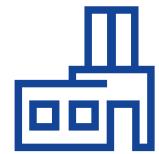
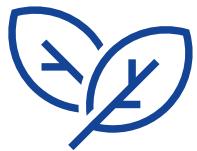


# ANNUAL REPORT 2018



With its mineral products k+s enables farmers to provide nutrition for the world, provides solutions that keep industries going, improves daily life for consumers and provides safety in winter. We continually meet the growing demand for mineral products mainly from production sites in Europe, North and South America as well as a worldwide sales network. We strive for sustainability because we are deeply committed to our responsibilities to people, environment, communities and economy in the regions in which we operate.

---

**OUR VISION:**

We will be the most customer-focused, independent minerals company and grow our EBITDA to €3bn in 2030 by ...

- thinking and acting as 'One Company'
  - tapping the full potential of our existing assets
  - exploring new adjacent growth areas
  - increasing the share of our specialties business
- 

**OUR MISSION:**

We enrich life by sustainably mining and transforming minerals into essential ingredients for Agriculture, Industry, Communities and Consumers.

**OUR FINANCIAL YEAR 2018 KEY FIGURES:<sup>1</sup>**

€4.04 billion / +11.4%  
REVENUES

€606.3 million / +5.1%  
EBITDA

2.6%  
RETURN ON CAPITAL EMPLOYED

€85.4 million / -41.1%  
GROUP EARNINGS AFTER TAX, ADJUSTED

14,931 / +0.9%  
EMPLOYEES (FTE)

71%  
EMPLOYEES REACHED BY COMMUNICATION MEASURES AND TRAINED IN COMPLIANCE MATTERS<sup>2</sup>

7.8  
LTI RATE<sup>2</sup>

1.0 million t  
AVOIDED SOLID RESIDUE<sup>2</sup>

<sup>1</sup> Please find a comprehensive overview of key figures at the end of this Annual Report.

<sup>2</sup> A complete presentation of our sustainability targets can be found on page 47.

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#### ABOUT THIS REPORT

The reporting period covers the period from 1 January to 31 December 2018. This Annual Report combines the Financial Report with the Sustainability Report.

The financial reporting is in accordance with the international IFRS standards; the Management Report is composed according to the German Accounting Standard (DrS) 20 and contains the information according to the CSR Directive Implementation Act. In the declaration on corporate governance we follow the transparency requirements of the German Corporate Governance Code (DCGK).

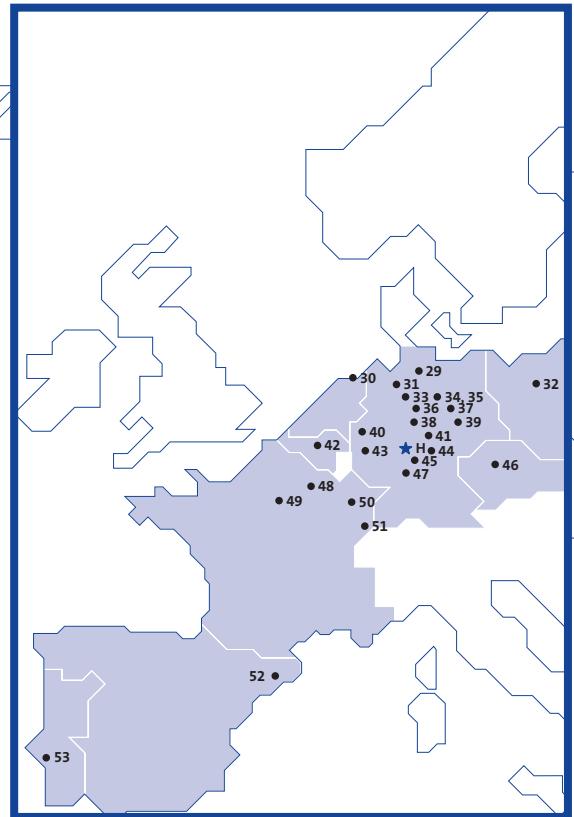
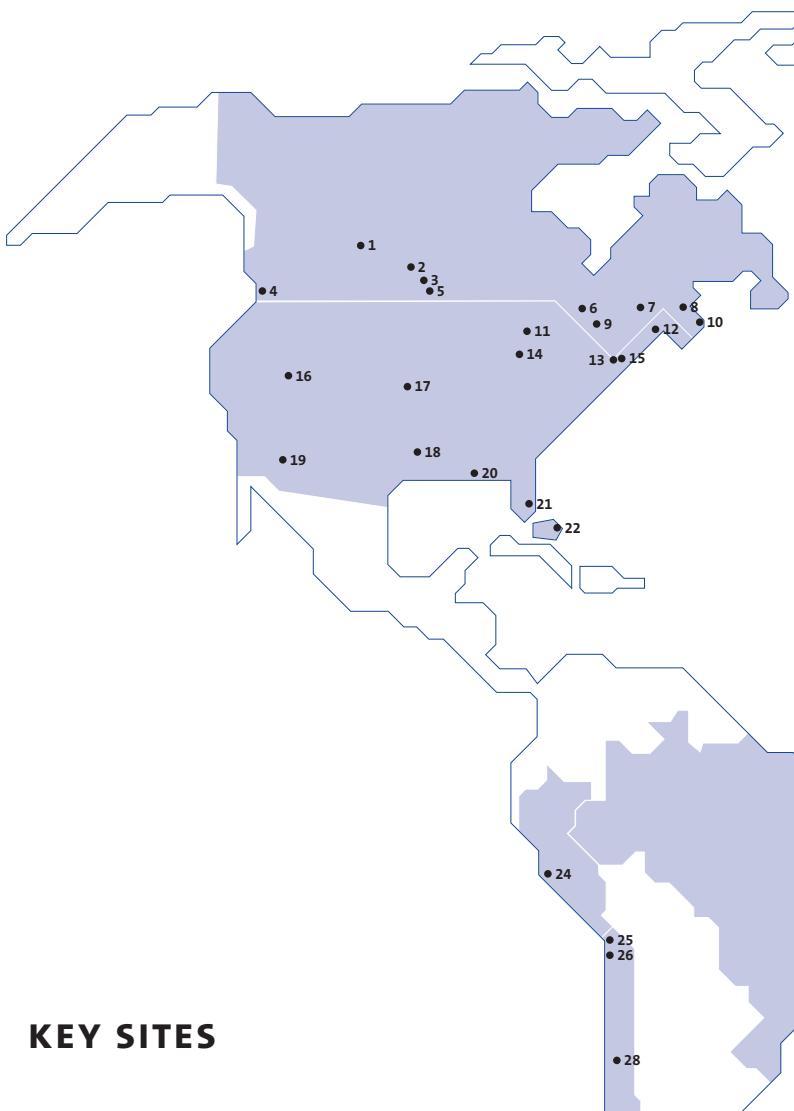
Reporting is also based on the guidelines of the Global Reporting Initiative (GRI Standards) and the recommendations of the International Integrated Reporting Council (IIRC). Simultaneously, the Annual Report serves as the progress report for the UN Global Compact.

In the event of any doubt, the German version of the Annual Report will prevail.

Published on 14 March 2019

#### KEY

- ⌚ Cross-references within the Annual Report
- 🌐 References to Internet sites



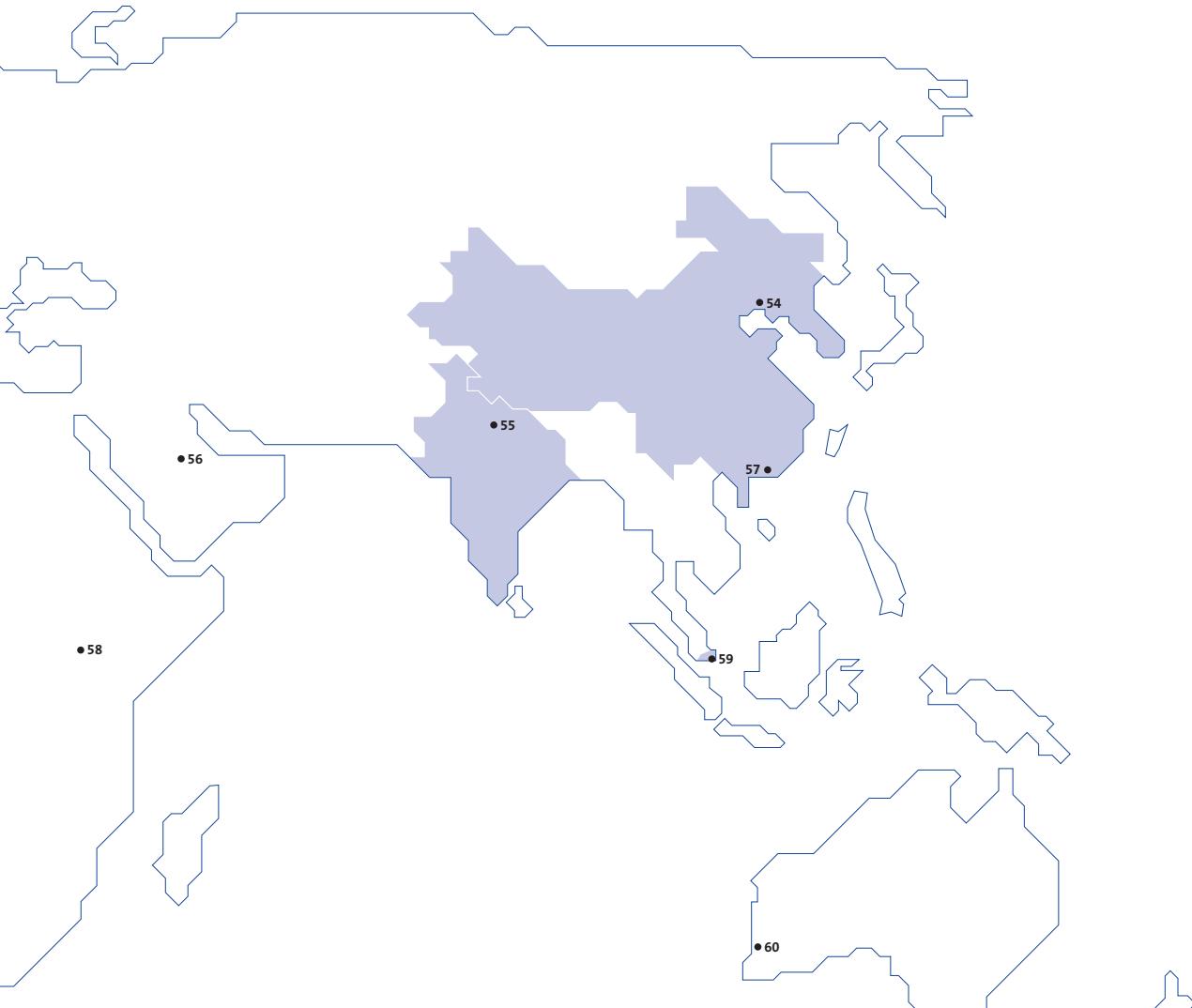
#### NORTH/SOUTH AMERICA

1	Lindbergh brine plant, Alberta, Canada	S
2	K+S Potash Canada, Saskatoon, Saskatchewan, Canada	K
3	Bethune potash mine, Saskatchewan, Canada	K
4	K+S Potash Canada, harbour logistic office, Vancouver, Canada	K
5	Solbetrieb Regina, Regina, Canada	S
6	Ojibway salt mine, Ontario, Canada	S☒
7	K+S Windsor Salt Head Office, Pointe-Claire, Quebec, Canada	S
8	Mines Seleine salt mine, Quebec, Canada	S☒
9	Windsor evaporated salt plant, Ontario, Canada	S
10	Pugwash salt mine, Nova Scotia, Canada	S☒
11	Manistee evaporated salt plant, Michigan, USA	S
12	Silver Springs evaporated salt plant, New York, USA	S
13	Fairport salt mine, Ohio, USA	S☒
14	Morton Salt Head Office, Chicago, Illinois, USA	S
15	Rittman evaporated salt plant, Ohio, USA	S
16	Grantsville solar evaporation salt facility, Utah, USA	S
17	Hutchinson evaporated salt plant, Kansas, USA	S
18	Grand Saline salt mine, Texas, USA	S☒
19	Glendale solar evaporated salt facility, Arizona, USA	S

20	Weeks Island salt mine, Louisiana, USA	S☒
21	Port Canaveral processing site, Florida, USA	S
22	Inagua sea salt facility, Bahamas	S
23	Salina Diamante Branco sea salt facility, Galinhos, Brazil	S
24	K+S Peru, Lima, Peru	S
25	Servicios Portuarios Patillos s.A., Port of Patillos, Iquique, Chile	S
26	Open-cast mining operations K+S Chile, Tarapaca, Atacama Desert, Chile	S
27	K+S Brasileira Fertilizantes e Produtos Industriais, distribution company, São Paulo, Brazil	K
28	K+S Chile Head Office, Santiago de Chile, Chile	S

#### EUROPE

29	K+S Transport GmbH, Hamburg, Germany	E
30	Frisia Zout B.V. brine plant, Harlingen, Netherlands	S
31	Sigmundshall potash mine, Lower Saxony, Germany (production discontinued as of 31 December 2018)	K☒
32	K+S Polska, distribution company, Poznań, Poland	K
33	esco Head Office in Hanover, Lower Saxony, Germany	S
34	Braunschweig-Lüneburg salt mine, Lower Saxony, Germany	S☒



35	k+S Baustoffrecycling GmbH, Sehnde, Lower Saxony, Germany	E
36	Bergmannsgegen-Hugo potash mine, Lower Saxony, Germany	K⊗
37	Zielitz potash mine, Saxony-Anhalt, Germany	K⊗
38	Granulation of Animal Hygiene Products, Bad Salzdetfurth, Lower Saxony, Germany	E
39	Bernburg salt mine, Saxony-Anhalt, Germany	S⊗
40	Borth salt mine, North Rhine-Westphalia, Germany	S⊗
41	msw-Chemie GmbH, Langelsheim, Lower Saxony, Germany	E
42	esco Benelux, distribution company, Diegem, Belgium	S
43	Chemische Fabrik Kalk GmbH, Cologne, North Rhine-Westphalia, Germany	E
44	k+S Entsorgung GmbH, Kassel, Hesse	E
45	Werra integrated potash plant, Hesse and Thuringia, Germany (Heringen/Merkers/Philippsthal/Unterbreizbach)	K⊗
46	k+S Czech Republic, distribution and production company, Prague, Czech Republic	S
47	Neuhof-Ellers potash mine, Hesse, Germany	K⊗
48	k+S KALI France Head Office, Reims, France	K
49	Saline Cérébos, production and packaging of salt products, Levallois-Perret, France	S
50	esco Holding France, Dombasle-sur-Meurthe, France	S

51	k+S KALI Wittenheim, production plant, Wittenheim, France	K
52	esco Spain Head Office, Barcelona, Spain	S
53	Vatel – Companhia de Produtos Alimentares Head Office, Alverca, Portugal	S

#### AFRICA/ASIA/PACIFIC

54	k+S (Huludao) Magnesium Products, production plant and distribution company, Huludao City, China	K
55	k+S Fertilizers (India), distribution company, New Delhi, India	K
56	Al Bariq for Fertilizer Plant (Joint Venture), Riyadh, Saudi Arabia	K
57	Shenzhen k+S Trading, distribution company, Shenzhen, China	K
58	Grainpulse Limited (Joint Venture), Kampala, Uganda	K
59	k+S Asia Pacific, distribution company, Singapore, Singapore	K
60	k+S Salt Australia, Perth, Australia	S

H = Headquarters  
 K = Potash and Magnesium Products  
 S = Salt  
 E = Complimentary Activities  
 ⊗ = Potash and rock salt mining

## **LETTER TO THE SHAREHOLDERS**



**DR BURKHARD LOHR**  
CHAIRMAN OF THE BOARD OF EXECUTIVE DIRECTORS

Dear shareholders, ladies and gentlemen,

It's a grey Tuesday morning here in Kassel as I'm writing this letter to you. The first sentence I committed to paper reads, "2018 was a good year for K+S". This might well puzzle some of you. Can a financial year in which we had to revise our original earnings forecasts downwards and your investment in our company lost more than 25 per cent of its value be termed a good year? Yes, it can! Allow me to explain why.

A turbulent and busy year is now behind us. The slowdown in economic growth worldwide and falling share prices dampened the mood in our company, too. This situation was exacerbated by operational challenges and extraordinary factors such as the prolonged heatwave and drought in Germany, the likes of which had not been seen since records began. As a result, we were forced to temporarily stop production at our Werra potash plant in September and again at the end of the year. Just a few years ago, the combined strength of these effects might have caused earnings to slump dramatically. Today however, K+S is so stable that in spite of all the headwinds we are still able to report a slight improvement in EBITDA year-on-year. This shows that we have made good progress in many areas.

The implementation of our SHAPING 2030 strategy is advancing with visible results: in 2018 we started to make our administrative functions more efficient and focus on delivering customer value. Initial synergy effects have already been achieved in procurement, production as well as sales and marketing. Thanks to our rigorous cost discipline, good sense of perspective, and significantly lower capital expenditure, we are on track with adhering to our timetable of achieving a positive free cash flow in 2019 and halving our indebtedness by 2020. More than that, we will reach our target of leveraging annual synergy potential by more than €150 million from the end of 2020. We will complete the transformation phase by the end of 2020, in order to start the subsequent growth phase on a solid foundation.

After some initial difficulties, we have made progress in our new potash mine in Bethune. In record time, we succeeded in constructing a completely new plant and put it into operation. We have now secured the raw materials we need for future growth. In the past year alone, we have already produced more than 1.4 million tonnes of potash in Saskatchewan.

Meanwhile in Germany, we have achieved additional key milestones with the successful commissioning of a new plant for the further reduction of wastewater as well as extensive preparations and approval for the expansion of the Hattorf tailings pile at the Werra plant. The continuation of constructive talks with the Weser river basin management on the long-term disposal of our saline wastewater also allows us to look optimistically into the new year. Our production operations are subject to the same high sustainability standards to which we as a company are committed. This claim is expressed not only in our sustainability targets, but also in our renewed commitment to the principles of the United Nations Global Compact.

Even though the main focus of the transformation is primarily on improving financial health, we have prepared the ground for future growth with successful initiatives. Since March 2018, we have been gathering important experience in the field of fertigation – liquid fertilization – with our aquaponics experimental test station. We firmly believe that this technology will be extremely important for our agricultural customers in the future. We are also making great strides in Africa. This long-term commitment has gained momentum with the signing of our company foundation in Uganda. In 2019, we will start linking new buyer groups and significantly expanding our presence in this future growth region inhabited by over one billion people.

Dear Shareholders,

You can see why I consider 2018 to have been a good year for k+s. Following important – and correct – strategic steps in 2017, we succeeded in picking up speed on our new path. I would particularly like to thank all k+s employees who made this achievement possible in the first place and who have shown admirable commitment to our strategy.

There is no doubt in our minds that in 2019 we will certainly stay on track and come much closer to achieving our ambitious goals. To this end, we will continue to work persistently and diligently, even if some of you were understandably disappointed last year.

I would like to thank you, also on behalf of my colleagues on the Board of Executive Directors, for the trust and support you have shown in the employees of k+s and in us as the Board of Executive Directors.

All the best!



Dr Burkhard Lohr  
Chairman of the Board of Executive Directors

Kassel, 14 March 2019

## OUR BOARD OF EXECUTIVE DIRECTORS



THE BOARD OF EXECUTIVE DIRECTORS OF THE K+S AKTIENGESELLSCHAFT (FROM LEFT TO RIGHT):  
**MARK ROBERTS, THORSTEN BOEKERS UND DR BURKHARD LOHR**

Dr Thomas Nöcker retired on 1 September 2018.

**DR BURKHARD LOHR****CHAIRMAN OF THE BOARD OF EXECUTIVE DIRECTORS****PERSONNEL DIRECTOR**

Dr Burkhard Lohr (born in 1963 in Essen) has been a member of the Board of Executive Directors of K+S AKTIENGESELLSCHAFT since 1 June 2012 and became Chairman of the Board of Executive Directors of K+S AKTIENGESELLSCHAFT on 12 May 2017. He is Personnel Director and has responsibility for Communications & Brands, Corporate Board Office, Corporate Secretary, Environmental & Regulatory Affairs, Health, Safety, Management Systems & Sustainability, Human Resources, Internal Auditing, Investor Relations, Legal & GRC and Strategy & Development.

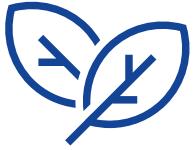
**THORSTEN BOECKERS****MEMBER OF THE BOARD OF EXECUTIVE DIRECTORS****CHIEF FINANCIAL OFFICER**

Thorsten Boeckers (born in 1975 in Würselen) has been a member of the Board of Executive Directors of K+S AKTIENGESELLSCHAFT since 12 May 2017. He is responsible for, among others, Controlling, Finance and Accounting, Insurance, IT, Procurement and Tax.

**MARK ROBERTS****MEMBER OF THE BOARD OF EXECUTIVE DIRECTORS**

Mark Roberts (born in 1963 in New Jersey, USA) has been a member of the Board of Executive Directors of K+S AKTIENGESELLSCHAFT since 1 October 2012 with responsibility for the operating units Americas and Europe+. He has also responsibility for Global Marketing, Commercial and Supply Chain Excellence with regard to the segments Agriculture, Industry, Consumers and Communities as well as Supply Chain Management Excellence and Operations Excellence with the subunit Technical Services.

- Please find the complete cv's on our website:  
[www.k-plus-s.com/executivedirectors](http://www.k-plus-s.com/executivedirectors)



AGRICULTURE



INDUSTRY



CONSUMER



COMMUNITIES

SHAPING 2030 is the name of our compass for the future development of the K+S GROUP. United in a clear mission and led by an ambitious vision, we are becoming “ONE K+S”, placing the customer at the centre of our actions and focusing on the four customer segments of agriculture, industry, consumers and communities. We will use our extensive experience and globally recognised expertise in the exploration and processing of minerals, to systematically develop our existing business and open up new business opportunities. In the first implementation phase of our strategy – the transformation – we will lay a solid foundation for future growth through organisational changes and measures to increase efficiency. For the subsequent growth phase up to 2030, we have developed a roadmap with clear and fixed development targets, including financial targets, and promising growth options. The first milestones for both phases were reached in 2018.



# AGRICULTURE



#### PLANT NUTRIENTS

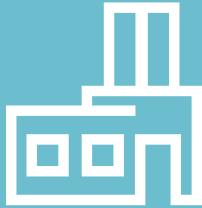
## HEALTHY SOIL, HEALTHY CROPS

In 2050, agriculture will be facing the challenge of feeding around ten billion people. Therefore, healthy soils with a balanced nutrient content are necessary to accomplish this task in various regions all over the world. Today, however, soil is not used efficiently. As a result, it erodes and loses the ability to yield healthy crops. To counteract this, balanced and demand-based fertilization is required. With our large selection of soil fertilizers, liquid and leaf fertilizers as well as accompanying advice, we support farmers worldwide to achieve high yields and the best qualities – even in unfavourable weather conditions. With the “Helping people to help themselves” slogan, we also participate in numerous agricultural aid projects, such as “Growth for Uganda”.



The background of the image shows a massive, smooth, white mound of salt against a clear, vibrant blue sky. The salt has a slightly textured surface with some minor ripples and a prominent diagonal crease running from the bottom left towards the center. The lighting is bright, casting soft shadows that emphasize the three-dimensional shape of the salt pile.

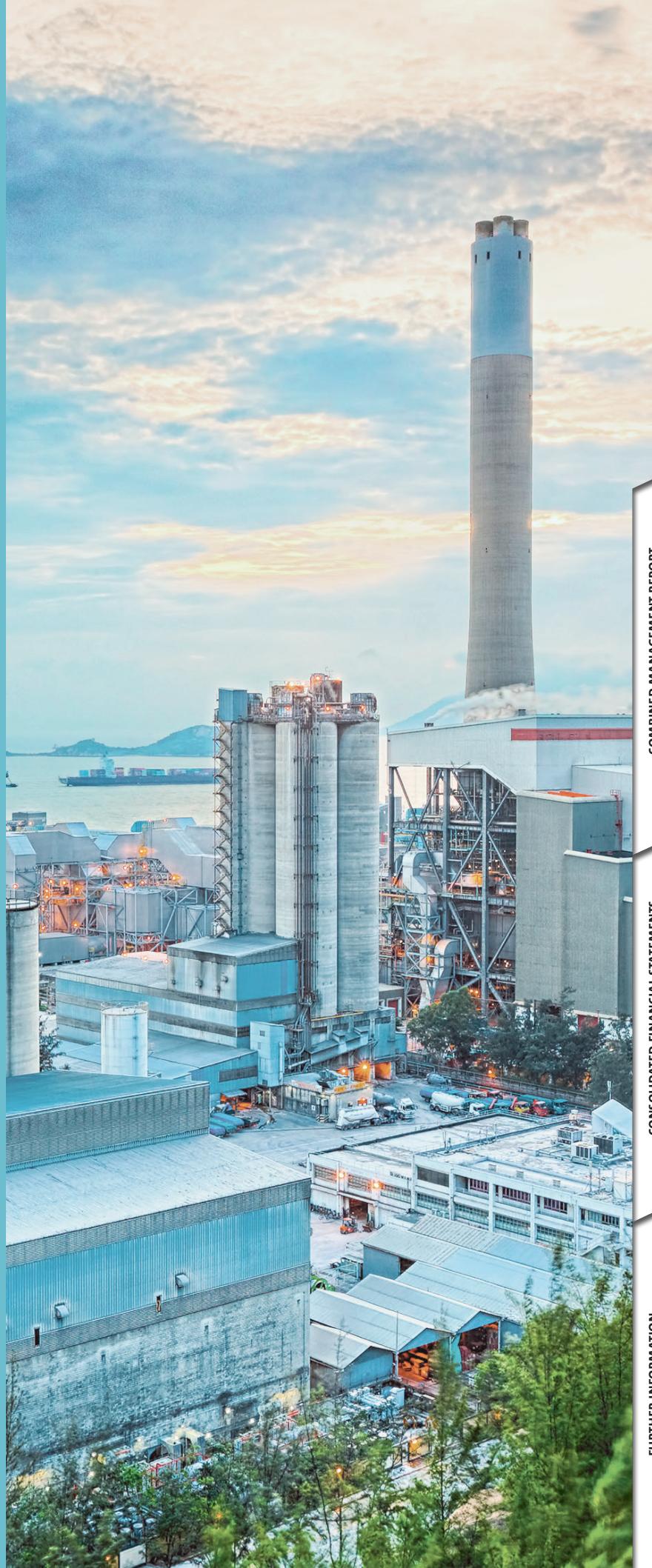
# INDUSTRY



#### INDUSTRIAL APPLICATIONS

## HOW IT WORKS

k+s offers a broad range of high-quality potash, magnesium and salt products for industrial applications in various degrees of purity and special grain sizes. These are used, for example, in chlor-alkali electrolysis in the chemical industry. Our products are the basis for production of various plastics. Additionally they are an indispensable part of the industrial added value in the production of glass, metallurgical processes, the textile industry, biotechnology, and even in oil and gas exploration. Moreover, a wide assortment of products are available to meet the particularly high demands of the pharmaceutical, cosmetics, food and animal nutrition industries.





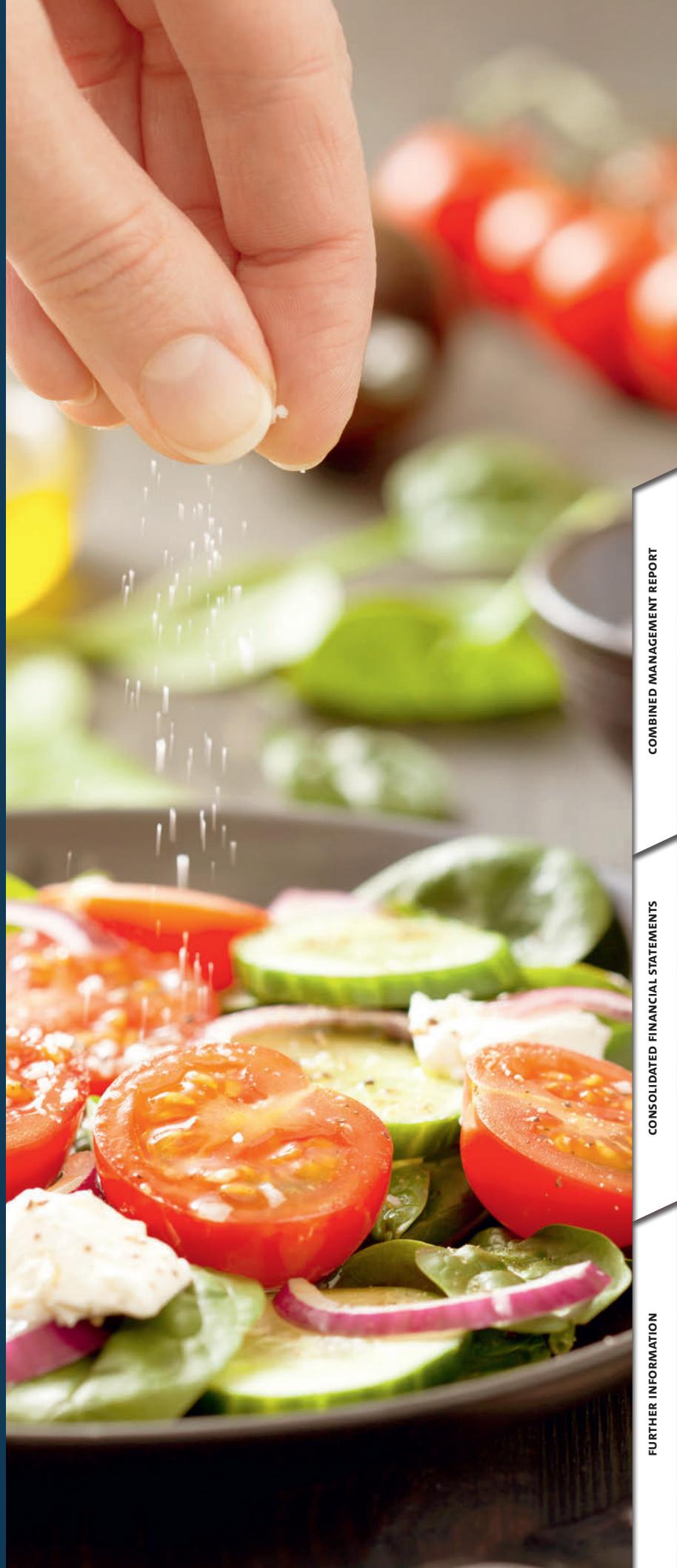
# CONSUMERS



SALT

## IMPROVING LIFE

Whether it is used as a spice or flavour enhancer, salt has been an essential part of our nutrition for thousands of years. Nutrition is now more than ever a matter of trust. Many consumers have become increasingly sceptical of industrially produced foods. Certified and guaranteed quality is therefore of the utmost importance to us. Our salt products are manufactured and packed using state-of-the-art processes and consistently comply with the highest quality, hygiene and safety standards. And while our food grade salt is most notable, we work to improve consumers' lives in a variety of ways. Whether it be through our water softening salts used to protect your skin, clothing and household appliances, or our ice melt salt used to protect your friends, families and loved ones during the winter, we strive to bring pure enjoyment into consumers' lives each and every day.





**COMMUNITIES**



## DE-ICING SALT

# ON TRACK

Everyone knows the hazards of icy roads. Today, we make the roads in many cities and communities safer during the winter months. We rely on a highly pure and particularly effective mixture of fine and coarse salt crystals. While the fine crystals ensure an immediate thawing effect, the coarse ones guarantee the required long-term effect on thicker layers of ice and snow. Another important factor for the satisfaction of our public consumers are smoothly running logistics. As one of the world's largest producers, we are not only a reliable supplier in terms of delivering sufficient quantities but, thanks to our decentralised logistics concept and consumer-focused production, we also protect the environment.



## SUPERVISORY BOARD REPORT



DR ANDREAS KREIMEYER  
CHAIRMAN OF THE SUPERVISORY BOARD

## *Dear shareholders,*

The 2018 financial year was an eventful year for our Company. The global economy has deteriorated, share prices have declined considerably in some cases, and the extreme drought in Germany had also left its mark on the K+S business. Nevertheless, in this difficult environment we have consistently worked on the implementation of our SHAPING 2030 strategy: We have streamlined our structures, cut costs, and evaluated new business opportunities. On behalf of the Supervisory Board, I would like to thank all employees for their hard work and commitment. I also would like to express gratitude to the members of the Board of Executive Directors, who successfully steered the Company amid difficult conditions, as well as to our employee representatives and Works Council members who accompanied the development of K+S in an invariably constructive manner.

Special thanks go to you, our shareholders, for placing your trust in our Company, its management, its staff and our products again in 2018.

On the Supervisory Board we especially discussed the new Group strategy, SHAPING 2030, in great detail during 2018 as well as the forward-looking organisation based thereon. Besides the detailed explanation of the business situation, other focal points of the Supervisory Board's activities in 2018 were potential opportunities for growth, the environmental strategy, the implementation of financing measures, and the selection of suitable candidates for appointments to the Board of Executive Directors and the Supervisory Board.

### **ADVISING THE BOARD OF EXECUTIVE DIRECTORS AND MONITORING OF MANAGEMENT**

During the 2018 financial year, the Supervisory Board diligently performed the supervisory and advisory functions incumbent on it by law and in accordance with the Articles of Association and its bylaws. Numerous matters were discussed in depth and resolutions were adopted on transactions requiring approval. We continuously monitored the Board of Executive Directors' management of the Company and advised the Board on the governance of the Group. We were always involved in decisions of fundamental importance in a timely and appropriate manner. The Board of Executive Directors regularly briefed us promptly and comprehensively on the course of business, the results of operations, financial position and net assets, the employment situation, the progress of important investment projects, planning, and the further strategic development of the Company. Deviations from planning were explained to the Supervisory Board in detail. The risk situation and risk management were carefully considered. The Supervisory Board received written reports from the Board of Executive Directors in order to prepare for meetings. In particular, the Chairman of the Supervisory Board also remained in close personal contact with the Board of Executive Directors outside of meetings and discussed significant events as well as upcoming decisions. The shareholder and employee representatives regularly discussed important agenda items at separate meetings prior to meetings of the Supervisory Board.

In 2018, six Supervisory Board meetings were held. The average attendance rate of the 16 Supervisory Board members at these meetings was 91% in the reporting period. Two meetings were attended by all Supervisory Board members; one meeting was unable to be attended by two Supervisory Board members; three members were unable to attend a third meeting; and one meeting took place in the absence of four members. All absences were excused. One Supervisory Board member who is an employee representative was unable to attend two meetings in the first six months of the year, which was more than half the number of meetings with relevance for this Supervisory Board member. Of the four physical **Audit Committee** meetings, two were attended by all committee members; at each of the other two meetings one member was excused. The **Nomination Committee** met on four sessions. Three of these meetings were attended by all committee members and on one occasion one member was excused. Two of the four meetings of the **Personnel Committee** were attended by all committee members; at two meetings one member was excused. The **Strategy Committee** met on three occasions, with full attendance at all meetings.

#### **COMPOSITION OF THE BOARD OF EXECUTIVE DIRECTORS AND THE SUPERVISORY BOARD**

The composition of the Board of Executive Directors changed as follows:

Dr Thomas Nöcker's term of office ended on 31 August 2018 after 15 years on the Board of Executive Directors. Once again, we would like to thank Dr Nöcker for his close and constructive collaboration at all times and his commitment to k+s over the past years.

The composition of the Supervisory Board changed as follows in 2018:

Mr Dieter Kuhn left the Supervisory Board with effect from 28 February 2018 on entering retirement.

Elections for employee representatives to the Supervisory Board of k+S AKTIENGESELLSCHAFT were held on 10 April 2018. Mr Harald Döll and Mr Michael Vassiliadis retired from the Board. Ms Anke Roehr, Mr André Bahn, Mr Peter Bleckmann, Mr Axel Hartmann and Mr Michael Knackmuß were elected as employee representatives. Mr Gerd Kübler was elected as a representative of the senior executives. Ms Petra Adolph and Mr Ralf Becker were elected as union representatives.

The Supervisory Board appointments of Ms Jella Benner-Heinacher, Dr Annette Messemer, Mr Wesley Clark and Dr Eckart Sünnner ended at the close of the Annual General Meeting on 15 May 2018. Ms Jella Benner-Heinacher was re-elected. Dr Elke Eller, Mr Gerd Grimmig and Mr Nevin McDougall were appointed as new Supervisory Board members.

After the end of the Annual General Meeting of K+S AKTIENGESELLSCHAFT, the members of the Supervisory Board elected a Vice Chairman and held by-elections to the committees:

- + Mr Ralf Becker was elected as Vice Chairman.
- + Pursuant to the German Co-determination Act (MitbestG), Mr Ralf Becker is also a new member of the Mediation Committee. Mr Axel Hartmann and Mr Thomas Kölbl were elected as further members. Mr Ralf Becker was also elected to the Strategy Committee.
- + Ms Petra Adolph, Ms Jella Benner-Heinacher and Dr Andreas Kreimeyer were elected as new members of the Audit Committee. Mr Ralf Becker and Mr Axel Hartmann were re-elected to this committee. Mr Thomas Kölbl was then elected as Chairman of the Audit Committee.
- + Dr Elke Eller, Mr Ralf Becker and Mr Michael Knackmuß were elected to the Personnel Committee.
- + Ms Jella Benner-Heinacher was re-elected to the Nomination Committee.

#### **SUPERVISORY BOARD MEETINGS**

One extraordinary and five ordinary Supervisory Board meetings were held during the 2018 financial year.

At the ordinary meeting held on 14 March 2018, the Supervisory Board examined the annual financial statements, the consolidated financial statements and the management reports for the 2017 financial year in the presence of the auditor, approved the financial statements on the recommendation of the Audit Committee and, following extensive discussions, agreed to the proposal of the Board of Executive Directors concerning the appropriation of profits. The business situation and the outlook for the current year were discussed in depth and the proposed resolutions for the 2018 Annual General Meeting were also approved. In addition, the findings of the audit of the non-financial statement were discussed with the auditors. Furthermore, we agreed on the setting of age limits for members of the Board of Executive Directors and the Supervisory Board. We were also briefed at length on the progress being made in the Group strategy SHAPING 2030 and the production situation at our new plant in Bethune.

At the ordinary meeting on 14 May 2018, the Board of Executive Directors briefed the Supervisory Board in detail on the development of the business situation and earnings in the first quarter of 2018, among other things. Furthermore, we were apprised of the acquisition of Grainpulse in Uganda and of the Africa strategy. Moreover, we approved a further financial measure. We were then briefed on the status of the implementation of the new EU General Data Protection Regulation at K+S.

The constituent meeting of the new Supervisory Board was held after the Annual General Meeting on 15 May 2018. Following the election of the Vice Chairman, the elections for the Mediation, Personnel, Audit, Nomination and Strategy Committees were held (see the section on the composition of the Board of Executive Directors and the Supervisory Board).

One of the topics we discussed in detail at the ordinary meeting on 23 August 2018 was the new K+S strategy, SHAPING 2030. In addition, we were briefed on the current situation as regards environmental issues, and the business situation of the K+S GROUP was explained to us. We also addressed the production situation at our plants.

At the last ordinary meeting of the year, held on 29 November 2018, the Board of Executive Directors explained the current business situation and provided a forecast of the anticipated revenues and earnings of the K+S GROUP in the 2018 financial year. The planning of the K+S GROUP for 2019, including the investment and financing framework, was examined in depth (also in terms of consistency with strategic objectives) and subsequently approved. We were then briefed on the implementation status of the new SHAPING 2030 strategy and the related opportunities for growth. Furthermore, the Chairman of the Board of Executive Directors gave us an explanation of the current environmental issues. The Chairman of the Audit Committee reported on this committee's last meeting. The Supervisory Board resolved to engage DELOITTE GMBH WIRTSCHAFTSPRÜFUNGSGESELLSCHAFT to audit the non-financial statement.

The joint 2018/2019 declaration of conformity by the Board of Executive Directors and Supervisory Board was likewise approved.

- ◊ ‘Declaration on Corporate Governance’, page 77

At the extraordinary meeting on 18 December 2018, the main topic of discussion was the handling of a potential opportunity for growth.

## COMMITTEE MEETINGS

In addition to the Mediation Committee required by law, the Supervisory Board has established four more committees to support its tasks and responsibilities: the Audit Committee, the Personnel Committee, the Nomination Committee and the Strategy Committee. An overview of these committees and their composition can be found in the management report on page 73 and on the K+S AKTIENGESELLSCHAFT website under 'Corporate Governance'. There you can also find the bylaws for the Supervisory Board and its committees.

The **Audit Committee** met a total of six times in 2018. On 2 March 2018, in the presence of the auditor as well as the Chairman of the Board of Executive Directors and the Chief Financial Officer, the committee examined the 2017 annual financial statements of K+S AKTIENGESELLSCHAFT, the 2017 consolidated financial statements, the combined management report as well as the proposal of the Board of Executive Directors for the appropriation of profits, and recommended to the Annual General Meeting that DELOITTE GMBH WIRTSCHAFTSPRÜFUNGSSELLSCHAFT again be elected as auditor. On 23 August 2018, the committee discussed the K+S GROUP's internal control system (ics) in detail with the Chairman of the Board of Executive Directors and the Chief Financial Officer. Moreover, the committee acknowledged and approved the report delivered by the Chief Compliance Officer on the status of the compliance organisation of the K+S GROUP. It was also decided to put the audit of the annual financial statements of K+S AKTIENGESELLSCHAFT and the consolidated financial statements for the 2019 financial year out to tender. Finally, the committee discussed focal points of the 2018 audit. At the meeting on 28 November 2018, the head of Internal Audit reported on his work in the K+S GROUP. The Board of Executive Directors reported on developments with regard to consultancy fees and donations as well as on the engagement of the auditor with non-audit services. Finally, the Audit Committee recommended that the Supervisory Board engage the statutory auditor to audit the non-financial statement.

The respective Quarterly Report or Half-Yearly Financial Report awaiting publication was discussed by the members of the Audit Committee, the Chairman of the Board of Executive Directors and the Chief Financial Officer in conference calls held on 8 May and 12 November and at a physical meeting on 9 August 2018.

The **Personnel Committee**, which prepares personnel decisions made by the Supervisory Board and is responsible for other matters concerning the Board of Executive Directors, met a total of four times in 2018. It focused on setting targets with, and their attainment by, the members of the Board of Executive Directors, the appropriateness of the remuneration of the Board of Executive Directors in relation to the management teams and the total workforce, the gender quota and the further development of the remuneration system for the members of the Board of Executive Directors and

the Supervisory Board. An age limit for members of the Board of Executive Directors and a consulting agreement for Dr Nöcker were also discussed. In addition, the committee addressed the long-term succession planning for the Board of Executive Directors. Detailed information about the level of remuneration of the members of the Board of Executive Directors in 2018 as well as the structure of the current remuneration system can be found on pages 134–143.

The members of the **Nomination Committee** likewise met four times in 2018; the main subject of debate was the long-term succession planning for the Supervisory Board. Furthermore, the committee addressed the introduction of an age limit for Supervisory Board members and limiting the number of periods in office.

The **Strategy Committee** met a total of three times in 2018. It mainly discussed the new Group strategy SHAPING 2030 and the future organisation, as well as growth options for the K+S GROUP based thereon.

The **Mediation Committee** did not need to be convened in the past financial year.

#### **CONFLICTS OF INTEREST**

No conflicts of interest involving members of the Board of Executive Directors or the Supervisory Board, about which the Annual General Meeting needed to be informed, were disclosed to the Supervisory Board during the reporting period.

#### **AUDIT OF THE 2018 ANNUAL FINANCIAL STATEMENTS AND CONSOLIDATED FINANCIAL STATEMENTS**

DELOITTE GMBH WIRTSCHAFTSPRÜFUNGSGESELLSCHAFT, Hanover, audited the annual financial statements of K+S AKTIENGESELLSCHAFT, prepared by the Board of Executive Directors in accordance with the rules of the German Commercial Code (HGB), the consolidated financial statements prepared on the basis of the international accounting standards as adopted by the EU and the supplementary German legal requirements required to be applied in accordance with section 315e (1) of the Handelsgesetzbuch (HGB – German Commercial Code) and the combined management and group management report for the 2018 financial year. The annual financial statements and the consolidated financial statements both received unqualified audit opinions. In addition to the statutory audit, the Supervisory Board of

K+S AKTIENGESELLSCHAFT commissioned DELOITTE GMBH WIRTSCHAFTSPRÜFUNGS GESELLSCHAFT to audit the conformity with limited assurance of the combined non-financial statement in accordance with the CSR-RUG. DELOITTE reported the results to the Audit Committee of K+S AKTIENGESELLSCHAFT at its meeting on 1 March 2019 and to the Supervisory Board at its meeting on 13 March 2019. Based on the audit procedures performed and the audit evidence obtained, no matters have come to the attention of DELOITTE that cause DELOITTE to believe that the condensed non-financial statement of the company for the period from 1 January to 31 December 2018 has not been prepared, in all material respects, in accordance with Sections 315b, 315c in conjunction with 289c to 289e of the German Commercial Code (HGB). The annual financial statements and the consolidated financial statements were each issued with an unqualified audit opinion. The aforementioned documents, the Board of Executive Directors' proposal concerning the appropriation of profits and the audit reports of DELOITTE GMBH WIRTSCHAFTSPRÜFUNGS GESELLSCHAFT, each of which had been submitted to the members of the Audit Committee and the Supervisory Board on time, were each addressed extensively at the Audit Committee meeting held on 1 March 2019, as well as at the Supervisory Board meeting held on 13 March 2019, in the presence of the auditor. All questions raised at both meetings were answered satisfactorily by the Board of Executive Directors and the auditor. Following its own examination of the reports presented, the Supervisory Board did not raise any objections. It agreed with the Board of Executive Directors on its assessment of the position of K+S AKTIENGESELLSCHAFT and of the Group and, at the suggestion of the Audit Committee, approved the financial statements for the 2018 financial year, thereby ratifying the 2018 annual financial statements of K+S AKTIENGESELLSCHAFT. The Supervisory Board endorsed the proposal of the Board of Executive Directors for the declaration on corporate governance (page 67). The resolution on the appropriation of profits proposed by the Board of Executive Directors was also examined, particularly with regard to the present and expected future financial situation of the K+S GROUP. Following extensive discussions, the Supervisory Board also approved this proposal made by the Board of Executive Directors.

On behalf of the Supervisory Board



Dr Andreas Kreimeyer  
Chairman of the Supervisory Board

Kassel, 13 March 2019

## K+S ON THE CAPITAL MARKET

K+S shares trended upwards in the first five months of 2018, mainly on the strength of rising potash prices overseas. From the third quarter, weather-related production problems began to weigh on the share price, whose downward trend towards year-end was furthered by an increasingly weak stock market. At the end of the financial year, our shares were trading close to their low for the year at €15.72.

**CAPITAL MARKET DATA**

**TAB. 1.1**

€ million		2014	2015	2016	2017	2018
Closing price on 31 December	XETRA, €	22.92	23.62	22.69	20.76	<b>15.72</b>
Highest price	XETRA, €	26.6	38.81	23.62	24.83	<b>25.75</b>
Lowest price	XETRA, €	19.44	22.4	16.06	19.11	<b>15.03</b>
Average number of shares	million	191.4	191.4	191.4	191.4	<b>191.4</b>
Market capitalisation on 31 December	€ billion	4.4	4.5	4.3	4.0	<b>3.0</b>
Average daily trading volume	million units	1.92	2.21	1.74	1.26	<b>0.89</b>
Enterprise value (EV) on 31 December	€ billion	6.1	6.9	7.9	8.1	<b>7.4</b>
Enterprise value to revenues (EV/revenues)	x	1.6	1.7	2.3	2.2	<b>1.8</b>
Enterprise value to EBITDA (EV/EBITDA)	x	6.8	6.5	15.3	14.1	<b>12.3</b>
Enterprise value to EBIT I (EV/EBIT I)	x	9.5	8.8	34.6	30.1	<b>32.8</b>
Book value per share	€/share	20.77	22.44	23.78	21.74	<b>21.65</b>
Earnings per share, adjusted <sup>1</sup>	€/share	1.92	2.83	0.68	0.76	<b>0.45</b>
Dividend per share <sup>2</sup>	€/share	0.90	1.15	0.30	0.35	<b>0.25</b>
Total dividend payment <sup>2</sup>	€ million	172.3	220.1	57.4	67.0	<b>47.9</b>
Payout ratio <sup>2,3</sup>	%	47.0	40.6	44.0	46.2	<b>55.6</b>
Dividend yield (closing price) <sup>2</sup>	%	3.9	4.9	1.3	1.7	<b>1.6</b>

<sup>1</sup> The adjusted key indicators include the profit/(loss) from operating forecast hedges in the relevant reporting period, which eliminates effects from changes in the fair value of the hedges (see also the 'Notes to the income statement and the statement of comprehensive income' on page 173). Related effects on deferred and cash taxes are also eliminated; tax rate in 2018: 30.0% (2017: 29.9%).

<sup>2</sup> The figure for 2018 corresponds to the dividend proposal.

<sup>3</sup> Based on adjusted earnings after tax.

## THE SHARE

### INTERNATIONAL STOCK MARKETS UNDER PRESSURE

Developments in the global economy in 2018 were dominated by geopolitical conflicts and macroeconomic uncertainty, which was reflected in the performance of many international stock indices, predominantly in the second half of the year. The trade dispute between the economic heavyweights, the USA and China, as well

as the debt crisis in Italy and the slow-moving negotiations for the United Kingdom's exit from the EU, put a damper on economic growth worldwide. In addition, the European Central Bank ushered in a turnaround in European monetary policy with the announcement that it was ending its bond-buying programme in December.

Subsequently, the German DAX index lost around 19% of its value in 2018 and closed the year at 10,558 points. The MDAX also recorded losses of over 17%, closing at 21,588 points. The European

DJ STOXX Europe 600 index retreated by about 13% to end the year at 337 points. The global MSCI WORLD index also trended downwards, losing 11% to finish the year at 1,883 points.

#### PRODUCTION CUTS IN THE SECOND HALF OF THE YEAR

##### WEIGHED ON THE K+S SHARE

In the first six months of 2018, the K+S shares traded on the MDAX developed strongly on the whole, outperforming all benchmark indices until the mid-year mark. The share reached its high for the year of €25.75 on 25 May. However, the share then came under pressure in the second half of the year, due in particular to the weather-related production outages at the integrated Werra plant. The share recorded its lowest closing price during the year of €15.03 on 27 November. The announcement in early December of a return to normal production levels at the integrated Werra plant gave a slight boost to the share price again. Nevertheless, amid a weak overall market it closed at a price of €15.72 at the end of the reporting period, close to its lowest closing price for the year (2017 year-end closing price: €20.76). In the course of the year, the short ratio fell from 12.6% to 8.4% (source: Bloomberg).

[www.k-plus-s.com/share](http://www.k-plus-s.com/share)

#### SHARE PRICES OF NORTH AMERICAN COMPETITORS

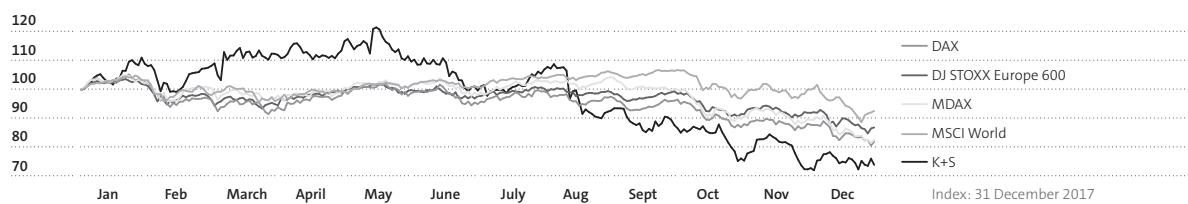
We also track the performance of our share compared with that of our publicly traded competitors. These include, in particular, the fertilizer producers NUTRIEN from Canada and MOSAIC from the United States, as well as the primarily salt-producing US-based company COMPASS MINERALS.

While NUTRIEN only slightly underperformed the overall market (-14%), COMPASS MINERALS stock showed a significantly negative development (-42%). By contrast, the share price of MOSAIC (+14%) benefited to a greater extent from the positive trend in the international potash markets.

K+S SHARE PERFORMANCE IN COMPARISON WITH THE DAX, MDAX, DJ STOXX 600 AND MSCI WORLD

FIG. 1.1

in %

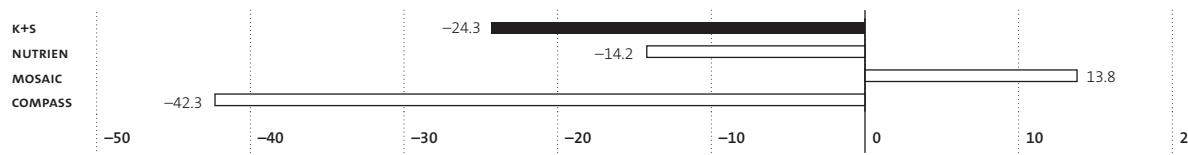


Source: Bloomberg

K+S SHARE PRICE PERFORMANCE IN COMPARISON WITH COMPETITORS IN 2018

FIG. 1.2

in %



## SHAREHOLDER STRUCTURE

Under the free float definition applied by DEUTSCHE BÖRSE AG, the free float is 100%. Until the end of February 2019, the following shareholders notified us of holdings above the legal thresholds:

- + Dimensional Holdings Inc.: 3.005% (notification dated 27 December 2018)
- + dws Investment GmbH: 5.69% (notification dated 31 December 2018)

## AMERICAN DEPOSITORY RECEIPTS FOR TRADING IN NORTH AMERICA

In North America, we offer an American depository receipts (ADR) programme to assist investors there in trading in K+S securities and thus expanding the international shareholder base. As ADRs are quoted in US dollars and the dividends are also paid in US dollars, they are essentially similar to US stocks. Two ADRs correspond to a single K+S share. ADRs are traded on the OTC (over-the-counter) market in the form of a 'level 1' ADR programme. The K+S ADRs are listed on the OTCQX trading platform.

- [www.k-plus-s.com/adr](http://www.k-plus-s.com/adr)
- [www.otcmarkets.com](http://www.otcmarkets.com)

## BONDS AND RATING

### K+S BONDS

As a result of the continued high liquidity supply from the leading central banks, bond prices for borrowers with good credit ratings remained high on the capital market – with correspondingly low yields. Most K+S bonds also benefited from this situation.

### RATING

Following a review of K+S's credit rating by the rating agency STANDARD & POOR'S, our BB rating was confirmed in August 2018. At the same time, however, STANDARD & POOR'S downgraded its rating outlook from 'stable' to 'negative'. This was mainly due to the challenges we faced at an operating level, which impeded a recovery of EBITDA, the net debt/EBITDA ratio and adjusted free cash flow. The new rating outlook had no significant negative impact on our Company's eligibility for financing.

## INVESTOR RELATIONS

### RESEARCH COVERAGE ON K+S

The very extensive research coverage of the K+S GROUP remained virtually unchanged compared with the previous year. The banks analysing us on a regular basis range from an investment boutique with regional expertise to major banks with an international scope. In total, 28 banks analysed us on a regular basis during the 2018 financial year (2017: 29).

- [www.k-plus-s.com/analysts](http://www.k-plus-s.com/analysts)

## SHAREHOLDER STRUCTURE

in %

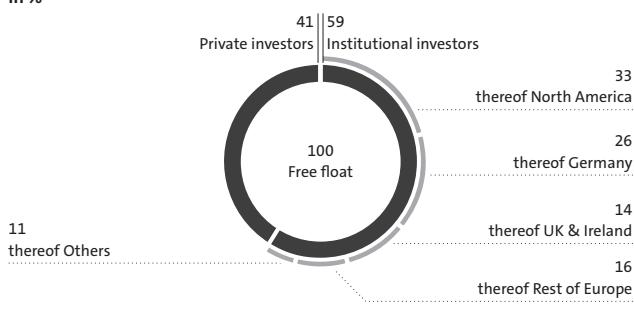


FIG. 1.3

TAB. 1.2

31 Dec 2018

in %	Price	Yield
K+S bond (December 2021); coupon: 4.125%	106.7	1.8
K+S bond (June 2022); coupon: 3.000%	102.4	2.3
K+S bond (April 2023); coupon: 2.625%	101.5	2.2
K+S bond (June 2024); coupon: 3.250%	96.0	4.1

At the end of February 2019, according to Bloomberg, 12 banks gave us a “buy/accumulate” recommendation, 11 a “hold/neutral” recommendation and 3 a “reduce/sell” recommendation. The average upside target was about €20.00.

#### K+S INVESTOR RELATIONS OFFERS A COMPREHENSIVE RANGE OF INFORMATION

In the past year, we responded to the need for information on the part of the capital market by offering 53 roadshows and conference days (2017: 52). We held investor meetings in Europe, North America and Asia, and in September we hosted a Capital Markets Day at our potash plant in Bethune, Canada. We also organised numerous one-on-one meetings and conference calls. By taking part in private shareholder events across Germany, we intensified our contact with private shareholders. We complement the broad information offering on our website by publishing YOUTUBE videos showing interviews with members of the Board of Executive Directors as part of our ongoing financial reporting.

□ [www.youtube.com/user/kplussag](http://www.youtube.com/user/kplussag)

The aim of our investor relations work is transparent and fair financial communication with all market participants in order to maintain and strengthen confidence in the quality and integrity of our corporate governance and provide comprehensive, prompt and objective information about our strategy, as well as about all events at the K+S GROUP that are relevant to the capital markets.

# COMBINED MANAGEMENT REPORT

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## BUSINESS MODEL

K+S prides itself on being a customer-centric, independent provider of mineral products for the areas of Agriculture, Industry, Consumers and Communities. We serve the constantly growing demand for mineral products from production sites primarily in Europe, North America and South America, as well as through a global distribution network.

### COMPANY PROFILE

As part of our new corporate strategy SHAPING 2030, we want to realise synergy potentials more intensively and have created a new structure so as to more closely integrate the previously separated Potash and Magnesium Products and Salt business units, thus forming "One Company".

- ◇ An overview of the most important sites of K+S is contained in the inside cover of this Annual Report.

### MATRIX STRUCTURE

In our view, the best structure for ONE K+S is a matrix organisation. The new structure links geographically-oriented operating units<sup>1</sup> with market-oriented customer segments<sup>2</sup> and centrally driven excellence functions so that we can leverage their respective strengths in projects and solutions on behalf of our customers everywhere. With this, we want to dispense with the silo mentality and focus on strengthening our networks across organisational units and countries. On 1 October 2018, we started to implement the new "One Company" structure:

K+S MATRIX STRUCTURE

FIG. 2.1



<sup>1</sup> Segments according to IFRS 8.

<sup>2</sup> No segments according to IFRS 8.

While we conduct our business operation in the two operating units Europe+ and Americas (see section “Operating Units”), the customer segments Agriculture, Industry, Consumers and Communities form a completely new organisational dimension for K+S. This organisational realignment is aimed at combining common customer interests and developing long-term strategies. In the customer segments we want to drive innovation, pursue megatrends, develop new markets and shape the Group-wide product portfolio. They also serve as an engine for growth initiatives and capital expenditure. The new “Global Marketing, Commercial and Supply Chain Excellence” unit combines the four customer segments. It is responsible for driving customer segment strategies, ensuring continuous process and technology improvement, establishing global key performance indicators (KPIs) and ensuring cross-regional benchmarking in its respective excellence functions.

The “Operations Excellence” unit is aligned toward the development of the global production network and the most effective possible steering of the production sites. Among other things, it defines and compiles key data, standardises maintenance, processes and materials, and enables the transfer of best practice know-how. This scope of responsibility includes internal and external benchmarks as well as the needs-based further development of our process technology competencies.

The central functions Communications & Brands, Controlling, Corporate Board Office, Corporate Secretary, Environmental & Regulatory Affairs, Finance & Accounting, Health, Safety, Management Systems & Sustainability, Human Resources, Investor Relations, Internal Auditing, Legal & GRC, Insurance, IT, Procurement, Strategy & Development and Tax serve as business partners to the operating units. They set standards, define processes and compile key data. In addition, they support the Board of Executive Directors and perform Group-wide governance tasks.

