2018, which were prepared in accordance with the International Financial Reporting Standards (IFRSs), and the proposal by the general partner on the appropriation of the net retained earnings. This also applies to the non-financial report.

PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, based in Frankfurt am Main with an office in Mannheim, audited the annual financial statements and the management report of KSB SE & Co. KGaA for the year ended 31 December 2018, as well as the consolidated financial statements and the Group management report for the year ended 31 December 2018, and issued an unqualified opinion for each. 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 and property, plant and equipment in the consolidated financial statements as well as the reporting on and presentation of transactions with related parties in the single-entity financial statements. The non-financial report was reviewed. The auditors reported on their findings on these key audit areas 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, especially on 13 March 2019, as well as in the

Supervisory Board plenary session on 20 March 2019, 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 non-financial report. In accordance with the recommendation of the Audit Committee, the Supervisory Board approved the annual 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 reduction of the dividend to € 3.00 per ordinary no-par-value share and € 3.38 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.

Dependent Company Report

The general partner was obliged to produce a dependent company report in accordance with Section 312 AktG until the new legal form became effective on 17 January 2018. This obligation no longer applies for the period starting on the effective date of the change of legal form. However, KSB decided to prepare this report beyond the statutory period for the full 2018 financial year in order to review and document the effectiveness of the measures taken in relation to business with dependent companies. The report was reviewed by the auditors, who issued the following unqualified opinion:

"On completion of our audit and assessment in accordance with professional standards, we confirm that

1. The actual amounts and disclosures in the report are correct.
2. The consideration paid by the company for the transactions listed in the report was not inappropriately high."

The report of the general partner and the audit report were provided in good time to all members of the Supervisory Board and were also discussed by the Audit Committee and in plenary sessions. The auditors attended the meetings of both bodies, reported on the material findings of the audit and were available to provide additional information. The Supervisory Board concurs with the auditors' findings. Both the recommendation by the Audit Committee and the final results of the Supervisory Board plenary session's examination did not give rise to any objections to the dependent company report prepared by the general partner and to the statement by the general partner at the end of the dependent company report.

Changes in the Supervisory Board and the Management

In the year under review, Monika Kühborth and Oswald Bubel resigned from their office as members of the Supervisory Board as of the end of January in order to focus on their responsibilities in the Administrative Board of KSB Management SE. In their place, Arturo Esquinca and Prof. Dr.-Ing. Corinna Salander were appointed to the Supervisory Board first by order of the *Amtsgericht* [Local Court] Ludwigshafen am Rhein on 26 February 2018 and then by the Annual General Meeting on 16 May 2018. Following the results of the election of new employee representatives to the Supervisory Board, the Annual General Meeting on 16 May 2016 appointed Thomas Pabst and Claudia Augustin in place of the departing Dr H. Stefan Wiß and Wolfgang Kormann. At a constituent Supervisory Board meeting which immediately followed the Annual General Meeting, Dr Bernd Flohr was confirmed in his office as Chairman of the Supervisory Board and Alois Lautner in his office as Deputy Chairman.

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

Frankenthal, 20 March 2019

The Supervisory Board

A Look Back at 2018

Q1

CHANGE IN COMPANY NAME

KSB AG adopts a new legal form and a new name: KSB SE & Co. KGaA. The partnership limited by shares [*Kommanditgesellschaft auf Aktien* (KGaA)] is operationally managed by four Managing Directors who organisationally belong to KSB Management SE. An Administrative Board sets the corporate and strategic guidelines and monitors their implementation.

PAKISTAN

At its production site in Hassanabdal, KSB upgrades the foundry by adding a fully automatic and environmentally friendly system to increase its melting and moulding capacities.

SERVICE EXPANSION IN THE USA

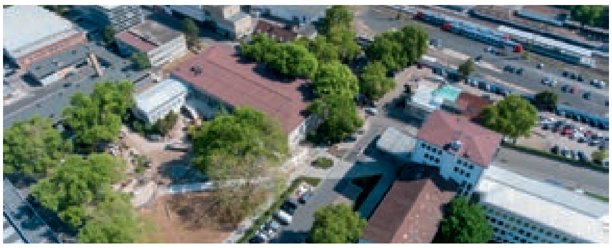
In order to expand its service network, KSB acquires DUBRIC Industries Inc. in the USA. The company's headquarters are located in Comstock Park, Michigan, between Detroit and Chicago. Founded in 1974, the company specialises in support services for pumps and other rotating equipment.

WASTE WATER PUMPS

The demand for pumps for large-scale waste water treatment plants is increasing worldwide. KSB therefore decides to extend its Sewatec types series by adding 15 new sizes. The largest pump set handles 33,000 cubic metres of waste water per second and has a drive rating of over one megawatt.

YOUNG RESEARCHERS

At the KSB training workshop in Frankenthal (Pfalz), 95 school pupils present their projects for "Jugend forscht", a regional competition for young researchers. This is the sixth time that KSB has hosted this event.



INVESTMENTS IN THE GROUP HEADQUARTERS

Extensive refurbishment and restructuring work begins at the Group headquarters in Frankenthal (Pfalz). KSB invests around ten million euros to improve the building structure and create an attractive work environment for employees.

Q2

SERVICE IN RIYADH

KSB Pumps Arabia Ltd., a joint venture of KSB and Abunayyan Holding, inaugurates its new service workshop in Riyadh on the occasion of the company's 25th anniversary. Over the last three years, KSB has invested more than € 10 million in the expansion and renovation of the 600 m² service centre. Its employees service and repair pumps and valves for all areas of application. Many industrial companies are located in the Saudi Arabian capital.

ACCOLADE FOR TRAINING

KSB is ranked one of "Germany's best training companies" for the second time since 2017. A study commissioned by Deutschland Test and the business magazine Focus Money evaluated the training quality of 20,000 companies in different industries. KSB is ranked ninth out of 58 mechanical engineering companies.

ADDITIVE MANUFACTURING

KSB commissions a large metal and laser melting system for additive manufacturing in Pegnitz. Based on specifications in a data record, a laser melts metal powder on a platform, creating components layer by layer. Costing around € 2 million, the system unlocks new design possibilities for materials and foundry technology.

AUGMENTED REALITY SERVICE

At the ACHEMA industry trade fair in Frankfurt, KSB presents a new service concept based on Augmented Reality. The concept involves visualising information in addition to electronic real-time images. Via data glasses, KSB service engineers and operating staff receive remote guidance which enables them to carry out maintenance measures. They can also identify spare parts and initiate the ordering process.

TRADE FAIR FIRST

KSB positions itself at IFAT in Munich with smart products and services for the water and waste water industry. One of the highlights is the KSB Guard pump monitoring system which sends current operating data to the KSB Cloud. This data can then be used to check the status of a pump at any time, for example via an app.

Q3

NEW CHANNELS

To recruit creative minds for a successful digital future, KSB directly addresses prospective applicants via social networks. At a Talent Challenge Day at the beginning of July, KSB tests a new selection process for the first time in which applicants are asked to find creative solutions to interesting problems.

VISIT BY MINISTER

The Minister of Economic Affairs of the State of Rhineland-Palatinate, Dr Volker Wissing, visits the Frankenthal site to find out about digitalisation at KSB. Members of Management also report on how the company is advancing its service portfolio and vocational training.

DIGITAL COMMUNICATION

KSB starts selling Bluetooth gateways. KSB service specialists use these devices for commissioning and service assignments. An app enables wireless communication with variable speed pump systems. Service engineers and operators can use the app to select their required settings and set up alert messages. The KSB product and spare parts catalogue can also be accessed via the app.

MAJOR ORDER

KSB lands an order worth several million euros for 280 high-pressure valves and spare parts for two steam power plants located in the state of Uttar Pradesh, India. The products will be supplied by KSB factories in Pegnitz (Germany), Coimbatore and Mala (both in India). Delivery will be completed by September 2019.

DISASTER RELIEF

After heavy rainfalls, the city of Alappuzha in the South Indian state of Kerala becomes severely flooded. KSB quickly provides help through the provision of water and waste water pumps.

Q4

MAINTENANCE INSPECTION

KSB Service performs comprehensive maintenance inspection work on valves at two German plants of a mineral oil company. The work takes several weeks and is carried out in plants for manufacturing fuels and petrochemical base materials. Maintenance inspections are an important element in the broad range of services offered under the KSB SupremeServ brand.

POLAND

Since its foundation in 1993, KSB Polska Sp. z o.o. has developed into a company employing around 100 staff. The company celebrates its 25th anniversary on 19 October. KSB is represented in Poland with three sales branches and two service centres. A third service centre is currently being set up.

A PUMP OF SUPERLATIVES

KSB wins the contract to produce the world's largest boiler feed pump for the new Pingshan II coal-fired power plant in Huaibei, China. Driven by two steam turbines, the pump set will have an input power of more than 50 megawatts with a maximum pressure of 400 bar. The pump will transport 5,150 cubic metres of water per hour.

US PREMIERE

KSB presents the new KSB SupremeServ service brand at the Turbomachinery & Pump symposium in Houston. The brand name stands for services such as installation, commissioning and inspection, fast spare parts delivery and modernisation.

WELL PUMPS FOR SUDAN

In December KSB delivers the first of over 1,000 well pumps to Sudan. The pump sets will be used for irrigation in agriculture. The slim submersible borehole pumps transport groundwater from deep below ground.

Corporate Social Responsibility

Combined separate non-financial report

We understand sustainability to mean a focus on environmental, economic and social values. As well as the responsible use of resources and the environment, this also includes our responsibility to our employees and our social commitment. We present these issues in a combined separate non-financial report pursuant to Sections 315b and 315c in conjunction with Sections 289b to 289e 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.

The concepts 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 2018. References to information not included in the group management report and any captions in this section represent supplementary information and are not part of the separate non-financial report. PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft performed a limited assurance engagement on the information in this report in accordance with ISAE 3000 (Revised) and issued an independent assurance report.

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.

In accordance with our business model, we aim to supply customers worldwide with high-quality pumps and valves, as well as related support services. 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 composed of selected partners. KSB's business model is presented in our group management report on page 76.

By signing 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. We ask our strategically most important business partners whether and to what extent they use these or comparable standards as a source of orientation.

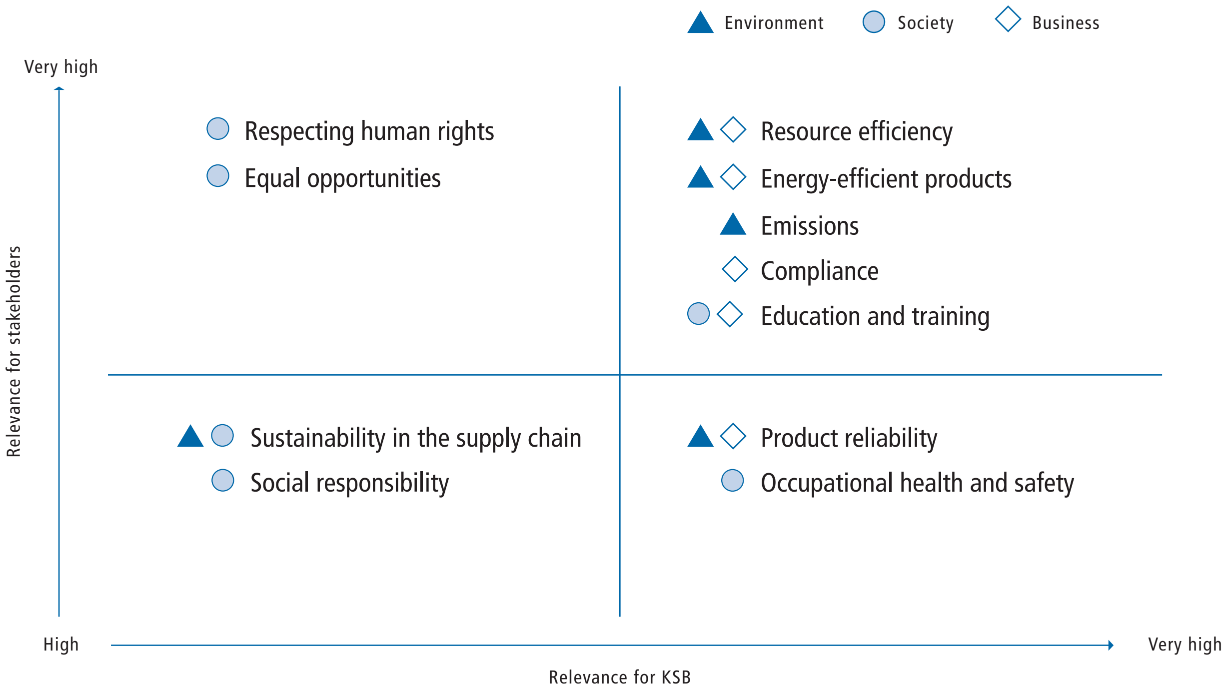
KSB's sustainability principles are binding for all locations and companies of the KSB Group. These principles are set forth in our sustainability policy which applies to the entire Group. A committee chaired by a member of Management regularly reviews progress in these areas. Management also receives 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.

KSB operates a globally integrated management system in order to fulfil the same high standards worldwide with regard to quality, risk, environment, occupational health and safety, and sustainability. The management system is pro-

104

KSB has actively or financially contributed at least € 5,000 each to 104 social projects.

Key sustainability topics for KSB



cess-oriented and complies with the requirements of the international ISO 9001, ISO 14001, OHSAS 18001 and ISO 26000 standards as well as the UN Global Compact. It governs the organisational processes and workflows, responsibilities, procedures and processes at Group level and at our individual locations.

We continually assess the requirements and expectations of the various stakeholders with regard to our company. In 2018, specialist departments and our sustainability committee – with the involvement of Management – reviewed and confirmed the key sustainability topics defined for KSB in the previous year. 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)

STATE OF THE ART: KSB takes ecological aspects into account when planning and building plants. The newly established production facility in Moscow meets the requirements for environmentally friendly construction. With modern insulation, an efficient heating system and insulated windows, we keep the new plant's energy requirements to a minimum. This enables us to not only conserve resources but also to reduce our operating costs.

KSB is currently carrying out energy-efficient refurbishments of its buildings to reduce energy consumption and CO_2 emissions. Regular energy audits of our European locations help to achieve this.

New KSB plant in Moscow


Apprentices from Halle in the fitness centre

HEALTHY RIGHT FROM THE START: To promote health awareness of its youngest employees, KSB organises an annual AzubiFit seminar at its Halle location. Aimed at trainees in their first year at KSB, the seminar teaches junior staff how to stay healthy and fit.

KSB takes a holistic approach to implementing its company health management system. We know that good physical and mental health are essential for our employees to deliver their very best performance for our clients.

Energy consumption

	Total	KSB SE & Co. KGaA	Europe***	Asia / Pacific	Americas	Middle East / Africa
Total energy consumption*	283,139 MWh	92,703 MWh	136,874 MWh	35,549 MWh	96,519 MWh	14,197 MWh
Total electricity**	160,803 MWh	37,488 MWh	56,339 MWh	30,778 MWh	61,978 MWh	11,708 MWh
Electricity from renewables	51,135 MWh	19,158 MWh	23,259 MWh	5,208 MWh	19,688 MWh	2,980 MWh
CO_2 emissions	101,339 t	21,215 t	29,555 t	28,139 t	35,860 t	7,785 t

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

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.

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.

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, like the environment, anti-corruption, human rights, employee concerns and social issues. All other risks with an impact on our business activities are described in the group management report from page 96.

The non-financial report – unless otherwise stated – encompasses 28 key companies within the KSB Group. We have chosen these companies due to their impact in terms of aspects such as energy consumption and the percentage of employees involved. The 28 Group companies include all consolidated subsidiaries with production plants and two service companies with energy-intensive workshops.

Environment

As a manufacturing company, we act responsibly when using natural resources. Our goal is to minimise the impact on the environment and reduce energy consumption to a minimum. In this way, we not only conserve natural resources, but also increase the cost-effectiveness of our products through lower raw material costs. Furthermore, we avoid economic and legal risks which could potentially result from environmental damage and failure to comply with laws and regulations.

Percentage of renewable energy in our power consumption:

31.8

(KSB SE & Co. KGaA: 51.1 %)

KSB follows the internationally recognised ISO 14001 environmental management system to ensure we deal responsibly with the natural environment. We have so far established the 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 conduct regular evaluations of our strategically most important suppliers to determine whether they comply with the requirements of applicable national or international environmental management standards. In 2018, we reviewed one third of our 618 suppliers via online research. The proportion of these suppliers using recognised environmental standards as a source of orientation was 61 %. In a supplier survey conducted in 2017, the proportion was 45 % for 547 respondents.

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. To help cut electricity consumption, for example, we use high-efficiency lights and sensor-controlled lighting. We are also continually expanding our video conference system worldwide in order to minimise the need to travel for our employees and to keep the associated costs and impact on the environment as low as possible.

We regularly record our energy consumption and CO_2 emissions so we can analyse this data. In the year under review, our energy consumption was 283,139 megawatt hours (KSB SE & Co. KGaA: 92,703 megawatt hours). 31.8 % (KSB SE & Co. KGaA: 51.0 %) of the energy we consumed came from renewable sources. This percentage decreased by 1.5 for the entire Group compared with the previous year, a result which is primarily due to higher electricity consumption in the USA, where our subsidiary GIW Industries, Inc. operates an energy-intensive foundry. As the share of renewable energies in the USA, at 12.5 %, is far below the Group average, the increase in consumption influenced the corresponding key indicator for the Group. 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 101,339 tonnes of CO_2 (previous year: 97,248 tonnes of CO_2 / KSB SE & Co. KGaA: 21,215 tonnes of CO_2, previous year: 22,072 tonnes of CO_2). Although the figures in the Regions Europe and Asia / Pacific improved, total carbon dioxide emissions increased slightly compared with the previous year. The reason for this rise were significantly higher emissions in the Region Americas, where the figure increased by around 7,000 tonnes.

By gradually modernising our systems, we are reducing the amount of hazardous substances used in our manufacturing processes. If we discover any environmental pollution at our locations, we set aside provisions to meet the liabilities for the necessary clean-up work. Provisions totalling € 835 thousand have therefore been recognised for KSB SE & Co. KGaA in the financial statements.

In order to minimise the impact of our business activities on the environment, we ensure that our manufacturing processes are as environmentally friendly as possible. We go even further than this by aiming to produce products that only require a small amount of electricity during their service life and that contribute towards preserving our environment. For example, our circulators, standardised water pumps and electric motors already exceed the minimum energy efficiency requirements of the European Union defined in the ErP Directive.

Our energy-efficient products help reduce the amount of energy consumed by our customers. Our specialists adopt an integrated approach to optimising our customers' plants, analysing the entire hydraulic system and the complete life cycle of the plant. This enables us to ensure that all system components are perfectly matched.

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 use established quality management systems. We are therefore able to design processes such that systematic errors during product manufacturing can be avoided. Furthermore, we 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 support services and optimum manufacturing processes.

Combating corruption and bribery (compliance)

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. The actions of a single individual can result in a permanent loss of trust in our company and seriously compromise our reputation.

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. It also sets out responsibilities and compliance 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 daily 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 receive practical guidance on impeccable conduct.

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 that all personnel with customer or supplier contact are familiarised with these topics. The training is repeated every three years, most recently for all personnel in 2017. Any interim needs for training are covered twice a year. In the year under review, we trained 546 employees across the Group on compliance issues.

Breakfast break with a member of Management

OPEN COMMUNICATION: Lunch and breakfast breaks with executives provide a direct line to KSB's Corporate Management. Employees exchange ideas with Dr Stephan Timmermann, CEO, in an informal atmosphere.

KSB not only offers its employees the opportunity to actively participate in the company's affairs through talks with representatives of top management, it also provides a social intranet which has been available to staff since 2018. This network provides a way for employees to help shape internal communication.

SUCCESS CAN BE LEARNT: At KSB, people can develop themselves, advance their knowledge and acquire new skills. By mastering ever more demanding tasks, employees ensure the future viability of the company. KSB supports its workforce with a comprehensive range of training opportunities.

Spring 2018 saw the launch of the International Service Academy in which service employees from all over the world deepen their specialist knowledge. Its training programme runs over two years and includes several training placements at KSB's German locations. The aim is for these qualified specialists to then contribute towards globally promoting the company's service business.

KSB service specialists continue their training

Age structure

Age	Total	KSB SE & Co. KGaA	Europe*	Asia / Pacific	Americas	Middle East / Africa
Under 25	9 %	12 %	9 %	10 %	8 %	7 %
26 – 39	35 %	30 %	29 %	39 %	38 %	51 %
40 – 54	39 %	35 %	40 %	44 %	35 %	29 %
Over 55	17 %	23 %	22 %	8 %	19 %	13 %

As figures are rounded, the total may deviate from 100.
* Including KSB SE & Co. KGaA

Training hours

	Total	KSB SE & Co. KGaA	Europe*	Asia / Pacific	Americas	Middle East / Africa
Hours per employee	15	9	11	13	9	64

* Including KSB SE & Co. KGaA

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. In 2018, the ombudsperson received two notifications of suspected compliance violation. However, a review revealed that neither of the cases constituted compliance violations. In 2018, our compliance organisation also received three 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. 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.

Respecting human rights

KSB supports and respects the protection of international human rights. To underline our commitment, we joined the UN Global Compact. We have also pledged not to indirectly tolerate violations of human rights, for example when it comes to selecting our suppliers. As a company, we comply with the conventions of the International Labour Organisation (ILO). Basic conduct requirements within the workforce are governed by the KSB Code of Conduct. We are aware that human rights violations are not only morally unacceptable, they can also damage a company's reputation and thus result in financial losses.

SHARED EXPERIENCES: KSB encourages employees to take part in sports events. In 2018, 160 women and men participated in the Company Cup on the Hockenheimring. In addition, employees have many opportunities to do sports together and keep fit.

Everyone who works at KSB is part of a large team. It is therefore a great idea to experience something together after work as well. In Frankenthal (Pfalz), more than 150 employees attended an after-work party and took the opportunity to socialise outside of the usual work environment.

Company run on the Hockenheimring

After-work party in Frankenthal

Workforce by gender

	Total	KSB SE & Co. KGaA	Europe*	Asia / Pacific	Americas	Middle East / Africa
Male employees	85 %	83 %	83 %	89 %	81 %	87 %
Female employees	15 %	17 %	17 %	11 %	19 %	13 %
Male managers	89 %	92 %	89 %	89 %	85 %	93 %
Female managers	11 %	8 %	11 %	11 %	15 %	7 %

* Including KSB SE & Co. KGaA

In 2018, KSB committed itself for the second 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.

We do not tolerate any discrimination in our work environment on the basis of individual characteristics such as age, origin, religion, appearance, gender, sexual orientation, disability or marital status. Furthermore, we 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.

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 to make sure 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 page 27).

Employee concerns

Motivated and high-performing employees form the basis for economic success. At KSB, more than 15,000 people are committed to serving our customers. In the competition for talent, we want to position ourselves as an attractive employer. Our aim is to recruit qualified experts such as engineers and service professionals for our company and continue to develop their skills in order to remain successful in the age of digitalisation.

The “digital natives” – young people who have grown up in the digital age – in particular expect a personal approach from potential employers. KSB therefore introduced a recruitment concept in 2018 to reach this target group even more effectively. The primary aim is to win creative young professionals for a talent pool. Contact is mainly made through social media and job fairs. Interested applicants apply via a web site and receive feedback from KSB within one day. The goal is to have a sufficient number of young talents to fill positions even faster in the future.

Number of training hours per employee:

15

(KSB SE & Co. KGaA: 9)

We want to develop and expand the skills and knowledge of our employees. We are fostering our best and brightest employees to prepare them for high-level specialist and leadership positions. Structured succession planning is also part of our approach.

A three-stage scheme enables us to expand our employees' skill sets. It differentiates between company-wide, departmental and individual professional development measures. Annual performance evaluation interviews between managers and staff determine what is required. We offer training measures covering engineering, business, information technology and communication. In 2018, each member of our staff completed an average of 15 hours of professional development activities (KSB SE & Co. KGaA: 9). Regional differences (see chart on page 27) emerge due to uneven qualification levels among new employees, meaning that more specialised training is required in some of our companies.

Our range of training options seeks to support our staff throughout their professional life. The goal is to strengthen our colleagues' capacity for self-directed learning, and we intend to initiate a corresponding expansion of the training we offer over the next few years. In the year under review, we set up an Internet-based platform for the entire Group via which our employees can access the full range of KSB training courses. In addition to greater use of e-learning, this learning centre also enables the direct exchange of knowledge and experience among users and thus supports mutual learning.

In order to meet demand for specialist staff, we are continually engaged in training young people. Our German locations participate in the country's dual vocational education system. In the year under review, we trained a total of 237 young talents to take on a role in our company. 2018 saw us invest around EUR 7.3 million in vocational training.

Those who take up vocational training or dual work / degree programmes with KSB experience practical learning. Alongside specialist skills, we set great store by the sense of responsibility exercised by our trainee staff. They are, for example, also involved in social and ecological projects around their locations.

At KSB, diverse personalities and cultures work together. We draw our strength from the diversity of these individuals and are committed to being an equal opportunities employer.

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.

A diversity of personalities always means a diversity of ideas and perspectives. That is why we are convinced that a mixed team of employees will improve performance in our company. So we want to see leadership positions filled by diverse personalities, all giving their best for KSB. As well as recruiting more non-German candidates for management roles, we have set ourselves the goal of increasing the number of women in leadership positions. We wish to be seen as a fair company and an attractive employer for women with all kinds of qualifications. Currently, the proportion of female managers is 11 %. In terms of our workforce as a whole, women make up 15 %. 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.

The rising average age of the population in many Western countries also affects companies. We thus monitor the age profiles of our staff in different regions (see chart on page 27) so that we can take timely action in ensuring we achieve the right balance, for example by recruiting younger trainees in sufficient numbers. It is then possible for us to distribute valuable knowledge within the company across different age groups.

KSB greatly values the active engagement of its employees in the development of the company and its work processes. 2018 saw us hold regular informal meetings for the first time in which employees and members of Management shared ideas and information. In addition, we set up a social intranet in the year under review. Through this social network, employees can actively participate in shaping internal communication at KSB.

We offer our employees many opportunities to help bring their work and private life into a healthy balance. For example, we support sports and leisure activities that our employees do together. This increases the motivation of the workforce and at the same time promotes identification with our company.

Preventing accidents in everyday working life is an absolute priority for KSB. Due to the increased level of risk, the focus of our measures is on production areas. Appropriate training sessions, instruction and further preventive measures are implemented regularly. In the year under review, 35 of our manufacturing and assembly plants (including all factories of KSB SE & Co. KGaA) were certified according to the OHSAS 18001 occupational health and safety management system. This represents 85 % of our locations.

KSB adopts a transparent approach to accident awareness and prevention. In 2018, we therefore installed digital displays in the entrance areas and production halls at four of our German locations. We use these to provide daily updates on key figures from occupational health and safety with the aim of raising employee awareness and facilitating constructive dialogue on the subject of accident prevention.

Health awareness at work is an important topic also at 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 thus takes a holistic approach to actively implementing its company health management system. This sees us fulfilling not only the legal requirements of the company health service, but also offering voluntary healthcare services such as colon cancer screening, skin cancer screening and flu vaccinations.

School class in Mali

SOCIAL COMMITMENT: KSB is committed to social issues and attaches particular importance to education for children and young adults and to supporting international projects that provide drinking water. Our company also helps with donations in the event of a disaster.

As part of its traditional Christmas donation campaign, KSB supported four projects in Germany and three in Africa and Asia with € 40,000. This benefited a school in the Gao region of Mali where € 10,000 were invested in improving the water supply and sanitary facilities.

In 2018, KSB supported several aid projects in Africa to supply people with clean drinking water. In Gambia, three well pumps ensure that the inhabitants of a village have access to the most important nutrient.

Drinking water wells in Gambia

Society

We are committed to social issues and strive to foster sustainable development and well-functioning cooperation within society. With this goal in mind, and in line with our donation directive, we support 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 for both people and organisations.

In the year under review, we actively participated in or provided financial support of at least € 5,000 each to a total of 104 social projects. In doing so, we are supporting the 17 global goals defined by the United Nations for sustainable development. For example, our commitment helps to combat poverty, enables people to lead healthy lives, ensures education, provides clean water and sanitation, and eliminates inequalities.

Education for young people is a core element of our commitment to social issues. It is important for us that young people develop their skills early enough to then pursue a career that offers the right fit for their talents and capabilities. For this reason we joined other companies to found the initiative *Wissensfabrik – Unternehmen für Deutschland e.V.* [Knowledge Factory – Companies for Germany].

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 donate regularly to projects seeking to supply people with clean drinking water, for which we also provide non-cash support such as pumps.

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

2

Global Reach

Global Reach – Local Commitment

Our global network of sales companies, manufacturing sites and service centres ensures we are always close to our customers, helping them to operate their production facilities reliably and cost-efficiently.

อุตสาหกรรม ในเอเชีย ตะวันออกเฉียงใต้

[Industry in South East Asia]

Clothing, electronics, cars, food – over half of all export goods from Indonesia are industrially produced. Vietnam has well over 200 flourishing industrial parks and Thailand is currently investing in automation to improve its competitive standing.

Piyachat Kiatkanarat, KSB SupremeServ Service Department Manager at KSB Pumps Co., Ltd. in Thailand, manages and coordinates local service assignments.

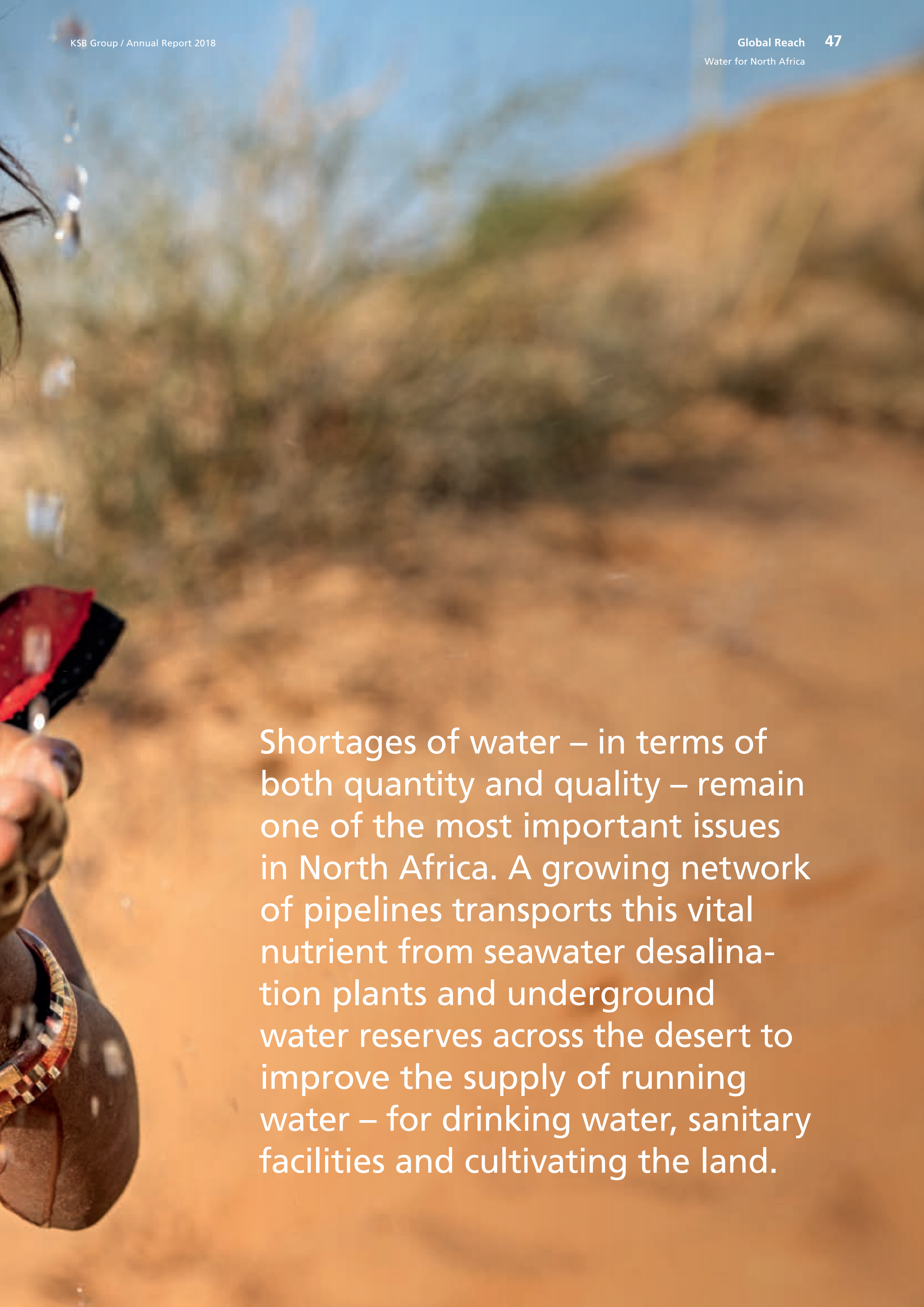
“It’s great to be able to actively shape growth and development in our region. We are there to provide our expertise whenever our customers need us.”

SOUTH EAST ASIA

KSB has sales and service companies in Vietnam, Singapore, Malaysia, Thailand, Indonesia and the Philippines. Over the last few years, KSB has won a number of major projects in the region for power plants, water and waste water transport, petrochemical applications and mining.

المياه لشمال إفريقيا

[Water for North Africa]



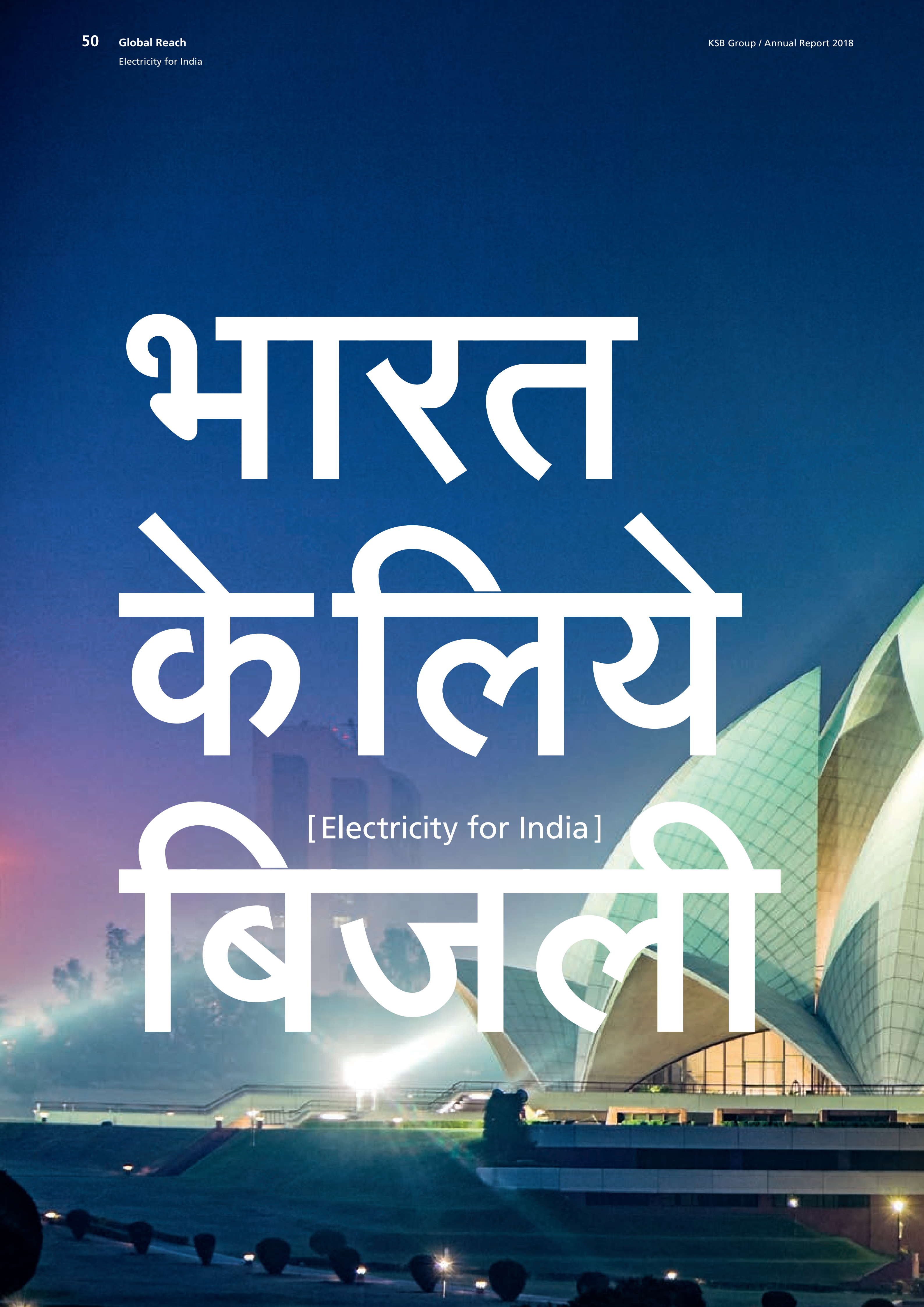
Shortages of water – in terms of both quantity and quality – remain one of the most important issues in North Africa. A growing network of pipelines transports this vital nutrient from seawater desalination plants and underground water reserves across the desert to improve the supply of running water – for drinking water, sanitary facilities and cultivating the land.

Workshop Manager Mohamed Benzeghioua installing an overhauled pump in an Algerian waterworks system.

“Clean drinking water is essential for health and quality of life. It is a fantastic feeling to know that I am supporting people in my region through my work and that I can pass on my knowledge and experience to young colleagues.”

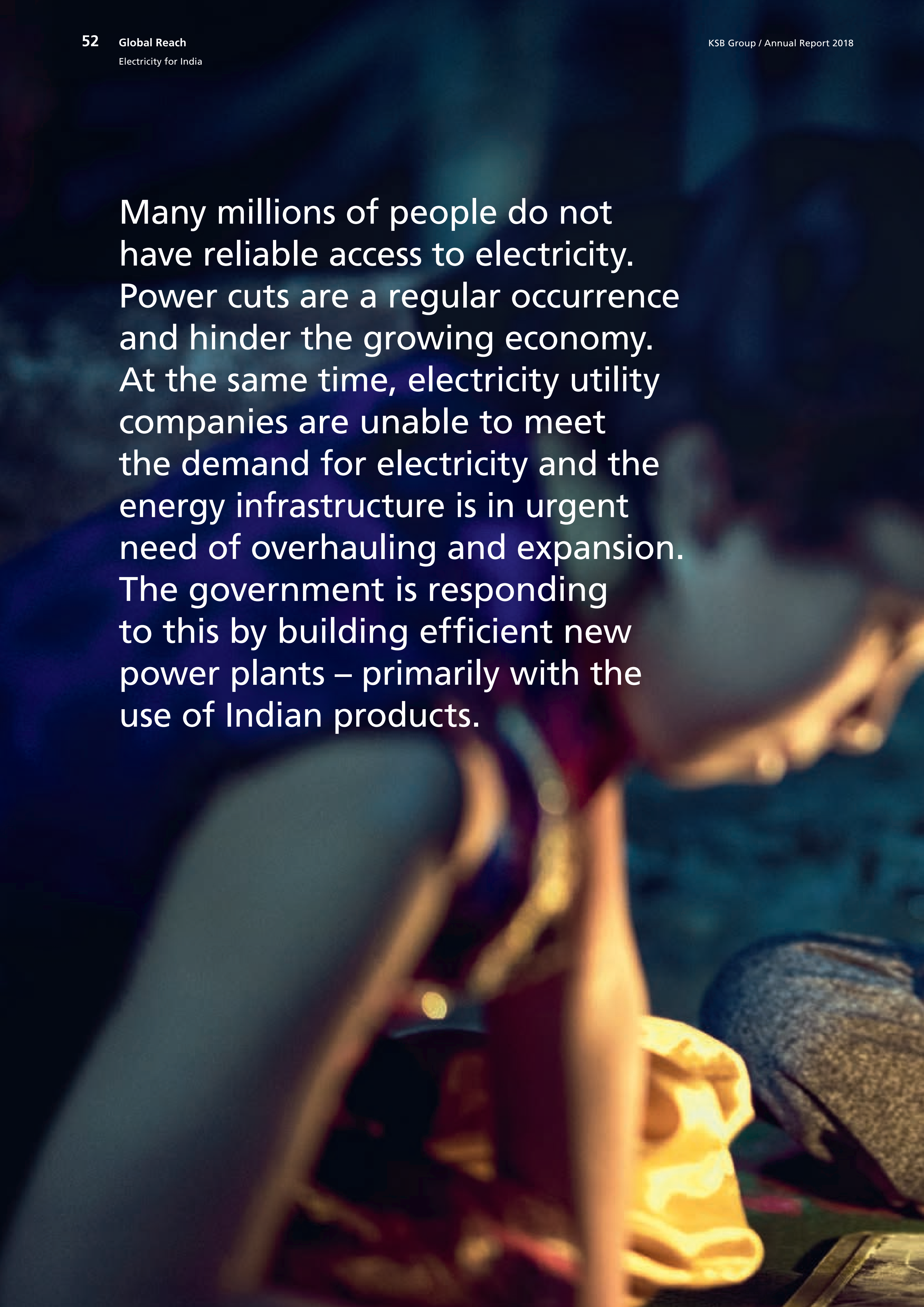
NORTH AFRICA

KSB operates local sales branches and service centres in countries such as Morocco, Egypt and Algeria. As a leading specialist for water and waste water applications, KSB is involved in numerous water extraction, treatment and transport projects.



भारत के लिये बिजली

[Electricity for India]



Many millions of people do not have reliable access to electricity. Power cuts are a regular occurrence and hinder the growing economy. At the same time, electricity utility companies are unable to meet the demand for electricity and the energy infrastructure is in urgent need of overhauling and expansion. The government is responding to this by building efficient new power plants – primarily with the use of Indian products.

Uday Joshi is the Head of Product Management for power plant pumps. He trains young talents for service activities in the KSB SupremeServ Academy.

"Our work helps towards meeting the growing demand for energy in India, providing the basis for economic success and a more stable future."

INDIA

KSB has been operating in India since 1960 and is represented by three local companies, six production locations and numerous service centres. A new plant was established in Shirwal specialising in the production of boiler feed pumps. It supplies pumps for the numerous power plants which are being built in India and in neighbouring countries. KSB also maintains a close-knit sales and service network nationwide.

COBRE

[Copper from Chile]

DE CHILE

Chile’s main export goods are raw materials. Progressive digitalisation and the resulting demand for electronic devices such as smartphones and tablets are having a positive impact on Chile’s economy. The country is naturally rich in copper, molybdenum and antimony. Giant mines extract these precious resources and transport them above ground.

Jenny Jara, a KSB SupremeServ employee in Santiago, is the contact for the Los Bronces copper mine and ensures that the spare parts required for maintenance and repairs are always available on time.

> “In order to mine copper ore, our slurry pumps have to transport large quantities of sand and stone, which leads to a high level of wear. Our spare parts centres in Santiago and Antofagasta ensure that our customers’ machines are always ready for operation.”

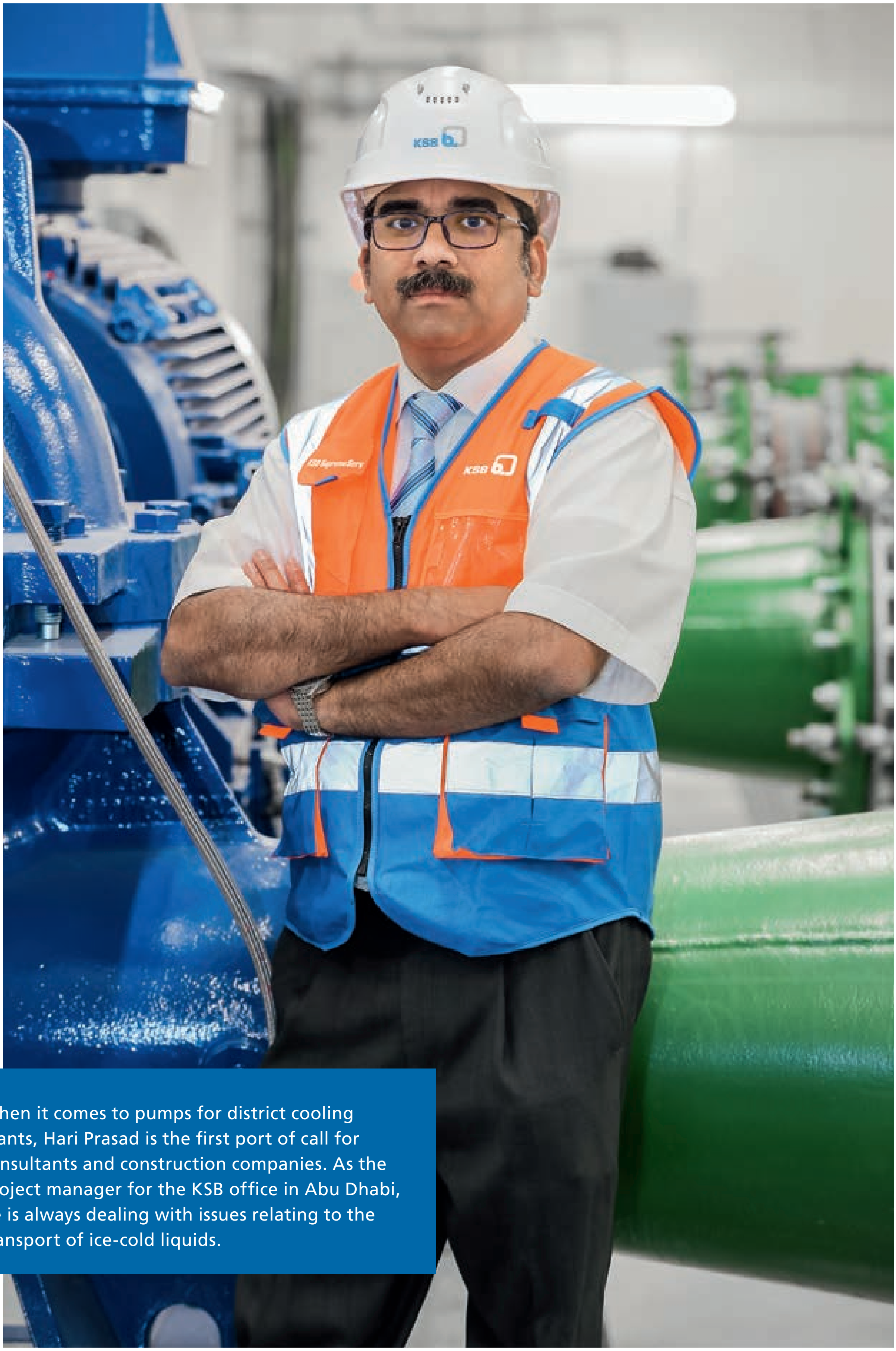
SOUTH AMERICA

In Argentina and Brazil, KSB has been an established name as a domestic pump manufacturer for over 60 years. Our pumps and valves are in operation in countless systems in industry, water management and energy applications. In Chile, in contrast, mining is the dominant industry, as reflected by the sales figures for slurry pumps. In Colombia and Peru, KSB subsidiaries supply customers with the locally needed products and services.

الحياة في دبي

[Living in Dubai]

Temperatures of 40 degrees Celsius or more are not unusual in Dubai. The quality of life in the desert state is therefore greatly dependent on sufficient air conditioning for homes and work spaces. Nearly all apartments, offices, supermarkets, restaurants and shopping malls are supplied with water, which is pumped from district cooling plants and distributed to buildings.



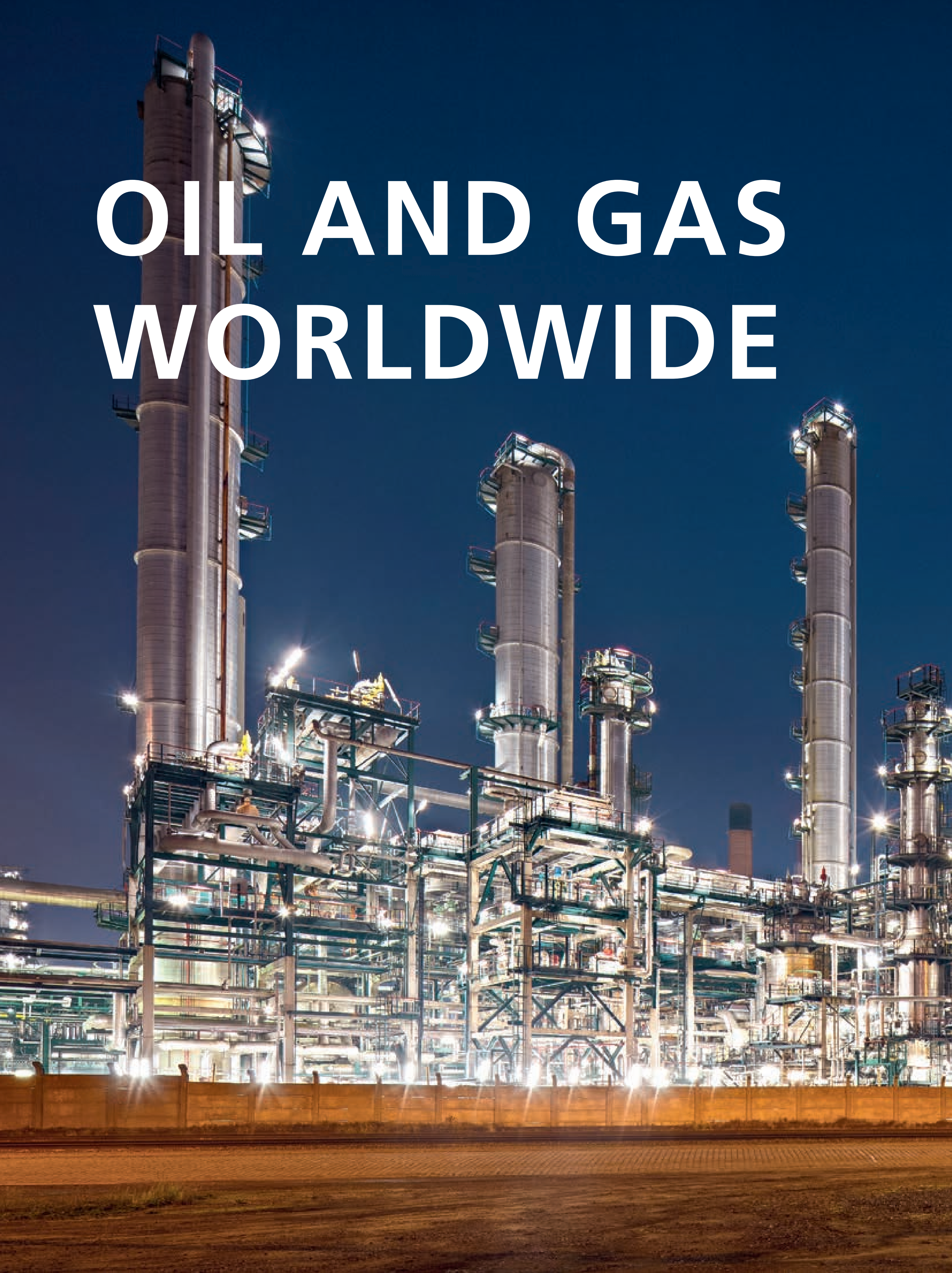
When it comes to pumps for district cooling plants, Hari Prasad is the first port of call for consultants and construction companies. As the project manager for the KSB office in Abu Dhabi, he is always dealing with issues relating to the transport of ice-cold liquids.

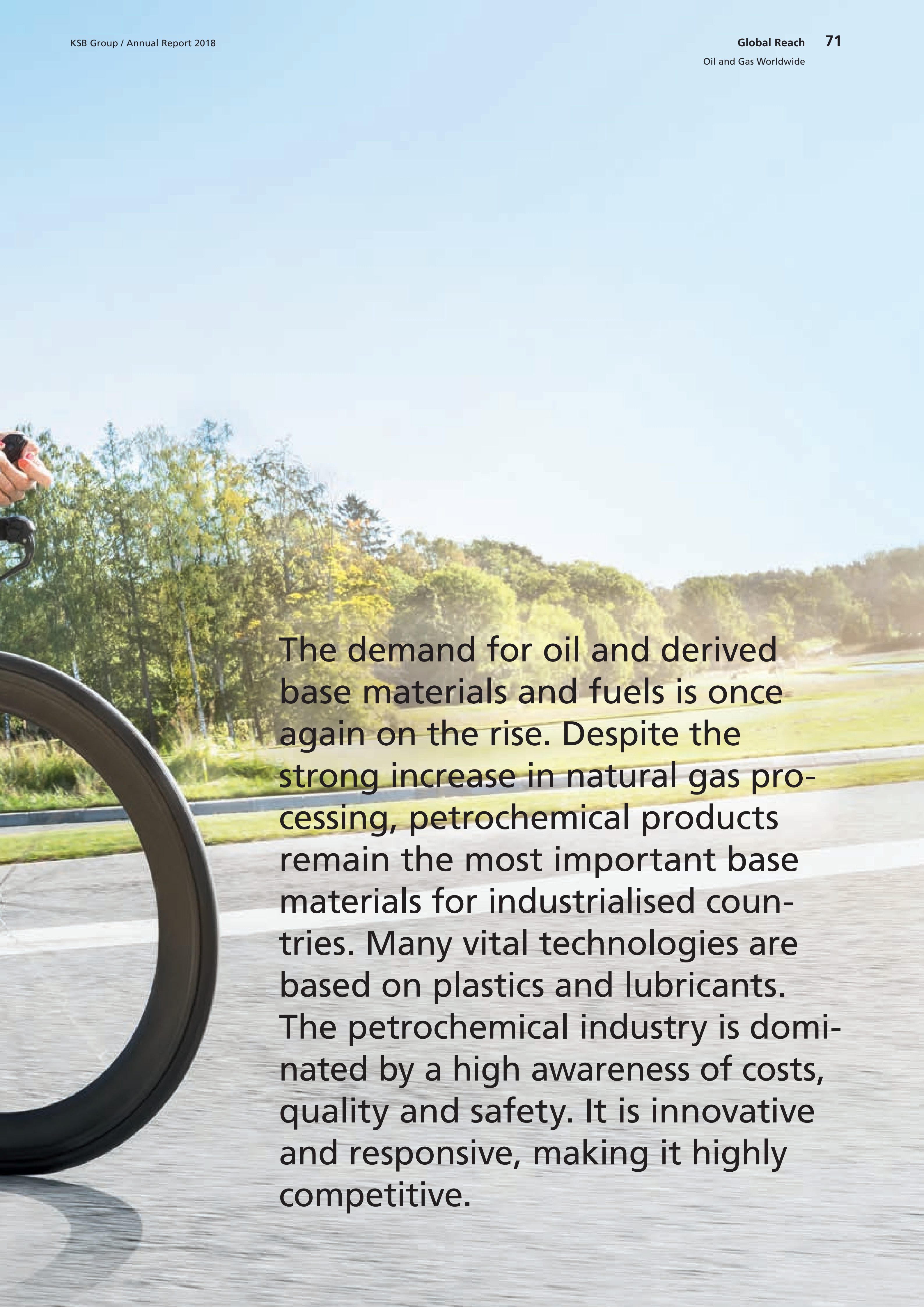
"Air conditioning for buildings is necessary here on a far greater scale than almost anywhere else in the world! Cooling giant buildings is a technical challenge that we face on a daily basis."

MIDDLE EAST

Headquartered in Dubai, KSB Middle East is represented with sales and service companies in the United Arab Emirates, Oman and Qatar, and with its own manufacturing company in Saudi Arabia. Scores of large KSB pumps ensure the performance of district cooling plants in the Gulf region. In addition to supplying pumps and valves, KSB supports the Gulf States with tailored service solutions through its own company.

OIL AND GAS WORLDWIDE





The demand for oil and derived base materials and fuels is once again on the rise. Despite the strong increase in natural gas processing, petrochemical products remain the most important base materials for industrialised countries. Many vital technologies are based on plastics and lubricants. The petrochemical industry is dominated by a high awareness of costs, quality and safety. It is innovative and responsive, making it highly competitive.

Kai Hannemann, employee of KSB SE & Co. KGaA in Frankenthal (Pfalz), is responsible for quotation management in the oil and gas business.

“As one of the leading pump manufacturers, we are committed to serving the technically demanding oil and gas market. We supply our customers with API products which are globally manufactured to the highest quality standards.”

WORLDWIDE

The KSB SupremeServ mobile service units conduct maintenance inspections of the entire pump and valve populations of refineries. KSB is an approved supplier for major oil companies.

3

Group Management Report

Basic Principles of the Group

Group Business Model

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 provides a wide range of support services to users of these products.

KSB SE & Co. KGaA (until 17 January 2018: KSB Aktiengesellschaft), Frankenthal / Pfalz, Germany, as the parent company, directly or indirectly holds the shares in the companies belonging to the Group. Besides it, 9 domestic and 74 foreign companies are fully consolidated; 6 other companies are accounted for under the equity method. KSB is currently represented in over 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 AG changed its legal form to that of an SE & Co. KGaA by entry in the *Handelsregister* [German Commercial Register] on 17 January 2018. The partnership limited by shares [*Kommanditgesellschaft auf Aktien* – KGaA] is a common legal form in Germany for companies with a family- and foundation-dominated ownership structure. The Annual General Meeting of KSB AG adopted a resolution on 10 May 2017 on the announced change in the legal form of the company. 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 thus 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].

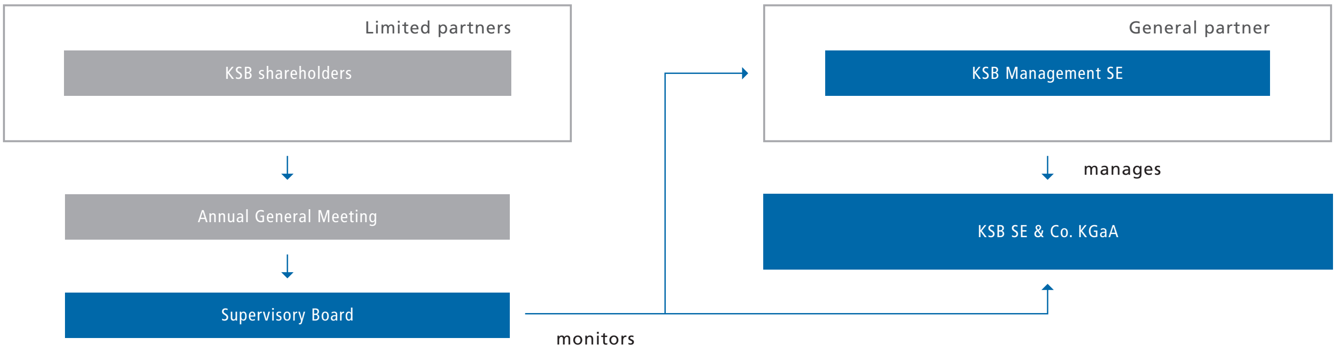
The KSB Group organises its business activities in three segments based on product groups: Pumps, Valves and Service. The Pumps segment covers single- and multistage pumps, and associated control and drive systems. Applications are industry (manufacturing, chemical / petrochemical, transport), energy 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 May 2018, 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. 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

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 Associations. This is the basis for efficient corporate governance, which contributes to sustainable corporate growth.

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 currently 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, customers in the energy and construction / building services sectors, transport equipment manufacturers and operators (e.g. ships, rail vehicles), water and waste water utilities, and mining companies. Once again in 2018, the top-selling markets for KSB products were industry and the energy supply sectors.

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 focus is currently upon Asian companies. 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:

Management decisions are made primarily on the basis of key indicators determined for the Pumps, Valves and Service segments: order intake, sales revenue and EBIT. EBIT is defined as earnings before financial income / expense and income tax. The definition of this earnings indicator changed in the 2018 financial year. Until the 2017 year-end, EBIT was defined as the earnings before interest and income tax. In the comments in these consolidated financial statements, the new definition of the key indicator is used; prior-year figures were restated accordingly.

For more information on these key indicators see the Notes to the Consolidated Financial Statements, Section VIII. Segment Reporting.

For the control of the entire Group, the key indicators of order intake, sales revenue, earnings before income tax (EBT), pre-tax return on sales as well as the net financial position are used, and from the 2018 financial year onwards also the EBIT. The pre-tax return on sales describes the ratio between earnings before income tax (EBT) and sales revenue; the net financial position is 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, receivables from deposits). Starting in the 2019 financial year, the key indicators of earnings before income tax (EBT), pre-tax return on sales as well as the net financial position will no longer be used. When specifying and evaluating these key indicators, KSB is guided on the one hand by developments in the market, and on the other by the performance of its key competitors.

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 together with experienced specialists to realise the digital transformation in the production and 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.

49.2

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 KSB Group spent around € 49 million on research and development in the year under review. This equates to about 2 % of our sales revenue. A large portion of the development work was on customer projects.

Economic Review

Macroeconomic Environment and Sector View

The global business cycle lost momentum in the course of 2018. The International Monetary Fund (IMF), whose forecast provided the basis for the planning, predicted growth of 3.9 % at the start of the year. At + 3.7 %, the actual performance fell short of this forecast. Causes included trade policy restrictions of the traffic of goods and above all the increasing difficulties experienced by a number of emerging markets and developing countries. They had to contend with an increase in the price of loans and energy together with political tensions, primarily in the Middle East, which put a brake on public-sector and private investments.