## **OPERATING UNITS**

We conduct business operations in two units (segments according to IFRS 8) in which our segment reporting will be reflected as of fiscal year 2019:

- + Operating unit Europe+, comprising the former Potash and Magnesium Products business unit including Bethune, ESCO (previously part of the former Salt business unit) and the previous supplementary activities (Waste Management and Recycling, Animal hygiene products, K+S TRANSPORT GMBH, CHEMISCHE FABRIK KALK GMBH)
- + Operating unit Americas, comprising MORTON SALT, K+S WINDSOR SALT and K+S SALT LA (previously part of the former Salt business unit)

These operating units also reflect the customer logic because the business of the customer segments Industry, Consumers and Communities is regionally aligned in view of how the products for these segments are dependent on transport costs. In market cultivation there are numerous synergies between South America and North America but only few between the Americas and Europe due to the significant geographic distance.

By contrast, the customer segment Agriculture operates in a global environment. We supply potash products to the entire world from both Germany and Canada. Although there are few market cultivation synergies between Agriculture and the other customer segments, there are numerous synergies that we intend to more intensively leverage in the areas of production, technology and logistics due to the geographic proximity of the potash and salt mines within Germany.

The operating units have direct and close ties with their customers. For optimal market cultivation, the two units are responsible for the entire value chain – from sales planning through production and marketing and distribution to delivery. Based on central strategies, they develop medium-term implementation concepts for their markets and implement central production standards.

The two operating units think and act in customer segments (no segments according to IFRS 8), which in turn are considered Group-wide. In each of these segments, we concentrate on the added value offered by K+S:

## CUSTOMER SEGMENTS



### AGRICULTURE: WE ENABLE FARMERS TO PROVIDE NUTRITION FOR THE WORLD.

Our fertilizers are used virtually all over the world – from the wheat fields of Europe to the rice terraces of Asia to the coffee plantations of South America.

The customer segment Agriculture can exclusively be found in the operating unit Europe+ and previously belonged to the former Potash and Magnesium business unit.

#### Products and services

The products of this customer segment are deployed in farming as plant nutrients. As natural products, these are largely permitted for organic farming under EU law as well. FIG. 2.2

#### Potassium chloride:

The universally applicable mineral fertilizer potassium chloride is used in particular for important crops, such as cereals, corn, rice and soybeans. Potassium chloride is applied directly on fields in granular form, mixed with other straight fertilizers in bulk blenders to produce what are known as “bulk blends” or alternatively supplied as a fine-grain “standard” product to the fertilizer industry, which processes it along with other nutrients to produce complex fertilizers.

#### Fertilizer Specialties:

The fertilizer specialties differ from potassium chloride, either because they are chloride-free, because of different nutrient formulas with magnesium, sulphur, sodium and trace elements, or because they are water-soluble. These products are used

for crops which have a greater need for magnesium and sulphur, such as rapeseed or potatoes, as well as for chloride-sensitive crops, such as citrus fruits, vines or vegetables. Fully water-soluble fertilizers are used in applications such as fertilization (use of fertilizer in irrigation systems), particularly for fruit and vegetables. The fertilizer specialties are marketed under the following product brands: KALISOP®, KORN-KALI®, PATENTKALI®, ESTA® KIESERIT, MAGNESIA-KAINIT®, SOLUMOP®, SOLUSOP®, SOLUNOP®, HORTISUL®, EPSO TOP®, EPSO MICROTOP®, EPSO COMBITOP® and EPSO BORTOP®.

#### Important sales regions and competitive positions

Half of revenues in the customer segment Agriculture are generated in Europe. In this region we benefit from the logically favourable proximity of the production sites to European customers. Other key sales regions are located in South America, particularly in Brazil, as well as in Asia. FIG. 2.3

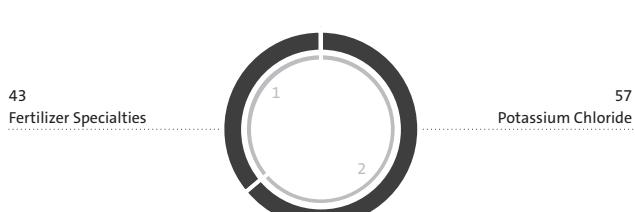
K+S is the world's fifth-largest and Western Europe's largest producer of potash products. With the new facility in Bethune, Canada, K+S has increased its share of the world potash market to about 9%. K+S is a world leader in fertilizer specialties.

Major competitors include the North American companies NUTRIEN and MOSAIC. Other important competitors are the Russian producers URALKALI and EUROCHEM, the Belarusian company BELARUS-KALI, the Israeli enterprise ICL, the Jordanian producer APC and the Chilean company SQM.

**AGRICULTURE – REVENUES BY PRODUCT GROUP**

**FIG. 2.2**

in %



©2018

1 — Specialties | 2 — Commodities

**AGRICULTURE – REVENUES BY REGION**

**FIG. 2.3**

in %

5  
Others

19  
Asia

22  
South America

4  
North America

50  
Europe

12  
thereof Germany

©2018



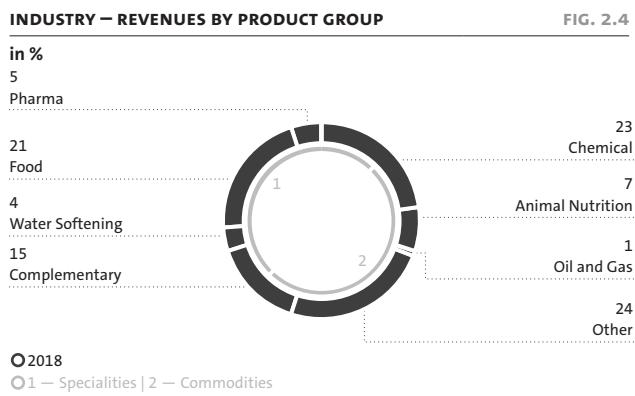
## INDUSTRY: WE PROVIDE SOLUTIONS THAT KEEP INDUSTRIES RUNNING

Our products in the Industry segment are extensively used in electrolysis and food processing industries, however industrial applications for our products are broad, ranging from pharmaceutical production to copper mining. For example, electrolysis is used to produce chlorine, a key substance for many industries. Our minerals are also contained in nutrition solutions and in cosmetic and personal care products. We play a key role in feeding the world population with our products and technical know-how for the food processing industry.

The customer segment Industry can be found in both operating units according to the regional split and previously belonged to the two former business units and the Complementary Activities.

### Products and services

K+S offers a wide range of higher-quality potash, magnesium and salt products for industrial applications that are available in different degrees of purity and in specific grain sizes. These are used, for example, in chlorine-alkali electrolysis in the chemical industry as a component of various plastics, to improve flavour and nutrient content in food, in glass production, in metallurgical processes, in the textile industry, in biotechnology, in oil and gas exploration, in water softening and in the recycling of plastics. In addition, a range of products is available to meet the particularly high requirements of the pharmaceutical, cosmetics, food processing and animal nutrition industries. Product brands in the customer segment Industry include: APISAL®, AXAL®, BÄCKERSTOLZ®, KADD®, KASA®, K-DRILL®, MORTON® PUREX®, MORTON® STAR FLAKE® DENDRITIC, SOLSEL®. FIG. 2.4



As a service for third parties and as a complementary business, K+S also uses parts of underground chambers that have been created by the extraction of crude salt. In some cases, waste products are removed safely from the biosphere in underground depositories. In other cases, residue from the flue gas cleaning procedure is used as backfill material to fill the chambers. The salt mineral sites used for this purpose are separated from the ongoing raw materials extraction operation, are impermeable for both gas and liquids and are securely separated from the layers carrying groundwater. A combination of geological and technical barriers guarantees the highest possible safety. K+S offers a complete service covering the recycling of salt slag for the secondary aluminium industry. An additional business sector is the above-ground recycling of low-contaminated materials.

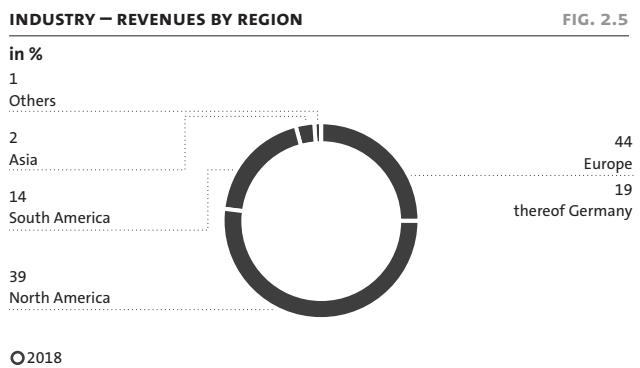
At the Salzdetfuth site, furthermore, extensive sections of the above-ground infrastructure of an inactive potash plant are used to granulate the well-known branded animal hygiene product CATSAN® for our customer MARS GmbH, among other applications.

K+S TRANSPORT GMBH in Hamburg acts as K+S's own logistics service provider, offering a number of different logistics services.

CHEMISCHE FABRIK KALK GMBH (CFK) trades in a selection of basic chemicals such as caustic soda, nitric acid, sodium carbonate (soda) as well as calcium chloride and magnesium chloride.

### Important sales regions and competitive positions

Europe and North America each account for 44 or 39% of revenues in the customer segment Industry. Other sales regions are located in South America, particularly in Brazil, as well as in Asia. FIG. 2.5



With potash and magnesium products for industrial, technical and pharmaceutical applications, K+S is also one of the most competitive manufacturers in the world and is by far the largest supplier in Europe. In terms of salt products for the food processing industry and salts for industrial and commercial applications, ESCO is a European market leader along with its competitors SÜDWESTDEUTSCHE SALZWERKE, GROUPE SALINS, WACKER CHEMIE and NOURYON (formerly: AKZONOBEL). Through K+S CHILE, South America's largest salt producer, K+S has access to the growing sales regions in South and Central America. Along with CARGILL and COMPASS MINERALS, MORTON SALT and K+S WINDSOR SALT belong to the largest salt producers in North America.

K+S ENTSORGUNG GMBH operates primarily in Europe and has a leading position there for underground reutilisation.



#### **CONSUMERS: WE ENRICH THE LIVES OF END CONSUMERS IN NUTRITION AND WATER SOFTENING**

Our brands – and particularly MORTON SALT – can be found on shelves around the world. Every child in the United States knows our "Umbrella Girl".

The customer segment Consumers can be found in both operating units according to the regional split and previously belonged to both, the former Potash and Magnesium business unit as well as the former Salt business unit.

#### **Products and services**

K+S products for consumers include table salt, water softening salt, dishwasher salt and de-icing salt for use in the home. The portfolio also includes premium products such as sea salt, kosher

salt and low-sodium salt. Family-sized packages of de-icing salt for consumers round off the product range in this segment. Product brands include BALANCE®, BIOSAL®, DIAMANTE BRANCO®, CÉRÉBOS®, LOBOS®, MORTON®, SALDORO®, VATEL®, WINDSOR® for table salts, CLEAN AND PROTECT®, PURE AND NATURAL®, REGENIT®, SYSTEM SAVER® for water softening and ACTION MELT®, SAFE-T-PET® and SAFE-T-POWER® for de-icing salt. FIG. 2.6

We relaunched our premium German table salt brand SALDORO® in April 2018. Based on representative consumer studies involving qualitative interviews, we strategically realigned the brand, expanded the product range and modernised its design to better meet the needs of consumers.

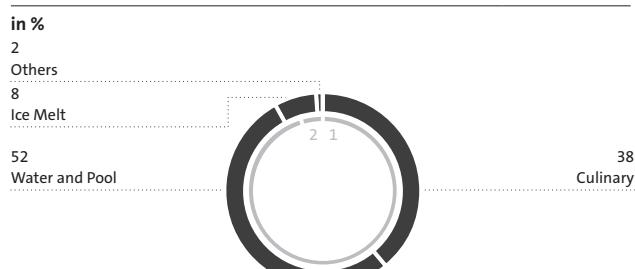
#### **Important sales regions and competitive positions**

Revenues of this customer segment are mainly generated in North America. Germany, France, Benelux, Scandinavia and Eastern Europe are key sales regions in Europe. FIG. 2.7

In terms of products for consumers, K+S is a European market leader along with its competitors SÜDWESTDEUTSCHE SALZWERKE, GROUPE SALINS and NOURYON (formerly: AKZONOBEL). Through K+S CHILE, South America's largest salt producer, K+S has access to the growing sales regions in South and Central America. Along with CARGILL and COMPASS MINERALS, MORTON SALT and K+S WINDSOR SALT belong to the largest salt producers in North America.

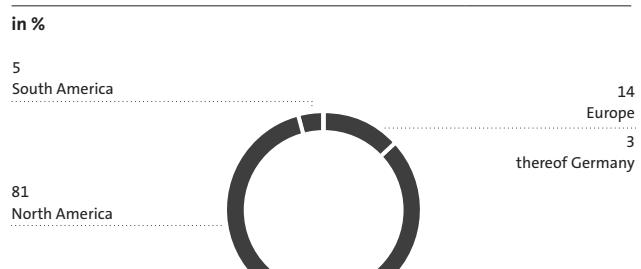
**CONSUMERS – REVENUES BY PRODUCT GROUP**

**FIG. 2.6**



**CONSUMERS – REVENUES BY REGION**

**FIG. 2.7**





## COMMUNITIES: WE PROVIDE A SAFE ENVIRONMENT IN THE WINTER

Our de-icing salts prevent accidents in the winter. K+S is the only supplier present in all of the world's major de-icing salt markets.

The customer segment Communities can be found in both operating units according to the regional split and previously belonged to the former Salt business unit.

### Products and services

Public road authorities, winter road maintenance services and commercial bulk customers procure de-icing salts from K+S, to a great extent through public tenders. Premium de-icing products are also offered; often as a result of adding calcium or magnesium chloride, they create heat on contact with ice and snow and work more efficiently than conventional products, especially at very low temperatures. These products are marketed under the BLIZZARD WIZARD® brand in the United States and the DI-MIX® brand in Europe. FIG. 2.8

### Important sales regions and competitive positions

Revenues of this customer segment are mainly generated in North America, Canada, the Midwestern United States and the US East Coast are particularly important regions in this connection. The main European sales regions include Germany, Scandinavia, Eastern Europe, Benelux and France. FIG. 2.9

In terms of production capacity, K+S is the largest supplier of salt products in the world. ESCO, along with the competitors SÜDWEST-DEUTSCHE SALZWERKE and GROUPE SALINS, is a leader in the European market. Through K+S CHILE, South America's largest salt

producer, and MORTON SALT as well as K+S WINDSOR SALT, K+S is one of the largest salt suppliers in North America along with CARGILL and COMPASS MINERALS.

To ensure reliable supplies to our customers, thanks to our production and logistics network in Europe, North America and South America, we can respond more flexibly than local competitors to weather-dependant fluctuations in demand for de-icing salt.

### GROUP LEGAL STRUCTURE

The described changes in the organisational structure initially had no impact on the corporate structures of the individual K+S GROUP subsidiaries in 2018.

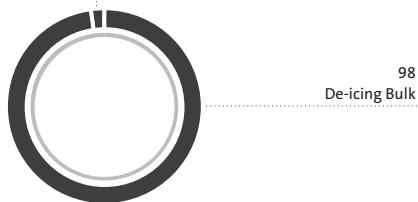
K+S AKTIENGESELLSCHAFT acts as the holding company for the K+S GROUP and holds shares, directly and indirectly, in its subsidiaries, both in Germany and abroad, which make a significant contribution to its financial performance. Along with K+S AKTIENGESELLSCHAFT, the consolidated financial statements also include all material equity investments. Subsidiaries that are not material are not consolidated.

⇒ 'Notes', List of shareholdings, page 212

Material subsidiaries are the directly held K+S KALI GMBH, K+S SALZ GMBH and K+S FINANCE BELGIUM BVBA. K+S SALZ GMBH encompasses ESCO – EUROPEAN SALT COMPANY GMBH & CO. KG (ESCO), K+S NETHERLANDS HOLDING B.V., which holds shares e.g. in Group companies in Canada and Brazil, and K+S BELGIUM HOLDING B.V. (since 31 December 2018: K+S BELGIUM HOLDING B.V.B.A.), which holds shares in Group companies in Chile. K+S FINANCE BELGIUM BVBA,

COMMUNITIES – REVENUES BY PRODUCT GROUP

in %  
2  
De-icing Packaged

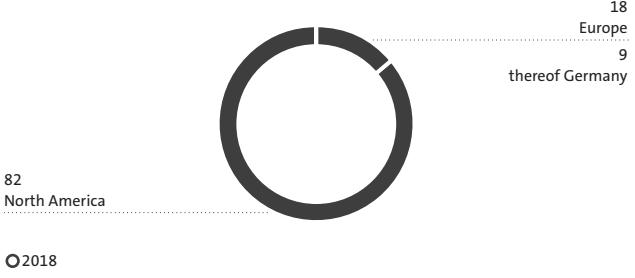


©2018  
Commodities

FIG. 2.8

COMMUNITIES – REVENUES BY REGION

in %  
18  
Europe  
9  
thereof Germany



©2018

together with K+S NETHERLANDS HOLDING B.V., holds shares in MORTON SALT, INC. (MORTON SALT) via subsidiaries. K+S KALI GMBH and K+S SALZ GMBH primarily hold their foreign subsidiaries through dedicated intermediate holding companies. K+S ENTSORGUNG GMBH, K+S TRANSPORT GMBH and CHEMISCHE FABRIK KALK GMBH (CFK) are held directly by K+S AKTIENGESELLSCHAFT.

The scope of consolidation has changed as follows compared with 31 December 2017: K+S VERSICHERUNGSVERMITTLUNGS GMBH is now consolidated. INAGUA TRANSPORTS, INCORPORATED was liquidated as of 21 May 2018. K+S BELGIUM HOLDING B. V. (since 31 December 2018: K+S BELGIUM HOLDING B.V.B.A.) was established with effect from 1 September 2018 through spin-off from K+S NETHERLANDS HOLDING B.V. The consolidated company holds the shares in Group companies in Chile and is a wholly owned subsidiary of K+S SALZ GMBH (see above). K+S CONSULTING GMBH was merged with K+S AKTIENGESELLSCHAFT on 14 September 2018, with retroactive economic effect from 1 January 2018. KALI (UK) LIMITED was liquidated as of 11 September 2018.

## VALUE CREATION

Below we present our business model using the value chain, which extends over the following six sections: Exploration, Mining, Production, Logistics, Sales/Marketing and Application. FIG. 2.10

### EXPLORATION

Exploration provides insights into the dimensions and structure of deposits, as well as their depth and mineral content. We use the data obtained to estimate reserves in accordance with international standards. Worldwide, underground exploration is predominantly conducted by drilling and seismic measurements that enable a spatial representation of underground geological structures.

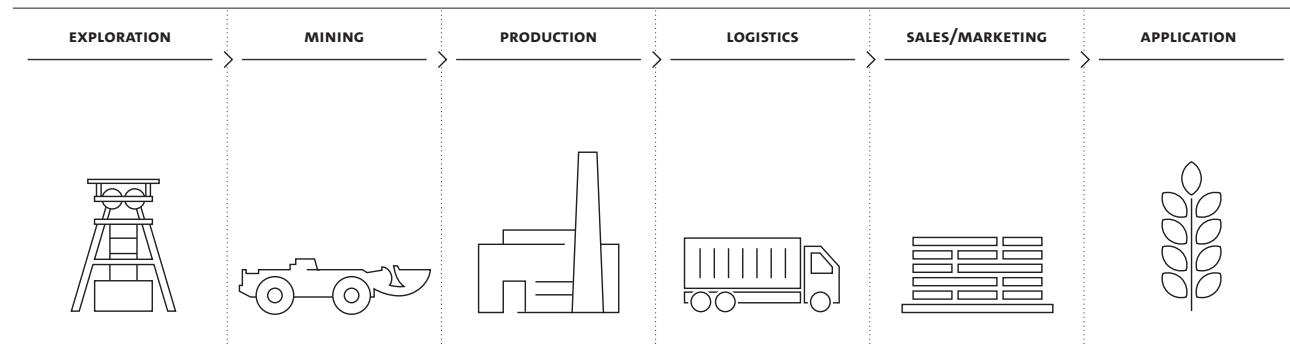
### RESERVES AND RESOURCES

Our potash and rock salt mineral deposits are either under the ownership of the K+S GROUP or located in places where we possess the appropriate licences and/or similar rights that permit the mining or solution mining of raw material reserves and secure these rights over the long term.

⇒ 'Glossary', page 236

THE K+S VALUE CHAIN

FIG. 2.10



⇒ [www.k-plus-s.com/valuechain](http://www.k-plus-s.com/valuechain)

Our potash deposits in Germany contain reserves of around 1.1 billion tonnes of crude salt as well as resources of around 1.4 billion tonnes of crude salt. Reserves include stocks that have been identified as certain or probable and can be extracted cost-efficiently using known technology. Resources are deposits that are anticipated on account of geological indicators but are not yet recoverable in a cost-efficient manner or have not yet been reliably identified. These potential extraction areas are predominantly connected to existing ones and belong to the K+S GROUP, or the K+S GROUP has the option to purchase them.

For our site in Bethune, Canada, we are quoting reserves and resources in billions of tonnes of potassium chloride ready for sale as an end product. Reserves total 0.2 billion tonnes and resources around 0.9 billion tonnes.

The K+S GROUP has reserves in its rock salt mineral deposits of 0.2 billion tonnes of crude salt in Europe and about 1.3 billion tonnes in North and South America, plus virtually infinite reserves of solar salt. Furthermore, resources amounting to around 0.5 billion tonnes of rock salt can be disclosed in Europe and around 1.0 billion tonnes North and South America, taking into account extraction and impoverishment losses.

## MINING

We extract raw materials in conventional mining above and below ground as well as through solution mining. We also extract salt by evaporating saline water, mostly sea water. The broadly comparable mining methods make it possible to realise synergies in the extraction of potash and magnesium products as well as salt. These involve the exchange of technical, geological and logistical know-how as well as coordinated procurement of machines and auxiliary materials.

In the case of underground extraction, crude salt is generally mined by means of drilling and blasting. Large shovel loaders then transport the crude salt to crushing plants. From there, the

crushed salt is brought to the extraction shaft via conveyor belts. In this manner, potassium chloride (KCl) and magnesium sulphate ( $MgSO_4$ )/Kieserite ( $MgSO_4 \cdot H_2O$ ) are obtained in Germany and rock salt (NaCl) in Germany, the United States and Canada. In Chile, rock salt is extracted using open-cast mining in the Atacama Desert in the Salar Grande de Tarapacá, a large former salt lake. We also extract sea salt and solar evaporation salt in Brazil, the Bahamas, at the Great Salt Lake in Utah and in Arizona, United States.

Moreover, K+S operates brine fields in the United States and Canada as well as one in the Netherlands and one in Germany for the extraction of evaporated salt. Since the summer of 2017, we have also been extracting potassium chloride by means of solution mining at the new Bethune potash plant in Saskatchewan, Canada.

In 2018, 34.7 million tonnes of crude salt were mined from German potash deposits. In addition, 1.4 million tonnes potassium chloride were produced as marketable end product in Bethune. 5.4 million tonnes were mined from rock salt mineral deposits in Europe and 17.2 million tonnes in North and South America.

## LONG-TERM PLANNING OF MINES

Once the raw material in a mining operation has been exhausted or uneconomically viable, measures are initiated for the partial or complete closure of the mine. In Germany, decommissioning and after-care are regulated inter alia in the German Federal Mining Act.

Potash production at the Sigmundshall site was discontinued as planned at the end of 2018. The technical measures required to shut down production and secure the mine, which will take several more years, were developed as part of a comprehensive project and are currently being reviewed by the responsible authorities. In addition to these activities, K+S plans to develop the site into a centre of innovation for the testing and establishment of new areas of business.

⇒ ‘Employees’, page 53

The possible resumption of potash production at the Siegfried-Giesen site, which was shut down in 1987, was approved in January 2019 by way of a planning decision approving public works. Taking into account the current framework and market conditions, k+s will decide if and when the project can be implemented.

□ [www.kali-gmbh.com/siegfriedgiesen](http://www.kali-gmbh.com/siegfriedgiesen)

Detailed plans describing the procedure for shutting down a site and after-care are also available for sites in the United States, Canada and Chile.

If no reasonable re-use of a decommissioned mine is possible, we are generally under obligation in Lower Saxony to flood the remaining caverns. 25 caverns have already been flooded there, two are currently being flooded and one has been kept 'dry'. At present, five sites in Lower Saxony are in the process of being secured, and at 23 sites this process has already been completed. Flooding at Sigmundshall is planned for 1 January 2023.

## **PRODUCTION**

The processing and refining of raw materials is one of our core competencies. The mineral crude salt mined by us passes through multi-stage mechanical or physical processes without changing its natural properties.

At the end of 2018, the annual production capacity for potash and magnesium products reached up to 9 million tonnes.

In addition to potassium (between 11% and 25% potassium chloride content), the potash deposits in Germany also contain magnesium and sulphur (between 9% and 24% magnesium sulphate content). Depending on the quality of the crude salt, we use processes such as thermal dissolution, flotation and, partly in combination with both of these, electrostatic separation (ESTA process) for processing. Solid residues and saline wastewater occur during the extraction and processing of crude potash salts. A detailed

description of our tailings pile management and water protection measures can be found under Environment in the Non-financial Statement on page 58.

□ 'Glossary', page 236

The potash deposit in Bethune, Canada, contains the mineral potassium (26% potassium chloride content). Here, we use solution mining, which is the process of mining underground water-soluble minerals by dissolving the minerals with water. The mineral-rich solution called brine is then extracted from the ground and the minerals are recovered from it. As the solution mining process is water and energy intensive, great efforts have been taken to conserve and re-use as much of the natural resources as possible.

k+s has an annual production capacity of approximately 9 million tonnes of salt in Europe and 22 million tonnes in North and South America. Rock salt from underground and open-cast mining is ground into the desired grain size above ground. Evaporated salt is produced by evaporating the water from the brine and extracting the dissolved salt. When extracting sea salt or solar salt, salt water is channelled into evaporation ponds laid out sequentially on a gradient. The brine becomes more and more concentrated as it flows through the basins until finally a layer of salt several centimetres thick can be harvested.

□ 'Glossary', page 236

k+s has acquired mining licences from a group of local investors to set up a solar salt plant in Western Australia (Ashburton Salt project). The project is still in the very early stages of development. After an environmental permit procedure was initiated in October 2016, the first step involved the coordination of the necessary study scope with the environmental authorities. Following the approval of this scoping, we then initiated the actual environmental studies and are completing a feasibility study for the project. Only when the necessary permits have been granted – in 2021 at the earliest – will k+s make a final investment decision on whether to build the solar salt production facility. Annual production capacity of the location could be approximately 4.5 million tonnes of solar salt.

## **OPERATIONS EXCELLENCE**

The Operations Excellence project was initiated within the scope of the SHAPING 2030 strategy to optimize work processes in extraction, production and maintenance. The goal is to sustainably increase efficiency through cost savings and increased throughout. The project will focus on processes at the facilities and on technology. It is intended to make the best processes and the most expedient technology the standard according to which K+S mines and refines worldwide, as this should reduce duplicate and administrative overhead. That in turn frees up capacities for further growth. To ensure that the effects are not of only short duration, Operations Excellence is also anchored in the organisational structure and will accompany extraction, production and maintenance in the future.

## **PROCUREMENT**

In 2018, K+S purchased technical goods and services (including logistics services), raw materials, consumables and supplies for around €2.5 billion from around 16,000 suppliers. The majority of our purchasing volume relates to production, as well as maintenance and expansion measures. Materials going into our production or our products only represent a relatively small part of the purchasing volume.

In accordance with the distribution of our sites, the K+S GROUP procures materials and services largely from Germany (42%) and the United States (22%), but also from Canada (18%), Chile (4%), the Netherlands (3%) and the Rest of the World (11%). Overall, 99% of our contractual partners come from OECD countries.

⇒ ‘Non-financial statement’, Business ethics, page 65

Open and fair partnership is our claim for the cooperation with our suppliers and service providers, which we select in a systematic, transparent, and IT-supported process that is not solely based on economic criteria. We maintain long-standing partnerships with our strategic suppliers and service providers, partly to ensure security of long-term supply and freight capacity.

## **LOGISTICS**

Our supply chain management governs and monitors the entire supply chain in order to ensure reliable supply to our customers worldwide under competitive terms and conditions. We make use of the various transport carriers, taking into account their individual advantages, and incorporate more environmentally friendly and cost-effective railway lines and waterways as much as possible. With the help of key performance indicators applicable across the Group, we monitor actual costs, measure the efficiency of logistics systems, and improve these in a continuous process in order to maintain and increase customer satisfaction.

K+S conveys more than 50 million tonnes of goods on average, including double counts when using various transport carriers. A global network of warehouse, port and distribution locations is available to this end.

## **OUR OWN LOGISTICS ACTIVITIES**

With K+S TRANSPORT GMBH in Hamburg and the Chilean company EMPRESA MARÍTIMA S.A., we have two logistics service providers of our own. K+S TRANSPORT GMBH operates the ‘Kalikai’ (potash quay) in Hamburg, one of the largest transhipment facilities for exports of bulk goods in Europe, with a storage capacity of around 400,000 tonnes. More than 3 million tonnes of potash and magnesium products are handled here each year. Furthermore, K+S TRANSPORT GMBH organises container transports in Germany using inland water vessels and the railways.

K+S CHILE S.A. (K+S CHILE) handles our maritime logistics through the shipping company EMPRESA MARÍTIMA S.A., using two of its own ships as well as additional chartered vessels. Our largest port is Patillos in Chile, where 6.5 million tonnes of salt were loaded onto maritime vessels in 2018.

The state-of-the-art transhipment and warehouse facility for potassium products in the port of Vancouver (Port Moody) includes an unloading station for freight cars, 1,260 metres of conveyor belts and a 263 metres long storage shed for a total of 160,000 tonnes of potash products. Freight trains hauling 18,000 tonnes of product can be unloaded here and ships with a capacity of 70,000 tonnes

can be loaded at the facility's quay. K+S has 1,000 rail cars at its disposal to transport goods from the Bethune plant to the harbour. These have been designed especially for K+S's requirements.

We are also investing in our own wagon fleet for our European rail transport, which will have more than 400 freight cars in the final implementation phase.

#### **LOGISTICS SERVICE PROVIDERS**

Securing long-term freight capacity is very important to us. Most of our international transport volume is forwarded by service providers with which we maintain long-standing partnerships.

#### **SALES/MARKETING**

We aim to be the most customer-focussed, independent provider of mineral products in the market through our corporate strategy SHAPING 2030. High product quality and reliability are crucial prerequisites for this. We strive for the greatest possible proximity to our customers and want to offer them tailor-made products that we sell worldwide through our established and customer-oriented distribution network. The Commercial Excellence project initiated as part of SHAPING 2030 is aimed at improving all customer-facing aspects of our business.

Assured quality, on-time delivery and professional advice should contribute significantly to customer loyalty. In terms of quality management, we want to improve the quality of our products in all phases of the value chain. Our quality management system is based on DIN EN ISO 9001 and is audited by accredited external certification companies. We constantly assess our products for possible risks to health and safety and for their environmental compatibility, and ensure that they are safe for people and not harmful to nature when they are used responsibly and properly. We provide our customers with comprehensive information about our products and services in product and safety specification sheets. Since most of our products are chemically non-modified natural substances, they are exempt from mandatory registration in the context of the EUROPEAN CHEMICALS REGULATION REACH. All other substances are registered in accordance with the regulations.

#### **PATENT AND BRAND PORTFOLIO**

A total of 71 patent families belong to the K+S GROUP worldwide, which are protected by 306 national laws. The patents are for example applied in the areas of electrostatic separation, granulate production and flotation.

The number of K+S brand rights increased slightly in 2018. As of the end of 2018, the K+S GROUP holds a total of 2,743 (2017: 2,582) national and regional proprietary rights, derived from 563 basic trademarks (2017: 534).

#### **APPLICATION**

Products and services, their application, and important sales markets and competitive positions are described under the four customer segments in the "Company Profile" section.

#### **APPLICATION ADVICE**

In the customer segment Agriculture, professionally educated and trained agronomists advise our customers and develop needs-based solutions worldwide. We also conduct our own research and field trials in order to optimise the supply of nutrients by adapting our product portfolio. The crops we focus on are potatoes, corn, oil palms, rapeseed, and soybeans. For our customers, we offer individual fertilization recommendations, which are the prerequisites for "good professional practice" in terms of agricultural land use. These recommendations help safeguard fertility and the productivity of the soil as a natural resource in the long term.

As a service, we offer professional advice to customers in the agricultural sector. We anticipate trends and research changes in general conditions with a view to water and resource efficiency and in relation to soil fertility. Our aim is to optimise the supply of plant nutrients to crops even when general conditions change. We offer technical application advice for our industrial products worldwide.

The “Growth for Uganda” project launched by K+S KALI GMBH in 2013 in cooperation with the SASAKAWA AFRICA ASSOCIATION has since trained about 131,000 small farmers to use better agricultural techniques, reduce post-harvest losses, and correctly apply fertilizer. The second phase of the project focussed on the basic work, as well as in particular on the commercial aspect, “Farming as a Business”. In an environment characterised by small farms, the goal is to build an infrastructure for fertilizer sales, offer fertilizers in small volumes and provide training for distributors. The supply of self-grown food products has become more reliable and yields have increased considerably. Following the scheduled completion of the project in 2018, K+S is working to transition the lessons and core activities into a sustainable business model. Within this scope, the K+S GROUP invested in Ugandan agricultural infrastructure in 2018, such as in facilities for mixing fertilizer and for the transhipment, processing and storage of cereals near Kampala, the Ugandan capital city. This enables our local partner Grainpulse Limited to offer crop-specific fertilizer to small farmers in practical amounts, as well as to purchase and process finished products such as coffee or cereals from the farmers after harvesting. The aim is to further expand this trading platform together with our partners and to digitalize it in a second step.

[www.kali-gmbh.com/uganda](http://www.kali-gmbh.com/uganda)

**GENERATION OF VALUE ADDED**

TAB. 2.1

€ million	2017	2018
Revenues	3,627.0	4,039.1
Other income	272.3	136.4
Cost of materials	-1,434.8	-1,629.1
Depreciation and amortisation	-331.3	-385.0
Other expenses	-697.0	-819.6
<b>Value added</b>	<b>1,436.2</b>	<b>1,341.8</b>

#### VALUE ADDED STATEMENT

The following value added statement describes our contribution to private and public income. Value added is calculated using sales revenues and other income after deducting material costs, depreciation and amortisation and other expenses. The allocation statement reveals what share of value added went to employees, shareholders, government and lenders and what share remains with the Company (reserves). TAB. 2.1

In 2018, our value added amounted to €1,341.8 million (2017: €1,436.2 million). The majority (84%) of that, €1,122.5 million, was allocated to our employees (2017: €1,106.2 million (77%)). This share is composed of wages and salaries, social insurance contributions and pension contributions. Local authorities received taxes and fees of €29.6 million (2%) (2017: €99.5 million (7%)). €104.2 million (8%) went as interest to lenders (2017: €85.5 million (6%)). It is assumed that the shareholders will receive the suggested dividend amounting to €47.9 million (3%) (2017: €67.0 million (5%)) and that the Company has retained €37.6 million (3%) (2017: €78.0 million (5%)) in the form of reserves and other assets. TAB. 2.2

**ALLOCATION OF VALUE ADDED**

TAB. 2.2

€ million	2017	2018
To employees (wages, salaries, social benefits)	1,106.2	1,122.5
To governments (taxes, fees)	99.5	29.6
To lenders (interest expenses)	85.5	104.2
To shareholders (dividends) <sup>1</sup>	67.0	47.9
To the Company (reserves)	78.0	37.6
<b>Value added</b>	<b>1,436.2</b>	<b>1,341.8</b>

<sup>1</sup> Dividends relate to the year under review and are paid in the subsequent year.  
The figure for 2018 corresponds to the dividend proposal.

## CORPORATE STRATEGY

A key focus of our work in 2018 was on implementing our corporate strategy SHAPING 2030. We have already reached the first milestones.

Considering that the market and competition are constantly changing and megatrends are having an increasing impact on our business, we initiated the strategic realignment of the K+S GROUP in 2017. An ambitious vision, our new mission, and the SHAPING 2030 strategy were therefore developed through intensive dialogue and by taking into account our stakeholders' interests.

As a distinctive guiding principle, our vision shows where we are going as a company and who we want to be in 2030: "We will be the most customer-focused, independent minerals company and grow our EBITDA<sup>1</sup> to €3 billion in 2030 by

- + thinking and acting as "One Company"
- + tapping the full potential of our existing assets
- + exploring new adjacent growth areas
- + increasing the share of our specialties business".

 [www.k-plus-s.com/vision](http://www.k-plus-s.com/vision)

Our mission expresses what drives us every day and what contribution we intend to make through our work: "We enrich life by sustainably mining and transforming minerals into essential ingredients for Agriculture, Industry, Consumers, and Communities."

The strategic realignment also involves a paradigm change: while we manage the operational business in two operating units, we will become a customer-centric ONE K+S that focuses on our four customer segments (no segments according to IFRS 8) at the same time. We are a company that systematically refines its raw material and production base and, taking into account the megatrends, makes use of opportunities to grow organically as well as through acquisitions. We are firmly convinced that, in this way, we can create the most value for our stakeholders in the long term – while offering a balanced profile of opportunities and risks.

It is also important to us to make the success of our strategy quantifiable. We have therefore formulated the following ambitions for 2030: EBITDA of €3 billion with a return on capital employed (ROCE) of at least 15% and a portfolio that after 2030 can achieve annual revenue growth of at least 4%. We want to achieve over two-thirds of the growth just by driving the development of our existing business and optimising our organisation and processes. With this objective in sight, we want to create a stable foundation for our future growth by the end of 2020 through organisational changes, efficiency enhancement measures, de-leveraging, and safeguarding our social licence-to-operate.

At the same time, we have added sustainability targets to our strategy. We have set ambitious goals for ourselves in the areas people, environment, and business ethics that we aim to realise with verifiable key indicators no later than 2030.

<sup>1</sup>The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. A reconciliation can be found on page 95.

## SHAPING 2030

SHAPING 2030 describes the way from the status quo to the realization of our vision.

□ [www.k-plus-s.com/vision](http://www.k-plus-s.com/vision)

Our strategy will be implemented in two stages:

**SHAPING 2030**

**FIG. 2.11**

		<b>PHASE 1: TRANSFORMATION 2017–2020</b>	<b>PHASE 2: GROWTH 2021–2030</b>
<b>MEASURES</b>	<ul style="list-style-type: none"><li>– Reduce indebtedness</li><li>– Realize synergies</li><li>– Advance corporate culture</li><li>– Shaping the organisation and focusing towards our clients</li></ul>	<ul style="list-style-type: none"><li>– Tapping the full potential of our existing assets</li><li>– Exploring new adjacent growth areas</li><li>– Increased share of specialties</li></ul>	
<b>GOALS</b>	<ul style="list-style-type: none"><li>– Net debt/EBITDA<sup>1</sup> ratio: halved vs. H1/2017 (8.1 times)</li><li>– Synergies: &gt;€150m from the end of 2020</li></ul>	<ul style="list-style-type: none"><li>– Requirements for Investment Grade-Rating achieved in 2023</li><li>– EBITDA<sup>1</sup> ambition: € 3 bn in 2030</li><li>– ROCE: &gt;15% in 2030</li><li>– Revenue growth beyond 2030: &gt;4% p.a.</li></ul>	

<sup>1</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. A reconciliation can be found on page 95.

## TRANSFORMATION PHASE THROUGH 2020

In the transformation phase, we want to create a stable foundation for future growth through organisational changes and efficiency enhancement measures. The best structure for this is the matrix organisation. Within it we link the operating units Europe+ and Americas (segments according to IFRS 8) with the customer segments and global operations excellence so as to dispense with the silo mentality and instead focus on strengthening our networks across organizational units and countries. Through the end of 2020 we will align our business to our four customer segments – Agriculture, Industry, Consumers and Communities (no segments according to IFRS 8). At the core of the organisational change is the integration of our two existing Potash and Magnesium Products and Salt business units to form “One Company”.

□ ‘Business model’, page 31

We have made impressive progress so far in realigning our organisation: our executive management functions have already been transitioned to the new model. Further management tiers will now follow successively. The negotiations with the employee representatives, which are self-evident in the context of such a reorganisation, are expected to be concluded in 2019.

The matrix structure is a key prerequisite for a stronger customer focus. What's more, it will allow us to develop our product portfolio more systematically and tap synergies in our existing business. We mainly aim to achieve this in the areas of production, administration, procurement, Commercial Excellence, and logistics. For example, one aim of the reorganisation is to release 10% of employees (FTEs) in the administration. The planning is also well under way in the area of production, where we had already identified more than 1,000 specific efficiency enhancement and standardisation measures by the end of 2018. In total, with all measures we expect to generate a positive effect on earnings of at least €150 million per year from the end of 2020.

The further increase in production at our new potash plant in Bethune, Canada, and the expected absence of wastewater-related production stoppages at the Werra plant, as well as a normalized capital expenditure volume and our working capital discipline should enable K+S to return to a positive free cash flow from 2019. We want to halve the leverage (net debt/EBITDA ratio) by the end of 2020 compared with mid-2017. After completing the transformation phase, we are seeking to fulfil the requirements for regaining our investment grade rating in 2023.

The persistent focus on our customers and our development towards “One Company” is not just an organizational but also a cultural challenge, as the way we see our business and the way we work together will be transformed. That’s why it’s all the more important to us to actively moderate the transformation process and optimally include our employees. The Board of Executive Directors, organisational unit heads and managers committed our team to the common path through numerous communication events and measures in 2018, and explained the associated changes as transparently as possible.

## GROWTH PHASE 2020 TO 2030

We have drafted a roadmap setting out development goals and promising growth options for the growth phase up to 2030. We want to increase our EBITDA while at the same time reducing their volatility. Our growth options are therefore directed at expanding the specialty business and new areas of business such as fertigation (liquid fertilization). In the industrial sector, we intend to strengthen our product portfolio and expand our offering for the pharmaceutical industry. We also intend to step up our business in high-growth regions such as Asia and Africa, particularly in Sub-Saharan Africa,

and are already making the preparations for this. We are currently investing in the establishment of agricultural infrastructure in Uganda, such as in facilities for mixing fertilizer and for the transhipment, processing and storage of cereals and coffee. The second step will be to establish a digital trading platform together with local partners. Our engagement in Uganda is designed as a long-term one. Should this business model prove successful, we will later expand it to other Sub-Saharan countries.

## SUSTAINABILITY PROGRAMME<sup>1</sup>

The mission we newly formulated in 2017 illustrates that sustainability plays a major role in our business operations and entrepreneurial success. We want our material sustainability issues to be as binding as we have made our financial targets within the scope of SHAPING 2030. We will make our progress measurable and comprehensible in the future by defining concrete goals and appropriate performance indicators, as well as by regularly reporting on the respective current situation.

<sup>1</sup> This section is part of the non-financial statement, which contains the information pursuant to Sections 289b–289e Handelsgesetzbuch (HGB – German Commercial Code) and 315b and 315c HGB and is not within the scope of the audit in accordance with Section 317 (2) Sentence 4 HGB.

## K+S GROUP ACTION AREAS<sup>1</sup>

The Sustainability Programme of the K+S GROUP addresses the major sustainability issues and even goes beyond them in the action areas. We assess issues and social trends with relevance for our company early and systematically. We last determined the major sustainability issues of the K+S GROUP in an online survey conducted in 2017. Throughout the world, 690 internal and external stakeholders were invited to evaluate sustainability aspects from the "GRI Standards", the guidelines of the GLOBAL REPORTING INITIATIVE. The response rate was over 56%. The result shows a clear focus in the aspect of the environment on the topics of "wastewater", "energy", "emissions" and "use of water". Our stakeholders also consider the issues "health and safety" and "compliance" to be of particular relevance.

## CONCRETE SUSTAINABILITY TARGETS THROUGH 2030<sup>1</sup>

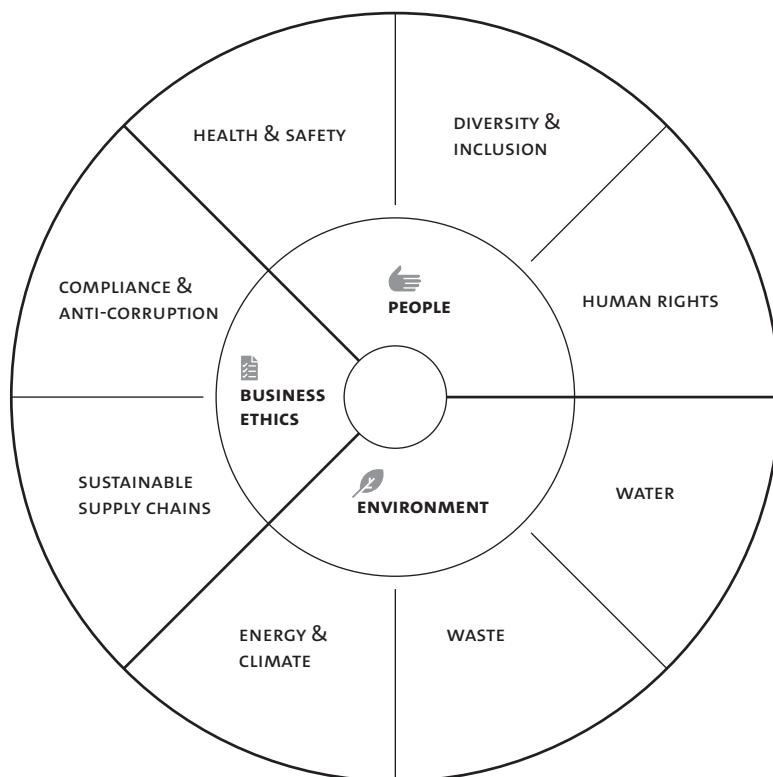
In 2018 we set ambitious goals for ourselves in the three areas people, environment, and business ethics. The targets decided by the Board of Executive Directors were drawn up by the specialist units and the Sustainability department. Each member of the K+S Board of Executive Directors is a personal sponsor of the individual targets and actively pursues their implementation.

⇒ 'Non-financial statement', page 55; Declaration on Corporate Governance, page 78

<sup>1</sup> This section is part of the non-financial statement, which contains the information pursuant to Sections 289b–289e Handelsgesetzbuch (HGB - German Commercial Code) and 315b and 315c HGB and is not within the scope of the audit in accordance with Section 317 (2) Sentence 4 HGB.

**K+S ACTION AREAS**

**FIG. 2.12**



**K+S SUSTAINABILITY KPIs AND TARGETS 2030**

Target	KPI <sup>1</sup>	Unit	Target value	Deadline
<b>People</b>				
<b>HEALTH &amp; SAFETY:</b> Providing a healthy and safe work environment to protect our employees who constitute our most valuable capital.	Lost time incident rate	Lost time incident rate (LTI rate)	0	Vision 2030
<b>DIVERSITY &amp; INCLUSION:</b> Hiring and developing a workforce that reflects the places in which we do business. Fostering an inclusive environment that enables all employees to thrive and contribute to innovation and results.	Employees' favourable perception of inclusive work environment	Percent	>90	2030
<b>HUMAN RIGHTS:</b> Establishing the respect towards internationally recognised human rights at all sites to ensure this core value is applied globally.	Sites covered by a human rights due diligence process	Percent	100	2030
<b>Environment</b>				
<b>WATER:</b> Ending deep well injection of saline waste water from potash production in Germany by end of 2021, no application for renewal. Reducing saline process water.	Deep well injection of saline waste water in Germany	m <sup>3</sup> p.a.	0	Beginning in January 2022
	Additional reduction of saline process water from potash production in Germany	m <sup>3</sup> p.a.	-500,000 (Excluding a reduction due to the KCF facility and the discontinuation of production in Sigmundshall)	2030
<b>WASTE:</b> Reducing the environmental impact and conserving natural resources by re-examining the potential of residues stored on tailings piles.	Amount of residue used for other purposes than tailings or increased amount of raw material yield	Million tonnes p.a.	3	2030
	Additional area of tailings piles covered	ha	155	2030
<b>ENERGY &amp; CLIMATE:</b> Reducing the carbon footprint and improving energy efficiency to enhance competitiveness.	Carbon footprint for power consumed (kgCO <sub>2</sub> /MWh)	Percent	-20	2030
	Specific greenhouse gas emissions (CO <sub>2</sub> ) in logistics (kgCO <sub>2</sub> e/t)	Percent	-10	2030
<b>Business Ethics</b>				
<b>SUSTAINABLE SUPPLY CHAINS:</b> Demand sustainable practices from our suppliers along the entire supply chain so as to align all business activities to our values.	Critical suppliers aligned with the K+S Group Supplier Code of Conduct (SCoC)	Percent	100	End of 2025
	Spend coverage of the K+S Group SCoC	Percent	>90	End of 2025
<b>COMPLIANCE &amp; ANTI-CORRUPTION:</b> Establishing a zero tolerance policy for corruption and bribery as well as anti-competitive practices to avoid the risks of liability, culpability, loss of reputation as well as financial disadvantages.	All employees reached by communication measures and trained appropriately in compliance matters	Percent	100	End of 2019

<sup>1</sup> The base year for all our non-financial performance indicators is 2017.

## STAKEHOLDER DIALOGUE<sup>1</sup>

The dialogue with our customers and business partners, the capital market, political representatives, the communities in which our sites are located, and our employees is very important to us. We treat our stakeholders with respect and fairness and provide them with comprehensive, truthful, and intelligible information. In this way we nurture and promote a regular exchange.

We consider stakeholders to be all individuals or organisations that influence or could influence issues with which our business activity is linked, or who could be impacted by our business operations. A criterion for identifying our stakeholders and weighting their importance is the extent to which mutual influence takes place or could take place.

In the year under review, for example, the Board of Executive Directors sought direct dialogue on the new corporate strategy SHAPING 2030 during several employee assemblies held at various sites, and also utilized dialogue formats in smaller groups such as the “Breakfast with the Boss” series. We maintain a continuous dialogue with capital market representatives, hold regular discussions with political representatives at the site, state and country levels, and have already provided information on our company twice at the “Kali Colloquium”, a potash symposium held in Thuringia. With regard to environmental issues, we strengthened stakeholder dialogue with environmental associations, political representatives and municipalities in 2018 – particularly as pertains to current projects and plans.

In the so-called Brine Challenge, a crowdsourcing competition, we looked for new and innovative approaches, concepts and impulses to considerably reduce the saline wastewater that always runs off from the tailings piles after rainfall. In this way we want to take into account new ways of thinking in our own processes, which have been developed by our own experts over the past years. A total of 44 ideas had been submitted from 16 countries by the submission deadline in December 2018. Among those submitting ideas were scientists, companies, institutes, and students, as well as laypersons from around the world. A panel made up of external experts and those from within K+S is evaluating the suggestions, up to three of which will each be rewarded with a prize of €20,000 in April 2019.

□ [www.k-plus-s.com/brine-challenge](http://www.k-plus-s.com/brine-challenge)

In October 2018 we invited guests to attend the Future Food Forum in Berlin – the third time we have done so. International experts and forward thinkers, stakeholders from politics, science and NGOs, development cooperation experts and representatives from start-up companies debated the topic of global nutrition.

□ [www.future-food-forum.de/en](http://www.future-food-forum.de/en)

In September 2018, we held our fourth Capital Markets Day with 20 guests at our new plant in Bethune, Canada. There the full Board of Executive Directors took part in an intensive discussion with analysts, investors, and banking representatives that focused on topics of relevance to the capital markets, and in particular on the perspectives offered by SHAPING 2030.

□ [www.k-plus-s.com/cmd2018](http://www.k-plus-s.com/cmd2018)

<sup>1</sup>This section is part of the non-financial statement, which contains the information pursuant to Sections 289b–289e Handelsgesetzbuch (HGB - German Commercial Code) and 315b and 315c HGB and is not within the scope of the audit in accordance with Section 317 (2) Sentence 4 HGB.

## OVERVIEW STAKEHOLDER DIALOGUE: CONTENT AND DIALOGUE FORMATS

<b>EMPLOYEES</b>  The success of our company is dependent on the expertise and success of our employees. Our employees voice matters of importance to them at regular employee assemblies. A mutual exchange and transfer of information is promoted via the Intranet.	Main topics	Human resources policy decisions, remuneration, further training, communication, career and family, etc.
	Methods	Meetings, committee activities, joint projects, workshops/conferences, Annual Report, blogs and social media, Intranet and internal communication, etc.
<b>CUSTOMERS AND BUSINESS PARTNERS</b>  Dialogue with our customers helps us better identify their needs, to which we align our products and services. We provide a wealth of information on the Internet. In addition to personal conversations, we undertake satisfaction analyses to gain specific information for improvements.	Main topics	Quality assurance, production conditions, observation of rules and standards, compliance, etc.
	Methods	Surveys, meetings, user training, trade fairs, joint projects, social media, press and public relations activities, guided site tours, etc.
<b>SHAREHOLDERS/ INVESTORS/ ANALYSTS</b>  We portray our business, field questions from the capital market and gather suggestions and ideas at regular roadshows and conferences.	Main topics	Enterprise valuation, corporate strategy, objectives, results, risks/opportunities, competition, ESG issues, etc.
	Methods	Annual General Meeting, Annual Report, quarterly reporting, Capital Markets Day, meetings with selected shareholders, surveys, telephone conversations, conferences, roadshows, etc.
<b>POLITICS AND ADMINISTRATION</b>  As a member of various associations and organisations, we directly or indirectly contribute our positions to the political discussion through national and international dialogue with representatives of governments, responsible authorities and parliamentary members.	Main topics	Social licence-to-operate, environmental issues, workplace safety, etc.
	Methods	Meetings, workshops, committee activities, press and public relations activities, guided site tours, etc.
<b>SITE COMMUNITIES</b>  It is important for us to be good neighbours to the communities and regions in which our sites are located. We create trust at our sites through dialogue with the municipalities and residents.	Main topics	Social licence-to-operate, environmental issues, job offers, etc.
	Methods	Meetings with selected stakeholders, workshops, information offices, open house events, press and public relations activities, guided site tours, etc.

## RESEARCH AND DEVELOPMENT

To ensure efficient use of resources and continuously improve our extraction and production processes, we conduct our own internal research and development and cooperate with external research institutions. Global trends give rise to additional fields of activity, and innovation projects supplement our traditional research and development work on salt and potash products. In line with our central focus on sustainability and customer centricity, our research focused on concepts for post-utilisation, tailings piles and disposal relating to the reduction of saline wastewater as well as product development.

### RESEARCH FIGURES

Research costs totalled €15.9 million in the reporting period and were thus slightly below the previous year's level (2017: €16.5 million). A consistent portion of research costs was attributed to the Potash and Magnesium Products business unit. The Salt business unit reported a slight reduction in research expenses. Research intensity (research costs/revenue) is at the level of previous years at 0.4%. Capitalised development-related capital expenditure increased to €1.4 million in the year under review (2017: €0.5 million).

### K+S ANALYSIS AND RESEARCH CENTRE

The K+S Analysis and Research Centre (AFZ) in Unterbreizbach, which employs around 100 scientists, engineers and specialist staff, is K+S' central research institute. The tasks of the AFZ include carrying out analyses, application-oriented fundamental research and process and product development for all customer segments of the K+S GROUP. All relevant analysis methods from standard analysis to more complex special analysis are covered.

The AFZ also supports the production sites in optimising technical processes on site. The collaboration with KSPC in Bethune was a key element in these efforts during 2018.

### RESEARCH INSTITUTIONS AND PARTNERSHIPS

For our research and development, we use our own various research facilities, cooperate in public/private partnerships, initiate research projects at higher education institutions and other research institutes, and cooperate with industrial partners.

### MORTON SALT RESEARCH

The focus of research and development is on accelerating growth through customer-centric platforms for new products within the key market segments. The existing modern research and development laboratory in Elgin, Illinois, has been expanded, and laboratories, technologies, and technical capabilities have been improved in order to optimise existing products by modifying product features and identifying new potential areas of application.

### RESEARCH FIGURES

TAB. 2.3

In € million	2014	2015	2016	2017	2018
Research costs	12.2	14.7	13.7	16.5	15.9
Potash and Magnesium Products business unit	6.1	7.9	8.1	8.4	8.4
Salt business unit	3.1	3.7	3.9	4.5	3.8
Other research costs	3.0	3.1	1.7	3.6	3.7
Research intensity (research costs/revenues)	0.3%	0.4%	0.4%	0.5%	0.4%
Capitalised development-related capital expenditure	3.5	2.0	1.4	0.5	1.4

k+s is increasing investments to support the strategic objectives for innovation. Construction of a state-of-the-art research and development facility near the headquarters in Chicago is underway. The new innovation centre will contribute to accelerating growth of product innovation in key customer segments. With the new facility, the research and development space will double and laboratories, technologies and technical capabilities will be expanded. In a multi-functional space, where meetings with customers, marketing events and consumer focus groups with live demonstrations and tastings can be held, the new innovation centre will create a unique Morton brand experience. This new space for innovation in the heart of Chicago is ideal for fostering open innovation opportunities with strategic customers. It will be fully operational from 2020.

### **INNOLABS**

The Innolabs, which were set up in 2017, supplement the established research and development facilities in the search for new markets and business models. The “AgTech/Nutrition” Innolab, for example, is working on overarching questions relating to the fields of resource conservation, water efficiency, and soil health. The “Industrial Science” Innolab is looking for new business scenarios in the areas of health care and biotechnology.

### **RESEARCH PARTNERSHIPS**

#### **PUBLIC/PRIVATE PARTNERSHIPS**

The INSTITUTE OF APPLIED PLANT NUTRITION (IAPN) is run as a public/private partnership by k+s together with the GEORG AUGUST UNIVERSITY OF GÖTTINGEN. Last year's research focused on the relationship between resource-conserving techniques in agriculture and optimised plant nutrition, especially with regard to the supply of potassium and magnesium to plants. Focal points here included increasing the efficiency of water use and the environmentally friendly use of nitrogen. At the same time, methods for better determining nutrient requirements were investigated.

The INTERNATIONAL MAGNESIUM INSTITUTE (IMI), located in Fu Zhou, China, is a partnership between k+s KALI GMBH and FUJIAN AGRICULTURE AND FORESTRY UNIVERSITY.

Last year, a research network was established in 15 provinces in China to harness scientific expertise for China and Asia. The collective aim of the network is to reduce the environmental effects of the use of nitrogen and phosphate through balanced plant nutrition. The main focus of these investigations was the nutrient magnesium. The IMI hosted the third symposium on magnesium in Guangzhou, China, where researchers shared experiences and discussed current issues surrounding the impact of magnesium on soil and plants and on human and plant nutrition.

#### **RESEARCH PARTNERSHIPS WITH EXTERNAL INSTITUTIONS AND COMPANIES**

Some examples of cooperation between k+s and external companies include the following:

- + In cooperation with K-UTEC AG SALT TECHNOLOGIES, research is being conducted on feasible solutions for saline wastewater disposal and on product development.
- + We are working together with HAGER+ELSÄSSER on a project researching the possibilities for using membrane filtration to treat saline water. In 2018, trials were successfully carried out at a pilot facility.
- + Under a partnership agreement with the German Research Centre for Geosciences and the Friedrich-Alexander-University Erlangen-Nürnberg, research is being conducted on geochemical interactions between salt rock, moisture, and gases. The project undertakes a combination of underground fluid monitoring and laboratory experiments and numerical simulations, with the aim of obtaining a better understanding of the process in order to increase mining safety and optimise the use of salt caverns.

## SELECTED RESEARCH AND DEVELOPMENT PROJECTS AND RESULTS

- + In the area of organic agriculture, our focus is on the development of sustainable solutions for optimal plant nutrition.
- + In terms of “precision agriculture”, we are working to improve fertilizer efficiency through the development of innovative application methods and products.
- + The use of our products enriched with high-quality micro-elements can prevent possible deficiencies in crops where micronutrient deficiencies are found. In this respect, we continue to develop our fertilizers based on market needs and sustainability considerations.
- + New and improved products for foliar application supplement the specialities portfolio and are quickly becoming effective alternatives to soil application in crop production.
- + Research and development work in the first test caverns in the Canadian brine field were completed in 2018. The next step of the solution mining process is to add secondary mining and the commissioning of the cooling pond will be scientifically monitored, and practical concepts will be developed and tested.
- + Following successful development work by the AFZ, optical sorting in potash processing was installed and successfully commissioned to recover potash material from a residual fraction for the first time at the Neuhof-Ellers plant.
- + Under the occupational exposure limits project, the chemical reactions between nitrogen oxides in underground environmental conditions were investigated and their conversion processes and effects described.