Europe was once again of primary importance for the KSB business in 2018. However, compared with the IMF forecast the growth of the economy on the home market weakened more sharply than it did on a global scale. Nevertheless, at + 1.8 % it reached a satisfactory level. The export business in Germany weakened. Taken together with lower industrial production, this meant that the economy, at + 1.5 %, fell considerably short of forecasts. France, Italy and the United Kingdom also fell short of expectations, albeit for different reasons. By contrast, the economy in Spain recorded above-average growth, which improved the conditions for local selling, production and support services.

Among the traditional industrialised nations the USA reported stronger growth than expected at + 2.9 % due to the policy of tax cuts and the favourable underlying financial conditions. The KSB Group produces its slurry pumps in the country and continued to expand its service and spare parts business in 2018.

Of the emerging markets in Asia, China and India performed particularly well with growth rates of 6.6 % and 7.3 %, respectively, in 2018. But whereas the Chinese economy failed to reach the previous year's growth, also on account of the trade dispute with the USA, economic expansion in India exceeded that seen in 2017. As well as higher private consumer spending, increased investment activities, which directly benefited mechanical engineering companies such as KSB, which have their own production base, contributed to this development.

The five economically most significant countries in South East Asia – Indonesia, Malaysia, the Philippines, Thailand and Vietnam – also showed a good performance with a growth rate totalling 5.2 %. Here, too, KSB is represented with its own companies.

The Region South America, which includes the important markets for KSB in Argentina, Brazil and Chile, remained considerably weaker with a growth of + 1.1 %. The economic and currency crisis in Argentina severely restricted demand; the recovery on the market in Brazil was also slow.

The economic performance of the countries in the Region Middle East / Africa was primarily marked by the international tensions in the context of the Syrian war, the US embargo against Iran and the political crises in Qatar, Yemen and Saudi Arabia. In South Africa, where KSB operates a factory in Johannesburg, the upcoming elections caused unrest and an investment climate shaped by uncertainty. This set narrow limits to the growth of companies operating in the country. But KSB South Africa additionally served further countries in sub-Saharan Africa, some of which recorded a stronger business performance.

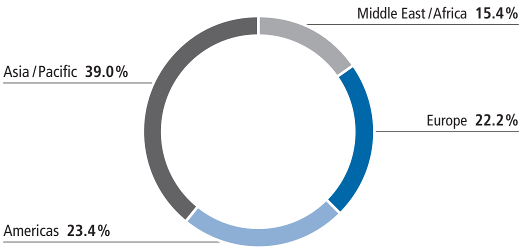
Russia does not yet see any signs of an overall economic improvement due to the continuing sanctions and the lack of foreign investments. In view of the preferential use of domestic sources, it was important for foreign companies to expand their production base in the country. KSB achieved this by establishing a new production and service site.

POSITIVE DEMAND TREND OVERALL

The more upbeat forecasts on the economy at the start of the year initially prompted companies to tackle new industry and infrastructure projects, some of which had been postponed for some time. This benefited the relevant suppliers in various industries, including KSB. But the risks to international trade that became more apparent in the course of the year put an increasing damper on the willingness to invest, particularly in regions affected by trade restrictions including sanctions or experiencing political tensions.

Demand in industry, the most important market for KSB, nevertheless showed a positive trend overall. This was particularly pronounced in the chemical and petrochemical industries. Alongside maintenance investments, an increase in new refinery projects in the oil processing industry was observed.

World market of centrifugal pumps and valves



Source: KSB estimate (February 2019), European Industrial Forecasting

The water and waste water sector, which is prioritised in strategic terms, similar to the industrial sector, saw marked regional differences in demand. A number of emerging economies and the growth market of China continued the expansion of their infrastructures. North America, too, recorded an increase in demand for products and services for safe drinking water supply and reliable waste water disposal. By contrast, the countries in the Middle East and North Africa, in particular, planned substantially fewer new plants for these purposes. Here, the uncertain political situation put a brake on investment.

Energy supply proved to be a persistently difficult market for all suppliers and service providers. The decline in demand for equipment and support services for coal-fired power plants continued. Alternative business options, such as the supply of combined cycle power plants, were unable to offset these structural losses.

In mining, the increase in commodity prices entailed brisk investment activity in some countries. This applied, for example, to copper mines in South America and to the mining of gold and lithium in Asia and Australia. In addition to replacement investments that had been postponed until then, the mine operators in some countries decided to expand their systems, which strengthened demand for equipment goods.

The construction industry recorded a good performance on the whole. In Western Europe this continued to apply to both residential and commercial construction. Here, the fact that interest rates remain very low in some countries had a beneficial effect. Investment activity also remained high in several Asian countries, such as China and India. One focus was on the construction of commercial buildings where KSB's building services products are primarily used.

The new shipbuilding market including LNG carriers recorded no more than a minor increase, according to Macquarie Research. The biggest share is accounted for by container ships, bulk carriers and tankers, followed by LNG and LPG carriers by a considerable margin.

ENGINEERING STILL ON THE UPSWING

According to the German Engineering Federation (VDMA), global sales in the mechanical engineering sector rose by 3 % in real terms for the second time in a row. Engineering posted above-average growth in Switzerland, Austria, the Netherlands, Germany, Sweden and the United Kingdom. Sales growth in 2018 was between 4 % and 7 %, with Switzerland, Sweden and the Netherlands reporting a particularly good sales performance of 7 %. In the Netherlands, business with semiconductor production equipment was extremely good, and in Sweden the public sector increasingly invested in smart city projects.

In Germany the previous year's level was exceeded by just under 5 %, due to a good order situation.

In China, companies are struggling with declining export orders on account of the trade conflict with the USA, which led to sales growth of only 2 % in 2018. By contrast, growth in India was unexpectedly strong at around 10 %. Mechanical engineering demand in Latin America rose significantly, reflected in an increase in sales revenue of 5 % in real terms.

In the liquid pumps sector, the VDMA recorded real sales revenue growth of 5 % among German pump manufacturers. Industrial valves also reported a positive sales revenue trend of 6 % whereas the order intake declined by 1 %.

Segment reporting

€ thousands	Order intake 2018	Order intake 2017	Sales revenue 2018	Sales revenue 2017	EBIT 2018	EBIT 2017 (adjusted)
Pumps segment	1,506,248	1,473,628	1,469,443	1,444,392	90,563	79,284
Valves segment	355,618	343,505	340,771	338,849	– 37,373	51
Service segment	441,670	448,179	435,734	421,717	21,512	37,020
Total	**2,303,536**	**2,265,312**	**2,245,948**	**2,204,958**	**74,702**	**116,355**
				Finance income / expense	– 9,141	– 12,175
				Earnings before income tax (EBT)	**65,561**	**104,180**

Business Development and Results of Operations

The business position continued to improve owing to increased investment activity of customers in key sales markets. This applied, in particular, to the industry and transport markets and to the construction / building services sector.

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.

Translation-related exchange rate effects had a significantly negative impact in the 2018 financial year.

ORDER INTAKE

The volume of incoming orders booked was increased by € 38.2 million (+ 1.7 %) to € 2,303.5 million in the financial year. This growth was weighed down by an exchange rate effect of € – 96.8 million over the previous year. Adjusted for currency translation effects, growth comes to 6 %.

Significant increases were recorded, in particular, with customers in the following markets: manufacturing at € + 58.3 million – mainly in the Pumps segment – and transport at € + 19.9 million. € 14.7 million of the performance in the transport market segment alone was accounted for by the Valves segment. Moreover, the order intake grew by € + 9.9 million in the construction / building services market and by € + 9.6 million in the chemicals / petrochemicals sector. This equates to growth of 4 %.

In regional terms, the companies in the Region Asia / Pacific made a significant contribution to growth at € + 35.8 million (+ 7.5 %). The development in India was outstanding at € 32.1 million (+ 21.9 %). This growth is supported by an Indian large power plant in the energy supply market with € + 22.9 million in the Pumps segment. The companies in Europe also reported slight increases (+ 1.3 %). However, the order intake of KSB SE & Co. KGaA declined by € – 15.1 million. Compared with the previous year, a lower project volume in the project-driven energy market, in particular, had a significant impact. The companies in the Americas closed the financial year with a stable result compared with the previous period, with full growth offset by a negative currency translation effect of € – 45.7 million. The same applies to the companies in the Region Middle East / Africa, whose modest growth was € – 14.0 million below the previous year's figure due to currency translation effects. The restricted Iran business also had a pronounced negative effect on the Region's growth.

Pumps

In the Pumps segment, sales revenue was € 1,506.2 million, up by € 32.6 million (+ 2.2 %). A key driver was double-digit growth of € + 47.1 million (+ 11.6 %) in the general industry market, primarily in the European companies. Taken together with the growth in building services of € + 8.9 million (+ 5.5 %) and in transport of € 3.5 million (+ 18.5 %), the substantial decline of € – 14.2 million in the energy supply market was more than offset in the European companies, in particular. The mining market was stable at the previous year's level while customer orders in the water / waste water and chemicals markets were more muted.

Valves

In the Valves segment, order intake was € 355.6 million, up by € 12.1 million (+ 3.5 %). This development was primarily attributable to the resurgence of the transport market, which posted growth of € 14.7 million. A significant increase was also recorded by the mining market at € + 3.6 million (+ 42.4 %) and the chemicals / petrochemicals market at € + 3.0 million (+ 7.7 %). In the Valves segment, too, the lower demand from the energy sector had an effect of € – 16.4 million. This was due to the substantial decline in activity in the area of major projects.

Service

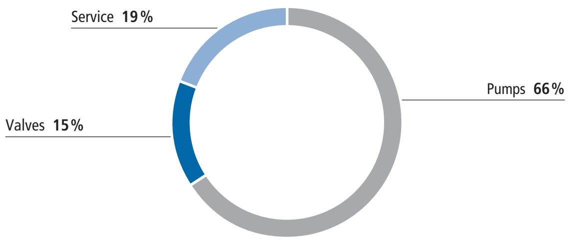
At € 441.7 million (– 1.5 %), the order intake in the Service segment was slightly below the previous year. Here, too, a major decline in the energy supply market of € – 21.9 million (– 16.2 %) was observed, which is making itself felt primarily in the European companies. Strong growth was reported in the general industry market at € + 10.9 million (+ 10.2 %) and the chemicals / petrochemicals market at € + 8.3 million (+ 12.4 %).

SALES REVENUE

Consolidated sales revenue grew by € + 40.9 million (+ 1.9 %) to € 2,245.9 million. Growth was also significantly burdened by currency translation effects of € – 92.6 million. Excluding the effects from exchange rates, the increase would have amounted to € 133.5 million (+ 6.1 %).

Europe remains the region with the strongest sales revenue at 56 %. The European companies' sales revenue was down 0.6 % from the previous year. The decline of € – 18.8 million to € 762.0 million in the largest unit, KSB SE & Co. KGaA, which serves the European market and the market outside Europe, was for the most part offset by growth in other parts of Europe, in particular Europe West. The companies in Asia / Pacific recorded the strongest growth with an increase of € + 29.7 million (+ 6.6 %) followed by the legal units in the Americas with a gain of € 18.9 million (+ 5.8 %). The companies in the Region Middle East / Africa fell slightly short of the prior-year level by € – 0.5 million, essentially due to the negative currency translation effects.

Sales revenue by segment



Pumps

Sales revenue in the Pumps segment increased by € 25.1 million (+ 1.7 %) to € 1,469.4 million. Substantial growth compared with the previous year was recorded by the Region Americas with € + 18.9 million and the Region Asia / Pacific with € + 14.8 million. Growth in the Region Americas was supported primarily by the US company GIW with its main business in the mining market. Growth in Asia / Pacific was spread across several units. Sales revenue of the European companies fell short of the previous year by € – 10.3 million.

Valves

In the Valves segment, order intake growth could not yet be translated into sales revenue of the same volume. Growth of € 2.0 million (+ 0.6 %) was posted here. The financial year closed with sales revenue of € 340.8 million. Whereas the companies in the Regions Asia / Pacific and Americas recorded an increase of € + 3.1 million and € + 2.0 million, respectively, despite significant currency translation effects, the companies in Europe and in the Middle East / Africa fell short of the previous year's figures by € – 2.1 million and € – 1.0 million, respectively.

Service

The Service segment showed the largest relative growth (+ 3.3 %) and closed the year with an increase of € 14.0 million to € 435.7 million. The Regions Asia / Pacific and Europe posted growth in the segment over the previous year. The largest absolute increase was generated by the companies in Asia / Pacific with € + 11.8 million. By contrast, the Regions Middle East / Africa and Americas posted an overall decline of € – 3.0 million.

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

The KSB Group achieved earnings before finance income/expense and income tax (EBIT) of € 74.7 million (previous year: € 116.4 million). The Pumps segment contributed € 90.6 million to this figure, the Valves segment € –37.4 million and the Service segment € 21.5 million.

The previous year's forecasts referred to earnings before interest and income tax; consequently, the comparative figures in the year under review are also presented below according to the previous year's definition. Earnings before interest and income tax total € 76.4 million (previous year: € 117.2 million). The development of earnings before interest and income tax in the Pumps segment had a positive effect at € 85.8 million (previous year: € 79.9 million). This means that the forecast made in the previous year's report (considerable increase) was accurate as an increase of 7.4 % was recorded. As reported in the half-year financial report, EBIT was weighed down by expenses in the amount of € 25 million from an additional provision for a legacy project in the United Kingdom. The pension plans of German companies concluded before 2009 solely provided for the payment of accumulated amounts in the form of a monthly pension for life upon retirement. A lump-sum option was introduced for these plans in December 2018. Under this, every employee is entitled to apply at any time during the ongoing employment relationship for payment in capital, either as a single payment or in ten annual instalments. Recognition of the exercising of this lump-sum option has resulted in one-off income of € 46.4 million in total based on past service cost, resulting in a reduction of provisions for pensions and similar obligations. The Pumps segment accounts for income from the lump-sum option of € 32.4 million. Contrary to the forecast of a stable performance, earnings before interest and income tax in the Valves segment fell from € 0.1 million in the previous year to € –37.1 million in the year under review. Among other factors, this is due to the impairment on the goodwill of KSB Seil Co., Ltd., South Korea, amounting to € 20.6 million. The impairment is attributable to the generally limited business performance of the company owing to the economic development of the long-cycle shipbuilding industry. Impairment losses on property, plant and equipment of the French production company KSB S.A.S. totalling € 10.6 million also weighed on earnings. The impairments relate to two valve ranges from which no long-term cash flows are expected any longer. Income from the lump-sum option of € 5.9 million had the opposite effect. A substantial increase had been forecast for EBIT of the Service segment, instead of which it recorded a decline of 25.7 % to € 27.7 million. A key reason for this was the goodwill impairments of two French cash-generating units amounting to € 7.6 million due to their dependence on a single major customer. Income of € 8.1 million resulting from the introduction of the lump-sum option is included.

2.2

Consolidated sales revenue in € billions

TOTAL OUTPUT OF OPERATIONS

The above increase in sales revenue is also reflected in a higher total output of operations, totalling € 2,275.8 million compared with € 2,210.5 million in the previous year. Work in progress and inventories of finished goods increased by € 22.6 million. Other work performed and capitalised amounts to € 7.3 million and is therefore 30.4 % up on the previous year.

INCOME AND EXPENSES

Other income declined from € 69.2 million to € 33.1 million, essentially due to high insurance compensations included in the previous year and lower income from the disposal of assets.

The cost of materials increased more sharply than the total output of operations, resulting in an increase in the cost of materials as a percentage of total output of operations from 40.2 % in the previous year to 41.1 % in the year under review. Overall, the cost of materials increased to € 934.5 million compared with € 887.8 million in the previous year. Among other factors, this is due to outsourcing.

Staff costs fell by 3.9 % to € 765.5 million. Staff costs as a percentage of total output of operations dropped by 2 percentage points. The key factor was € 46.4 million in income from the lump-sum option in the pension plans of the German companies. Compared with 2017, the number of employees rose by 258, taking the total figure at the end of the year under review to 15,713. The sharpest increase was posted by the North American companies with 159 people, due among other things to the acquisition of the assets and liabilities of the Dubric Group. The biggest declines were recorded at the French and South American sites. The KSB Group employed on average 90 more people than in the previous year. Based on the 3.0 % increase in total output of operations and simultaneous rise in the number of employees, the average output per employee improved from € 142 thousand in the previous financial year to € 146 thousand.

The ratio of other expenses to total output of operations rose from 17.8 % to 18.3 %. In absolute terms, this represents a change from € 392.4 million to € 416.9 million. The increase was attributable to higher expenses for warranties and contractual penalties (€ + 20.4 million) due to the provision for a legacy project in the United Kingdom mentioned earlier, as well as higher expenses for repairs, maintenance and third-party services (€ + 22.0 million). By contrast, other staff costs fell by € 12.5 million.

Finance income / expense improved by € 3.0 million, reflecting higher income from equity investments accounted for using the equity method and lower financial expense, particularly interest expense.

EARNINGS

The KSB Group generated earnings before income tax (EBT) of € 65.6 million, compared with € 104.2 million in 2017. This means that the previous year's forecast of a substantial increase in earnings did not materialise on account of the one-time special effects described above. Correspondingly, the return on sales before tax decreased from 4.7 % in the previous year to 2.9 %, also falling short of expectations outlined in the previous year. The income tax rate rose substantially and is now 63.5 % after 50.0 % in the previous year. This rise was attributable to considerably higher deferred tax expenses. Adjusted for the effects resulting from deferred taxes on loss carryforwards, which cannot be capitalised, and impairment losses on the goodwill of KSB Seil Co., Ltd., South Korea, and the French cash-generating units, the adjusted income tax rate is 31.8 %. Earnings after income tax, which totalled € 23.9 million (previous year: € 52.1 million) fell by 54.1 % and thus more sharply than earnings before income tax (EBT) (– 37.0 %).

At € 12.6 million, earnings attributable to non-controlling interests declined by € 2.3 million compared with the previous year. Relative to earnings after income tax, there was therefore a change from 28.6 % to 52.7 %.

Earnings attributable to shareholders of KSB SE & Co. KGaA (€ 11.3 million) were € 25.9 million lower than in the previous year (€ 37.2 million).

Earnings per ordinary share were € 6.26, compared with € 21.10 in the previous year, and € 6.64 per preference share, compared with € 21.36 in 2017.

65.6

Consolidated earnings (EBT) in € millions

Financial Position and Net Assets

FINANCIAL POSITION

The financial position of the KSB Group remains as solid as ever on account of one-time special effects, as evidenced by a consistently high equity ratio of 38.2 % (previous year: 39.3 %).

Liquidity

KSB generated cash flows from operating activities of € 61.4 million, a year-on-year decrease of € 59.3 million. This was primarily attributable to the high commitment of funds in inventories. This contrasted with higher liabilities.

The outflows from investing activities increased by € 82.3 million compared with 2017. While the return of term deposits and commercial papers increased cash flows considerably in the previous year, the addition of fixed-term deposits and payments for the acquisition of consolidated companies led to a decline in cash flow in the year under review. Accordingly, cash flows from investing activities changed from € – 8.2 million in the previous year to € – 90.5 million in the year under review.

Negative cash flows from financing activities fell strongly, totalling € –9.4 million compared with € –106.0 million in the previous year. This is due to lower payments for financial liabilities because no partial redemption of the loan against borrower's note took place in the year under review, in contrast to the previous year.

Cash and cash equivalents from all cash flows fell sharply from € 289.5 million to € 255.5 million. Exchange rate effects amounting to € +4.6 million (previous year: € –6.8 million) contributed significantly to this.

The KSB Group assumes that, in future, it will continue to be able to meet its outgoing payments largely from operating cash flow. 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. 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.

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
As in the previous year, the additions for tangible assets amounting to € 13.0 million (previous year: € 12.5 million) primarily concerned internally generated tangible assets. Advance payments for a new software to be deployed in Sales was reclassified to this balance sheet item in the year under review.

Investments in property, plant and equipment in the reporting year amounted to € 66.6 million, considerably down on the figure of € 89.4 million for the previous year. The highest additions at € 21.5 million (previous year: € 29.0 million) relate to plant and machinery. A further € 20.3 million related to other equipment, operating and office equipment (previous year: € 21.8 million). As in 2017, the focus of investment activities was Europe, and predominantly Germany and France. Outside Europe, the highest additions were made at the plants in the USA, India and China. The policies for measuring depreciation and amortisation were maintained in the year under review.

255

Net financial position in € millions

Net financial position
Due to a decline in cash and cash equivalents, the net financial position at € 255.0 million, down from € 288.0 million in the previous year, is lower than forecast twelve months ago (significantly above the previous year). This development is essentially attributable to an increase in inventories and higher payments for materials.

Contingencies and commitments
The KSB Group's off-balance sheet contingent liabilities totalled € 10.7 million as at the reporting date (previous year: € 7.2 million). These arise mainly from performance guarantees.

There are no other extraordinary obligations and commitments beyond the reporting date. Other financial obligations arise only within the normal scope from long-term rental, lease and service agreements (in particular IT and telecommunications) necessary for business operations and from purchase commitments amounting to € 12.4 million (previous year: € 12.2 million).

38.2

Equity ratio in percent

NET ASSETS

Around 27.5 % is attributable to fixed assets (previous year: 28.5 %). Intangible assets and property, plant and equipment with a historical cost of € 1,476.2 million (previous year: € 1,424.3 million) have carrying amounts of € 587.7 million (previous year: € 614.3 million). In intangible assets, goodwill impairment of the South Korean company KSB Seil Co., Ltd. reduced the value by € 20.6 million and that of the French cash-generating units reduced the value by € 7.6 million. The advance payments made decreased by € 24.5 million year on year and the internally generated intangible assets increased by € 30.2 million. This development essentially resulted from the reclassification of a selection software for the standard pump programme and of a project whose objective is to introduce an end-to-end e-sales process. The amounts for these two projects previously included in advance payments are reported under internally created intangible assets in the year under review. Overall, intangible assets decreased from € 108.1 million to € 91.1 million due to the above-mentioned impairment on goodwill. With investments in property, plant and equipment (€ 66.6 million) lower than write-downs this year (€ 71.2 million), this balance sheet item contracted by € 9.6 million. The carrying amount of financial assets, investments accounted for using the equity method and long-term other non-financial assets rose by a total of € 0.2 million to € 28.5 million. The investments accounted for using the equity method accounted for € + 1.7 million. Deferred tax assets decreased to € 80.4 million (previous year: € 91.7 million)

Inventories totalled € 544.4 million, up € 82.6 million from the 2017 year end. Raw materials, consumables and supplies as well as work in progress, finished goods and goods purchased and held for resale increased. This increase was primarily attributable to higher inventories of work in progress for orders on hand (€ + 15.6 million), higher raw materials, consumables and supplies (€ + 19.6 million) and the effect resulting from the first-time application of IFRS 15 on the inventories presented (€ + 42.2 million). Inventories tied up around 24 % of resources (previous year: 20 %).

Trade payables decreased from € 613.3 million at the 2017 year end to € 518.1 million. This decline resulted mainly from receivables recognised by PoC that were no longer recorded in the reporting period. The receivables recognised by PoC in the previous year correspond to the contract assets from the application of IFRS 15 that are shown as a separate item in the year under review. Contract assets total € 74.5 million. Overall – taking into account the change in total assets – this balance sheet item accounts for approximately 23 % (previous year: 27 %) of total assets.

Other financial assets declined from € 117.0 million to € 103.4 million. This change essentially results from reduced other receivables and other current assets (€ – 8.9 million).

In contrast, other non-financial assets rose by € 12.1 million. Here, recoverable taxes, essentially in France, Germany and the USA, rose by € 9.3 million to € 40.1 million.

Cash and cash equivalents account for around 11 % of assets, totalling € 255.5 million (previous year: € 289.5 million).

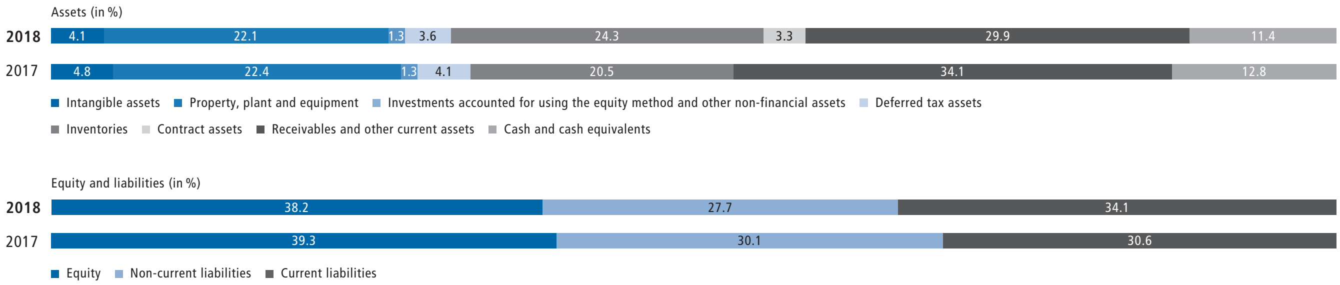
Total assets fell by 0.5 % to € 2,242.2 million. Considerable decreases were recorded for both non-current assets and current assets. Inventories in current assets were the exception, recording a drastic increase.

Equity

The KSB Group's equity amounts to € 856.8 million (previous year: € 885.4 million). This includes KSB AG's subscribed capital of € 44.8 million as in the previous year. The capital reserve remains unchanged at € 66.7 million. Revenue reserves declined to € 577.8 million (previous year: € 611.9 million) essentially as a result of the transition to IFRS 15 and IFRS 9 and negative currency translation differences; this figure includes the proportion of earnings after income tax attributable to shareholders of KSB SE & Co. KGaA of € 11.3 million (previous year: € 37.2 million). € 167.6 million (previous year: € 162.1 million) is attributable to non-controlling interests. Due to these developments, the equity ratio fell to 38.2 % (previous year: 39.3 %) despite the 0.5 % decline in total equity and liabilities year on year.

Expenses in statement of comprehensive income

Balance sheet structure



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. At € 0.3 million, this has not resulted in any material impact on our net assets, financial position or results of operations.

The translation of financial statements of consolidated companies that are not prepared in euro gave rise to a difference of € –13.8 million (previous year: € –54.1 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 decreased by € 33.3 million from € 586.9 million to € 553.6 million. This development results primarily from the lump-sum option in the pension plans of the German companies applicable since 2018. Details and information on the impact on EBIT are set out in the Business Development and Results of Operations section.

On 2 October 2018, Heubeck AG published the new Heubeck 2018 G mortality tables. These contain the latest statistics of statutory pension insurance schemes and of the German Federal Statistical Office and reflect the most up-to-date developments on mortality, disability, marriage and fluctuation probabilities.

The new tables now take into account the statistically verifiable relation between life expectancy and the amount of pension paid. This is achieved via a general marking down of mortality rates. In addition, the new mortality tables reflect changed disability rates, as there has been a decline for more than ten years in the age range from 58 years.

The first-time application of the new mortality tables resulted in an addition of € 4.8 million in the balance sheet; the closing balance of pension provisions in the year under review is € 553.6 million.

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.

To understand the explanations on provisions and liabilities compared with the previous year, it should be kept in mind that from the 2018 financial year accounting principles were amended so that some items previously allocated to provisions are now classified as liabilities. This did not have an impact on earnings. The reclassification was performed retrospectively for the balance sheet figures of the previous financial year. Further information on the impact on individual balance sheet items is presented in the Notes to the consolidated financial statements.

Non-current liabilities fell by € 24.2 million to € 30.1 million, due to the reclassification of the tranche of the loan against borrower's note due in 2019 to current financial liabilities. The loan against borrower's note, which still amounts to € 48.0 million, is expected to be repaid in 2019 and 2021.

Current liabilities rose overall by € 74.3 million to € 765.0 million compared with € 690.7 million at the 2017 year end.

Other provisions for employee benefits rose to € 34.4 million (previous year: € 28.0 million).

Other provisions also increased from € 70.2 million in 2017 to € 84.9 million. While provisions for warranty obligations and contractual penalties as well as provisions for restructuring measures decreased, provisions for other obligations rose by € 20.7 million. This is essentially attributable to additions to provisions from a legacy project in the United Kingdom totalling € 25 million, as mentioned earlier.

Trade payables rose to € 270.2 million (previous year: € 241.6 million). Other non-financial liabilities decreased by € 108.9 million. Advance payments received on orders, which were stated under this item at € 97.7 million in the previous year, are shown under contract liabilities in the year under review. Other financial liabilities fell by € 48.7 million. In the previous year this item included advance payments from PoC of € 49.4 million, which are also stated under contract liabilities in the year under review. Current financial liabilities increased by € 26.8 million. This is attributable to the tranche of the loan against borrower's note due in 2019, which was reclassified from non-current financial liabilities to current financial liabilities in the year under review. Taking into account the decline in total equity and liabilities, the share of current liabilities in total equity is 34.1 % (previous year: 30.7 %).

Summary of the Performance in the Financial Year

The tangible improvement in order intake forecast in the previous year was not achieved. Essentially, this is attributable to the negative currency translation effects described earlier. The Indian rupee, the Brazilian real and the Argentinian peso, in particular, weighed on the order intake, as a result of which the Pumps segment recorded no more than slight growth instead of a pronounced increase. The previous year's forecasts can be confirmed for the other segments despite the burden resulting from translation effects. Orders received rose sharply in the Valves segment and remained stable in the Service segment.

The trend of sales revenue corresponded to that of order intake. Adjusted for currency translation, the forecast tangible increase would have materialised, but the current exchange rates led to no more than a moderate rise. Sales revenue in the Pumps segment rose slightly, rather than tangibly as forecast; similarly, the Valves segment fell short of the projected slight growth, recording a stable performance instead. In the Service segment the forecast of tangible growth was confirmed.

The tangible improvement in EBIT predicted in the previous year failed to materialise due to unforeseen events. A considerable increase was expected for the Pumps segment, which materialised as forecast. However, this increase was not due to operational factors. For one, it was attributable to income from the decline in pension provisions resulting from the introduction of a lump-sum option in the pension plans of the German companies; for another, it was attributable to the provision made in the first half of the year for a legacy project in the United Kingdom. In the Valves segment, in contrast, the expectation of a stable performance did not materialise. Expenses for the goodwill impairment of a South Korean company and impairment losses on property, plant and equipment of a production facility in France weighed on EBIT for the Valves segment, which had to report a substantial decline as a result. Assumptions were also not confirmed for the Service segment, for which significant growth had been forecast. Among other things, this is due to the goodwill impairment of two French cash-generating units. Instead, this segment reported a sharp decline. Like the sharp drop in EBIT described above, earnings before income tax (EBT) and the return on sales fell significantly as a result of the effects described, falling short of expectations of a strong increase. At € 255.0 million, down from € 288.0 million in the previous year, the net financial position also fell strongly due to increased inventories and was thus lower than planned twelve months ago (significantly above the previous year).