- + Following the commissioning of the new kainite crystallisation and flotation (KCF) facility at the Werra plant, further research and development is being carried out so that the remaining processing wastewater can be treated in such a way that it can be safely stored in mine voids near the site.
- + A pilot project to cover tailings piles using a thin layer cover and revegetation has also begun and is being scientifically monitored. In addition to this pilot, other alternatives to cover tailings piles are also being investigated. A number of internal efforts have also been initiated, including a crowdsourcing project, to develop new approaches.

□ [www.k-plus-s.com/brine-challenge](http://www.k-plus-s.com/brine-challenge)

- + The Innolab is testing the technical feasibility of macroalgae breeding in artificial seawater at its own pilot facility. Various marine algae species are currently being cultivated and examined for economic viability.
- + With the opening of the aquaponic container and the launch of a consumer app, the Innolab has put the spotlight on urban farming for the first time. The aim is to raise awareness of, and test various technologies for urban cultivation in closed systems.

## PATENT PORTFOLIO

Worldwide, the K+S GROUP has 71 patent families (2017: 70), which are protected by 306 national rights (2017: 304). The patents are used, for example, in the areas of electrostatic separation processes, granulate production and flotation.

## EMPLOYEES

The Group strategy SHAPING 2030 is changing the corporate culture on multiple levels: K+S is being transformed into “One Company”. For this transformation to take place, each and every employee must be integrated appropriately in the best possible manner.

### ACTING AS “ONE COMPANY”

In 2018, the K+S GROUP worked on designing its new matrix organisation which closely connects operating units with some centrally driven functions to put the customer in the centre. More than ever, this requires our managers to facilitate and promote successful teamwork across the K+S GROUP. With this in mind, we are continuing to develop our human resources strategy into a comprehensive, global approach.

### OUR WORKFORCE

As of 31 December 2018, the K+S GROUP employed a total of 15,070 employees, or 14,931 FTEs (full-time equivalents) (2017: 14,925 employees or 14,793 FTEs). TAB. 2.4

Our workforce consists of 88.3% (2017: 88.5%) employees covered by a collective wage agreement, 7.6% (2017: 7.7%) employees not covered by a collective wage agreement and 4.0% (2017: 3.8%) trainees. On average, our employees are 42 years old and have been working for us for 15 years. The turnover rate, i.e. the ratio of persons who leave the company to average workforce size, is 8.4% (2017: 7.4%).

K+S respects the freedom of association and the right to collective bargaining. Around 76% of employees covered by a collective wage agreement in Group companies in Germany are members

of trade unions. The relationship with the works councils as well as with Industriegewerkschaft Bergbau, Chemie, Energie (IG BCE) is characterised by a long-standing partnership built on trust. In Chile, 53%, in the USA 59% and at KSPC no employees are organised in trade unions. When we started implementing SHAPING 2030 in 2018, we initiated negotiations with the social partners to achieve a fair balance of interests. The employees of the Sigmundshall facility were given more security for their personal future with the social plan agreed between the company and the works council in the conciliation committee proceedings. About 250 employees will continue to work in Sigmundshall. All other employees were offered a career perspective at another site of the K+S GROUP.

### REMUNERATION

The K+S GROUP rewards its employees worldwide in line with the market and in relation to performance. In 2018, personnel expenses amounted to €1,122.5 million and were therefore around 1% above the level recorded in the previous year (2017: €1,106.2 million). During the year under review, personnel expenses per employee (FTEs) amounted to €75,315 (2017: €75,485), almost on the same level as in the previous year. The proportion of variable remuneration included in personal expenses, which allows our employees to participate in the success of the Company in the context of a performance-related remuneration system, was €35.7 million in 2018 or approximately 3% (2017: €45.0 million or approx. 4%).

### EMPLOYEES BY UNIT

TAB. 2.4

in full-time equivalents as at 31 Dec (FTEs) <sup>1</sup>	2017	%	2018	%
Potash and Magnesium Products business unit	8,708	58.9	8,797	58.9
Salt business unit	5,008	33.9	5,015	33.6
Complementary Activities	280	1.9	280	1.9
Other areas	797	5.3	839	5.6
<b>K+S Group</b>	<b>14,793</b>	<b>100.0</b>	<b>14,931</b>	<b>100.0</b>

<sup>1</sup> FTE: Full-time equivalents; part-time positions are weighted according to their share of working hours.

## DEVELOPING AND PROMOTING EMPLOYEES

Expertise and innovation of our workforce are a key driver for corporate success. We therefore continue to develop and utilise our employees' potential. At the same time, we are always on the lookout for talented people who will advance our continuous development process with fresh ideas.

### TRAINING

Excellently trained and committed specialists are indispensable for the reorientation of our Group as part of the SHAPING 2030 strategy. At 31 December 2018, a total of 588 women and men in the German companies of the K+S GROUP were in a vocational training programme or in a cooperative study programme (2017: 567). With 201 trainees hired in 2018 we are concentrating on the growing need for specialists (2017: 179). At the end of the year, the training ratio, based on employees in Germany, was around the level of the previous year at 5.6% (2017: 5.5%). We offered jobs to around 85% of our trainees (2017: around 89%).

### STAFF DEVELOPMENT

As part of the Group's strategic staff development, the global K+S competency model provides a uniform assessment basis for human resources development throughout the Group.

In 2018, we opened up our talent management process also to employees covered by a collective wage agreement. Development discussions, which have been held with employees not covered by a collective wage agreement for several years now, will be introduced for all employees covered by a collective wage agreement starting in 2019. This is a face-to-face exchange between an employee and their supervisor to discuss wishes and expectations with regard to the employee's professional and personal development.

Our management development programmes TRACK+S PROFESSIONAL and TRACK+S EXECUTIVE are important components for the qualification of our employees for the implementation of our shaping 2030 strategy.

⇒ 'Non-financial Statement', page 58

### CONTINUING EDUCATION AND FURTHER TRAINING

K+S offers skilled employees and managers numerous training opportunities in order to impart general and company-specific knowledge. Depending on company requirements, we award grants to our employees for full-time Bachelor's or Master's degrees. In the United States, Canada and Chile, we support employees who continue their education in line with their career at a university recognised by the company, by reimbursing all or part of their tuition fees. Investment in continuing education and further training amounted to around €13.4 million in 2018 (2017: €12.8 million). The increase in costs is attributable to the number of training days in Germany (14,181 days, 2017: 13,212 days) and a significant increase in supported technician trainings at the College for Economy and Technology in Clausthal-Zellerfeld.

### KNOWLEDGE MANAGEMENT/CONTINUOUS IMPROVEMENT PROCESS

In the knowledge management/continuous improvement process (CIP) we give employees the opportunity to take an active role in operating processes and structures and to be involved in their shaping. At present, the knowledge management/CIP is effective in large sections of Germany and North America. Other K+S regions will be successively incorporated as part of ONE K+S. A total of 12,259 ideas were submitted in 2018 (2017: 13,804). The benefit over a period of two-and-a-half years, i.e. the efficiency gains generated less the actual cost of knowledge management, was high at €13.8 million (2017: €13.8 million).

### COMPANY PENSION SCHEMES

K+S helps its employees secure their standard of living in old age. Every employee in the participating German companies who is signed up to one of the three company pension schemes receives a subsidy from K+S. K+S subsidises the retirement benefits with a 13% top-up of the amount the employees themselves pay from their remuneration subject to social security deductions into the company pension scheme. The majority of our pension schemes for the employees of our companies abroad are defined contribution plans, which are predominantly financed by the employees themselves and subsidised by the employer. In 2018, we spent a total of €20.4 million (2017: €26.2 million) on defined contribution pension plans.

⇒ 'Notes': Note (21) 'Provisions for Pensions and Similar Obligations', page 188

## NON-FINANCIAL STATEMENT

This Non-Financial Statement (NFS) has been prepared in accordance with the provisions of Sections 289b–289e HGB and Sections 315b and 315c HGB and according to the GRI Standards of the Global Reporting Initiative as an international framework. Unless otherwise indicated, all information and key figures presented in this statement relate to the K+S GROUP, including K+S AKTIENGESELLSCHAFT. The following overview serves to ensure that the information required by law can be found and assigns it to the strategic action areas of the K+S GROUP.<sup>1</sup>

### INDEX FOR THE NON-FINANCIAL STATEMENT

NFS component	Included in section	Reference
Business Model	Company Profile Corporate Strategy Sustainability Management	Page 31 Page 45–49 Page 78–79
Risks	Report on Risks and Opportunities	Page 110
Aspect	Action area	Reference
Environmental Matters	Water Waste (Solid Residues) Energy & Climate	Page 60 Page 62 Page 63
Employee Matters	Health & Safety Diversity & Inclusion	Page 55 Page 57
Social Matters	Stakeholder Dialogue	Page 48–49
Respect for Human Rights	Human Rights	Page 58
Anti-Corruption and Bribery Matters	Compliance & Anti-Corruption	Page 65
Supply Chain	Supply Chain	Page 66

We strive for sustainability, because we are committed to our responsibility to people, the environment, communities, and the economy in the regions in which we operate. Our mission is the sustainable extraction and refinement of minerals. Accordingly, the Sustainability Program is part of the corporate strategy SHAPING 2030. We have set ourselves ambitious objectives in the areas of people, the environment and business ethics, and have developed corresponding concepts which we intend to implement by 2030 at the latest. To do this, we have made the objectives verifiable with non-financial indicators. A spreadsheet presentation of our fields of action, with the associated sustainability targets and non-financial indicators, is contained in the chapter on strategy. These series of aspects correspond to our strategic logic of the action fields in K+S Sustainability Programme.

- ‘Corporate strategy’, page 45

### PEOPLE

We work daily for the satisfaction of our customers. We strive to meet their interests and those of our key stakeholders with selected sustainability activities, focusing primarily on the action areas that we defined in our materiality process: “Health & Safety”, “Diversity & Inclusion”, and “Human Rights”.

- ‘Employees’, page 53; ‘Sustainability management’, page 78
- ‘Corporate strategy’, page 43
- [www.k-plus-s.com/people](http://www.k-plus-s.com/people)

### HEALTH & SAFETY

The health and safety of our employees is the highest priority for K+S. We have the slogan: “Nothing is more important than health and safety – not production, not revenues, not profit”, and we

<sup>1</sup> The section ‘Non-Financial Statement’, which contains the disclosures pursuant to sections 289b – 289e and sections 315b and 315c HGB, is not subject to auditing in accordance with section 317(2) sentence 4 HGB.

work constantly to provide a healthy, safe working environment for effective protection of our employees. Taking the **k+s** Health, Safety & Environment Policy as a basis, we continuously expand and improve the processes we have implemented for protecting health and guaranteeing safety on the job. Thus, for example, every meeting of the Executive Board of Directors begins with the topic of health and safety.

Anywhere we identify hazards, work-related pressures or health risks, we actively take steps to protect health and increase occupational safety. We preventively brief our staff by means of training courses and campaigns. The **k+s GROUP** is introducing a management system in accordance with ISO 45001 at all of its production sites. A global “Management Systems” competence centre helps to coordinate the implementation and integrate other management standards. It also serves as a best practice platform.

⇒ ‘Environment’, page 58; ‘Employees’, page 53

The development of occupational health and safety in the **k+s GROUP** is discussed and monitored in committees, competence centres and specialist working groups at global and regional level. In Germany, for example, the Joint Committee on Health, Safety and the Environment (HSE Committee), which also includes works council representatives, regularly advises on overarching HSE issues.

We continued to provide occupational health and safety training for managers and employees in 2018. In 2019, we are planning to introduce globally consistent mandatory awareness training for the management level in particular.

#### SAFETY

👉 Goal: The **k+s** vision is completely avoiding accidents at work. We are therefore striving to reduce the number of accidents at work among our employees, measured as working hours lost per one million hours worked (lost-time incident (LTI) rate), to zero by 2030.

In 2018, 750 work accidents occurred at our locations worldwide (2017: 794). The LTI rate for the **k+s GROUP** in 2018 fell to 7.9 compared with 8.5 in 2017. The accident rate (number of workplace accidents divided by the number of hours worked multiplied by one million) decreased to 29.3 (2017: 31.5). We are deeply saddened to report two fatal accidents in 2018. One employee died following an accident underground at the mine of our subsidiary

ESCO – EUROPEAN SALT COMPANY GMBH & CO in Bernburg, Germany, while a contractor died of injuries sustained in an accident at the Inagua site in the Bahamas.

Our risk assessment processes are designed to ensure that work-related health and safety risks are identified at an early stage and appropriate countermeasures are taken. We completed the implementation of a uniform system for recording near-accidents for the German potash and salt sites in 2018. This means that all **k+s** production sites around the world now record near-accidents.

In 2018, we also implemented various measures and campaigns aimed at developing employees’ decision-making abilities and promoting responsible health and safety behaviour. These include the introduction of the general obligation to wear eye protection at our production sites.

#### HEALTH

Our workplace health promotion and prevention programmes supplement the management systems with measures to improve health competencies. The programmes are communicated at the individual sites and employees are invited to participate. Measures range from traditional health care courses and seminars to early detection measures and counselling services. Programmes and measures are planned site-specifically based on the needs of and local conditions at the organisation in question.

Health care and advice in Germany is provided by company doctors. They also assist with the further development of operational health management and are involved in carrying out assessments of risks and working conditions.

We are committed to implementing operational integration management, which is mandatory in Germany, and encourage the incorporation of disabled employees into operations. At 6.1% (2017: 6.6%), the proportion of severely disabled employees of the **k+s** workforce in Germany is once again above the latest published national average of just under 5% for the year 2016.

In 2018, Professor Horst Christoph Broding, who has many years of experience in mining, was appointed to the chair for industrial medicine and operational health management at the University of Witten/Herdecke, which is sponsored by **k+s**.

An important aspect of health care is reliable compliance with occupational exposure limits. In response to the occupational exposure limits disclosed by the Federal Ministry of Labour and Social Affairs in Germany for nitrogen oxides and particulate diesel emissions underground, our broad-based implementation project for the German sites has been launched successfully. For example, significant progress has been made in the projects we got off the ground on the use of the latest diesel engine technology, alternative drive technologies, the testing of reduced-emission explosive substances as well as the optimisation of ventilation underground. We also kicked off a health survey at two sites to analyse the physiological effects of the aforementioned substances.

⇒ ‘Report on Risks and Opportunities’, page 121; ‘Research and Development’, page 50

#### DIVERSITY & INCLUSION

It is important to us that all k+s employees are valued, irrespective of, for example, their gender, nationality, ethnic origin, religion or ideology, disability, age, sexual orientation and identity. We do not tolerate any discrimination.

The recognition and promotion of diversity and inclusion is enshrined in our core values and principles (CODE OF CONDUCT). We have confirmed our self-image in the form of voluntary commitments by signing the UN GLOBAL COMPACT and the CHARTA DER VIELFALT (Diversity Charter), a German initiative designed to encourage diversity in companies and institutions.

Diversity describes the set-up of our workforce. In an inclusive working environment, everyone can leverage their potential to help meet the different requirements of our markets. Our

clearly described growth path also provides new development and employment opportunities.

Traditionally, more men than women work in mining. As at 31 December 2018, 87% of our workforce based on the number of employees was male and 13% female for the companies of the K+S GROUP.

⇒ ‘Target figures for the percentage of women’, page 76

👉 Goal: Hiring and developing a workforce that reflects the places in which we do business. Fostering an inclusive environment that enables all employees to thrive and contribute to innovation and results.

This goal will be achieved if, by 2030 at the latest, more than 90% of our employees perceive the working environment as inclusive. Going forward, this will be tracked in topic-specific pulse surveys, i.e. in the form of short surveys on core issues, so as to ascertain the current mood and evaluate change processes. We will use the findings from the surveys to identify and build on the need for action. In the last full Group-wide employee survey, which was conducted in 2015, the approval rating was 68% (ratings on a scale of one to five were mainly “tend to agree” or “agree”).

Our aim is to continue to expand and step up the active use of diversity and inclusion as an essential part of our corporate culture. Diversity and inclusion are called for and supported by the management level, are promoted by human resources functions as business partners in all employee processes, and live and breathe through the appreciation of all employees.

The measures to promote diversity and inclusion are horizontal tasks. They are adapted to the requirements of the respective sites. This starts with the acquisition of talented staff. Here we seek to ensure that, despite an increasingly challenging labour market, the best people are recruited for all divisions. We expanded our social media presence in 2018. We have now made our job advertisements gender-neutral so as to make it easier for people to come on board. To retain and develop our employees, annual talent round-table discussions are among the initiatives held at local, regional and global level. Their main purpose is to support the individual further training of k+s employees and promote mobility within the organisation, for example. Through our TRACK+S PROFESSIONAL and TRACK+S EXECUTIVE management

**EMPLOYEES BY REGION**

in %

5/5  
South America

21/22  
North America

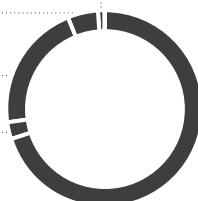
3/3  
Rest of Europe

**FIG. 2.13**

1/1  
Asia

70/70  
Germany

⇒ 2018/2017



development programmes we support the development of our employees and safeguard our succession planning at the same time. All employees worldwide were given the opportunity to apply for these international development programmes. In 2018, 16 employees commenced the one-year TRACK+S PROFESSIONAL programme. Six more employees will begin the TRACK+S EXECUTIVE programme in 2019. In addition, we make a targeted contribution to the development of a diverse workforce across all organisational areas and levels and, with regard to the organisational structure, aim to ensure that our employees in the matrix organisation work together across all cultures. From 2019 onwards, we will promote this through a stronger mix of methods based on the 70:20:10 model. It puts a greater focus on learning on the job rather than through formal training. And it is designed to reinforce the positive exchange of ideas and information by K+S employees in projects, shadowing in other teams and international assignments.

## HUMAN RIGHTS

K+S respects the internationally recognised human rights and supports its observance. The INTERNATIONAL CHARTER OF HUMAN RIGHTS and the INTERNATIONAL LABOUR ORGANISATION's (ILO) core labour standards are among the standards enshrined both in our core values and principles (CODE OF CONDUCT) and our Group-wide SUPPLIER CODE OF CONDUCT. We reject any form of forced or child labour.

 Goal: Our Group-wide goal is observance of internationally recognised human rights at all of our locations and assurance that this basic value is applied globally. We measure this with the KPI "Site coverage through human rights due diligence", which we intend to meet fully by 2030. As our methodology is currently being developed, our activities are only just beginning. The figure for systematic coverage in 2018 is therefore still 0%.

Responsibility for implementing the process lies with the 'Sustainability' department in cooperation with the Europe+ and Americas operating units. The global working group for the introduction of the human rights due diligence process started work at the beginning of December 2018. An initial training session for the working group has taken place.

In implementing human rights due diligence, we consider the five core elements: A policy commitment to meet the responsibility to

respect human rights; procedures for identifying the human rights impact; implementation of measures and review of their effectiveness; reporting; and establishment of grievance mechanisms.

To implement our human rights due diligence, we are about to establish a process that is based on a standardised methodology and takes country-specific circumstances and our business activity into account. It is based on the UN Guiding Principles for Business and Human Rights, the OECD Guidelines for Multinational Enterprises, national action plans and other relevant guidelines, and laws. Our respect for human rights is enshrined in the K+S core values and principles (CODE OF CONDUCT). The first pilot for a human rights impact assessment will be carried out in Chile in spring 2019; another pilot is expected to be performed in the course of 2019. In these, potential adverse impacts on human rights will be identified, possible consequences drawn and organisational learning promoted at the same time. Requirements for human rights grievance mechanisms within the framework of human rights due diligence have been discussed in cooperation with the Legal & GRC unit.

## ENVIRONMENT

### ENVIRONMENT

The K+S GROUP works continuously to minimise the impact on nature associated with the extraction and processing of raw materials. We use state-of-the-art mining and treatment methods for environmentally friendly production and are constantly developing these further. By investing in research and development, we operate at the cutting edge. We will also be breaking new ground in future in relation to the disposal of our residues and setting standards for the state of the art. At the same time, we need to remain economically efficient. In connection with the K+S sustainability objectives for 2030, we have set ourselves ambitious goals in the areas of "water", "mining waste" and "energy & climate".

Our environmental management function helps us to achieve our goals and is coordinated across the Group and across all topics. The companies specify requirements and support the locations in their implementation. Based on our integrated Health, Safety & Environment (HSE) Policy, we strive to standardise and

continuously improve our management systems and HSE performance for key sites worldwide by introducing management systems in accordance with DIN EN ISO 14001:2015 for environmental management and DIN EN ISO 50001:2015 for energy management on an ongoing basis. National and international committees of experts have been set up to increase efficiency and exchange experience.

Environmental performance indicators at plant and company level are collected and evaluated using an environmental data software package that has been implemented at all production sites. We collect the environmental performance indicators reported for all key consolidated production sites. They are mostly based on figures that are measured directly.

For the non-financial indicators defined as part of the sustainability targets, we present the recording method and the reporting limits separately.

▷ ‘About this report’, page 227

#### CAPITAL EXPENDITURE AND OPERATING COSTS FOR ENVIRONMENTAL PROTECTION

Investments in environmental protection amounted to €99.1 million in 2018. The €26.8 million lower level compared to the previous year (€125.9 million) results from lower investments in the water protection after the major project of the Kainite Crystallisation and Flotation (KCF) facility at Hattorf site was completed as scheduled. While 2017 marked the main investment focus of the €180 million project, in 2018 only relatively small investments were made for the new facility, which had already been commissioned in January.

In 2018, this was offset by high investments for the approved tailings pile expansion at the Hattorf potash site. In terms of value, the largest subprojects included the preparation of the expansion area, including the base sealing as well as tangible assets in the tailings pile technology. Another investment focus in 2018 was the acquisition of the required land for the applied tailings pile expansion at the Zielitz potash site.

**CAPITAL EXPENDITURE ON ENVIRONMENTAL PROTECTION<sup>1</sup>**

TAB. 2.5

in € million	2017	2018	deviation	%
Water protection	118.8	90.1	-28.7	-24.2
Prevention of air pollution and climate protection	0.9	0.9	0	0
Waste management	2.7	2.1	-0.6	-22.2
Nature conservation <sup>2</sup> and soil decontamination	3.4	5.1	1.7	50.0
Other	0.1	0.9	0.8	>100
<b>Total</b>	<b>125.9</b>	<b>99.1</b>	<b>-26.8</b>	<b>-21.3</b>

<sup>1</sup> The reporting of environmental investments is based on the German Environmental Statistics Act (Umweltstatistikgesetz, UStatG), but also includes the items relating to our global operations.

<sup>2</sup> Including landscape conservation.

**OPERATING COSTS FOR ENVIRONMENTAL PROTECTION<sup>1</sup>**

TAB. 2.6

in € million	2017	2018	deviation	%
Water protection	145.7	169.9	24.2	16.6
Prevention of air pollution and climate protection	31.7	31.0	-0.7	-2.2
Waste management	14.3	16.5	2.2	15.4
Nature conservation <sup>2</sup> and soil decontamination	2	2.1	0.1	5.0
Other	4.7	5.1	0.4	8.5
<b>Total</b>	<b>198.4</b>	<b>224.6</b>	<b>26.2</b>	<b>13.2</b>

<sup>1</sup> The reporting of environmental investments is based on the German Environmental Statistics Act (Umweltstatistikgesetz, UStatG), but also includes the items relating to our global operations.

<sup>2</sup> Including landscape conservation.

The higher investments in nature conservation and soil decontamination compared to 2017 can be attributed to further compensation and replacement measures implemented as part of the ongoing tailings pile expansion process in Zielitz. **TAB. 2.5**

The operating costs for environmental protection in 2018 amounted to €224.6 million, up €26.2 million (2017: €198.4 million). The reason for the significant rise was, in particular, higher costs arising from tailings piles of the German potash sites, which are incorporated in the water protection costs. Starting in the 2018 financial year, the underlying plots and the relevant sealing materials will be amortized by increasing filling on a scheduled basis, as the subsequent use of the pots is excluded. In addition, higher expenses for recultivation obligations had to be considered due to the stoppage of potash production at the Sigmundshall site at the end of 2018.

A further cost increase in water protection was due to a rise in transports for additional measures implemented for remote disposal of saline wastewater of the Werra plant in Lower Saxony and Saxony-Anhalt. The reasons were the long-lasting severe drought conditions and the associated, extremely low water levels of the Werra, causing the discharge of saline wastewater to be very limited or not possible at all.

The higher costs incurred for waste management are primarily due to price increases for landfill and construction waste disposal and the year-round production of the Bethune site in Canada following its commissioning start in 2017.

Operating costs primarily include additional environmental protection measures. These measures relate in particular to water protection, prevention of air pollution and climate protection, waste management, nature conservation and soil decontamination, and refer to facilities separate from other production processes. Operating costs and depreciation on production facilities for water protection, which are integrated into production processes and enable the production of additional sales products, are not included. **TAB. 2.6**

## **WATER**

Water is also a very important resource for K+S. We use water in varying qualities in many of our processes. We need water for mining and extraction in certain deposits, in production and in the use of certain products, for example in agriculture. We extract high-quality salt products from seawater and other saline waters through solar evaporation. On the other hand, certain production processes and tailings piles generate saline wastewater that we need to dispose of.

A Group-wide water risk analysis was carried out for all relevant production sites in 2017 in order to identify water risks that could impact on our business activity. The results will continue to be included in the site specific concepts for environmental management. Our aim is to minimise water-related impacts. The K+S GROUP has set itself concrete targets for this. The key figures for water withdrawal and wastewater disposal below provide more information on how we use water as a resource.

## **WATER WITHDRAWAL**

In 2018, the K+S GROUP withdrew a total of 422.8 million m<sup>3</sup> of water (2017: 397.9 million m<sup>3</sup>) from different sources for the extraction and manufacturing of products. Following the start of production of our Canadian potash plant Bethune, the river water intake in 2018 increased to 137.0 million m<sup>3</sup> (2017: 133.0 million m<sup>3</sup>). The withdrawal of salt water from seas and other saline sources decreased 2017 due to the damages by hurricane Irma and returned to normal levels in 2018. The majority (89%) of our water withdrawal takes place at locations without water stress.

## **WASTEWATER**

The extraction and processing of our raw materials and the raising of tailings piles leads to saline wastewater. K+S continues to work hard to reduce the volume of saline wastewater generated in production and from the disposal of residues for the long term. The volume and composition of processing wastewater and tailings pile runoff is dependent on many factors such as local crude salt quality, the treatment method used, the products manufactured and the product quality required. The total salt content of saline wastewater therefore varies.

**WATER WITHDRAWAL**

TAB. 2.7

in million m <sup>3</sup>	2017 <sup>1</sup>	2018
Seawater and other saline water	256.1	276.2
River water	133.0	137.0
Groundwater	8.2	8.3
Drinking water and water from municipal water utilities	1.2	1.3
<b>Total volume of water withdrawn</b>	<b>398.4</b>	<b>422.8</b>

<sup>1</sup>The previous year's figures have been adjusted due to subsequent data received.

In 2018, the volume of saline wastewater discharged into surface water amounted to 4.8 million m<sup>3</sup> (2017: 6.2 million m<sup>3</sup>) for potash production and to 6.0 million m<sup>3</sup> (2017: 7.4 million m<sup>3</sup>) for salt production. A further 8.0 million m<sup>3</sup> (2017: 3.9 million m<sup>3</sup>) was injected underground.

The volume of saline wastewater discharged into surface waters as a result of potash operations was down owing to the production cuts at the Werra plant. The higher figures for injection are attributable to the increase in production at the Bethune plant in Canada.

The commissioning of the kainite crystallisation and flotation (KCF) facility at the Hattorf site of the Werra plant in January 2018 leads to a future reduction of around 20% in the volume of saline wastewater from the Werra plant. The options available for disposing of this saline wastewater are further on the discharge into the Werra and injection.

If the two means of disposal are insufficient due to prolonged low water levels in the Werra river, some of the saline wastewater can be transported by truck and/or rail for disposal in suitable vacant mines and gas caverns or used for mine stabilisation work. In the summer of 2019, K+S also plans to increase the temporary storage capacity for saline wastewater on-site by a further 400,000 m<sup>3</sup> to a total of up to 1 million m<sup>3</sup>.

Production at the Werra plant had to be interrupted in 2018 due to the extraordinary drought followed by low water levels of surface waters. At the Wintershall, Hattorf and Unterbreizbach sites,

**WASTEWATER**

TAB. 2.8

in million m <sup>3</sup>	2017 <sup>2</sup>	2018
<b>Wastewater</b>		
Wastewater discharged into municipal sewage treatment plants	0.6	0.7
Process water in river water	110.6	112.1
<b>Salt water<sup>1</sup></b>		
Injection	3.9	8.0
Saline wastewater discharged into seawater and other saline waters <sup>2</sup>	52.4	50.8
Saline wastewater discharged into surface water	13.3	10.8
Saline wastewater in potash production	6.2	4.8
Saline wastewater in salt production	7.1	6.0

<sup>1</sup>Total dissolved solids (TDS) > 1 g/l.

<sup>2</sup>The previous year's figures have been adjusted due to improved classification of wastewater.

there was a 38-day/23-day/3-day production cut as a result of the greatly reduced scope for discharging waste during the months of August, September and December.

⇒ 'Report on Risks and Opportunities', page 116

Regarding saline water, K+S has ambitious plans. We have set ourselves the following ambitious goals up to 2021 and up to 2030:

leaf Goal: After 2021, K+S will no longer inject saline water below ground in Germany. This will also allow us to fulfil a key measure of the Weser river basin management. In 2018, the K+S GROUP injected 1.0 million m<sup>3</sup> (2017: 1.2 million m<sup>3</sup>) of saline wastewater arising from processing at the Hattorf site underground. In accordance with the agreement reached with FRIENDS OF THE EARTH GERMANY (BUND FÜR UMWELT UND NATURSCHUTZ DEUTSCHLAND, BUND), we intend to inject a total of 1 million m<sup>3</sup> less processing wastewater underground by 2021. The possibility of storing process water underground is currently being developed for disposal of the water after 2021. In a first step, our goal is to dispose of 1.5 million m<sup>3</sup> per year in suitable cavities in the mine on the Werra.

□ [www.fgg-weser.de/](http://www.fgg-weser.de/)

 Goal: By 2030, we also intend to reduce the amount of saline process water from potash production to be disposed of in Germany by a further 500,000 m<sup>3</sup>. This reduction will be in addition to the volumes saved by the KCF facility at the Werra site and does not include the reduction generated by the end of production at our plant in Sigmundshall in 2018. It is therefore expected that from 2030 onwards only 2.2 million m<sup>3</sup> of process water from potash production will need to be disposed of. The planned savings of 500,000 m<sup>3</sup> of saline process water include our established potash plants in Germany. The K+S plant Bethune in Canada was in the ramp-up phase in 2018 and is built according to the state of the art. The environmental impact of Bethune had already been assessed and comprehensively taken into account prior to its commissioning in 2017.

In 2018, a total of 3.4 million m<sup>3</sup> (2017: 4.5 million m<sup>3</sup>) of saline process water was generated at the potash sites in Germany. The volume was thus 1.1 million m<sup>3</sup> below the previous year. Based on the adjusted base year 2017, which is taking into account the full effect of the KCF facility (-1.5 million m<sup>3</sup>) and the end of production at Sigmundshall plant (-0.3 million m<sup>3</sup>), the saline process water volume initially increased in 2018 to 0.4 million m<sup>3</sup>.

In order to achieve our goal by 2030 and safeguard German potash production, K+S is engaged in extensive research and development projects in Germany to further optimise extraction and treatment processes as well as in projects to reduce the volume of process water to be disposed of.

⇒ ‘Report on Risks and Opportunities’, page 116; ‘Research and development’, page 50

#### **WASTE (SOLID RESIDUES)**

Solid residues regularly occur in mining during the extraction and processing of crude potash salts. These make up most of our solid waste. Disposal of the residue on tailings piles depends on the conditions at the individual locations and the permits granted and aims to minimise the impact on the environment through development of new technologies. As part of our extensive approval procedures, which last several years, environmental impacts are analysed and avoidance options optimised. Our operational environmental management, compliance with official requirements and the relevant legislation as well as professional exchange of ideas and information in various committees ensure continuous monitoring and improvement of standards.

#### **TAILINGS PILE MANAGEMENT**

In 2018, K+S KALI GMBH piled up 27.6 million tonnes of solid residues in Germany (2017: 27.5 million tonnes). Comprehensive monitoring programmes include groundwater, deformation and dust measurements and monitor any impact the tailings piles may have. The data generated on this basis is available to the licensing authorities at all times. Besides this, K+S performs regular internal inspections. In addition, operation of the tailings pile is monitored by recurring inspections by the licensing authorities. We give the authorities detailed information about the planning and implementation of measures. Existing tailings piles need to be expanded to safeguard potash production in the long term.

- + The expansion of the Hattorf tailings pile (phase I) was approved in 2018 and is already being implemented. Approval was granted for an area of around 27 hectares to the northwest of the existing tailings pile. It provides capacity for five to six years. In addition, the authorities are already reviewing the application for the second phase of the expansion of tailings pile capacity, which is expected to last until the early 2040s.
- + The application documents for the process of extending the tailings piles at the Zielitz site were submitted to the relevant authorities in October 2017. Public participation took place in summer 2018. The public hearing is expected to be held in the first quarter of 2019.
- + The application documents for the planned expansion of tailing piles at the Wintershall site were submitted in April 2018. In the run-up to the approval process, the general public was comprehensively briefed on the project at several information events as well as through flyers and information published on the K+S website.

The tailings pile expansions will entail comprehensive compensatory and replacement measures. The compensatory measures include long-term, large-scale projects that aim to create new biotopes for fauna and flora or upgrade existing ones. Reforestation will also be carried out primarily in areas deemed to be of poor quality from a nature conservation perspective to conserve usable agricultural areas. In addition, before this starts to have an impact, some species conservation measures will be carried out earlier than planned to ensure the uninterrupted continuity of environmental functions.

 Goal: Our Group-wide goal is to further reduce the impact on the environment and conserving natural resources by re-examining the potential of residues stored on tailings piles. From 2030, we hope to use three million tonnes of residue per year for purposes other than the raising of tailings piles. We are planning to achieve this goal by an alternative use of the tailings pile material and avoiding residue through increased raw material yield. We record this indicator on a project basis depending on the form of residue recycling. In 2018, we recycled 1.0 million tonnes of residue for evaporated salt production by FRISIA ZOUT B.V. and avoided residue by implementing technical measures to increase raw material exploitation.

In 2018, we initiated a variety of projects aimed at reducing residue. These include recycling of solution residue at alternative operating sites, rock salt pre-separation and other optical sorting underground. In 2019, we will also work hard on the options to increase raw material exploitation.

 Goal: By 2030 we aim to cover another 115 hectares of tailings pile surface area, further reducing or preventing tailings pile runoff. This involves covering large and medium-sized tailings piles that will be raised in addition to the existing cover in 2017 (approx. 70 hectares). By 2030 we will thus have covered a total of 225 hectares of tailings pile surface area. The tailings pile surface area covered relates to the contact surface of the tailings pile that is relevant for reducing the tailings pile runoff. For this, the area covered will be projected to the contact surface. We will review progress by taking annual measurements. Where measurements are delayed compared with the reporting period, the annual figures will be based on extrapolations. An additional 5.9 hectares of tailings pile surface area were covered in 2018.

+ At the Hattorf site we completed pilot testing for thin film coverage on an area of 0.5 hectares and will receive further information about the technical feasibility and long-term material behaviour in the future. In addition, we covered the surface of a former sludge basin spanning 4.2 hectares. A polder construction has begun at the top of the tailings pile in Hattorf. This will be continued in 2019. The engineering of further covering measures is also at the preparatory stage. We will initiate these measures in 2019, subject to approval by the regulatory authorities. They include covering the contact surface of a former kieserite tailings pile and the corresponding basins.

- + At the Neuhof site, the initial steps for covering the tailings pile with a so called innovative erosion protection have already been taken. Polder construction on the top of the tailings pile is currently at the planning stage.
- + At the same time, a pilot project has been running in Zielitz since 2013 to develop a further site-appropriate covering option, the infiltration inhibition layer.

In line with our strategy for legacy tailings piles, we have continued to cover the Friedrichshall tailings pile. The plan is to complete this, including all remaining work, by the end of 2021. At the Sigmundshall plant, sections of the tailings pile plateau and other sections of the sides of the tailings piles have been covered. The tried-and-tested site-specific covering process will be continued in the coming years.

⇒ ‘Report on Risks and Opportunities’, page 117

#### ENERGY & CLIMATE

As a resources company we operate many energy-intensive processes along the entire value chain, from extraction of the raw materials and production to transportation of the finished product.

#### ENERGY

The K+S GROUP generates most of its global energy requirements for electricity and heat in its own plants using primary energy sources. We buy any additional energy required on the market. We are continuously working on the most energy-efficient raw material extraction and factory production.

 Goal: By 2030 we aim to reduce our specific carbon footprint for all electrical energy used at our production sites by 20% (2017 data: 302.51 kg CO<sub>2</sub>/MWh). This will entail making our energy conversion even more efficient, exploiting our potential from combined heat and power (CHP) generation to a greater extent and looking into using renewable sources of energy. The target concerns our Scope 1 and 2 emissions from own-use electricity, which are generated from direct energy conversion on the one hand and indirectly sourced electricity on the other. In the 2018 financial year, our carbon footprint for electricity used was 298.1 kg CO<sub>2</sub>/MWh (2017: 302.51 kg CO<sub>2</sub>/MWh), a reduction of -1.5% compared with 2017 data. The decline is attributable to an additional CHP electricity generation in Germany and the first-time achievement of the nominal capacity utilization of our KCF facility in the second half of the year.

**ENERGY USE BY ENERGY SOURCES AND GREENHOUSE GAS EMISSIONS SCOPE 1, 2 AND 3**

TAB. 2.9

		2017	2018
<b>Direct energy sources</b>	GWh	<b>8,716.9</b>	<b>11,403.1</b>
(Scope 1)	mil-lion t CO <sub>2</sub> e	<b>1.8</b>	<b>2.4</b>
Natural gas	GWh	8,063.6	10,683.9
Coal	GWh	281.3	295.5
Diesel	GWh	343.8	406.2
Heating oil	GWh	13.8	1.3
Liquefied Petroleum Gas (LPG)	GWh	9.2	10.9
Petrol	GWh	5.2	5.3
<b>Indirect energy sources</b>	GWh	<b>2,119.6</b>	<b>2,231.8</b>
(Scope 2)	mil-lion t CO <sub>2</sub> e	<b>0.2</b>	<b>0.2</b>
Externally sourced electricity	GWh	591.6	707.8
Externally sourced steam	GWh	1,525.3	1,521.3
Externally sourced heat	GWh	2.7	2.8
<b>Total energy consumption</b>	GWh	<b>10,836.5</b>	<b>13,634.9</b>
(Scope 1 & 2)	mil-lion t CO <sub>2</sub> e	<b>2.1</b>	<b>2.6</b>
<b>Sold electricity</b>	GWh	<b>37.3</b>	<b>42.0</b>
(Scope 3)	mil-lion t CO <sub>2</sub> e		
<b>Emissions of outgoing shipments (logistics emissions)</b>		<b>0.8</b>	<b>1.0</b>

### Energy Consumption

We operate a DIN EN ISO 50001 certified energy management system in all German companies with production plants. We regularly conduct energy audits in accordance with DIN EN ISO 16247 at all other German companies. A Group-wide concept for energy management is being developed and the introduction of ISO 50001 at our sites outside Germany has begun.

Through the K+S ENERGY EFFICIENCY NETWORK (KEEN), K+S thus voluntarily contributes to the projects of the German Federal Government and German industry to establish 500 energy efficiency networks by 2020. German K+S plants and external companies are members of KEEN. The “KEEN global” group of internal experts, which was formed in 2018, will record the results of the external initiative and analyse their applicability and implementation at global level. The group will also manage measures for achieving the “Energy & Climate” sustainability objective by 2030.

□ [www.effizienznetzwerke.org/initiative/unsere-netzwerke/](http://www.effizienznetzwerke.org/initiative/unsere-netzwerke/)

As 2018 was the first year of operation for the Bethune plant in Canada and due to the commissioning of the KCF facility in 2018, total energy consumption in 2018 rose to 13,634.9 GWh (2017: 10,836.5 GWh). TAB. 2.9

### Energy Sources

The energy sources used differ depending on the location of the mines and production facilities. 85% of K+S’s steam and power generation in Germany uses the primary energy source natural gas, with the remaining 15% based on energy generated from an incineration plant. Six of our seven German potash plants have their own power stations, which operate in accordance with the combined heat and power (CHP) cogeneration system. Their efficiency level is 90%. We also operate two out of seven drying facilities using the CHP system. CHP energy conversion at the Hattorf site was expanded for the operation of the KCF facility. This measure will enable a further 15 MW of electricity from CHP to be generated, replacing the need for external electricity.

In recent years, our subsidiary MORTON SALT converted two coal-powered operating sites in the United States to natural gas as a reduced-emissions energy source. This has led to a substantial reduction in CO<sub>2</sub> emissions across the Group. In addition, we are continuing to examine the possibility of using renewable energy sources – sun and/or wind – at several production sites in North America.

Due to the use of solution mining as an extraction method at our new mine in Bethune, Canada, as well as the continuing expansion of the other underground raw material mining areas and the higher energy costs this entails, we anticipate increasing specific demand for primary energy.

### Emissions

As part of the Paris Agreement signed in 2016, the international community set itself the goal of limiting global warming to 1.5°C compared with pre-industrial levels as far as possible. How this was to be implemented was detailed further at the 2018 UN Climate Change Conference in Katowice, Poland. The aims defined in the Paris Climate Agreement are set to be implemented in Germany on the basis of the 2050 Climate Protection Plan. The aim is to reduce greenhouse gas emissions initially by 55% by 2030 compared with 1990 data with the participation of industry.

The EUROPEAN EMISSIONS TRADING SYSTEM (EU ETS) for reducing greenhouse gas emissions in energy-intensive industries entered into force back in 2005. Emissions trading aims to reduce emissions in those places where the reduction is the most efficient. The K+S GROUP currently operates 13 power stations and drying facilities in Germany that are subject to emissions trading. Their emissions are recorded in accordance with applicable EU monitoring guidelines and verified by external audit organisations. We do not anticipate any additional costs for emissions trading in the third trading period (up to 2020). The Canadian government is working on a system for the evaluation of greenhouse gas emissions in Canada.

We report all our emissions in Scope 1 and Scope 2 as well as Scope 3 for logistics emissions of our outgoing shipments in co<sub>2</sub> equivalents (co<sub>2</sub>e). These indicate the specific global warming potential of greenhouse gases compared with that for co<sub>2</sub>. In 2018, co<sub>2</sub>e emissions from the consumption of all direct and indirect energy sources (Scope 1 and 2) amounted to 2.6 million tonnes co<sub>2</sub>e (2017: 2.1 million tonnes co<sub>2</sub>e). The emission factors from the GREENHOUSE GAS PROTOCOL are used to calculate the volume of co<sub>2</sub>e.

#### **LOGISTICS EMISSIONS**

Our international logistics network ensures a smooth flow in the supply chain and transports our products to our customers all over the world on schedule and with the lowest possible environmental impact. Our global transport chains are managed holistically and regularly optimised so as to guarantee a high level of efficiency.

 Our goal is to continue to eliminate the environmental impact associated with the transportation of our products in the form of greenhouse gas emissions. By 2030, the K+S GROUP aims to reduce specific greenhouse gas emissions in logistics operations by 10%. This applies to the emissions of our outgoing shipments measured in kilogrammes of co<sub>2</sub> equivalents per tonne (tank-to-wheel).

Logistics emissions account for a significant share of our value chain emissions and make up the largest share of our Scope 3 emissions. At 1.0 million tonnes co<sub>2</sub>e, the emissions we calculate from our outgoing shipments account for approximately half of our Scope 1 and 2 emissions. The specific value per tonne in 2018 was 17.9 kg co<sub>2</sub>e/t (2017: 18.3 kg co<sub>2</sub>e/t). This represents a

decrease of –2.0% compared with 2017 data. Specific emissions were avoided by changing the logistical flow of goods. In particular, the increase in short-haul transport volumes in Europe and North America meant that a smaller amount of high-emission had to be transported long-haul, thereby reducing the average output per tonne.

By optimising our logistics network in Europe we hope to reduce emissions from logistics operations and increase the capacity utilisation of our transport vehicles. Emissions are currently calculated on the basis of DIN EN 16258. To also be able to show the impacts of new technologies in the future, for example by purchasing low-emissions logistics services, we are planning to substitute default values with real consumption data from our service providers in the long term.

#### **BUSINESS ETHICS**

K+S is a reliable partner for customers, suppliers, and the wider community. For us, it is a matter of course that our employees act with integrity and a sense of responsibility. We expect the same from our business partners. In relation to business ethics, we therefore focus on the action areas “Compliance & Anti-Corruption” and “Sustainable Supply Chains”.

▷ ‘Corporate Governance’ page 67, ‘Company profile’ page 40

#### **COMPLIANCE & ANTI-CORRUPTION**

Compliance is an integral part of our corporate culture at K+S. The applicable legal regulations, our internal regulations and the regulatory standards recognised by the company, and for example our commitment to the UN GLOBAL COMPACT, form the basis for our compliance management system.

Every employee is made familiar with our core values and principles (CODE OF CONDUCT) as well as with the internal regulations derived from these. Target group-specific training sessions for employees are held on specific issues (for example, anti-trust law, anti-corruption measures, money laundering and the financing of terrorism, use of social media, data protection, environmental protection, occupational safety).

▷ ‘Compliance management’, page 77

 Goal: k+s is pursuing a zero tolerance policy for corruption and bribery as well as anti-competitive practices to avoid the risks of liability, culpability, loss of reputation as well as financial disadvantages. We have enshrined the principles of our compliance management system in our sustainability goals and defined a key performance indicator for measuring target achievement: all employees are reached by communication measures and appropriately trained in compliance matters. The figure for 2018 is 71% with communication at a value of 100% and trainings at 42% (2017: 59% with 100% communication and 18% trainings). The increase can be attributed to a higher number of training courses given in 2018. We aim to reach 100% fulfilment of this indicator by the end of 2019.

In 2018, we notified employees of compliance measures at regional and global level through a variety of communication channels. In accordance with our strategy of continuing k+s's development as "One Company", the existing communication and training measures will be expanded further. In 2018, we focused mainly on establishing contemporary systems, holding training seminars for specific target groups and reporting any breaches of compliance.

We plan to intensify our compliance training for employees in 2019. For example, we will make a basic compliance training available to all employees. Further compliance training courses will be developed in 2019 and included in the training plan.

All employees can seek information or personal advice on compliance-related matters from the compliance officers. External ombudspersons can be contacted through hotlines. Employees and third parties can report compliance breaches to them, anonymously if desired. Their contact details are available on the k+s website and in the portal (intranet) or on notice boards. It goes without saying that whistleblowers need not fear any disadvantages as a result of submitting a report (non-retaliation).

#### **EXTRACTIVE INDUSTRIES TRANSPARENCY INITIATIVE (EITI)**

We are participating in the EXTRACTIVE INDUSTRIES TRANSPARENCY INITIATIVE, which aims to combat corruption. k+s is an active member of the multi-stakeholder group of D-EITI.

-  [www.d-eiti.de/en/](http://www.d-eiti.de/en/);
-  [www.rohstofftransparenz.de/en/](http://www.rohstofftransparenz.de/en/)

#### **DONATIONS AND SPONSORSHIP**

We provide funding for selected projects in the areas of education, social affairs and culture. The Board of Executive Directors has defined uniform terms and conditions for donations and sponsorship. k+s does not make any contributions to political parties, including their related organisations or persons. Donations totalling €1.9 million were made to benefit scientific and charitable causes in 2018 (2017: nearly €2.4 million).

-  [www.k-plus-s.com/community](http://www.k-plus-s.com/community)

#### **SUSTAINABLE SUPPLY CHAINS**

k+s calls for fair, sustainable business practices in supply chains and has formulated corresponding expectations and requirements in the k+s GROUP Supplier CODE OF CONDUCT (Code). The Code requires suppliers to commit to and comply with our values. It is based on international standards such as the principles of the UN GLOBAL COMPACT, the General Declaration on Human Rights, the ILO core labour standards and the OECD Guidelines for Multinational Enterprises. It covers human and labour rights, health and safety, environmental considerations and responsible business.

-  [www.k-plus-s.com/suppliercodeofconduct](http://www.k-plus-s.com/suppliercodeofconduct)

 Goal: By 2025, the Code is expected to cover more than 90% of our purchasing volume. Another goal is that all of our "critical suppliers", in other words suppliers with a high sustainability risk, commit to the Code by 2025.

We began rolling out the Code worldwide in 2018. It already covers 29.4% of our purchasing volume. 14.7% of our "critical" suppliers have committed to the Supplier Code of Conduct. The "critical" suppliers are determined annually. The Corruption Perceptions Index (CPI) and the environmental friendliness of the main products or services delivered by the supplier are taken into account, among other things. Clear processes and responsibilities are defined in the event that a breach of the Supplier Code of Conduct becomes known.

The Code will be sent out to more suppliers in 2019. In the two years that follow, there are plans to develop a monitoring system to oversee suppliers' compliance with the principles of the Code. A supplier development process will be introduced for the event of any deviations.

## DECLARATION ON CORPORATE GOVERNANCE<sup>1</sup>

In accordance with Sections 289f and 315d of the HGB, the Board of Executive Directors issues the following declaration on corporate governance; with which the Board of Executive Directors and the Supervisory Board simultaneously report in accordance with number 3.10 of the German Corporate Governance Code.

Our goal is responsible management and monitoring of the Company that is geared towards sustainable value creation. This principle forms the basis of our internal decision-making and control processes.

### GOVERNING BODIES

The governing bodies of the Company are the Annual General Meeting, the Supervisory Board and the Board of Executive Directors. The powers vested in these bodies and their duties and responsibilities are governed by the Aktiengesetz (AktG – German Stock Corporation Act), the Mitbestimmungsgesetz (MitbestG – German Co-Determination Act), the Articles of Association and the bylaws of the Board of Executive Directors and the Supervisory Board.

### ANNUAL GENERAL MEETING

The shareholders assert their rights at the Annual General Meeting and decide on fundamental matters affecting the Company by exercising their voting rights. Each share carries one vote (one share, one vote principle). All documents that are important in terms of decision-making are also made available to shareholders on our website. The Annual General Meeting is also streamed live online until the end of the speech by the Chairman of the Board of Executive Directors. Shareholders may exercise their voting rights through a proxy whom they have appointed and issued voting instructions, or may cast a postal vote. Voting is also possible via an electronic system. Shortly after the end of the Annual General Meeting, we also publish details of attendance and the results of the voting online.

[www.k-plus-s.com/agm](http://www.k-plus-s.com/agm)

### SUPERVISORY BOARD

In accordance with Article 8 (1) sentence 1 of the Articles of Association, the composition of the Supervisory Board is governed by mandatory statutory regulations. It currently has 16 members and is subject to co-determination in accordance with the German Co-Determination Act (MitbestG). This therefore means that half of the Supervisory Board members are elected as representatives of the shareholders by the Annual General Meeting and half as employee representatives by the employees of the K+S GROUP in Germany. Each member is elected for a term of around five years.

[www.k-plus-s.com/corporategovernance](http://www.k-plus-s.com/corporategovernance)

The Supervisory Board oversees and advises the Board of Executive Directors in connection with the conduct of business activities. It is promptly and appropriately involved in any decisions of fundamental importance. The Board of Executive Directors informs the Supervisory Board regularly, promptly and comprehensively about corporate strategy, planning, the course of business, earnings, the financial and asset position, the employment situation and about specific corporate opportunities and risks. The Supervisory Board regularly receives written reports from the Board of Executive Directors in order to prepare for meetings. After thorough review and discussion, the Supervisory Board adopts resolutions on proposals made by the Board of Executive Directors and on other matters where required. In the case of particular business transactions that are of great importance to the Company, the Supervisory Board is also provided with immediate and comprehensive information by the Board of Executive Directors between routine meetings. The Supervisory Board regularly carries out an efficiency review in the form of a questionnaire in order to obtain pointers for the future work of the Supervisory Board and its committees.

[‘Supervisory Board Report’, page 18](#)

<sup>1</sup> In accordance with Section 317 (2) sentence 6 of the HGB, the information contained in the Declaration on Corporate Governance pursuant to Section 289f and Section 315d of the HGB is not within the scope of the audit.

The Supervisory Board has adopted bylaws and formed five committees from among its members:

- + The **Mediation Committee** performs the tasks set out in Section 31 (3) sentence 1 of the MitbestG. The Chairman of the Supervisory Board is also the chairman of this committee. Of the four members of this committee, two members are shareholder representatives, and two are employee representatives.
- + The **Strategy Committee** is responsible for advising the Board of Executive Directors on the strategic direction of the Company including strategic reviews and reporting thereof to the Supervisory Board. In addition, the Strategy Committee prepares resolutions of the Supervisory Board that require approval concerning acquisitions, divestments, investments, organisational changes or restructuring. Further, it advises the Board of Executive Directors on corporate strategy matters and on projects of a strategic nature. The Strategy Committee consists of three members: the Chairman of the Supervisory Board serving as Chairman of the Committee, one shareholder representative and one employee representative.
- + The **Audit Committee** performs the tasks set out in the AktG and the German Corporate Governance Code. In particular, it is involved in monitoring the accounting process, the effectiveness of the internal control system, the risk and opportunity management system, the internal audit system and compliance, the issuing of mandates to the company auditors as well as the audit of the financial statements. It also discusses the half-yearly financial report and quarterly reports with the Board of Executive Directors prior to publication. The Chairman of the Audit Committee, Mr Kölbl (independent financial expert), has comprehensive knowledge and experience in applying accounting principles and internal control procedures. He garnered this knowledge from his experience as CFO of Südzucker AG. The Audit Committee has six members; three are shareholder representatives, and three are employee representatives.
- + The **Personnel Committee** is responsible for preparing the appointment of members of the Board of Executive Directors, including long-term succession planning. The committee submits proposals for resolutions to the plenary meeting of the Supervisory Board concerning the determination of total remuneration for the Executive Board and the Supervisory Board members as well as on resolving contractual matters for the individual members of the Board of Executive Directors. The Chairman of the Supervisory Board is also the chairman of this committee. The Personnel Committee has four

members; two are shareholder representatives, and two are employee representatives.

- + The **Nomination Committee** proposes suitable candidates to the Supervisory Board for its recommendations to the Annual General Meeting. The Chairman of the Supervisory Board is also the chairman of this committee. The committee has four members, all of whom represent the shareholders.

□ [www.k-plus-s.com/corporategovernance](http://www.k-plus-s.com/corporategovernance)

In accordance with the German Act on Equal Participation of Women and Men in Leadership Positions, the minimum percentage of women and men on the Supervisory Board is 30% for each gender. Two female shareholder representatives and two female employee representatives currently have a seat on the Supervisory Board.

#### COMPETENCE PROFILE AND DIVERSITY

When appointing members to the Supervisory Board, the aim is to ensure that there is a range of competencies and member diversity on the Supervisory Board necessary for the proper performance of the Supervisory Board tasks.

The Company complies with the recommendation under number 5.4.1 of the German Corporate Governance Code for the Supervisory Board to set concrete targets for its composition. It should be noted in this regard that the Supervisory Board does not itself decide on its own composition and can therefore only work to achieve the targets it pursues by suggesting appropriate candidates for proposal to the Annual General Meeting. The Annual General Meeting is not obliged to follow these candidate proposals. As a corporate body, the Supervisory Board is not entitled to influence proposals for the nomination of employee representatives.

In 2017, the Nomination Committee conducted a competence analysis of the Supervisory Board under the professional guidance of a remuneration expert. As part of this analysis, all shareholder representatives were consulted about the target and actual competence profile. In its November meeting, the Supervisory Board discussed in detail the competence profile of the shareholder representatives and is convinced that the performance of the body as a whole depends essentially on diversity in the mix of experts, qualifications, integrity and independence. The culture should be characterized by professionalism and appreciation. Against this

background, the requirements profile includes in particular the following aspects:

- + The members should have knowledge of the industry, product segments, production and relevant technologies.
- + Knowledge of international markets and markets relevant for K+S should be available.
- + Experience in the strategic management of a company is an essential requirement.
- + A reasonable number of members should have financial literacy, in particular in the areas of accounting and auditing.
- + At least one independent financial expert must have a seat on the Supervisory Board.
- + Knowledge in the areas of law, compliance, HR including co-determination as well as restructuring and crisis management should be available to the appropriate extent.

Efforts are also made to ensure that at least half of the shareholder representatives on the Supervisory Board are independent. This assumes in particular that the persons concerned do not hold a governing or advisory position with significant customers, suppliers, lenders, other business partners or main competitors, or have any other significant business or personal relationship with the Company or its Board of Executive Directors. Potential conflicts of interest on the part of persons proposed for election to the Supervisory Board should be prevented, wherever possible.

The Supervisory Board believes that the aforementioned objectives are fulfilled with its current composition.