Accordingly, business performance in terms of order intake and sales revenue corresponded to expectations, apart from the negative exchange rate effects.

Expectations for the earnings figures of the Group were not met overall owing to negative one-time special effects.

On the whole, the picture emerging is that which KSB announced back in August 2018. For the two key indicators, order intake and sales revenue, the corrected forecast of a moderate rise was reached. In the same way, the corrected forecast of a considerable decline in EBIT materialised.

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

Dependent Company Report

The legal representative has submitted the dependent company report to the Supervisory Board. This concludes with the following declaration: “In accordance with Section 312(3) AktG [*Aktiengesetz* – German Public Companies Act], we declare that our company – on the basis of the circumstances known to us at the time when the transactions were made – received adequate compensation for all transactions listed in the dependent company report. No measures required to be reported were taken or not taken at the instigation or in the interest of Johannes und Jacob Klein GmbH or a company affiliated to it.”

Report on Expected Developments

The International Monetary Fund has lowered its growth forecast for the global economy in 2019 to 3.5 % in real terms. This means that the growth seen in the past years will decline slightly. Among other factors, this development is due to the negative consequences of the trade dispute between the USA and China. Effects curbing growth in Europe dating from the second half of 2018, including the risks in the Italian financial sector, a decline in consumer spending in Germany and political uncertainties in France are additionally expected to linger in 2019. For the United Kingdom, in particular, the forecast of around 1.5 % is subject to high risk on account of the uncertainties associated with Brexit. Overall growth in the euro zone is expected to weaken to 1.6 %.

The IMF forecasts anticipate a slowdown in the growth momentum in the USA to 2.5 %. The budget freeze at the start of the year also has a negative impact on economic growth. Nevertheless, the fiscal incentives suggest that consumer demand will remain high, which will also benefit imports.

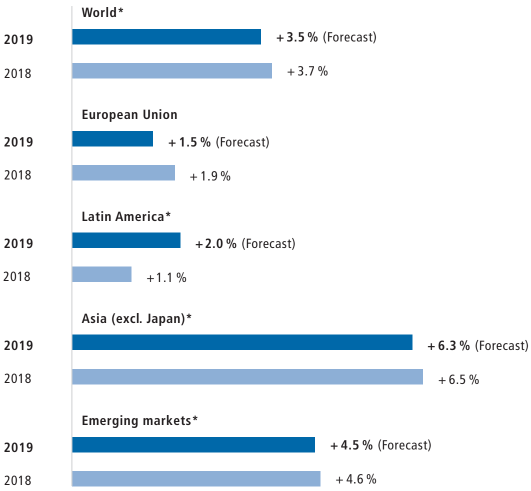
For the emerging markets and developing economies the IMF is projecting a growth rate of 4.5 %, i.e. only slightly below the previous year's level. For the European emerging economies a decline of the growth rate to 0.7 % overall is forecast despite a good economic performance in Central and Eastern Europe; this is solely due to the currency crisis in Turkey.

For Asia the IMF is forecasting economic growth of 6.3 %, which is attributable in particular to the weakening momentum in China of 6.2 %. By contrast, an increase in gross domestic product (GDP) of 7.5 % is anticipated for India, which benefits from lower oil prices and a less restrictive monetary policy. Growth of 5.1 % is projected for the ASEAN countries, which also include important KSB markets.

Growth in Latin America is expected to range at 2.0 %. The recovery from the recession in 2015 and 2016 continues in Brazil and should lead to a 2.5 % rise in GDP this year.

Despite the slowdown in the growth of the global economy the IMF expects persistently strong growth of gross investment worldwide. For the German mechanical engineering companies the German Mechanical Engineering Industry Association (VDMA) expects positive stimuli for orders received from the two biggest markets, USA and China, among others.

Gross domestic product growth



* Source: International Monetary Fund (January 2019)

As far as manufacturers of liquid pumps in Germany are concerned, the VDMA expects sales revenue growth of 1 % in the current year; for industrial valves, the association expects an increase of 2 %.

For global mechanical engineering, the VDMA projects similar, slightly weaker economic growth. For German mechanical engineering, too, the VDMA forecasts the third consecutive boom year and a price-adjusted rise of + 2 %, i.e. slightly below the previous year.

As far as liquid pumps in Germany are concerned, the VDMA expects real sales revenue growth of + 2 % in the current year; for industrial valves, the association expects a nominal increase of 2 %.

For new shipbuilding, Macquarie Research projects a slight decline for 2019 after a slight increase in the year under review; for the following years it forecasts no more than a stable performance at the 2019 level.

SUMMARY OF EXPECTED DEVELOPMENT

Despite the weaker global economic growth, the underlying conditions are, generally speaking, expected to be good for an expansion of business in and outside Europe. Overall, the KSB Group is looking forward to further order intake growth in the current year because it tends to lag slightly behind the economic cycle. The main drivers of business will be standard products, support services and spare parts. Given that customers remain very willing to invest, the number of major projects for which products tailored to project specifications are supplied in addition to standard pumps and valves, is expected to increase. Overall, the order intake is expected to increase to € 2,350 million to € 2,500 million and sales revenue is expected to rise to € 2,300 million to € 2,450 million. Considering that the earnings for the current financial year will be impacted by one-time special effects, EBIT is forecast to grow to € 95 million to € 115 million overall for the 2019 financial year.

Expected development

	Actual 2018	Forecast 2019
Order intake	**€ 2,303.5m**	**€ 2,350m – € 2,500m**
Pumps	€ 1,506.2m	Substantial increase
Valves	€ 355.6m	Tangible increase
Service	€ 441.7m	Substantial increase
Sales revenue	**€ 2,245.9m**	**€ 2,300m – € 2,450m**
Pumps	€ 1,469.4m	Substantial increase
Valves	€ 340.8m	Substantial increase
Service	€ 435.7m	Tangible increase
EBIT	**€ 74.7m**	**€ 95m – € 115m**
Pumps	€ 90.6m	Slight decline
Valves	€ – 37.4m	Substantial increase
Service	€ 21.5m	Substantial increase

Pumps

Order intake in the Pumps segment will rise substantially in the course of the year although the situation in the field of conventional power stations remains critical and there are also signs that demand for pumps in industry and mining will be muted. Instead, a significant increase in order intake is to be expected from water and waste water management and from building services. In the oil and gas industry the extension of the product range may provide fresh stimuli for customer orders. Sales revenue for pumps will also increase substantially in 2019, helped by the invoicing of project orders from 2018 and previous years. Despite the expected substantial rise in sales revenue KSB is expecting EBIT for this segment to decline slightly in 2019 due to this year's one-time special effects totalling € +7.4 million.

Valves

A tangible increase in order intake is expected in the Valves segment in the current year. A rising number of orders are anticipated from industry, including but not limited to the chemicals and petrochemicals industries, and from the transport sector. In construction / building services and in industry, the planned growth will be based on new products and in the water and waste water sector on improved demand from East and South East Asia. By contrast, a further decline in demand for globe, butterfly and gate valves for the energy sector is to be expected. Sales revenue lags behind the order intake for valves and is therefore anticipated to show substantial growth in 2019 compared with 2018. For the Valves segment KSB therefore projects a substantial rise in EBIT.

Service

A focus of the growth strategy is on expansion of the service business. Consequently, substantial growth of the order intake for support services and spare parts is projected for the current year, with a focus on industry. The spare parts warehouses in Germany, Brazil and South Africa will be equipped with new software to make processes faster and smoother. In addition, new component warehouses will be established in China, India and South East Asia. Specifically in China a spare parts factory is planned to be built with a view to reducing delivery times significantly. Sales initiatives will help communicate the range of service offerings in growth markets more effectively and win new customers. This also applies to support services that are newly developed and offered in the wake of the digital transformation. For sales revenue in the Service sector the Group is projecting tangible growth while forecasting a substantial increase in EBIT in 2019. This assumption is based on the continued expansion of the service business under the new KSB SupremeServ brand.

The forecast horizon for all the afore-mentioned measures is the 2019 financial year.

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 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 trends, they also twice a year report the 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. A distinction is made between qualitative risks and quantitative risks, not considering any action that has been taken or planned:

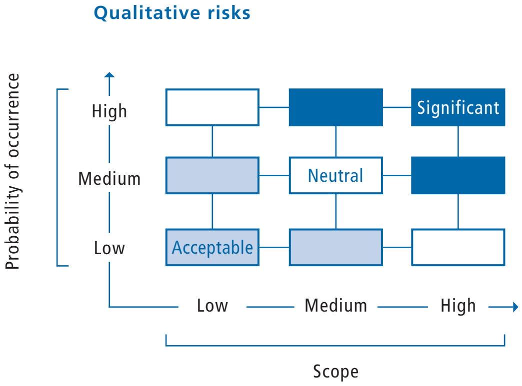
Qualitative risks are long-term developments that could have a negative impact on the KSB Group and which cannot or cannot yet be thoroughly quantified due to a lack of precise information. In order to be able to evaluate them all the same, however, estimates of the probability of occurrence and scope 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.

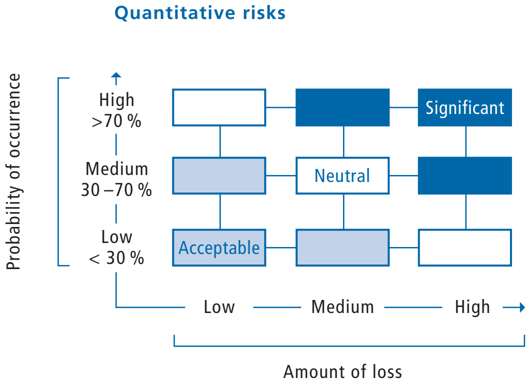
Quantitative risks are those risks with possible monetary impact on the earnings of the KSB Group or the respective Group company. They are evaluated taking into account the specifically calculated probability of occurrence in combination with the potential amount of loss.

The scope or amount of loss describes the potential influence of the individual risk on the redefined 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.

In order to assess whether qualitative and quantitative individual risks are material for KSB, they are classified as acceptable, neutral or significant risks. All individual risks categorised as neutral or significant 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 matrices below:

→ Qualitative risks – Quantitative risks





Classification of amount of loss

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

Evaluation of the amount of loss at KSB is based on just three possible classifications: low, medium and high. The following criteria apply:
→ Classification of amount of loss

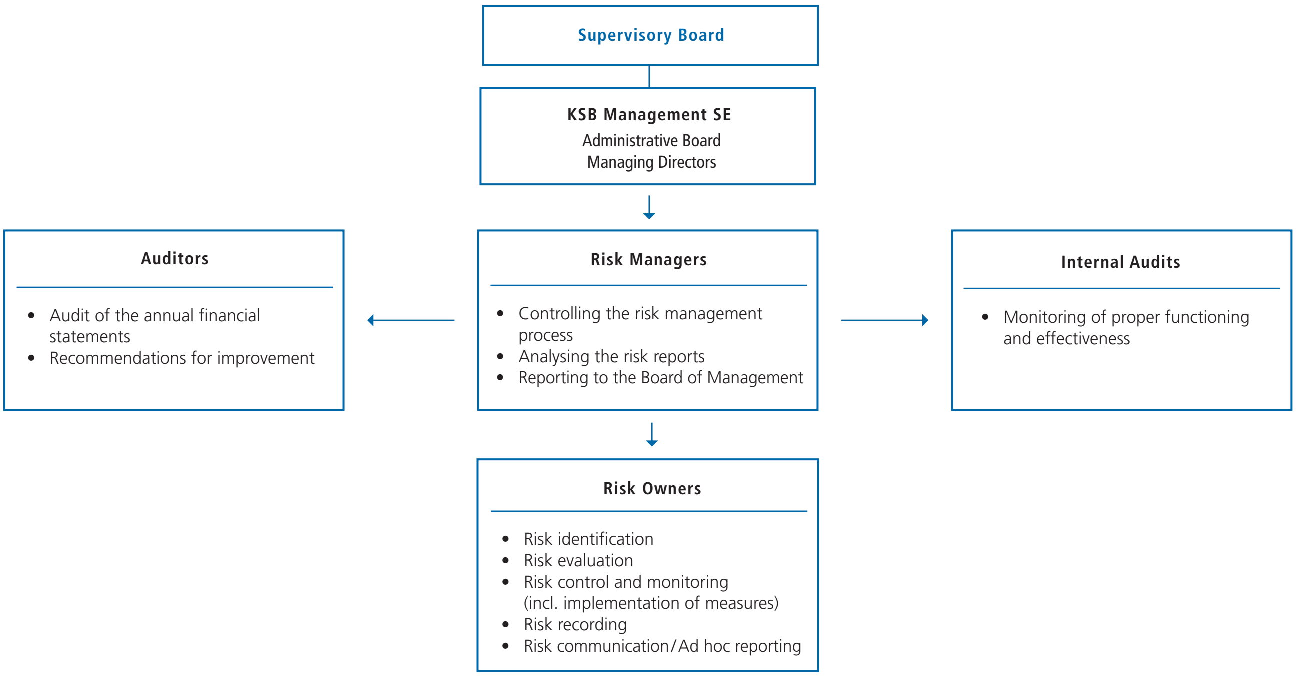
This approach offers the necessary transparency to identify risks in their entirety and to manage them effectively, professionally and in an economically responsible manner.

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 at KSB

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 investigates all reported risks to determine whether they are relevant for the 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 categorised as significant or neutral 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 segment managers and regional managers purely in qualitative terms, without further quantification.

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.

Risk management at KSB



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 regularly reviewed and promptly updated where necessary, 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, the Accounting department carries out regular analytical plausibility checks using 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. Accounting KSB Group monitors compliance with these regulations. 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. Since the year under review, the process is also supported by a harmonised chart of accounts used throughout the Group.

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 gross risks classified as significant or neutral and the main opportunities for business development as at 31 December 2018. Where risks are not designated as significant, they were classified as neutral 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. 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 is monitoring the development of the economic environment for its markets. If necessary, capacities are adjusted, production facilities relocated and cost-cutting measures implemented.

Asia remains the most important sales market for power plant equipment, including pumps and valves. The competitive situation in China has not eased by comparison with the previous year. The associated increased pressure on prices thus also constitutes a “significant” risk in the current financial year. Political decisions too, such as the postponement or even abandonment of energy projects in several Chinese provinces, have impacted negatively on business performance. In order to tap into the Asian market more widely, KSB agreed a strategic alliance with a long-term partner, the Chinese SEC Group, in late 2015. This aims at closer cooperation so that KSB can achieve success in Asian power plant projects outside of China.

The risk from the political situation in various parts of this world, however, regained in significance year on year. Most important in this context is the development of relations between the United States and Iran. Due to the US sanctions against Iran, there are no opportunities to continue ongoing projects in Iran. Consequently, there is a risk that the costs already incurred on local projects have to be borne without consideration. The protectionist tariff policy of the United States also weighs on business due to the associated global decline in demand. 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 are to increasingly order products that have been made in Russia or involve a high proportion of local value added. The KSB company in Moscow has prepared for this development, setting up a local assembly site for industrial and water engineering pumps in leased premises. Additionally, KSB completed the establishment of its own production site, which is due to start operating in 2019.

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. In general, there is still uncertainty about the future provisions; however, delays in goods trade, for example, may result from increased border checks. In total, the United Kingdom accounts for 1.2 % of sales revenue in the Group.

▪ Opportunities

Major contracts for infrastructure development projects are to be awarded in the two Asian growth countries China and India in 2019. 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 and valves. In addition, owing to targeted activities in the service market KSB expects to be able to sell more services and spare parts in China, in particular.

By broadening its portfolio of pumps to API specifications the KSB Group has steadily improved its position in the oil processing industry since 2016. Here, the order situation is expected to improve over 2018.

From 2020, new regulations of the International Maritime Organisation IMO will apply. 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 invest in the technology for processes to produce this fuel. This should increase demand for refinery pumps. Moreover, ships which continue to use fuel with a high sulphur content will be retrofitted with exhaust gas cleaning 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 risk of delivery delays, which can lead to an adverse effect on KSB's reputation with customers and also result in financial penalties, it constantly monitors its sales and manufacturing operations. 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. By doing this, KSB counters the risk of schedule and cost overruns that is rated as "significant".

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 posed by cheap products from Eastern Europe and Asia that compete with KSB's portfolio. 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.

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. This also applies to pumps that are to be provided within the framework of a major contract running over a number of years for the construction of a new type of power plant in China. Commercial risks are minimised by using appropriate contractual clauses. Care is taken to ensure that advance payments usually cover the costs incurred. Suitable provisions are set aside for warranty obligations and contractual penalty risks. These amounted to € 46 million in the consolidated financial statements for 2018 compared with € 51 million in the previous year; beyond this KSB sees no other major residual risk (net risk).

▪ Opportunities

Submersible borehole pumps, like those required in well fields, in mining and on drilling platforms, are increasingly used in higher performance ranges. Accordingly, KSB has extended the portfolio to include pumps which – with drive ratings up to 5 MW – deliver flow rates of up to 5,000 m^3 per hour. For heads up to 1,500 m KSB, as one of only two producers worldwide, has also been offering double-entry submersible borehole pumps since 2018, which offer relatively greater protection against failure. This competitive edge improves KSB's position as a supplier for major, technically sophisticated projects.

At the ACHEMA 2018 industry fair KSB presented new digital products that are used for service activities. They include use of a control system that records status data of pumps in a system. It indicates to the customer – or alternatively, KSB directly – when servicing is required. When the system is commissioned or on-site repairs are carried out, KSB is able to provide local specialist personnel with direct and appropriate support using Augmented Reality Service technology without specialists having to travel to the site. This saves the customer time and expense. These and other innovative services enable the KSB Group to consolidate its market position and to improve order opportunities.

Finance / Liquidity

▪ Risks

As a group with global operations, KSB is exposed to a wide variety of currency risks. This significant risk is countered with foreign exchange hedges. However, the global manufacturing network also offers the opportunity to benefit from currency effects and to use these where appropriate in competition with other manufacturers. In addition to uncertainties regarding exchange rates, interest rate developments on the capital markets play a role. In material individual cases in the past KSB countered the interest rate risk involved in bank loans subject to variable interest rates by hedging future interest payment flows accordingly. In the current financial year KSB saw no need for such hedging.

Alongside the euro, the most important currencies for the KSB Group are the US dollar, the Indian rupee, the Brazilian real and the Chinese yuan. If the exchange rate differs from the assumptions made, this would have positive or negative effects on business volumes and earnings. A strict receivables management system and the use of trade credit insurance helps KSB avoid situations where receivables cannot be collected from customers.

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 delays in payment and bad debts which were rated as "significant" in the financial year would weigh 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. 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. In the current financial year an impairment loss of € 20.6 million was incurred in respect of goodwill of the South Korean company KSB Seil Co., Ltd. Based on current estimates, a residual risk of € 0.8 million remains for the future. For other companies with goodwill we have taken into account the risk assessment through sensitivity analyses to estimate the risk of impairment. Further information can be found 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. In the 2018 consolidated financial statements, like in the previous year, we did not set aside any provisions for circumstances that are classified as a significant or neutral risk. In addition, there are contingent liabilities in the expected amount of € 1.5 million (previous year: € 1.6 million).

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 some French 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 reorganisation measures or a review of the business model of the company in question.

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 the context of the procurement strategy, KSB is also careful to avoid becoming dependent on individual suppliers and thereby counteract the risk of a supplier default. If local conditions mean that it is impossible to ensure sufficient diversification in this regard, KSB will make use of additional foreign business partners. In selected cases, external expertise is integrated into our company, not least to make the best possible use of capacity.

- **Opportunities**

KSB reorganised global purchasing and continued to improve processes to increase the efficiency of work in this area in 2018. This also applies to the increased number of online measures through which KSB makes a global comparison of purchasing terms and conditions for goods and services with little investment. The Group will benefit from these measures in the current year.

The changes support the competitiveness of KSB and also provide the foundation for the successful digitalisation of purchasing. 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**

In the Business Innovation Lab KSB works in interdisciplinary teams to explore new business models on the basis of digital technologies. By including plant-based data KSB is able to offer its customers solutions to make their liquid transport methods more secure and more efficient while ensuring a higher level of transparency of their processes. Several of these models are currently undergoing testing for functionality and marketability. They are applied in line with the business opportunities they offer.

Through the digital transformation approach there is a greater focus on the permanent external monitoring and communication of systems. Sensors and communications modules are becoming an integral part of this new type of system. The new cloud-based system for continuous pump monitoring enables customers to order support services before problems materialise, which ultimately benefits KSB's business. The Group is also investigating approaches for self-learning monitoring software, the electronic change of fixed speeds – as an alternative to mechanical adjustments – as well as the miniaturisation of power electronics and its integration in the motor.

A particular focus of development activity in past years has been on pumps for the oil and gas industry which are in compliance with the API standard. The programme launched in 2016 was continued in the year under review and the portfolio expanded to include further sizes and additional versions, which increases the likelihood of order successes.

Other business-specific risks – Environment

- **Risiks**

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 2018 consolidated financial statements, these amounted to just under € 0.2 million for significant or neutral risks, as in the previous year.

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 where environmental regulations are becoming more stringent, there is a risk that KSB products and own or purchased services may cause infringements that lead to KSB losing its market authorisation and which damage KSB's reputation. 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 in the administrative areas. Inversely, the KSB Group offers the users of its products the opportunity to reduce their electricity costs by selecting energy-efficient KSB products.

Hazards to people and nature may emanate from the production and processing methods of manufacturing companies. The global environmental management system helps identify these risks early on and initiate protective measures in good time. KSB thereby not only prevents pollution, but also its financial consequences.

Drawing on a functioning and certified environmental management system, KSB fulfils a requirement of numerous public-sector customers, large companies and entire industries such as the automotive sector. For them, evidence of an environmental management system is an increasingly important criterion in the selection of suppliers. By having its production and service plants checked by auditors and certified to international standards, the KSB Group and its customers are both assured that KSB companies respect 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.

Changing market conditions can have a negative impact on the funded status of pension obligations. Strong fluctuations in the evaluation of capital market interest rates to be paid may have a considerable impact on the Group's earnings and the equity carried on the balance sheet. Alternative models are validated to mitigate this risk.

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 teething troubles when changes are introduced to structures and processes, as such problems could impact on 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. To rule out a net risk, the 2018 consolidated financial statements include about € 2 million (previous year: € 1 million) for those cases classified as significant or neutral risks. Provisions for litigation with authorities and for staff matters have been created in the amount of just under € 2 million overall (previous year: € 3 million) to cover any cases classified as significant or neutral within the risk assessment methodology. Overall, the risk from legal disputes in the financial year is rated to be significant.

Government decisions, such as cost sharing for projects to expand infrastructure in the vicinity of KSB properties, may also adversely affect KSB's earnings.

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**

2018 saw the launch of a programme designed to enhance KSB's appeal as an employer and improving the opportunities for identifying and retaining the right employees for forward-looking positions. This applies, for example, to young talent to help shape the Group's digital transformation. Target group-appropriate recruitment processes were developed for these and other specialists, at times departing from the traditional avenues of personnel recruitment.

Moreover, the introduction of a global HR management system is being prepared, which will form the basis of strategic human resources 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.

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. A material factor for Pumps and Valves, and to a lesser extent for Service, continues to lie in the uncertainties regarding the political risk, which have increased in some countries compared with the previous year. Political decisions in China regarding energy projects and the East/West relations, which remain under considerable strain, and as of this year also the relations between the United States and Iran, constitute material risks for the business of the KSB Group. KSB adjusted its strategy accordingly and discontinued its business with Iran. Nevertheless, a risk remains with regard to projects started and the associated outstanding payments. Worsening payment morale also bears corresponding risk potential for future business. As regards the economic development, the risk assessment compared with the previous year has changed in that the conflict in the Middle East could lead to an oil crisis and is thus a significant risk for the KSB Group. 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.

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

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:

On the one hand, KSB is 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 € 238.3 million (previous year: € 276.5 million). Foreign currency items denominated in US dollars account for the major volume hedged by forwards. By strengthening its production sites worldwide, KSB can make use of "natural" currency hedging in currency markets that continue to be volatile.

To minimise interest rate risks, interest rate swaps are concluded in material individual cases to hedge cash flows from underlyings. No hedging via interest rate swaps took place in the current financial year.

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 as at the reporting date of 31 December 2018 tightened compared with the previous year. 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 scope 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 2019 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.

Acquisition-related Disclosures

A summary of the acquisition-related disclosures required by Section 315(4) HGB [*Handelsgesetzbuch* – German Commercial Code] is given below and explanatory information is provided pursuant to Sections 175(2) and 176(1) AktG [*Aktiengesetz* – German Public Companies Act]. Information is disclosed only to the extent that it applies to KSB SE & Co. KGaA (KSB AG until 17 January 2018). In the following, only the term KSB SE & Co. KGaA will be used.

The share capital of KSB SE & Co. KGaA 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. Some 84 % of ordinary shares are held by Johannes und Jacob Klein GmbH, Frankenthal (until 4 May 2017, the company operated as Klein Pumpen GmbH), whose shares are majority-owned by KSB Stiftung [KSB Foundation], Stuttgart. 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 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 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 such cases, the legal representative shall be authorised by the Articles of Association to adjust the number of no-par-value shares. KSB SE & Co. KGaA 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 legal representative to increase the share capital (authorised capital).

In accordance with its Articles of Association, KSB SE & Co. KGaA was managed by at least two Board of Management members until 17 January 2018. The Supervisory Board decided on the appointment and termination of the mandate of members of the Board of Management in accordance with the statutory provisions. Since 17 January 2018, KSB Management SE has conducted the business of KSB SE & Co. KGaA. According to the Articles of Association, the business of KSB SE & Co. KGaA is managed by the legal representative, 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 289f HGB [*Handelsgesetzbuch* – German Commercial Code] in conjunction with Section 315d HGB dated 13 March 2019 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 practices of KSB Management SE as the general partner and the Supervisory Board, and the composition and working practices of the committees of the Supervisory Board.

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

The combined separate non-financial report is prepared in accordance with Sections 315b, 315c in conjunction with 289b to 289e HGB and disclosed together with the group management report in accordance with Section 325 HGB. The report can be accessed at: www.non-financial-report2018.ksb.com

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 (item 4.2.5).

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 KSE SE & Co. KGaA in the 2018 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, 13 March 2019

KSB Management SE

The Managing Directors

4

Consolidated Financial Statements

Balance Sheet

Assets

€ thousands	Notes	31 Dec. 2018	31 Dec. 2017
Non-current assets			
Intangible assets	1	91,089	108,054
Property, plant and equipment	2	496,659	506,214
Non-current financial assets	3	1,773	6,132
Other non-financial assets	4	2,914	–
Investments accounted for using the equity method	5	23,855	22,185
Deferred tax assets	18	80,391	91,736
		696,681	**734,321**
Current assets			
Inventories	6	544,430	461,877
Contract assets	7	74,499	–
Trade receivables	7	518,116	613,311
Other financial assets	7	103,388	116,970
Other non-financial assets	7	49,504	37,402
Cash and cash equivalents	8	255,545	289,535
		1,545,482	**1,519,095**
		2,242,163	**2,253,416**

Equity and Liabilities

€ thousands	Notes	31 Dec. 2018	31 Dec. 2017
Equity	9		
Subscribed capital		44,772	44,772
Capital reserve		66,663	66,663
Revenue reserves		577,756	611,855
Equity attributable to shareholders of KSB SE & Co. KGaA		689,191	723,290
Non-controlling interests		167,600	162,108
		856,791	**885,398**
Non-current liabilities			
Deferred tax liabilities	18	10,252	14,703
Provisions for employee benefits	10	578,640	606,875
Other provisions	10	1,377	1,397
Financial liabilities	11	30,099	54,333
		620,368	**677,308**
Current liabilities			
Provisions for employee benefits	10	9,287	8,033*
Other provisions	10	83,557	68,806*
Financial liabilities	11	48,777	21,960
Contract liabilities	11	157,389	–
Trade payables	11	270,212	241,630*
Other financial liabilities	11	32,767	81,467
Other non-financial liabilities	11	154,689	263,600*
Income tax liabilities	11	8,326	5,214
		765,004	**690,710**
		2,242,163	**2,253,416**

* Restated compared with presentation in the 2017 Annual Report.
Further information is provided in the Notes to the consolidated financial statements.

Statement of Comprehensive Income

Income statement

€ thousands	Notes	2018	2017
Sales revenue	12	**2,245,948**	**2,204,958**
Changes in inventories		22,554	– 49
Work performed and capitalised		7,332	5,588
Total output of operations		**2,275,834**	**2,210,497**
Other income	13	33,050	69,170
Cost of materials	14	– 934,545	– 887,820
Staff costs	15	– 765,462	– 796,732
Depreciation and amortisation	1, 2	– 104,491	– 70,593
Other expenses	16	– 416,869	– 392,414
Other taxes		– 12,815	– 15,753
		74,702	**116,355**
Finance income	17	4,893	6,417
Finance expense	17	– 16,544	– 20,106
Income from / expense to investments accounted for using the equity method	17	2,510	1,514
		– 9,141	**– 12,175**
Earnings before income tax		**65,561**	**104,180**
Taxes on income	18	– 41,644	– 52,076
Earnings after income tax		**23,917**	**52,104**
Attributable to:			
Non-controlling interests	19	12,618	14,923
Shareholders of KSB SE & Co. KGaA		**11,299**	**37,181**
Diluted and basic earnings per ordinary share (€)	20	6.26	21.10
Diluted and basic earnings per preference share (€)	20	6.64	21.36

Statement of income and expense recognised in equity

€ thousands	Notes	2018	2017*
Earnings after income tax		**23,917**	52,104
Remeasurement of defined benefit plans	10	– 10,736	9,328
Taxes on income		3,341	– 3,843
Expense and income recognised directly in equity and not reclassified to profit or loss in subsequent periods		**– 7,395**	**5,485**
Currency translation differences		– 13,276	– 54,238
Attributable to: Expense and income recognised directly in equity attributable to investments accounted for using the equity method		451	– 2,225
Changes in the fair value of financial instruments: Hedging reserve		– 5,571	8,804*
Taxes on income		1,665	– 2,737*
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		– 53	– 1,601*
Taxes on income		18	480*
Expense and income recognised directly in equity and reclassified to profit or loss in subsequent periods		**– 17,217**	**– 49,292**
Other comprehensive income		**– 24,612**	**– 43,807**
Total comprehensive income		**– 695**	**8,297**
Attributable to:			
Non-controlling interests		12,983	– 62
Shareholders of KSB SE & Co. KGaA		**– 13,678**	**8,359**

Further information is provided in the Notes to the consolidated financial statements. * Prior-year value restated under IFRS 9

Statement of Changes in Equity

€ thousands	Subscribed capital of KSB SE & Co. KGaA	Capital reserve of KSB SE & Co. KGaA
1 Jan. 2017	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. 2017	**44,772**	**66,663**

€ 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**

Accumulated currency translation differences (€ thousands)	Equity attributable to shareholders of KSB SE & Co. KGaA	Non-controlling interests	Total equity
Balance at 1 Jan. 2017	– 44,507	– 5,264	**– 49,771**
Change in 2017	– 39,262	– 14,881	**– 54,143**
31 Dec. 2017	**– 83,769**	**– 20,145**	**– 103,914**
Balance at 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**

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
836,530	–44,507	–5,181	582	–173,186	725,673	164,661	**890,334**
–	–39,357	6,157	–1,121	5,499	–28,822	–14,985	**–43,807**
37,181	–	–		–	37,181	14,923	**52,104**
37,181	**–39,357**	**6,157**	**–1,121**	**5,499**	**8,359**	**–62**	**8,297**
–9,857	–	–	–	–	–9,857	–2,491	**–12,348**
–	–	–	–	–	–	–	**–**
–980	95	–	–	–	–885	–	**–885**
–	–	–	–	–	–	–	**–**
862,874	**–83,769**	**976**	**–539**	**–167,687**	**723,290**	**162,108**	**885,398**

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**

* Prior-year value restated under IFRS 9

Statement of Cash Flows

€ thousands	2018	2017
Earnings after income tax	23,917	52,104
Depreciation and amortisation / Write-ups	104,491	71,445
Increase / decrease in non-current provisions	– 41,305	9,947
Gain / loss on disposal of fixed assets	– 957	– 9,150
Other non-cash expenses / income	– 455	29
Cash flow	**85,691**	**124,375**
Increase / Decrease in inventories	– 50,834	– 15,725
Increase / Decrease in trade receivables and other assets	– 7,522	– 21,001
Increase / Decrease in contract assets	– 6,606	–
Increase / Decrease in current provisions	10,320	8,231
Increase / Decrease in advances received from customers	–	15,536
Increase / Decrease in liabilities (excluding financial liabilities)	35,997	10,535
Increase / Decrease in contract liabilities	– 4,433	–
Other non-cash expenses (operating)	– 1,260	– 1,260
	– 24,338	**– 3,684**
Cash flows from operating activities	**61,353**	**120,691**
Proceeds from disposal of intangible assets	1,778	4
Payments to acquire intangible assets	– 13,932	– 11,941
Proceeds from disposal of property, plant and equipment	2,263	20,224
Payments to acquire property, plant and equipment	– 69,203	– 88,526
Proceeds from disposal of non-current financial assets	6	218
Payments to acquire non-current financial assets	– 843	– 819
Payments to acquire consolidated companies	– 5,650	–
Proceeds from / Payments for investments in Group companies that are not fully consolidated	681	295
Proceeds from commercial papers	29,979	74,820
Payments for commercial papers	– 19,990	– 29,979
Proceeds from term deposits (maturity of more than 3 and up to 12 months)	596	55,825
Payments for term deposits (maturity of more than 3 and up to 12 months)	– 16,180	– 28,447
Other non-cash expenses / income	–	165
Cash flows from investing activities	**– 90,495**	**– 8,161**
Dividends paid for prior year – Shareholders of KSB SE & Co. KGaA (Notes No. 9)	– 13,360	– 9,857
Dividends paid for prior year – Non-controlling interests	– 2,506	– 2,491
Payments for loan against borrower's note	–	– 74,500
Proceeds from financial liabilities	23,702	8,671
Payments for financial liabilities	– 15,757	– 27,821
Payments to acquire non-controlling interests	– 1,512	–
Cash flows from financing activities	**– 9,433**	**– 105,998**
Changes in cash and cash equivalents	– 38,575	6,532
Effects of exchange rate changes on cash and cash equivalents	4,585	– 6,828
Effects of changes in consolidated Group	–	948
Cash and cash equivalents at beginning of period	289,535	288,883
Cash and cash equivalents at end of period	**255,545**	**289,535**

Cash flows from operating activities include cash flows from interest received amounting to € 4,618 thousand (previous year: € 6,139 thousand) and cash flows from income tax totalling € – 23,780 thousand (previous year: € – 40,193 thousand). Cash flows from investing activities for the 2018 financial year include cash flows from dividends received of € 1,029 thousand (previous year: € 1,654 thousand). Cash flows from financing activities include cash flows from interest expense of € – 4,888 thousand (previous year: € – 8,649 thousand).

Further information is presented in Section VII. Statement of Cash Flows in the Notes to the consolidated financial statements.

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. By entry in the Commercial Register on 17 January 2018, KSB Aktiengesellschaft changed its legal form to SE & Co. KGaA. 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 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) 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 applicable in the EU. The consolidated financial statements were prepared on a going concern basis in accordance with IAS 1.25. They were prepared using the historical cost convention, with the exception of measurement at market value for available-for-sale financial assets and measurement at fair value through profit and loss for financial assets and liabilities (including derivatives). Investments in joint ventures and associates were measured using the equity method.

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 and the group management report, as well as the annual financial statements and management report of the Group's parent company, are submitted to and published in the *Bundesanzeiger* [German Federal Gazette].

The present consolidated financial statements, due to be approved by the Supervisory Board on 20 March 2019, will be approved for publication on 28 March 2019 by the Managing Directors of KSB Management SE.

New accounting principles

a) Accounting principles applied for the first time in the 2018 financial year

The following new and revised Standards issued by the International Accounting Standards Board (IASB) were required to be applied for the first time in financial year 2018:

In July 2014, the IASB published **IFRS 9 Financial Instruments** as the successor to IFRS 39 Financial Instruments: Recognition and Measurement. IFRS 9 specifies new rules for classifying and measuring financial instruments, new rules regarding the impairment of financial assets and also revised rules for recognising hedges. The modified retrospective method was used for application as at the date of first-time adoption. The resultant effects are presented in Section III. Accounting Policies in the "Impact of the introduction of new accounting standards" sub-section. Under the transitional provisions, the option of presenting the comparative information for the 2017 financial year in accordance with IAS 39 was used.

In May 2014, the IASB published the new IFRS 15 Revenue from Contracts with Customers standard. The new accounting standard defines principles that an entity should apply to report on the nature, amount, timing and uncertainty of revenue and cash flows arising from a contract with a customer. Sales revenue is recognised when the customer has control over the agreed goods and services and can derive benefits from these. It supersedes the following previous Standards and Interpretations: IAS 11 Construction Contracts, IAS 18 Revenue, IFRIC 13 Customer Loyalty Programmes, IFRIC 15 Agreements for the Construction of Real Estate, IFRIC 18 Transfers of Assets from Customers and SIC-31 Revenue – Barter Transactions Involving Advertising Services.

IFRS 15 was applied for the first time on 1 January 2018 using the modified retrospective method. Accordingly, the cumulative impact on earnings from the change was recognised at the beginning of the reporting period in revenue reserves. The comparative figures for the 2017 financial year were not restated. In addition, the option of simplified first-time adoption was used and IFRS 15 was only applied to contracts that had not yet been complete on 1 January 2018. The resultant effects are presented in Section III. Accounting Policies in the "Impact of the introduction of new accounting standards" sub-section.

Three standards were amended through the **Annual Improvements to IFRS Standards 2014 – 2016 Cycle**. The changes to IFRS 12 Disclosure of Interests in Other Entities have had to be applied since 1 January 2017. There were further revisions to IFRS 1 First-time Adoption of IFRS and IAS 28 Investments in Associates and Joint Ventures which have had to be applied since 1 January 2018. The short-term exemptions in paragraphs E3–E7 of IFRS 1 were deleted, as they had served their intended purpose. IAS 28 clarified that on initial recognition there is an option, for every investment in an associate or joint venture on an individual investment basis, to measure an investment in an associate or joint venture held by an entity that is a venture capital organisation or another qualifying entity at fair value through profit or loss.

The amendments to **IFRS 2 Share-based Payment** relate to the accounting treatment of cash-settled share-based payment transactions. Some of the new provisions concern the calculation of the fair value of obligations resulting from share-based payments.

The changes to **IFRS 4 Insurance Contracts** aim to reduce the impact of the differing start dates for IFRS 9 Financial Instruments and the successor standard to IFRS 4, above all for entities with comprehensive insurance activities.

IFRIC 22 Foreign Currency Transactions and Advance Consideration clarifies the exchange rate to be used on initial recognition for the conversion of foreign currency transactions that include the receipt or payment of advance consideration.

IAS 40 Investment Property has been amended in order to clarify that an entity may only transfer a property to or out of its investment property portfolio if there is evidence of a change of use.

The above listed new or revised accounting Standards and Interpretations 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 9 and IFRS 15.

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

The following Standards and revised Standards issued by the IFRS Interpretations Committee (IFRIC) were not yet mandatory and were not applied in the 2018 financial year:

→ IFRS announcements

IFRS announcements

	First-time adoption in the EU
Changes to **IAS 28** Investments in Associates and Joint Ventures and **IFRS 10** Consolidated Financial Statements	1 Jan. 2019
IFRS 16 Leases	1 Jan. 2019
IFRIC 23 Uncertainty over Income Tax Treatment	1 Jan. 2019
Changes to **IAS 19** Employee Benefits	1 Jan. 2019
Improvements to the International Financial Reporting Standards (2015 to 2017)	1 Jan. 2019
Changes to **IFRS 9** Financial Instruments	1 Jan. 2019
Amendments to the cross-references in the **Conceptual Framework** in IFRS	1 Jan. 2020
Revision of **IFRS 3** Business Combinations	1 Jan. 2020
Changes to **IAS 1** Presentation of Financial Statements and **IAS 8** Accounting Policies	1 Jan. 2020
IFRS 17 Insurance Contracts	1 Jan. 2021

As a matter of principle, the new or revised Standards or Interpretations shown in the table have not been adopted early. Apart from IFRS 16 Leases, no or no material impact on the net assets, financial position and results of operations is expected from the IFRS announcements.

IFRS 16 Leases was published in January 2016 and must be applied to financial years that begin on or after 1 January 2019. The new lease standard replaces 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.

KSB will be applying IFRS 16 from 1 January 2019. The standard will be implemented using the modified retrospective method for first-time adoption.

IFRS 16 specifies the new rules on recognising, measuring, presenting and disclosing leases on a more detailed basis compared with IAS 17. The classification into operating and finance leases shall no longer apply to lessees in future. Under IFRS 16, all leases must be presented by the lessee in the balance sheet in the form of a right-of-use asset (right to use the leased item) and a corresponding lease liability 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.

Under IFRS 16, lessees have the option of not capitalising short-term leases (leases with a lease term of less than twelve months) and leases with a low-value underlying asset. If this option is used, the lease will be accounted for in a comparable way to that previously stipulated under IAS 17 for operating leases. KSB will be making use of these options. This approach was the basis for the expected impact resulting from the transition as at 1 January 2019, as presented in the following. It has also been taken into account that as part of the transition, KSB will exercise the option for existing leases of recognising the right-of-use assets at the amount of the lease liabilities. For the purposes of determining fair value in these cases, no initial direct costs, such as payable commissions, were included in the measurement of the expected carrying amount of the right-of-use assets as at 1 January 2019.

For subsequent accounting purposes, lessees must remeasure the lease liability to reflect specific events (such as a change in the lease term or change in future lease payments arising from changes in the index or interest rate applied to determine the lease payments). Lessees will in general recognise the amount of the remeasured lease liability as an adjustment to the right-of-use asset.

KSB has reviewed all of the Group's existing leases for the specifications of IFRS 16 and analysed the likely impact of the introduction of IFRS 16 on the Group's net assets, financial position and result of operations for the 2019 financial year. The standard is deemed to have a significant impact on operating lease agreements in force in which KSB is the lessee.

KSB expects to capitalise lease liabilities of around € 43 million as at 1 January 2019 and, in line with the envisaged use of the option permitted, right-of-use assets of the same amount, with potential variations of +/−5 % percentage points to be taken into account for each item. The balance sheet total will accordingly increase by some € 43 million through the recognition of right-of-use assets under assets and the recognition of lease liabilities under equity and liabilities. Equity will not have to be restated at the transition point due to the chosen approach of recognising lease liabilities and right-of-use assets at the same amount.

No material effect is expected on EBIT from the amended presentation in the income statement in the form of interest expenses from lease liabilities and depreciation/amortisation of the right-of-use assets compared with the expenses for operating leases shown under IAS 17.

The cash flows from operating leases were part of cash flows from operating activities in the year under review. Upon first-time adoption of IFRS 16 and the related capitalisation of these leases, the amortisation component of cash flow from financing activities will fall, while the interest portion in cash flow from operating activities will remain the same.

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

II. BASIS OF CONSOLIDATION

Consolidated Group

In addition to KSB SE & Co. KGaA, 9 German and 74 foreign companies (previous year: 9 German and 73 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 exercises control over the budget.

KSB also 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.

Affiliates that were not consolidated due to there being no material impact are reported as other investments under non-current other financial assets in the year under review. They were shown under non-current financial assets in the previous year.

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

Information on the subgroup that comprised the subsidiaries of the KSB Group listed in the following table as at 31 December 2018 is summarised under the name “PAB”.
→ Composition of the PAB subgroup 31 Dec. 2018

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 also include financial information of KSB AMRI Inc., Houston / Texas, in which KSB America Corporation, Richmond / Virginia, held an 89.97 % stake throughout the previous year and also in the reporting year until the company was liquidated on 6 December 2018.
→ Summarised balance sheet
→ Summarised statement of comprehensive income
→ Condensed statement of cash flows

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	2018 / 2017	31 Dec. 2018	31 Dec. 2017	31 Dec. 2018	31 Dec. 2017
PAB, Germany / USA (subgroup)	49.00 %	6,312	7,457*	81,920	72,134*
KSB Limited, India	59.46 %	5,059	4,742	55,116	53,508
KSB Shanghai Pump Co., Ltd., China	20.00 %	– 254	– 847	10,222	10,569
Individually immaterial fully consolidated subsidiaries with non-controlling interests		1,501	3,571*	20,342	25,897*
Total amount of non-controlling interests		**12,618**	**14,923**	**167,600**	**162,108**

* Restated compared with presentation in the 2017 Annual Report.

Composition of the PAB subgroup 31 Dec. 2018

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

Summarised balance sheet

	PAB		KSB Limited		KSB Shanghai Pump Co., Ltd.	
€ thousands / 31 Dec.	**2018**	**2017***	**2018**	**2017**	**2018**	**2017**
Non-current assets	69,422	60,271	47,404	48,551	27,851	25,398
Current assets	150,681	142,424	107,463	101,760	145,085	137,263
Non-current liabilities	– 13,140	– 8,564	– 2,340	– 5,223	–	–
Current liabilities	– 39,779	– 46,918	– 59,832	– 56,330	– 121,824	– 113,214
Net assets	**167,184**	**147,213**	**92,695**	**88,758**	**51,112**	**49,447**

* Restated compared with presentation in the 2017 annual report.

Summarised statement of comprehensive income

€ thousands	PAB 2018	PAB 2017*	KSB Limited 2018	KSB Limited 2017	KSB Shanghai Pump Co., Ltd. 2018	KSB Shanghai Pump Co., Ltd. 2017
Sales revenue	212,570	185,007	133,180	127,563	158,278	146,291
Earnings after income tax	12,882	15,219	9,365	8,804	– 1,269	– 5,478
Other comprehensive income	8,496	– 18,748	– 3,890	– 4,083	2,934	7,893
Comprehensive income	21,378	– 3,529	5,475	4,721	1,665	2,415
Other comprehensive income attributable to non-controlling interests	4,163	– 9,187	– 2,313	– 2,428	587	1,579
Comprehensive income attributable to non-controlling interests	10,475	– 1,729	3,255	2,807	333	483
Dividends paid to non-controlling interests	–	–	– 1,538	– 1,549	–	–

* Restated compared with presentation in the 2017 annual report.

Condensed statement of cash flows

€ thousands	PAB 2018	PAB 2017*	KSB Limited 2018	KSB Limited 2017	KSB Shanghai Pump Co., Ltd. 2018	KSB Shanghai Pump Co., Ltd. 2017
Cash flows from operating activities	9,286	18,987	9,883	– 3,606	11,210	9,495
Cash flows from investing activities	– 20,722	– 12,170	– 7,597	– 10,354	2,250	193
Cash flows from financing activities	– 1,178	– 178	325	– 2,867	– 3,179	– 9,121
Changes in cash and cash equivalents	**– 12,614**	**6,639**	**2,611**	**– 16,827**	**10,281**	**567**
Cash and cash equivalents at beginning of period	19,486	15,051	10,264	28,241	2,258	2,292
Effects of exchange rate changes	528	– 2,204	– 382	– 1,150	191	– 301
Cash and cash equivalents at end of period	**7,400**	**19,486**	**12,493**	**10,264**	**12,730**	**2,558**

* Restated compared with presentation in the 2017 annual report.

Acquisitions and divestments

KSB Dubric, Inc., Michigan (USA) was established in order to expand the service network in the American Midwest. The company acquired the assets of the DUBRIC Group on 28 February 2018 and has been fully consolidated from that date. KSB Dubric, Inc. is specialised in servicing and selling pumps, other rotating equipment and the corresponding spare parts. The KSB Group owns 51 % of the shares.

The purchase price of the assets and liabilities acquired was € 5.6 million. The fair value of non-current assets included property, plant and equipment as well as intangible assets of € 4,911 thousand. The goodwill arising from the transaction amounts to € 2.4 million.

From the date of acquisition, KSB Dubric, Inc. contributed € 4.8 million of sales revenue to the Group's consolidated sales revenue. The contribution to consolidated earnings after income tax for the consolidation period was € – 695 thousand.

The costs incurred by the KSB Group through the acquisitions was € 283 thousand. They are reported in the income statement under other operating expenses. In addition, the first-time consolidations had the following impact on the consolidated balance sheet:

First-time consolidations – Impact on balance sheet

€ thousands	2018
Non-current assets	4,913
Current assets	– 4,523
Assets	**390**
Equity	–
Non-current liabilities	–
Current liabilities	390
Equity and liabilities	**390**

Other effects resulting from the consolidation of the company were not material.

As part of the strategic orientation of the operative business of KSB Pumps and Valves (Pty) Ltd., Germiston (Johannesburg), South Africa, the local management decided at the beginning of 2018 to improve its Broad-based Black Economic Empowerment (B-BBEE) rating to improve its chances of being awarded government contracts. The Broad-based Black Economic Empowerment Act is an affirmative action programme to achieve financial equality of previously disadvantaged population groups in South Africa.

For this reason, the shares of the previous B-BBEE partner, which owned 15.01 % of the partnership shares, were first bought back by KSB on 18 January 2018 through a contractually agreed option. On 20 July 2018, 30 % (plus one share) of the shares in KSB Pumps and Valves (Pty) Ltd. were transferred to the new B-BBEE partner. In the 2018 financial year, no profit share had so far been allocated to new shareholders. Any entitlement depends on the occurrence of other conditions. More information can be found in Section V. Income Statement Disclosures – Notes No. 17 “Finance income / expense”.

The American company KSB AMRI, Inc., Houston, and the British company Smedegaard Pumps Limited, Bridgwater, were liquidated in the financial year. The sale of KSB Shanghai Precision Casting Co., Ltd., Shanghai, China, carried out in the 2017 financial year was completed by selling the remaining 5 % of the shares. The company gear-tec GmbH, Eggebek, Germany, which was not fully consolidated due to there being no material impact, was also sold in the middle of the year under review.

The impact of the above changes on the consolidated financial statements was not material.

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 euros (€). 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,

Exchange rates for the most important currencies

	Closing rate		Average rate	
	31 Dec. 2018	31 Dec. 2017	2018	2017
US dollar	1.1450	1.1993	1.1810	1.1292
Brazilian real	4.4440	3.9729	4.3085	3.6041
Indian rupee	79.7298	76.6055	80.7332	73.4887
Chinese yuan	7.8751	7.8044	7.8081	7.6257

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 and cash flow statement items are translated at average annual exchange rates (modified closing rate method). The sole exception as at 31 December 2018 was the translation of the financial statements of KSB Compañía Sudamericana de Bombas S.A., Argentina where income statement items were translated at the closing rate. 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 € – 117,763 thousand (previous year: € – 103,914 thousand). The effect of currency translation adjustments taken directly to equity on intangible assets, property, plant and equipment, and financial assets was a loss of € 6,885 thousand (previous year: loss of € 25,689 thousand).
→ Exchange rates for the most important currencies

Hyperinflation

In the financial year, Argentina was rated as a hyperinflation country for accounting purposes. 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 since 1 January 2018. The effect on the monetary items was € -335 thousand. 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 from 2009. 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 concerns the primary financial instruments such as trade receivables and financial claims as well as trade payables. 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, liabilities 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.

In the previous year, items were allocated to the following categories under IAS 39:

- Loans and receivables (LaR) that are not quoted in an active market
- Financial liabilities measured at amortised cost (FLAC) using the effective interest method. Liabilities that are not quoted in an active market, such as trade payables
- Available for sale (AfS) – Available-for-sale financial instruments – Non-derivative financial instruments that are not allocated to any other measurement category, such as investments in non-consolidated subsidiaries or securities

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, currency options 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 receivables and other current assets, and under miscellaneous other 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 and amortisation" in the income statement. The underlying useful lives of intangible assets – excluding goodwill (indefinite useful life) – is between two and five 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 (CGU), 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 rate of inflation and estimates with regard to regional and segment-specific 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; previous year: 5 %), a 0.25 % reduction in the growth rate (Sensitivity 2) 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 of their capitalisation. Research costs are expensed as incurred. Where research and development costs cannot be reliably distinguished within a project, no costs are capitalised.

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 lives 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

Leases

IAS 17 defines a lease as an arrangement under which a lessor provides a lessee with the right to use an asset for an agreed period of time in exchange for a payment. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incident to ownership to the lessee. Otherwise, such transactions are to be classified as operating leases.

Lease payments that are payable under operating leases are recognised as expenses in the period in which they are incurred. In the case of finance leases, the leased asset is recognised at the time of inception of the lease at the lower of fair value and the present value of future minimum lease payments. A liability is recognised in the same amount for the future lease payment. The asset's carrying amount is reduced by depreciation over its useful life or the shorter lease term.

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 as 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 here 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 using allowance accounts. 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 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.

Assets 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 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.

Deferred taxes

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 carryforwards 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.

In the 2018 financial year, accounting principles were amended so that some items previously allocated to provisions are now classified as liabilities. To increase transparency in relation to the uncertainties associated with individual liability items, liabilities for other staff costs previously shown in particular under provisions that can be classified as certain in terms of maturity and amount, as well as accruals and deferrals for outstanding invoices are now reported under liabilities.

In accordance with IAS 8, this is a voluntary change requiring retrospective application. The prior-year figures were restated accordingly. More information on the changes are presented in Section IV. Balance Sheet Disclosures - Notes No. 10 “Provisions” and 11 “Liabilities”.

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

The rules of IFRS 15 were applied by KSB for the first time in the year under review. The new IFRS 15 standard summarises in a new standard the numerous previous rules and interpretations on sales revenue recognition. Standardised basic principles for all sectors and categories were also determined by the new standard. The recognition of sales revenue from customer contracts is essentially based on a five-step model framework.

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, as with the previous procedure under IAS 11 (percentage-of-completion method)/IAS 18, 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 expected 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 expenses 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.

The pension plans concluded before 2009 solely provided for the payment of accumulated amounts in the form of a monthly pension for life upon retirement. In an extension to the Group works agreement, a lump-sum option was added to the company pension scheme in the 2018 financial year. Under this, every employee is entitled to apply at any time during the ongoing employment contract for payment in annual instalments, as a single payment or as a pension for life. KSB has estimated how the specific workforce is likely to decide on exercising the lump-sum option and has taken this into account for the measurement of pension provisions. All other measurement parameters are unchanged year on year. Average fluctuation is assumed.

Other provisions are reported based on the best possible estimate of the probability of future outflows. 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 %. For the reporting, the best estimate is based on the expected tax payment. 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 it must be taken into account that expected future business developments are subject to uncertainties and are in some cases beyond the control of 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.

Impact of the introduction of the new accounting standards

As a result of the application of the new rules contained in IFRS9 Financial Instruments and IFRS 15 Revenue from Contracts with Customers, KSB changed its accounting policies as from 1 January 2018. Both IFRS 9 (apart from the recognition of hedges) and IFRS 15 were applied for the first time without any retrospective restatement of comparative data. The reclassifications and restatements resulting from the amended accounting principles are therefore not retrospective to 31 December 2017, but are only reported in the opening balance sheet as at 1 January 2018.

The following table shows the restatements in the opening balance sheet per individual item in the balance sheet. Items not subject to any change as at 1 January 2018 are not included in the table.

→ Restatements in the opening balance sheet

IFRS 9 Financial Instruments contains new rules on the classification and measurement of financial instruments, changes in the reporting and measurement of impairment of certain financial assets and revised rules on hedge accounting.

IFRS 9 contains three categories for measuring financial assets and liabilities: at amortised cost, at fair value through profit or loss and at fair value directly in equity. The categories of IAS 39 have been replaced in full. The rules for *classification and measurement* of financial instruments under IFRS 9 are based on the following two criteria: Firstly on the Group's business model for managing the financial assets (hold, hold and sell and held for sale), and secondly on the nature of the cash flows. If the cash flows from the financial instrument derive solely from interest and redemption payments, classification is made depending on the business model. If the asset is only held to collect contractual cash flows, then measurement is at amortised cost. Nearly all the Group's assets meet these criteria and are therefore measured at amortised cost, with the exception of financial instruments and currency forwards. The reclassifications following this approach from IAS 39 to IFRS 9 are presented in the reconciliation table.

→ Reconciliation of measurement categories of financial assets from IAS 39 to IFRS 9

Restatements in the opening balance sheet

Balance sheet (extract) / € thousands	31 Dec. 2017*	Restatement under IFRS 9	Restatement under IFRS 15	Opening balance sheet 1 Jan. 2018
Assets				
Non-current assets				
Financial assets	6,132	– 2,985	–	3,147
Other non-financial assets	–	2,985	–	2,985
Current assets				
Inventories	461,877	–	42,210	504,087
Contract assets	–	– 79	69,724	69,645
Trade receivables from third parties	480,928	– 1,486	–	479,442
Receivables recognised by PoC, net	100,042	–	– 100,042	–
Deferred tax assets	91,736	562	1,546	93,844
Equity and liabilities				
Equity	885,398	– 1,003	– 8,222	876,173
Non-current liabilities				
Deferred tax liabilities	14,703	–	– 1,311	13,392
Current liabilities				
Other provisions	68,806*	–	4,883	73,689
Contract liabilities	–	–	165,192	165,192
Other financial liabilities	81,467	–	– 49,401	32,066
Other non-financial liabilities	263,600*	–	– 97,703	165,897

* Restated compared with presentation in the 2017 annual report.

Changes to the financial liabilities measured at fair value through profit and loss were fully recognised in the income statement under IFRS 39, while IFRS 9 requires a separate treatment. If changes are a result of credit risk developments, then they are to be recognised in other comprehensive income. Other changes are recognised in the income statement. Financial liabilities are as a rule measured at amortised cost in the Group.

According to the new rules regarding impairment, the incurred loss model (retrospective) applied under IAS 39 is to be replaced by the expected credit loss model (prospective). The standard stipulates a general three-stage model (impairment model) and a simplified method for determining the anticipated impairment. For all financial instruments that fall within the scope of the new impairment model, the calculated prospective impairment needs to be reported at the time of initial recognition based on a valid future estimation.

KSB applies the expected credit loss model to financial assets under IFRS 9. This applies to the value of the “Trade receivables” and “Contract assets” balance sheet items.

Under IFRS 9, KSB applies the simplified approach to determine default risk for trade receivables and contract assets. As of 1 January 2018, the impairment allowance of trade receivables was increased by € 1,486 thousand directly in equity. Furthermore, impairment of contract assets of € 79 thousand was taken directly to equity on a one-time-only basis. The change in risk provision for expected credit losses in the financial year is presented in the comments on trade receivables and contract assets in Section IV. Balance Sheet Disclosures.

Reconciliation of measurement categories of financial assets from IAS 39 to IFRS 9

	31 Dec. 2017		Restatements under IFRS 9		1 Jan. 2018	
€ thousands	Measurement category (IAS 39)	Carrying amount	Re-categori-sation	Measurement effect	Carrying amount [1]	Measurement category (IFRS 9)
Non-current assets						
Other investments	n / a	2,985	– 2,985	–	–	n / a
Non-current financial instruments	AfS	657	–	–	657	FVPL
Loans	LaR	2,490	–	–	2,490	Amortised cost
Current assets						
Trade receivables from third parties	LaR	480,928	–	– 1,486	479,442	Amortised cost
Trade receivables from other investments, associates and joint ventures	LaR	32,341	–	–	32,341	Amortised cost
Receivables from loans to other investments, associates and joint ventures	LaR	13,344	–	–	13,344	Amortised cost
Receivables recognised by PoC, net	LaR	100,042	– 100,042	–	–	n / a
Currency forwards used as hedges	n / a	5,074	–	–	5,074	n / a
Other receivables and other current assets	LaR	98,552	–	–	98,522	Amortised cost
Cash and cash equivalents	LaR	289,535	–	–	289,535	Amortised cost

[1] Carrying amount except for the “Receivables recognised by PoC, net” item excluding restatements under IFRS 15.

Loans, cash and cash equivalents as well as other financial assets are also subject to the new impairment provisions of IFRS 9. However, the analysed impairment expense was not material either on an individual or collective basis.

In addition, IFRS 9 covers hedge accounting. As such, the risk management of an entrepreneur goes hand in hand with hedge accounting. The hedges in place as at 31 December 2017 essentially meet the conditions of IFRS 9 in respect of hedge accounting and are therefore being continued in principle subject to an amended designation. With the change to IFRS 9, the forward elements and currency basis spreads are excluded from the hedge in the case of derivative instruments designated in foreign currency hedges and reported separately directly in equity in the hedging cost reserve under other comprehensive income.

The designated spot element is reported in the hedging reserve under other comprehensive income. This change was applied from 1 January 2018 to all designated foreign currency derivatives and led to a reclassification from the hedge reserve to the hedging cost reserve of € -770 thousand as of 1 January 2018 (€ 831 thousand as of 1 January 2017). The comparative figures were restated for reporting purposes.

The most important changes resulting from **IFRS 15 Revenue from Contracts with Customers** are described below.

Change from sales revenue recognition over time to recognition at a point in time

Individual KSB construction contracts that were presented in line with project progress under the percentage-of-completion method until the end of the 2017 financial year do not meet the criteria for sales revenue recognition over time under IFRS 15. This essentially relates to cases where KSB does not have, at any time of the contractual term, an enforceable right to compensation for goods or services provided to the customer or where an asset is produced that could be put to an alternative use by KSB beyond the customer contract in force. For the construction contracts in question, this results in the recognition of sales revenue at a point in time being postponed until control is transferred to the customer. In the balance sheet, these cases result in an increase in inventories against a fall in trade receivables and PoC. The change in the method of recognising revenue for individual customer contracts resulted in a restatement of revenue reserves directly in equity as part of the transition to IFRS 15 as from 1 January 2018.