**MEMBERS OF THE SUPERVISORY BOARD IN THE 2018 FINANCIAL YEAR (INFORMATION ON OTHER SUPERVISORY BOARD APPOINTMENTS AND SUPERVISORY BOARD BODIES AS AT 31 DECEMBER 2018)**

**Dr rer. nat. Andreas Kreimeyer (born in 1955), Degree in Biology,  
Chairman of the Supervisory Board**

**Shareholder representative**

Entrepreneur (former member of the Board of Executive Directors and Research Spokesperson at BASF SE, Ludwigshafen)

In office until the end of the  
2020 Annual General Meeting  
First appointed: 12 May 2015

Other supervisory board appointments:

- + Karlsruhe Institute of Technology (KIT), Karlsruhe  
(Vice-Chairman of the Supervisory Board)

Other supervisory bodies:

- + C.H. Boehringer Sohn AG & Co. KG, Ingelheim  
(Member of the Advisory Council)

**Ralf Becker (born in 1965), Trade Union Secretary**

**Vice-Chairman**

**Employee representative**

Regional Manager North of the Mining, Chemicals and Energy Trade Union, Hanover

In office until the end of the  
2023 Annual General Meeting  
First appointed: 1 August 2009

Other supervisory board appointments:

- + Continental Reifen Deutschland GmbH, Hanover  
(Vice-Chairman)
- + Deutsche Shell Holding GmbH, Hamburg
- + Deutsche Shell GmbH, Hamburg
- + Shell Deutschland Oil GmbH, Hamburg

**Petra Adolph (born in 1964), Master of Political Science and Literature**

**Employee representative**

Board Secretary (participation/social policies),  
Mining, Chemicals and Energy Trade Union, Hanover

In office until the end of the  
2023 Annual General Meeting  
First appointed: 15 May 2018

Other supervisory board appointments:  
+ CEWE Stiftung & Co. KGaA, Oldenburg

**André Bahn (born in 1968), Electrician**

**Employee representative**

Vice-Chairman of the General Works Council  
of the K+S GROUP  
Chairman of the Works Council of the Werra plant, K+S KALI  
GMBH, Kassel

In office until the end of the  
2023 Annual General Meeting  
First appointed: 15 May 2018

**Jella Benner-Heinacher (born in 1960), Lawyer**

**Shareholder representative**

Deputy General Manager of the Deutsche Schutzvereinigung  
für Wertpapierbesitz e.V. (German association for private investors), Düsseldorf

In office until the end of the  
2023 Annual General Meeting  
First appointed: 7 May 2003

Other supervisory bodies:

+ A.S. Créditation Tapeten AG, Gummersbach (Vice-Chairman)

**Peter Bleckmann (born in 1962), Trained Motorcar Mechanic**

**Employee representative**

Vice-Chairman of the General Works Council  
of the K+S GROUP  
Chairman of the Works Council of the Borth plant,  
ESCO – EUROPEAN SALT COMPANY GMBH & CO. KG, Hanover

In office until the end of the  
2023 Annual General Meeting  
First appointed: 15 May 2018

**Philip Freiherr von dem Bussche (born in 1950), Degree in Business Administration**

**Shareholder representative**

Entrepreneur/Farmer

In office until the end of the 2020 Annual General Meeting  
First appointed: 12 May 2015

Other supervisory bodies:

- + Bernard Krone Holding SE & Co. KG, Spelle  
(Chairman of the Supervisory Board)
- + DF World of Spices GmbH, Dissen  
(Member of the Advisory Board)
- + Grimme GmbH & Co. KG, Damme  
(Chairman of the Advisory Board)
- + Pfeifer und Langen IHKG, Cologne (Member of the Shareholders' Committee) (until 31 December 2018)
- + DLG e.V. Frankfurt am Main (Chairman of the Supervisory Board) (until 22 February 2018)

**George Cardona (born 1951), Economist**

**Shareholder representative**

Economist

In office until the end of the 2020 Annual General Meeting  
First appointed: 9 October 2009

Other supervisory bodies:

- + Board of Banque Havilland (Monaco) S.A.M., Monaco  
(Director, since 18 September 2018)

**Dr Elke Eller (born in 1962), Degree in Economics and Business Management**

**Shareholder representative**

Member of the Board of Executive Directors of  
TUI Aktiengesellschaft, Hanover

In office until the end of the 2023 Annual General Meeting  
First appointed: 15 May 2018

Other supervisory board appointments:

- Group companies of the TUI Group
- + TUI Deutschland GmbH, Hanover
  - + Tuifly GmbH, Langenhagen

Other supervisory bodies:

- Group companies of the TUI Group
- + TUI Belgium N.V., Oostende
  - + TUI Nederland N.V., Rijswijk

**Gerd Grimmig (born in 1953), Degree in Mining Engineering****Shareholder representative**

Retired (former member of the Board of Executive Directors of  
K+S AKTIENGESELLSCHAFT, Kassel)

In office until the end of the  
2023 Annual General Meeting  
First appointed: 15 May 2018

**Axel Hartmann (born 1958), Training in Retail Sales****Employee representative**

Chairman of the General Works Council of the k+s GROUP  
Chairman of the Works Council of the Neuhof-Ellers plant,  
K+S KALI GMBH, Kassel

In office until the end of the  
2023 Annual General Meeting  
First appointed: 14 May 2013

**Michael Knackmuß (born in 1975), Car Mechanic****Employee representative**

Chairman of the Works Council of the Zielitz plant, K+S KALI GMBH,  
Kassel

In office until the end of the  
2023 Annual General Meeting  
First appointed: 11 July 2014

**Thomas Kölbl (born in 1962), Degree in Business Administration****Shareholder representative**

Chief Financial Officer of Südzucker AG, Mannheim

In office until the end of the  
2022 Annual General Meeting  
First appointed: 10 May 2017

Other supervisory board appointments:

Group companies of Südzucker Group  
+ CropEnergies AG, Mannheim (Vice Chairman)

Other supervisory bodies:

Group companies of Südzucker Group  
+ AGRANA Stärke GmbH, Vienna/Austria  
(Member of the Supervisory Board)  
+ AGRANA Zucker GmbH, Vienna/Austria  
(Member of the Supervisory Board)  
+ ED&F MAN Holdings Limited, London/United Kingdom  
(Member of the Board of Directors (non-executive))

+ Freiberger Holding GmbH, Berlin (Member of the  
Supervisory Board)

+ PortionPack Europe Holding B.V., Oud-Beijerland/  
Netherlands (Chairman of the Supervisory Board)

+ Raffinerie Tirlemontoise S.A., Brussels/Belgium  
(Member of the Conseil d'Administration)

+ Saint Louis Sucre S.A.S., Paris/France  
(Member of the Comité de Supervision)

+ Südzucker Polska S.A., Wrocław/Poland  
(Member of the Supervisory Board)

+ Südzucker Versicherungs-Vermittlungs-GmbH,  
Mannheim (Chairman of the Advisory Board)

**Gerd Kübler (born in 1967), Degree in Engineering****Employee representative**

Head of Mining, K+S AKTIENGESELLSCHAFT, Kassel

In office until the end of the 2023 Annual General Meeting  
First appointed: 1 January 2016

**Nevin McDougall (born in 1967), Master of Agriculture  
(Agriculture Economics & Business)****Shareholder representative**

President & Chief Commercial Officer, A&L Canada  
Laboratories Inc., London, Canada

In office until the end of the  
2023 Annual General Meeting  
First appointed: 15 May 2018

Other supervisory bodies:

+ Board Member of the BioEnterprise Corporation  
(non-profit Canadian company)

**Anke Roehr (born in 1964), Industrial Clerk****Employee representative**

Chairman of the Works Council of ESCO – EUROPEAN SALT  
COMPANY GMBH & co, Hanover  
Employee in sales and distribution of ESCO – EUROPEAN SALT  
COMPANY GMBH & co, Hanover

In office until the end of the  
2023 Annual General Meeting  
First appointed: 1 April 2016

□ [www.k-plus-s.com/supervisoryboard](http://www.k-plus-s.com/supervisoryboard)

**MEMBERS WHO LEFT OFFICE IN 2018:****Wesley Clark (born in 1952), Master of Business****Administration****Shareholder representative**

Operating Partner of Advent International Private Equity Group,  
Boston, Massachusetts, USA

Appointment ended at the end of the

2018 Annual General Meeting

First appointed: 14 May 2013

Other supervisory bodies:

- + Board of Directors of Patriot Supply Holdings, Inc., Fort Worth, Texas, USA (Non-Executive Chairman) (until 2 July 2018)
- + Board of Directors of ABC Supply Corporation, Beloit, Wisconsin, USA
- + Board of Directors of Distribution international, Inc., Fort Worth, Texas, USA (Non-Executive Chairman)

**Harald Döll (born in 1964), Power Plant Electronics Technician****Employee representative**

(Former Chairman of the General Works Council of the K+S GROUP and

Chairman of the Works Council of the Werra plant, K+S KALI GMBH, Kassel)

Appointment ended at the end of the

2018 Annual General Meeting

First appointed: 1 August 2009

**Dieter Kuhn (born in 1958), Mining Mechanic****Employee representative**

Retired (former First Vice-Chairman

of the General Works Council of the K+S GROUP and

Chairman of the Works Council of the Bernburg plant,  
ESCO – EUROPEAN SALT COMPANY GMBH & CO. KG, Hanover)

Appointment ended 28 February 2018

First appointed: 7 May 2003

**Dr Annette Messemer (born in 1964), Political Scientist****Shareholder representative**

Divisional Director of Commerzbank AG

Appointment ended at the end of the

2018 Annual General Meeting

First appointed: 14 May 2013

Other supervisory bodies:

- + Board of Directors of Essilor International S.A., Charenton-le-Pont, France

**Dr Eckart Sünder (born in 1944), Lawyer****Shareholder representative**

Independent solicitor at Neustadt an der Weinstraße

Appointment ended at the end of the

2018 Annual General Meeting

First appointed: 28 April 1992

Other supervisory board appointments:

- + Infineon Technologies AG, Neubiberg (Chairman since 22 February 2018)

**Michael Vassiliadis (born in 1964),****Chemical Laboratory Technician,****Vice Chairman****Employee representative**

Chairman of the Mining, Chemicals and Energy Trade Union, Hanover

Appointment ended at the end of the

2018 Annual General Meeting

First appointed: 7 May 2003

Other supervisory board appointments:

- + BASF SE, Ludwigshafen
- + STEAG GmbH, Essen
- + RAG Aktiengesellschaft, Essen (Vice-Chairman)
- + RAG DSK AG, Essen (Vice-Chairman)
- + RAG Stiftung, Essen
- + Henkel AG & Co. KGaA, Düsseldorf (since 9 March 2018)

## SUPERVISORY BOARD COMMITTEES

### MEDIATION COMMITTEE

- + Dr Andreas Kreimeyer (Chairman)
- + Ralf Becker (since 15 May 2018)
- + Axel Hartmann (since 15 May 2018)
- + Thomas Kölbl (since 15 May 2018)
- + Harald Döll (until 15 May 2018)
- + Dr Eckart Sünner (until 15 May 2018)
- + Michael Vassiliadis (until 15 May 2018)

### STRATEGY COMMITTEE

- + Dr Andreas Kreimeyer (Chairman)
- + Ralf Becker (since 15 May 2018)
- + Philip Freiherr von dem Bussche
- + Michael Vassiliadis (until 15 May 2018)

### AUDIT COMMITTEE

- + Thomas Kölbl (Chairman, since 15 May 2018)
- + Petra Adolph (since 15 May 2018)
- + Ralf Becker
- + Jella Benner-Heinacher (since 15 May 2018)
- + Axel Hartmann
- + Dr Andreas Kreimeyer (since 15 May 2018)
- + Dr Eckart Sünner (Chairman, until 15 May 2018)
- + Dr Annette Messemer (until 15 May 2018)
- + Michael Vassiliadis (until 15 May 2018)

### PERSONNEL COMMITTEE

- + Dr Andreas Kreimeyer (Chairman)
- + Ralf Becker (since 15 May 2018)
- + Dr Elke Eller (since 15 May 2018)
- + Michael Knackmuß (since 15 May 2018)
- + Jella Benner-Heinacher (until 15 May 2018)
- + Harald Döll (until 15 May 2018)
- + Michael Vassiliadis (until 15 May 2018)

### NOMINATION COMMITTEE

- + Dr Andreas Kreimeyer (Chairman)
- + Jella Benner-Heinacher
- + Philip Freiherr von dem Bussche
- + George Cardona

## THE BOARD OF EXECUTIVE DIRECTORS

The Board of Executive Directors manages the Company under its own responsibility in accordance with the law, the Articles of Association and its bylaws, taking into account the resolutions adopted by the Annual General Meeting. The Board of Executive Directors represents the Company in its dealings with third parties.

The bylaws of the Board of Executive Directors govern the cooperation between its members and the allocation of business responsibilities as well as mutual representation. Matters that concern other areas of responsibility or deviate from usual day-to-day business have to be agreed with the other members of the Board of Executive Directors. Where possible, such matters should be discussed at the regular meetings of the Board of Executive Directors that are held at two or three weekly intervals and measures decided there, where necessary; a resolution must always be brought about on important business matters and measures.

 [www.k-plus-s.com/corporategovernance](http://www.k-plus-s.com/corporategovernance)

### COMPOSITION OF THE BOARD OF EXECUTIVE DIRECTORS, REQUIREMENTS PROFILE AND DIVERSITY

In accordance with Article 5 (1) of the Articles of Association, the Board of Executive Directors has at least two members. The exact number of members is determined by the Supervisory Board. Up until the retirement of Dr Nöcker on 31 August 2018, the Board of Executive Directors had four male members. From 1 September until 31 December 2018, the Board of Executive Directors consisted of three male members.

Criteria for the appointment of Executive Board members are the professional suitability for the management of the respective division, proven achievements on the previous career path as well as pronounced leadership competence. In addition, the Supervisory Board is of the opinion that diversity is also important for the Board of Executive Directors. Thus, the Board should consist of people who complement each other in terms of professional and life experience and are of different ages. In addition, at least one board member should have strong international experience.

With regard to the German Act on Equal Participation of Women and Men in Leadership Positions, the target quota of 0% defined by the Supervisory Board of K+S AKTIENGESELLSCHAFT until 31 December 2020 was met during the reporting period.

## **MEMBERS OF THE BOARD OF EXECUTIVE DIRECTORS**

(Information on responsibilities and appointments as of 31 December 2018, unless otherwise stated)

### **Dr Burkhard Lohr (born in 1963), Degree in Business Administration, Chairman, Personnel Director**

- 
- + Communications & Brands
  - + Corporate Board Office
  - + Corporate Secretary
  - + Environmental & Regulatory Affairs
  - + Health, Safety, Management Systems & Sustainability
  - + Human Resources
  - + Internal Auditing
  - + Investor Relations
  - + Legal & GRC
  - + Strategy & Development

In office until 31 May 2020

First appointed: 1 June 2012

Supervisory board appointments:

- + K+S KALI GMBH (Chairman), Kassel<sup>1</sup>
- 

### **Thorsten Boeckers (born in 1975), Banker Chief Financial Officer**

- 
- + Controlling
  - + Finance & Accounting
  - + Insurance
  - + IT
  - + Procurement
  - + Tax
  - + Units of the CFO of the operating units Americas and Europe+ and for all direct shareholdings of the Company unless assigned to another area of responsibility

In office until 11 May 2020

First appointed: 12 May 2017

Supervisory board appointments:

- + K+S KALI GMBH, Kassel<sup>1</sup>
- 

### **Mark Roberts (born in 1963), Bachelor of Science (marketing)**

- 
- + Operating unit Americas
  - + Operating unit Europe+
  - + Global Marketing, Commercial and Supply Chain Excellence including the Agriculture, Consumers, Industry, Communities and Supply Chain Management Excellence sub-units
  - + Operations Excellence with the Technical Services sub-unit

In office until 30 September 2020

First appointed: 1 October 2012

- 
- [www.k-plus-s.com/executivedirectors](http://www.k-plus-s.com/executivedirectors);
  - [www.k-plus-s.com/corporategovernance](http://www.k-plus-s.com/corporategovernance)

## **MEMBERS WHO LEFT OFFICE IN 2018:**

### **Dr Thomas Nöcker (born in 1958), Lawyer, Personnel Director**

- 
- + Corporate HR
  - + Corporate IT
  - + Corporate Health, Safety & Environment
  - + Business Centre and sub-units:
    - Communication Services
    - Financial Accounting
    - Insurance
    - IT Services
    - Logistics Europe
    - Procurement/Material Management Europe
    - Project Management
    - Real Estate & Facility Management
  - + K+S TRANSPORT GMBH
  - + K+S VERSICHERUNGSVERMITTLUNGS GMBH
  - + WOHNBAU SALZDETFLURTH GMBH

Appointment ended 31 August 2018

First appointed: 1 August 2003

Supervisory board appointments:

- + K+S KALI GMBH, Kassel<sup>1</sup> (until 14 May 2018)
- 

<sup>1</sup> Group appointment.

### **COOPERATION BETWEEN THE BOARD OF EXECUTIVE DIRECTORS AND THE SUPERVISORY BOARD**

The Supervisory Board is kept informed by the Board of Executive Directors, at regular intervals in a timely and comprehensive manner, regarding any issues that are relevant to the Company as a whole and that concern corporate strategy, planning, the course of business and the earnings, financial and asset position as well as about any particular business risks and opportunities. Moreover, the Chairman of the Supervisory Board is in close contact with the Chairman of the Board of Executive Directors with regard to all relevant topics. Important business transactions and measures require the consent of the Supervisory Board; more information on this can be found in Section 12 of the Supervisory Board bylaws.

□ [www.k-plus-s.com/articlesofassociation](http://www.k-plus-s.com/articlesofassociation)

### **CONFLICTS OF INTEREST**

No conflicts of interest involving members of the Board of Executive Directors or the Supervisory Board, about which the Annual General Meeting needed to be informed, were disclosed to the Supervisory Board during the reporting period.

### **DIRECTORS AND OFFICERS (D&O) INSURANCE**

We have taken out D&O insurance in case a claim for compensation based on statutory third-party liability provisions is made against members of the Board of Executive Directors or the Supervisory Board on account of a breach of duty committed in the performance of their duties. The excess is 10% of the respective claim up to a maximum of 1.5 times the fixed annual remuneration. The D&O insurance also applies to managers.

### **SHARE TRANSACTIONS BY MEMBERS OF THE SUPERVISORY BOARD AND THE BOARD OF EXECUTIVE DIRECTORS**

In accordance with Article 19 of the Market Abuse Regulation, members of the Company's Board of Executive Directors and the Supervisory Board must disclose the purchase and disposals of Company shares.

The directors' dealings for the Supervisory Board and the Board of Executive Directors in 2018 were disclosed as follows: TAB. 2.10

□ [www.k-plus-s.com/directorsdealings](http://www.k-plus-s.com/directorsdealings)

### **DIRECTORS' DEALINGS OF THE MEMBERS OF THE SUPERVISORY BOARD AND THE BOARD OF EXECUTIVE DIRECTORS**

TAB. 2.10

	Date	Transaction	ISIN	Volume
Dr Andreas Kreimeyer	18/07/2018	Bond purchase	XS1854830889	€99,880.00
Dr Susanne Nöcker/Dr Thomas Nöcker	13/07/2018	Bond purchase	XS1591416679	€10,133.50
Dr Thomas Nöcker	13/07/2018	Bond purchase	XS1854830889	€20,000.00
Dr Burkhard Lohr	13/07/2018	Bond purchase	XS1854830889	€200,000.00
Thorsten Boeckers	15/03/2018	Share purchase	DE000KSAG888	€24,465.00
Dr Burkhard Lohr	15/03/2018	Share purchase	DE000KSAG888	€141,120.00
Dr Thomas Nöcker	15/03/2018	Share purchase	DE000KSAG888	€22,671.04
Dr Thomas Nöcker	15/03/2018	Share purchase	DE000KSAG888	€106,860.72
Dr Thomas Nöcker	15/03/2018	Share purchase	DE000KSAG888	€5,793.07
Dr Thomas Nöcker	15/03/2018	Share purchase	DE000KSAG888	€6,598.35
Mark Roberts	15/03/2018	ADR purchase	US48265W1080	\$ 36,525.00

On 31 December 2018, the members of the Board of Executive Directors and the Supervisory Board collectively held less than 1% of the shares of K+S AKTIENGESELLSCHAFT and related financial instruments.

#### **TARGET FIGURES FOR THE FIRST AND SECOND LEVELS OF MANAGEMENT BELOW THE BOARD OF EXECUTIVE DIRECTORS**

In accordance with the German Act on Equal Participation of Women and Men in Leadership Positions, we have set target quotas for the percentage of women at management levels below the Board of Executive Directors of K+S AKTIENGESELLSCHAFT until 31 December 2021. Although we were able to increase the share of women in the first management level below the Board of Executive Directors by more than two percentage points, the target of 13% could not yet be achieved as of 31 December 2018. Due to fluctuation and a slight increase in the total number of management positions at this management level, the proportion of women as of the reporting date was around 8% (2017: 6%). A favourable result was achieved by exceeding the target quota of 11% in the second management level below the Board of Executive Directors with almost 22% as of 31 December 2018 (2017: 19%).

#### **CORPORATE GOVERNANCE/DECLARATION OF CONFORMITY**

Over and above the legal obligations, we have defined our own core values and principles in our **CODE OF CONDUCT**, which forms a compulsory framework for our conduct and decisions and provides orientation for our corporate actions.

#### **CORE VALUES AND PRINCIPLES (CODE OF CONDUCT)**

The high degree of entrepreneurial expertise the K+S GROUP shows in its business units is recognised by business partners and other stakeholders alike. It is vital that we continuously develop this reputation. In order to do this we rely on the integrity and responsibility of each individual employee.

#### **Sustainability**

We know that a sustainable successful economy is based not only on rules and laws, but also requires people's basic trust. In order to achieve our principal goal, which is sustainable economic success, we also consider the connected ecological and social aspects of our activities.

We act upon opportunities which arise while handling risks with care.

#### **Integrity**

We observe and support compliance with internationally recognised human rights and act in accordance with the laws of the countries in which we operate. We reject any form of forced and child labour.

We respect free competition. We do not tolerate any form of corruption. We avoid conflicts of interest and protect company property against any misuse. We respect trade union freedom of association and the right to engage in collective wage bargaining.

#### **Respect, Fairness, and Trust**

We treat our business partners, employees, and other stakeholders with respect and fairness. Providing an environment of equal opportunities and rejecting of any kind of discrimination is a matter of course for us. We create a workplace atmosphere that facilitates the open exchange of ideas and an approach to dealing with one another characterised by confidence.

#### **Competence and Creativity**

We take actions to maintain and increase specialist competencies, commitment and motivation of our employees. We encourage our employees to contribute their creativity to the success of the company. We reward our employees in line with the market and in relation to performance on the basis of salary structures which are oriented towards economic success.

As a global company, we recognise that intercultural competence is an important factor of our continued success. We develop intercultural competences in a targeted way.

#### **Transparency**

We provide our employees, shareholders, the capital market, the media and other stakeholders with comprehensive, truthful and intelligible information.

Other important regulations applicable across the Group are our "Management within the K+S GROUP", "Organisation within the K+S GROUP" and "Corporate Governance and Monitoring in the K+S GROUP" guidelines.

Each organisational unit of the K+S GROUP is obliged, in compliance with the regulations of higher-level units, to issue the required illustrative regulations for its area of responsibility to ensure proper governance and monitoring.

The content of (overall) works agreements and regulatory standards (i.e. rules and standards of third parties, which the K+S GROUP or parts of it have undertaken to comply with and implement) have the same importance as internal regulations; this applies inter alia to the German Corporate Governance Code unless the Board of Executive Directors and the Supervisory Board have jointly agreed on deviations from its recommendations.

In December 2018, the Company's Board of Executive Directors and the Supervisory Board made the following joint declaration in accordance with Section 161 of the AktG:

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**"We declare that the recommendations of the Government Commission of the German Corporate Governance Code, published by the German Ministry of Justice in the official section of the German Federal Gazette, were complied with in 2018 and will be complied with in 2019 as follows:**

**In the period from 1 January 2018 to 14 March 2018, with the exception of the recommendations in number 5.1.2 (2) sentence 3 (stipulation of an age limit for the members of the Board of Executive Directors) and number 5.4.1 (2) sentence 2 (stipulation of an age limit for Supervisory Board members as well as a regular limit for the term of office on the Supervisory Board)**

and

as of 14 March 2018 to the full extent.

**On 14 March 2018, we resolved to introduce age limits for members of the Board of Executive Directors and the Supervisory Board as well as a regular limit for the term of office on the Supervisory Board. We previously did not believe that it is necessary or appropriate to stipulate age limits for the members of the Board of Executive Directors and the Supervisory Board or regular limits for the term of office on the Supervisory Board, as the ability to carry out the work of the respective corporate body does not necessarily end upon reaching a certain age or a certain length of service, but depends solely on the respective individual capabilities. We have now aligned ourselves with a general trend by introducing age limits for the members of the Board of Executive Directors and the Supervisory Board as well as a regular limit for the term of office on the Supervisory Board.**

**Kassel, December 2018"**

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## COMPLIANCE MANAGEMENT

Our Group-wide compliance management system creates the prerequisites for ensuring awareness across the Group of applicable legislation as well as our internal regulations and other regulations of equal importance, and that compliance with these can be monitored. We want not only to avoid the risks of liability, culpability and fines as well as other financial disadvantages for the Company, but also to ensure a positive reputation for the Company, its corporate bodies and employees in the public eye. We regard it as a matter of course that breaches of compliance are pursued and penalties inflicted.

- ◊ 'Non-financial statement', page 65
- [www.k-plus-s.com/corporategovernance](http://www.k-plus-s.com/corporategovernance)

The risk of compliance violations including corruption risk is taken into account in the risk management process at K+S. Compliance risks can also be identified through the regular review of compliance issues carried out by Internal Audit.

- ◊ 'Report on Risks and Opportunities', page 121

The Board of Executive Directors has entrusted the head of the "Legal & GRC" unit with the role of Chief Compliance Officer (CCO) and the task of ensuring that an effective and lawful compliance management system is in place in the K+S GROUP. The Chief Compliance Officer reports directly to the Chairman of the Board of Executive Directors and heads up the Global Compliance Committee on which the compliance officers of each operating unit and the heads of central Company functions that are relevant in terms of compliance have a seat (for example, Internal Audit, Legal, Human Resources). The Global Compliance Committee has the task of advising on general compliance management topics and coordinating this across the Group. In addition, it is tasked with analysing the general suitability of the compliance management system on a regular basis and issuing recommendations for actions to the respective responsible management if a need for action is identified. The Board of Executive Directors reports on the compliance management system to the Audit Committee of the Supervisory Board of K+S AKTIENGESELLSCHAFT on a regular basis.

By the end of the first quarter of each year, the CCO receives a completeness letter about reported compliance incidents across the entire Company. In 2018, there were again no incidents of corruption and no penalties had to be paid.

- ◊ 'Non-financial statement', page 65

## CORPORATE GOVERNANCE AND MONITORING

In addition to the relevant statutory requirements, the target status of an effective and legally compliant corporate governance and monitoring system (internal control system in a broader sense) in the k+s GROUP has been defined in the “Governance and Monitoring in the k+s GROUP” guideline adopted by the Board of Executive Directors. This guideline also stipulates the regulatory and organisational measures required to achieve and maintain this status. This system should ensure:

- + The sustainable economic efficiency of business operations (these also include protecting assets and preventing and identifying damage to assets),
- + Responsible corporate governance,
- + The adequacy and reliability of internal and external accounting procedures,
- + Compliance with legislation relevant to the Company.

The structure of the governance and monitoring system is defined in detail by additional internal regulations; consistent standards are agreed for the formulation and communication of such regulations.

The “Legal & GRC” unit, whose head reports directly to the Chairman of the Board of Executive Directors, is responsible for co-ordinating Group-level development and maintenance of an equally effective and legally compliant governance and monitoring system.

The task of the central Governance, Risk, Compliance (GRC) Committee is to analyse the general suitability of the governance and monitoring system on a regular basis and to issue recommendations for actions to the respective responsible management if weaknesses are identified.

Firstly, the sub-systems of risk and opportunity management and sustainability management, which are relevant for both the governance and monitoring components, are presented below. These complement one another and overlap in part. Finally, governance and internal monitoring are explained.

### MANAGEMENT OF RISK AND OPPORTUNITIES

The aim of the risk and opportunity management system is to promptly identify risks and opportunities across the whole k+s GROUP and evaluate the impact on the asset, financial or earnings position as well as the non-financial impact of the risks and opportunities. Steps are then taken to prevent/reduce the risks or use the opportunities; by doing so, the system supports the Company’s success on a sustainable basis. Moreover, structured internal and external reporting of the risks and opportunities should be ensured. The following principles apply in this respect:

- + Corporate actions are inevitably associated with risk.  
The aim is to use the opportunities available and only take risks that are unavoidable in order to secure income potential.
- + No action or decision may constitute a risk in itself, which can foreseeably lead to a risk in terms of the Company’s continued existence.

A Group-wide applicable directive governs the tasks and powers of the parties involved in the risk management process as well as the risk and opportunities management process itself and defines the requirements for risk and opportunity reporting.

The Central Risk and Opportunities Management Committee has the task of providing advice on general issues relating to risk and opportunities management and coordinating these across the Group. It also has the task of analysing the general suitability of the risk and opportunities management system on a regular basis and issuing recommendations for actions to the respective responsible management if a need for adjustment is identified.

A detailed description of the process for identifying, assessing, controlling and reporting risks and opportunities, a presentation of risk management in relation to financial instruments (IFRS 7), as well as the significant risks and opportunities, can be found in the Report on Risks and Opportunities from page 110.

### SUSTAINABILITY MANAGEMENT<sup>1</sup>

Corporate action on the part of k+s GROUP is geared towards the achievement of sustainable economic success. In order to enjoy economic success in the long-term, appropriate account also needs to be taken of ecological and social aspects; they are therefore an integral part of our strategy.

- ⌚ Sustainability Management, page 55

<sup>1</sup>This section is part of the non-financial statement, which contains the information pursuant to Sections 289b–289e HGB and 315b and 315c HGB and is not within the scope of the audit in accordance with Section 317 (2) Sentence 4 HGB.

The Board of Executive Directors is responsible for setting the strategic sustainability goals of the K+S GROUP. A member of the Board of Executive Directors is a sponsor for each goal. The Board of Executive Directors is provided with regular updates on the development of the key non-financial indicators. Any non-financial risks are identified and assessed as part of risk management.

Sustainability goals	Responsible member of the Board of Executive Directors (sponsor)
Health & Safety	Mark Roberts, COO
Diversity & Inclusion	Mark Roberts, COO
Human Rights	Mark Roberts, COO
Water	Dr Burkhard Lohr, CEO
Waste	Dr Burkhard Lohr, CEO
Energy & Climate	Mark Roberts, COO
Sustainable Supply Chains	Thorsten Boeckers, CFO
Compliance & Anti-Corruption	Thorsten Boeckers, CFO

Sustainability management of the K+S GROUP is a part of the "Health, Safety, Management Systems and Sustainability" unit. Its head reports directly to the Chairman of the Board of Executive Directors and chairs the Central Sustainability Committee. The task of the unit is to create effective structures and to engage in and deal with sustainability issues within the K+S GROUP. The unit further determines, analyses and prioritises sustainability requirements set by or imposed on the K+S GROUP. It draws up proposals to the Board of Executive Directors for the strategic focus in terms of sustainability issues and reports on the relevant performance indicators. The unit is also responsible for external sustainability reporting.

The Central Sustainability Committee has the task of advising on sustainability issues and coordinating these across the Group. It also analyses the general suitability of the sustainability management system on a regular basis and issues recommendations for action to the respective responsible management if a need for adjustment is identified. The Committee met on three occasions in 2018, to define the K+S sustainability goals and to discuss appropriate performance indicators as well as to discuss and improve the internal and external reporting.

Managers of the central specialist units are closely involved in the strategy process related to sustainability issues and develop measures to implement the goals in cooperation with the operating units. They regularly report to the Board of Executive Directors on the progress of achieving the targets through the efforts of sustainability management.

⇒ 'Non-financial Statement', page 55

## GOVERNANCE

The framework and general objectives of the K+S GROUP governance system are derived from its mission and vision, which are described in the "Corporate Strategy" section on page 43.

The basis for fulfilment of this mission is the Group strategy defined by the Board of Executive Directors. Sub-targets and sub-strategies, processes and measures are defined for its implementation based on regular talks between the Board of Executive Directors and the heads of the K+S AKTIENGESELLSCHAFT units reporting directly to it and the management of key Group companies, which in turn are broken down in a cascading process to the respective subordinated organisational levels. The relevant content of each of these is communicated to the respective employees by the line manager.

The quality of target definition is crucial in terms of achieving these targets and being able to assess them. Therefore, they must be specific, measurable, achievable, realistic and time-based, and should not contradict other targets.

Key business transactions and measures require the approval of the whole Board of Executive Directors or of the member of the Board responsible for the respective unit/Group company.

The relevant control instruments are mid-term planning and rolling monthly planning. Mid-term planning of the K+S GROUP comprises a planning period of three years and includes the annual plan for the coming financial year and planning for the following two years. Key figures are planned by the operating units and the K+S AKTIENGESELLSCHAFT units in numerous sub-processes; the most important planning assumptions are specified centrally. Controlling collates the mid-term planning for the consolidated operational planning as well as human resources, capital expenditure and financial planning of the K+S GROUP and provides an explanation of this to the Board of Executive Directors. Once this has been approved, the Board of Executive Directors presents the annual plan to the Supervisory Board for approval and explains planning for the following two years. Once the consolidated financial statements have been prepared, the Board of Executive Directors and the Supervisory Board receive an overview as part of a budget/actual comparison of the main differences from the annual plan for the previous K+S GROUP financial year.

Rolling monthly planning is based on the endorsed annual plan. Here, generally all key figures, such as revenues, earnings, financial position and capital expenditure for the current financial year are projected by the units to be included in the consolidated financial statements and consolidated by Controlling. The actual values

available and new information about business development are continually included in the projections. Significant assumptions are checked on a regular basis and updated where necessary. Deviations are analysed and assessed as part of rolling monthly planning and are used to manage business operations. The Board of Executive Directors receives a written and verbal explanation of the consolidated rolling monthly planning of the K+S GROUP.

#### KEY FINANCIAL PERFORMANCE INDICATORS

The Company's activities are managed based on the following key financial performance indicators:

- + EBITDA<sup>1</sup> (K+S GROUP, business units, operating units in the future)
- + Adjusted free cash flow<sup>2</sup> (K+S GROUP)
- + Return on Capital Employed (ROCE)<sup>3</sup> (K+S GROUP, business units, operating units in the future)
- + Group earnings after tax, adjusted (K+S GROUP)

- ◇ ‘Definition of the financial indicators used’, page 234;
- ◇ ‘Glossary’, page 236

Since the 2018 financial year, we direct the Company primarily by utilising the earnings figure EBITDA. Also, since the beginning of 2018, the short-term incentive (STI) as a variable component of the remuneration of the Board of Executive Directors and non-tariff paid employees has been based on a comparison of the planned EBITDA with the actual EBITDA achieved. As part of our growth strategy, SHAPING 2030, we have set an EBITDA target for 2030 and published it as a long-term value perspective for the Group. This emphasises the relevance we place on EBITDA as a key performance indicator. Following the successful completion of the construction of the Canadian Bethune production site as the largest investment project in the history of K+S, we are now primarily focusing on reducing indebtedness (net debt/EBITDA ratio). For this reason, we are focusing on the key financial performance indicator of adjusted free cash flow.

- ◇ ‘Remuneration Report’, page 134

<sup>1</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. The calculation of the “EBITDA” performance indicator can be found in the Economic Report on page 95.

<sup>2</sup> The calculation of the “Adjusted free cash flow” performance indicator can be found in the Economic Report on page 101.

<sup>3</sup> The calculation of the “ROCE” performance indicator can be found in the Economic Report on page 97.

We use the performance indicator return on capital employed (ROCE) to monitor our financial objective; its relevance was also emphasised again when communicating our SHAPING 2030 strategy. We derive economic value added on the basis of ROCE using the weighted average cost of capital before taxes. Economic value added is also included in the calculation of variable remuneration for the Board of Executive Directors and non-tariff paid employees. A principal key performance indicator for managing the company is adjusted Group earnings after tax, which serves as the basis for dividend proposals.

The comparison of the actual and projected course of business on page 90 includes, amongst others, the performance indicators referred to above.

A presentation and description of the development of earnings figures in the last five years can be found in the ‘Earnings Position’ section on page 97 and that of cash flow in the ‘Financial Position’ section on page 103.

In addition to revenues and return on total investment, other key financial figures and non-financial figures that are also relevant to the K+S GROUP are sales volumes, average selling prices and the number of employees. Although operating earnings (EBIT) as well as capital expenditure no longer function as key financial performance indicators, they nevertheless still receive attention. However, these figures are not considered key performance indicators within the meaning of German Accounting Standard (DrS) 20.

#### NON-FINANCIAL PERFORMANCE INDICATORS

In the context of sustainability management, the requirements of the K+S GROUP and those imposed on it are determined, analysed and prioritised in order to define specific sustainability targets for sub-areas (sites, companies, operating units etc.). In this manner, performance indicators and target values in sustainability management were set for the K+S GROUP in 2018.

- ◇ ‘Sustainability programme’, page 47

#### MONITORING

The monitoring system is intended to ensure fulfilment of the management requirements developed in the context of the governance system as well as compliance with the relevant legal requirements. It consists of process-integrated monitoring measures (internal control system in a narrower sense) as well as process-independent monitoring measures.

Process-integrated monitoring measures entail that management responsible for an internal process must identify and analyse risks to achieving objectives in order to be compliant with internal regulations and the law. Depending on the significance of the respective risk, upstream, process-integrated controls are to be defined that are designed to prevent the occurrence of this risk. Downstream, process-integrated controls are also to be defined which identify errors that have occurred/risks that have materialised as quickly as possible so that the relevant action to counter these can be taken. Depending on the materiality of the respective process and its risks, the risk analysis conducted, the controls defined and the action taken are to be recorded.

Non-process dependent monitoring measures are implemented by the internal audit department. Reports containing summary audit results are produced for these audits and presented to the respective responsible management to support managers with assessing the general suitability and actual effectiveness of the governance and monitoring system. The reliability of the risk and opportunity management system and the compliance management system are reviewed on a regular basis.

Non-process dependent monitoring measures are taken externally in connection with the annual audits as well as in the form of IT penetration tests.

#### GROUP ACCOUNTING PROCESS (SECTION 289 (4) AND SECTION 315 (4) OF THE HGB)/AUDIT

International Financial Reporting Standards (IFRS) are applied when preparing the Company's consolidated financial statements. The rules for K+S GROUP accounting and reporting in accordance with IFRS stipulate standard accounting policies for the German and foreign companies included in the consolidated financial statements. In addition, we impose detailed and formalised requirements for the reporting of the consolidated companies. New external accounting regulations are analysed promptly in terms of their effects and, if these are relevant to us, are implemented in the accounting processes through internal regulations. The accounting policies for the separate financial statements of K+S AKTIENGESELLSCHAFT and its domestic subsidiaries are documented in accounting instructions, in accordance with German commercial law and supplementary provisions. All employees

undergo training according to their tasks and receive regular training particularly in relation to changes in regulations or processes.

We have a Group-wide IT platform for all major companies, a standard Group accounts structure and automatically standardised accounting processes. This standardisation ensures the proper and timely reporting of key business transactions. Binding regulations as well as control mechanisms are in place for additional manual recording of accounting transactions. The measurement of balance sheet items, such as impairment tests on goodwill or the calculation of mining obligations, is performed by internal Group experts. In individual cases, such as the measurement of pension obligations, the measurement is performed by external experts.

To prepare the consolidated financial statements of the K+S GROUP, the financial statements of those companies whose accounts are kept on the K+S GROUP IT platform are imported directly into an IT consolidation system. In the case of the remaining consolidated companies, the financial statements data are transferred via an online interface. The validity of the financial statements data transferred is reviewed by means of system controls. In addition, the financial statements submitted by the consolidated companies are reviewed centrally with due consideration being given to the reports prepared by the auditors. Information relevant to the consolidation process is automatically derived and obtained in a formalised manner by the system, thus ensuring that intragroup transactions are properly and completely eliminated. All consolidation processes for the preparation of the consolidated financial statements are carried out and documented in the IT consolidation system. The components of the consolidated financial statements, including key information for the Notes, are developed from this.

The annual financial statements of companies subject to mandatory audits and the consolidated financial statements are audited by independent auditors in addition to the existing internal monitoring. This is the key process-independent monitoring measure with regard to the Group accounting process. The annual financial statements of those German companies not subject to mandatory audits are audited by the internal audit department. Moreover, the independent auditor audits the reliability of the early risk detection system.

The 2018 audit was conducted by DELOITTE GMBH WIRTSCHAFTSPRÜFUNGS GESELLSCHAFT, HANOVER. This company or its predecessor companies have conducted our audits since 1972. The auditor

directly responsible was auditor/tax adviser Dr Christian H. Meyer (auditor of K+S since Annual Report 2015). The overall mandate was overseen by auditor/tax adviser Heiner Kompenhans (auditor of K+S since Annual Report 2015) as responsible partner. DELOITTE GMBH WIRTSCHAFTSPRÜFUNGSGESELLSCHAFT issued a declaration of independence pursuant to number 7.2.1 of the German Corporate Governance Code. The elected auditor is appointed by the Supervisory Board, acting on a recommendation submitted by the Audit Committee. The Audit Committee supervises the audit activities. The Chairman of the Supervisory Board and the Chairman of the Audit Committee are advised by the auditor without delay of any reasons giving rise to exclusion or partiality that may arise during the audit if these cannot be eliminated immediately. Furthermore, the auditor should immediately advise of any findings and occurrences of relevance to the tasks of the Supervisory Board that may arise during the audit. In addition, the auditor is required to advise the Supervisory Board or make an appropriate note in the audit report if, during the course of the audit, he identifies any facts suggesting incompatibility with the declaration on conformity issued by the Board of Executive Directors and the Supervisory Board in accordance with Section 161 of the AktG.

#### DISCLOSURES IN ACCORDANCE WITH SECTION 289A (1) AND SECTION 315 (1) OF THE HGB AS WELL AS THE EXPLANATORY REPORT OF THE BOARD OF EXECUTIVE DIRECTORS IN ACCORDANCE WITH SECTION 176 (1) SENTENCE 1 OF THE AKTG

#### **ITEM 1: COMPOSITION OF THE SUBSCRIBED CAPITAL**

The share capital is €191,400,000, divided into 191,400,000 shares. The bearer shares of the Company are no-par value shares. There are no other classes of shares.

#### **ITEM 2: RESTRICTIONS ON VOTING RIGHTS OR ON THE TRANSFER OF SHARES**

Each share carries one vote; no restrictions apply to voting rights or to the transfer of shares. The Board of Executive Directors is not aware of any relevant shareholder agreements.

#### **ITEM 3: DIRECT OR INDIRECT INTERESTS IN THE CAPITAL EXCEEDING 10%**

No direct or indirect interests in the share capital of more than 10% were reported to us.

#### **ITEM 4: HOLDERS OF SHARES WITH SPECIAL RIGHTS CONFERRING CONTROL POWERS**

There are no shares with special rights conferring control powers.

#### **ITEM 5: VOTING RIGHT CONTROL IN THE EVENT OF EMPLOYEE OWNERSHIP OF CAPITAL**

No voting right controls apply.

#### **ITEM 6: STATUTORY REGULATIONS AND PROVISIONS OF THE ARTICLES OF ASSOCIATION CONCERNING THE APPOINTMENT AND DISMISSAL OF MEMBERS OF THE BOARD OF EXECUTIVE DIRECTORS AND AMENDMENTS TO THE ARTICLES OF ASSOCIATION**

The appointment and dismissal of member of the Board of Executive Directors are governed by Section 84 of the AktG. Accordingly, the members of the Board of Executive Directors are appointed by the Supervisory Board for a maximum term of five years. In accordance with Article 5 of the Articles of Association, the Board of Executive Directors of K+S AKTIENGESELLSCHAFT has at least two members. The number of members is determined by the Supervisory Board. The Supervisory Board may appoint a member of the Board of Executive Directors as Chairman of the Board of Executive Directors. The Supervisory Board may rescind the appointment of a member of the Board of Executive Directors or the appointment of the Chairman of the Board of Executive Directors for good cause.

The Annual General Meeting may pass amendments to the Articles of Association with a simple majority of the share capital represented (Section 179 (2) of the AktG in conjunction with Article 17 (2) of the Articles of Association), unless mandatory statutory provisions require a larger majority.

**ITEM 7: BOARD OF EXECUTIVE DIRECTORS' POWERS  
REGARDING THE OPTION TO ISSUE OR BUY BACK SHARES**

**AUTHORISATION TO CREATE NEW AUTHORISED CAPITAL  
OR AUTHORISED CAPITAL II WITH THE OPTION TO EXCLUDE  
SHAREHOLDERS' SUBSCRIPTION RIGHTS**

The Board of Executive Directors was authorised by the Annual General Meeting on 12 May 2015 to increase the Company's share capital, with the consent of the Supervisory Board, by a total of €19,140,000.00, in one lump sum or several partial amounts at different times, by issuing a maximum of 19,140,000 new registered shares (authorised capital) in return for cash and/or non-cash contributions during the period to 11 May 2020. The Board of Executive Directors was further authorised on 11 May 2016 to increase the Company's share capital, with the consent of the Supervisory Board, by a total of €19,140,000.00, in one lump sum or several partial amounts at different times, by issuing a maximum of 19,140,000 new registered shares (authorised capital II) in return for cash and/or non-cash contributions during the period to 10 May 2021. Shareholders are generally offered the right to subscribe when increasing capital from the authorised capital or authorised capital II respectively. The new shares can be acquired by a financial institution determined by the Board of Executive Directors with the obligation that they must be offered to the shareholders for subscription (indirect subscription right).

- [www.k-plus-s.com/agm2015invitation](http://www.k-plus-s.com/agm2015invitation);
- [www.k-plus-s.com/agm2016invitation](http://www.k-plus-s.com/agm2016invitation)

The Board of Executive Directors is authorised, both for the authorised capital and for the authorised capital II, with the consent of the Supervisory Board, to exclude the shareholders' statutory right to subscribe up to a proportionate amount of the share capital of €19,140,000.00 (corresponding to 19,140,000 no-par value shares) in the following cases:

- + For fractional amounts that arise as a consequence of the right to subscribe.
- + In the case of capital increases in return for cash contributions up to a proportionate amount of the share capital of €19,140,000.00 (corresponding to 19,140,000 no-par value shares) if the issue price of the new shares is not significantly less than the stock exchange price of already listed shares of the same type and structure on the date when the issue price is finally agreed.
- + In the case of capital increases in return for non-cash contributions up to a proportionate amount of the share capital of €19,140,000.00 (corresponding to 19,140,000 shares) if the new shares are to be used as consideration in the acquisition of an undertaking or an interest in an undertaking by the Company.

- + In order to implement a scrip dividend where the shareholders are asked to offer their dividend claim, in full or in part, as a non-cash contribution in return for new shares in the Company.

The Board of Executive Directors may only make use of the authorisations described above to exclude the right to subscribe insofar as the proportionate amount of the total shares issued with exclusion of the right to subscribe does not exceed 10% of the share capital (10% ceiling), neither on the date of the resolution regarding these authorisations nor on the date they are respectively exercised. If other authorisations to issue or sell Company shares or to issue rights are exercised, which enable or obligate the acquisition of Company shares, during the term of the authorised capital or authorised capital II until their respective utilisation thus excluding the right to subscribe, this must be credited against the 10% ceiling referred to above.

The Board of Executive Directors is authorised to determine the further details of capital increases from the authorised capital or the authorised capital II with the consent of the Supervisory Board.

As a result of the option granted by the Board of Executive Directors to implement a capital increase with limited exclusion of the right to subscribe with the approval of the Supervisory Board until 11 May 2020 (authorised capital) or 10 May 2021 (authorised capital II), the Company will be given a widespread instrument with the help of which, for example, fast and flexible use can be made of the opportunities that present themselves to make acquisitions. The Board of Executive Directors will only make use of this option if there is an appropriate ratio between the value of the new shares and the value of the consideration.

**AUTHORISATION TO ISSUE CONVERTIBLE BONDS  
AND BONDS WITH WARRANTS WITH THE OPTION TO  
EXCLUDE SHAREHOLDERS' SUBSCRIPTION RIGHTS WHILE  
SIMULTANEOUSLY CREATING CONDITIONAL CAPITAL**

**Authorisation to issue convertible bonds and bonds with warrants**

The Board of Executive Directors is authorised until 11 May 2020, with the consent of the Supervisory Board, to issue bearer and/or registered convertible bonds and/or warrant linked bonds (bonds) on one or more occasions, with an aggregate nominal value of up to €750,000,000.00 with or without a limited term, and to issue or impose conversion rights or obligations on the holders or creditors of bonds, or warrants on shares in the Company with a proportionate amount of the share capital of up to a total of €19,140,000.00, as set out in greater detail in the terms and conditions of the

convertible or warrant-linked bonds. The proportionate amount of the share capital represented by the shares to be issued upon conversion may not exceed the nominal amount of the bonds.

□ [www.k-plus-s.com/agm2015invitation](http://www.k-plus-s.com/agm2015invitation)

In addition to euros, bonds may also be issued in the legal tender of any OECD country, limited to the corresponding euro counter-value at the time of issuing the bond. Bonds may also be issued by group companies of the Company; in this case, the Board of Executive Directors is authorised to act as guarantor for the bonds on behalf of the Company and to grant or impose conversion rights or obligations or warrants on shares in the Company to/upon the holders or creditors of such bonds. The bond issues may be subdivided into equivalent debentures in each case.

The Company's shareholders are generally entitled to subscription rights to bonds. The bonds can also be acquired by one or more financial institutions with the obligation that they must be offered to the Company's shareholders for subscription.

The Board of Executive Directors is however authorised with the approval of the Supervisory Board to exclude subscription rights, in full or in part, in the following cases:

- + If bonds are issued against cash and if the issue price is not substantially lower than the theoretical market value of the bonds calculated in accordance with recognised actuarial methods. However, exclusion of subscription rights only applies to bonds with conversion rights or obligations or warrants on shares representing a proportionate amount of the share capital of up to 10% of the share capital as of the date of the resolution or, if the amount of the share capital is lower at that time, on the date when the authorisation is exercised. The maximum limit of 10% of the share capital is reduced by the proportionate amount of the share capital amount attributable to shares issued during this authorisation period in connection with another increase in capital where subscription rights are excluded in direct or indirect application of Section 186 (3) sentence 4 of the AktG. The maximum limit of 10% of the share capital is also reduced by the proportionate amount of the share capital attributable to own shares, which are sold by the Company during this authorisation period, where subscription rights are excluded in direct or indirect application of Section 186 (3) sentence 4 of the AktG.
- + If and insofar as this is necessary in order to grant the bearers of convertible bonds or warrants in respect of shares in the Company or the creditors of convertible bonds provided

with conversion obligations, a right to subscribe to the extent to which they would be entitled following the exercising of these rights or the fulfilment of the conversion obligations.

- + In order to exempt fractional amounts from the shareholders' right to subscribe, which are a consequence of the subscription ratio.
- + Insofar as the bonds are issued in connection with the acquisition of undertakings, interests in undertakings, or parts of undertakings in exchange for non-cash considerations, provided the value of the consideration is adequate in relation to the value of the bonds.

The authorisations described above to exclude the right to subscribe only apply to bonds with conversion rights or obligations or warrants on shares representing a proportionate amount of the share capital of up to 10% of the share capital as of the date of the resolution or, if the amount of the share capital is lower at that time, on the date when the authorisation is exercised.

If bonds with conversion rights are issued, creditors may exchange their bonds against shares in the Company in accordance with the bond terms and conditions. The exchange ratio is calculated by dividing the nominal amount of a bond by the conversion price determined for a new share in the company. The exchange ratio can also be calculated by dividing the issue price of a bond that is below the nominal amount by the conversion price determined for a new share in the company. The exchange ratio can be rounded up or down to the next whole number in each case; a premium to be paid in cash can also be determined. Moreover, provision can be made for fractional amounts to be combined and/or settled in cash. The proportionate amount of the share capital represented by the shares to be issued per bond may not exceed the nominal amount of the bond.

If warrant-linked bonds are issued, one or more warrants will be attached to each bond, which authorise the holder to subscribe to shares in the Company, as set out in greater detail in the warrant terms and conditions to be defined by the Board of Executive Directors. The proportionate amount of the share capital represented by the shares to be issued per bond may not exceed the nominal amount of the warrant-linked bond.

The respective conversion or option price for a share in the Company (subscription price) must correspond to either (a) at least 80% of the weighted average stock exchange price of K+S shares in the XETRA computer trading system (or any functionally

comparable successor system replacing it) at the Frankfurt Stock Exchange during the last ten trading days prior to the day on which the Board of Executive Directors adopts the resolution to issue the convertible or warrant-linked bonds, or (b) at least 80% of the weighted average stock exchange price of K+S shares in the XETRA computer trading system (or any functionally comparable successor system replacing it) at the Frankfurt Stock Exchange during the days on which subscription rights are traded on the Frankfurt Stock Exchange, with the exception of the last two days of subscription rights trading.

For warrant-linked bonds or bonds with conversion rights, or obligations, the warrants or conversion rights, or obligations, can be adjusted to preserve value in the event of a dilution in the value of the warrants or conversion rights, or obligations, in accordance with the bond terms and conditions, notwithstanding Section 9 (1) of the AktG, insofar as the adjustment is not already stipulated by law. Moreover, the bond terms and conditions may make provision for a value-preserving adjustment of the warrants or conversion rights/obligations in the event of a capital reduction or other extraordinary measures or events (such as a third party obtaining control, unusually large dividends).

The bond terms and conditions may also make provision for a conversion obligation at the end of the term (or an earlier date) or for the Company's right to grant shares in the Company, in full or in part, in lieu of payment of the amount due to the creditors of the bonds at the time of final maturity of bonds with conversion rights or warrants (this also includes maturity on account of termination). The bond terms and conditions may also stipulate in each case at the Company's discretion that instead of being converted into new shares from conditional capital, warrant-linked or convertible bonds may be converted into existing shares in the Company or that the warrant can be fulfilled by providing such shares.

Finally, the bond terms and conditions may make the provision that in the event of a conversion, the Company will not grant shares in the Company to the party entitled to the conversion, but will make a payment, which for the number of shares to be supplied alternatively, corresponds to the weighted average stock exchange price of K+S shares in the XETRA computer trading system (or any functionally comparable successor system replacing it) at the Frankfurt Stock Exchange during the ten trading days following the declaration of the conversion or exercise of the warrant.

The Board of Executive Directors is authorised, in the context of the requirements described above, with the approval of the Supervisory Board, to define the further details of the issue and structure of the convertible and/or warrant-linked bonds, particularly interest rate, issue price, term, denomination, dilution protection, and the conversion or warrant period or to define these in consultation with the corporate bodies of the holding companies issuing the convertible and/or warrant-linked bonds.

#### **Conditional capital increase**

The share capital is increased by up to €19,140,000.00 by issuing up to 19,140,000 bearer shares with no par value (conditional capital). The purpose of the conditional capital increase is to grant no-par value shares to the holders or creditors of bonds, which are issued by the Company or group companies of the Company in accordance with the above authorisation before 11 May 2020. New no-par value shares will be issued at the conversion or option price to be determined in each case as described above.

The conditional capital increase will be implemented only insofar as the holders or creditors of conversion rights or warrants from bonds, which were issued by the Company or a group company before 11 May 2020 based on the authorising resolution of the Annual General Meeting held on 12 May 2015, exercise their conversion rights or warrants; or as the holders or creditors of the convertible bonds with conversion obligation, which were issued by the Company or a group company before 11 May 2020 based on the authorising resolution of the Annual General Meeting held on 12 May 2015, who are required to convert, fulfil their conversion obligation; or if the Company elects before 11 May 2020, based on the authorising resolution of 12 May 2015, to grant shares in the Company, in full or in part, in lieu of payment of the amount due; and if no cash settlement is made or own shares are used to settle such claims. New no-par value shares are eligible to participate in the profits from the beginning of the financial year during which they are created through the exercise of conversion rights or warrants or through the fulfilment of conversion obligations; in deviation from this, the Board of Executive Directors may determine, with the consent of the Supervisory Board, that new no-par value shares are eligible to participate in the profits from the beginning of the financial year, in respect of which the Annual General Meeting has not yet adopted a resolution regarding the appropriation of the balance sheet profit at the time when the conversion rights or warrants are exercised or the conversion obligations are fulfilled. The Board of Executive Directors is authorised with the consent of the Supervisory Board to determine the

additional content of share rights and further details of the implementation of a conditional capital increase.

In addition to the traditional options for raising outside and equity capital, issuing convertible bonds and/or warrant-linked bonds can also provide an opportunity to take advantage of attractive financing alternatives on the capital markets depending on the market situation. The Board of Executive Directors believes that it is in the Company's interests that this financing option is also available to the Company. Issuing convertible bonds and/or warrant-linked bonds makes it possible to raise capital under attractive conditions. The conversion and/or option premiums achieved benefit the Company's capital base thereby enabling it to take advantage of more favourable financing opportunities. The other possibility provided for, in addition to the granting of conversion rights and/or warrants, to create conversion obligations, widens the scope for structuring this financing instrument. The authorisation provides the Company with the necessary flexibility to place the bonds itself or through direct or indirect holding companies. The option to exclude the right to subscribe allows the Company to make rapid use of advantageous stock exchange situations and to place bonds on the market quickly and flexibly under attractive conditions.

#### **AUTHORISATION TO ACQUIRE AND USE OWN SHARES WITH THE OPTION TO EXCLUDE SHAREHOLDERS' RIGHT TO SUBSCRIBE**

The Board of Executive Directors is authorised to acquire own shares representing no more than 10% of the total no-par value shares comprising the share capital of K+S AKTIENGESELLSCHAFT until 11 May 2020. At no time may the Company hold more than 10% of the total number of no-par value shares comprising its share capital. Acquisition will be made via the stock exchange by means of a public offer to buy addressed to all shareholders or by way of a public call to shareholders to submit offers for sale. In the event of a purchase effected on a stock exchange, the purchase price per share (excluding acquisition costs) must not exceed or undercut the relevant stock exchange price by more than 10%; the relevant stock exchange price will be the price of the K+S share in the XETRA computerised trading system (or any functionally comparable successor system replacing it) at the Frankfurt Stock Exchange, determined by the opening auction on the day of purchase. In the event of a purchase by means of an offer to buy addressed to all shareholders, the purchase price offered per share (excluding acquisition costs) must not exceed or undercut the relevant stock

exchange price by more than 10%; the relevant stock exchange price will be the weighted average stock exchange price of K+S shares in the XETRA computer trading system (or any functionally comparable successor system replacing it) at the Frankfurt Stock Exchange during the last ten trading days prior to the publication of the offer to buy. In the event of a call to shareholders to submit offers for sale, the purchase price offered per share (excluding acquisition costs) must not exceed or undercut the relevant stock exchange price by more than 10%; the relevant stock exchange price will be the weighted average stock exchange price of K+S shares in the XETRA computer trading system (or any functionally comparable successor system replacing it) at the Frankfurt Stock Exchange during the last ten trading days prior to the publication of the call to shareholders to submit offers for sale. In the event of acquisition by means of a public offer to buy addressed to all shareholders or by way of a public call to shareholders to submit offers for sale, the volume of the offer or call can be limited. If the overall subscription to this offer or the offers for sale exceed this volume, shares must be acquired on allocation basis. Provision may be made for preferential acceptance of small quantities of up to 100 shares offered for sale per shareholder.

□ [www.k-plus-s.com/agm2015invitation](http://www.k-plus-s.com/agm2015invitation)

Furthermore, the Board of Executive Directors is authorised, with the consent of the Supervisory Board, to sell shares in the Company, which are or were acquired based on the authorisation above or authorisation previously granted by the Annual General Meeting pursuant to Section 71 (1) (8) of the AktG, on the stock exchange or via a public offer addressed to all shareholders. In the following cases, shares may be disposed of by other means and thus with the exclusion of the shareholders' right to subscribe:

- + Disposal against payment of a cash sum that is not significantly below the relevant stock exchange price;
- + Issue of shares as consideration for the purpose of acquiring undertakings, parts of undertakings or interests in undertakings;
- + Servicing of convertible bonds and bonds with warrants, which have been issued on the basis of authorisation given by the Annual General Meeting.

The authorisation to exclude the right to subscribe applies in respect of all shares representing a proportionate amount of the share capital of up to 10% of the share capital when the resolution is adopted or if the amount of the share capital is lower at that time, on the date when the authorisation is exercised. If use

is made of other authorisations to issue or sell Company shares or to issue rights, which enable or obligate the acquisition of Company shares, during the term of this authorisation to acquire own shares, thus excluding the right to subscribe, the total number of shares issued or sold where the right to subscribe is excluded must not exceed 10% of the share capital.

Finally, the Board of Executive Directors is authorised, with the consent of the Supervisory Board, to withdraw shares in the Company from circulation, which are or were acquired based on the authorisation above or authorisation previously granted by the Annual General Meeting pursuant to Section 71 (1) (8) of the AktG, without the Annual General Meeting having to pass a further resolution on such withdrawal. Shares must be withdrawn from circulation in accordance with Section 237 (3) (3) of the AktG without a capital reduction in such a way that withdrawal results in an increase in the proportion of remaining no-par value shares in the share capital pursuant to Section 8 (3) of the AktG. The Board of Executive Directors is authorised pursuant to Section 237 (3) (3) clause 2 of the AktG to adjust the number of shares indicated in the Articles of Association.

The authorisations to purchase own shares as well as to dispose of them and withdraw them from circulation may be exercised in full or in part each time and on several occasions in the latter case. The authorisation granted by the Annual General Meeting to the Board of Executive Directors to purchase a limited number of own shares in the Company is a common instrument available in many companies. The ability to resell own shares, puts the Company in a position to, for example, gain long-term investors in Germany and abroad or to finance acquisitions flexibly. Moreover, it will also enable the Company to use shares for servicing convertible and warrant-linked bonds. It may be advisable to use own shares in full or in part instead of new shares from a capital increase to fulfil conversion rights or warrants. Using own shares rules out any dilution of shareholder interests that would occur if conditional capital were used. The continued option to withdraw own shares from circulation is also a common alternative, the use of which is in the interest of the Company and its shareholders.

#### **ITEM 8: SIGNIFICANT AGREEMENTS THAT APPLY IN THE EVENT OF A CHANGE OF CONTROL RESULTING FROM A TAKEOVER BID**

In 2013, K+S concluded a syndicated credit line for €1 billion. All loans drawn against this line of credit will become due and payable immediately and the entire credit line will become redeemable in accordance with the loan terms and conditions if one person acting alone or more persons acting jointly acquire control over K+S AKTIENGESELLSCHAFT. Also in the case of the bonds issued by K+S AKTIENGESELLSCHAFT, as well as the promissory notes issued, the respective creditors have the right, in the event of a change of control, to terminate the bonds or promissory notes that have not yet been redeemed.

The provisions in credit agreements and bond conditions agreed in the event of a change of control are routine and reasonable from the perspective of protecting the legitimate interests of the creditors.

#### **ITEM 9: AGREEMENTS CONCLUDED WITH THE BOARD OF EXECUTIVE DIRECTORS OR EMPLOYEES CONCERNING COMPENSATION IN THE EVENT OF A TAKEOVER BID**

Agreements of this type exist with the members of the Board of Executive Directors of K+S AKTIENGESELLSCHAFT and are explained in detail in the Remuneration Report on page 140. The existing compensation agreements with the members of the Board of Executive Directors take into appropriate consideration both the legitimate interests of those concerned and of the Company and its shareholders.

## REPORT ON ECONOMIC POSITION

We increased both revenues and earnings in the 2018 financial year. Revenues of the K+S GROUP rose from €3,627.0 million in the previous year to €4,039.1 million. EBITDA<sup>1</sup> amounted to €606.3 million, moderately higher than the previous year's figure (2017: €576.7 million).

### OVERVIEW OF THE COURSE OF BUSINESS

#### MACROECONOMIC ENVIRONMENT

Global gross domestic product rose by 3.7% in 2018, although the differences in economic momentum widened between different countries and regions. Driven by fiscal stimulus measures, the United States economy gained further momentum. In the euro zone and Japan, on the other hand, the growth rate was noticeably slower. In addition to the sharp decline in automobile production, the respective labour markets also underperformed. Growth in the emerging economies slowed down, albeit to very different degrees, as the financial environment worsened. Russia, many Asian countries and parts of Latin America experienced only minor downturns, while Argentina and Turkey experienced severe turbulence and slipped into recession.

Sources: Kiel Institute for the World Economy (IfW), IMF

Prices for important soft commodities initially showed a positive trend during 2018. While the price of wheat improved over the course of the year, soybeans and palm oil reported tangible price drops in the second half of the year. The DOW JONES-UBS AGRICULTURE SUBINDEX, which tracks developments in the prices of corn, soybeans, sugar, wheat, soy oil, cotton and coffee, decreased by around 13%. FIG. 2.14

Following a recovery that lasted until the third quarter of 2018, crude oil prices fell sharply in the final quarter. At the end of December, the price of Brent Crude was around USD 54 per barrel (31 December 2017: USD 67). The main reasons for the price decline were higher supplies due to production increases in major producer countries and high inventories in the United States. The average price for 2018 of around USD 72 was nevertheless significantly above that of the previous year (2017: USD 55).

The NCG Natural Gas Year Future, which focuses primarily on western and southern Germany, rebounded to €26/mwh over the course of the year following a drop from around €18/mwh at the beginning of the year to approximately €16/mwh in the first quarter, and ended the year at around €22/mwh. The average figure increased to around €21/mwh compared to the previous year (2017: €17/mwh). The Henry Hub Natural Gas Future, which focuses primarily on North America, reported a slight decline from 3.0 USD/mmBtu at the beginning of the year to 2.8 USD/mmBtu at the end of 2018. In the meantime, the price picked up and reached an annual high of 4.5 USD/mmBtu on 14 November. The average for the year was 3.1 USD/mmBtu.

The value of the US dollar stood at EUR/USD 1.18 for the year on average and thus below the level of the previous year (2017: EUR/USD 1.13). FIG. 2.15

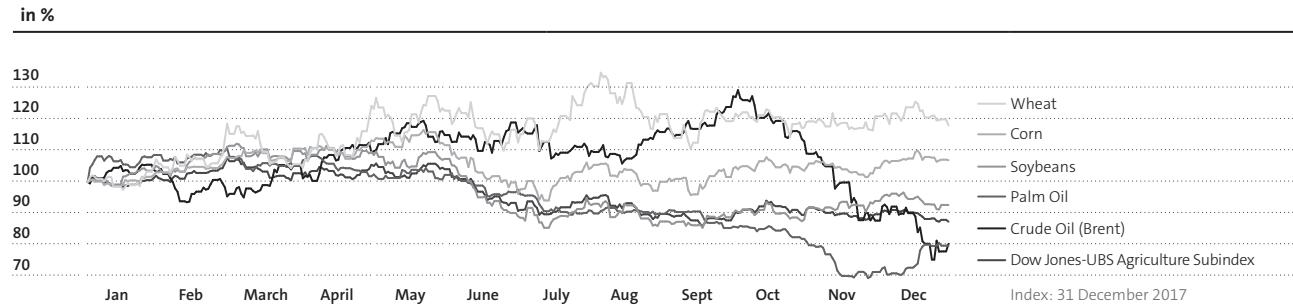
#### IMPACT ON K+S

The changes in the macroeconomic environment had an impact on the business development of K+S as follows:

- + The K+S GROUP's energy costs are affected in particular by the cost of purchasing natural gas, which rose slightly in the reporting period, mainly as a result of significantly higher volumes coming from the production ramp-up of the Bethune mine. Our long-term purchase contracts with favourable conditions make us less dependent on short-term market price changes.

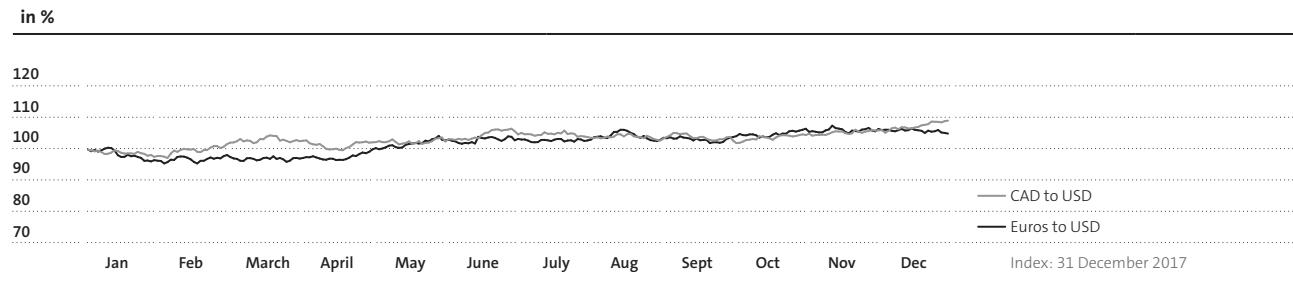
<sup>1</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. A reconciliation can be found on page 95.

FIG. 2.14

**DEVELOPMENT OF PRICES FOR AGRICULTURAL PRODUCTS AND CRUDE OIL IN 2018**

Source: Bloomberg

FIG. 2.15

**DEVELOPMENT OF EXCHANGE RATES IN 2018**

Source: Bloomberg

- + Foreign currency hedging system: The use of hedging instruments for the Potash and Magnesium Products business unit resulted in an average exchange rate of EUR/USD 1.14 in 2018 including hedging costs (2017: EUR/USD 1.12). We also hedged the euro exchange rate for the capital expenditure related to construction of the Bethune plant payable in Canadian dollars for the last time in the 2017 financial year. Due to product revenues invoiced in US dollars, the Canadian dollar is now hedged against the US dollar. The average hedging rate in the year under review was USD/CAD 1.31 (2017: 1.45 EUR/CAD).

⇒ ‘Financial position’, page 98

- + Prices of important soft commodities remained at a comparatively low level over the course of the year. Despite recent price increases, e.g. for fertilizers, the resulting earnings prospects continued to give farmers sufficient incentive in the year under review to increase yield per hectare by using plant nutrients.

**SECTOR-SPECIFIC ENVIRONMENT****POTASH AND MAGNESIUM PRODUCTS BUSINESS UNIT**

In the 2018 financial year, the industry-specific situation for the Potash and Magnesium Products business unit was characterised by good demand. Because contracts between the major potash producers and the Chinese and Indian customers were signed at a relatively late date in the previous year, remaining contractual quantities were still being delivered in the first six months of 2018. In the course of the third quarter, a new price for potassium chloride including freight of USD 290 per tonne for both China and India (2017: USD 230 and 240 per tonne, respectively) was agreed. The global average price level for potassium chloride rose further in 2018 compared with the previous year and has continued to gain ground over the course of the year.

Prices for fertilizer specialities also rose on average, but more moderately than prices for potassium chloride.

## SALT BUSINESS UNIT

An extraordinarily strong winter at the beginning of 2018 led to low stocks of de-icing salt at us customers in the Midwest as well as in Canada. As a result, price increases were realised for the 2018/2019 winter season. In Europe, prices remained at the level of the previous winter season. Prices were below the previous year only on the us East Coast owing to the competitive market environment. Compared with the previous year, the de-icing salt season in Northern Europe and North America started the fourth quarter of 2018 slightly weaker overall than in the previous year, after good early fills business in the third quarter.

General conditions for the sale of consumer products and salts for the food industry improved slightly compared to the previous year. In North America, higher prices for water softening salts were recorded. A similar development was seen for salts for industrial applications in Europe, also due to reduced product availability. There was slightly higher global demand for pharmaceutical salts (e.g. dialysis), due primarily to the higher average age of the population. At the same time, however, the entire business sector was exposed to high cost inflation, mainly driven by increased logistics costs.

## KEY EVENTS AFFECTING THE COURSE OF BUSINESS

- + Product availability at the integrated Werra plant was significantly lower compared to the previous year. Due to the extreme drought, it was not possible to completely dispose of the saline wastewater from production, despite numerous countermeasures. We were therefore forced to temporarily halt production at that plant.
- + In the 2018 financial year, we further increased the production at our new Bethune potash plant, which opened in 2017. After around 0.5 million tonnes had been produced in 2017, production volumes in 2018 were already a good 1.4 million tonnes.
- + Contracts signed with Chinese and Indian customers in the second half of 2018 had a stable to slightly positive effect on global potash demand and reflect the ongoing recovery in potassium chloride prices.
- + K+S had to accept higher freight prices in 2018, especially in North America. Further price-related increases in logistics costs are also expected for 2019. To some extent, these increases can be offset by passing them on to customers and by other measures.

## COMPARISON OF ACTUAL AND PROJECTED

### COURSE OF BUSINESS

#### EARNINGS FORECAST

At the time of publishing the financial figures for the second quarter of 2018, we had set our earnings forecast at €660–740 million, which was below the market expectation of around €800 million at the time. As announced in the course of the third quarter, this forecast was adjusted to a range of €570–630 million on 15 November 2018, mainly due to weather-related stoppage days in the context of our third quarter report and the associated extensive off-site disposal measures for saline waste water in the fourth quarter. In addition, a sharp rise in logistics costs in the Salt business unit negatively impacted earnings. At €606.3 million, the K+S GROUP's EBITDA for the 2018 financial year was within this adjusted range (2017: €576.7 million). However, it is not in accordance with our forecast of a significant increase from the statements we made in our 2017 Annual Report. TAB. 2.11

The Potash and Magnesium Products business unit achieved EBITDA of €359.3 million in the reporting period (2017: €268.8 million) despite the aforementioned adjustments and still achieved a significant increase compared with the previous year, as forecasted in our 2017 Annual Report. The Salt business unit generated EBITDA of €274.5 million (2017: €325.2 million) and was thus unable to achieve a tangible increase in EBITDA, as we had originally forecast in the 2017 Annual Report. Although sales volumes increased as expected, they were offset by, among other things, the cost increases described above.

⇒ ‘Presentation of segments’, page 104

For adjusted Group earnings after tax, we had forecast a range of €55–85 million at the time of the Q3/18 Quarterly Report. At €85.4 million, earnings were at the upper end of this corridor. However, in the course of adjusting our EBITDA forecast during the year, we also had to reduce the range for adjusted Group earnings after tax. Originally, we had assumed a “significant increase” here compared to 2017, according to the statements in the 2017 Annual Report (2017: €145.0 million).

ROCE amounted to 2.6% and was thus, as recently expected, significantly below the previous year’s level (2017: 3.2%). Here, too, we had adjusted our forecast in the course of the year for the

## TARGET/ACTUAL COMPARISON 2018

TAB. 2.11

		ACTUAL 2017	Forecast 2017 Annual Report	Forecast Q1/18	Forecast Q2/18	Forecast Q3/18	ACTUAL 2018
<b>K+S Group</b>							
Revenues	€ billion	3.63	tangible increase	tangible increase	3.90-4.10	3.90-4.10	4.04
EBITDA <sup>1</sup>	€ million	576.7	significant increase	significant increase	660-740	570-630	606.3
Group earnings after tax, adjusted <sup>2</sup>	€ million	145.0	significant increase	significant increase	110-160	55-85	85.4
Capital expenditure	€ million	810.8	significantly below prior year	significantly below prior year	significantly below prior year	significantly below prior year	443.2
Adjusted Free Cash flow	€ million	-389.8	significant improvement, still slightly negative	significant improvement, still negative	significant improvement, still negative	significant improvement, still negative	-206.3
ROCE	%	3.2	significant increase	significant increase	significant increase	significant decrease	2.6
EUR/USD exchange rate	EUR/USD	1.13	1.20	1.21	1.21	1.20	1.18
<b>Potash and Magnesium Products business unit</b>							
EBITDA <sup>1</sup>	€ million	268.8	significant increase	significant increase	significant increase	significant increase	359.3
ROCE	%	1.4	significant increase	significant increase	significant increase	significant increase	1.2
<b>Salt business unit</b>							
EBITDA <sup>1</sup>	€ million	325.2	tangible increase	moderate increase	stable	moderate increase	274.5
Sales volumes – crystallised salt	million tonnes	20.3	tangible increase	tangible increase	tangible increase	tangible increase	23.7
ROCE	%	8.9	significant increase	significant increase	tangible increase	tangible increase	8.1

<sup>1</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted for depreciation and amortisation of own work capitalised recognised directly in equity, earnings from fair value changes arising from operating anticipatory hedges still outstanding, changes in the fair value of operating anticipatory hedges recognised in prior periods, and in the prior year earnings from the hedging of investments in Canadian dollars. A reconciliation can be found on page 95.

<sup>2</sup> The adjusted key indicators include the profit/(loss) from operating forecast hedges in the relevant reporting period, which eliminates effects from changes in the fair value of the hedges (see also the 'Notes to the income statement and the statement of comprehensive income' on page 173). Related effects on deferred and cash taxes are also eliminated; tax rate in 2018: 30.0% (2017: 29.9%)

reasons already mentioned, after we had assumed a "significant increase" at the time of publishing the 2017 Annual Report. At the level of our Potash and Magnesium Products and Salt business units, ROCE also fell tangibly to 1.2% in the Potash and Magnesium Products business unit and moderately to 8.1% in the Salt business unit (2017: 1.4% and 8.9% respectively).

**CASH FLOW FORECAST**

We met our forecast of a continued negative but significantly improved adjusted free cash flow for the 2018 financial year. However, the forecast of a "slightly negative" expected free cash flow was adjusted to "negative". It amounted to €-206.3 million in the reporting period (2017: €-389.8 million). The forecast of a capital expenditure volume "significantly below the previous year" was achieved.

## RESULTS OF OPERATIONS

### REVENUES

In the 2018 financial year, K+S GROUP revenues amounted to €4,039.1 million compared to €3,627.0 million in the previous year. Larger sales volumes of potassium chloride from the Bethune plant and higher market prices for potash and magnesium products had a positive impact on the revenue trend. Increased sales volumes in the Salt business unit and higher prices for water softening salt and de-icing salt in North America also contributed to the positive revenue trend. This was offset by reduced availability of potash and magnesium products from Germany, in particular as a result of weather-related production stoppages at the integrated Werra plant, as well as negative currency effects in both business units. A certain seasonality can generally be recognised from the quarterly revenues; in terms of volume, the first six months for the Potash and Magnesium Products business unit usually benefit from the start of spring fertilizing in Europe. The de-icing salt business is normally focused on the first and fourth quarter of a year. **TAB. 2.12, 2.13**

- ⌚ ‘Display of segments’, page 104;
- ⌚ ‘Segment reporting’, page 150

Within the K+S GROUP, the revenue contributions of the Potash and Magnesium Products and Salt business units were once again relatively balanced, accounting for 49% and 47% respectively of total revenues. 4% of revenues were generated by Complementary Activities. **FIG. 2.16**

With regard to regional distribution, the higher proportion of potash products sold from Bethune led to a percentage increase in revenues in South America and Asia. Accordingly, the percentage for Europe declined. Nevertheless, we continued to generate the largest share of revenues here, now accounting for 41%, followed by North America with around 35%. South America and Asia accounted for 13% and 9%, respectively, of our total revenues. **FIG. 2.17**

### DEVELOPMENT OF ORDERS

Most of our business is not covered by longer-term agreements on fixed volumes and prices. The business in the Potash and Magnesium Products business unit is characterised by long-term customer relationships as well as revolving framework agreements with non-binding volume and price indications.

In the Salt business unit, de-icing salt contracts for the public sector in Europe, Canada and the United States are awarded through public tenders. We generally participate in these tenders from the second quarter for the coming winter season, but also, in some cases, for subsequent winter seasons. The contracts include agreements on both prices and maximum volumes. If the contractual agreed volumes are subject to fluctuations permitted by law – depending on weather conditions – these volumes cannot be classified as orders on hand. This also applies if volumes can be transferred to the following winter if demand is weak in a particular season.

**REVENUES BY UNIT**

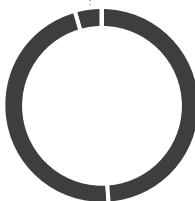
**TAB. 2.12**

in € million	2017	Q1/18	Q2/18	Q3/18	Q4/18	2018	%
Potash and Magnesium Products business unit	1,703.5	488.7	440.5	422.2	621.6	1,973.0	+15.8
Salt business unit	1,762.0	635.6	326.9	375.0	553.3	1,890.8	+7.3
Complementary activities	159.9	44.9	43.9	41.7	41.9	172.4	+7.8
Reconciliation	1.6	0.6	0.6	1.2	0.5	2.9	+81.2
<b>K+S Group</b>	<b>3,627.0</b>	<b>1,169.8</b>	<b>811.9</b>	<b>840.1</b>	<b>1,217.3</b>	<b>4,039.1</b>	<b>+11.4</b>
Share of total revenues (%)	–	29.0	20.1	20.8	30.1	100.0	–

**REVENUES BY UNIT**

in %  
4.3/4.4  
Complementary Activities

46.8/48.6  
Salt business unit

**FIG. 2.16**

48.9/47.0  
Potash and Magnesium Products business unit

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For the reasons stated above, the reporting of orders on hand is not relevant for the assessment of our short- and medium-term profitability.

#### DEVELOPMENT OF SIGNIFICANT COSTS

During the reporting period, cost of sales rose from €2,414.6 million to €2,779.5 million. Except for price-related increases, especially in logistics services, the cost of sales also rose as a result of the ramp-up in production at our Bethune plant. In addition, the extensive use of logistics services for the off-site disposal of saline wastewater in Germany led to an increase in production costs. However, these transports were necessary during the extreme drought in order to maintain production for as long as possible. Selling expenses amounted to €779.8 million in the year under review compared to €704.5 million in the previous year. This increase was also the result of higher sales volumes. Other operating income

**VARIANCE COMPARED WITH PREVIOUS YEAR****TAB. 2.13**

in %	2018
<b>Change in Revenues</b>	+11.4
– volume/structure-related	+9.8
– price/pricing-related	+4.6
– currency-related	-3.0
– consolidation-related	-

**REVENUES BY REGION**

in %  
9.0/8.1  
Asia

13.0/10.7  
South America

34.6/35.5  
North America

**FIG. 2.17**

2.4/2.0  
Africa, Ozeania

41.0/43.7  
Europe

14.9/16.3  
thereof Germany

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fell to €146.8 million (2017: €187.8 million) and other operating expenses to €171.6 million (2017: €186.1 million). The gains/losses on operating anticipatory hedges decreased to €-49.5 million in 2018 (2017: €61.2 million).

⇒ ‘Consolidated financial statements’, page 145

Within the costs, the cost of materials, personnel expenses, energy and freight costs had a particularly strong effect on the cost trend. At €1,629.1 million, the cost of materials increased tangibly, mainly as a result of higher production volumes (2017: €1,434.8 million). In 2018, personnel expenses amounted to €1,122.5 million, and were therefore slightly higher than the amount of the previous year (2017: €1,106.2 million). Freight costs of €883.6 million (2017: €714.8 million) partly benefited from relatively low crude oil prices, yet remained noticeably above the figure for the previous year, mainly due to increased volumes and prices. Energy costs were €261.7 million compared to €253.3 million, with the increase due mainly to volume increases.

⇒ ‘Notes’, page 150

#### EARNINGS DEVELOPMENT IN THE PAST FINANCIAL YEAR

##### OPERATING EARNINGS EBITDA AND EBIT I

Since the 2018 financial year, we have been controlling the company in particular via the EBITDA. EBIT I no longer acts as a key financial performance indicator and will be reported for the last time this year.

**EBITDA BY UNIT<sup>1</sup>**

TAB. 2.14

in € million	2017	Q1/18	Q2/18	Q3/18	Q4/18	2018	%
Potash and Magnesium Products business unit	268.8	120.8	90.6	3.4	144.5	359.3	+33.7
Salt business unit	325.2	120.9	23.3	41.5	88.8	274.5	-15.6
Complementary Activities	30.3	9.8	8.0	6.2	7.2	31.3	+3.3
Reconciliation <sup>2</sup>	-47.6	-14.7	-16.8	-14.7	-12.6	-58.8	-
<b>K+S Group</b>	<b>576.7</b>	<b>236.8</b>	<b>105.1</b>	<b>36.4</b>	<b>228.0</b>	<b>606.3</b>	<b>+5.1</b>
Share of total EBITDA (%)	-	39.1	17.3	6.0	37.6	100.0	-

<sup>1</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. A reconciliation can be found on page 95.

<sup>2</sup> Expenses and income that cannot be allocated to business units and Complementary Activities are recorded separately and shown under 'Reconciliation'.

**EBIT I BY UNIT**

TAB. 2.15

in € million	2017	Q1/18	Q2/18	Q3/18	Q4/18	2018	%
Potash and Magnesium Products business unit	81.4	52.5	21.1	-68.5	64.5	69.6	-14.5
Salt business unit	223.0	102.1	4.0	21.7	69.0	196.8	-11.7
Complementary Activities	23.5	8.7	6.8	5.0	5.9	26.4	+12.3
Reconciliation <sup>1</sup>	-57.0	-16.3	-18.5	-16.3	-14.4	-65.5	-
<b>K+S Group</b>	<b>270.8</b>	<b>147.0</b>	<b>13.4</b>	<b>-58.1</b>	<b>124.9</b>	<b>227.2</b>	<b>-16.1</b>
Share of total EBIT I (%)	-	64.7	5.9	-25.6	55.0	100.0	-

<sup>1</sup> Expenses and income that cannot be allocated to business units and Complementary Activities are recorded separately and shown under 'Reconciliation'.

EBITDA<sup>1</sup> amounted to €606.3 million in the year under review and was moderately higher than the previous year's amount (2017: €576.7 million). This was due to price and volume increases – as already described in the section on revenue development – which were mainly offset by cuts in production at the integrated Werra plant, but also by the ongoing effects from the ramp-up of our Canadian production and the efforts associated with this to improve product quality. In addition, a disproportionate increase in transport costs had a negative impact. The reconciliation fell to €-58.8 million in 2018 (2017: €-47.6 million) mainly due to non-recurring costs in connection with a IT changeover and external consulting costs for SHAPING 2030. TAB. 2.14

<sup>1</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. A reconciliation can be found on page 95.

Operating profit (EBIT I) amounted to €227.2 million in the year under review, compared to €270.8 million in the previous year; this represents a decline of around 16%. EBIT I contains depreciation and amortisation including impairment losses and reversals (adjusted for depreciation and amortisation charged on own work capitalised and recognised directly in equity) of €379.1 million. This item increased by around 24% compared to the previous year (2017: €305.9 million), mainly due to the full-year depreciation and amortisation at the Bethune site in Canada. TAB. 2.15

**EARNINGS AFTER OPERATING HEDGES (EBIT II)**

Earnings after operating hedges (EBIT II) of €165.3 million were generated in 2018 (2017: €327.3 million). The difference between EBIT I and EBIT II of €-61.9 million (2017: €+56.5 million) was largely the result of the negative change in the fair values of outstanding hedging transactions and the elimination of maturing transactions with positive fair values. TAB. 2.16

- ◇ 'Consolidated financial statements', page 145;
- ◇ 'Glossary', page 236

**RECONCILIATION TO OPERATING EARNINGS (EBIT I) AND EBITDA**

TAB. 2.16

in € million	2017	2018
Earnings after operating hedges (EBIT II)	327.3	165.3
Income (-)/expenses (+) arising from changes in the fair value of outstanding operating anticipatory hedges	-37.2	25.7
Elimination of prior-period changes in the fair value of operating anticipatory hedges	-10.3	36.2
Realised gains (-)/losses (+) from currency hedging for capital expenditure in Canada	-9.0	—
<b>Operating earnings (EBIT I)</b>	<b>270.8</b>	<b>227.2</b>
Depreciation and amortisation (+)/impairment losses (+)/reversals of impairment losses (-) on non-current assets	330.0	385.0
Capitalised depreciation expenses recognised directly in equity <sup>1</sup> (-)	-24.1	-5.9
<b>EBITDA</b>	<b>576,7</b>	<b>606,3</b>

<sup>1</sup> Relates to depreciation of assets used to create other items of property, plant and equipment. Depreciation is capitalised as part of cost and not recognised in profit or loss.

**RECONCILIATION TO GROUP EARNINGS AFTER TAX,****ADJUSTED**

TAB. 2.17

in € million	2017	2018
Group earnings after tax	184.6	42.1
Income (-)/expenses (+) arising from changes in the fair value of outstanding operating anticipatory hedges	-37.2	25.7
Elimination of prior-period changes in the fair value of operating anticipatory hedges	-10.3	36.2
Elimination of resulting deferred taxes and taxes payable	16.9	-18.6
Realised gains (-)/losses (+) from currency hedging for capital expenditure in Canada	-9.0	—
<b>Group earnings after tax, adjusted</b>	<b>145.0</b>	<b>85.4</b>

The changes in fair value arising from hedging transactions are reported in profit or loss. EBIT II includes all earnings from operating hedges, i. e. both reporting date-related measurement effects and earnings from realised operating hedging derivatives. Any effects on earnings arising from the hedging of underlying transactions relating to financing that are not reflected in EBIT I and II are reported in the financial result.

**FINANCIAL RESULT**

The financial result deteriorated from €-26.4 million to €-112.2 million. One major reason for this change was a sharp increase in interest expense; following the commissioning of the Bethune plant, less borrowing costs are capitalised now, and we also issued a €600 million corporate bond in July 2018 to refinance the €500 million bond maturing in December 2018. Accordingly, an additional interest expense was incurred for this period. In addition, the currency-related other interest income from the measurement of financial assets and liabilities from the previous year no longer applied.

**GROUP EARNINGS AND EARNINGS PER SHARE**

In the year under review, Group earnings after tax amounted to €42.1 million (2017: €184.6 million). While the tax expenses for 2017 of €116.3 million included a non-recurring tax expense of €28.3 million in relation to the US tax reform, the tax expenses for 2018 of €10.9 million included a retrospective positive effect of €4.2 million from the US tax reform. The expected income tax expense was calculated based on a domestic Group income tax rate of 30.0% (2017: 29.9%).

In the year under review, earnings per share reached €0.22 (2017: €0.96). As in the previous year, the calculation was based on an average number of 191.4 million no-par value outstanding shares.

⇒ 'Notes', page 179

## EARNINGS PER SHARE

TAB. 2.18

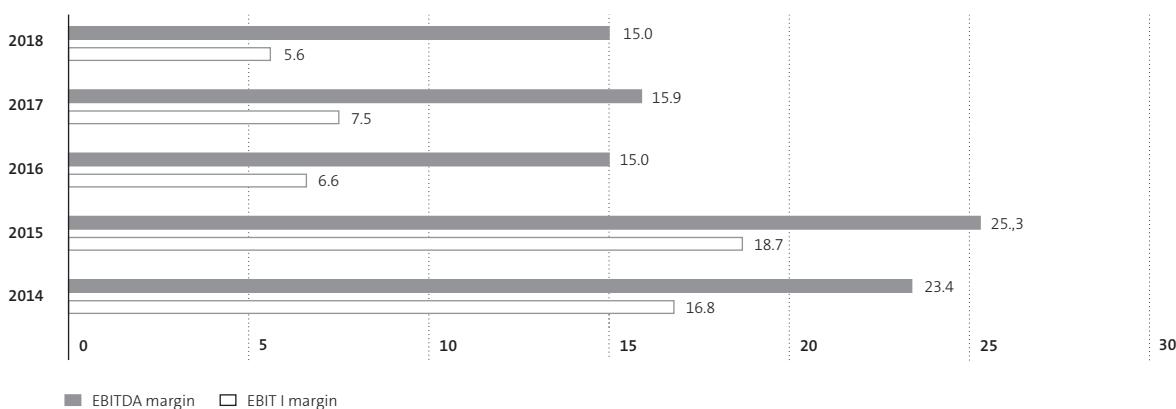
	2017	Q1/18	Q2/18	Q3/18	Q4/18	2018	%
Earnings per share (€)	0.96	0.40	-0.17	-0.33	0.32	0.22	-77.1
Earnings per share, adjusted (€) <sup>1</sup>	0.76	0.44	-0.05	-0.32	0.38	0.45	-41.3
Average number of shares (millions)	191.40	191.40	191.40	191.40	191.40	191.40	-

<sup>1</sup> The adjusted key indicators include the profit/(loss) from operating anticipatory hedges in the respective reporting period, which eliminates effects from fluctuations in the fair value of the hedges. Related effects on deferred and cash taxes are also eliminated; tax rate in 2018: 30.0% (2017: 29.9%).

## MARGIN KEY INDICATORS

ABB. 2.18

in %



## ADJUSTED GROUP EARNINGS AND ADJUSTED EARNINGS PER SHARE

For the basis of our dividend, we also report adjusted Group earnings after tax, which eliminate the effects from operating anticipatory hedges and serves as an internal performance indicator at the same time. Furthermore, the effects on deferred taxes and taxes payable resulting from this adjustment are eliminated, but the impacts of the us tax reform are not. The adjusted Group earnings after tax serve as a basis for calculating dividends in accordance with our distribution policy and are determined in table 2.17. TAB. 2.17

Adjusted Group earnings after tax amounted to €85.4 million (2017: €145.0 million). Adjusted earnings per share amounted to €0.45 in the year under review compared to €0.76 in the previous year. This figure, too, was based on 191.4 million no-par value shares.

As at 31 December 2018, we held no treasury shares. At the end of the year, the total number of shares of the k+s GROUP outstanding therefore remained unchanged at 191.4 million no-par value shares. TAB. 2.18

## KEY INDICATORS ON RESULTS OF OPERATIONS

### MARGIN KEY INDICATORS

The margin key indicators changed as follows in the year under review: our EBITDA of €606.3 million resulted in an EBITDA margin (revenues/EBITDA) of 15% compared to 16% in the previous year. The EBIT I margin (revenues/EBIT I) was almost 6% (2017: 8%). The return on revenues (Group earnings after tax, adjusted/revenues) was around 2% (2017: 4%). FIG. 2.18

⇒ ‘Definition of key financial indicators’, page 234

**RECONCILIATION TO COST OF CAPITAL**

The weighted average cost of capital for the K+S GROUP is calculated by adding the returns expected by equity providers on their equity share and the interest on the interest-bearing share of debt in total capital using the peer group method under IAS 36. As this is considered from an after-tax perspective, the average interest on debt is reduced by the corporate tax rate.

The returns expected by equity investors derive from a risk-free interest rate plus a risk premium. The cash value equivalent average of the yields of government bonds denominated in euros with a maturity of 1 to 30 years was assumed as the risk-free interest rate according to the Svensson method; as of 31 December 2018 this was 0.95% (2017: 1.25%). The risk premium has been calculated using a market risk premium of 6.25% (2017: 6.25%) as well as the beta factor of 1.12 derived from the peer group in relation to the MSCI WORLD benchmark index. This means that an equity provider is entitled to notional returns of 7.9% (2017: 7.7%).

The average interest on debt before taxes is 3.1% (2017: 2.8%) and results from the peer group company rating and a corresponding spread applicable to the risk-free basic interest rate. After taking into account the adjusted Group tax rate of 28.5%, this results in an average cost of debt after taxes of 2.2% (2017: 2.0%).

**COMPUTATION OF THE ROCE**

TAB. 2.19

in € million	2017	2018
<b>ROCE = Operating Earnings (EBIT I)/ Capital employed (Average for the Year)</b>	<b>3.2%</b>	<b>2.6%</b>
Potash and Magnesium Products business unit	1.4%	1.2%
Salt business unit	8.9%	8.1%
Complementary Activities	33.8%	35.3%
<b>EBIT I</b>	<b>270.8</b>	<b>227.2</b>
Intangible assets <sup>1</sup>	789.1	807.6
Property, plant and equipment	6,692.6	6,687.9
Investments in affiliated companies and other equity interests	20.6	88.8
<b>Operating assets<sup>1</sup></b>	<b>7,502.3</b>	<b>7,584.3</b>
Inventories	690.9	691.5
Trade receivables	714.9	836.7
Other assets	338.8	316.8
Trade payables	-288.4	-239.7
Other liabilities	-312.5	-330.2
Current provisions	-292.3	-314.6
Working capital adjustments <sup>2</sup>	116.7	166.7
<b>Working capital</b>	<b>968.1</b>	<b>1,126.7</b>
<b>Capital employed</b>	<b>8,470.4</b>	<b>8,711.0</b>

<sup>1</sup> Adjusted by the deferred tax included in goodwill from initial consolidation.<sup>2</sup> Adjusted by CTA asset surpluses, receivables and liabilities from investments, air values of operating forecast hedging transactions, reimbursement claims and corresponding obligations as well as liabilities from finance lease.**MULTIPLE PERIOD OVERVIEW OF MARGIN AND PROFITABILITY RATIOS<sup>1</sup>**

TAB. 2.20

Key Indicators in %	2014	2015	2016	2017	2018
Gross margin	42.1	45.9	36.3	33.4	31.2
EBITDA margin	23.4	25.3	15.0	15.9	15.0
EBIT I margin	16.8	18.7	6.6	7.5	5.6
Return on revenues <sup>2</sup>	9.6	13.0	3.8	4.0	2.1
Return on equity after taxes <sup>2, 3</sup>	9.9	13.1	2.9	3.3	2.1
Return on total investment <sup>2, 3</sup>	9.0	10.4	2.7	3.1	2.4
Working capital	768.1	945.9	894.6	968.1	1,126.7
Operating assets	4,265.5	5,900.3	6,639.0	7,377.6	7,464.0
Return on capital employed (ROCE)	12.7	12.5	3.0	3.2	2.6
Weighted average cost of capital before taxes	8.4	8.3	8.2	8.5	8.4
<b>Value added (€ million)</b>	<b>216.4</b>	<b>262.8</b>	<b>-391.7</b>	<b>-438.1</b>	<b>-500.8</b>

<sup>1</sup> Information refers to the continuing operations of the K+S Group.<sup>2</sup> The adjusted key indicators include the profit/(loss) from operating forecast hedges in the relevant reporting period, which eliminates effects from changes in the fair value of the hedges. Related effects on deferred and cash taxes are also eliminated; tax rate for 2018: 30.0% (2017: 29.9%).<sup>3</sup> This information refers to continued and discontinued operations of the K+S Group.

#### COMPUTATION OF RETURN ON EQUITY

TAB. 2.21

in € million	2017	2018
Equity	4,160.7	4,144.1
Effects of fair value fluctuations arising from operating anticipatory hedges	-26.5	16.9
Equity, adjusted as of 31.12.	4,134.2	4,161.0
<b>Equity, adjusted (LTM)</b>	<b>4,351.2</b>	<b>4,147.6</b>
<b>Group earnings after tax, adjusted</b>	<b>145.0</b>	<b>85.4</b>
<b>Equity</b>	<b>3.3%</b>	<b>2.1%</b>

#### COMPUTATION OF RETURN ON TOTAL INVESTMENTS

TAB. 2.22

in € million	2017	2018
Balance sheet total	9,754.4	9,966.2
Effects from fair value fluctuations	-27.7	13.3
Effects from deferred tax	-268.9	-267.3
Reimbursement claims and corresponding obligations	-26.1	-27.0
<b>Total assets, adjusted as at 31.12.</b>	<b>9,431.7</b>	<b>9,685.2</b>
<b>Total assets, adjusted (LTM)</b>	<b>9,470.6</b>	<b>9,738.6</b>
<b>Earnings, adjusted before taxes</b>	<b>297.8</b>	<b>235.7</b>
<b>Return on total Investment</b>	<b>3.1%</b>	<b>2.4%</b>

As of 31 December 2018, the debt to equity ratio calculated according to the peer group method is 48.5%. (2017: 40.7%).

In total, this results in a weighted average cost of capital for the K+S GROUP, as for the individual business units, of 6.0% (2017: 6.0%) after taxes. Based on an average figure for capital tied up of €8,744.5 million (of which tied up in operations: €8,590.8 million), for 2018, this resulted in a capital charge of €524.7 million (2017: €509.9 million). This corresponds to a cost of capital before taxes of 8.4% (2017: 8.5%).

#### PROFITABILITY RATIOS

Profitability ratios were declining, due mainly to the negative EBIT I performance in both business units. In the year under review, the return on equity after taxes was 2.1% (2017: 3.3%) with the return

on total investments amounting to 2.4% (2017: 3.1%). The return on capital employed (ROCE) of the K+S GROUP fell to 2.6% in the year under review compared to 3.2% in the previous year. In 2018 as well, the ROCE was therefore below our cost of capital of 8.4% before taxes. As a result, the K+S GROUP was forced to record a negative value added of €-500.8 million for the past financial year (2017: €-438.1 million). EBIT I in the Potash and Magnesium Products business unit was adversely affected by the first full-year depreciation and amortisation charge. This also had a corresponding effect on ROCE in the Potash and Magnesium Products business unit (1.2% compared to 1.4%).

⇒ ‘Definition of key indicators’, page 234

Computation of return on equity and return on total investments are presented in tables 2.21 and 2.22. TAB. 2.21, 2.22

#### FINANCIAL POSITION

#### PRINCIPLES AND GOALS OF FINANCIAL MANAGEMENT OF THE K+S GROUP

##### FINANCIAL MANAGEMENT IS CONTROLLED CENTRALLY

The primary goals of financial management in the K+S GROUP include:

- + securing liquidity and controlling it efficiently across the Group,
- + maintaining and optimising the financial capability of the Group, and
- + reducing financial risks, including through the use of financial instruments.

Central cash management allows us to control liquidity and optimise the cash flows within the K+S GROUP. In order to maintain our capability for financing and to achieve a low cost of capital for borrowed capital and equity, we aim to achieve a capital structure in the long term which is orientated towards the standard criteria and indicators for an “investment grade” rating. Mainly due to the construction of our new Bethune potash plant in Canada in the last years we currently have a “non-investment grade” rating. Our capital structure is managed on the basis of the following key figures: TAB. 2.23

⇒ ‘K+S on the Capital Market’, page 26

Currency and interest rate management is performed centrally for all key Group companies. Derivative financial instruments are only entered into with top-rated banks and are spread across several banks and continuously monitored to reduce the risk of default.

#### FOREIGN CURRENCY HEDGING SYSTEM

Exchange rate fluctuations can lead to the value of the service performed not matching the value of the consideration received because income and expenditure arise at different times in different currencies (transaction risks). Exchange rate fluctuations, especially in the euro/us dollar and Canadian dollar/us dollar exchange rate, particularly affect the levels of earnings and receivables in the Potash and Magnesium Products business unit. Key

net positions (net revenues in us dollars less freight and other costs) are therefore hedged using derivatives, normally options and futures.

Options and futures are used to hedge a worst-case scenario but at the same time, the opportunity remains for some of the foreign currency positions to benefit from more favourable exchange rate movements. In 2018, the rate realised for the euro against the us dollar in the Potash and Magnesium Products business unit averaged EUR/USD 1.14 including costs (2017: EUR/USD 1.12), and the rate realised for the Canadian dollar against the us dollar averaged CAD/USD 1.31 including costs.

#### KEY INDICATORS OF THE CAPITAL STRUCTURE

TAB. 2.23

	2014	2015	2016	2017	2018
Net debt/EBITDA ratio	1.8	2.3	6.9	7.2	7.3
Net debt/equity (%)	40.9	55.9	78.7	99.5	107.2
Equity ratio (%)	50.6	51.9	47.2	42.7	41.6

#### FOREIGN CURRENCY HEDGING – POTASH AND MAGNESIUM PRODUCTS BUSINESS UNIT

TAB. 2.24

	2017	Q1/18	Q2/18	Q3/18	Q4/18	2018
EUR/USD exchange rate after premiums	1.12	1.15	1.14	1.12	1.15	1.14
Average EUR/USD spot rate	1.13	1.23	1.19	1.16	1.14	1.18

#### CAPITAL EXPENDITURE BY UNIT<sup>1</sup>

TAB. 2.25

in € million	2017	Q1/18	Q2/18	Q3/18	Q4/18	2018	%
Potash and Magnesium Products business unit	680.4	48.1	70.0	89.4	109.2	316.7	-53.5
Salt business unit	118.8	13.5	18.9	31.1	47.7	111.2	-6.4
Complementary Activities	4.4	0.3	1.1	1.1	4.3	6.8	+55.2
Other capital expenditure	7.2	0.6	1.2	2.8	4.0	8.6	+19.7
<b>K+S Group</b>	<b>810.8</b>	<b>62.5</b>	<b>91.2</b>	<b>124.4</b>	<b>165.1</b>	<b>443.2</b>	<b>-45.3</b>
Share of capital expenditure (%)	-	14.1	20.6	28.1	37.3	100.0	-

<sup>1</sup> Relates to cash payments for investments in property, plant and equipment and intangible assets, taking claims for reimbursement from claim management into account.

Furthermore, currency effects occur for subsidiaries whose functional currency is not the euro (translation risks): On the one hand, the earnings of these companies determined in a foreign currency are translated into euros at average rates and recognised in profit or loss, and on the other hand, their net assets are translated into euros at the rates prevailing on the reporting date. The latter can result in currency-related fluctuations in the equity of the K+S GROUP. Translation effects from the conversion of US dollars and Canadian dollars occur in the Salt and Potash and Magnesium Products business units and are not hedged. **TAB. 2.24**

#### CAPITAL EXPENDITURE ANALYSIS

In 2018, the K+S GROUP invested a total of €443.2 million and was thus able to significantly reduce the capital expenditure volume compared to the previous year (2017: €810.8 million). As expected, the decrease compared to the previous year was mainly due to the lower capital expenditure for our Bethune plant, which we successfully commissioned in 2017. In addition, investments subjected to a high cost discipline in the last financial year. **FIG. 2.19**, **TAB. 2.25**

At the end of the year, there were capital expenditure obligations totalling €397.1 million related to ongoing investment projects and obligations from operating leases.

#### POTASH AND MAGNESIUM PRODUCTS BUSINESS UNIT

We invested €316.7 million in the Potash and Magnesium Products business unit, €363.7 million less than in the previous year (2017: €680.4 million) which can be traced back to the aforementioned reasons. At the Bethune plant, we continued to develop the cavern fields ("Pads") and expand the pipeline network. In Germany, our capital expenditure mainly went towards the purchase of new bulk material wagons. An important individual project was the expansion of the tailings pile at the Hattorf site.

⇒ 'Presentation of segments', page 104, 'Environment', page 58

#### SALT BUSINESS UNIT

Capital expenditure in the Salt business unit decreased to €111.2 million in 2018 (2017: €118.8 million). One of the most significant projects in the year under review was the opening of the respective mining horizons at our Ojibway, Canada, and Weeks Island, USA, sites.

#### COMPLEMENTARY ACTIVITIES

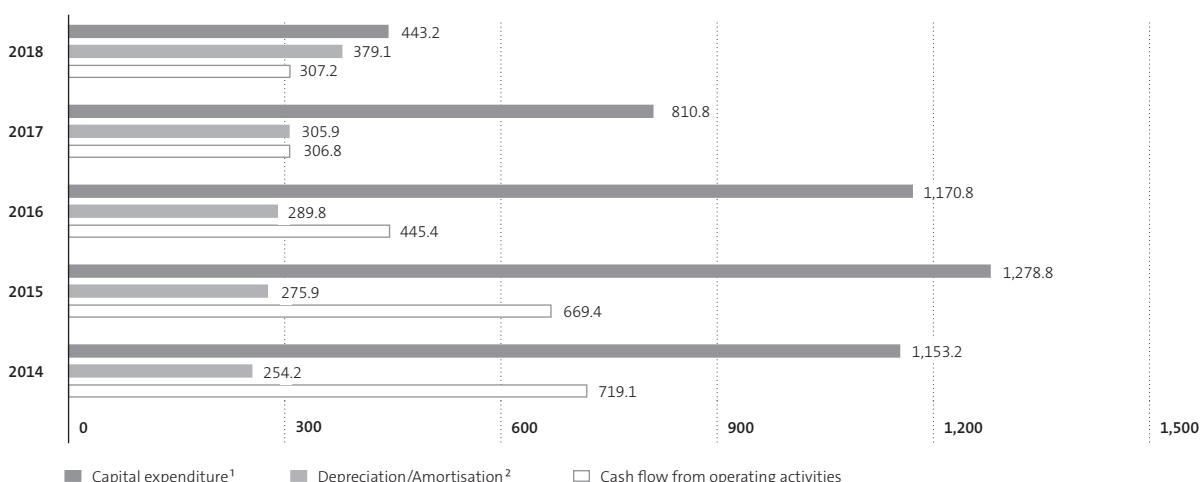
Our capital expenditure for Complementary Activities increased to €6.8 million (2017: €4.4 million). The majority of this spending went towards investments for expanding capacity in the Animal Hygiene Products segment at the Salzdetfurth site.

We calculate capital expenditure as follows: **TAB. 2.26**

#### CAPITAL EXPENDITURE COMPARED TO DEPRECIATION, AMORTISATION, WRITE-DOWNS AND CASH FLOWS FROM OPERATING ACTIVITIES

in € million

**FIG. 2.19**



<sup>1</sup> Relates to cash payments for investments in property, plant and equipment and intangible assets, taking claims for reimbursement from claim management into account.

<sup>2</sup> Depreciation, amortisation and write-downs (including impairment losses and reversals) recognised in profit or loss on property, plant and equipment, intangible assets and investment properties, as well as impairment losses on financial assets.

## LIQUIDITY ANALYSIS

Net cash flows from operating activities in the year under review were €308.7 million, almost at the same level as in the previous year (2017: €306.8 million). An increase in EBITDA over the previous year was offset by higher income tax payments and slightly higher capital employed in working capital compared to the previous year.

In 2018, net cash flows used in investing activities (adjusted for purchases/sales of securities and other financial investments) amounted to €–515.0 million (2017: €–696.6 million) and reflected the decrease in investments mentioned before. At €–206.3 million, the adjusted free cash flow (excluding purchases/sales of securities and other financial investments) showed a significant improvement compared to the previous year (2017: €–389.8 million).

Net cash flows from financing activities in the year under review fell to €187.3 million (2017: €411.5 million). The main reason for this were higher repayments compared to the previous year.

As at 31 December 2018, net cash and cash equivalents amounted to €162.2 million (31 December 2017: €175.7 million). These consist of term deposit investments, money market instruments and comparable securities with a residual term of less than three months.

TAB. 2.27

## FINANCING ANALYSIS

As at 31 December 2018, 87% of financing resulted from equity and non-current debt, which in turn preferentially consists of bond payables (31 December 2017: 86%). Provisions also make up a large part of the debt. FIG. 2.20

## EQUITY ON PREVIOUS YEAR LEVEL

Equity amounted to €4,144.1 million on the balance sheet date compared to €4,160.7 million in the previous year. Due to an increase in debt to a total of €5,822.1 million (31 December, 2017: €5,593.7 million), the equity ratio declined slightly to 41.6% (31 December, 2017: 42.7%).

## RECONCILIATION CAPITAL EXPENDITURE

TAB. 2.26

in € million	2017	2018
Additions of other intangible assets and property, plant and equipment	950.7	553.2
– Borrowing costs	51.4	17.5
– Capitalisation of depreciation	24.1	5.9
– Recultivation	15.6	39.1
– Reimbursement claims and other non-cash changes	48.8	47.5
<b>Capital expenditure</b>	<b>810.8</b>	<b>443.2</b>

## OVERVIEW OF CASH FLOWS

TAB. 2.27

in € million	2017	Q1/18	Q2/18	Q3/18	Q4/18	2018	%
Net cash flows from operating activities	306.8	232.8	59.4	–16.3	32.8	308.7	+0.6
Net cash flows used in investing activities	–663.5	–90.0	–155.0	–368.2	100.5	–512.7	+22.7
<b>Free cash flow</b>	<b>–356.7</b>	<b>142.8</b>	<b>–95.6</b>	<b>–384.5</b>	<b>133.3</b>	<b>–204.0</b>	<b>+42.8</b>
Adjustment for purchases/sales of securities and other financial investments	–33.1	0.0	47.0	230.7	–280.0	–2.3	+93.1
<b>Adjusted free cash flow</b>	<b>–389.8</b>	<b>142.8</b>	<b>–48.6</b>	<b>–153.8</b>	<b>–146.7</b>	<b>–206.3</b>	<b>+47.1</b>

## EQUITY AND LIABILITIES

FIG. 2.20

in %



#### DEBT SHARE INCREASED

Non-current debt including non-current provisions amounted to €4,528.4 million as at 31 December 2018 (2017: €4,240.2 million). As a result, the proportion of non-current debt increased to 45.4% of total equity and liabilities (31 December 2017: 43.4%). This was mainly due to higher non-current financial liabilities.

Current debt was €1,293.7 million at the balance sheet date (31 December, 2017: €1,353.5 million). Its share of total equity and liabilities therefore decreased to 13.0% as at 31 December 2018 (31 December 2017: 13.9%).

⇒ ‘Notes’, Page 150

#### FINANCIAL LIABILITIES

As at 31 December 2018, financial liabilities amounted to €3,283.3 million (31 December 2017: €3,021.7 million). In December 2018, we redeemed a €500 million bond. In July 2018, a corporate bond with a total volume of €600 million was issued for refinancing purposes. Further large parts of our non-current debt relate to the corporate bonds issued in June 2012, December 2013 and March 2017 as well as the promissory notes issued in the summer of 2016.

#### PROVISIONS

The non-current provisions of the K+S GROUP are mainly provisions for mining obligations as well as for pensions and similar obligations.

The provisions for long-term mining obligations remained virtually unchanged at €1,015.1 million at the balance sheet date (31 December 2017: €1,000.0 million). The average discount rate also remained at 3.3% (2017: 3.3%).

Non-current provisions for pensions and similar obligations increased to €187.0 million (2017: €166.4 million). The average weighted interest rate for pensions and similar obligations was 3.1% as at 31 December 2018 (31 December 2017: 2.9%). The actuarial valuation of pension provisions uses the projected unit credit method in accordance with IAS 19.

⇒ ‘Notes’, Page 150

#### SIGNIFICANCE OF OFF-BALANCE SHEET FINANCING INSTRUMENTS FOR THE FINANCIAL POSITION

We use operating leases for company vehicles, storage capacities and IT equipment, for example. Their scope has no material bearing on the economic position of the K+S GROUP.

#### NET ASSETS

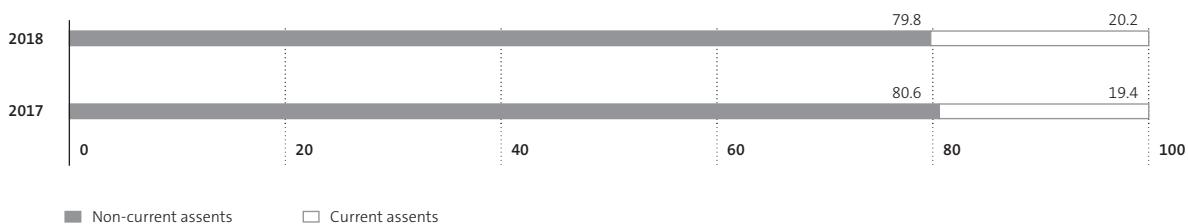
#### ANALYSIS OF ASSET STRUCTURE

Total assets of the K+S GROUP amounted to €9,666.2 million as at 31 December 2018 (31 December 2017: €9,754.4 million). Property, plant and equipment amounted to €6,687.9 million, about the same level as in the previous year (31 December 2017: €6,692.6 million). In particular due to increased product sales from Bethune, trade receivables also increased to €836.7 million (31 December, 2017: €714.9 million). Cash and cash equivalents, current and non-current securities and other financial investments fell to €185.8 million as at the balance sheet date (31 December 2017: €201.0 million). Compared to the previous year, the ratio of non-current to current assets was almost unchanged at 80:20 (2017: 81:19). FIG. 2.21

ASSETS

in %

FIG. 2.21



**MULTIPLE PERIOD OVERVIEW OF THE FINANCIAL POSITION**

TAB. 2.28

in € million	2014	2015	2016	2017	2018
Equity	3,974.5	4,295.6	4,552.2	4,160.7	4,144.1
Equity ratio (%)	50.6	51.9	47.2	42.7	41.6
Non-current liabilities	2,999.8	3,036.8	3,930.4	4,240.2	4,528.4
– of which provisions for pensions and similar obligations	162.8	166.1	186.7	166.4	187.0
– of which provisions for mining obligations	872.5	870.1	996.0	1,000.0	1,015.1
Non-current provisions as share of total equity and liabilities (%)	15.2	12.5	12.3	12.0	12.1
Current liabilities	880.9	941.2	1,162.9	1,353.5	1,293.7
– of which trade accounts payable	284.6	306.0	343.8	288.4	239.7
Financial liabilities	1,551.3	1,543.7	2,534.5	3,021.7	3,283.3
Net financial liabilities	590.9	1,363.6	2,401.1	2,974.1	3,241.5
Net debt	1,626.2	2,399.8	3,583.8	4,140.5	4,443.6
Financial liabilities/equity (%)	39.0	35.9	55.7	72.6	79.2
Net debt/equity (%)	40.9	55.9	78.7	99.5	107.2
Working capital	768.1	945.9	894.6	968.1	1,126.7
Net cash flows from operating activities	719.1	669.4	445.4	306.8	308.7
Free cash flow	134.2	-106.4	-756.0	-356.7	-204.0
Net cash flows from/(used in) financing activities	-787.8	-151.5	769.1	411.5	187.3

**NET DEBT**

TAB. 2.29

in € million	31 Dec 2017	31 Dec 2018
Cash and cash equivalents	182.6	167.6
Non-current securities and other financial investments	7.0	7.0
Current securities and other financial investments	11.4	11.2
Financial liabilities	-3,021.7	-3,283.3
Liabilities from finance leases	-173.0	-164.2
Long-term reimbursement claim for Morton Salt bond	19.6	20.2
<b>Net financial liabilities</b>	<b>-2,974.1</b>	<b>-3,241.5</b>
Provisions for pensions and similar obligations	-166.4	-187.0
Long-term provisions for mining obligations	-1,000.0	-1,015.1
<b>Net debt</b>	<b>-4,140.5</b>	<b>-4,443.6</b>

**MULTIPLE PERIOD OVERVIEW OF ASSETS**

TAB. 2.30

in € million	2014	2015	2016	2017	2018
Tangible and intangible fixed assets	5,128.3	6,123.1	7,540.4	7,655.4	7,670.2
Financial assets, non-current securities and other financial investments	47.0	14.1	34.4	28.0	96.1
Inventories	578.8	705.3	710.4	690.9	691.5
Trade receivables	732.9	708.6	656.5	714.9	836.7
Cash and cash equivalents, current securities and other financial investments	910.0	163.1	154.5	194.0	178.8

The net debt of the K+S GROUP was €4,443.6 million as at 31 December 2018 (31 December 2017: €4,140.5 million). Net financial liabilities, excluding non-current provisions, amounted to €3,241.5 million as at the reporting date (31 December 2017: €2,974.1 million). These increases were essentially attributable to negative adjusted free cash flows. The net debt/EBITDA ratio stood at 7.3 (31 December 2017: 7.2). The year 2018 was significantly affected by weather-related production standstills at our integrated Werra plant in Germany. We assume that EBITDA has decreased due to weather-related reasons by around €110 million. Our goal, however, remains to reducing our net debt/EBITDA ratio by half by 2020 from its H117 level of 8.1 and to achieving this goal within the scope of the transformation phase as part of our SHAPING 2030 strategy. **TAB. 2.29, 2.30**

- ⌚ ‘Corporate strategy’, page 43
- ⌚ ‘Definition of key indicators’, page 234

#### **RESTRICTED ASSETS**

In 2005, we began funding the pension obligations of the domestic companies through a contractual trust arrangement (CTA model). Such allocation of funds requires that financial resources are earmarked. The same applies to plan assets which serve to fund pension obligations in Canada. Moreover, reinsurance arrangements are in place which are also to be classified as plan assets in accordance with IFRS. Obligations treated in this way are presented on the balance sheet on a net basis in accordance with IFRS. In 2018, restricted assets in connection with pension obligations amounted to €399.0 million compared to €441.3 million in the previous year. In addition, as of the balance sheet date, plan assets for obligations from working lifetime accounts amounted to €19.3 million (2017: €0 million), which was also netted on the balance sheet.

- ⌚ ‘Notes’, note (21), page 188

#### **ASSETS NOT SHOWN ON THE BALANCE SHEET**

As at 31 December 2018, other financial obligations totalled €397.1 million (31 December 2017: €388.3 million) and concern both obligations arising from uncompleted capital expenditure projects as well as from operating leases for factory and office equipment (e.g. printers, photocopiers and IT peripherals). In addition, rail cars, vehicles and storage capacities are rented. Starting with

the 2019 financial year, the leased assets have to be capitalized in accordance with the newly applicable accounting standard IFRS 16 (see Notes to the Consolidated Financial Statements “New or changed accounting standards and interpretations” on page 167).

## **PRESENTATION OF SEGMENTS**

### **POTASH AND MAGNESIUM PRODUCTS BUSINESS UNIT**

#### **SIGNIFICANT INCREASE IN REVENUES**

In the year under review, revenues for this business unit amounted to €1,973.0 million, compared to €1,703.5 million in the previous year. This significant increase was due mainly to an increase in sales volumes thanks to the additional production output at our Bethune plant in Canada. In addition, higher fertilizer prices, especially overseas, had a positive impact. This was offset by reduced product availability at the German sites, in particular as a result of weather-related production stoppages and a lower operational performance at the integrated Werra plant. In total, the sales volumes in the Potash and Magnesium Products business unit nevertheless increased tangibly to around 7.5 million tonnes (2017: 6.7 million tonnes). **TAB. 2.31, 2.32**

- ⌚ ‘Industry-specific framework conditions’, page 89

In the reporting year, around 53% of revenues were generated in Europe. Of the remaining revenues, the majority was generated in Asia and South America. **FIG. 2.22**

In the 2018 financial year, revenues for potassium chloride (MOP) increased significantly to €1,004.0 million (2017: €733.4 million), in particular due to higher volumes as a result of the increase in production at the Bethune potash plant. In addition, prices partly rose tangibly over the course of the year. An unfavourable currency trend had an offsetting effect. In Europe, we sold around 1.2 million tonnes of potassium chloride in the year under review (2017: 1.2 million tonnes), and more than 2.9 million tonnes were sold overseas compared to 2.0 million tonnes in the previous year.

Revenues for fertilizer specialities remained virtually stable at €727.4 million compared to the same period last year (2017: €710.5 million). Lower product availability at the integrated

Werra plant was offset by slight price increases. While sales volumes in Europe remained unchanged at around 2.0 million tonnes, overseas sales fell from over 0.7 million tonnes in the previous year to 0.6 million tonnes.

In the Industrial Products unit, revenues declined moderately to €241.6 million from €259.5 million in the previous year. Sales volumes in Europe decreased to around 0.5 million tonnes (2017: 0.6 million tonnes) due to availability and remained stable overseas at 0.2 million tonnes (2017: 0.2 million tonnes).

#### RECOVERY OF OPERATING EARNINGS

EBITDA of the business unit amounted to €359.3 million in the year under review and was thus significantly higher than the previous year's figure (2017: €268.8 million). This was mainly attributable to the sales and price volume increases described above. Our Canadian plant in Bethune improved its earnings contribution significantly compared to the previous year, as expected, and achieved a positive EBITDA for the first time. This was mainly offset by cuts in production at the integrated Werra plant.