Changes in presentation in the balance sheet

Contract assets: If KSB acquires a right to payment from the supply of goods or services under a contract with a customer and this right exceeds payments already made by or due from the customer and is conditional not only on the passage of time but also on the satisfaction of an overall contractual performance obligation by KSB, this must be presented as contract assets under IFRS 15.

Contract assets at KSB derive from typical customer contracts for production and service if they meet the criteria of IFRS 15 for sales revenue recognition over time. When KSB's overall contractual performance obligation ends and there is an unconditional right to payment that depends only on the passage of time, contract assets are reclassified as trade receivables.

Contract assets are recognised in the balance sheet under "Contract assets". Under the previous accounting policies, items corresponding to contract assets were reported as "Receivables recognised by PoC, net" under "Trade receivables and PoC" in the balance sheet.

Contract liabilities: Advances received from customers that exceed the amount of goods or services previously transferred by KSB under a customer contract represent contract liabilities under IFRS 15.

Contract liabilities are recognised as a separate balance sheet item. Under the previous accounting policies, items corresponding to contract liabilities were reported as "Advances received from customers (PoC), net" under "Other financial liabilities" in the balance sheet for customer contracts presented using the percentage-of-completion method. For customer contracts not presented according to the percentage-of-completion method, the relevant item "Advances received from customers" was previously shown under "Other non-financial liabilities" in the balance sheet.

Provisions for onerous customer contracts: As a result of the first-time application of IFRS 15, a gross statement of contract assets must be prepared for customer contracts that are expected to make a loss as well as provisions for the expected losses under IAS 37 under "Other provisions" in the balance sheet. Expected losses from customer contracts were netted with receivables recognised by PoC before the introduction of IFRS 15.

The following tables show the restated amounts in the balance sheet and statement of comprehensive income arising from the application of IFRS 15 as at 31 December 2018 compared with the rules under IAS 11 and IAS 18 that applied before the change.

→ Balance sheet
→ Statement of comprehensive income

Please refer to the comments above in this section for explanation of the material reconciliation effects between recognition under IFRS 15 and recognition under IAS 11/IAS 18 as at 31 December 2018.

Balance sheet

€ thousands	31 Dec. 2018 (as reported)	Reconciliation to IAS 11 and IAS 18	31 Dec. 2018 (amounts without application of IFRS 15)
Non-current assets			
Intangible assets	91,089	–	91,089
Property, plant and equipment	496,659	–	496,659
Non-current financial assets	1,773	–	1,773
Other non-financial assets	2,914	–	2,914
Investments accounted for using the equity method	23,855	–	23,855
Deferred tax assets	80,391	-2,851	77,540
Current assets			
Inventories	544,430	– 32,192	512,238
Contract assets	74,499	– 74,499	–
Trade receivables (and PoC)	518,116	143,458	661,574
Other financial assets	103,388	–	103,388
Other non-financial assets	49,504	–	49,504
Cash and cash equivalents	255,545	–	255,545
Total assets	**2,242,163**	**33,916**	**2,276,079**
Equity			
Subscribed capital	44,772	–	44,772
Capital reserve	66,663	–	66,663
Revenue reserves	577,756	6,854	584,610
Equity attributable to shareholders of KSB SE & Co. KGaA	689,191	6,854	696,045
Non-controlling interests	167,600	245	167,845
Non-current liabilities			
Deferred tax liabilities	10,252	2,077	12,329
Provisions for employee benefits	578,640	–	578,640
Other provisions	1,377	–	1,377
Financial liabilities	30,099	–	30,099
Current liabilities			
Provisions for employee benefits	9,287	–	9,287
Other provisions	83,557	– 10,292	73,265
Financial liabilities	48,777	–	48,777
Contract liabilities	157,389	– 157,389	–
Trade payables	270,212	–	270,212
Other financial liabilities	32,767	–	32,767
Other non-financial liabilities	154,689	192,421	347,110
Income tax liabilities	8,326	–	8,326
Total equity and liabilities	**2,242,163**	**33,916**	**2,276,079**

Statement of comprehensive income

€ thousands	31 Dec. 2018 (as reported)	Reconciliation to IAS 11 and IAS 18	31 Dec. 2018 (amounts without application of IFRS 15)
Sales revenue	**2,245,948**	**11,457**	**2,257,405**
Changes in inventories	22,554	– 6,042	16,512
Work performed and capitalised	7,332	–	7,332
Total output of operations	**2,275,834**	**5,415**	**2,281,249**
Other income	33,050	–	33,050
Cost of materials	– 934,545	–	– 934,545
Staff costs	– 765,462	–	– 765,462
Depreciation and amortisation	– 104,491	–	– 104,491
Other expenses	– 416,869	–	– 416,869
Other taxes	– 12,815	–	– 12,815
Finance income	4,893	–	4,893
Finance expense	– 16,544	–	– 16,544
Income from / expense to investments accounted for using the equity method	2,510	–	2,510
Earnings before income tax	**65,561**	**5,415**	**70,976**
Taxes on income	– 41,644	– 1,186	– 42,830
Earnings after income tax	**23,917**	**4,229**	**28,146**
Diluted and basic earnings per ordinary share (€)	6.26	1.10	7.36
Diluted and basic earnings per preference share (€)	6.64	1.17	7.81
Earnings after income tax	**23,917**	**4,229**	**28,147**
Remeasurement of defined benefit plans	– 10,736	–	– 10,736
Taxes on income	3,341	–	3,341
Expense and income recognised directly in equity and not reclassified to profit or loss in subsequent periods	**– 7,395**	**–**	**– 7,395**
Currency translation differences	– 13,276	–	– 13,276
Changes in the fair value of financial instruments	– 5,571	–	– 5,571
Taxes on income	1,665	–	1,665
Changes in the fair value of financial instruments Hedging cost reserve	– 53	–	– 53
Taxes on income	18	–	18
Expense and income recognised directly in equity and reclassified to profit or loss in subsequent periods	**– 17,217**	**–**	**– 17,217**
Other comprehensive income	**– 24,612**	**–**	**– 24,612**
Comprehensive income	**– 695**	**4,229**	**1,304**

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	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Balance at 1 January	71,883	71,167	103,210	104,189	–	–	25,311	15,781	**200,404**	**191,137**
Changes in consolidated Group	1,241	28	2,254	–	–	–	–	–	**3,495**	**28**
Currency translation adjustments	– 552	– 2,014	– 167	– 813	–	–	–	–	**– 719**	**– 2,827**
Other	2,093	– 6	274	–	–	–	– 72	–	**2,295**	**– 6**
Additions	2,596	2,767	–	–	9,187	–	1,228	9,692	**13,011**	**12,459**
Disposals	– 5,780	– 285	–	– 166	–	–	– 1,000	–	**– 6,780**	**– 451**
Reclassifications	3,300	226	–	–	21,558	–	– 24,694	– 162	**164**	**64**
Balance at 31 December	74,781	71,883	105,571	103,210	30,745	–	773	25,311	**211,870**	**200,404**
Accumulated depreciation and amortisation	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Balance at 1 January	59,680	57,294	32,670	27,247	–	–	–	–	**92,350**	**84,541**
Currency translation adjustments	– 481	– 1,441	395	– 132	–	–	–	–	**– 86**	**– 1,573**
Other	301	– 6	– 68	– 1	–	–	–	–	**233**	**– 7**
Additions	4,513	4,114	28,194	5,556	563	–	–	–	**33,270**	**9,670**
Disposals	– 5,002	– 281	–	–	–	–	–	–	**– 5,002**	**– 281**
Reclassifications	16	–	–	–	–	–	–	–	**16**	**–**
Balance at 31 December	59,027	59,680	61,191	32,670	563	–	–	–	**120,781**	**92,350**
Carrying amount at 31 December	**15,754**	**12,203**	**44,380**	**70,540**	**30,182**	**–**	**773**	**25,311**	**91,089**	**108,054**

The additions to intangible assets amounting to € 13.0 million (previous year: € 12.5 million) primarily concerned, as in the previous year, advance payments and own work capitalised for a new software to be deployed in Sales.

The "Concessions, industrial property and similar rights and assets, as well as licences in such rights and assets" item includes € 10.6 million (previous year: € 8.3 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 € 30,182 thousand, which largely related to projects for the KSBase sales software in development.

KSBase is a new selection software for the standard pump range. KSBase derives from acquired licences that have yet not been implemented as functional, as the requirements to be met by the software changed considerably in the past few years. These changes also mean a much higher share of programming by internal KSB staff, or that external resources must be bought in through service contracts. Both meant that the risk of successfully introducing the software and therefore the production risk has been transferred to KSB. As a result, the assets of the KSBase project were reclassified into internally generated intangible assets in the 2018 financial year.

In the reporting year, advance payments for intangible assets of € 1,000 thousand were derecognised (previous year: none). These relate to software that is no longer used due to changed requirements. Furthermore, as in the previous year, no impairment losses on other intangible assets were recognised in the reporting year.

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

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 1.0 % in the year under review (previous year: 1.25 %). The market risk premium was set at 5.75 %, which was unchanged on the previous year, with a beta factor of 0.90 (previous year: 0.94). In addition, country-specific tax rates and country risk premiums are taken into account individually for each cash-generating unit (CGU). Growth rates of 0.00 % and 1.25 % (previous year: 0.75 % to 1.25 %) were used in the financial year. 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 remains the same as in the previous year.

Discount rates

Before taxes in % (value in use)	30 Sept. 2018	30 Sept. 2017
Companies in Germany	7.9 – 8.4	8.7 – 8.8
Companies in the Netherlands	7.7	8.3
Companies in the USA	7.8	9.7
Companies in South Africa	11.4	12.2
Companies in South Korea	8.2	8.7
Companies in the rest of Europe	7.5 – 11.1	8.2 – 13.8

Goodwill

Name of CGU / € thousands	31 Dec. 2018	31 Dec. 2017
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)	2,405	–
KSB Pumps (S.A.) (Pty) Ltd., South Africa	1,808	2,010
KSB Seil Co., Ltd., South Korea	758	21,665
Société de travaux et Ingénierie Industrielle (ST II), France	–	5,689
KSB Service Energie S.A.S.U., France	–	1,412
	31,989	**57,794**
Other 17 (previous year: 16) companies	12,391	12,746
Total	**44,380**	**70,540**

The reference date for carrying out the goodwill impairment test is 30 September every year. When assessing the indications for impairment of assets, it was found that the carrying amount of net assets at KSB exceeds market capitalisation. On that basis, the goodwill impairment test was repeated as at the reporting date 31 December 2018. Impairment was recalculated

Impairment loss on goodwill (31 December 2018)

Name of CGU	Segment	Discount factor	Recoverable amount in € thousands	Impairment loss in € 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
Total 31 Dec. 2017				
KSB Seil Co., Ltd., South Korea	Valves	7.3 %	41,662	5,556

using the capital cost factor as at 31 December 2018; resulting increased impairment losses were taken into account.

→ Impairment loss on goodwill

In KSB's view, the impairment on two French cash-generating units stems from dependence on one individual major customer. The units are bound to its procurement policy and economic situation. The reduction in the proportion of nuclear energy used in the electricity mix also exacerbates the situation.

The business performance of the cash-generating unit in South Korea, KSB Seil Co., Ltd., remained generally limited. In KSB's estimation, this is attributable to its considerable reliance on the economic development of the long-cycle shipbuilding industry. Performance is heavily dependent on this sector which turned out weaker than forecast. Business is expected to recover in the short term, and then remain stable over the medium term.

The impairment loss will be reported in the income statement under "Depreciation and amortisation".

→ Detailed information on key goodwill items

For the annual impairment test, the assumptions presented in the "Basic assumptions for goodwill considered material" table were made regarding the development of order intake, sales revenue and operating earnings for goodwill deemed to be material.

→ Basic assumptions for goodwill considered material

Detailed information on key goodwill items (30 September 2018)

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
KSB Seil Co., Ltd., South Korea	Value in use	21.4 (before depreciation / amortisation)	48 %	8.2 % before tax	0.00 %	■ Stagnating shipbuilding market over the medium term ■ Little change in exchange rates	Consideration of macro-economic key data and internal estimates of the relevant purchasing and sales departments
DP industries B.V., the Netherlands	Value in use	18.3	41 %	7.7 % before tax	1.25 %	■ Low to significant market growth rates	Consideration of macro-economic 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
KSB Seil Co., Ltd., South Korea	Stagnating growth over the medium term	Stagnating growth over the medium term	Stagnating growth over the medium term, as a result of sales revenue and cost planning	5 years
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

As well as impairment testing, sensitivity analyses were conducted for each cash-generating unit. The table shows the total amount of impairment that would have arisen if the respective sensitivity had been applied.
→ Sensitivities

There would have been no additional impairment requirement for other cash-generating entities, even after taking sensitivities into account.

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	0	n / a
SPI Energie, France	332	0	n / a
Dynamik-Pumpen GmbH, Germany	132	0	n / a
KAGEMA Industrieausrüstungen GmbH, Germany	135	0	n / a
31 Dec. 2017			
KSB Seil, Busan, South Korea	7,507	6,642	7,964

2 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	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Balance at 1 January	381,587	372,075	593,154	583,604	225,103	215,203	24,071	31,049	**1,223,915**	**1,201,931**
Changes in consolidated Group	1,282	149	25	605	109	132	–	–	**1,416**	**886**
Currency translation adjustments	–1,991	–13,032	–822	–20,397	–3,481	–7,892	–1,092	–1,813	**–7,386**	**–43,134**
Other	25,324	–68	–22,901	–2,073	225	2,586	–4	–	**2,644**	**445**
Additions	8,660	18,226	21,472	29,041	20,315	21,762	16,146	20,402	**66,593**	**89,431**
Disposals	–641	–3,989	–9,168	–10,596	–12,894	–10,972	–20	–23	**–22,723**	**–25,580**
Reclassifications	2,610	8,226	12,426	12,970	–1,224	4,284	–13,976	–25,544	**–164**	**–64**
Balance at 31 December	416,831	381,587	594,186	593,154	228,153	225,103	25,125	24,071	**1,264,295**	**1,223,915**
Accumulated depreciation and amortisation	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Balance at 1 January	156,455	153,019	402,104	394,668	159,142	152,638	–	–	**717,701**	**700,325**
Currency translation adjustments	315	–3,962	1,013	–11,936	–2,152	–5,449	–	–	**–824**	**–21,347**
Other	18,540	–603	–17,846	–2,161	277	2,641	–	–	**971**	**–123**
Additions	13,712	10,466	38,417	31,910	19,092	18,547	–	–	**71,221**	**60,923**
Disposals	–285	–2,132	–8,685	–9,581	–12,447	–10,364	–	–	**–21,417**	**–22,077**
Reclassifications	169	–333	1,442	–796	–1,627	1,129	–	–	**–16**	**–**
Balance at 31 December	188,906	156,455	416,445	402,104	162,285	159,142	–	–	**767,636**	**717,701**
Carrying amount at 31 December	**227,925**	**225,132**	**177,741**	**191,050**	**65,868**	**65,961**	**25,125**	**24,071**	**496,659**	**506,214**

Assets resulting from finance leases are recognised as fixed assets in accordance with IAS 17, and corresponding financial liabilities are recognised. The carrying amount of these capitalised assets amounts to € 1,464 thousand (previous year: € 1,382 thousand), of which € 648 thousand (previous year: € 429 thousand) relate to land and buildings and € 816 thousand (previous year: € 940 thousand) to other equipment, operating and office equipment. There were no finance leases for plant and machinery in the year under review (previous year: € 13 thousand).

Disposals of intangible assets and items of property, plant and equipment resulted in book gains of € 1,618 thousand (previous year: € 12,319 thousand) and book losses of € 661 thousand (previous year: € 3,169 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 € 10,580 thousand (previous year: none) were recognised on property, plant and equipment, as no more long-term cash flows were expected from these assets for two valve type series. This impairment is reported in the income statement under depreciation and amortisation. Depreciation/amortisation relates to the Valves segment. Impairment was determined using the discounted cash flow model and a discount rate of 7.1 %.

3 Non-current financial assets

€ thousands	31 Dec. 2018	31 Dec. 2017
Loans	1,113	2,490
Financial instruments	660	657
Other investments	–	2,985
	1,773	6,132

€ 535 thousand of the loans are loans to equity investments (previous year: € 186 thousand). Due to the first-time application of IFRS 9 in the year under review, other investments are no longer allocated to financial assets. They are reported under non-current other non-financial assets.

4 Other non-financial assets

€ thousands	31 Dec. 2018	31 Dec. 2017
Other investments	2,914	–
	2,914	–

Other investments are investments in affiliates that were not consolidated due to there being no material impact. There were no write-downs applied in the year under review (previous year: € 850 thousand). Under IFRS 9, other investments are reported under other non-financial assets. They were previously allocated to financial assets.

5 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 is provided below.

→ Summarised balance sheet
→ Summarised statement of comprehensive income
→ Reconciliation to carrying amount of group share in joint ventures
→ Summarised information on joint ventures 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	**31 Dec. 2018**	**31 Dec. 2017**	**31 Dec. 2018**	**31 Dec. 2017**
Non-current assets	10,678	9,958	73,907	79,251
Current assets	39,143	36,141	126,679	102,249
of which cash and cash equivalents	263	157	17,928	7,116
Non-current liabilities	– 4,896	– 4,619	– 25,523	– 35,836
of which non-current financial liabilities (excluding trade payables and provisions)	– 3,487	– 3,334	– 25,523	–
Current liabilities	– 26,634	– 26,193	– 145,667	– 116,777
of which current financial liabilities (excluding trade payables and provisions)	– 5,090	– 4,989	– 26,793	– 37,227
Net assets	**18,291**	**15,287**	**29,396**	**28,887**

Summarised statement of comprehensive income

	KSB Pumps Arabia Ltd.		Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd.	
€ thousands	**2018**	**2017**	**2018**	**2017**
Sales revenue	34,916	39,056	55,840	53,331
Depreciation / amortisation	782	590	4,116	4,223
Interest income	–	11	62	35
Interest expense	– 553	– 608	– 2,613	– 2,617
Earnings from continuing operations	2,591	1,872	775	1,569
Taxes on income	– 46	– 680	–	– 592
Earnings after taxes from continuing operations	**2,545**	**1,192**	**775**	**977**
Earnings after taxes from discontinued operations	–	–	–	–
Other comprehensive income	861	– 2,941	– 266	– 1,870
Comprehensive income	**3,406**	**– 1,749**	**509**	**– 893**
Dividends received from joint ventures	**201**	**951**	**–**	**–**

Reconciliation to carrying amount of group share in joint ventures

	KSB Pumps Arabia Ltd.		Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd.	
€ thousands	**2018**	**2017**	**2018**	**2017**
Net carrying amount at 1 January	15,287	18,938	28,887	29,780
Earnings after income tax	2,545	1,192	775	977
Distribution of dividends	– 402	– 1,902	–	–
Other comprehensive income	861	– 2,941	– 266	– 1,870
Net carrying amount at 31 December	**18,291**	**15,287**	**29,396**	**28,887**
Investment in joint venture (50 % / 45 %)	9,145	7,643	13,228	12,999
Elimination of intercompany profit and loss	–	–	– 3,349	– 2,969
Goodwill	–	–	–	–
Carrying amount at 31 December	**9,145**	**7,643**	**9,879**	**10,030**

Summarised information on joint ventures that are immaterial individually

€ thousands	Joint ventures 2018	Associates 2018	Total 2018	Joint ventures 2017	Associates 2017	Total 2017
Group share of earnings from continuing operations	140	592	732	211	583	794
Group share of other comprehensive income	144	23	167	– 460	–	– 460
Group share of comprehensive income	284	615	899	– 249	583	334
Total carrying amounts of Group shares in these companies	**3,631**	**1,200**	**4,831**	**3,347**	**1,165**	**4,512**

6 Inventories

€ thousands	31 Dec. 2018	31 Dec. 2017
Raw materials, consumables and supplies	182,134	162,577
Work in progress	184,158	161,394
Finished goods and goods purchased and held for resale	162,128	121,421
Advance payments	16,010	16,485
	544,430	**461,877**

€ 61,614 thousand (previous year: € 51,933 thousand) of the inventories is carried at net realisable value. The impairment losses recognised as an expense in the reporting period amount to € 10,513 thousand (previous year: € 11,969 thousand). Due to new estimates, write-downs totalling € 810 thousand (previous year: € 1,303 thousand) were reversed where the current net realisable value was higher than the prior-period value. Inventories amounting to € 911,991 thousand (previous year: € 887,869 thousand) were recognised as an expense in the reporting period.

7 Contract assets, trade receivables and other financial and non-financial assets

→ Contract assets, trade receivables and other financial and non-financial assets

The "Receivables recognised by PoC, net" item is no longer used following the implementation of IFRS 15 as at 1 January 2018. KSB's claims to consideration in exchange for goods or services transferred to customers are reported in the new "Contract assets" balance sheet item if the right to payment is not only conditional on the passage of time but also on the satisfaction of an overall contractual performance obligation by KSB. The opening balance sheet value of contract assets as at 1 January 2018 was € 69,645 thousand. The balance of contract assets at the end of the year under review was at a comparable level at € 74,499 thousand.

Impairment losses on trade receivables from third parties amounted to € 33,943 thousand (previous year: € 33,995 thousand). There were impairment losses of € 499 thousand on trade receivables from other investments (previous year: € 839 thousand). Impairment losses on contract assets amounted to € 190 thousand.

Impairment losses on trade receivables and contract assets include the individual impairment allowance (EWB) and risk provisions for expected credit losses (ECL). The following table shows the reconciliation as at the first-time adoption date (31 December 2017 to 1 January 2018) and the change within the 2018 financial year.

→ Reconciliation of impairment losses

The expected default risk determined using the simplified impairment model is distributed over the gross age structure of trade receivables excluding hedged receivables as shown below:

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

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

€ thousands	31 Dec. 2018	31 Dec. 2017
Contract assets	**74,499**	**–**
Trade receivables	**518,116**	**613,311**
Trade receivables from third parties	483,626	480,928
Trade receivables from other investments, associates and joint ventures	34,490	32,341
thereof from other investments	5,384	3,524
thereof from associates	7	280
thereof from joint ventures	29,098	28,537
Receivables recognised by PoC, net	–	100,042
Receivables recognised by PoC, gross	–	130,021
Advances received from customers	–	– 29,979
Other financial assets	**103,388**	**116,970**
Receivables from loans to other investments, associates and joint ventures	12,661	13,344
Currency forwards	1,070	5,074
Other receivables and other current assets	89,657	98,552
Other non-financial assets	**49,504**	**37,402**
Other tax assets	40,124	30,830
Deferred income	9,380	6,572

Reconciliation of impairment losses

		Trade receivables from third parties		Contract assets
€ thousands	**Total**	**EWB**	**ECL***	**ECL**
31 Dec. 2017 IAS 39	**– 33,995**	**– 27,746**	**– 6,249**	**–**
Restatement under IFRS 9	– 1,486	–	– 1,486	– 79
1 Jan. 2018	**– 35,481**	**– 27,746**	**– 7,735**	**– 79**
Change in financial year				
Additions	– 7,399	– 7,399	–	– 111
Utilised	3,616	3,616	–	–
Reversals	5,321	2,170	3,151	–
31 Dec. 2018	**– 33,943**	**– 29,359**	**– 4,584**	**– 190**

* Lump-sum individual impairment allowance in the previous year

Risk provision for expected credit losses by maturity of trade receivables

31 Dec. 2018		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 %	0.3	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**

Furthermore, the balance of risk provisions for expected credit losses includes € 555 thousand, which relate to hedged receivables.

Risk provision for expected credit losses of contract assets

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

Impairment losses on receivables from loans to other investments amounted to € 3,172 thousand (previous year: € 3,127 thousand). No impairment losses were applied on receivables from joint ventures or associates, as in the previous year.

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 € 24,700 thousand (previous year: € 20,900 thousand).

€ 20,964 thousand (previous year: € 23,681 thousand) of all receivables and other assets fall due after more than one year.

8 Cash and cash equivalents

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

9 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 resulted in deferred tax assets in the amount of € 75,366 thousand (previous year: € 70,477 thousand) and deferred tax liabilities in the amount of € 24 thousand (previous year: € 187 thousand). Due to the new IFRS 9 and IFRS 15 accounting principles applied in the financial year, there was a cumulative decrease in revenue reserves of € 9,218 thousand as a result of the changeover. The impact on the total equity of the KSB Group amounted to € 9,225 thousand.

The effect on revenue reserves was as follows as at 1 January 2018:

Impact on revenue reserves

€ thousands	
Increase in impairment losses (net) of financial assets and contract assets under IFRS 9[1]	– 1,564
Increase in deferred tax assets[1]	562
Restatement of revenue reserves due to first-time application of IFRS 9	**– 1,002**
Cumulative impact on assets and liabilities under IFRS 15[1] excluding deferred tax	– 11,070
Balance from change in deferred tax[1]	2,854
Restatement of revenue reserves due to first-time application of IFRS 15	**– 8,216**
Restatement of revenue reserves on 1 January under IFRS 9 and IFRS 15	**– 9,218**

[1] See the "Restatements in the opening balance sheet" table in Section III. Accounting Policies in the "Impact of the introduction of new accounting standards" sub-section.

A total of € 13,360 thousand (dividend of € 7.50 per ordinary share and € 7.76 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 16 May 2018.

Non-controlling interests relate primarily to PAB GmbH, Frankenthal, and the interests it holds, as well as to the companies in India and China. KSB FINANZ S.A., Echternach, 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. The control parameter for KSB until the end of the 2018 financial year was 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. KSB regularly reviews the performance of this key indicator. Due to the increase in inventory items, the net financial position of € 255 million (previous year: € 288 million) was € 45 million below the target figure of € 300 million.

10 Provisions

→ Composition of provisions
→ Development of individual provision categories

In the 2018 financial year, the accounting principles were amended with the effect that some items previously allocated to current provisions for other employee benefits or current other provisions are now classified as liabilities. This relates in particular to obligations to employees arising from overtime, annual leave entitlements and bonuses as well as liabilities from outstanding invoices. To a lesser extent, such liabilities were also identified in current provisions for warranty obligations and contractual penalties; due to the present certainty of their maturity and amount they were reclassified to liabilities in the new presentation as at 31 December 2017. All restated liabilities and provisions items as at 31 December 2017 are shown in the relevant table.

→ Restatement of liabilities and provisions as at 31 Dec. 2017

Please refer to Section III. Accounting Policies for further explanations.

Composition of provisions

			31 Dec. 2018			31 Dec. 2017
Changes (€ thousands)	**Total**	**Non-current**	**Current**	**Total**	**Non-current**	**Current**
Employee benefits	**587,927**	**578,640**	**9,287**	**614,908**	**606,875**	**8,033***
Pensions and similar obligations	553,573	553,573	–	586,861	586,861	–
Other employee benefits	34,354	25,067	9,287	28,047	20,014	8,033*
Other provisions	**84,934**	**1,377**	**83,557**	**70,203**	**1,397**	**68,806***
Warranty obligations and contractual penalties	45,582	–	45,582	49,812	–	49,812*
Provisions for restructuring	1,023	–	1,023	2,750	–	2,750
Miscellaneous other provisions	38,329	1,377	36,952	17,641	1,397	16,244*
	672,861	**580,017**	**92,844**	**685,111**	**608,272**	**76,839***

* Restated compared with presentation in the 2017 annual report.

Development of individual provision categories

Changes (€ thousands)	1 Jan. 2018 (application of IAS 11/18)	Restatement under IFRS 15	1 Jan. 2018 (application of IFRS 15)	Changes in consolidated Group/ CTA**/Other	Utilisation/ Prepayments	Reversals	Additions	31 Dec. 2018
Employee benefits	**614,908***	**–**	**614,908**	**– 456**	**– 68,460**	**– 688**	**42,623**	**587,927**
Pensions and similar obligations	586,861	–	586,861	– 189	– 60,267	–	27,168	553,573
Other employee benefits	28,047*	–	28,047	– 267	– 8,193	– 688	15,455	34,354
Other provisions	**70,203***	**4,883**	**75,086**	**576**	**– 24,192**	**– 7,819**	**41,282**	**84,934**
Warranty obligations and contractual penalties	49,812*	–	49,812	– 411	– 18,049	– 2,271	16,501	45,582
Provisions for restructuring	2,750	–	2,750	1	– 1,745	– 1	18	1,023
Miscellaneous other provisions	17,641*	4,883	22,524	986	– 4,398	– 5,547	24,764	38,329
	685,111*	**4,883**	**689,994**	**120**	**– 92,652**	**– 8,507**	**83,905**	**672,861**

* Restated compared with presentation in the 2017 annual report.
** CTA = Currency translation adjustments

Restatement of liabilities and provisions as at 31 Dec. 2017

€ thousands	31 Dec. 2017 (as originally reported)	Restatement	31 Dec. 2017 (restated)
Current provisions for other employee benefits	81,472	– 73,439	8,033
Current provisions for warranty obligations and contractual penalties	51,275	– 1,463	49,812
Current other provisions	44,382	– 28,138	16,244
Trade payables to third parties	210,819	29,601	240,420
Current other non-financial liabilities relating to social security and liabilities to employees	48,703	73,439	122,142
Total	**436,651**	**0**	**436,651**

In the reporting year, the first-time application of IFRS 15 meant that for customer contracts that are expected to make a loss, contract assets and provisions for expected losses were stated gross under other provisions. The year-on-year rise in other provisions is specifically due to the fact that in the previous year, before application of IFRS 15, expected losses from customer contracts were recognised through “Receivables recognised by PoC, net”. The opening balance sheet value of other provisions as at 1 January 2018 increased by € 4,883 thousand in this connection.

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.

For employees of Group companies in Germany there is a defined contribution plan under the German statutory pension insurance scheme into which the employer must pay the currently valid pension contribution rate. Contributions to state pension insurance funds recognised in the income statement totalled € 26,778 thousand (previous year: € 25,989 thousand). € 7,877 thousand (previous year: € 7,446 thousand) was spent on defined contribution schemes for employees in other countries in the year under review.

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). Pension benefits are paid in annual instalments of one tenth of the amount. However, under certain conditions it is also possible to make a capital payment or pay a monthly pension instead. Since the year under review, early payments of the capital amount after termination of the employment contract have also been possible.