#### INTEGRATED WERRA PLANT TEMPORARILY CLOSED

##### OWING TO EXTREME DROUGHT

In the third and fourth quarters of 2018 we were forced to suspend production at the sites of the Werra plant as follows: Wintershall 38 days, Hattorf 23 days and Unterbreizbach 3 days. The weather-related negative EBITDA effect in 2018, including all related costs, amounted to around €110 million. This was due to the unusually long drought in Germany, which resulted in extremely low water levels in the Werra river. Consequently, discharge of saline wastewater into this river was only possible to a very limited extent, if at all, although we were able to reduce the amount of wastewater produced thanks to our KAINITE CRYSTALLISATION AND FLOTATION facility (KCF facility) and were able to gain additional flexibility by expanding our basin capacity and fully exploiting additional measures. For temporary wastewater disposal, we made intensive use of additional remote measures such as discharge into the inactive K+S Bergmannssegen-Hugo mine (Hanover region).

▷ 'Environment', page 58

#### KEY FIGURES

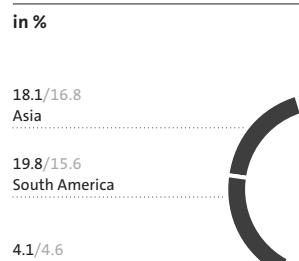
TAB. 2.31

in € million	2017	Q1/18	Q2/18	Q3/18	Q4/18	2018	%
Revenues	1,703.5	488.7	440.5	422.2	621.6	1,973.0	+15.8
– of which potassium chloride	733.4	224.6	205.9	215.3	358.3	1,004.0	+36.9
– of which fertilizer specialities	710.5	202.6	173.7	155.3	195.8	727.4	+2.4
– of which industrial products	259.5	61.5	60.9	51.6	67.7	241.6	-6.9
EBITDA	268.8	120.8	90.6	3.4	144.5	359.3	+33.7

#### REVENUES BY REGION

FIG. 2.22

TAB. 2.32



© 2018/2017

4.6/4.1  
Africa, Oceania  
18.1/16.8  
Asia  
53.4/58.9  
Europe  
19.8/15.6  
South America  
14.7/17.2  
thereof Germany  
4.1/4.6  
North America

#### VARIANCE COMPARED WITH PREVIOUS YEAR

TAB. 2.32

in %	2018
Change in revenues	+15.8
– volume/structure-related	+10.0
– price/pricing-related	+7.7
– currency-related	-1.9
– consolidation-related	-

DEVELOPMENT OF REVENUES, SALES VOLUMES AND AVERAGE PRICES BY REGION<sup>1</sup>

TAB. 2.33

		2017	Q1/18	Q2/18	Q3/18	Q4/18	2018	%
Revenues	€ million	1,703.5	488.7	440.5	422.2	621.6	1,973.0	+15.8
Europe	€ million	1,002.8	306.0	244.2	214.3	288.2	1,052.7	+5.0
Overseas	USD million	791.5	224.7	233.6	242.0	386.5	1,086.8	+37.3
Sales volumes	t million (product)	6.71	1.94	1.71	1.56	2.24	7.46	+11.2
Europe	t million (product)	3.77	1.11	0.89	0.75	0.99	3.74	-0.8
Overseas	t million (product)	2.94	0.84	0.83	0.81	1.25	3.72	+26.5
Average price	€/t (product)	253.8	251.6	257.2	270.0	276.9	264.4	+4.2
Europe	€/t (product)	266.0	276.3	274.4	285.7	289.6	281.5	+5.8
Overseas	USD/t (product)	269.0	269.1	282.8	297.5	304.5	291.9	+8.5

<sup>1</sup> Revenues include prices both inclusive and exclusive of freight costs and, in the case of overseas revenues, are based on the respective EUR/USD spot rates. Hedging transactions were concluded for most of these sales revenues. Prices are also affected by the relevant product mix and should therefore be taken as a rough indication only.

#### PRODUCT AVAILABILITY AT GERMAN PRODUCTION SITES

2018 has shown that we still need to improve our efficiency in terms of exploiting our German deposits. The challenges we identified in the course of the year included among other things limited personnel and machinery availability at the Werra plant, low levels of recoverable materials (K<sub>2</sub>O) in mine sections of the Unterbreizbach site and geological challenges at the Neuhof site. We were able to make some improvements by the end of the year as a result of numerous measures, such as the partial renewal of the underground vehicle fleet, but still lagged behind our potential technical capacity and thus could not exploit the marketable deductible potential. For this reason, and as part of our new SHAPING 2030 strategy, we have launched the Operational Excellence project. We aim to significantly increase efficiency at all our sites by 2020.

⇒ ‘Business model’, page 31

#### BETHUNE PLANT IN CANADA PRODUCES MORE THAN

#### 1.4 MILLION TONNES OF POTASH FOR THE FIRST TIME

In the 2018 financial year, we generated in excess of 1.4 million tonnes of potassium chloride at our new Bethune site for the first time, enabling us to meet our latest production target. However, we are still in the ramp-up phase. We are working hard to meet the various challenges associated with the start-up of a new

potash mine, as addressed in summer 2018. We have identified several approaches to significantly improve our product quality at Bethune, so we are confident that we will achieve our quality target by the end of 2019.

#### EXPANSION OF TAILINGS PILE CAPACITY FOR THE HATTORF POTASH SITE APPROVED

The licensing authorities approved our application for the expansion of tailings pile capacity at the Hattorf site on 11 October 2018. The safe disposal option for solid production residues this will provide is an essential requirement for operation of the potash mine. The current approval status is valid for five to six years. In addition, the authorities are currently reviewing the application for the second phase of the expansion of tailings pile capacity, which is expected to last until the early 2040s. We are also confident that we will receive the required permits for the expansion of tailings pile capacity at our Wintershall and Zielitz sites in due time.

⇒ ‘Risk and opportunity report’, page 117;

#### DISCONTINUATION OF PRODUCTION AT SIGMUNDSHALL POTASH MINE

Potash production at the Sigmundshall site (Hanover region) terminated on 21 December 2018. The recoverable reserves were dwindling, and the conditions for mining the commodity at a

depth of over 1,400 metres pushed people and technology to the limit. As a result of the greater effort required to mine, productivity at this site fell steadily over the past three years despite the strong commitment of the employees.

### SALT BUSINESS UNIT

#### MODERATE INCREASE IN REVENUES

In the 2018 financial year, revenues in the Salt business unit amounted to €1,890.8 million (2017: €1,762.0 million), about 7% above the figure for the previous year, due mainly to higher revenues in the North American de-icing salt business resulting from volume effects. **FIG. 2.23, TAB. 2.34, 2.35**

In North America, demand for de-icing salt rose significantly as a result of the winter weather at the beginning of the year and led to low inventories on the part of our customers. By contrast, the end of the year was comparatively mild. European demand in 2018 remained at the previous year's level. At 13.5 million tonnes,

approximately 27% more de-icing salt was sold over the course of the year (2017: 10.7 million tonnes). At €55 per tonne, the average price was around 4% down on the previous year's figure. While prices in the Midwest of the USA and Canada rose during the course of the year, prices on the East Coast and in Europe fell. Overall, revenues from de-icing salt in 2018 amounted to €739.8 million, compared with €613.2 million in the previous year.

Revenues of €411.9 million for the Consumer Products segment in the year under review remained roughly at the level of the previous year (2017: €407.4 million). Higher prices for water softening salts in North America were offset by the unfavourable development of exchange rates. Sales volumes also remained stable at 1.5 million tonnes.

Revenues for industrial salts, such as for the animal feed, oil/natural gas and pharmaceutical industry, increased by 5% in the past financial year; revenues amounted to €334.4 million compared to €318.4 million in the previous year. Negative currency

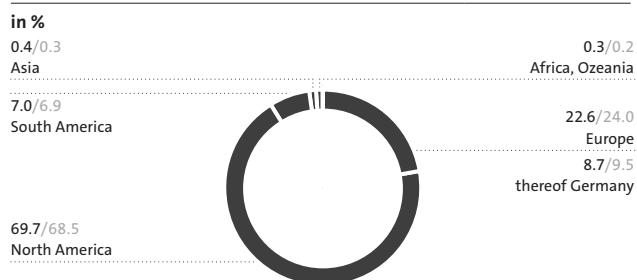
### KEY INDICATORS

TAB. 2.34

in € million	2017	Q1/18	Q2/18	Q3/18	Q4/18	2018	%
Revenues	1,762.0	635.6	326.9	375.0	553.3	1,890.8	+7.3
– of which de-icing salt	613.2	361.4	48.3	88.8	241.3	739.8	+20.6
– of which consumer products	407.4	97.6	100.7	100.1	113.5	411.9	+1.1
– of which industrial salt	318.4	81.9	83.0	83.9	85.6	334.4	+5.0
– of which food processing	242.5	52.1	53.9	56.2	55.7	217.9	-10.1
– of which salt for chemical use	144.6	30.8	33.9	37.1	43.0	144.8	+0.1
EBITDA	325.2	120.9	23.3	41.5	88.9	274.5	-15.6

### REVENUES BY REGION

FIG. 2.23



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### VARIANCE COMPARED WITH PREVIOUS YEAR

TAB. 2.35

in %	2018
Change in revenues	+7.3
– volume/structure-related	+10.0
– price/pricing-related	+1.5
– currency-related	-4.3
– consolidation-related	-

DEVELOPMENT OF REVENUES, SALES VOLUMES AND AVERAGE PRICES<sup>1</sup>

TAB. 2.36

		2017	Q1/18	Q2/18	Q3/18	Q4/18	2018	%
<b>De-icing</b>								
Revenues	€ million	613.2	361.4	48.3	88.8	241.3	739.8	+20.6
Sales volumes	million tonnes	10.66	6.89	0.94	1.59	4.11	13.53	+26.9
Average price	€/tonnes	57.5	52.5	51.4	55.9	58.7	54.7	-4.9
<b>Consumer products, food processing, industrial salt and salt for chemical use</b>								
Revenues	€ million	1,108.3	262.4	271.5	277.4	297.7	1,109.0	+0.1
Sales volumes	million tonnes	9.66	2.45	2.51	2.54	2.65	10.15	+5.1
Average price	€/tonnes	114.8	107.1	108.2	109.4	112.3	109.3	-4.9

<sup>1</sup> Revenues include prices both inclusive and exclusive of freight costs. Prices are also affected by exchange rate movements and the relevant product mix and should therefore be taken as a rough indication only.

effects were more than offset by significantly higher sales volumes in South America. Overall, we sold 4.3 million tonnes in this product group, an increase of around 19% on the previous year's value (2017: 3.6 million tonnes).

Revenues from salt for the food processing industry fell by a good 10% to €217.9 million (2017: €242.5 million) as a result of volume and currency factors. Sales volumes in 2018 amounted to just under 1.2 million tonnes (2017: 1.3 million tonnes).

We could confirm revenues from the salt for chemical use business at the same high levels of the previous year, rising slightly to €144.8 million (2017: €144.6 million). Sales volumes of 3.2 million tonnes in total were slightly lower than in the previous year (2017: 3.3 million tonnes).

At 23.7 million tonnes, sales volumes for solid salt were around 17% above the figure for the previous year (2017: 20.3 million tonnes).

TAB. 2.36

#### EBITDA BURDENED FROM LOGISTICS COSTS

EBITDA amounted to €274.5 million, down from €325.2 million in the previous year. In addition to negative currency effects, the main reason for the significant decrease was the increase in logistics costs over the course of the year. Our logistics expenses, which account for about one-third of the business unit's total costs, increased significantly, especially in North America, owing to temporary increases in fuel prices and an increase in the cost of freight due to insufficient capacity for trucks. In addition, the drought in Germany and the resulting low river water levels led to higher freight costs for inland water vessels in Europe.

#### COMPLEMENTARY ACTIVITIES

##### REVENUES ABOVE PREVIOUS YEAR

Revenues for Complementary Activities increased moderately to €172.4 million (2017: €159.9 million). Intra-group revenues deriving from services provided to K+S GROUP companies are not

KEY FIGURES

TAB. 2.37

in € million	2017	Q1/18	Q2/18	Q3/18	Q4/18	2018	%
Revenues	159.9	44.9	43.9	41.7	41.9	172.4	+7.8
– Waste Management and Recycling	85.8	23.7	22.7	21.2	21.5	89.1	+3.8
– K+S Transport GmbH	9.7	2.6	2.6	2.1	2.6	9.9	+2.1
– Animal Hygiene Products	40.1	10.9	10.4	10.8	10.2	42.3	+5.5
– CFK (Trading)	24.3	7.7	8.1	7.6	7.7	31.1	+28.0
EBITDA	30.3	9.8	8.0	6.2	7.2	31.3	+3.3

included in these figures. If these intra-Group revenues are included, total revenues for the year under review amounted to €202.5 million (2017: €188.6 million). FIG. 2.24, TAB. 2.37, 2.38

Revenues in the Waste Management and Recycling Segment increased from €85.8 million to €89.1 million in the year under review, mainly as a result of higher volumes. At €9.9 million, third-party revenues for K+S TRANSPORT GMBH were about at the same level as in the previous year (2017: €9.7 million). Revenues increased volume-related to €42.3 million for the Animal Hygiene Products segment (2017: €40.1 million). The cfr trading business recorded a price-driven increase in revenues to €31.1 million (2017: €24.3 million).

#### EBITDA AT PREVIOUS YEAR'S LEVEL

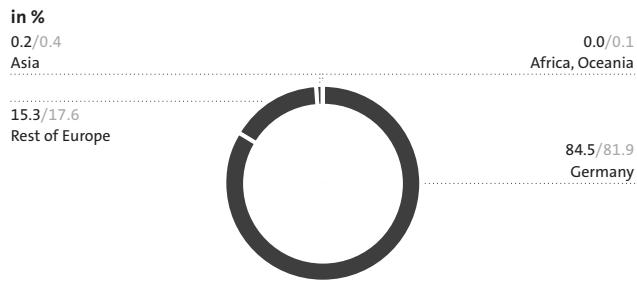
EBITDA for Complementary Activities amounted to €31.3 million in the year under review, almost on a par with the previous year (2017: €30.3 million). Price and volume-related increases were almost offset by cost increases.

#### ASSESSMENT OF THE CURRENT ECONOMIC SITUATION BY THE BOARD OF EXECUTIVE DIRECTORS<sup>1</sup>

2018 was a particularly challenging year for the K+S GROUP. The prolonged heat wave combined with extreme drought, in particular, resulted in low water levels in the Werra, making stoppages in production in the second half of the year unavoidable, resulting in a weather-related negative EBITDA effect of around €110 million. This was despite the fact that we reduced the amount of wastewater produced thanks to the KAINITE CRYSTALLISATION AND FLOTATION facility (KCF facility) and were able to gain additional flexibility by expanding our basin capacity and fully exploiting additional measures. But challenges such as limited personnel and machinery availability at the Werra plant, low levels of recoverable materials (K<sub>2</sub>O) at the Unterbreizbach site and geological challenges at the Neuhof site have also shown that we still need to improve our efficiency in terms of exploiting our German deposits. Just a few years ago, the combined strength of these effects might have caused earnings to slump. Today, the K+S GROUP is so stable that in spite of all the headwinds, we were still able to improve our EBITDA by 5% to €60.3 million. This was attributable to the positive market environment for potash and magnesium products, a good de-icing salt business in the first quarter, the ramp-up in production at our Canadian potash site in Bethune as well as our efforts and strategic decisions with regard to operating performance. At €–206.3 million, the adjusted free cash flow remained negative although it improved significantly compared to the previous year (2017: €–389.8 million). The net debt/EBITDA ratio in 2018 stood at 7.3 (31 December 2017: 7.2).

**REVENUES BY REGION**

FIG. 2.24



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**VARIANCE COMPARED WITH PREVIOUS YEAR**

TAB. 2.38

in %	2018
Change in revenues	+7.8
– volume/structure-related	+3.0
– price/pricing-related	+4.8
– currency-related	–
– consolidation-related	–

<sup>1</sup> As at 5 March 2019.

## REPORT ON RISKS AND OPPORTUNITIES

As an international company, K+S regularly encounters a series of developments and events that may affect the achievement of financial and non-financial goals. Strategy and planning constitute the starting point for the management of risks and opportunities at K+S.

We define risks as negative deviations and opportunities as positive deviations from possible future developments of a forecast or target value.

### MANAGEMENT PROCESS

#### IDENTIFICATION

Risks and opportunities are generally identified in the respective corporate departments using various tools. There are a number of tools available for this purpose. In ongoing operations and project management, we take a close look at analyses of the market and the competition, for instance, evaluate a wide range of external information, the relevant revenue/cost elements and mining circumstances, and observe risk indicators and success factors from the macroeconomic, industry-specific, legal and political environment.

⇒ ‘Declaration on Corporate Governance’, page 67

#### ASSESSMENT OF THE FINANCIAL IMPACT AND MANAGEMENT

We have set up and documented specific processes for managing risks and opportunities. For each risk a gross assessment is carried out initially in which the likelihood of occurrence and the loss potential are quantitatively assessed in terms of the financial impact. The next step involves developing suitable countermeasures, considering alternative risk scenarios. Our aim is to reduce the loss potential or the likelihood of occurrence. The decision whether to implement the measures also takes account of the actual costs required. In the process, risks can also be transferred to a third party. If the gross likelihood of occurrence and/or gross loss potential can be reliably reduced by implementing effective

and appropriate countermeasures, the focus of consideration will be on the net likelihood of occurrence and the net loss potential affecting the operating result.

With regard to their likelihood of occurrence and loss potential, risks are assessed internally for a short-, medium- and long-term observation period, i.e. for the coming 12, 36 and 120 months from the time of identification or review. The assessments for risks that have already been identified and the counter-measures developed and possibly implemented are continuously reviewed to ensure these are up to date and effective; they are adjusted and reported in the event of significant changes or if defined thresholds are exceeded.

To assess the financial impact, each opportunity is examined in terms of its feasibility, profitability and any risks it may entail. Suitable development measures are specifically sought, pursued and implemented in order to make effective use of opportunities. The benefit potential only applies to the net perspective following implementation of appropriate development measures. The assessment periods are identical to those used for risk assessment.

#### ASSESSMENT OF NON-FINANCIAL IMPACT

Identified risks can also have negative effects on the non-financial aspects of environmental matters, social and employee-related matters, respect for human rights, anti-corruption and bribery matters. In case the risk materialises, these effects may give rise to reputational risks that are difficult or impossible to quantify.

The non-financial impact is identified and assessed based on our central sustainability analyses and using the dimensions of loss potential and likelihood of occurrence.

Systems and concepts for managing developments or events that may affect the above-mentioned aspects are described in our sustainability strategy in the non-financial statement.

⇒ ‘Non-financial Statement’, page 55

#### **REPORTING**

Internal reporting on risks and opportunities is based on a threshold concept. This involves continuous reporting on risks and opportunities by the corporate departments to the Board of Executive Directors if defined thresholds for both the likelihood of occurrence and loss potential/benefit potential are exceeded. Information on whether a risk or an opportunity is included in the forecast or planning is also provided.

Risks and opportunities whose financial impact is considered in the mid-term planning or forecast through corresponding earnings discounts or premiums do not form part of risk and opportunity reporting. Risks related to the non-financial aspects as defined by the CSR Directive Implementation Act should at least have a significant loss potential and a high likelihood of occurrence; such were not identified in the past financial year. However, where materialising risks could have a significant or serious non-financial impact on the aspects of environmental matters, social and employee-related matters, respect for human rights, anti-corruption and bribery matters as well as supply chain, we specify these in the description of the relevant risk.

Moreover, when determining the substantial general assumptions for the mid-term planning or forecast (such as volumes, revenues, costs, exchange rates, interest rates), the relevant risks and opportunities need to be considered in the likeliest scenario. In addition, the negative/positive effect that certain deviations would have on the individual planning parameters is required to be disclosed for particular planning assumptions (“sensitivities”).

The Board of Executive Directors and management continually have an overview of the current risk and opportunity exposure thanks to standardised reporting. Significant risks that arise in the short term are communicated directly to the Board of Executive

Directors without delay in case of urgency. The Supervisory Board is also briefed by the Board of Executive Directors on a regular basis and in a timely manner, immediately in urgent cases.

#### **RISK MANAGEMENT IN RELATION TO THE UTILISATION OF FINANCIAL INSTRUMENTS**

We aim to limit financial risks (for example, exchange rate risk, interest rate risk, default risk and liquidity risk) through special management. A centralised finance management system has been set up at K+S AKTIENGESELLSCHAFT for this purpose. In addition, we manage our capital structure to safeguard the financing of business operations and investing activities at all times and in the long term.

⇒ ‘Financial Position’, page 98

Our international business activities can give rise to currency-related revenue risks, which we counteract through hedging transactions as part of our currency management. Internal regulations determine the permissible hedging strategies as well as hedging instruments, responsibilities, processes and control mechanisms. Other market risks may arise from changes in interest rates. Similar regulations apply insofar as derivative financial instruments are specifically used here for hedging purposes. Financial transactions are conducted only with suitable partners. The suitability of partners and compliance with position limits is continuously reviewed through regular monitoring. A balanced distribution of the financial derivatives used across various counterparties is implemented to further limit the risk of default.

The instruments selected are used exclusively to secure underlying transactions, but are not used for trading or speculative purposes. Firstly, hedging transactions are concluded for existing underlying transactions. Our intention here is to largely avert exchange rate risks arising from recognised underlying transactions (usually receivables). Secondly, we enter into hedging transactions for future business, which can be anticipated with a high level of probability based on empirically reliable findings (anticipatory hedges).

⇒ ‘Notes’, page 150

## RISKS AND OPPORTUNITIES 2019 – 2021

Risks and opportunities that could affect the results of operations, financial position and net assets of k+s during the mid-term planning period (three years) and have not yet been incorporated into the planning through corresponding earnings discounts or premiums are listed and described in this section. The cumulative net loss/net benefit potential is distinguished as follows:

- + Significant financial impact: > €200 million
- + Moderate financial impact: > €25–200 million

The relevant likelihood of occurrence is differentiated as follows:

- + Likely: > 50%
- + Possible: 10–50%
- + Unlikely: < 10%

We show changes in the assessment of risks and opportunities compared with the previous year as follows:

- + Higher than in the previous year: ↑
- + Lower than in the previous year: ↓

A change in the general conditions compared with the assumptions made in our mid-term planning may result in a reassessment of risks and opportunities over time. The results are then communicated accordingly in our interim reporting.

### OVERVIEW OF RISKS

Table 2.40 provides an overview of the risks with significant or moderate net loss potential with their net likelihood of occurrence for an observation period of three years, as well as the change in the assessment compared with the previous year. Comparable risks from different business units are aggregated and reported. The risks listed are considered as potential negative deviations from the assumptions made in the mid-term planning (for example in respect of volumes, revenues, costs, exchange rates and interest rates). If no business unit is specified, the risks apply to the entire k+s GROUP. TAB. 2.40

### OVERVIEW OF OPPORTUNITIES

Table 2.39 provides an overview of the opportunities with significant and moderate net benefit potential with their net likelihood of occurrence for an observation period of three years, as well as the change in the assessment compared with the previous year. Comparable opportunities from different business units

#### OPPORTUNITIES

TAB. 2.39

	Likelihood of occurrence	Benefit potential
<b>External and industry-specific opportunities</b>		
Macroeconomic developments	Possible	Moderate
Price increase/increase in demand	Possible	Moderate
Weather-related fluctuations in demand	Possible	Significant
<b>Operational opportunities</b>		
Market penetration, market development, expansion in capacity, cost optimisation, acquisitions and/or strategic partnerships, innovation	Possible	Moderate
Leveraging of synergies	Possible	Moderate
Ramp-up phase at the Bethune site	Possible	Moderate
Litigation	Possible	Moderate
Energy costs	Possible	Moderate
<b>Financial opportunities</b>		
Currency/exchange rate fluctuations	Possible	Significant
Change in the general interest rate level	Possible	Moderate
Upgrading of the company rating	Possible	Moderate

**RISKS****TAB. 2.40**

	<b>Likelihood of occurrence</b>	<b>Loss potential</b>		
<b>External and industry-specific risks</b>				
Macroeconomic developments	Possible	Significant		
Increased supply/reduced demand	Possible	Significant		
Weather-related fluctuations in demand	Possible	Significant		
Additional weather-related costs	Possible	Moderate		
<b>Risks arising from changes in the legal environment</b>				
Management planning in accordance with the Water Framework Directive or amendment, refusal or revocation by a court of official licences for the disposal of liquid and solid production residues in Germany	Possible	Significant		
More stringent requirements regarding the outdoor storage of de-icing salt in North America	Possible	Significant		
Collateral security under mining law	Possible	Moderate		
Tightening of existing regulations on the underground disposal of mining waste	Possible	Moderate		
<b>Operational risks</b>				
Leveraging of synergies	Possible	Moderate		
Ramp-up phase at the Bethune site	Possible	Moderate		
Litigation risks and legal disputes	Possible	Moderate		
Energy costs and energy supply	Possible	Moderate		
Freight costs and availability of transport capacity	Possible	Moderate		
Production equipment	Possible	Moderate		
Carbon dioxide pockets in deposits	Possible	Moderate		
Changes in the composition of crude salt	Possible	New	Moderate	New
Damage due to rock bursts	Unlikely		Significant	
Water inflow	Unlikely		Significant	
Compliance	Unlikely		Significant	
Non-compliance with regulations on occupational exposure limits underground	Unlikely	New	Significant	New
Loss of suppliers and supply bottlenecks	Unlikely		Moderate	
Personnel	Unlikely		Moderate	
IT security	Unlikely		Moderate	
Reputation	Unlikely		Moderate	
<b>Financial risks</b>				
Currency/exchange rate fluctuations	Possible	Significant		
Change in the general interest rate level	Possible	Moderate		
Downgrading of the company rating	Possible	Moderate		
Liquidity	Unlikely	Significant		
Default on receivables from customers	Unlikely		Moderate	
Default of partners in financial transactions	Unlikely		Moderate	

are aggregated and reported. The opportunities listed are considered as potential positive deviations compared with the assumptions made in the mid-term planning (for example in respect of

volumes, revenues, costs, exchange rates and interest rates). If no business unit is specified, the opportunities concern the entire K+S GROUP. TAB. 2.39

## EXTERNAL AND SECTOR-SPECIFIC RISKS AND OPPORTUNITIES

### **MACROECONOMIC DEVELOPMENTS**

Demand for potash and magnesium products is significantly influenced by economic growth and the associated rising standards of living in the regions relevant to us, trends in soft commodity prices and, in part, also by political decisions in some consumer countries. International prices for potassium chloride continued to increase in 2018, continuing the positive trend seen since mid-2016. Overall, we believe that the level of agricultural prices should continue to provide an incentive for farmers to increase their yield per hectare also through more intensive use of plant nutrients. There is a risk that growth in the emerging economies will slow down contrary to expectations and/or that the sovereign debt crisis in the Euro area will intensify again. If this should lead to agricultural prices falling to a level that triggers uncertainty among farmers about their future income situation, it could adversely affect their demand for plant nutrients. The impact on the Company depends on the duration and the intensity of the relevant scenario.

⇒ ‘Macroeconomic environment’, page 88

The impact of the general economic situation on demand for de-icing and industrial salt as well as for consumer products and salt for food processing is of minor importance, since this business is largely independent of economic conditions.

Unpredictable changes in US trade policy cannot be ruled out. These are possible and are being continuously monitored. Some parts of the US tax reform also are not yet finalized. The relevant impact cannot be assessed at present.

A hard or soft Brexit would have little direct impact on K+S. The indirect effects, however, are currently not predictable.

Should the global economy develop better than expected and growth prove to be higher than generally forecast, especially in our main sales regions Europe, North America, Brazil and South East Asia, this could lead to positive deviations from planning.

We would respond to the effects described above with demand-oriented production management.

As K+S's planning is based on the expectations stated in the forecast report, the assessment of the future macroeconomic situation is incorporated directly in the forecast for 2019.

### **INCREASED SUPPLY/REDUCED DEMAND**

Particularly products from our Potash and Magnesium Products business unit could be threatened by considerable decreases in demand caused by external influences.

In terms of demand, macroeconomic factors such as unfavourable exchange rate developments or liquidity reduction of farm businesses could affect demand in individual sales regions. The same is true for political market regulation, for example through regional subsidy cuts, the imposition of customs duties on fertilizers and/or agricultural products or the introduction of more restrictive fertilizer regulations. Environmental factors such as diseases in certain crops, the occurrence of animal epidemics or unfavourable weather conditions could likewise lead to a decline in demand. Moreover, demand could also develop negatively due to deliberate purchasing restraint on the part of our customers.

Changes on the supply side could arise as a result of capacity expansion. New and existing producers are in the process of expanding their production capacity based on their forecasts of long-term growth in demand on the global potash market.

Should the market not be ready to absorb additional volumes entirely, this could increase competitive pressure during a transitional period. Furthermore, producers could attempt to gain additional market share or regain lost market share by increasing supply within available capacity. A decline in demand could also give rise to increased competitive pressure.

Major increases in capacity and its utilisation, increases in supply from individual producers within available capacity as well as longer-term decreases in demand could substantially affect pricing and/or sales prospects. This could change the existing structure of the entire plant nutrient market, even resulting in the squeezing out of supply-side competition. Consequently, a drop in potash prices and/or saleable volumes cannot be ruled out.

The impact on the Company depends on the duration and intensity of these events. Since the development of new potash capacity is very capital-intensive and takes many years to implement, there should be an incentive for producers to obtain an attractive premium on the capital employed. We consider the long-term drivers to be still valid: demand for agricultural products and thus for plant nutrients depends on megatrends such as the growing world population and a rising standard of living in the emerging economies. Plant nutrients, which increase yields and enhance quality, will therefore also play a key role in future agricultural production.

To increase competitiveness, we are working to further improve our cost and organisational structures and expand our speciality products.

#### **PRICE INCREASE/INCREASE IN DEMAND**

Opportunities with significant positive effects essentially lie in demand for potash and magnesium products.

In 2018, the industry situation in the Potash and Magnesium Products business unit was characterised by strong demand. International prices for potassium chloride continued to increase almost everywhere in 2018, continuing the trend seen since mid-2016. If farmers utilise any additional available uncultivated land or increase the intensity of existing cultivation, this would require additional use of plant nutrients and in future could result in global demand for potash fertilizers rising faster than forecast. In addition, the trend towards balanced fertilization involving the use of the main nutrients nitrogen (N), phosphorus (P) and potassium (K) in key sales regions such as India and China could lead to disproportionate growth in demand for potash.

The financial impact of the associated increase in demand depends to a large extent on the scale of the fertilizer price increase triggered as a result. Compared with the assumptions made in our mid-term planning, we consider positive price effects with a moderate impact to be possible, but we do not anticipate a significant impact in the medium-term owing to the expected competition.

#### **WEATHER-RELATED FLUCTUATIONS IN DEMAND**

In the Salt business unit, the weather in the de-icing salt regions of Europe and North America is of particular relevance. Our planning is based on a rolling average for the past ten years. An unusually hard winter in K+S's de-icing salt regions could have a clearly positive effect on sales volumes of de-icing salt caused by a weather-related increase in demand. This in turn could put pressure on inventory levels and subsequently result in increasing prices. Conversely, mild winters may lead to a weather-related decrease in demand and thus considerably reduced sales volumes; this in turn could create large season-ending inventories of de-icing salt, putting pressure on tenders for the upcoming winter season. Both cases would have a moderate financial impact on the development of the Company's revenues and earnings with respect to one year. Should such positive or negative weather conditions be repeated during the medium-term period, significant opportunities or risks could arise.

We are responding to such fluctuations with regional diversification, demand-oriented production management and flexible working time models. Strategic inventories and flexible adjustment of production levels of de-icing salt enable us to meet spikes in demand even at short notice.

A sales risk for the Potash and Magnesium Products business unit could arise as a result of a weather-related decline in demand. Prolonged cold and wet weather conditions during the spring season, which is particularly important for Europe, could, for example, result in shifts in or even declining sales of plant nutrients. The same holds for weather phenomena such as El Niño, La Niña or droughts, which could lead to significant losses of yields for farmers in the affected regions and reduced use of plant nutrients.

### **ADDITIONAL WEATHER-RELATED COSTS**

In the Potash and Magnesium Products business unit, water law framework conditions are particularly important at some production sites for the unrestricted use of the available technical production capacity. We believe that the commissioning of the KAINITE CRYSTALLISATION AND FLOTATION FACILITY (KCF facility) in January 2018 will allow the Werra plant to dispose of saline wastewater close to the site under the existing permits in a hydrological normal year under the assumption of the unobstructed use of the deep-well injection. In a dry year, however, certain volumes of saline wastewater would have to be disposed of remotely, generating additional costs for the transportation of this waste. In the case of extreme drought (similar to summer/autumn 2018) with an unusually low water flow in the Werra river over a prolonged period, production stoppages could occur if all available resources for off-site waste disposal are exhausted. In addition to the low water flow, under extreme conditions the water temperature could also affect production at the Werra plant because the volume of water used for cooling purposes that can be discharged into the Werra and Ulster rivers is additionally limited by official temperature threshold values.

For this reason, k+s developed additional measures for wastewater disposal. We have obtained permits for temporary storage of brine at the Springen mining field (Merkers mine) and for discharging process and tailings pile water into the inactive k+s Bergmanns-segen-Hugo mine (Hanover region). Furthermore, another cavern at the underground gas storage (UGS) facility in Bernburg is being secured by flooding with saturated saline water from potash production at the Werra plant. Additional measures include continuous expansion of basin capacity on site to further increase the flexibility of wastewater management. In doing so, we aim to increase the temporary storage capacity for saline wastewater on site to a total of up to 1 million m<sup>3</sup>.

### **RISKS ARISING FROM CHANGES IN THE LEGAL ENVIRONMENT**

A large number of licences and permits under public law are required for the exercise of our activities, particularly in the areas of mining/extraction/processing and disposal of residues. The framework for the granting of these licences and permits is firmly entrenched in European and national environmental, water and mining law with respect to production in Germany and Europe. We believe that the regulatory density will increase further in the future.

There is a risk for all activities requiring approval that third parties will appeal against licences or permits after they have been granted and that these will be revoked by courts. Furthermore, extensions of existing licences and permits or new ones granted may be restricted in terms of time and scope, permanently amended or refused or further conditions may be attached. In addition, ancillary provisions of individual authorizations/permits may result in their suspension.

### **MANAGEMENT PLANNING IN ACCORDANCE WITH THE WATER FRAMEWORK DIRECTIVE OR AMENDMENT, REFUSAL OR REVOCATION BY A COURT OF OFFICIAL LICENCES FOR THE DISPOSAL OF LIQUID AND SOLID PRODUCTION RESIDUES IN GERMANY**

In the Potash and Magnesium Products business unit, both solid residues and liquid residues (saline wastewater) arise from both ongoing production and the tailings piles. The solid residues are either placed on our tailings piles or disposed of underground. Saline wastewater is discharged into rivers in accordance with existing permits and some is injected into the dolomite layer. It is also used to secure old mines permanently.

### **REFUSAL OF OFFICIAL PERMITS FOR THE DISPOSAL OF LIQUID PRODUCTION RESIDUES: DISCHARGE**

The management plans based on the European Water Framework Directive and German water legislation impose significant general conditions for the above-mentioned means of disposal of

residues from the German sites. For the coming years, the management plans for the second management period of 2015 to 2021 of the individual river authorities (FGG) are relevant in this regard.

⇒ ‘Environment’, page 58

The management plan currently in force forms the regulatory framework for the period from 2015 to 2021 and will not have any direct adverse effect on potash production in the Hesse-Thuringia potash district during this period. Further measures and target values for the third management period from 2021 to 2027 will be reviewed and defined in the coming years. If the aspects included in the management plan for the period from 2015 to 2021 (in particular the target values in bodies of water) also appear in the plan for the period after 2021 without further realizable and proportionate measures being available, considerable risks relating to the granting and retention of operating licences, planning decisions approving public works and water permits cannot be ruled out. This could have a material adverse effect on employment and on the region's economic situation.

Further measures for saline wastewater prevention and additional means of disposal will be examined during the period from 2015 to 2021.

#### **REFUSAL OF OFFICIAL PERMITS FOR THE DISPOSAL OF LIQUID PRODUCTION RESIDUES: INJECTION**

The deep-well injection permit for saline wastewater from potash production at the Werra plant is valid until the end of 2021. The permit is for an annual injection volume of 1.5 million m<sup>3</sup> and it also limits the daily injection volume to 5,000 m<sup>3</sup> per day. k+s will not apply for a continuation of deep-well injection. If, contrary to expectations, circumstances arise that could have an adverse effect on usable groundwater resources, if ancillary clauses could not be complied with, or if appeals against the existing permit were successful, this could result in the restriction or revocation of existing permits.

This in turn could lead to production stoppages and/or major cuts in production at the affected sites due to a lack of disposal options for saline wastewater (injection volumes) and/or give rise to additional costs for transport to remote alternative disposal sites. We believe that the decisions by the authorities will endure and that potash production at the Werra plant is secured under these

circumstances. The results of a 3D groundwater model also confirm that adverse effects from the injection to the groundwater can be excluded. A revocation is still possible if compliance with the threshold values at two wells of a potable water supply facility is not ensured.

k+s continues to work hard on measures to reduce saline wastewater and on alternative disposal options. Research and development as well as innovation activities are also being promoted. These are designed to ensure the disposal of production and tailings pile wastewater into the Werra river largely through the discharge permit. The aim of these measures is also to maintain added value and safeguard the associated jobs over the long term by means of further substantial investments, as well as to reduce the impact on the Werra and Weser rivers and thus ensure the future viability of the potash plants in the Hesse-Thuringia potash district.

⇒ ‘Environment’, page 58

#### **REFUSAL OR REVOCATION BY A COURT OF OFFICIAL PERMITS FOR THE DISPOSAL OF SOLID PRODUCTION RESIDUES**

If licences and permits for the expansion of tailings piles are revoked or necessary projects for the expansion of tailings piles are not approved or are only approved subject to unreasonably high requirements, it would not be possible to dispose of the solid residues. We consider the complete refusal or the withdrawal of all existing licences and permits for the expansion of tailings piles to be unlikely, as the permits are compatible with the legal and statutory framework. Furthermore, they represent the state of the art and there is governmental and widespread political support for the preservation of potash mining in Germany in the federal states that are relevant to us.

Individual licences and permits for the necessary expansion of tailings piles might not be granted in certain circumstances or might be approved only to a limited extent. In the worst case, this would result in an adjustment of production levels and possibly the closure of the affected sites with considerable negative economic repercussions both for the Company and for the employment and economic situation of the region in question. This could be avoided through the development of further safeguards and through rescheduling, which would nevertheless lead to significant cost increases.

The licensing authorities approved the application for the expansion of tailings pile capacity at the Hattorf site on 11 October 2018. The current approval status is valid for five to six years. In addition, the authorities are currently reviewing the application for the second phase of the expansion of tailings pile capacity, which is expected to last until the early 2040s.

We are also confident that we will receive the required permits for the expansion of tailings pile capacity at the Wintershall and Zielitz sites in due time.

⇒ ‘Tailings pile management’, page 62

#### **INCREASE IN HEAVY METAL VALUES IN THE GROUND AND SURFACE WATER IN THE SURROUNDING AREA OF THE TAILINGS PILES**

In the course of our comprehensive and continuous monitoring of the ground and surface water in the surrounding area of the tailings piles, an increase in heavy metal values was identified at some points. However, in terms of their composition and concentration, these cannot be classified as tailings pile material.

According to the current state of knowledge, a greater number of decisive factors with locally varying degrees of manifestation and interaction could play a role in the emergence of this phenomenon. Therefore, k+s has, in collaboration with external research institutions, adopted a fundamental investigation regarding the circumstances (comprehensive survey, supplementary monitoring measures and construction of additional measuring points) that extends across the locations. With the approval of the authorities, k+s has, with due regard to conditions at the individual locations, developed and implemented respective concepts (including collecting, draining and cleaning of the emerging spring water at the Hattorf location as well as drainage works and wells or the removal of topsoil with heavy metal mobilisation potential) to tackle the phenomenon described.

The potential impact of increased amounts of heavy metals and trace matters on the subjects of protection (particularly groundwater and drinking water protection areas) located in the sphere of influence of the tailings piles is therefore excluded through suitable technical measures with due regard to general conditions at the individual locations.

Individual licences and permits for the necessary expansion of tailings piles at the Werra and Zielitz locations may be granted in certain circumstances with ancillary provisions for the imposing of further safety measures. However, it is unlikely that licenses and permits will be refused.

⇒ ‘Tailings pile management’, page 62

#### **MORE STRINGENT REQUIREMENTS REGARDING THE OUTDOOR STORAGE OF DE-ICING SALT IN NORTH AMERICA**

In the past, there have been no special environmental protection requirements regarding the outdoor storage of de-icing salt in North America. However, more and more individual states and local authorities are now moving towards defining mandatory standards in this regard. As a result of stricter local requirements, comprehensive measures may be required, including indoor storage.

In conjunction with environment experts we continue to work on environmental audits to determine whether owned and leased warehouse locations comply with the new local requirements.

#### **COLLATERAL SECURITY UNDER MINING LAW**

The determination of collateral security under mining law is subject to the professional judgement of the acting authorities; at the present time, existing collateral security is usually provided through the formation of corresponding provisions as well as through comfort letters or group guarantees. If additional security had to be furnished, this could narrow the Company's financial scope, especially if such security were required to be provided through bank guarantees or a deposit of funds.

#### **TIGHTENING OF EXISTING REGULATIONS ON THE UNDERGROUND DISPOSAL OF MINING WASTE**

The Closed Cycle and Waste Management Law (KrWG) and the German Federal General Mining Ordinance (ABBergV) must be complied with for underground waste disposal. The existing regulations currently vary from one federal state to another. A tightening of the regulations could result in higher costs for the underground disposal of mining waste, as it may then only be possible to store waste with mineral properties underground. This would have the effect of driving up running disposal costs as well as the costs required to close down mining sites.

## OPERATIONAL RISKS AND OPPORTUNITIES

### **MARKET PENETRATION, MARKET DEVELOPMENT, EXPANSION IN CAPACITY, COST OPTIMISATION, ACQUISITIONS AND/OR STRATEGIC PARTNERSHIPS, INNOVATION**

In all customer segments, we use our growth potential to increase our market share by generating higher sales volumes from our existing customer base and/or by acquiring new customers. Furthermore, we are reviewing whether it would be possible to enter new sales regions with our products. We also want to use our market-related opportunities by investing in new products and business approaches. The enterprise value should be continually increased in the process. This will require external growth, plus an organisational reorientation. In addition, possibilities to optimise costs (e.g. by way of process digitalisation at the underground mines or by increasing the efficiency of machinery, processes and organisational structures) will be closely reviewed and thus meaningfully implemented on an ongoing basis.

Through the systematic implementation of the growth initiatives defined in detail in our corporate strategy, we want to make successful use of the opportunities presented and achieve sustainable, profitable growth.

### **LEVERAGING OF SYNERGIES**

K+S assumes the leveraging of synergies will increase earnings by at least €150 million per year from the end of 2020. Significant deviations from projected effects represent both a risk and an opportunity.

### **RAMP-UP PHASE AT THE BETHUNE SITE**

In 2023, the new potash plant in Bethune in Canada will reach its full production capacity. When a site of this size is being built, negative effects in the transition to regular operation (ramp-up phase) cannot be ruled out completely. Conversely, planned qualitative and quantitative objectives may also be surpassed. Furthermore, technical and logistical challenges may lead to higher costs or lower production volumes.

Through systematic cost and quality management we try to limit negative effects and increase earnings contributions.

### **LITIGATION RISKS AND LEGAL DISPUTES**

K+S is exposed to risks arising from legal disputes or legal proceedings in which we are either currently involved or that could arise in the future.

It cannot be ruled out that K+S might be involved in further lawsuits and arbitration proceedings with suppliers in connection with supplies and services procured in connection with the investment project for building the new Bethune potash mine. We also already asserted reimbursement claims against contracting parties involved in the project. The outcome of potential legal disputes, which can take an extended period of time to clarify, is very difficult to predict. This could result in cash outflows or inflows that negatively or positively affect the site's profitability. The impact in terms of liquidity and earnings varies significantly. Through the formation of a claim management team, a continuous claim management process is ensured with the goal of processing K+S's existing receivables from suppliers and recovery claims to achieve the best possible outcome.

As a mine owner, K+S KALI GMBH maintains the Merkers mine and implements preservation measures there. The costs of the preservation methods are currently borne by the Free State of Thuringia in accordance with the indemnification agreement on the clean-up of pre-existing environmental contamination of October 1999, under which the state is required to bear costs reviewed by a court of law under the indemnification agreement. The Meinigen administrative court ruled in the first instance that the Free State of Thuringia is required to comply fully with the agreement and thus bear the costs for the clean-up of pre-existing environmental contamination. This agreement requires the State of Thuringia to bear the costs for the environmental damage caused by the former GDR potash mining on the border between Thuringia and Hesse carried out until 1990. The State appealed this decision. The higher administrative court in Weimar allowed the appeal by the State of Thuringia against the ruling by the Meinigen administrative court. A decision of the court in the matter is still pending. We still firmly believe that the decision in the first instance was correct and therefore consider significant implications unlikely.

K+S AKTIENGESELLSCHAFT uses subsidiaries in Malta and Belgium to finance Group companies. As part of the tax audit for the years 2011 to 2013, a further review was performed in this context and, for the first time, an objection was filed that led to the tax add-back of foreign income. Corresponding additional tax payments were stipulated. In addition, additional tax payments may have to be made for subsequent years. Appeals were filed against existing tax assessment notices. Fulfilment of the tax assessment notices was suspended by the tax authorities in conformity with the judicial order. The appeal procedures have not yet been finalised. It is considered unlikely that the tax authorities will assert their opinion in a court case.

All other process risks are described in the context of the relevant risk.

#### **ENERGY COSTS AND ENERGY SUPPLY**

The energy costs incurred by K+S are primarily determined based on our consumption of natural gas and power. This applies in varying degrees to all corporate departments. Energy prices are often subject to strong fluctuations. Sharp market-related rises in energy prices compared with the projected price level constitute a price risk and cannot be ruled out in the future. Furthermore, an amendment to the Renewable Energy Sources Act (EEG) or a review of the criteria for the exemption from the EEG surcharge for energy-intensive companies could lead to cost increases. A positive development of energy costs compared with projected costs provides an opportunity for K+S.

To limit this risk, we have reduced the quantities of natural gas required for our potash and salt production in Europe by using steam from alternative fuel heating systems. Moreover, we are pursuing a hedging strategy worldwide that allows us to secure attractive prices for purchasing natural gas in the medium term by concluding fixed supply agreements.

▷ ‘Energy/Climate’, ‘Environment’, page 63

#### **FREIGHT COSTS AND AVAILABILITY OF TRANSPORT CAPACITY**

Our total costs are influenced by freight costs to a considerable degree. A significant proportion of our products in terms of volume needs to be transported to the customer over long distances in some cases. Reduced availability of freight capacity could result

in higher costs. Furthermore, considerable additional costs are incurred when crude oil prices rise. The heavy reliance of our business operations on transport likewise makes us highly dependent on the relevant infrastructure facilities such as ports, roads, railway lines and loading facilities. A breakdown or a bottleneck could limit the sales prospects and thus production.

We make every effort to limit cost increases and safeguard transport capacity for the Group through long-term agreements.

#### **PRODUCTION EQUIPMENT**

The production facilities of the K+S GROUP are characterised by a high degree of complexity and efficiency. As a result of operational and accident risks to which our facilities, production plants, storage and loading facilities are exposed, business interruptions may occur and serious personal injury or damage to property or the environment may also be caused.

Where possible and economically viable, suitable insurance cover is taken out with the aim of limiting these risks. Tailored training and staff development measures are also designed to increase occupational safety.

#### **CHANGES IN THE COMPOSITION OF CRUDE SALT**

The extraction of crude salt in our mining operations forms the basis for the production of fertilizers and industrial products. We are implementing an extensive geological investigation programme aimed at developing our mining operations further and exploiting new crude salt deposits. Nevertheless, significant discrepancies may arise in the quantity and quality of crude salt deposits. Unforeseen geological faults in salt exploitation with low mineral content may lead to additional costs and reduced production volumes.

#### **CARBON DIOXIDE POCKETS IN DEPOSITS**

Carbon dioxide pockets constitute a latent potential danger in certain mines. Despite our comprehensive safety measures, carbon dioxide could escape from these pockets in an uncontrolled manner. Consequently, there are risks of production cuts/stoppages as well as of personal injury and damage to property. Underground extraction is therefore always carried out in compliance with specific safety guidelines in case of escapes of CO<sub>2</sub>.

### DAMAGE DUE TO ROCK BURSTS

There is the specific risk at active and inactive mining sites of a sudden subsidence of the earth's surface over a large area that could, in certain circumstances, be severe (rock burst). If a rock burst occurs, in addition to the partial or complete loss of the mine and damage to facilities, it could also result in personal injury or death and in considerable damage to the property of third parties.

Our professional dimensioning of the underground safety pillars based on comprehensive research serves to secure the surface, safeguard the stability of the mine workings over a longer period of time and therefore prevent rock bursts. After the closure of a location, preservation measures are carried out, for which appropriate provisions have been recognised. Continuous monitoring of the mine workings aims to provide timely indications of whether additional measures for the protection of the mine workings and the prevention of damage resulting from mining are necessary.

### WATER INFLOW

Hydrogeological risks generally exist in underground mining operations. There are risks in connection with shafts that cut through water-bearing rock shafts and in saline deposits in rock strata. Hydrogeological risks are limited through the extensive safeguards we have put in place; however, these risks could result in significant uncontrollable damage culminating in the total loss of the mine. In this case, material adverse effects on employment, the region's economic situation and damage to the environment and to property would be virtually unavoidable.

Extensive exploration work is carried out by means of seismology, drilling and ground-penetrating radar in order to secure the mines. Preservation of protective layers and adequate dimensioning of safety pillars ensure maximum mine safety. Ongoing maintenance work on the shafts should ensure that the risk of groundwater inflows can normally be virtually ruled out. Because the top of a shaft is in a high position, surface water is not expected to gain access to mine workings even if flooding occurs.

### COMPLIANCE

There is a general risk that members of management/supervisory bodies or employees of K+S GROUP companies may breach laws, internal regulations or regulatory standards recognised by the Company. K+S could sustain damage to its assets or reputation as a result.

We have established a Group-wide compliance management system that helps to raise awareness among employees and prevent breaches of compliance, including through training in the main areas of risk (for example, competition law and anti-trust law, corruption and money laundering). Compliance management is continuously reviewed and adjusted as required, for example based on recent developments.

⇒ 'Declaration on Corporate Governance', page 77

### NON-COMPLIANCE WITH REGULATIONS ON OCCUPATIONAL EXPOSURE LIMITS UNDERGROUND

The Federal Ministry of Labour and Social Affairs in Germany has defined the occupational exposure limits for nitrogen oxides and particulate diesel emissions underground that shall apply in the future. These statutory requirements must be met for our German mining operations starting from 31 October 2021 or from 31 October 2022, respectively. To satisfy them, K+S is currently investigating, as part of an extensive project, for example the use of the latest diesel engine technology, alternative drive technologies, the development of low-emission explosive substances as well as the optimisation of ventilation underground. There is a risk that the investments considered in the planning will not suffice. There might also not be enough time to fulfil the requirements (machinery uptime). If these requirements cannot be met in the long term, there is a risk that in an extreme case German sites could close down or significant production limitations could occur.

### LOSS OF SUPPLIERS AND SUPPLY BOTTLENECKS

The number of suppliers for raw materials, consumables and supplies as well as technical equipment and spare parts specific to mining is limited. In spite of counter-measures in place, supply

bottlenecks, non-delivery or delivery boycotts, over which we only have very little influence or no influence at all, could result in limited availability of these materials and thus lead to a significant increase in costs or have adverse effects on production.

We will mitigate these procurement risks through market analyses, targeted supplier selection and evaluation, long-term supply agreements, clearly defined quality standards and state-of-the-art purchasing methods.

#### **PERSONNEL**

Competition for qualified managers and specialists is fierce in all of the regions in which we operate. The loss of employees in key positions constitutes a fundamental risk. Moreover, we could be facing demographic challenges in the future, especially in Europe and North America. This increases the risk that suitable applicants for vacancies will not be found or that it will take considerable time and effort to find them.

The K+S GROUP wants to be an attractive employer not only for entry-level staff, but also for qualified managers and specialists. By offering practical support for the next generation of employees as well as tailored training and further education measures and by promoting high achievers and employees showing potential, the K+S GROUP still succeeds in permanently motivating employees and in retaining qualified managers and specialists for the long term. In addition, our focus on diversity in our workforce enables us to unlock all potential in the labour market. By adopting this strategy and increasing cooperation with selected higher education institutions, we offer qualified managers and specialists promising career prospects.

⇒ ‘Employees’, page 53

#### **IT SECURITY**

Our IT systems support almost all corporate functions in large measure. The IT security risk lies primarily in loss of the availability, integrity, confidentiality and authenticity of data due to external attacks (for example, hackers, viruses) and internal risks (for example, technical failure, sabotage). If this risk were to materialise, serious interruptions to business could result. However, we consider a prolonged failure of the IT systems to be unlikely due to the precautions we take.

We limit such risk by having independent experts continuously review the scope and effectiveness of our wide-ranging security measures. Insurance to cover claims from IT system failures has been taken out for cyber-attacks with a loss amount of €50 million.

#### **REPUTATION**

The materialisation of any risk may have a financial impact for the Company that is difficult or impossible to quantify depending on the perception among the general public of a loss of image. This includes, in particular, risks with material adverse effects on the non-financial aspects of environmental matters, social and employee-related matters, respect for human rights, anti-corruption and bribery matters, as well as failure to achieve targets defined by the Company.

We counter such developments with open, timely communication to our stakeholders.

## FINANCIAL RISKS AND OPPORTUNITIES

### CURRENCY/EXCHANGE RATE FLUCTUATIONS

A currency risk results from transactions which are not effected in the currency of our Group reporting (the Euro). In the case of this risk, we make a distinction between transaction and translation risks. While the risk relates to negative exchange rate developments, positive exchange rate developments may have a advantageous impact on earnings and equity, thus presenting an opportunity.

### TRANSACTION RISKS

A significant proportion of K+S GROUP revenues is in US Dollars. In addition to this, revenues are also generated and costs incurred in other national currencies (such as Canadian Dollars, Chilean Pesos and Pounds Sterling). Our earnings are therefore exposed to exchange rate fluctuations. This may lead to the value of the service performed not matching the value of the consideration received in transactions, because income and expenditure are incurred at different times in different currencies. Exchange rate fluctuations, especially in the EUR/USD and CAD/USD exchange rates, primarily affect the Potash and Magnesium Products business unit in relation to the level of earnings and receivables as well as costs and liabilities.

▷ ‘Financial Position’, page 98

We use derivative financial instruments to counter exchange rate risks arising from transactions. Significant net positions are hedged using derivatives, normally options and futures, in the context of transaction hedging. These ensure a “worst case” exchange rate. On the basis of revenue and cost planning as well as expected capital expenditure, the volumes to be hedged are determined and updated continuously using safety margins, so as to avoid excess hedging or hedging shortfalls.

▷ ‘Notes’, page 150

### TRANSLATION RISKS

Furthermore, currency effects arise in relation to subsidiaries whose functional currency is not the Euro, since the earnings of these companies calculated in a foreign currency are translated into Euros at average rates and recognised in net profit or loss. However, the net assets of these companies are translated into Euros at the rates prevailing on the reporting date. This conversion system could result in currency-related fluctuations in the earnings and equity of K+S. These translation effects arise throughout the K+S GROUP and are not hedged.

### CHANGE IN THE GENERAL INTEREST RATE LEVEL

Both risks and opportunities arise as a result of changes in the general interest rate level.

On the one hand, changes in market interest rates have an effect on future interest payments for variable-rate liabilities, as well as on interest income for variable-rate investments. Impacts on fixed-interest liabilities arise when the interest rate fixation expires and an prolongation is sought. The market values of financial instruments are also affected. However, due to the current financing structure, only a moderate impact is expected.

The K+S GROUP is required to report long-term provisions, particularly from mining obligations and pensions, at the present value of the future anticipated expenditure. A change in the market interest rates compared with the preceding reporting date could therefore lead to changes in the discount rates on the current reporting date and thus to an adjustment of long-term provisions. A one-off adjustment by half a percentage point would have a moderate impact on the balance sheet and the earnings of the K+S GROUP.

Most of the pension obligations are covered by plan assets resulting from fixed-income securities, shares and other investments. Decreasing income from these investments may have an unfavourable effect on the fair value of the plan assets. We mitigate the risk of fluctuations in the fair value of the plan assets through balanced asset allocation and continuous analysis of the investment risks.

▷ ‘Notes’, page 150

#### **UPGRADING/DOWNGRADING OF THE COMPANY RATING**

Ratings are used to assess the creditworthiness of companies and are normally issued by external rating agencies. The rating provides indications of the ability of companies to pay, particularly for credit institutions and institutional investors. It cannot be ruled out that a rating agency might change K+S's credit rating.

A downgrade could negatively impact the financing costs of K+S. Conversely, an upgrade in the credit rating – and hence an improvement in the Company's rating – has a positive effect on the costs and availability of the Company's financing options. We hope to fulfil the requirements to regain an investment grade rating in 2023; at the present time, we believe that an earlier upgrade is unlikely.

⇒ 'Financial Position', page 98

#### **LIQUIDITY**

Liquidity risk entails the failure to procure the funds needed to meet payment obligations or the inability to do so in a timely manner. External factors, especially a general financial crisis, could make it impossible to replace credit lines or bonds on acceptable commercial terms should the need arise. In this case, a risk associated with procuring liquidity would also arise.

For this reason, the principal objective of our liquidity management activities is to ensure the ability to make payments at any given time. The liquidity requirement is determined through our liquidity planning and must be met with cash on hand and bank balances, committed credit lines and other financial instruments.

Liquidity is managed by the central treasury department using cash pooling systems. As of 31 December 2018, the available liquidity amounted to €1,187.0 million and consisted of investments and cash on hand and bank balances as well as the unused portion of our syndicated credit line running until mid-2020. The available liquidity was therefore significantly higher than our target minimum reserve of €300 million. In the case of investments, we pursue the goal of optimising the income earned from cash on hand and bank balances at low risk.

⇒ 'Notes', Note (25) 'Financial liabilities', page 197

#### **DEFAULT ON RECEIVABLES FROM CUSTOMERS**

We maintain comprehensive business relationships with many customers. If one or more major customers is not in a position to fulfil their contractual payment obligations towards us, this could result in corresponding losses for us, which in turn could have an adverse effect on the financial position of K+S.

Risks arising from payment default are covered across the Group mainly through credit insurance. We only waive a security against non-payment following a critical review of the customer relationship and express approval.

#### **DEFAULT OF PARTNERS IN FINANCIAL TRANSACTIONS**

Default risks also exist with regard to partners with which we have concluded hedging transactions, credit lines exist or money was invested. A potential failure of a bank or another partner could have an adverse effect on the financial position of K+S. There is no particular dependency on any individual financial institutions.

#### **CHANGES IN INDIVIDUAL RISKS AND OPPORTUNITIES COMPARED WITH THE PRIOR PERIOD**

The assessments made in relation to the likelihood of occurrence and/or financial impact of the risks and opportunities reported in prior periods are shown in Tables 2.39 and 2.40 on pages 112 and 113.

Risks in the Potash and Magnesium Products business unit in relation to the disposal of liquid and solid production residues continue to be significant on account of the regulatory conditions. The risk of a refusal or revocation by a court of official permits for the disposal of solid production residues and the disposal of liquid residues in the discharge subsegment remains within the probability of risk of between 10% and 50%.

The application for the extension of tailings pile capacity in Hattorf was approved. This means that the approval process started in 2011 for the expansion of tailings pile capacity is continuing to progress well. The approval granted, which is valid for five to six years, relates to the first part of the project. Relevant risks pertaining to the disposal of solid production residues at the Hattorf site have been significantly mitigated for this period.

As part of the tax audit for the years 2011 to 2013 a statement was made, which may lead to tax burdens. Appeals have been lodged.

The higher administrative court in Weimar allowed the appeal by the State of Thuringia against the ruling by the Meiningen administrative court that the Free State of Thuringia must bear the costs of the clean-up of pre-existing environmental contamination. We still firmly believe that the decision in the first instance was correct.