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 impose actuarial risks on the Group, 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**

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 pension plans of German companies concluded before 2009 solely provided for the payment of accumulated amounts in the form of a monthly pension for life upon retirement. In an extension to the Group works agreement, a lump-sum option was added to the company pension scheme in the 2018 financial year. Under this, every employee is entitled to apply at any time during the ongoing employment contract for payment in annual instalments, as a single payment or as a pension for life. KSB has estimated how the specific workforce is likely to

Balance sheet figures for defined benefit plans

€ thousands	Defined benefit obligations (DBOs) 31 Dec. 2018	Fair value of plan assets 31 Dec. 2018	Net liability from defined benefit plans 31 Dec. 2018	Defined benefit obligations (DBOs) 31 Dec. 2017	Fair value of plan assets 31 Dec. 2017	Net liability from defined benefit plans 31 Dec. 2017
Germany	529,188	–	529,188	560,234	–	560,234
France	16,332	7,279	9,053	17,920	7,181	10,739
USA	13,411	11,253	2,158	14,217	12,066	2,151
Switzerland	12,794	11,721	1,073	17,253	15,769	1,484
Other countries	39,458	27,357	12,101	40,841	28,588	12,253
Carrying amounts	**611,183**	**57,610**	**553,573**	**650,465**	**63,604**	**586,861**

Change in cash value of defined benefit obligations

€ thousands	2018	2017
Opening balance of the defined benefit obligation (DBO) – 1 Jan.	**650,465**	**654,392**
Current service cost	8,011	9,858
Interest cost	12,837	12,844
Employee contributions	3,190	4,409
Remeasurements		
– / + Gain / loss from the change in demographic assumptions	4,718	1,206
– / + Gain / loss from the change in financial assumptions	1,278	– 5,340
– / + Experience-based gain / loss	818	– 2,091
Benefit payments	– 20,935	– 18,614
Past service cost (incl. effects of settlements and curtailments)	– 46,174	– 218
Transfer of assets	– 433	– 138
Currency translation differences	192	– 5,613
Changes in consolidated Group / Other	– 2,784	– 230
Closing balance of the defined benefit obligation (DBO) – 31 Dec.	**611,183**	**650,465**

decide on exercising the lump-sum option and has taken this into account for the measurement of pension provisions. Recognition of the exercising of this lump-sum option has resulted in income of € 46,434 thousand in total based on past service cost.

On 2 October 2018, Heubeck AG published the new Heubeck 2018 G mortality tables. These contain the latest statistics of statutory pension insurance schemes by the German Federal Statistical Office and reflect the most up-to-date developments on mortality, disability, marriage and fluctuation probabilities. In addition, the new tables take the statistically verifiable relation between life expectancy and the amount of pension paid into consideration by way of a general marking down of mortality rates. In addition, the new mortality tables reflect changed disability rates, as there has been a decline for more than ten years in the age range from 58 years.

In relation to the total volume of provisions for pensions and similar obligations, the impact of the application of the new mortality tables is not material. Provisions have increased by € 4,803 thousand as a result.

The expected contributions in the following year are forecast to be around € 10,527 thousand (previous year: € 11,448 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 expense for plan assets amounted to € 1,093 thousand (previous year: income of € 5,109 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 (previous year: 2015G 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 € 86 million (previous year: € 102 million). A 100 basis point reduction in the discount factor would increase the DBO by € 113 million (previous year: € 131 million). It should be noted that a change in the discount factor due to

Changes in the fair value of the plan assets

€ thousands	2018	2017
Opening balance of the plan assets measured at fair value – 1 Jan.	**63,604**	**64,850**
Interest income	2,019	2,008
Remeasurements		
– / + Gain / loss from plan assets excluding amounts already recognised in interest income	– 3,922	3,101
Contributions by the employer	1,787	1,655
Contributions by the beneficiary employees	197	223
Currency translation differences	131	– 4,485
Changes in consolidated Group	–	–
Paid benefits	– 4,096	– 2,801
Other	– 2,110	– 947
Closing balance of the plan assets measured at fair value – 31 Dec.	**57,610**	**63,604**

Changes to the net liability of the defined benefit obligations

€ thousands	2018	2017
Opening balance of the net liability from defined benefit plans – 1 Jan.	**586,861**	**589,542**
Current service cost	8,011	9,858
Net interest expense	10,818	10,836
Employee contributions	2,993	4,186
Contributions by the employer	– 1,787	– 1,655
Remeasurements		
– / + Gain / loss from plan assets excluding amounts already recognised in interest income	3,922	– 3,101
– / + Gain / loss from the change in demographic assumptions	4,718	1,206
– / + Gain / loss from the change in financial assumptions	1,278	– 5,340
– / + Experience-based gain / loss	818	– 2,091
Benefit payments	– 16,839	– 15,813
Past service cost (incl. effects of settlements and curtailments)	– 46,174	– 218
Transfer of assets	– 433	– 138
Currency translation differences	61	– 1,128
Changes in consolidated Group / Other	– 674	717
Closing balance of the net liability from defined benefit plans – 31 Dec.	**553,573**	**586,861**

Composition of plan assets

€ thousands	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	Quoted market price in an active market 31 Dec. 2017	No quoted market price in an active market 31 Dec. 2017	Total 31 Dec. 2017
Equity instruments (shares)	20,746	–	**20,746**	19,660	–	**19,660**
Debt instruments (loans)	21,824	70	**21,894**	16,782	–	**16,782**
Government bonds	6,625	–	6,625	8,817	–	8,817
Corporate bonds	15,199	70	15,269	7,965	–	7,965
Currency forwards	–	–	**–**	–	–	**–**
Money market investments	1,606	277	**1,883**	7,611	–	**7,611**
Real estate	3,377	–	**3,377**	520	–	**520**
Insurance contracts	–	6,098	**6,098**	–	16,319	**16,319**
Bank credit balances	792	12	**804**	1,482	–	**1,482**
Other investments	1,528	1,280	**2,808**	870	360	**1,230**
	49,873	**7,737**	**57,610**	**46,925**	**16,679**	**63,604**

Actuarial assumptions

	Discount rate		Assumed rate of salary increase		Assumed rate of pension increase	
in %	31 Dec. 2018	31 Dec. 2017	31 Dec. 2018	31 Dec. 2017	31 Dec. 2018	31 Dec. 2017
Germany	1.8	1.9	2.7	2.7	1.9	1.9
France	1.6	1.35	2.8	3.0	–	–
USA	4.0	3.4	–	–	–	–
Switzerland	1.0	0.6	1.0	1.0	–	–
Other countries	1.25 – 13.25	0.75 – 10.4	1.5 – 21.0	1.0 – 11.0	1.5 – 14.5	1.5 – 3.0

Expected pension benefit payments

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

€ thousands at 31 Dec. 2017	2018	2019	2020	2021	2022
Expected payments	23,964	21,181	21,241	22,230	21,716

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 € 22 million (previous year: € 20 million).

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

On 31 December 2018 the weighted average term of the defined benefit obligations was 24 years, as in the previous year.
→ Expected pension benefit payments

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. In the year under review, they amounted to € 45,582 thousand (restated previous year's figure: € 49,812 thousand).

Other provisions primarily contain provisions for expected losses of € 25,900 thousand (previous year: € 4,656 thousand). These include provisions for a legacy project in the United Kingdom as well as provisions set aside due to the political situation in Iran. They also cover risks of litigation and legal proceedings if the recognition criteria for a provision are met (€ 8.6 million; previous year: € 5.3 million). These are usually risks arising from legal disputes in relation to operations or, in rare cases, disputes with government agencies or personnel matters. In order to determine the amount of the provisions, the facts related to each case, the size of the claim, the results of comparable proceedings and independent legal opinions are considered in individual cases along with assumptions regarding the probability of occurrence and the range of potential claims.

€ 16,571 thousand (previous year: € 18,489 thousand) of the other provisions are expected to become cash-effective after more than one year.

11 Liabilities

Non-current liabilities

€ thousands	31 Dec. 2018	31 Dec. 2017
Financial liabilities	**30,099**	**54,333**
Loan against borrower's note	21,976	47,964
Bank loans and overdrafts	6,967	5,468
Finance lease liabilities	826	574
Other	330	327

Current liabilities

€ thousands	31 Dec. 2018	31 Dec. 2017
Financial liabilities	**48,777**	**21,960**
Loan against borrower's note	26,000	–
Bank loans and overdrafts	21,990	21,275
Finance lease liabilities	404	353
Liabilities to other investments, associates and joint ventures	320	322
Other	63	10
Trade payables	**270,212**	**241,630***
Trade payables to third parties	264,675	240,420*
Liabilities to other investments, associates and joint ventures	5,537	1,210
Contract liabilities	**157,389**	**–**
Other financial liabilities	**32,767**	**81,467**
Advances received from customers PoC (net)	–	49,401
Advances received from customers PoC (gross)	–	88,172
Receivables recognised by PoC	–	– 38,771
Currency forwards	3,731	1,883
Miscellaneous other financial liabilities	29,036	30,183
Other non-financial liabilities	**154,689**	**263,600***
Advances received from customers	–	97,703
Social security and liabilities to employees	116,674	122,142*
Tax liabilities (excluding income tax)	23,734	28,171
Prepaid expenses	9,629	10,788
Investment grants and subsidies	4,652	4,796
Income tax liabilities	**8,326**	**5,214**

* Restated compared with presentation in the 2017 annual report.

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 thousand 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. There were no redemptions in the year under review. € 27.5 million of the liabilities arising from the loan against borrower's note are classified as bank loans and overdrafts, and € 20.5 million as other financial liabilities (unchanged on the previous year).

There has also been a syndicated loan agreement of KSB SE & Co. KGaA and KSB Finanz S.A. since December 2018 to hedge liquidity risk and cover the need for bank guarantees of the KSB Group. The Group used these as follows at the end of the financial year:

€ thousands / Type of line	Maximum amount of line	Use as at 31 Dec. 2018
Loans	300,000	–
Sureties	350,000	86,950

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.

Items presented in the previous year as advances received from customers and advances received from customers PoC (net) are stated as contract liabilities under IFRS 15. They reflect KSB's obligation to transfer goods or services to customers for which KSB has already received advance payments.

In the 2018 financial year, the accounting principles were amended so that some items previously allocated to provisions are now classified as liabilities. This covers trade payables to third parties and other non-financial liabilities relating to social security and liabilities to employees. The previous year's figures were restated accordingly. For more details on this, please refer to the explanations in Sections III. Accounting Policies, and IV. Balance Sheet Disclosures – Notes No. 10 "Provisions".

The opening balance sheet value of contract liabilities as at 1 January 2018 was € 165,192 thousand. In the financial year, KSB reported sales revenue of € 61,797 thousand which was contained in the balance of contract liabilities at the beginning of the financial year. Cost corrections of fixed-price contracts and the resulting changes in contract progress had a positive € 1.9 million impact on contract liabilities. Contract liabilities as at 31 December 2018 totalled € 157,389 thousand, which was € 7,803 thousand below the opening balance sheet figure.

Assets amounting to € 11,939 thousand (previous year: € 6,098 thousand) have been pledged as security in the KSB Group for bank liabilities on the basis of standard terms and conditions. Of these, € 5,239 thousand (previous year: none) relate to property, plant and equipment, none (previous year: € 1,522 thousand) to inventories, none as in the previous year to receivables and € 5,258 thousand (previous year: € 4,576 thousand) to other securities.

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

The weighted average interest rate on bank loans and overdrafts as well as on an open-market credit (loan against borrower's note) was 3.94 % (previous year: 4.31 %). Interest rate risk exists for the major portion of the loan against borrower's note mentioned above.

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

V. INCOME STATEMENT DISCLOSURES

12 Sales revenue

Sales revenue by contract type

€ thousands	2018	2017
Revenue from the sale of goods and goods purchased and held for resale	1,984,508	1,951,928
Services sales revenue	261,440	253,030
Sales revenue	**2,245,948**	**2,204,958**

KSB generates income from the transfer of goods and services over time or at a point in time in the segments presented.
→ Sales revenue by segment and timing of revenue recognition

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

Unsatisfied performance obligations

€ thousands	2018
Orders on hand, total transaction price of unsatisfied performance obligations as at 31 Dec. 2018	1,353,910
of which expected sales revenue within the next 12 months	1,004,119
of which expected sales revenue in more than 12 months	349,791

The stated amounts include variable considerations amounting to € 6,760 thousand.

13 Other income

Other income

€ thousands	2018	2017
Income from the reversal of provisions	8,507	14,845
Income from the reversal of impairment losses	5,321	5,834
Income from disposal of assets	1,618	12,319
Currency translation gains	1,146	5,767
Miscellaneous other income	16,458	30,405
	33,050	**69,170**

Income from current assets is primarily from the reversal of impairment losses on receivables. Insurance compensation, rental and lease income and commission income are also part of other income. Government grants for individual projects (for example, for research activities) generated income of € 3,855 thousand (previous year: € 3,065 thousand).

14 Cost of materials

Cost of materials

€ thousands	2018	2017
Cost of raw materials, production supplies and of goods purchased and held for resale	836,383	795,559
Cost of purchased services	98,162	92,261
	934,545	**887,820**

Sales revenue by segment and timing of revenue recognition

€ 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 Staff costs

Staff costs

€ thousands	2018	2017
Wages and salaries	655,614	640,390
Social security contributions and employee assistance costs	126,650	128,563
Pension costs	– 16,802	27,779
	765,462	796,732

Pension costs are reduced by the interest component included in the allocation of provisions that is reported in financial income / expense. Income of € 46,434 thousand based on past service cost has resulted from the introduction in December 2018 of a lump-sum option as additional payment variant for pension claims acquired by staff.

→ Employees

The first-time inclusion of the fully consolidated company KSB Dubric, Inc., USA, led to an increase of 32 in the average number of employees over the year and in the total number at the reporting date.

16 Other expenses

Other expenses

€ thousands	2018	2017
Repairs, maintenance, third-party services	118,983	96,981
Administrative expenses	89,703	84,232
Selling expenses	68,370	66,083
Rents and leases	26,640	27,232
Other staff costs	26,001	38,480
Impairment losses on trade receivables and contract assets	7,510	8,219
Currency translation losses	2,546	5,508
Losses from current assets	2,142	2,648
Losses from asset disposals	661	3,169
Miscellaneous other expenses	74,313	59,862
	416,869	392,414

Other expenses include mainly additions to provisions of € 26,719 thousand (previous year: € 13,490 thousand). The provision for a legacy project in the United Kingdom has a material impact here.

Employees

	Average for the year		At reporting date	
	2018	2017	31 Dec. 2018	31 Dec. 2017
Wage earners	6,744	6,998	6,737	6,954
Salaried employees	8,457	8,073	8,535	8,047
	15,201	15,071	15,272	15,001
Apprentices	410	450	441	454
	15,611	15,521	15,713	15,455

17 Finance income / expense

→ Finance income / expense

Interest and similar expenses include the net interest cost on pension provisions amounting to € 10,818 thousand (previous year: € 10,836 thousand).

On 20 July 2018, 30 % (plus one share) of the shares in KSB Pumps and Valves (Pty) Ltd. were issued to the new B-BBEE partner. The issuance of the company shares to the new B-BBEE partner is within the scope of IFRS 2. There is a payment through equity instruments, as no form of cash settlement payment is specified in the agreements. The shares issued were measured at fair value using a Monte Carlo simulation. The value of the shares totals € 768 thousand and is reported under other finance expense. For more details see Section II. Basis of Consolidation – Consolidated Group.

The positive performance of the finance income / expense is primarily due to lower interest expenses from a scheduled partial redemption of the loan against borrower's note in December 2017.

18 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	2018	2017
Effective taxes	27,663	36,053
Deferred taxes	13,981	16,023
	41,644	**52,076**

€ 1,376 thousand (previous year: € 425 thousand) of the effective taxes in the year under review related to prior-period tax refunds and € 889 thousand (previous year: € 2,632 thousand) to tax arrears.

Finance income / expense

€ thousands	2018	2017
Finance income	**4,893**	**6,417**
Income from equity investments	248	253
thereof from other investments	(248)	(253)
Interest and similar income	4,618	6,139
thereof from other investments	(30)	(36)
thereof from investments accounted for using the equity method	(767)	(644)
Other finance income	27	25
Finance expense	**– 16,544**	**– 20,106**
Interest and similar expenses	– 15,432	– 19,204
Write-downs on other investments	–	– 853
Other finance expense	– 1,112	– 49
Income / expense from / to investments accounted for using the equity method	**2,510**	**1,514**
Finance income / expense	**– 9,141**	**– 12,175**

Reconciliation of deferred taxes

€ thousands	2018	2017
Change in deferred tax assets	11,345	20,430
Change in deferred tax liabilities	– 4,451	2,328
Change in deferred taxes recognised in balance sheet	**6,894**	**22,758**
Change in deferred taxes taken directly to equity	5,024	– 6,100
Changes in consolidated Group / CTA*/ Other	2,063	– 635
Deferred taxes recognised in income statement	**13,981**	**16,023**

* CTA = Currency translation adjustments

→ Allocation of deferred taxes

As at the reporting date, deferred tax assets of € 67,579 thousand (previous year: € 80,111 thousand) were recognised, arising from companies posting a loss in the financial year 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	2018	2017
Remeasurement of defined benefit plans	– 10,736	9,328
Taxes on income	3,341	– 3,843
Currency translation differences	– 13,276	– 54,238
Taxes on income	–	–
Changes in the fair value of financial instruments	– 5,624	7,203
Taxes on income	1,683	– 2,257
Other comprehensive income	**– 24,612**	**– 43,807**

The introduction of new local taxes had minor effects (previous year: none) in the year under review. Changes in foreign tax rates led to an increase in the total tax expense of € 185 thousand (previous year: reduction of € 2,386 thousand).

Allocation of deferred taxes

	Deferred tax assets		Deferred tax liabilities	
€ thousands	2018	2017	2018	2017
Non-current assets	**4,191**	**1,456**	**36,708**	**28,220**
Intangible assets	608	739	9,089	105
Property, plant and equipment	3,583	717	27,618	28,060
Non-current financial assets	–	–	1	55
Current assets	**41,999**	**54,912**	**20,957**	**50,142**
Inventories	34,997	49,356	51	143
Receivables and other current assets	7,002	5,556	20,906	49,999
Assets held for sale	–	–	–	–
Non-current liabilities	**84,364**	**93,504**	**7**	**88**
Provisions	84,167	93,312	–	77
Other liabilities	197	192	7	11
Current liabilities	**18,600**	**15,806**	**22,475**	**11,438**
Provisions	12,055	10,408	931	1,261
Other liabilities	6,545	5,398	21,544	10,177
Tax loss carryforwards	**1,132**	**1,243**	**–**	**–**
Gross deferred taxes – before offsetting	**150,286**	**166,921**	**80,147**	**89,888**
Offset under IAS 12.74	– 69,895	– 75,185	– 69,895	– 75,185
Net deferred taxes – after offsetting	**80,391**	**91,736**	**10,252**	**14,703**

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 € 71,440 thousand (previous year: € 108,394 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 € 124,041 thousand (previous year: € 78,748 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.

Deductible temporary differences for which no deferred tax assets had to be set up amounted to € 34,339 thousand (previous year: € 32,722 thousand).

→ Reconciliation of income tax

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

Other tax credits were previously contained under Miscellaneous. These are now stated separately under "Other tax credits". The previous period was restated accordingly.

19 Earnings after income tax – Non-controlling interests

The net profit attributable to non-controlling interests amounts to € 13,569 thousand (previous year: € 15,770 thousand) and the net loss attributable to non-controlling interests amounts to € 951 thousand (previous year: € 847 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.

20 Earnings per share

→ Earnings per share

Earnings per share under IAS 8.28 (f) after application of accounting standards IAS 11 and IAS 18 as at 31 December 2018 would be € 7.36 per ordinary share and € 7.81 per preference share.

Reconciliation of income tax

€ thousands	2018	2017*
Earnings before income tax (EBT)	65,561	104,180
Calculated income tax on the basis of the applicable tax rate (30 % as in the previous year)	19,668	31,254
Differences in tax rates	16	– 3,297
Unused tax loss carryforwards	14,124	4,229
Impairment losses on deferred taxes on tax loss carryforwards	–	7,012
Impairment loss on goodwill	6,659	1,222
Impairment losses on deferred taxes for temporary differences	–	3,991
Tax-exempt income	– 7,243	– 2,381
Non-deductible expenses	11,957	7,548
Prior-period taxes	– 1,587	2,207
Other tax credits	– 1,695	– 2,246
Non-deductible foreign income tax	2,471	2,406
Investments accounted for using the equity method	– 579	– 408
Miscellaneous	– 2,147	539
Current taxes on income	**41,644**	**52,076**
Current tax rate	64 %	50 %

* Restated compared with presentation in the 2017 annual report.

Earnings per share

		2018	2017
Earnings after income tax attributable to KSB SE & Co. KGaA shareholders	€ thousands	11,299	37,181
Additional dividend attributable to preference shareholders (€ 0.38 per preference share)	€ thousands	– 329	– 225
	€ thousands	**10,970**	**36,956**
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	**€**	**6.26**	**21.10**
Diluted and basic earnings per preference share	**€**	**6.64**	**21.36**

VI. ADDITIONAL DISCLOSURES ON FINANCIAL INSTRUMENTS

Financial instruments – Carrying amounts and fair values by measurement category

Financial instruments by measurement category as at 31 Dec. 2018 – Assets

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

Financial instruments by measurement category as at 31 Dec. 2018 – Equity and liabilities

Balance sheet item / Class € thousands	Measurement category	Carrying amount 31 Dec. 2018	Fair value 31 Dec. 2018
Non-current liabilities			
Financial liabilities excluding finance lease liabilities	Amortised cost	29,273	31,621
Finance lease liabilities	n / a	826	832
Current liabilities			
Financial liabilities excluding finance lease liabilities	Amortised cost	48,373	–
Finance lease liabilities	n / a	404	–
Trade payables	Amortised cost	270,212	–
Currency forwards used as hedges	n / a	3,731	3,731
Miscellaneous other financial liabilities	Amortised cost	29,036	–

Carrying amounts aggregated by category under IFRS 9

Balance sheet item € thousands	Measurement category	31 Dec. 2018
Assets	Amortised cost	877,092
Equity and liabilities	Amortised cost	376,894
FVPL	FVPL	660

Financial instruments by measurement category (IAS 39) as at 31 Dec. 2017 – Assets

Balance sheet item / Class € thousands	Measure-ment category	Initial / subsequent measurement	Carrying amount 31 Dec. 2017	Fair value 31 Dec. 2017
Non-current assets				
Other investments	n / a	Amortised cost	2,985	–
Non-current financial instruments	AfS	Fair value	657	657
Loans	LaR	Fair value / Amortised cost	2,490	2,490
Current assets				
Trade receivables	LaR	Fair value / Amortised cost	480,928	–
Trade receivables from other investments, associates and joint ventures	LaR	Fair value / Amortised cost	32,341	–
Receivables from loans to other investments, associates and joint ventures	LaR	Fair value / Amortised cost	13,344	–
Receivables recognised by PoC, net	LaR	Fair value / Amortised cost	100,042	–
Currency forwards used as hedges	n / a	Fair value	5,074	5,074
Other receivables and other current assets	LaR	Fair value / Amortised cost	98,552	–
Cash and cash equivalents	LaR	Fair value / Amortised cost	289,535	–

Financial instruments by measurement category (IAS 39) as at 31 Dec. 2017 – Equity and liabilities

Balance sheet item / Class € thousands	Measure-ment category	Initial / subsequent measurement	Carrying amount 31 Dec. 2017	Fair value 31 Dec. 2017
Non-current liabilities				
Financial liabilities excluding finance lease liabilities	FLAC	Fair value / Amortised cost	53,759	52,622
Finance lease liabilities	n / a	In accordance with IAS 17	574	579
Current liabilities				
Financial liabilities excluding finance lease liabilities	FLAC	Fair value / Amortised cost	21,607	–
Finance lease liabilities	n / a	In accordance with IAS 17	353	–
Trade payables	FLAC	Fair value / Amortised cost	241,360	–
Advances received from customers on contract assets	FLAC	Fair value / Amortised cost	49,401	–
Currency forwards used as hedges	n / a	Fair value	1,883	1,883
Other financial liabilities	FLAC	Fair value / Amortised cost	30,183	–

Carrying amounts aggregated by category under IFRS 7

Balance sheet item € thousands	Measure-ment category	Initial / subsequent measurement	31 Dec. 2017
Loans and receivables	LaR	Fair value / Amortised cost	1,017,232
Available-for-sale financial instruments	AfS	Fair value	657
Financial liabilities measured at amortised cost	FLAC	Fair value / Amortised cost	346,909

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 and 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 the cash flows within level 2 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 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**

Hierarchy levels 2017

€ thousands	Level 1	Level 2	Level 3	Total
Financial assets recognised at fair value				
Current financial instruments	657	–	–	**657**
Currency forwards	–	5,074	–	**5,074**
Financial liabilities recognised at fair value				
Currency forwards	–	1,883	–	**1,883**

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 in 2018
→ Net results by measurement category in 2017

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.

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.

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**

Net results by measurement category in 2017

€ 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
LaR	6,164	–	– 718	– 1,476	–	3,970
AfS	265	–	–	– 2	–	263
FLAC	– 9,542	–	228	–	–	– 9,314
	– 3,113	**–**	**– 490**	**– 1,478**	**–**	**– 5,081**

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. KSB also covers the credit risk of receivables that are past due by providing for the risk involved. 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 this 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. The approved cash loans and credit lines total approximately € 1,283.9 million (previous year: approx. € 893.5 million), of which € 1,012.4 million has not yet been utilised (previous year: € 620.2 million).

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 2018
→ Cash flows of financial liabilities 2017

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 and, on rare occasions, options. 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 both transactions already recognised and cash flows that are expected in the future with a high degree of probability. 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

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

Cash flows of financial liabilities 2017

€ thousands	Total	Up to 1 year	1 – 5 years	> 5 years
Financial liabilities	82,888	24,827	57,504	557
Trade payables	241,630	241,630	–	–
Miscellaneous other financial liabilities	30,183	30,175	8	–
Derivative financial instruments Incoming payments	– 5,074	– 4,690	– 384	–
Derivative financial instruments Outgoing payments	1,883	1,489	375	19
	351,310	293,431	57,503	576

Notional volumes 2018

€ thousands	Total	Up to 1 year	1 – 5 years	> 5 years
Currency forwards	238,300	231,947	6,353	–

Notional volumes 2017

€ thousands	Total	Up to 1 year	1 – 5 years	> 5 years
Currency forwards	276,489	261,560	14,819	110

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 2018 and 2017 financial years.

At the reporting date, the notional volume of all currency forwards was € 283,300 thousand (previous year: € 276,489 thousand), and the notional volume of all interest rate derivatives was € 0 thousand (previous year: none). The contractual maturities of payments for currency forwards are as follows:

→ Notional volumes 2018
→ Notional volumes 2017

The weighted average rate of hedging instruments for the main foreign currencies was:

Hedging of currency risk

	2018	2017
Average rate USD/EUR	1.19	1.18
Average rate GBP/EUR	0.90	0.90
Average rate SEK/EUR	10.32	9.78

The change in the hedging reserve and in the cost of hedging reserve for currency hedges before tax is shown below:

→ Changes in the fair value of derivatives 2018
→ Changes in the fair value of derivatives 2017

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 € 0.4 million (previous year: € 1.5 million) for CNY, € 2.4 million (previous year: € 2.3 million) for USD and € 1.5 million (previous year: € 1.2 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 € 11.2 million lower (higher), with € 8.1 million resulting from USD and € 3.1 million from the other currencies. At the previous year's reporting date, equity and the fair value of the derivatives would have been € 11.7 million lower (higher), with € 9.0 million resulting from USD and € 2.7 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. No such transactions were recognised in the financial year.

Changes in the fair value of derivatives 2018

€ thousands	OCI Cash flow hedges – hedging reserve	OCI Cash flow hedges – cost of hedging 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

Changes in the fair value of derivatives 2017

€ thousands	OCI Cash flow hedges – hedging reserve	OCI Cash flow hedges – cost of hedging reserve
Currency risk		
Opening balance at 1 January	– 7,560	831
Effective portion of changes in fair value	10,169	– 1,618
Realisation of underlying recognised in income	– 1,225	17
Closing balance at 31 December	**1,384**	– 770

Currency volumes

	CNY 31 Dec. 2018	CNY 31 Dec. 2017	USD 31 Dec. 2018	USD 31 Dec. 2017
Trade receivables	€ 53.3 million	€ 57.5 million	€ 22.7 million	€ 22.3 million
Trade payables	€ 49.1 million	€ 42.1 million	€ 15.6 million	€ 10.8 million
Balance	**€ 4.2 million**	**€ 15.4 million**	**€ 7.1 million**	**€ 11.5 million**

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 reporting year 2018, the net interest balance would have been € 1.5 million (€ 1.0 million) (previous year: € 1.7 million (€ 1.2 million) higher (lower). As in the previous year, there were no interest rate derivatives in the Group in the financial year.

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.

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.

Changes in cash flows from financing activities

		Cash-effective	Not cash-effective		
€ thousands	**1 Jan. 2018**		**Acquisitions**	**Changes resulting from exchange rates**	**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	–	–	–
Payments for the acquisition of minority interests	–	– 1,512	–	–	–
Total cash flows from financing activities	**–**	**– 9,433**	**–**	**–**	**–**

		Cash-effective	Not cash-effective		
€ thousands	**1 Jan. 2017**		**Acquisitions**	**Changes resulting from exchange rates**	**31 Dec. 2017**
Non-current liabilities	57,269	– 2,122	–	– 1,388	53,759
Current liabilities	119,082	– 95,491	–	– 2,306	21,285
Lease liabilities	1,193	– 223	–	– 43	927
Total liabilities from financing activities	**177,544**	**– 97,386**	**–**	**– 3,737**	**75,971**
Dividend payments	–	– 12,348	–	–	–
Salary conversion (provisions for pensions)	–	4,186	–	–	–
Total cash flows from financing activities	**–**	**– 105,998**	**–**	**–**	**–**

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 organisation and 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 definition of the earnings indicator of the segments, EBIT, changed in the first quarter of the 2018 financial year. Until the 2017 year-end, the EBIT was still defined as the earnings before interest and income taxes; since the beginning of 2018, it means earnings before financial income / expense and income tax. In the comments in consolidated financial statements, the new definition of the key indicator applies. Prior-year figures have been restated accordingly.

The table shows **earnings before finance income / expense and income tax (EBIT)** and **consolidated earnings before income tax (EBT)** including non-controlling interests.
→ Segment reporting

The EBIT of the Pumps segment includes depreciation and amortisation expense of € 48,802 thousand (previous year: € 46,998 thousand), the EBIT of the Valves segment includes depreciation and amortisation expense of € 32,292 thousand (previous year: € 9,559 thousand) and the EBIT of the Service segment includes depreciation and amortisation expense of € 23,397 thousand (previous year: € 14,889 thousand).