Risks from changes in the composition of crude salt have been updated on the basis of our exploration knowledge and cannot be excluded, in particular with the advance into peripheral areas of the deposits.

Compliance with the new applicable occupational exposure limits for nitrogen oxides and particulate diesel emissions underground is required from 31 October 2021 or 31 October 2022, respectively. This is the reason this risk is returning to the observation period for the mid-term planning. Our extensive measures help us to comply with these requirements.

## ASSESSMENT OF RISK AND OPPORTUNITY POSITION BY THE BOARD OF EXECUTIVE DIRECTORS: NO RISKS TO THE COMPANY'S CONTINUED EXISTENCE AS A GOING CONCERN

The risk and opportunity position assessed below is based on the findings of our risk and opportunity management system in conjunction with the planning, management and monitoring systems in place.

Taking into account the likelihood of occurrence and the financial impact of each of the risks discussed, and based on the findings of our mid-term planning, at the present time the Board of Executive Directors does not expect any future development where the risks, either individually or in conjunction with other risks, could have a lasting adverse effect on the results of operations, financial position and net assets of K+S, jeopardising its continued existence as a going concern.

K+S's risk position is unchanged due to positive developments in the potash market and the environmental regulations, notwithstanding the cost pressure for environmental and additional disposal measures.

The opportunities open to K+S in the medium term provide a positive outlook. We are confident that K+S's operating strength provides a solid foundation for our future business growth and that the resources necessary to take advantage of the opportunities are available.

Overall, the risk and opportunity position is nearly unchanged compared with the previous year and will continue to receive considerable attention owing to the general conditions in the Potash and Magnesium Products business unit.

## REPORT ON EXPECTED DEVELOPMENTS

We expect to see a moderate rise in revenues in 2019; EBITDA<sup>1</sup> is expected in a corridor between €700 and 850 million and should therefore increase significantly compared to 2018. The main reasons for these developments are the higher production volumes assumed at the Bethune site and the expected absence of wastewater-related production stoppages at the Werra plant.

The Report on Expected Developments is based on the future external reporting in the new structure for the financial year 2019 in the operating units Europe+ and Americas as segments in accordance with IFRS 8.

⇒ ‘Business modell’, page 31

### FUTURE MACROECONOMIC SITUATION

The following details on the future macroeconomic situation are based on forecasts by the KIEL INSTITUTE FOR THE WORLD ECONOMY and the INTERNATIONAL MONETARY FUND (IMF). TAB. 2.41

The INTERNATIONAL MONETARY FUND as well as the experts at the IfW in Kiel forecast that the growth rate in global gross domestic product in 2019 will fall to 3.5% or 3.4%, respectively (2018: 3.7%). This forecast is based on the assumption that capacity utilisation in the advanced economies will hardly increase at all and

that production in emerging markets will only expand at a moderate rate. Economists expect the rate of expansion in the euro zone to stagnate. Possible effects of a Brexit are not only slowing the economy in the United Kingdom. However, the UK's imminent departure is not expected to have any significant impact on our future earnings, financial and asset position. The share of the United Kingdom in the total revenues of the K+S GROUP is only in the low single-digit percentage range.

The economic development in the US is expected to have peaked in 2018 and the decade-long upswing could well lose momentum. Moreover, a deteriorating trade environment is likely to have a dampening effect on world trade growth. In China, the impact of US sanctions as well as more rigid lending should lead to weaker production growth according to the experts in Kiel.

Notwithstanding the fact that inflation is expected to rise only slowly worldwide, economists are assuming both further tightening of the hitherto expansive monetary policy and a slowdown in government growth incentives. This should also have a dampening effect on global GDP growth in the long term.

PERCENTAGE CHANGE IN GROSS DOMESTIC PRODUCT

TAB. 2.41

in %; in real terms	2015	2016	2017	2018	2019e
Germany	+1.5	+2.2	+2.5	+1.5	+1.3
Euro area	+1.6	+1.9	+2.4	+1.8	+1.6
World	+3.4	+3.3	+3.8	+3.7	+3.5

Source: IfW

<sup>1</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory

hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. A reconciliation can be found on page 95.

## FUTURE INDUSTRY SITUATION

### AGRICULTURE

In the future, it will only be possible to meet the increasing demand for soft commodities in light of a constantly growing global population, changing eating habits and limited arable land by intensifying fertilizer application. A balanced use of mineral plant nutrients is crucial here. Even the continued low price level of agricultural products on a long-term comparative basis, following a partial recovery, should continue to give farmers sufficient incentive to increase yields per hectare by means of a balanced or even greater use of fertilizers in case of deficiency.

For 2019, we expect global potash demand to remain at least stable compared with the year under review (2018: over 71 million tonnes including around 5 million tonnes of potassium sulphate and potash grades with a lower mineral content). Following the significant recovery in prices for standard potash (MOP) in the course of 2018, prices for fertilizer specialities should follow suit in 2019. The positive environment of 2018 should also favourably reach into 2019 for potassium chloride (MOP).

### INDUSTRY

Demand for potash, magnesium and salt products in the customer segment industry is expected to rise slightly in the medium term. Global demand for products for industrial applications should increase noticeably. Aided by the ageing population, demand for pharmaceutical products should continue to support moderate growth rates. While demand for products for food processing is expected to remain more or less stable in 2019, demand for water softening salts and potash and salt products for animal nutrition

should increase especially in Europe. Despite recent variability in oil pricing, demand for potash products in Europe as well as for salt products in the US should be above last year's level; in Canada, demand could decline due to expected production cuts in the oil and gas industry. In South America, demand for salt for the extraction of copper from mined raw ore (copper leaching) is expected to grow in 2019 as well.

### CONSUMERS

North America is among the leading sales regions for consumer salt products; demand in this region is expected to remain more or less stable overall in 2019. Consumption at the previous year's level is expected in Europe and South America as well. In the long term, however, for table salt, a global trend of increased use of more premium salt such as sea salt or kosher salt as well as low-sodium products is discernible.

### COMMUNITIES

In the de-icing salt segment, the 2018/2019 winter season started averagely overall after a good previous year. While in Europe, the wintry weather conditions at the beginning of the year caused a demand for de-icing salt slightly above average, the business in North America at the beginning of the year was still slightly below average.

## EXPECTED DEVELOPMENT OF REVENUES AND EARNINGS

In the 2019 financial year, we expect revenues of the K+S GROUP to increase moderately (2018: €4.04 billion). EBITDA of the K+S GROUP is expected to improve significantly to between €700 million and €850 million<sup>2</sup> (2018: €606.3 million).

<sup>2</sup> Including a positive effect from IFRS 16.

In the operating unit Europe+ (segment in accordance with IFRS 8), the further increase in production at our new Bethune potash plant in Canada and the expectation that the wastewater-related production stoppages at the Werra plant will not recur are expected to have a positive effect, such that revenues are likely to rise moderately and EBITDA significantly as a result (revenues 2018: €2.60 billion, EBITDA: €443.4 million). Meanwhile, revenues and EBITDA in the operating unit Americas (segment in accordance with IFRS 8) are expected to remain more or less stable (revenues 2018: €1.46 billion, EBITDA: €221.7 million). With an average de-icing salt business, higher product prices should be balanced by cost inflation.

Our assessment for full-year 2019 is mainly based on the following assumptions:

- + Changes in the product mix are counteracting a positive market environment in the Agriculture customer segment, which belongs to the operating unit Europe+, and as a result we expect a moderate increase in the average price for potash and magnesium products in our product portfolio in 2019 (2018: €255/tonne).
- + The expected sales volume of all products in the Agriculture customer segment is likely to be between 6.9 and 7.2 million tonnes (2018: 6.8 million tonnes), mainly as a result of higher production volumes at the Bethune site. Assuming a normal hydrological year for 2019, no wastewater-related production cuts due to prolonged low water periods in the Werra are expected. Our efforts to further improve our wastewater management and to expand local storage capacity should significantly reduce the risk of shutdowns, even in the event of prolonged drought. Our challenges at the Werra and Neuhof sites are addressed and the product availability has already improved. Nevertheless, we expect that the German sites in 2019 will still lag behind the technically available capacity.
- + Especially due to the continued use of off-site disposal of saline wastewater, our production costs in the Agriculture customer segment will still be burdened by logistic costs of about €40 million.
- + Owing to the weather-related overall average start to the de-icing salt business, for the 2019 financial year we expect sales volumes of between 12.5 and 13.0 million tonnes (2018: 13.3 million tonnes) in the Communities customer segment, which belongs to both operating units according to the

regional split. As usual, this forecast assumes that our sales of de-icing salt in the fourth quarter will remain at the long-term average level.

- + An average spot rate of EUR/USD 1.20 (2018: EUR/USD 1.18) is assumed for the euro-dollar exchange rate.

The adjusted Group earnings after tax should increase significantly compared to the same period in the previous year (2018: €85.4 million) due to the effects described above.

## ANTICIPATED FINANCIAL POSITION AND PLANNED CAPITAL EXPENDITURE

Although the capital expenditure volume of the K+S GROUP for 2019 should exceed that of the previous year (€443.2 million), mainly as a result of further expansions of our tailings pile capacities in Germany, the adjusted free cash flow should improve significantly compared with the previous year as a result of our operating improvements and active working capital management; this should return to positive figures for the first time since 2013 (2018: –€206.3 million). Despite more capital being tied up, the return on capital employed (ROCE) should increase significantly due to significantly higher earnings (2018: 2.6%). At the operating unit level, ROCE for Europe+ is expected to rise significantly (2018: 2.0%), while it is expected to significantly lag behind previous year's level for the Americas (2018: 7.9%).

## PROPOSED DIVIDEND FOR THE 2018 FINANCIAL YEAR

Our earnings-oriented dividend policy is essentially reflected in a payout ratio of 40 to 50% of adjusted Group earnings after taxes. As we have a positive view on 2019 as described, the Board of Executive Directors and the Supervisory Board intend to propose a dividend of €0.25 per share (previous year: €0.35 per share) to the Annual General Meeting on 15 May 2019. Against this background, the distribution ratio of 56% (previous year: 46%) of adjusted Group earnings after tax is slightly above the corridor of the dividend policy.

## GENERAL STATEMENT ON THE EXPECTED DEVELOPMENT OF THE K+S GROUP

The Board of Executive Directors of K+S AKTIENGESELLSCHAFT views 2019 optimistically and expects that EBITDA of the K+S GROUP will be significantly higher than that of the previous year and will be within a corridor between €700 and €850 million. A good market environment for fertilizers, the continued ramp-up of our Bethune site and the continuing measures to improve our operating performance should contribute to this development. Overall, the adjusted free cash flow of the K+S GROUP should continue to improve significantly in 2019 and achieve positive figures for the first time since 2013.

## K+S AKTIENGESELLSCHAFT (EXPLANATIONS BASED ON THE GERMAN COMMERCIAL CODE (HGB))

The management report of K+S AKTIENGESELLSCHAFT and the Group management report have been combined for the 2018 financial year. The annual financial statements of K+S AKTIENGESELLSCHAFT in accordance with the GERMAN COMMERCIAL CODE (HGB) and the combined Management Report are published simultaneously in the German Federal Gazette (Bundesanzeiger).

## DECLARATION ON CORPORATE GOVERNANCE

The Declaration on Corporate Governance in accordance with Section 289f of the German Commercial Code (HGB) can be found on page 67.

## INFORMATION IN ACCORDANCE WITH SECTION 289A (1) OF THE GERMAN COMMERCIAL CODE (HGB) AND EXPLANATORY REPORT OF THE BOARD OF EXECUTIVE DIRECTORS

Information in accordance with Section 289a (1) of the German Commercial Code (HGB) and the explanatory report of the Board of Executive Directors can be found on page 82.

## REMUNERATION REPORT

The information to be disclosed in accordance with Section 289a (2) of the German Commercial Code (HGB) is provided on page 134.

## BUSINESS OPERATIONS, CORPORATE STRATEGY, CORPORATE MANAGEMENT AND MONITORING, OVERVIEW OF THE COURSE OF BUSINESS

Information on business operations, corporate strategy, corporate management and monitoring as well as an overview of the business performance can be found on pages 31–49 and 78–91.

**INCOME STATEMENT OF K+S AKTIENGESELLSCHAFT<sup>1</sup>**

TAB. 2.42

in € million	2017	2018
<b>Revenues</b>	<b>136.3</b>	<b>137.8</b>
Cost of sales	141.8	152.4
<b>Gross profit</b>	<b>-5.5</b>	<b>-14.6</b>
Sales and distribution, general and administrative expenses and research costs	36.9	37.3
Other operating income and expenses	16.9	-18.5
Income from investments, net	76.6	324.0
Net interest	-138.7	-168.7
Write-downs of long-term financial assets and securities classified as current assets	0.2	0.1
Expenses from transfer of losses	-	-
<b>Earnings before tax</b>	<b>-87.9</b>	<b>84.8</b>
Income tax expense	24.5	10.3
<b>Earnings for the period</b>	<b>-112.4</b>	<b>74.5</b>
<b>Withdrawal from other revenue reserves</b>	<b>179.4</b>	<b>-</b>
<b>Accumulated profit</b>	<b>67.0</b>	<b>74.5</b>

<sup>1</sup> A detailed income statement is included in the 2018 Annual Financial Statements of K+S Aktiengesellschaft.

**BALANCE SHEET OF K+S AKTIENGESELLSCHAFT – ASSETS**

TAB. 2.43

in € million	31.12.2017	31.12.2018
Intangible assets	8.4	9.9
Tangible fixed assets	61.4	61.4
Financial investments	6,923.8	6,663.0
<b>Fixed assets</b>	<b>6,993.7</b>	<b>6,734.3</b>
Inventories	1.7	4.8
Receivables and other assets	427.4	754.1
Securities	6.2	6.1
Cash on hand and bank balances	46.5	78.9
<b>Current assets</b>	<b>481.8</b>	<b>843.9</b>
Prepaid expenses	14.3	10.3
<b>ASSETS</b>	<b>7,489.8</b>	<b>7,588.6</b>

**RESULTS OF OPERATIONS**

At €137.8 million, K+S AKTIENGESELLSCHAFT's revenues were €1.5 million above the previous year's level (€136.3 million). Revenues in the Animal Hygiene Products segment were slightly higher than in the previous year (+4%) and revenues in the IT segment rose by 2%. Other revenues declined by €0.7 million to €55.3 million (2017: €56.0 million), mainly due to an increase in intragroup billing of services rendered to Group companies.

Other operating income was significantly lower, dropping €45.8 million to €100.5 million (2017: €146.3 million). This was mainly attributable to higher income from the measurement of USD and CAD items compared to the previous year.

Other operating expenses decreased from €129.5 million to €119.0 million. This was due mainly to lower exchange currency translation losses. By contrast, consulting expenses were higher.

Income from investments increased from €76.6 million in 2017 to €324.0 million in 2018. The main reasons for this increase were the profit transfers of €217.5 million (2017: €58.4 million) from K+S KALI GMBH and €44.1 million (2017: –) from K+S SALZ GMBH), and the income of €40.4 million (2017: –) from the investment in K+S FINANCE BELGIUM BVBA. Further income from investments resulted from the transfer of profit of €11.5 million (2017: €8.9 million from K+S ENTSORGUNG GMBH and €9.4 million (2017: €7.4 million) from K+S TRANSPORT GMBH.

Other interest and similar income was around the previous year's level at €10.5 million (2017: €10.9 million).

Interest and similar expenses increased from €149.6 million to €179.2 million, mainly due to higher interest expenses resulting from the bonds issued in March 2017 and July 2017, negative effects from the measurement of plan assets, and an increase in interest payable to Group companies. The increase was held back by lower expenses for interest added to provisions.

Income after taxes increased by €186.9 million to €74.5 million (2017: €–112.4 million). TAB. 2.42

## FINANCIAL POSITION

Fixed assets increased by €259.4 million to €6,734.7 million (2017: €6,993.7 million). This was principally due to capital returned to affiliated companies. Fixed assets therefore accounted for 89% of total assets (2017: 93%). Overall, the total assets rose €98.8 million to €7,588.6 million in 2018. Current assets increased by €362.1 million to €843.9 million (2017: €481.8 million). As a result of higher receivables from profit transfers and cash pool receivables, receivables from affiliated companies increased from €372.4 million in 2017 to €646.5 million. There was a decline in receivables from current loans to subsidiaries. TAB. 2.43, 2.44

Equity was around the prior-year level at €1,973.9 million (2017: €1,966.4 million). The equity ratio was unchanged at 26% as of the reporting date (2017: 26%). Liabilities to affiliated companies of €2,083.9 million (2017: €2,241.0 million) primarily consisted of cash pooling liabilities and loan liabilities.

BALANCE SHEET OF K+S AKTIENGESELLSCHAFT – EQUITY AND LIABILITIES

TAB. 2.44

in € million	31.12.2017	31.12.2018
Issued capital	191.4	191.4
Share premium	701.6	701.6
Retained earnings	1,006.4	1,006.4
Accumulated profit	67.0	74.5
<b>Equity</b>	<b>1,966.4</b>	<b>1,973.9</b>
Provisions for pensions and similar obligations	2.6	24.5
Tax provisions	25.8	9.7
Other provisions	208.2	224.6
<b>Provisions</b>	<b>236.6</b>	<b>258.8</b>
<b>Liabilities</b>	<b>5,281.3</b>	<b>5,351.4</b>
Deferred income	5.5	4.5
<b>EQUITY AND LIABILITIES</b>	<b>7,489.8</b>	<b>7,588.6</b>

Total liabilities increased by €70.1 million to €5,351.4 million in 2018 (2017: €5,281.3 million). The main reasons for this rise were the redemption and issue of bonds and liabilities to banks. Liabilities to affiliated companies decreased. As of the reporting date, the company reported provisions of €258.8 million with a predominantly long-term character. The company's financing came to a considerable extent from funds available in the long term.

## EMPLOYEES

K+S AKTIENGESELLSCHAFT had an annual average of 1,029 employees (2017: 962 employees). As in the previous year, the proportion of women was 35% and of men 65% (2017: 35% women, 65% men). Thereof 22 were trainees (2017: 20 trainees). The increase in personnel was mainly due to the integration of the IT Service Centre into K+S AKTIENGESELLSCHAFT. The number of occupational accidents was 16 (2017: 16), with an accident rate of 12.0 (2017: 12.8) and accidents involving downtime of 1.5 per million working hours (2017: 0.8). The proportion of severely disabled employees was 4.6% in 2018 (2017: 4.7%).

## DIVIDEND

K+S AKTIENGESELLSCHAFT reports accumulated profit of €74.5 million for the 2018 financial year (2017: €67.0 million).

The Board of Executive Directors and the Supervisory Board intend to propose to the Annual General Meeting on 15 May 2019 that the accumulated profit of K+S AKTIENGESELLSCHAFT for the 2018 financial year should be used as shown in TAB. 2.45

### APPROPRIATION OF PROFITS

### TAB. 2.45

in € million	2017	2018
Dividend per share (€)	0.35	0.25
Total dividend payment based on 191,400,000 no-par value shares eligible for dividend	67.0	47.9
Allocation to other reserves	–	26.6
<b>Accumulated profit</b>	<b>67.0</b>	<b>74.5</b>

## RESEARCH AND DEVELOPMENT

Detailed information about the research and development activities of the K+S GROUP, which relate primarily to holding companies with operating activities, can be found on page 50.

## RISKS AND OPPORTUNITIES

The business development of K+S AKTIENGESELLSCHAFT is essentially subject to the same risks and opportunities as the K+S GROUP. K+S AKTIENGESELLSCHAFT participates in the risks and opportunities of its shareholdings and subsidiaries according to its respective interest share. More information can be found in the 'Risk and Opportunity Report' on page 110.

The description of the internal control system with regard to the accounting process of K+S AKTIENGESELLSCHAFT (Section 289 (4) of the German Commercial Code (HGB)) can be found on page 81.

## REPORT ON POST-BALANCE SHEET DATE EVENTS

The Report on Post-Balance Sheet Date Events for the K+S GROUP and K+S AKTIENGESELLSCHAFT can be found on page 214.

## REPORT ON EXPECTED DEVELOPMENTS

The earnings performance of K+S AKTIENGESELLSCHAFT depends to a large extent on the performance of its subsidiaries. The expected business development of the K+S GROUP can be found in the Report on Expected Developments on page 126.

## **RESPONSIBILITY STATEMENT FROM THE LEGAL REPRESENTATIVES OF K+S AKTIENGESELLSCHAFT**

To the best of our knowledge, and in accordance with the applicable principles for financial reporting, the consolidated financial statements and the annual financial statements of K+S AKTIENGESELLSCHAFT give a true and fair view of the assets, financial and earnings position of the Group and K+S AKTIENGESELLSCHAFT, and the combined Management Report includes a fair review of the development and performance of the business and the position of the Group and K+S AKTIENGESELLSCHAFT, together with a description of the principal opportunities and risks associated with the expected development of the Group and K+S AKTIENGESELLSCHAFT.

Kassel, 5 March 2019

**K+S AKTIENGESELLSCHAFT**  
**BOARD OF EXECUTIVE DIRECTORS**

### **FORWARD-LOOKING STATEMENTS**

This report contains facts and forecasts that relate to the future development of the K+S GROUP and its companies. The forecasts are estimates that we have made on the basis of all the information available to us at this time. Should the assumptions underlying these forecasts prove incorrect or should certain risks – such as those referred to in the Risk Report – materialise, actual developments and results may deviate from current expectations. The Company assumes no obligation to update the statements contained in this Management Report, save for the making of such disclosures as required by law.

# REMUNERATION REPORT

This report explains the main features of the remuneration systems used for the Board of Executive Directors and the Supervisory Board of K+S AKTIENGESELLSCHAFT, together with the specific design of the individual components.

## REMUNERATION OF THE BOARD OF EXECUTIVE DIRECTORS

### REMUNERATION STRUCTURE

The criteria for the appropriateness of remuneration include, in particular, the responsibilities and performance of the Board of Executive Directors, a comparison with senior executives worldwide and the total workforce, as well as the economic situation, the success and future prospects of the Company, considering comparable remuneration of their peer group.

The remuneration for the members of the Board of Executive Directors consists of annual components and those with a long-term incentive character. The annual remuneration components include both those not related to performance (fixed) and performance-related components (variable). The components that are not related to performance comprise fixed remuneration, non-cash remuneration and other benefits. The variable

<sup>1</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory

performance-related part consists of two components: the bonus (STI) as well as two variable remuneration components, based on key indicators, with a long-term incentive character (LTI I and LTI II). The members of the Board of Executive Directors also have pensions entitlements. The management contracts do not include a **claw-back clause**, as we consider the absolute level of remuneration of the members of the Board of Executive Directors as very moderate compared with other companies – especially other MDAX companies.

Fixed, basic remuneration not related to performance is paid monthly. Additionally, the members of the Board of Executive Directors receive fringe benefits, in particular contributions to pension, health and long-term care insurance as well as non-cash remuneration, which consists mainly of the use of company cars.

Since 1 January 2018, the performance-related remuneration components have been composed of two elements: The short-term incentive (STI) relates to the current financial year and, at 40%, comprises the smaller part of variable remuneration. The long-term incentive (LTI) comprises the more significant part, at 60%, and is made up of two equally weighted components. One is linked to value added (LTI I) and the second is linked to share price performance (LTI II). Both components are measured over a three-year period.

hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. A reconciliation can be found on page 95.

### ILLUSTRATIVE CALCULATION OF THE ANNUAL REMUNERATION OF A MEMBER OF THE BOARD OF EXECUTIVE DIRECTORS.

TAB. 2.46

	Target achievement 100%	Target achievement 0%	Maximum target achievement
<b>in €</b>			
Fixed remuneration	485.0	485.0	485.0
Bonus	380.0 <sup>1</sup>	0.0 <sup>2</sup>	912.0 <sup>3</sup>
<b>Annual remuneration</b>	<b>865.0</b>	<b>485.0</b>	<b>1,397.0</b>
LTI I <sup>10</sup>	285.0 <sup>4</sup>	0.0 <sup>5</sup>	570.0 <sup>6</sup>
LTI II <sup>10</sup>	285.0 <sup>7</sup>	0.0 <sup>8</sup>	570.0 <sup>9</sup>
<b>Total remuneration</b>	<b>1,435.0</b>	<b>485.0</b>	<b>2,537.0</b>

<sup>1</sup> Actual EBITDA  $\triangleq$  plan EBITDA; performance factor  $\triangleq$  1.0.

<sup>2</sup> Actual EBITDA  $\triangleq$  0%.

<sup>3</sup> Actual EBITDA  $\triangleq$  200%; performance factor  $\triangleq$  1.2.

<sup>4</sup> Actual Value Added (average performance period)  $\triangleq$  plan Value Added (average reference value).

<sup>5</sup> Actual Value Added (average performance period)  $\triangleq$  0%.

<sup>6</sup> Actual Value Added (average performance period)  $\triangleq$  200%.

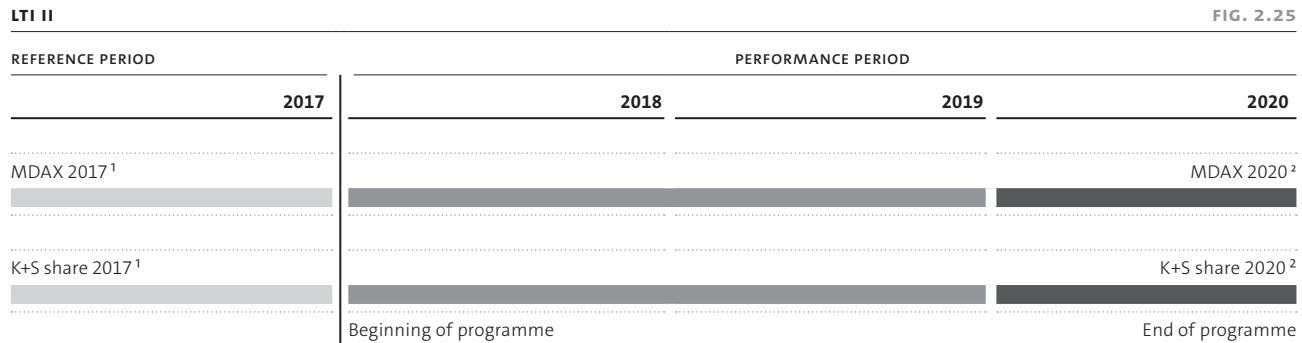
<sup>7</sup> K+S share price (average performance period)  $\triangleq$  performance MDAX (average reference value).

<sup>8</sup> K+S share price (average performance period)  $\triangleq$  0%.

<sup>9</sup> K+S share price (average performance period)  $\triangleq$  200%.

<sup>10</sup> If appropriate, pro rata temporis until the end of the appointment.

FIG. 2.25



<sup>1</sup> Average for the stock market year; reference base.

<sup>2</sup> Average for the stock market year 2020; reference base for comparison of performance with 2017.

The **STI** is measured against reaching the **EBITDA**<sup>1</sup> set in the annual plan. If the EBITDA figure from the annual plan approved by the Supervisory Board is reached, the STI base amount is 100%. If the actual EBITDA exceeds or falls short of the planned EBITDA, the percentage rate of target achievement increases or decreases in a linear fashion by the same percentage. Maximum target achievement is 200% and minimal achievement is 0%. The Supervisory Board has no discretion to influence target achievement.

Instead of a bonus based on personal performance, after the end of the relevant financial year, the Supervisory Board sets a performance factor for the entire team of executive directors. This serves as a multiplier on the base amount of STI and ranges from 0.8 to 1.2. The **performance factor** depends on achievement of annual targets defined between the Supervisory Board and the entire Board of Executive Directors. For the years from 2018 to 2020, the specific target is reaching the milestones of the SHAPING 2030 strategy, e.g. reducing indebtedness.

Sample calculation for applying the performance factor:

STI fulfilment level, e. g.

100% x performance factor, e. g. 1.1 = 110%

To determine **LTI I**, before the performance period begins, the Supervisory Board as a rule uses the mid-term planning to define **value added** for each year of the performance period. The planned value added corresponds to the arithmetical mean of the three value contribution figures of the performance period. After the

performance period has ended, actual value creation is compared to planned value creation. If actual and planned value creation are the same, target achievement is 100%. If the actual value creation exceeds or falls short of the planned value creation, the percentage target achievement increases or decreases in a linear fashion by the same percentage. Maximum target achievement is 200% and minimum achievement is 0%.

**LTI II** is based on the **K+S share price performance** (incl. dividends paid) compared to the performance of the **MDAX (Performance Index)**. If the K+S share price performance is equal to the performance of the MDAX during the reference period, target achievement is 100%. If the price performance of the K+S share exceeds or falls short of the performance of the MDAX, the percentage rate of target achievement increases or decreases in a linear fashion by the same percentage. Maximum target achievement is 200% and minimum achievement is 0%. Since LTI II – and thus 50% of long-term remuneration – is linked to the performance of K+S shares, there is no special “ownership guideline”. FIG. 2.25

The Chairman of the Board of Executive Directors receives 1.5 times the remuneration of an ordinary member of the Board of Executive Directors.

#### LTI CLAIMS FROM PREVIOUS YEARS – OLD SYSTEM

##### UNTIL 31 DECEMBER 2017

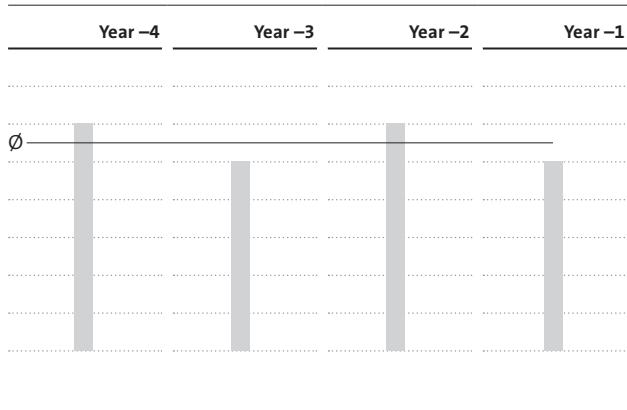
The executive directors have claims under ongoing LTI programmes from 2015, 2016 and 2017, which are outlined below:

LTI PROGRAMME

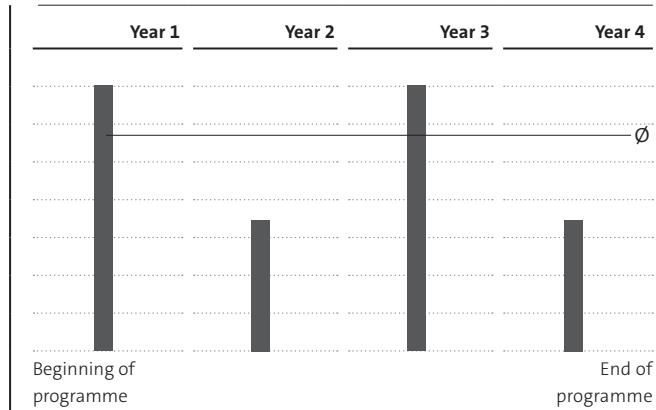
FIG. 2.26

## VALUE CONTRIBUTIONS IN € MILLION

## REFERENCE PERIOD



## PERFORMANCE PERIOD



Beginning of programme

End of programme

LTI PROGRAMME 2015–2018

FIG. 2.27

In € million	2011 <sup>1</sup>	2012	2013	2014	2015	2016	2017	2018	2019	2020	Result
					Av. 302			Av. -277			Difference = €-579 million
LTI 2015	500	384	222	102	226	-396	-437	-502	-	-	Disbursement <sup>2</sup> = €0.0 thousand
					Av. 234			not yet complete (av. to date: -445)			
LTI 2016	-	384	222	102	226	-396	-437	-502	-	-	
					Av. 39			not yet complete (av. to date: -470)			
LTI 2017	-	-	222	102	226	-396	-437	-502	-	-	

Reference period  
Performance period

<sup>1</sup> In 2011, the cap was reached on account of outstanding value contributions (LTI until 2017).<sup>2</sup> For an ordinary member of the Board of Executive Directors, payment is made in April of the year following the end of the programme.

The system is based on a multi-year assessment in accordance with the value contributions (LTI until 2017) achieved. The Company's success is thereby determined on the basis of two four-year periods. The value contribution (LTI until 2017) is derived as follows:

Operating earnings (EBIT I)

- + interest income for the financial year
- capital costs (before taxes) for the financial year
- = value contribution (LTI until 2017)

The value contribution (LTI until 2017) is capped at €±500 million per financial year.

Two four-year periods (a "reference period" and a "performance period") are compared to determine the result for an LTI tranche. The reference period covers the four years prior to commencement of the respective LTI, while the performance period covers the four years of the respective LTI term. The diagram 2.26 shows the LTI programme periods: FIG. 2.26

The average of the four value contributions (LTI until 2017) for the reference period is calculated at the beginning of an LTI period and the average of the four value contributions (LTI until 2017) for the performance period at the end of the programme. The difference between these average value contributions (LTI until 2017) is reflected as a percentage on a scale from €-200 million to €+200 million. If the value contributions (LTI until 2017) in the reference and performance period are the same, 100% of the LTI is paid out. In this case, the variable component of remuneration with a long-term incentive character for an ordinary member of the Board of Executive Directors is €350,000. In the case of underperformance, the payment decreases on a straight-line basis to 0% in line with the percentage deviation. In the case of out-performance, the payment increases accordingly up to an upper limit of 200% (= €700,000). The Chairman of the Board of Executive Directors receives 1.5 times that of an ordinary member of the Board of Executive Directors.

Payment is made in April of the year following the end of the programme. In the event of termination of an employment contract or reaching retirement age, a discounted pro-rata payment for all current tranches is generally made in April of the following year.

As shown in figure 2.27, the value contributions generated in the four-year performance period were below those generated in the reference period. Consequently, the 2015 LTI programme had no positive value.

#### **REMUNERATION AMOUNT**

Details of the individual remuneration of the Board of Executive Directors in the 2018 financial year are shown in the tables below. The difference between the "Benefits granted" and "Benefits received" tables merely relates to the variable remuneration elements. The "Benefits granted" table shows amounts that have been promised in the event of 100% target achievement. An exception to this is the share-based payment of LTI II. The "Benefits granted" table shows the amounts committed to the members of the Board of Executive Directors for the entire remaining contract period. The "Benefits received" table, on the other hand, shows amounts that will be paid in the following year based on the targets that have actually been achieved.

In the course of the reduction of the Executive Board in the first step from five to four members and the associated greater responsibility of the individual Executive Board members, the Supervisory Board increased the remuneration of the Executive Board by 2.5% with effect from 1 January 2018.

Mark Roberts receives his remuneration in euros. In order to limit exchange rate risks, a clause has been agreed according to which exchange rate offsetting takes place at the end of each year, in the event that the actual rate of the respective transfers differs from the rate upon signing the contract (EUR 1.00 = USD 1.30) by more than 10% in individual cases or by more than 5% on average for the whole year.

The average salary of the Board of Executive Directors in the past financial year was 5.2 times (2017: 5.5 times) that of senior executives worldwide and 23.6 times (2017: 21.0 times) the total workforce.

Dr Thomas Nöcker's term of office ended on 31 August 2018. The planned reduction in the size of the Board of Executive Directors to three members was therefore achieved.

The total remuneration of the Board of Executive Directors related to four members, three of whom were in office for the whole year. In the previous year, the Board of Executive Directors had five members, three of whom were in office for the whole year.

#### **PENSION COMMITMENTS**

The pensions of the active members of the Board of Executive Directors are based on a modular system, i.e. a pension module is created for each year of service as a member of the Board of Executive Directors.

The pension modules are calculated on the basis of 40% of the fixed annual remuneration of the respective member of the Board of Executive Directors. There is an upper limit on the total annual pension under this modular system to avoid disproportionately high pensions resulting from long periods of service (>15 years). The amount is calculated in accordance with actuarial principles and set aside for retirement; the factors for the creation of the 2018 modules for the members of the Board of Executive Directors are between 9.0 and 18.0%, depending on their age. These factors decline with increasing age. The individual pension modules earned during the respective financial years are totalled and, when the insured event occurs, the respective member of the Board of Executive Directors or, if applicable, his surviving dependents, receive the benefit to which they are entitled. The upper limit for the Chairman of the Board of Executive Directors is €325,000, and for an ordinary member of the Board of Executive Directors it is €245,000. These amounts are reviewed every three years and adjusted if necessary – a routine review is scheduled for 2019.

**REMUNERATION OF THE BOARD OF EXECUTIVE DIRECTORS (BENEFITS GRANTED)**

	Dr Burkhard Lohr Chairman of the Board of Executive Directors Member of the Board of Executive Directors since 6/2012				Thorsten Boeckers Member of the Board of Executive Directors since 5/2017			
	2017	2018	2018 (min.)	2018 (max.)	2017 <sup>3</sup>	2018	2018 (min.)	2018 (max.)
<b>in € thousand</b>								
Fixed remuneration	584.8	727.5	727.5	727.5	269.3	485.0	485.0	485.0
Fringe benefits <sup>1</sup>	26.9	28.5	28.5	28.5	12.7	20.1	20.1	20.1
<b>Total</b>	<b>611.7</b>	<b>756.0</b>	<b>756.0</b>	<b>756.0</b>	<b>282.0</b>	<b>505.1</b>	<b>505.1</b>	<b>505.1</b>
One-year variable remuneration	877.3	570.0	0.0	1,368.0	403.9	380.0	0.0	912.0
Multi-year variable remuneration <sup>4</sup>	487.3	950.1	0.0	1,900.2	57.8	613.4	0.0	1,226.8
– LTI (until 2017)	487.3	–	–	–	57.8	–	–	–
– LTI I (from 2018)	–	344.4	0.0	688.8	–	224.6	0.0	449.2
– LTI II (2018–2020)	–	344.4	0.0	688.8	–	224.6	0.0	449.2
– LTI II (2019–2021)	–	201.9	0.0	403.8	–	129.6	0.0	259.2
– LTI II (2020–2022)	–	59.4	0.0	118.8	–	34.6	0.0	69.2
<b>Total</b>	<b>1,976.3</b>	<b>2,276.1</b>	<b>756.0</b>	<b>4,024.2</b>	<b>743.7</b>	<b>1,498.5</b>	<b>505.1</b>	<b>2,643.9</b>
– Service costs	740.0	743.4	743.4	743.4	521.8	719.8	719.8	719.8
<b>Total remuneration</b>	<b>2,716.3</b>	<b>3,019.5</b>	<b>1,499.4</b>	<b>4,767.6</b>	<b>1,265.5</b>	<b>2,218.3</b>	<b>1,224.9</b>	<b>3,363.7</b>

<sup>1</sup> Fringe benefits are capped at €75,000.

<sup>2</sup> Before exchange rate offsetting: a US dollar rate is stipulated for the translation of remuneration. Since payments are initially converted using current rates, offsetting may be required after the end of the year.

<sup>3</sup> Assumption of the remaining periods for the LTI entitlements that Mr. Boeckers received as the Head of Investor Relations of K+S Aktiengesellschaft.

<sup>4</sup> If appropriate, pro rata temporis until the end of the appointment.

**REMUNERATION OF THE BOARD OF EXECUTIVE DIRECTORS (BENEFITS RECEIVED)**

	Dr Burkhard Lohr Chairman of the Board of Executive Directors Member of the Board of Executive Directors since 6/2012		Thorsten Boeckers Member of the Board of Executive Directors since 5/2017	
	2018	2017	2018 <sup>2</sup>	2017 <sup>2</sup>
<b>in € thousand</b>				
Fixed remuneration	727.5	584.8	485.0	269.3
Fringe benefits	28.5	26.9	20.1	12.7
<b>Total</b>	<b>756.0</b>	<b>611.7</b>	<b>505.1</b>	<b>282.0</b>
One-year variable remuneration	469.6	540.1	313.1	232.5
Multi-year variable remuneration	0.0	0.0	0.0	0.0
– LTI until 2017	0.0 <sup>3</sup>	0.0 <sup>4</sup>	0.0 <sup>3</sup>	0.0 <sup>4</sup>
– LTI I from 2018	–	–	–	–
Other	–	–	–	–
<b>Total</b>	<b>1,225.6</b>	<b>1,151.8</b>	<b>818.2</b>	<b>514.5</b>
– Pension-related expenses	743.4	740.0	719.8	521.8
<b>Total remuneration</b>	<b>1,969.0</b>	<b>1,891.8</b>	<b>1,538.0</b>	<b>1,036.3</b>

<sup>1</sup> Incl. exchange rate offsetting.

<sup>2</sup> Assumption of the remaining periods for the LTI entitlements that Mr Boeckers received as the Head of Investor Relations of K+S Aktiengesellschaft – 2015-2018 programme is valueless.

<sup>3</sup> Term 2015–2018.

<sup>4</sup> Term 2014–2017.

**DISCLOSURES IN ACCORDANCE WITH SECTION 314(1) NO. 6A GERMAN COMMERCIAL CODE**
**TAB. 2.49**

	Fixed remuneration <sup>1</sup>	STI	LTI until 2017	LTI I from 2018	LTI II until 2018	Total
Dr Burkhard Lohr	756.0	469.6	0.0	–	605.7	1,831.3
Thorsten Boeckers	505.1	313.1	0.0	–	388.8	1,207.0
Mark Roberts <sup>2</sup>	590.4	346.5	0.0	–	498.9	1,435.8
Dr Thomas Nöcker	341.7	208.7	0.0	28.7	63.3	642.4

<sup>1</sup> Including fringe benefits.

<sup>2</sup> Including exchange rate offsetting.

TAB. 2.47

Mark Roberts <sup>2</sup> Member of the Board of Executive Directors since 10/2012				Dr Thomas Nöcker Member of the Board of Executive Directors from 8/2003 to 8/2018			
2017	2018	2018 (min.)	2018 (max.)	2017	2018	2018 (min.)	2018 (max.)
420.0	485.0	485.0	485.0	420.0	323.3	323.3	323.3
55.4	53.6	53.6	53.6	25.5	18.4	18.4	18.4
<b>475.4</b>	<b>538.6</b>	<b>538.6</b>	<b>538.6</b>	<b>445.5</b>	<b>341.7</b>	<b>341.7</b>	<b>341.7</b>
630.0	380.0	0.0	912.0	630.0	253.3	0.0	608.0
350.0	760.2	0.0	1,520.4	350.0	126.6	0.0	253.2
350.0	—	—	—	350.0	—	—	—
—	261.3	0.0	522.6	—	63.3	0.0	126.6
—	261.3	0.0	522.6	—	63.3	0.0	126.6
—	166.3	0.0	332.6	—	—	—	—
—	71.3	0.0	142.6	—	—	—	—
<b>1,455.4</b>	<b>1,678.8</b>	<b>538.6</b>	<b>2,971.0</b>	<b>1,425.5</b>	<b>721.6</b>	<b>341.7</b>	<b>1,202.9</b>
648.2	538.9	538.9	538.9	432.2	283.3	283.3	283.3
<b>2,103.6</b>	<b>2,217.7</b>	<b>1,077.5</b>	<b>3,509.9</b>	<b>1,857.7</b>	<b>1,004.9</b>	<b>625.0</b>	<b>1,486.2</b>

TAB. 2.48

Mark Roberts <sup>1</sup> Member of the Board of Executive Directors since 10/2012		Dr Thomas Nöcker Member of the Board of Executive Directors from 8/2003 to 8/2018	
2018	2017 <sup>1</sup>	2018	2017
536.8	481.1	323.3	420.0
53.6	55.4	18.4	25.5
<b>590.4</b>	<b>536.5</b>	<b>341.7</b>	<b>445.5</b>
346.5	429.8	208.7	362.6
0.0	0.0	28.7	0.0
0.0 <sup>3</sup>	0.0 <sup>4</sup>	0.0 <sup>3</sup>	0.0 <sup>4</sup>
—	—	28.7	—
—	—	—	—
936.9	966.3	550.4	808.1
538.9	648.2	283.3	432.2
<b>1,475.8</b>	<b>1,614.5</b>	<b>833.7</b>	<b>1,240.3</b>

<b>DISCLOSURES IN ACCORDANCE WITH IFRS 2</b>		<b>TAB. 2.50</b>
	<b>Expenses LTI II</b>	<b>Provisions LTI II</b>
Dr Burkhard Lohr	238.0	238.0
Thorsten Boeckers	156.1	156.1
Mark Roberts	173.0	173.0
Dr Thomas Nöcker	57.7	57.7
<b>Total</b>	<b>624.8</b>	<b>624.8</b>

Pension benefits are adjusted in line with changes in the “consumer price index for Germany” only on payment. Entitlements arising from modules earned are non-forfeitable. The statutory provisions on the non-forfeitability of pension entitlements apply for future pension agreements. These provisions specify that pension entitlements only become non-forfeitable after five years of service. A fixed euro-us dollar exchange rate has been agreed for Mark Roberts.

If the term of office of a member of the Board of Executive Directors ends, the retirement pension starts upon reaching the age of 65 unless it is to be paid on the basis of an occupational or general disability or as a surviving dependent’s pension in the event of death. In the event of an occupational or general disability of a member of the Board of Executive Directors prior to reaching pension age, the respective member receives a disability pension commensurate with the pension modules created up to the time the disability occurs. If disability occurs before the age of 55, modules are fictitiously created on the basis of a minimum value for the years missing up to the age of 55. In the event of the death of a serving or former member of the Board of Executive Directors, the surviving spouse receives 60%, each orphan 30% and each half-orphan 15% of the benefit. The maximum amount of the benefits awarded to surviving dependents may not exceed 100% of the pension payment. If this amount is reached, the benefit is reduced proportionately. If a member of the Board of Executive Directors retires at the age of 60, entitlements can already be claimed in accordance with the pension commitment at that time.

In 2018, the following amounts were allocated to pension provisions for members of the Board of Executive Directors: **TAB. 2.51**

The pension module earned by each of the members of the Board of Executive Directors in 2018 gives rise to pension expenses, which are calculated in accordance with actuarial principles. The increase in current values compared to the previous year's value is due to the fact that the period until the assumed start of the pension is one year shorter.

## **EARLY TERMINATION OF CONTRACTS WITH THE BOARD OF EXECUTIVE DIRECTORS**

If the appointment as a board member is revoked, the member of the Board of Executive Directors receives, at the time of termination, a severance payment of 1.5 times the fixed remuneration, up to a maximum of the total remuneration for the remaining term of the employment contract.

In the event of an early termination of a contract with a member of the Board of Executive Directors as the result of a takeover (“change of control”), the fixed remuneration and bonuses outstanding until the end of the original term of the appointment will be paid plus a compensatory payment, unless there are reasons justifying a termination of the respective contract without giving notice. The bonus is calculated on the basis of the average of the preceding two years. The compensatory payment is 1.5 times the annual fixed remuneration. In addition, there is an upper limit for severance payments, whereby entitlements arising from the “change of control” clause may not exceed the value of the combined annual remuneration for three years. In the event of a change of control, members of the Board of Executive Directors enjoy no extraordinary right to terminate their contract.

## **OTHER**

The Supervisory Board has introduced an age limit of 65 years for members of the Board of Executive Directors.

The members of the Board of Executive Directors were not promised or granted benefits by third parties for their work as executive directors during the reporting period – nor did they receive any loans. Apart from the employment contracts mentioned, there are no contractual relationships between the Company or its Group companies and members of the Board of Executive Directors or persons closely related to them.

The total remuneration of previous members of the Board of Executive Directors and their surviving dependents amounted to €2.1 million in the reporting year (2017: €2.1 million).

## **REMUNERATION OF THE SUPERVISORY BOARD**

### **REMUNERATION STRUCTURE**

The remuneration of the Supervisory Board is regulated by Article 12 of the Articles of Association. A member of the Supervisory Board receives fixed annual remuneration of €100,000. The Chairman of the Supervisory Board receives twice this amount and the Vice-Chairman 1.5 times this amount.

TAB. 2.51

PENSIONS OF THE MEMBERS OF THE BOARD OF EXECUTIVE DIRECTORS<sup>1</sup>

in € thousand	2018	Age	Current value as of 01.01.	Pension expense <sup>2</sup>	Current value as of 31.12.
Dr Burkhard Lohr	2017	55	3,545.3	814.3	4,515.9
Norbert Steiner (member until 11 May 2017)	2018	64	2,923.8	—	3,545.3
Thorsten Boeckers <sup>3</sup> (member until 12 May 2017)	2018	43	—	367.3	8,519.0
Dr Thomas Nöcker (member until 31 August 2018)	2018	60	796.0	735.8	1,621.2
Mark Roberts	2017	55	6,602.0	526.8	7,326.0
Dr Otto Lose <sup>4</sup> (member from 1 January to 28 November 2017)	2018	48	2,867.2	545.3	6,602.0
<b>Total</b>	<b>2018</b>	<b>2017</b>	<b>14,011.9</b>	<b>2,565.7</b>	<b>17,370.9</b>
			<b>20,991.6</b>	<b>3,525.3</b>	<b>23,124.3</b>

<sup>1</sup> Disclosures in accordance with IFRS.<sup>2</sup> Including interest expense.<sup>3</sup> Includes pension entitlements from the time as Head of Investor Relations of K+S AKTIENGESELLSCHAFT.<sup>4</sup> Dr Otto Lose resigned from the Board of Executive Directors with effect from 28 November 2017; his employment contract ended on 31 December 2017. In addition to the pension expenses reported, pension-related expenses of €1,270.1 thousand were incurred for the remaining period of his original employment contract from 29 November 2017 to 31 December 2019, increasing the current value of the total entitlement as at 31 December 2017.

The members of the Audit Committee each receive annual remuneration of €15,000 and the members of the Personnel Committee €7,500. Each member of the Nomination Committee receives annual remuneration of €7,500 if at least two meetings have taken place during the respective year. The chairmen of these committees each receive twice this amount and a vice-chairman 1.5 times this amount. Finally, each member of the Supervisory Board receives a fee of €750 for attending a meeting of the Supervisory Board or one of its committees; however, if more than one meeting is held on the same day, members will receive a maximum of €1,500 per day. The members of the Supervisory Board are entitled to reimbursement by the Company of any expenses that are necessary and reasonable for the performance of their duties, as well as to the reimbursement of any value added tax (VAT) to be paid as a consequence of their activities in their capacity as Supervisory Board members.

**REMUNERATION AMOUNT**

Details of the individual remuneration of the Supervisory Board for the 2018 financial year are shown in the table below: TAB. 2.52

Additionally, in 2018, members of the Supervisory Board were reimbursed expenses totalling €79.7 thousand (2017: €64.9 thousand). In 2018, no remuneration was paid to members of the

Supervisory Board for services rendered personally, particularly consultancy or brokerage services, nor were any benefits granted.

In addition to the Supervisory Board remuneration, employee representatives, who are employees of the K+S GROUP, receive remuneration that is not related to activities performed for the Supervisory Board.

A relative of one Supervisory Board member is employed by the K+S Group. This person's remuneration is in line with the internal remuneration policy of the K+S Group and corresponds to the normal remuneration paid to people in comparable posts.

**Absence from meetings**

The following table provides an individualized overview of members' attendance of meetings of the Supervisory Board and its committees in 2018.

**Age limit and maximum terms of office**

Candidates may not be 72 or older when they are elected. In addition, members may serve on the Supervisory Board for a maximum of four terms of office – five in exceptional cases. This does not affect the statutory co-determination rules.

REMUNERATION OF THE SUPERVISORY BOARD<sup>1</sup>

TAB. 2.52

in €		Fixed remu- neration	Audit Committee	Personnel Committee	Nomination Committee	Strategy Committee <sup>5</sup>	Attendance fees	Total
Dr Andreas Kreimeyer (Chairman since 10 May 2017)	2018	200,000	10,000	15,000	15,000	0	8,250	248,250
	2017	166,667	—	8,125 <sup>2,3</sup>	10,625 <sup>3</sup>	0	10,500	195,917
Michael Vassiliadis (until 15 May 2018 Vice-Chairman)	2018	62,500	6,250	3,125	—	0	1,500	73,375
	2017	150,000	15,000	7,500	—	0	8,250	180,750
Ralf Becker (since 15 May 2018 Vice Chairman)	2018	133,333	15,000	5,000	—	0	6,750	160,083
	2017	100,000	15,000	—	—	—	6,750	121,750
Petra Adolph (since 15 May 2018)	2018	66,667	10,000	—	—	—	1,500	78,167
	2017	—	—	—	—	—	—	—
André Bahn (since 15 May 2018)	2018	66,667	—	—	—	—	2,250	68,917
	2017	—	—	—	—	—	—	—
Jella S. Benner-Heinacher	2018	100,000	10,000	3,125	7,500	—	8,250	128,875
	2017	100,000	—	7,500	—	—	11,250	123,750
Peter Bleckmann (since 15 May 2018)	2018	66,667	—	—	—	—	2,250	68,917
	2017	—	—	—	—	—	0	0
George Cardona	2018	100,000	—	—	7,500	—	5,250	112,750
Wesley Clark (until 15 May 2018)	2018	41,667	—	—	—	—	1,500	43,167
	2017	100,000	—	—	—	—	3,750	103,750
Harald Döll (until 15 May 2018)	2018	41,667	—	3,125	—	—	0	44,792
	2017	100,000	—	7,500	—	—	5,250	112,750
Dr. Elke Eller (since 15 May 2018)	2018	66,667	—	5,000	—	—	1,500	73,167
	2017	—	—	—	—	—	—	—
Gerd Grimmelg (since 15 May 2018)	2018	66,667	—	—	—	—	2,250	68,917
	2017	—	—	—	—	—	—	—
	2018	100,000	15,000	—	—	—	6,000	121,000
Axel Hartmann	2017	100,000	15,000	—	—	—	6,750	121,750
	2018	100,000	—	5,000	—	—	4,500	109,500
Michael Knackmuß	2017	100,000	—	—	—	—	3,750	103,750
Thomas Kölbl (since 10 May 2017)	2018	100,000	25,000	—	—	—	5,250	130,250
	2017	66,667	10,000	—	—	—	4,500	81,167
	2018	100,000	—	—	—	—	3,750	103,750
Gerd Kübler	2017	100,000	—	—	—	—	3,750	103,750
Dieter Kuhn (until 28 February 2018)	2018	16,667	—	—	—	—	0	16,667
	2017	100,000	—	—	—	—	3,750	103,750
Nevin McDougall (since 15 May 2018)	2018	66,667	—	—	—	—	1,500	68,167
	2017	—	—	—	—	—	—	—
Dr. Annette Messemer (until 15 May 2018)	2018	41,667	6,250	—	—	—	2,250	50,167
	2017	100,000	15,000	—	—	—	6,750	121,750
	2018	100,000	—	—	—	—	3,750	103,750
Anke Roehr	2017	100,000	—	—	—	—	3,750	103,750
Dr. Eckart Sünder (until 15 May 2018)	2018	41,667	12,500	—	—	—	2,250	56,417
	2017	100,000	30,000	—	—	—	6,750	136,750
	2018	100,000	—	—	7,500	0	6,000	113,500
Philip Freiherr von dem Bussche	2017	100,000	—	—	7,500	0	8,250	115,750
	2018	1,779,170	110,000	39,375	37,500	0	76,500	2,042,545
<b>Total</b>	<b>2017<sup>4</sup></b>	<b>1,766,667</b>	<b>106,250</b>	<b>36,875</b>	<b>36,875</b>	<b>0</b>	<b>105,000</b>	<b>2,051,667</b>

<sup>1</sup> Excluding reimbursement to members of the Supervisory Board for value added tax (VAT) paid as a consequence of their activities.<sup>2</sup> Since 10 May 2017.<sup>3</sup> Chairman since 21 August 2017<sup>4</sup> Excluding members who stepped down in 2017.<sup>5</sup> Currently without compensation, will be revised in 2019.

## ATTENDANCE OF MEMBERS OF THE SUPERVISORY BOARD OF K+S AKTIENGESELLSCHAFT AT MEETINGS HELD IN 2018

TAB. 2.53

Supervisory Board member	Meetings, including committee meetings	Total plenary meetings	Plenary meetings attended	Total committee meetings	Committee meetings attended	Total attendance in %
Dr. Andreas Kreimeyer	20	6	6	14	14	100%
Michael Vassiliadis (until 15 May 2018)	5	2	1	3	2	60%
Ralf Becker (since 15 May 2018)	15	6	6	9	9	100%
Petra Adolph (since 15 May 2018)	7	4	2	3	2	57%
André Bahn (since 15 May 2018)	4	4	4			100%
Jella S. Benner-Heinacher	14	6	6	8	8	100%
Peter Bleckmann (since 15 May 2018)	4	4	4			100%
George Cardona	10	6	5	4	3	80%
Wesley Clark (until 15.05.2018)	2	2	2			100%
Harald Döll (until 15 May 2018)	3	2		1		0%
Dr Elke Eller (since 15 May 2018)	7	4	3	3	2	71%
Gerd Grimmig (since 15 May 2018)	4	4	4			100%
Axel Hartmann	10	6	6	4	4	100%
Michael Knackmuß	9	6	6	3	3	100%
Thomas Kölbl	10	6	5	4	4	90%
Gerd Kübler	6	6	6			100%
Dieter Kuhn (until 28 February 2018)						
Nevin McDougall (since 15 May 2018)	4	4	3			75%
Dr Annette Messemer (until 15 May 2018)	3	2	2	1	1	100%
Anke Roehr	6	6	6			100%
Dr Eckart Sünder (until 15 May 2018)	3	2	2	1	1	100%
Philip Freiherr von dem Bussche	13	6	6	7	7	100%
<b>Total</b>	<b>159</b>	<b>94</b>	<b>90%</b>	<b>65</b>	<b>92%</b>	<b>91%</b>

# CONSOLIDATED FINANCIAL STATEMENTS

## 03

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**INCOME STATEMENT<sup>1</sup>**

TAB 3.1

in € million	Note	2017	2018
<b>Revenues</b>	(1)	<b>3,627.0</b>	<b>4,039.1</b>
Cost of sales		2,414.6	2,779.5
<b>Gross profit</b>		<b>1,212.4</b>	<b>1,259.6</b>
Selling expenses		704.5	779.8
General and administrative expenses		231.4	228.5
Research and development costs		16.6	15.9
Other operating income	(2)	187.8	146.8
Other operating expenses	(3)	186.1	171.6
Net income from equity investments	(4)	4.5	4.2
Gains/(losses) on operating anticipatory hedges	(5)	61.2	-49.5
<b>Earnings after operating hedges (EBIT II)<sup>2,3</sup></b>		<b>327.3</b>	<b>165.3</b>
Interest income	(6)	10.6	11.6
Interest expense	(6)	53.4	120.7
Other financial result	(7)	16.4	-3.1
<b>Financial result</b>		<b>-26.4</b>	<b>-112.2</b>
<b>Earnings before tax</b>		<b>300.9</b>	<b>53.1</b>
Income tax expense	(8)	116.3	10.9
– of which deferred taxes		-14.4	-17.9
<b>Earnings for the period</b>		<b>184.6</b>	<b>42.2</b>
Non-controlling interests		–	0.1
<b>Earnings after tax and non-controlling interests</b>		<b>184.6</b>	<b>42.1</b>
 Earnings per share in € (basic ≈ diluted)	(11)	 0.96	 0.22

**STATEMENT OF COMPREHENSIVE INCOME<sup>1</sup>**

TAB 3.2

in € million	Note	2017	2018
<b>Earnings for the period</b>		<b>184.6</b>	<b>42.2</b>
Exchange differences on translation of foreign operations		-528.4	-49.0
<b>Items of other comprehensive income that may be reclassified to profit or loss in subsequent periods</b>		<b>-528.4</b>	<b>-49.0</b>
Remeasurement gains/(losses) on defined benefit plans		7.8	-5.2
Measurement of equity instruments at fair value		–	10.7
<b>Items of other comprehensive income not to be reclassified to profit or loss</b>		<b>7.8</b>	<b>5.5</b>
<b>Other comprehensive income after tax</b>	(20)	<b>-520.6</b>	<b>-43.5</b>
<b>Total comprehensive income for the period</b>		<b>-336.0</b>	<b>-1.3</b>
Non-controlling interests		–	0.1
<b>Total comprehensive income for the period, net of tax and non-controlling interests</b>		<b>-336.0</b>	<b>-1.4</b>

<sup>1</sup> Rounding differences may arise in percentages and numbers.<sup>2</sup> The reconciliation of EBIT II to operating earnings (EBIT I) and EBITDA is presented in the notes  
⇒ (see "Notes to the Income Statement and the Statement of Comprehensive Income" on page 173).<sup>3</sup> These are key figures not defined by IFRS.