€ 562,147 thousand (previous year: € 588,997 thousand) of the sales revenue presented was generated by the companies based in Germany, € 241,476 thousand (previous year: € 228,404 thousand) was generated by the companies based in France, € 188,989 thousand (previous year: € 167,274 thousand) by the companies based in the USA, and € 1,253,336 thousand (previous year: € 1,220,283 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 € 611,603 thousand (previous year: € 636,453 thousand), with 214,857 thousand (previous year:

Segment reporting

€ thousands	Order intake 2018	Order intake 2017	Sales revenue 2018	Sales revenue 2017	EBIT 2018	EBIT 2017 (restated)
Pumps segment	1,506,248	1,473,628	1,469,443	1,444,392	90,563	79,284
Valves segment	355,618	343,505	340,771	338,849	– 37,373	51
Service segment	441,670	448,179	435,734	421,717	21,512	37,020
Total	**2,303,536**	**2,265,312**	**2,245,948**	**2,204,958**	**74,702**	**116,355**
				Finance income / expense	– 9,141	– 12,175
				Earnings before income tax (EBT)	**65,561**	**104,180**

€ 204,209 thousand) being attributable to the companies based in Germany and € 396,746 thousand (previous year: € 432,244 thousand) being attributable to the other Group companies. They include intangible assets, property, plant and equipment and investments accounted for using the equity method; non-current financial instruments and deferred tax assets are not included.

IX. OTHER DISCLOSURES

Contingent liabilities

Contingent liabilities resulting from legal disputes in relation to operations amounted to € 23.7 million (previous year: € 56.7 million). There are no insurance claims to be covered, as in the previous year. Significant uncertainties result for KSB in estimating the expected outcome of current court proceedings and the potentially resultant obligations and risks. In this respect, 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. KSB is not currently expecting a payment obligation for contingent liabilities arising from legal disputes.

Other contingent liabilities related to tax items (plus potential interest) of € 1,536 thousand (previous year: € 1,599 thousand). At present, there are no indications that any claims will be asserted under these obligations.

The Group has contingent liabilities as a result of its investment in associates and joint ventures of € 7,367 thousand (previous year: € 7,426 thousand). Contingent liabilities to other investments total € 393 thousand (previous year: € 963 thousand). The extent to which these will result in a cash outflow depends on the future business performance of the respective company.

Contingent liabilities

€ thousands	2018	2017
Liabilities from guarantees	7,760	4,877
Liabilities from warranties	–	482
Liabilities from the granting of security for third-party liabilities	2,897	1,836
	10,657	**7,195**

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 € 12,418 thousand (previous year: € 12,249 thousand). Almost all of the corresponding payments are due in 2019.

Leases

Operating leases

€ thousands	Minimum lease payments 2018	Minimum lease payments 2017
Due within 1 year	20,471	15,696
Due between 1 and 5 years	38,389	30,069
Due after more than 5 years	4,200	3,941
	63,060	**49,706**

Finance leases

€ thousands	Minimum lease payments 2018	Minimum lease payments 2017	Present values 2018	Present values 2017
Due within 1 year	413	359	404	353
Due between 1 and 5 years	832	579	826	574
Due after more than 5 years	–	–	–	–
	1,245	**938**	**1,230**	**927**

In the reporting year, leasing payments for operating leases of € 26,640 thousand (previous year: € 27,232 thousand) were recognised in the income statement.

Future liabilities arising from IT service contracts in force amount to € 37,534 thousand (previous year: € 41,843 thousand). Of these, € 19,521 (previous year: € 16,190 thousand) are due within one year and € 18,013 thousand (previous year: € 25,653 thousand) subsequently in up to five years.

Operating leases relate primarily to vehicles and real estate.

→ Finance leases

Finance leases relate mostly to real estate, as well as to other equipment, operating and office equipment. The term of the contract covers most of the useful life of the asset concerned.

Research and development costs

Research and development costs in the year under review amounted to € 49,228 thousand (previous year: € 47,106 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. 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, Palatina Versicherungsservice GmbH, Frankenthal, and the companies of Abacus alpha GmbH, Frankenthal. Furthermore, related parties also include entities controlled or jointly controlled by the Managing Directors of Johannes und Jacob Klein GmbH (JJK), 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 (from 17 January 2018, previously: Board of Management of KSB Aktiengesellschaft) and the members of the Administrative Board of KSB Management SE are deemed to be related parties of KSB SE & Co. KGaA. In the financial year, three Supervisory Board members held an immaterial share of interests in our company.

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, as the general partner, assumes liability for KSB. 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) are presented in Section IV. Balance Sheet Disclosures – Notes No. 5 “Investments accounted for under the equity method”, Notes No. 7 “Contract assets, trade receivables and other financial and non-financial assets” and Notes No. 11 “Liabilities”, and in Section IX. Other Disclosures – Contingent Liabilities.

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 transactions with associates or joint ventures of KSB with Johannes und Jacob Klein GmbH in the financial year.

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 associated 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.

In previous years, KSB incurred expenses for services that accrued to JJK or third parties at the instigation or in the interest of JJK. These expenses were either not passed onto JJK or third parties or not passed on at the market rate. Corresponding compensatory arrangements were made in subsequent years. Subsequently, facts became known about services that were provided at non-market rates to JJK, its investees or third parties at the instigation or in the interest of JJK. The legal review and evaluation of these facts lasted until April 2018. As a result, agreements were made in May 2018 that led to payments to KSB of € 298 thousand in total. In December 2018, JJK made a further payment of € 128 thousand to KSB based on the further legal review and evaluation of facts relating to relationships with related parties. The payment covered the settlement of VAT back payments for services provided by KSB to JJK or its investees in the period from 2013 to April 2017, related back interest and the legal costs incurred by KSB in connection with such services. These back payments were reported under other operating income.

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.

Services, receivables and liabilities in dealings with related parties

	Sales of goods and services		Purchases of goods and services		Receivables		Liabilities	
€ thousands	2018	2017	2018	2017	31 Dec. 2018	31 Dec. 2017	31 Dec. 2018	31 Dec. 2017
KSB Management SE	62	–	5,817	–	–	–	3,340	–
Klein, Schanzlin & Becker GmbH	–	–	–	–	–	–	–	–
KSB Stiftung and Kühborth-Stiftung GmbH	–	–	–	–	–	–	–	–
Johannes und Jacob Klein GmbH	222	1,708	23	16	1	4	1	16
Subsidiaries of Johannes und Jacob Klein GmbH	665	1,448	2,933	2,845	163	182	34	774
Associates / joint ventures of Johannes und Jacob Klein GmbH	–	–	142	–	–	–	1	–
Other related parties (corporate bodies), excluding "Management remuneration"	24	105	–	16	–	6	–	–

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. Due to the change in the company's legal form, the contracts of service of the members of the Board of Management of KSB Aktiengesellschaft were cancelled as of 17 January 2018. Since that date, they have been managing KSB's business as Managing Directors of KSB Management SE. As a result, some of the pension commitments were transferred from KSB to KSB Management SE under Section 4(2) No. 1 BetrAVG [*Betriebsrentengesetz* – German Company Pensions Act]. 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. 2018	31 Dec. 2017
Short-term benefits (total remuneration)	3,722	1,858
Post-employment benefits	1,929	1,422
Other long-term benefits	–	–
Termination benefits	–	–
Share-based payments	–	–
Total	**5,651**	**3,280**

In the financial year, KSB Management SE received from KSB SE & Co. KGaA reimbursed expenses of € 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 € 684 thousand (previous year: € 2,934 thousand) for pension obligations to current Managing Directors of KSB Management SE, and € 41,648 thousand (previous year: € 42,202 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 2018; total benefits paid to these persons amounted to € 2,548 thousand in the year under review (previous year: € 2,422 thousand).

The short-term benefits paid to members of the Supervisory Board amount to € 932 thousand for the 2018 financial year (previous year: € 834 thousand). Provisions of € 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 the 2018 financial year at the Annual General Meeting of KSB SE & Co. KGaA on 16 May 2018. Overall, fees (including expenses) amounting to € 2,314 thousand were recognised as expenses. Of this, € 1,162 thousand relate to audit services, € 82 thousand to other certification services and € 1,070 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.

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

There were no events after the end of the financial year that are of particular significance for the company'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 13 March 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	KSB, Bombas e Válvulas, SA, Albarraque	Portugal	S	95.00	95.00	
11	KSB Chile S.A., Santiago	Chile	S	100.00	100.00	
12	KSB de Mexico, S.A. de C.V., Querétaro	Mexico	P	100.00	100.00	
13	KSB FINANZ S.A., Echternach	Luxembourg	H	100.00	100.00	
14	Aplicaciones Mecánicas Válvulas Industriales, S.A. (AMVI), Burgos	Spain	P	100.00	100.00	13
15	Dalian KSB AMRI Valves Co., Ltd., Dalian	China	P	100.00	100.00	13
16	KSB Australia Pty Ltd, Bundamba QLD	Australia	S	100.00	100.00	13
17	KSB New Zealand Limited, Albany / Auckland	New Zealand	S	100.00	100.00	16
18	KSB Belgium S.A., Bierges-lez-Wavre	Belgium	S	100.00	100.00	13
19	KSB Service Belgium S.A. / N.V., Bierges-lez-Wavre	Belgium	SVC	100.00	100.00	18
20	KSB BRASIL LTDA., Várzea Paulista	Brazil	P	100.00	100.00	13
21	KSB Compañía Sudamericana de Bombas S.A., Carapachay (Buenos Aires)	Argentina	P	95.00	95.00	13
				5.00	5.00	
22	KSB Finance Nederland B.V., Zwanenburg	The Netherlands	H	100.00	100.00	13
23	DP industries B.V., Alphen aan den Rijn	The Netherlands	P	100.00	100.00	22
24	KSB Nederland B.V., Zwanenburg	The Netherlands	S	100.00	100.00	22
25	KSB Italia S.p.A., Milan	Italy	S	99.00	99.00	13
				1.00	1.00	
26	KSB ITUR Spain S.A., Zarautz	Spain	P	100.00	100.00	13
27	KSB Limited, Loughborough	United Kingdom	S	100.00	100.00	13
28	KSB Middle East FZE, Dubai	U.A.E.	S	100.00	100.00	13
29	KSB Österreich Gesellschaft mbH, Vienna	Austria	S	100.00	100.00	13
30	KSB-Pompa, Armatür Sanayi ve Ticaret A.S., Ankara	Turkey	P	100.00	100.00	13
31	KSB Pumps Inc., Mississauga / Ontario	Canada	S	100.00	100.00	13
32	KSB Pumps (S.A.) (Pty) Ltd., Germiston (Johannesburg)	South Africa	H	100.00	100.00	13
33	KSB Pumps and Valves (Pty) Ltd., Germiston (Johannesburg)	South Africa	P	70.00	70.00	32
34	FORTY FOUR ACTIVIA PARK (PTY) LTD, Germiston (Johannesburg)	South Africa		100.00	70.00	33
35	KSB S.A.S., Gennevilliers (Paris)	France	P	100.00	100.00	13
36	KSB POMPES ET ROBINETTERIES S.à.r.l. d'Associé unique, Casablanca	Morocco	S	100.00	100.00	35
37	KSB Service EITB-SITELEC S.A.S., Montfavet	France	SVC	100.00	100.00	35
38	KSB Service Energie S.A.S.U., Rambervillers	France	SVC	100.00	100.00	35
39	KSB SERVICE COTUMER S.A.S., Déville lès Rouen	France	SVC	100.00	100.00	38
40	Société de travaux et Ingénierie Industrielle S.A.S., Déville lès Rouen	France	SVC	100.00	100.00	39

* 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.
41	SPI Energie S.A.S., La Ravoire	France	SVC	100.00	100.00	35
42	KSB Shanghai Pump Co., Ltd., Shanghai	China	P	80.00	80.00	13
43	KSB Verwaltung (Schweiz) AG, Reinach	Switzerland		100.00	100.00	13
44	PAB Pumpen- und Armaturen-Beteiligungsges. mbH, Frankenthal	Germany	H	51.00	51.00	13
45	KSB America Corporation, Richmond / Virginia	USA	H	100.00	51.00	44
46	GIW Industries, Inc., Grovetown / Georgia	USA	P	100.00	51.00	45
47	KSB Dubric, Inc., Comstock Park / Michigan	USA	SVC	100.00	51.00	45
48	KSB, Inc., Richmond / Virginia	USA	S	100.00	51.00	45
49	KSB, Inc. – Western Division, Bakersfield / California	USA	SVC	100.00	51.00	45
50	Standard Alloys Incorporated, Port Arthur / Texas	USA	SVC	100.00	51.00	45
51	PT. KSB Indonesia, Cibitung	Indonesia	P	94.06	94.06	13
				5.94	5.94	
52	PT. KSB Sales Indonesia, Cibitung	Indonesia	S	99.00	99.00	51
				1.00	1.00	
53	SISTO Armaturen S.A., Echternach	Luxembourg	P	52.85	52.85	13
54	KSB Finland Oy, Kerava	Finland	S	100.00	100.00	
55	KSB Hungary Kft., Budapest	Hungary	S	100.00	100.00	
56	KSB Korea Ltd., Seoul	South Korea	S	100.00	100.00	
57	KSB Limited, Hong Kong	China	S	100.00	100.00	
58	KSB Pump & Valve Technology Service (Tianjin) Co., Ltd, Tianjin	China	SVC	100.00	100.00	57
59	KSB Norge AS, Ski	Norway	S	100.00	100.00	
60	KSB Polska Sp. z o.o., Ozarow-Mazowiecki	Poland	S	100.00	100.00	
61	KSB Pumps and valves L.t.d., Domžale	Slovenia	S	100.00	100.00	
62	KSB Pumps Co. Ltd., Bangkok	Thailand	S	40.00	40.00	
63	KSB Pumps Company Limited, Lahore	Pakistan	P	58.89	58.89	
64	KSB-Pumpy+Armatury s.r.o., koncern, Prague	Czech Republic	S	100.00	100.00	
65	KSB (Schweiz) AG, Oftringen	Switzerland	S	100.00	100.00	
66	KSB Seil Co., Ltd., Busan	South Korea	P	100.00	100.00	
67	KSB Service GmbH, Frankenthal	Germany	SVC	100.00	100.00	
68	KSB Service GmbH, Schwedt	Germany	SVC	100.00	100.00	
69	KSB Singapore (Asia Pacific) Pte Ltd, Singapore	Singapore	S	100.00	100.00	
70	KSB Malaysia Pumps & Valves Sdn. Bhd., Shah Alam	Malaysia	S	100.00	100.00	69
71	KSB PHILIPPINES, INC., Makati City	Philippines	S	100.00	100.00	69
72	KSB Vietnam Co., Ltd, Long Thanh District	Vietnam	S	100.00	100.00	69
73	KSB Sverige Aktiebolag AB, Gothenburg	Sweden	S	100.00	100.00	
74	KSB Sverige Fastighets AB, Gothenburg	Sweden	S	100.00	100.00	73
75	PUMPHUSET Sverige AB, Sollentuna	Sweden	SVC	100.00	100.00	73
76	VM Pumpar AB, Gothenburg	Sweden	S	100.00	100.00	73
77	KSB Taiwan Co., Ltd., New Taipei City	Taiwan	S	100.00	100.00	
78	KSB Tech Pvt. Ltd., Pimpri (Pune)	India		100.00	100.00	
79	KSB Valves (Changzhou) Co., Ltd., Jiangsu	China	P	100.00	100.00	
80	PMS-BERCHEM GmbH, Neuss	Germany	SVC	100.00	100.00	
81	Pumpen-Service Bentz GmbH, Reinbek	Germany	SVC	100.00	100.00	
82	REEL s.r.l., Ponte di Nanto	Italy	P	100.00	100.00	
83	Uder Elektromechanik GmbH, Friedrichsthal	Germany	SVC	100.00	100.00	

* P = Production, S = Sales, SVC = Service, H = Holding

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							
84	Nikkiso-KSB GmbH, Pegnitz	Germany		50.00	50.00		0	0
	International							
85	KSB MOTOR TEKNOLOJİLERİ SANAYİ VE TİCARET ANONİM ŞİRKETİ, Ankara	Turkey	P	55.00	55.00	30	83	7
86	KSB Pumps Arabia Ltd., Riyadh	Saudi Arabia	S	50.00	50.00	13	18,291	2,545
87	KSB Service LLC, Abu Dhabi	U.A.E.	S	49.00	49.00		7,317	278
88	Shanghai Electric-KSB Nuclear Pumps and Valves Co., Ltd., Shanghai	China	P	45.00	45.00		29,396	775

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							
89	Motori Sommersi Riavvolgibili S.r.l., Cedegolo	Italy		25.00	25.00		4,799	2,366

* 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								
90	FluidPartner GmbH, Stein	Germany	SVC	51.00	51.00	67	2	– 17	■
	International								
91	IOOO "KSB BEL", Minsk	Belarus	S	98.10	98.10	9	403	93	
				1.90	1.90	8			
92	KSB Algérie Eurl, Bordj el Kifane (Alger)	Algeria	S	100.00	100.00	13	953	137	
93	KSB Čerpadlá a Armatúry, s.r.o., Bratislava	Slovakia	S	100.00	100.00		333	43	
94	KSB Colombia SAS, Funza (Cundinamarca)	Colombia	S	100.00	100.00	13	312	94	
95	KSB Ltd., Tokyo	Japan	S	100.00	100.00		– 1,687	88	
96	KSB Perú S.A., Lurin	Peru	S	100.00	100.00		1,263	19	
97	KSB Pumpe i Armature d.o.o. Beograd, Belgrade	Serbia	S	100.00	100.00	61	140	20	
98	KSB pumpe i armature d.o.o., Rakov Potok	Croatia	S	100.00	100.00	61	191	24	
99	KSB ZAMBIA LIMITED, Kitwe	Zambia	SVC	60.00	60.00	32	119	47	
100	Techni Pompe Service Maroc (TPSM), Casablanca	Morocco	SVC	100.00	100.00	36	– 546	– 3	
101	TOO "KSB Kazakhstan", Almaty	Kazakhstan	S	100.00	100.00	9	169	48	
102	TOV "KSB Ukraine", Kiev	Ukraine	S	100.00	100.00	9	410	199	

* 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
(Chairman)

Alois Lautner, Lathe Operator, Kirchenthumbach[1)]
Deputy Chairman of the Pegnitz Works Council
of KSB SE & Co. KGaA
(Deputy Chairman of the Supervisory Board)

Claudia Augustin, Office Management Assistant, Pegnitz
Member of the Pegnitz Works Council of
KSB SE & Co. KGaA
(Member of the Supervisory Board since 16 May 2018)

Oswald Bubel, Dipl.-Betriebswirt, Saarbrücken[2)]
Managing Director of Hager Electro GmbH & Co. KG
(Member of the Supervisory Board until 31 January 2018)

Klaus Burchards, Dipl.-Kfm., Stuttgart
Independent Auditor

Arturo Esquinca, Dipl.-Chemieing., Forch, Switzerland
Coesia Group, Industrial Process Division, Zurich, Switzerland
Head of Business Development
(Member of the Supervisory Board since 26 February 2018)

René Klotz, NC Programmer, Frankenthal
Chairman of the General Works Council of
KSB SE & Co. KGaA and KSB Service GmbH

Wolfgang Kormann, Hand Moulder, Pegnitz
Chairman of the Group Works Council of KSB SE & Co. KGaA
(Member of the Supervisory Board until 16 May 2018)

Klaus Kühborth, Dipl.-Wirtsch.-Ing., Frankenthal
Managing Director of Johannes und Jacob Klein GmbH
(formerly Klein Pumpen GmbH)

Monika Kühborth, Editor, Homburg/Saar[3)]
Managing Director of Klein, Schanzlin & Becker GmbH
(Member of the Supervisory Board until 31 January 2018)

Birgit Mohme, Industrial Business Management Assistant,
Frankenthal[4)]
2. Delegate of IG Metall Ludwigshafen/Frankenthal

Thomas Pabst, Dipl.-Ing., Freinsheim
Head of Operations Europe Central at KSB SE & Co. KGaA
(Member of the Supervisory Board since 16 May 2018)

Prof. Dr.-Ing. Corinna Salander, Stuttgart[5)]
Head of Railway Vehicle Technology, Stuttgart University
(Member of the Supervisory Board since 26 February 2018)

Volker Seidel, Electrical and Electronics Installer, Münchberg
1. Delegate of IG Metall Ostoberfranken

Gabriele Sommer, Dipl.-Geol., Wörthsee[6)]
Global Head of Human Resources TÜV SÜD AG

Dr Hans-Stefan Wiß, Ludwigshafen am Rhein
Head of Legal & Compliance, KSB SE & Co. KGaA
(Member of the Supervisory Board until 16 May 2018)

Mandates of KSB Supervisory Board members on the Supervisory Board / Board of Directors of other companies

[1)] BKK 24, Obernkirchen, Germany

[2)] KSB Management SE, Frankenthal, Germany (Chair)

[3)] KSB Management SE, Frankenthal, Germany (Deputy Chair)

[4)] Deutsche Rentenversicherung Rheinland-Pfalz, Speyer, Germany

[5)] Bombardier Transportation GmbH, Berlin, Germany
Scientific Committee of the Shift2Rail Joint Undertaking, Brussels, Belgium

[6)] TÜV SÜD Industrie Service GmbH, Munich, Germany
TÜV SÜD Auto Service GmbH, Stuttgart, Germany

Legal Representatives

Managing Directors of KSB Management SE (from 17 January 2018, previously: Board of Management of KSB Aktiengesellschaft)

Dr Stephan Jörg Timmermann, CEO, Augsburg
Strategy, Human Resources, Communications, Internal Audits, Legal & Compliance, Patents & Trademarks as well as the Region Europe. He is also the spokesperson for Management.

Dr Stephan Bross, Freinsheim [1)]
Global Operations, Research / 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.

Ralf Kannefass, Regensburg [2)]
Sales and Marketing, Service, Project Management, as well as the Region Asia North and the Region Asia South / Pacific.

Dr Matthias Schmitz, Frankenthal [3)]
Taxes, Controlling KSB Group, Finance / Accounting including coordination of Shared Services, Information Technology, Purchasing, as well as the Regions America North and America South.

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 (supervisor)

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 (from 9 July 2018)

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)]
Member and 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 29 May 2019 that the net retained earnings of € 90,178,695.14 of KSB SE & Co. KGaA be appropriated as follows:

Proposal for the appropriation of net retained earnings

in €	
Dividend of € 3.00 per ordinary no-par-value share	2,659,845.00
Dividend of € 3.38 per preference no-par-value share	2,922,726.56
Total	**5,582,571.56**
Carried forward to new account	**84,596,123.58**
	90,178,695.14

Frankenthal, 13 March 2019

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.

5

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 group management report 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, 13 March 2019

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 OPINIONS

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 2018, 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 2018, 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 2018. 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 2018, and of its financial performance for the financial year from 1 January to 31 December 2018 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 2018. 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

1. **Recoverability of goodwill**
2. **Accounting treatment of project orders recognized over time and initial application of IFRS 15**
3. **Provision for an onerous customer contract**
4. **Measurement of pension provisions**

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:

1 Recoverability of goodwill

1 In the Company's consolidated financial statements goodwill amounting in total to EUR 44.4 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 resulted in the recognition of a write-down amounting to a total of EUR 20.6 million with respect to the cash-generating unit KSB Seil Co. Ltd., Busan/South Korea and a total of EUR 7.6 million with respect to two cash-generating units of French service entities. 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. We evaluated that the necessary disclosures were made in the notes relating to cash-generating units for which a reasonably possible change in an assumption would result in the recoverable amount falling below the carrying amount of the cash-generating units including the allocated goodwill.

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.

2 Accounting treatment of project orders recognized over time and initial application of IFRS 15

1 In the Company's consolidated financial statements revenue totaling EUR 2,245.9 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 properly recognizing and deferring revenue. In this financial year, the initial application of the new accounting standard on revenue recognition (IFRS 15) had a material impact on revenue recognition and deferral.

Revenue amounting to EUR 618.4 million is attributable to project orders recognized over time and services. In the case of project orders, the progress of work is estimated on the basis of the ratio of the actual contract costs already incurred to the planned total costs.

The initial application of IFRS 15 resulted in an EUR 11.5 million change in revenue (0.6 % of total revenue), which is primarily attributable to a change in the date on which the revenue is recognized. The initial application of IFRS 15 resulted in a significant expansion of disclosure requirements. In addition, in certain areas IFRS 15 necessitate estimates and judgment, the appropriateness of which had to be assessed as part of our audit.

In particular, the estimation of the planned total costs of the project orders recognized over time and the appropriate allocation of costs incurred to the orders are based on the executive directors' estimates and assumptions. In addition, recognizing and deferring revenue correctly in accordance with the Group-wide application of the new accounting standard IFRS 15 is considered to be complex. Against this background, accounting for revenue was of particular significance during our audit.

2 As part of our audit we assessed the processes and controls implemented by the Group and adapted for IFRS 15 for the recognition of revenue, among others.

In addition, with the support of our internal specialists from Capital Markets and Accounting Advisory Services, we assessed the impact of the initial application of IFRS 15 as part of our audit. In connection with the disclosure requirements arising from the initial application of IFRS 15, we assessed among other things the appropriateness of the procedure used to transition to IFRS 15, including the impact analyses conducted within the Group, and 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 companies.

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 furthermore 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 the planned total costs as well as 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 established systems and processes adapted for IFRS 15, and the controls which are 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 properly recognized in accordance with IFRS 15 as applied for the first time.

3 The Company's disclosures on the initial application of IFRS 15 can be found in section I. "General information on the group" and its disclosures on revenue from project orders recognized over time can be found in sections III. "Accounting policies", IV. "Balance sheet disclosures" note 9 and 10 and V. "Income statement disclosures" note 11 of the notes to the consolidated financial statements.

3 Provision for an onerous customer contract

1 In the Company's consolidated financial statements provisions for onerous contracts amounting to EUR 25.9 million are reported under the "Other provisions" balance sheet item in "Current liabilities". These obligations primarily relate to EUR 17.4 million in provisions for a legacy project in the United Kingdom, of which the completion is scheduled for 2020. The Company assumes that the total costs still to be incurred for the project will exceed the revenues by the amount provided for. The executive directors do not envisage any contract-related risks beyond this. The costs still to be incurred are calculated based on project progress to date and estimates of future progress. These assumptions are based on qualified estimates. In our view, this matter was of particular significance in the context of our audit since the recognition and measurement of this significant item in terms of its amount is to a large extent based on estimates and assumptions made by the Company's executive directors.

2 With the knowledge that estimated values bear an increased risk of accounting misstatements and that the measurement decisions made by the executive directors have a direct and significant effect on net profit or loss, we assessed the appropriateness of the carrying amounts using the measurement bases presented to us. We assessed the total project costs based on project calculations and additional information provided by the executive directors and the project manager, among others. We checked the calculation of project loss and assessed its appropriateness. We also verified the measurement of the provision and assessed the measurement parameters used. We were able to satisfy ourselves that the estimates applied and the assumptions made by the executive directors were sufficiently documented and substantiated to justify the recognition and measurement of the provision for the onerous customer contract.

3 The Company's disclosures on other provisions are contained in section IV. "Balance sheet disclosures", note 9 of the notes to the consolidated financial statements.

4 Measurement of pension provisions

1 In the consolidated financial statements of the Company EUR 553.6 million (24.7 % of total assets) relating to long-term pensions and similar obligations are recognized under the "Provisions for pensions and similar obligations" balance sheet item. Obligations under defined benefit plans are measured using the projected unit credit method. This requires assumptions to be made in particular about long-term rates of growth in salaries and pensions, average life expectancy and staff turnover. The discount rate must be determined by reference to market yields on high-quality corporate bonds with matching currencies and consistent maturities. As part of a supplement to the Group works agreement in financial year 2018, the company pension plan was expanded to include a capital option. When benefits become payable, employees have the option to choose between payment in annual installments, payment as a lump sum, or a lifetime annuity. The Company's executive directors estimated the payment options likely to be chosen by the specific employees, and took this into consideration in measuring the pension provision. Recognizing the capital option reduces the provision in the amount of EUR 46.4 million and is reported under staff costs in the income statement.

From our point of view, these matters were of particular significance in the context of our audit because the recognition and measurement of this significant item in terms of its amount are based to a large extent on estimates and assumptions made by the Company's executive directors.

2 As part of our audit we evaluated the actuarial expert reports obtained and the professional qualifications of the external experts, among others. We also examined the specific features of the actuarial calculations and assessed the numerical data, the actuarial parameters and the valuation methods on which the valuations were based for compliance with the standard and appropriateness, in addition to other procedures. In addition, we analyzed the changes in the obligation and the cost components in accordance with actuarial expert reports in the light of changes occurring in the valuation parameters and the numerical data, and verified their plausibility. We reviewed and assessed the justification for the executive directors' assumptions with respect to the distribution between lump-sum payment, annuity and installments. On this basis, we checked the calculation of the provisions and their presentation in the consolidated balance sheet and the notes to the consolidated financial statements, among other things.

Based on our audit procedures, we were able to satisfy ourselves that the estimates and assumptions made by the executive directors are substantiated and sufficiently documented.

3 The Company's disclosures on pension provisions are contained in section IV. "Balance sheet disclosures", note 9 of the notes to the consolidated financial statements.

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 effectiveness 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 16 May 2018. We were engaged by the supervisory board on 12 November 2018. 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, 13 March 2019

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Dr. Ulrich Störk
Wirtschaftsprüfer

Christina Pöpperl
Wirtschaftsprüferin

Glossary

ABBREVIATIONS

API
American Petroleum Institute

HR
Abbreviation for Human Resources

IMO
International Maritime Organisation, a specialised UN agency

ISO 14001
International standard stipulating requirements for environmental management systems

IMF
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.

Augmented Reality Repair
The practice of working with data glasses connected to the Internet or a smartphone app. This technology allows an engineer who is not a pump specialist to be guided through a step-by-step maintenance procedure.

Business Innovation Lab
Think tank in which a KSB team develops future-oriented business models for the age of digitalisation

CE marking
The CE marking documents that goods comply with the health and safety requirements of the European Union.

ErP Directive
Directive of the European Union which sets out the requirements for the environmentally compatible design of energy-related products

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

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

Contacts

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ONLINE NEWS

You will find the latest news
on the KSB Group at: www.ksb.com

Should you need additional information,
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CONCEPT AND DESIGN

KSB Communications, Frankenthal
3st kommunikation, Mainz

PHOTOGRAPHY

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arche Nova (p. 32)
Frank Lehmann, Dirmstein (p. 32)
Emanuel Spiegel, Frankenthal (p. 42, 54, 72)
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Pamela Ojeda, Chile (p. 60)
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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 and HTML formats at http://annualreport2018.ksb.com.

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
- Colombia
- Mexico
- Peru
- USA

- KSB production / assembly sites
- KSB sales / service sites

Financial Calendar

28 March 2019
Financial press conference
10:00, Frankenthal, Germany

4 April 2019
Invitation to Annual General Meeting

25 April 2019
Interim report
January – March 2019

29 May 2019
Annual General Meeting
10:00, Frankenthal, Germany

14 August 2019
Half-year financial report
January – June 2019

13 November 2019
Interim report
January – September 2019

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