**BALANCE SHEET<sup>1</sup>**

TAB 3.3

in € million	Note	31 Dec 2017	31 Dec 2018
Intangible assets	(12)	962.8	982.3
– of which goodwill from acquisitions of companies	(12)	672.7	693.2
Property, plant and equipment		6,692.6	6,687.9
Investment properties	(13)	5.3	6.4
Financial investments	(14)	21.0	89.1
Other financial assets	(18, 19)	46.3	36.2
Other non-financial assets		29.0	21.9
Securities and other financial investments	(15)	7.0	7.0
Deferred taxes	(16)	95.2	92.6
Income tax refund claims		–	28.0
<b>Non-current assets</b>		<b>7,859.3</b>	<b>7,951.2</b>
Inventories	(17)	690.9	691.5
Trade receivables	(18)	714.9	836.7
Other financial assets	(18, 19)	107.6	86.2
Other non-financial assets		155.9	172.5
Income tax refund claims		31.7	49.3
Securities and other financial investments	(15)	11.4	11.2
Cash and cash equivalents	(30)	182.6	167.6
<b>Current assets</b>		<b>1,895.1</b>	<b>2,015.0</b>
<b>TOTAL ASSETS</b>		<b>9,754.4</b>	<b>9,966.2</b>

<sup>1</sup> Rounding differences may arise in percentages and numbers.

**BALANCE SHEET<sup>1</sup>**

TAB 3.4

in € million	Note	31 Dec 2017	31 Dec 2018
Issued capital	(20)	191.4	191.4
Share premium	(20)	645.7	645.7
Other reserves and net retained earnings	(20)	3,322.1	3,305.4
Total equity attributable to shareholders of K+S AKTIENGESELLSCHAFT		4,159.2	4,142.5
Non-controlling interests		1.5	1.6
<b>Equity</b>		<b>4,160.7</b>	<b>4,144.1</b>
Financial liabilities	(25)	2,451.8	2,741.4
Other financial liabilities	(19, 25)	154.2	154.9
Other non-financial liabilities		10.2	13.2
Income tax liabilities		48.5	46.6
Provisions for pensions and similar obligations	(21)	166.4	187.0
Provisions for mining obligations	(22)	1,000.0	1,015.1
Other provisions	(22, 23)	156.4	140.1
Deferred taxes	(16)	252.6	230.1
<b>Non-current liabilities</b>		<b>4,240.2</b>	<b>4,528.4</b>
Financial liabilities	(25)	569.9	541.9
Trade payables	(25)	288.4	239.7
Other financial liabilities	(19, 25)	89.3	112.3
Other non-financial liabilities		58.8	49.9
Income tax liabilities		54.6	35.3
Provisions	(22, 24)	292.3	314.6
<b>Current liabilities</b>		<b>1,353.5</b>	<b>1,293.7</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>9,754.4</b>	<b>9,966.2</b>

<sup>1</sup> Rounding differences may arise in percentages and numbers.

**STATEMENT OF CASH FLOWS<sup>1</sup>**
**TAB 3.5**

in € million	Note (30)	2017	2018
Earnings after operating hedges (EBIT II)		327.3	165.3
Income (–)/expenses (+) arising from changes in the fair value of outstanding operating anticipatory hedges		–37.2	25.7
Neutralisation of changes in the fair value of operating anticipatory hedges recognised in prior periods		–10.3	36.2
Realised gains (–)/losses (+) from currency hedging for capital expenditure in Canada		–9.0	–
Depreciation, amortisation, impairment losses (+)/reversals of impairment losses (–)		305.9	379.1
Increase (+)/decrease (–) in non-current provisions (excluding interest rate effects)		5.4	5.7
Interest received and similar income		10.6	8.3
Realised gains (+)/losses (–) on financial assets/liabilities		–20.2	27.9
Interest paid (–)		–63.5	–91.6
Income tax paid (–)		–36.0	–99.6
Other non-cash expenses (+)/income (–)		2.0	–0.1
Gain (–)/loss (+) on sale of assets and securities		–22.4	6.7
Increase (–)/decrease (+) in inventories		–31.1	6.8
Increase (–)/decrease (+) in receivables and other operating assets		–99.9	–134.7
Increase (+)/decrease (–) in liabilities from operating activities		–34.0	–37.6
Increase (+)/decrease (–) in current provisions		22.9	32.1
Allocations to plan assets		–3.6	–21.5
<b>Net cash flow from operating activities</b>		<b>306.8</b>	<b>308.7</b>
Proceeds from sale of assets		60.0	6.4
Purchases of intangible assets		–11.3	–10.0
Purchases of property, plant and equipment		–743.5	–504.7
Purchases of financial investments		–7.6	–6.7
Proceeds from sale of consolidated companies		5.8	–
Proceeds from sale of securities and other financial investments		62.4	297.8
Purchases of securities and other financial investments		–29.3	–295.5
<b>Net cash flows used in investing activities</b>		<b>–663.5</b>	<b>–512.7</b>
Dividends paid		–57.4	–67.0
Proceeds from other allocations to equity		2.0	–
Purchases of own shares		–2.4	–
Sales of own shares		0.2	–
Repayment (–) of borrowings		–385.4	–754.3
Proceeds (+) from borrowings		854.5	1,008.6
<b>Net cash flows from/(used in) financing activities</b>		<b>411.5</b>	<b>187.3</b>
<b>Cash change in cash and cash equivalents</b>		<b>54.8</b>	<b>–16.7</b>
Exchange rate-related change in cash and cash equivalents		–17.7	3.2
Consolidation-related change in cash and cash equivalents		3.9	–
<b>Net change in cash and cash equivalents</b>		<b>41.0</b>	<b>–13.5</b>
<b>Net cash and cash equivalents as at 1 January</b>		<b>134.7</b>	<b>175.7</b>
<b>Net cash and cash equivalents as at 31 December</b>		<b>175.7</b>	<b>162.2</b>
– of which cash on hand and bank balances		182.6	167.6
– of which cash received from affiliated companies		–6.9	–5.4

<sup>1</sup> Rounding differences may arise in percentages and numbers.

STATEMENT OF CHANGES IN EQUITY<sup>1</sup>

TAB 3.6

Note (20)

in € million	Issued capital	Share premium	Net retained profits/ revenue reserves	Foreign currency translation reserve	Remeasurement gains/(losses) on defined benefit plans		Measurement instruments at fair value	Total equity attributable to shareholders of K+S AG	Non-controlling interests	Equity
					on defined benefit plans	Measurement instruments at fair value				
Balance as at 1 January 2018	191.4	645.7	3,349.0	61.5	-88.4	-	-	4,159.2	1.5	4,160.7
Adjustments resulting from the first-time application of IFRS 9 <sup>2</sup>	-	-	-	-	-	-	51.6	51.6	-	51.6
As at 1 January 2018 (adjusted)	191.4	645.7	3,349.0	61.5	-88.4	51.6	4,210.8	1.5	4,212.3	
Earnings for the period	-	-	42.1	-	-	-	42.1	0.1	42.2	
Other comprehensive income after tax	-	-	-	-49.0	-5.2	10.7	-43.5	-	-	-43.5
<b>Total comprehensive income for the period</b>	<b>-</b>	<b>-</b>	<b>42.1</b>	<b>-49.0</b>	<b>-5.2</b>	<b>10.7</b>	<b>-1.4</b>	<b>0.1</b>	<b>-1.3</b>	
Dividend for the previous year	-	-	-67.0	-	-	-	-67.0	-	-	-67.0
Other changes in equity	-	-	0.1	-	-	--	0.1	-	-	0.1
<b>Balance as at 31 December 2018</b>	<b>191.4</b>	<b>645.7</b>	<b>3,324.2</b>	<b>12.5</b>	<b>-93.6</b>	<b>62.3</b>	<b>4,142.5</b>	<b>1.6</b>	<b>4,144.1</b>	
Balance as at 1 January 2017	191.4	645.7	3,219.9	589.9	-96.2	-	4,550.7	1.5	4,552.2	
Earnings for the period	-	-	184.6	-	-	-	184.6	-	-	184.6
Other comprehensive income after tax	-	-	-	-528.4	7.8	-	-520.6	-	-	-520.6
<b>Total comprehensive income for the period</b>	<b>-</b>	<b>-</b>	<b>184.6</b>	<b>-528.4</b>	<b>7.8</b>	<b>-</b>	<b>-336.0</b>	<b>-</b>	<b>-</b>	<b>-336.0</b>
Dividend for the previous year	-	-	-57.4	-	-	-	-57.4	-	-	-57.4
Other changes in equity	-	-	1.9	-	-	-	1.9	-	-	1.9
<b>Balance as at 31 December 2017</b>	<b>191.4</b>	<b>645.7</b>	<b>3,349.0</b>	<b>61.5</b>	<b>-88.4</b>	<b>-</b>	<b>4,159.2</b>	<b>1.5</b>	<b>4,160.7</b>	

<sup>1</sup> Rounding differences may arise in percentages and numbers.<sup>2</sup> For details on the IFRS 9 amendment, see "New or amended financial reporting standards and interpretations" on page 167

# NOTES

## SEGMENT REPORTING

### SEGMENT REPORTING<sup>1</sup>

in € million	Note	Total revenues		of which revenues with third parties (37)	
		2017	2018	2017	2018
Potash and Magnesium Products business unit		1,773.6	2,035.8	1,703.5	1,973.0
Salt business unit		1,771.6	1,898.7	1,762.0	1,890.8
Complementary Activities		188.6	202.5	159.9	172.4
Reconciliation <sup>2</sup>	(36)	-106.8	-97.9	1.6	2.9
<b>K+S total</b>		<b>3,627.0</b>	<b>4,039.1</b>	<b>3,627.0</b>	<b>4,039.1</b>

in € million	Note	Assets		Liabilities	
		2017	2018	2017	2018
Potash and Magnesium Products business unit		6,400.1	6,544.8	1,415.2	1,451.7
Salt business unit		3,001.5	3,044.0	612.3	702.2
Complementary Activities		104.9	121.6	56.1	61.0
Reconciliation <sup>2</sup>	(36)	247.9	255.8	3,510.1	3,607.2
<b>K+S total</b>		<b>9,754.4</b>	<b>9,966.2</b>	<b>5,593.7</b>	<b>5,822.1</b>

<sup>1</sup> Rounding differences may arise in percentages and numbers.

<sup>2</sup> Figures for business units are shown before intersegment consolidation. Expenses and income as well as balance sheet items that cannot be allocated to business units are reported separately. Both effects are shown under "Reconciliation".

<sup>3</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. A reconciliation can be found on page 95.

<sup>4</sup> Return on capital employed (see definition in section entitled "Further information" on page 234).

<sup>5</sup> Relates to cash payments for investments in property, plant and equipment and intangible assets, taking claims for reimbursement from claim management into account.

<sup>6</sup> Relates to systematic depreciation and amortisation. If material impairment losses or reversals of impairment losses are involved, they are disclosed in Note (35).

<sup>7</sup> Adjusted for the depreciation amount recognised in equity as own work capitalised.

TAB. 3.6

of which intersegment revenues		EBIT I		EBITDA <sup>3,7</sup>	
2017	2018	2017	2018	2017	2018
70.1	62.8	81.3	69.6	268.8	359.3
9.6	7.9	223.0	196.8	325.2	274.5
28.7	30.1	23.5	26.4	30.3	31.3
-108.4	-100.8	-57.0	-65.5	-47.6	-58.8
-	-	270.8	227.2	576.7	606.3

ROCE <sup>4</sup>		Capital expenditure <sup>5</sup>		Depreciation and amortisation <sup>6,7</sup>	
2017	2018	2017	2018	2017	2018
1.4%	1.2%	680.4	316.7	187.4	289.7
8.9%	8.1%	118.8	111.2	98.6	77.7
33.8%	35.3%	4.4	6.8	6.8	4.9
-	-	7.2	8.6	9.4	6.7
3.2%	2.6%	810.8	443.2	302.2	379.0

## STATEMENT OF CHANGES IN NON-CURRENT ASSETS

### STATEMENT OF CHANGES IN NON-CURRENT ASSETS 2018<sup>1</sup>

in € million	Note	Balance as at 1 Jan 2018	Change in scope of consolidation	Gross carrying amounts				Balance as at 31 Dec 2018
				Additions	Disposals	Reclassifi- cations	Translation differences	
Other acquired concessions, industrial property rights, similar rights and assets, and licences in such rights and assets		83.9	–	7.0	11.9	5.3	1.0	85.1
Customer relations		231.2	–	–	–	–	7.6	238.8
Brands		119.6	–	–	–	–	4.1	123.8
Port concessions		34.1	–	–	–	–	1.6	35.7
Goodwill from acquisitions of companies		672.7	–	–	–	–	20.5	693.2
Internally generated intangible assets		31.1	–	0.1	0.1	–	–	31.1
Emission rights		15.2	–	0.2	0.2	–	–	15.2
Intangible assets in progress		9.8	–	2.8	–	-4.7	–	7.9
<b>Intangible assets</b>	<b>(12)</b>	<b>1,197.6</b>	<b>–</b>	<b>10.0</b>	<b>12.2</b>	<b>0.6</b>	<b>34.8</b>	<b>1,230.8</b>
Land, land rights and buildings including buildings on third-party land		2,207.8	–	67.7	52.3	44.2	-27.7	2,239.8
Finance leases for land, land rights and buildings including buildings on third-party land		1.0	–	–	–	–	–	1.1
Raw material deposits		703.1	–	–	–	–	1.8	704.9
Technical equipment and machinery		5,715.7	–	170.3	71.0	225.2	-71.4	5,968.9
Finance leases for technical equipment and machinery		248.1	–	0.5	0.9	0.5	-8.9	239.3
Ships		52.6	–	–	0.1	–	2.1	54.6
Finance leases for ships		1.9	–	–	–	–	-0.1	1.8
Other equipment, operating and office equipment		465.7	–	18.4	85.2	9.6	-1.5	407.0
Prepayments and assets under construction		557.0	–	286.3	1.3	-281.5	-7.0	553.4
<b>Property, plant and equipment</b>	<b>(13)</b>	<b>9,952.9</b>	<b>–</b>	<b>543.2</b>	<b>210.8</b>	<b>-1.8</b>	<b>-112.6</b>	<b>10,170.9</b>
<b>Investment properties</b>		<b>10.2</b>	<b>–</b>	<b>–</b>	<b>0.4</b>	<b>1.3</b>	<b>–</b>	<b>11.0</b>

<sup>1</sup> Rounding differences may arise in percentages and numbers.

TAB. 3.7

	Balance as at 1 Jan 2018	Change in scope of consolidation	Depreciation and amortisation	Impairment losses	Reversals of impairment losses	Depreciation, amortisation and impairment losses			Balance as at 31 Dec 2018	Net carrying amounts Balance as at 31 Dec 2018
						Disposals	Reclassifi- cations	Translation differences		
	56.8	–	8.0	–	–	11.9	–	0.7	53.6	31.6
	138.8	–	10.9	–	–	–	–	3.7	153.5	85.3
	11.8	–	0.2	–	–	–	–	0.1	12.0	111.7
	1.4	–	0.1	–	–	–	–	0.1	1.6	34.1
	–	–	–	–	–	–	–	–	–	693.2
	26.0	–	2.0	–	–	0.1	–	–	27.8	3.3
	–	–	–	–	–	–	–	–	–	15.2
	–	–	–	–	–	–	–	–	–	7.9
	234.7	–	21.3	–	–	12.1	–	4.6	248.5	982.3
	519.2	–	80.4	–	–	4.9	–	1.1	595.8	1,643.9
	0.9	–	0.1	–	–	–	–	–	1.0	0.1
	44.0	–	10.1	–	–	–	–	0.4	54.3	650.5
	2,306.5	–	243.3	–	–	61.7	–	3.0	2,491.0	3,477.9
	12.6	–	10.5	–	–	–	–	–0.6	22.4	216.9
	11.2	–	2.3	–	–	0.1	–	0.6	14.0	40.6
	1.1	–	0.1	–	–	–	–	–	1.2	0.7
	364.9	–	16.8	–	–	77.5	–	-1.0	303.1	103.9
	–	–	–	–	–	–	–	–	–	553.4
	3,260.3	–	363.6	–	–	144.2	–	3.2	3,483.0	6,687.9
	4.9	–	0.1	–	–	0.4	–	–	4.6	6.4

**STATEMENT OF CHANGES IN NON-CURRENT ASSETS 2017<sup>1</sup>**

in € million	Note	1 Jan 2017	Change in scope of consolidation	Gross carrying amounts				Balance as at 31 Dec 2017
				Additions	Disposals	Reclassifications	Translation differences	
Other acquired concessions, industrial property rights, similar rights and assets, and licences in such rights and assets		72.1	0.6	16.3	1.1	1.0	-5.0	83.9
Customer relations		259.9	-	-	-	-	-28.8	231.2
Brands		133.7	-	-	-	-	-14.1	119.6
Port concessions		38.8	-	-	-	-	-4.7	34.1
Goodwill from acquisitions of companies		753.4	-	-	-	-	-80.7	672.7
Internally generated intangible assets		26.1	-	0.4	-	4.6	-	31.1
Emission rights		15.2	-	0.2	0.1	-	-	15.2
Intangible assets in progress		9.5	-	5.6	-	-5.3	-	9.8
<b>Intangible assets</b>	(12)	<b>1,308.8</b>	<b>0.6</b>	<b>22.5</b>	<b>1.3</b>	<b>0.3</b>	<b>-133.3</b>	<b>1,197.6</b>
Land, land rights and buildings including buildings on third-party land		1,396.7	-6.2	124.8	51.3	797.0	-53.1	2,207.8
Finance leases for land, land rights and buildings including buildings on third-party land		2.4	-	-	1.1	-	-0.3	1.0
Raw material deposits		768.8	-	-	-	-	-65.8	703.1
Technical equipment and machinery		3,451.4	-5.2	400.8	61.9	2,055.1	-124.6	5,715.7
Finance leases for technical equipment and machinery		43.4	-	139.6	0.1	70.7	-5.6	248.1
Ships		58.8	-	0.7	-	0.3	-7.2	52.6
Finance leases for ships		2.0	-	-	-	-	-0.1	1.9
Other equipment, operating and office equipment		441.9	-0.1	25.8	13.5	23.2	-11.7	465.7
Prepayments and assets under construction		3,417.4	-0.2	236.4	1.8	-2,946.3	-148.5	557.0
<b>Property, plant and equipment</b>		<b>9,582.9</b>	<b>-11.7</b>	<b>928.2</b>	<b>129.6</b>	<b>-</b>	<b>-416.8</b>	<b>9,952.9</b>
<b>Investment properties</b>	(13)	<b>11.1</b>	<b>-</b>	<b>-</b>	<b>0.9</b>	<b>-</b>	<b>-</b>	<b>10.2</b>

<sup>1</sup> Rounding differences may arise in percentages and numbers.

TAB. 3.8

	Balance as at 1 Jan 2017	Change in scope of consolidation	Depreciation and amortisation	Impairment losses	Reversals of impairment losses	Depreciation, amortisation and impairment losses			Net carrying amounts	
						Disposals	Reclassifi- cations	Translation differences	Balance as at 31 Dec 2017	Balance as at 31 Dec 2017
	52.1	–	8.9	–	–	1.1	–	–3.1	56.8	27.1
	139.2	–	15.0	–	–	–	–	–15.4	138.8	92.3
	11.8	–	0.2	–	–	–	–	–0.2	11.8	107.9
	1.4	–	0.1	–	–	–	–	–0.2	1.4	32.7
	–	–	–	–	–	–	–	–	–	672.7
	19.9	–	6.0	–	–	–	–	–	26.0	5.2
	–	–	–	–	–	–	–	–	–	15.2
	–	–	–	–	–	–	–	–	–	9.8
	224.4	–	30.4	–	–	1.1	–	–18.9	234.7	962.8
	489.8	–4.3	58.5	4.8	–	18.7	–	–10.9	519.2	1,688.7
	2.1	–	0.1	–	–	1.1	–	–0.2	0.9	0.2
	40.8	–	6.5	–	–	–	–	–3.3	44.0	659.0
	2,211.2	–3.6	199.7	0.1	1.3	57.9	0.3	–42.0	2,306.5	3,409.2
	8.6	–	4.5	–	–	–	–	–0.5	12.6	235.5
	10.3	–	2.3	–	–	–	–	–1.4	11.2	41.4
	1.0	–	0.1	–	–	–	–	–0.1	1.1	0.8
	363.1	–0.5	24.2	–	–	13.1	–	–8.9	364.9	100.8
	–	–	–	–	–	–	–	–	–	557.0
	3,126.9	–8.4	296.0	4.9	1.3	90.8	0.3	–67.3	3,260.3	6,692.6
	4.9	–	–	–	–	–	–	–	4.9	5.3

## STATEMENT OF CHANGES IN PROVISIONS

### STATEMENT OF CHANGES IN PROVISIONS<sup>1</sup>

in € million	Note	Balance as at 1 Jan 2018	Translation differences	Additions
Backfilling of vacant mines and shafts		344.8	-0.5	12.0
Maintenance of tailings piles		565.2	-0.2	39.4
Risk of mining damage		33.0	-	0.5
Other mining obligations		57.0	-	0.4
<b>Provisions for mining obligations</b>	(22)	<b>1,000.0</b>	<b>-0.7</b>	<b>52.3</b>
Service anniversaries		30.7	-	1.8
Other personnel obligations		26.9	0.3	18.3
<b>Personnel obligations</b>	(23)	<b>57.6</b>	<b>0.3</b>	<b>20.1</b>
Other provisions		98.7	0.6	1.5
<b>Provisions (non-current liabilities)</b>		<b>1,156.3</b>	<b>0.2</b>	<b>73.9</b>
Provisions for mining obligations	(22)	22.4	-	0.4
Personnel obligations	(24)	112.2	0.9	78.0
Provisions for obligations from sales transactions	(24)	38.8	0.2	51.5
Provisions for obligations from purchase contracts	(24)	78.8	-1.3	89.1
Other provisions		40.1	0.1	25.8
<b>Provisions (current liabilities)</b>		<b>292.3</b>	<b>-0.1</b>	<b>244.8</b>
<b>Provisions</b>		<b>1,448.6</b>	<b>0.1</b>	<b>318.7</b>

<sup>1</sup> Rounding differences may arise in percentages and numbers.

## BASIS OF PREPARATION

The consolidated financial statements of the K+S GROUP prepared by K+S AKTIENGESELLSCHAFT as at 31 December 2018 have been prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB). This process took account of all IFRS adopted by the European Union for which application was mandatory as at the balance sheet date, as well as the additional requirements of section 315e of the German Commercial Code (Handelsgesetzbuch, HGB).

K+S AKTIENGESELLSCHAFT is a listed stock corporation (Aktiengesellschaft) registered in the commercial register under HRB 2669 at the Local Court of Kassel. Its registered office is Bertha-von-Suttner-Str. 7, 34131 Kassel, Germany.

The consolidated financial statements are prepared in euros (€). To ensure a clear presentation, the individual items of the consolidated financial statements are presented in millions of euros (€ million). Rounding differences may arise in percentages and numbers.

The consolidated financial statements were prepared by the Board of Executive Directors on 5 March 2019 and presented to the Supervisory Board for approval at its meeting on 13 March 2019.

## SCOPE OF CONSOLIDATION

The following companies were added to the scope of consolidation in 2018:

- + K+S VERSICHERUNGSVERMITTLUNGS GMBH
- + K+S BELGIUM HOLDING B.V.B.A.

TAB. 3.9

Interest component	Utilisation	Reversal	Reclassification	CTA reclassification	Balance as at 31 Dec 2018
10.5	4.4	4.6	15.5	–	373.3
12.9	1.2	52.3	–	–	563.8
0.2	0.8	2.8	–1.5	–	28.6
1.5	9.0	0.5	–	–	49.4
<b>25.1</b>	<b>15.4</b>	<b>60.2</b>	<b>14.0</b>	<b>–</b>	<b>1,015.1</b>
0.6	1.7	–	–	–	31.4
0.2	1.4	0.1	–11.8	19.3	13.1
<b>0.8</b>	<b>3.1</b>	<b>0.1</b>	<b>–11.8</b>	<b>19.3</b>	<b>44.5</b>
2.7	4.5	2.7	–0.7	–	95.6
<b>28.6</b>	<b>23.0</b>	<b>63.0</b>	<b>1.5</b>	<b>19.3</b>	<b>1,155.2</b>
–	1.5	–	–14.0	–	7.3
–	83.6	6.6	11.7	–	112.6
–	25.6	9.9	–	–	55.0
–	64.3	9.3	–	–	93.0
–	17.4	2.7	0.8	–	46.7
–	<b>192.4</b>	<b>28.5</b>	<b>–1.5</b>	<b>–</b>	<b>314.6</b>
<b>28.6</b>	<b>215.4</b>	<b>91.5</b>	<b>–</b>	<b>19.3</b>	<b>1,469.8</b>

K+S BELGIUM HOLDING B.V. (since 31 December 2018: K+S BELGIUM HOLDING B.V.B.A.) was established on 1 September 2018 as a spin-off from K+S NETHERLANDS HOLDING B.V. The company has shares in INVERSIONES K+S SAL DE CHILE SPA including its subsidiaries.

The following company was removed from the scope of consolidation in 2018:

+ INAGUA TRANSPORTS, INCORPORATED

16 (2017: 15) domestic and 42 (2017: 42) foreign companies were included in the consolidated financial statements. A total of 24 (2017: 27) subsidiaries were not included in the consolidated financial statements and are measured at fair value according to IFRS 9, as they are immaterial to the consolidated financial statements in terms of total assets, revenues and earnings.

All joint ventures and companies over which companies of the K+S GROUP exercise significant influence (associates) are accounted for using the equity method. The potential impact on earnings of accounting for such equity interests using the equity method is, however, immaterial from a Group perspective. As a result of their overall immateriality, all equity investments in joint ventures and associated companies were therefore recognised at fair value in both the 2018 financial year and the previous year.

A complete summary of equity investments of K+S AKTIENGESELLSCHAFT can be found in the list of shareholdings on page 212.

## CONSOLIDATION METHODS

### SUBSIDIARIES

Subsidiaries are companies controlled by K+S AKTIENGESELLSCHAFT. Control is presumed to exist in cases where K+S AKTIENGESELLSCHAFT has pre-existing rights that give it the current ability to direct the relevant activities. The relevant activities are those that have a significant effect on the company's returns. As a rule, the ability to exercise control is based on K+S AKTIENGESELLSCHAFT directly or indirectly holding a majority of the voting rights. Consolidation begins on the date when K+S AKTIENGESELLSCHAFT gains control of the investee.

The financial statements of the consolidated subsidiaries are prepared as at the same balance sheet date as the consolidated financial statements. The assets and liabilities of the consolidated subsidiaries are recognised and measured uniformly in accordance with the policies described here and in the following notes.

Revenues, expenses and income generated or incurred between consolidated companies while the companies concerned are members of the K+S GROUP are eliminated in full. Similarly, receivables and liabilities as well as inter-company profits resulting from goods and services supplied between consolidated subsidiaries are eliminated, unless they are immaterial.

In acquisition accounting, the cost of the investee is offset against the share of the remeasured equity attributable to it at the date of acquisition. Any positive difference that remains after allocating the purchase price to the assets and liabilities is recognised as goodwill. Any negative differences from the purchase price allocation are recognised in profit or loss.

### JOINT OPERATIONS, JOINT VENTURES AND ASSOCIATES

Joint operations and joint ventures are defined by the existence of a contractual arrangement according to which K+S AKTIENGESELLSCHAFT directly or indirectly conducts the respective activities jointly with a non-Group company.

Associates are companies over which K+S AKTIENGESELLSCHAFT directly or indirectly has significant influence.

### ACCOUNTING POLICIES

#### RECOGNITION OF INCOME AND EXPENSES

In the K+S GROUP, revenues include income from the sale of goods and the provision of services, as well as revenues from customer-specific construction contracts. K+S acts as a principal in almost all transactions.

Multiple element arrangements occur in the form of goods supplies and transport services provided subsequently. The transaction price is determined taking any variable elements into account and is allocated to the respective performance obligations on the basis of stand-alone selling prices. No directly observable stand-alone selling prices are available for either the goods supplied or transport services provided. The stand-alone selling prices of the transport services provided are therefore determined by applying the adjusted market approach method; the stand-alone selling prices of goods are calculated using the residual value method.

Revenues are recognised from the sale of goods as at the date when control of the goods is transferred to the customer (revenue recognition at a point in time). In normal circumstances the date of transfer of control is the date at which the risks and rewards associated with ownership are transferred.

Revenues from services and customer-specific construction contracts are recognized in the K+S GROUP over the period during which the performance obligation is satisfied. Revenue from services is recognized on a straight-line basis over the period in which the services are provided. Revenues from customer-specific construction contracts are recognized according to the ratio of costs incurred to expected total costs (input method). Because of the nature of the services provided and customer-specific construction contracts, this is the most suitable method for presenting a true and fair view of the transfer of control to the customer. If the stage of completion cannot be estimated reliably, revenues are

recognised only to the extent of the expenses incurred that the Company is expected to recover.

Deferred revenues arising from performance obligations that have not been (fully) satisfied (contract liabilities) are recognized in the balance sheet as “other non-financial liabilities” under current liabilities.

Receivables from customer-specific construction contracts are receivables that represent a conditional right to payment from the customer for k+s (contract assets within the meaning of IFRS 15). These types of receivables are recognized in the balance sheet as “Other non-financial assets” in the short term.

Reversals of provisions and additions to provisions for sales transactions are reported under revenues.

Contracts containing (explicitly agreed or implied) significant financing arrangements do currently not normally exist. Should this apply to future contracts with customers, use of the facilitation of considering such effects only from a term of payment of more than one year in the transaction price will be made. Costs of obtaining contracts with payment terms of one year or less are not capitalised but recognised immediately in profit or loss.

If the amount can be determined reliably and it is probable that economic benefits will flow to the Company as a result of the transaction, other operating income is recognised in the period in which a legal (contractual or statutory) claim arises.

Other operating expenses are charged to profit or loss on the date the goods or services are used, or the expenses are incurred.

#### **NET INCOME FROM EQUITY INVESTMENTS**

This item contains income (dividend distributions, profit or loss transfers) from non-consolidated subsidiaries, joint ventures, associates and other equity investments on a net basis.

#### **INTANGIBLE ASSETS**

Intangible assets are recognized at cost, if it is probable that economic benefits associated with the intangible assets will flow to the Company and cost can be reliably determined. Purchased intangible assets are recognised at cost. Internally generated intangible assets are recognised at the development cost attributable to them (production costs). They are subsequently carried at cost less amortisation and, if required, impairment losses. The option of subsequent measurement at fair value, which is allowed under certain conditions, is not exercised. If their useful lives can be determined, intangible assets are subject to systematic amortisation. If they have indefinite useful lives, they are not amortised, but written down for impairment, if necessary. Goodwill is always assumed to have an indefinite useful life.

Intangible assets with finite useful lives are amortised using the straight-line method based on normal useful lives. The following useful lives are applied to these assets as standard across the Group: TAB: 3.10

#### **USEFUL LIVES OF INTANGIBLE ASSETS WITH FINITE USEFUL LIVES**

TAB. 3.10

<b>in years</b>	
Customer relations	5–20
Brands	20
Port concessions	250
Other intangible assets	2–50

The amortisation charges for the financial year are disclosed in the income statement in line with the use of the assets concerned under the following items:

- + Cost
- + Selling expenses
- + General and administrative expenses
- + Research and development costs
- + Other operating expenses

Impairment losses are recognised in case of impairment. If the reasons for previously recognised impairment losses no longer exist, the impairment loss is reversed, although the net carrying amount of the asset must not be exceeded. Impairment losses on goodwill must not be reversed.

Goodwill is tested for impairment at least once a year and an impairment loss is recognised if necessary. Any need to recognise an impairment loss is determined in accordance with IAS 36 by comparing the carrying amounts of the cash-generating units to which goodwill has been allocated with the recoverable amounts of the units. The recoverable amount is the higher of fair value less costs to sell and value in use. Value in use is determined based on the discounted expected future cash flows from the cash-generating units to which the corresponding goodwill amounts have been allocated.

CO<sub>2</sub> emission rights are initially measured at cost. Accordingly, rights granted free of charge are recognised at a value of zero and those acquired for a consideration are recognised at cost. If the fair value on the reporting date falls below cost, an impairment test is carried out under which the carrying amount of the cash-generating unit holding the emission rights is compared with the value in use of that unit.

If intangible assets are sold or decommissioned, the gain or loss calculated as the difference between net realisable value (sale proceeds less cost of disposal) and the net carrying amount is recognised in other operating income or expenses.

#### **PROPERTY, PLANT AND EQUIPMENT**

Property, plant and equipment is recognized at cost, if it is probable that economic benefits associated with the assets will flow to the Company and cost can be reliably determined. Where relevant, cost also includes future restoration and renaturation obligations for which provisions have been recognised in accordance with IAS 37. They are subsequently carried at cost less amortisation and, if required, impairment losses. The option of subsequent measurement at fair value, which is allowed under certain conditions, is not exercised.

Property, plant and equipment is generally depreciated using the straight-line method based on normal useful lives. Certain assets in the "Finance leases for technical equipment and machinery" group are depreciated according to the proportional performance method, because this method more suitably reflects the consumption of economic benefits.

For property, plant and equipment depreciated using the straight-line method, the following useful lives are applied as standard across the Group: **TAB: 3.11**

The amortisation charges for the financial year are disclosed in the income statement in line with the use of the assets concerned under the following items:

- + Cost
- + Selling expenses
- + General and administrative expenses
- + Research and development costs
- + Other operating expenses

#### **USEFUL LIVES OF PROPERTY, PLANT AND EQUIPMENT**

**TAB. 3.11**

<b>in years</b>	
Buildings	15–50
Raw material deposits	17–250
Technical equipment and machinery (excavations)	4–122
Technical equipment and machinery (other)	8–39
Ships	25
Other equipment, operating and office equipment	7–11

Acquired raw material deposits are recognised as property, plant and equipment. Depreciation starts on the date the raw materials are first extracted.

Excavations (main ventilation drifts, main conveyor roads, return air collection drifts, main access roads, workshops, bunkers, warehouses) are also reported as property, plant and equipment, if they are used for longer than one period.

Impairment losses in excess of depreciation charges already recognised are charged to other operating expenses. These impairment losses are determined in accordance with IAS 36 by comparing the carrying amounts with the discounted expected future cash flows of the assets concerned. If no specific cash flows can be allocated to the assets concerned, the cash flows of the corresponding cash generating units are used for the comparison instead. If the reasons for previously recognised impairment losses no longer exist, the impairment loss is reversed as appropriate, although the net carrying amounts must not be exceeded.

If property, plant and equipment is sold or decommissioned, the gain or loss calculated as the difference between net realisable value (sale proceeds less cost of disposal) and the net carrying amount is recognised in other operating income or expenses.

#### **CAPITALISATION OF BORROWING COSTS**

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset form part of the cost of that asset and should therefore be capitalised. A qualifying asset is an asset that takes a period of at least one year to get ready for its intended use or sale. If the qualifying asset can be shown not to be financed with borrowings, no borrowing costs are recognised. In the statement of cash flows, capitalised borrowing costs are reported under "Interest paid" in "Net cash flow from operating activities".

#### **LEASES**

A lease is a contract that conveys the right to control the use of an identified asset for a period of time in exchange for a single payment or a series of payments. Leases are divided into finance leases and operating leases. A finance lease is a lease that transfers substantially all the risks and rewards of ownership to the lessee, who consequently becomes the beneficial owner of the asset. If that is the case, the lessee recognises the asset at its fair value or, if lower, at the present value of the minimum lease payments. A corresponding amount is recognised as a lease liability. The depreciation policy for lease assets is the same as for comparable legally owned assets. Lease payments under operating leases are recognised as expenses over the lease term on a straight-line basis, unless another systematic basis is more representative of the time pattern of the user's benefit. Conditional lease payments under an operating lease are expensed in the period they are incurred.

#### **GOVERNMENT GRANTS**

Government grants for the acquisition or production of property, plant and equipment (e.g. investment subsidies and grants) reduce the cost of the assets to which they relate. Performance-related grants are offset against the corresponding expenses in the current year.

#### **INVESTMENT PROPERTIES**

Investment property is recognized at cost, if it is probable that economic benefits associated with the investment property will flow to the Company and cost can be reliably determined. It is subsequently carried at cost less amortisation and, if required, impairment losses. The option of subsequent measurement at fair value, which is allowed under certain conditions, is not exercised. Investment property is depreciated using the straight-line method based on normal useful lives. A useful life of 50 years is

generally assumed. The depreciation expense is recognised under other operating expenses. Income from the disposal of investment properties is recognised in the financial result.

#### **NON-CURRENT ASSETS AND DISPOSAL GROUPS HELD FOR SALE AS WELL AS DISCONTINUED OPERATIONS**

A non-current asset (or disposal group) is classified as held for sale, if most of its carrying amount will be recovered through a sale transaction rather than through continuing use. This is the case, if the asset (or disposal group) is available for sale in its present condition and if such sale is highly probable. Non-current assets (or disposal groups) classified as held for sale are carried at the lower of carrying amount and fair value less costs to sell. These assets are no longer depreciated.

An operation is reported as a discontinued operation, if it has been sold or is classified as held for sale and

- + represents a separate major line of business or a geographical area of operations,
- + is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations, or
- + represents a subsidiary exclusively acquired with a view to resale.

#### **FINANCIAL INSTRUMENTS**

Financial instruments are contracts that give rise to a financial asset for one of the parties to such contract and to a financial liability or equity instrument for the other party. As a rule, financial assets and financial liabilities are disclosed separately from each other (no offsetting). Financial assets mainly comprise cash and cash equivalents, trade receivables, receivables from customer-specific construction contracts, securities, financial investments as well as derivative financial instruments with a positive

fair value. Financial liabilities include, in particular, financial obligations, trade payables as well as derivative financial instruments with a negative fair value.

#### **CLASSIFICATION AND MEASUREMENT**

The classification and measurement of financial assets depends on the company's business model, among other factors. Since K+S always pursues the objective of collecting the contractual cash flows from financial assets, they are classified and measured under the "hold" business model.

The accounting treatment of financial assets in the form of debt instruments additionally depends on the cash flow characteristics. If the contractually agreed cash flows represent solely payments of principal and interest on the principal amount outstanding, they are measured at amortised cost. If this cash flow condition is not met, the assets are measured at fair value through profit or loss.

Equity instruments in the "hold" business model are always measured at fair value. This mainly applies for shares in non-consolidated subsidiaries, joint ventures, associates and other equity investments. They are always held for the long term and not for trading. For this reason, the OCI option is exercised, which allows changes in fair value to be recognised in other comprehensive income without reclassifying them to the income statement on disposal.

Derivatives are measured at fair value. Changes in fair value are recognised through profit or loss. Derivatives are derecognised on the settlement date. Hedge accounting is not applied.

Financial liabilities (except derivatives with negative fair values) are measured at amortised cost.

#### **IMPAIRMENT LOSSES**

For financial assets not measured at fair value, impairment losses are always recognised on the basis of expected losses.

At initial recognition, an impairment loss in the amount of the expected twelve-month losses must always be recognised. Interest is determined on the basis of gross carrying amounts.

If default risk increases significantly in subsequent periods, the impairment loss is determined on the basis of the lifetime expected losses of the instrument. Interest is likewise determined on the basis of gross carrying amounts.

If there is objective evidence of impairment (e.g. insolvency), the impairment loss is also determined on the basis of the lifetime expected losses of the instrument, but interest is determined on the basis of net carrying amounts.

At K+S, the guidance on impairment losses is applied most frequently to trade receivables, for which lifetime credit losses are recognised on initial recognition in accordance with the simplified IFRS 9 model.

#### **INVENTORIES**

In accordance with IAS 2, inventories include assets held for sale in the ordinary course of business (finished goods and merchandise), assets in the production process for sale in the ordinary course of business (work in progress), and materials and supplies that are consumed in production (raw materials, consumables and supplies).

Inventories are measured at the lower of average cost and net realisable value. In addition to direct costs, production costs also include reasonable proportions of fixed and variable material and manufacturing overhead provided they are incurred in connection with the production process. The same applies to general administrative expenses, post-employment and other employee benefit costs as well as other social security expenses. Fixed overheads are allocated on the basis of normal capacity. Net realisable value is defined as the estimated selling price less the estimated costs of completion and the estimated costs necessary to make the sale.

#### **CASH AND CASH EQUIVALENTS**

This item includes cash on hand and balances with banks. It also includes financial investments with a maturity of generally not more than three months from the date of acquisition.

#### **PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS**

The provisions for pensions and similar obligations are determined in accordance with actuarial principles applying the projected unit credit method. The discount rate is determined on the basis of the returns for high-grade corporate bonds available at the reporting date. High-grade corporate bonds are bonds with an AA rating. To this end, corporate bonds that match the expected maturity and currency of the pension obligations must be used. Since appropriate long-term corporate bonds were not always available at the balance sheet date, the interest rate with matching maturities was in such cases determined by means of extrapolation. Aspects such as future expected salary and pension increases, cost increases for healthcare benefit commitments as well as mortality rates are also taken into account. Any plan assets are offset against the corresponding obligations.

The net interest for a reporting period is determined by multiplying the net liabilities from the defined benefit pension plans (asset) by the discount factor specified above. Both factors are determined at the beginning of the reporting period after taking into account expected allocations/disbursements.

Remeasurement gains or losses on the net liabilities from defined benefit pension plans are recognised in other comprehensive income. They include:

- + actuarial gains/losses,
- + income from plan assets, excluding amounts contained in the net interest attributable to the net liabilities from defined benefit pension plans (asset) and
- + changes in the effects of the asset ceiling, excluding amounts contained in the net interest attributable to the net liabilities from defined benefit pension plans (asset).

#### **MINING AND OTHER PROVISIONS**

Provisions are recognised in an amount corresponding to the extent to which they are expected to be used for discharging current obligations to third parties arising from a past event. Such utilisation must be more probable than not and it must be possible to reliably estimate the amount of the obligations. Non-current provisions with a remaining maturity of more than one year are discounted using a capital market interest rate of suitable duration to take account of future cost increases, if the interest rate effect is material.

#### **SHARE-BASED PAYMENT**

The K+S GROUP's share-based payment programme is a cash-settled share-based payment plan that is part of performance-related pay (LTI II programme). The fair value of the obligation is charged to the income statement pro rata over the benefit period. Fair value and the associated provision to be recognised are remeasured as at each balance sheet date. Any changes in fair value and the corresponding changes in the amount of the provision are recognised in profit or loss. Fair value is calculated using a recognised option pricing model (CRR option pricing model).

#### **DEFERRED TAXES**

Deferred taxes are determined in accordance with IAS 12 using the accounting-based liability method in line with common international practice. This results in the recognition of deferred tax items for temporary differences between the tax base and the amounts recognised in the consolidated balance sheet, as well as for tax loss carryforwards. However, deferred tax assets are only recognised, if it is sufficiently probable that they will be realised. Deferred taxes are measured using tax rates that, under current legislation, are expected to apply in the future when the temporary differences will reverse. The effects of changes in tax legislation on deferred tax assets and liabilities are recognised in profit or loss in the period in which the changes in legislation have been substantively enacted. As specified in IAS 12, deferred tax assets and liabilities are not discounted. Deferred tax assets and liabilities are offset based on maturity within individual companies or within tax groups.

#### **ACQUISITIONS**

Business combinations are accounted for using the acquisition method. In connection with the remeasurement of the acquiree, all hidden reserves and hidden liabilities of the acquiree are uncovered, and assets, liabilities and contingent liabilities are recognised at their fair values (with the exceptions specified in IFRS 3). Any resulting positive difference from the cost of the acquiree is recognised as goodwill. Any negative difference is immediately recognised in profit or loss.

### **JUDGEMENT AND ESTIMATES**

#### **JUDGEMENT IN THE APPLICATION OF ACCOUNTING POLICIES**

The carrying amounts of assets and liabilities sometimes depend on judgement on the application of accounting policies. This relates in particular to the following:

- + determination of the basis of consolidation,
- + determination of whether a company acts as principal or agent in a sales transaction and
- + determination of whether a transaction is classified as an operating lease or as a finance lease within the meaning of IAS 17.

#### **ESTIMATES AND ASSUMPTIONS IN THE APPLICATION OF ACCOUNTING POLICIES**

The reasons for and amount of some items recognised in the IFRS financial statements are in some cases based on estimates and the definition of certain assumptions. This is particularly necessary in the case of

- + determining the useful lives of depreciable items of property, plant and equipment,
- + specifying measurement assumptions and future gains or losses in connection with impairment tests, especially for capitalised goodwill,
- + determining the net realisable value of inventories,
- + determining the inputs necessary for the measurement of pension provisions and similar obligations (e.g. discount rate, future wage/salary and pension trends, mortality rates, healthcare cost trends),

- + determining of the fair value for the valuation of the provisions for share-based payment in accordance with IFRS 2,
- + determining amounts, settlement dates and discount rates for the measurement of provisions for mining obligations,
- + selecting inputs for the model-based measurement of derivatives (e.g. assumptions about volatility and interest rates),
- + determining the accrual of revenues and expenses according to IFRS 15 for services that have not yet been (fully) provided at the balance sheet date,
- + determining the profit or loss on customer-specific construction contracts according to the stage of completion (estimate of contract progress, total contract costs, cost to completion, total contract revenue and contract risks),
- + determining the usability of tax loss carryforwards,
- + determining the fair value of intangible assets, property, plant and equipment and liabilities acquired in connection with a business combination, and determining the useful lives of the intangible assets and property, plant and equipment acquired and
- + determining of the fair value for the valuation of shares in affiliated companies and participations.

Despite taking great care in producing such estimates, actual outcomes may differ from the assumptions made.

#### **START OF DEPRECIATION OF BETHUNE**

An asset must be depreciated or amortised as soon as it is available for use as intended by the management. In relation to the Bethune plant, it was determined that this point has been reached on the basis of the following criteria:

- + ability to ensure continuous production of the product in saleable condition,
- + amount of capital expenditure incurred compared with planned capital expenditure and
- + degree of physical completion of the plant.

Based on the above criteria, depreciation of the Bethune plant began on 1 September 2017. The completed facilities were reclassified from “Prepayments and assets under construction” to the appropriate asset class and depreciation commenced on a prospective basis on the basis of useful lives.

#### **SIGMUNDSHALL POTASH MINE**

In the 2017 financial year, it was decided to discontinue potash production at the Sigmundshall site by the end of the 2018 financial year due to the limitation of inventories that can be produced profitably. The actual closure took place in December 2018. Some of the employees will continue to be employed for securing the mine and REKAL operations beyond the year 2018, while another part will be transferred to other K+S GROUP locations. The other employees were terminated as of 31 December 2018 for compulsory reasons. In the course of the financial year K+S concluded a social plan with the works council, which regulates the conditions for the employees affected by the plant closure.

Major expenses from the plant closure result from the provisions for social plan expenses, the reduction in the scheduled useful life and adjustments to the mining provisions for this site. In the previous year, this resulted in a total burden on earnings of €43.0 million. In the current financial year, further expenses of €13.4 million were recorded. The expenses are to be allocated entirely to the Potash and Magnesium Products business unit.

## CURRENCY TRANSLATION

The annual financial statements of foreign Group companies are translated into euros in accordance with the functional currency concept of IAS 21. All companies conduct their operations independently in financial, economic and organisational terms. The functional currency is the currency of the primary economic environment in which the entity operates; it normally corresponds to the local currency. Assets and liabilities are translated at the exchange rate prevailing on the balance sheet date. Income and expenses are translated at the average exchange rates for the quarter. The resulting currency translation differences are recognised directly in equity. When Group companies exit the scope of consolidation, the corresponding currency translation difference is reversed and recognised in profit or loss.

13 companies use the us dollar, rather than their local currency, as the functional currency, because these companies generate

most of their cash flows in this currency. The companies using the us dollar are: COMPAÑIA MINERA PUNTA DE LOBOS LTDA., EMPRESA DE SERVICIOS LTDA., EMPRESA MARITIMA S.A., INAGUA GENERAL STORE, LTD., INVERSIONES COLUMBUS LTDA., INVERSIONES EMPREMAR LTDA., K+S ASIA PACIFIC PTE. LTD., K+S BELGIUM HOLDING B.V.B.A., K+S CHILE S.A., K+S FINANCE BELGIUM BVBA, MORTON BAHAMAS LTD., SERVICIOS MARITIMOS PATILLOS S.A. and SERVICIOS PORTUARIOS PATILLOS S.A.

The translation of significant currencies in the Group was based on the following exchange rates per one euro: TAB: 3.12, 3.13

In the year under review, net translation differences of €-25.2 million (2017: €34.1 million) were recognised in the income statement (e.g. measurement/realisation of receivables and liabilities in a foreign currency); they were mainly reported in other operating income or expenses.

**EXCHANGE RATES**

TAB. 3.12

2018

per € 1	Closing rate as at 31 Dec	Q1 quarterly average	Q2 quarterly average	Q3 quarterly average	Q4 quarterly average
US dollar (USD)	1.145	1.229	1.191	1.163	1.141
Canadian dollar (CAD)	1.561	1.554	1.538	1.521	1.506
Czech koruna (CZK)	25.724	25.402	25.599	25.718	25.864
Brazilian real (BRL)	4.444	3.989	4.294	4.597	4.344
Chilean peso (CLP)	794.630	740.029	741.107	771.088	776.494
Pound sterling (GBP)	0.895	0.883	0.876	0.892	0.887

**EXCHANGE RATES**

TAB. 3.13

2017

per € 1	Closing rate as at 31 Dec	Q1 quarterly average	Q2 quarterly average	Q3 quarterly average	Q4 quarterly average
US dollar (USD)	1.199	1.065	1.102	1.175	1.177
Canadian dollar (CAD)	1.504	1.410	1.482	1.473	1.496
Czech koruna (CZK)	25.535	27.021	26.535	26.085	25.650
Brazilian real (BRL)	3.973	3.347	3.544	3.715	3.820
Chilean peso (CLP)	738.085	698.293	731.358	754.190	745.933
Pound sterling (GBP)	0.887	0.860	0.861	0.898	0.887

## NEW OR AMENDED FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS

### **IFRS 9 “FINANCIAL INSTRUMENTS”**

IFRS 9 replaces the current standard for accounting for financial instruments, IAS 39 “Financial Instruments: Recognition and Measurement”. Its application is mandatory for K+S from financial year 2018 onwards; there is no early application. In addition to new qualitative and quantitative disclosure requirements, IFRS 9 led to the following adjustments:

### **CLASSIFICATION AND MEASUREMENT**

The classification and measurement of financial assets now depends on the underlying business model and the contractual cash flow characteristics. K+S’s business model for financial instruments in the form of debt instruments specifies that they are always held to maturity. Since the cash inflows normally represent solely payments of principal and interest on the underlying receivables, they

continue to be measured at amortised cost (especially in the case of trade receivables and other financial assets).

Changes affect the measurement of subsidiaries, joint ventures, associates and other equity investments that are not consolidated due to immateriality. These were previously measured at cost and have been recognised at fair value since 1 January 2018. The resulting increase in the carrying amount of €51.6 million was recognised directly in equity (other comprehensive income) as at 1 January 2018 in accordance with the transitional arrangements. Prior-year figures have not been restated. For subsequent periods, the OCI option will be exercised in all cases, which allows changes in fair value to be recognised in other comprehensive income without reclassifying them to the income statement.

Derivatives continue to be recognised at fair value through profit or loss, and debt instruments issued (e.g. bonds) continue to be recognised at amortised cost.

### **NEW OR AMENDED FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS**

TAB. 3.14

Standard/interpretation	Date of mandatory application in the K+S Group <sup>1</sup>
New IFRS 9	Financial Instruments 1 January 2018
New IFRS 15	Revenue from Contracts with Customers 1 January 2018
New IFRIC 22	Foreign Currency Transactions and Advance Consideration 1 January 2018
Amendment IAS 40	Transfers of Investment Property 1 January 2018
	Classification and Measurement of Share-Based Payment Transactions 1 January 2018
Amendment IFRS 2	Clarifications to IFRS 15 1 January 2018
Amendment IFRS 15	Collective standard to amend several IFRSs Annual improvements to IFRSs 2014–2016 cycle <sup>2</sup> 1 January 2018

<sup>1</sup> Initial application for companies whose registered office is in the EU for reporting periods beginning on or after this date. The application of new or amended IFRS standards or interpretations for companies whose registered office is in the EU is subject to endorsement by the European Commission. Occasionally, the date of mandatory application determined by the European Commission may differ from the first-time application date stipulated by the IASB.

<sup>2</sup> The amendments to IFRS 1 and IAS 28 are effective for reporting periods beginning on or after 1 January 2018; the amendments to IFRS 12 had to be applied as at 1 January 2017.

## IMPAIRMENT

The new guidance of IFRS 9 for recognising impairment is based on expected credit losses. To date, impairment losses have only been recognised for loss events that have already occurred.

The main balance sheet items affected are trade receivables. Because of the high degree of collateralisation and the good financial standing of the contractual partners, only a small amount

of losses is expected (for details, see Note 18 "Trade Receivables and Other Financial Assets").

In addition to hedging derivatives, the "other financial assets" item contains a large number of individual items (e.g. claims for reimbursement, insurance receivables), for which no material

**MEASUREMENT CATEGORIES AND CARRYING AMOUNTS BY CLASS**

**TAB. 3.15**

in € million	Measurement categories		Carrying amounts as at 31 Dec 2017/1 Jan 2018		
	IAS 39	IFRS 9	IAS 39	IFRS 9	Difference
Shares in affiliated companies and other equity investments	Available for sale <sup>1</sup>	Fair value through other comprehensive income	20.6	72.2	51.6
Loans	Loans and receivables	Amortised cost	0.4	0.4	—
<b>Financial investments</b>			<b>21.0</b>	<b>72.6</b>	<b>51.6</b>
<b>Trade receivables</b>	Loans and receivables	Amortised cost	<b>714.9</b>	<b>714.9</b>	—
Derivatives with positive fair values	Held for trading	Fair value through profit or loss	45.0	45.0	—
Other non-derivative financial assets	Loans and receivables	Amortised cost	109.0	109.0	—
<b>Other financial assets</b>			<b>154.0</b>	<b>154.0</b>	—
<b>Securities and other financial investments</b>	Loans and receivables	Amortised cost	<b>11.4</b>	<b>11.4</b>	—
Securities and other financial investments	Available for sale	Fair value through other comprehensive income	7.0	7.0	—
<b>Cash and cash equivalents</b>	Loans and receivables	Amortised cost	<b>182.6</b>	<b>182.6</b>	—
<b>Financial liabilities</b>	Financial liabilities at amortised cost	Amortised cost	<b>3,021.7</b>	<b>3,021.7</b>	—
<b>Trade payables</b>	Financial liabilities at amortised cost	Amortised cost	<b>288.4</b>	<b>288.4</b>	—
Derivatives with negative fair values	Held for trading	Fair value through profit or loss	7.6	7.6	—
Other non-derivative financial liabilities	Financial liabilities at amortised cost	Amortised cost	62.9	62.9	—
Liabilities from finance leases	IFRS 7	IFRS 7	173.0	173.0	—
<b>Other financial liabilities</b>			<b>243.5</b>	<b>243.5</b>	—

<sup>1</sup> Until 31 December 2017, cost was measured in accordance with IAS 39.46c.

impairment losses are expected. The derivatives continue to be measured at fair value and are not subject to impairment rules.

Due to the good financial standing of the counterparties and the short residual maturities, there is a low risk of impairment for securities and other financial investments as well as cash and cash equivalents.

Overall, the amended impairment rules did not have a material effect at the time of initial application or at the reporting date. The impairment losses recognised in the reporting period are therefore limited to loss events that have already occurred. In future, any change in expectations may have a corresponding impact on the amounts of impairment losses.

#### HEDGE ACCOUNTING

The amended regulations on hedge accounting aim for a closer alignment of hedge accounting with the company's risk management strategy. The new regulations will have no impact as the K+S GROUP does not currently apply hedge accounting.

Table 3.15 shows the classes of financial instruments and liabilities under IFRS 9, including the respective previous and new measurement categories and carrying amounts. TAB. 3.15

The carrying amounts of financial assets and liabilities are reconciled from the IAS 39 to the IFRS 9 measurement category as follows. TAB. 3.16, 3.17

#### RECONCILIATION OF CARRYING AMOUNTS OF FINANCIAL ASSETS FROM IAS 39 TO IFRS 9

TAB. 3.16

in € million	IAS 39 carrying amount 31 Dec 2017			IFRS 9 carrying amount 1 Jan 2018	Effect on equity 1 Jan 2018			
		Reclassification	Remeasurement					
<b>IFRS 9 measurement categories</b>								
(31 December 2017: IAS 39)								
<b>Fair value through profit or loss</b>								
(31 December 2017: held for trading)	<b>45.0</b>	—	—	<b>45.0</b>	—			
Derivatives with positive fair values	45.0	—	—	45.0	—			
<b>Fair value through OCI</b>								
(31 December 2017: available for sale)	<b>27.6</b>	—	<b>51.6</b>	<b>79.2</b>	<b>51.6</b>			
Shares in affiliated companies and other long-term equity investments <sup>1</sup>	20.6	—	51.6	72.2	51.6			
Securities and other financial investments	7.0	—	—	7.0	—			
<b>Amortised cost</b>								
(31 December 2017: loans and receivables)	<b>1,018.3</b>	—	—	<b>1,018.3</b>	—			
Loans	0.4	—	—	0.4	—			
Trade receivables	714.9	—	—	714.9	—			
Other non-derivative financial assets	109.0	—	—	109.0	—			
Securities and other financial investments	11.4	—	—	11.4	—			
Cash and cash equivalents	182.6	—	—	182.6	—			

<sup>1</sup> Until 31 December 2017, cost was measured in accordance with IAS 39.46c.

**RECONCILIATION OF CARRYING AMOUNTS OF FINANCIAL LIABILITIES FROM IAS 39 TO IFRS 9**

TAB. 3.17

in € million	IAS 39 carrying amount 31 Dec 2017			IFRS 9 carrying amount 1 Jan 2018	Effect on equity 1 Jan 2018			
		Reclassification	Remeasurement					
<b>IFRS 9 measurement categories (31 December 2017: IAS 39)</b>								
<b>Fair value through profit or loss (31 December 2017: held for trading)</b>								
Derivatives with negative fair values	7.6	–	–	7.6	–			
<b>Amortised cost (31 December 2017: amortised cost)</b>	<b>3,373.0</b>	–	–	<b>3,373.0</b>	–			
Financial liabilities	3,021.7	–	–	3,021.7	–			
Trade payables	288.4	–	–	288.4	–			
Other non-derivative financial liabilities	62.9	–	–	62.9	–			
<b>No IFRS 9/IAS 39 measurement category</b>								
Liabilities from finance leases	173.0	–	–	173.0	–			

**IFRS 15 REVENUE FROM CONTRACTS WITH CUSTOMERS**

IFRS 15 replaces IAS 11 “Construction Contracts” and IAS 18 “Revenue” as well as the corresponding interpretations.

The K+S GROUP initially applied IFRS 15 as at 1 January 2018, using the modified retrospective method. The K+S GROUP has exercised the option that allows users to apply IFRS 15 retrospectively only to contracts that have not yet been (fully) performed as at 1 January 2018.

The application of IFRS 15 led to a change in accounting treatment for multiple element arrangements. Multiple element arrangements occur in the form of goods supplies and transport services provided subsequently. Whether a transport service represents a separate performance obligation depends on the relevant contractual arrangements with the customer. To date, the K+S GROUP has recognised revenues from transport services simultaneously with the revenues attributable to the supply of goods. In future, the share of revenues attributable proportionately to transport services identified as a separate performance obligation will be

recognised pro rata over the duration of the goods transport (recognition over time). This will result in a timing mismatch between the recognition of revenues and the recognition of the corresponding selling expenses.

The quantitative effects on the K+S GROUP’s assets, liabilities, financial position and profit or loss arising from the first-time application of IFRS 15 are not material from the Group’s perspective. The need to defer revenues for transport services not yet provided led to a reduction in retained earnings (equity) and the recognition of a contract liability of €4.3 million as at 1 January 2018. Expenses accrued for transport services not yet provided (other non-financial liability) led to an increase in retained earnings (equity) by the same amount.

If there is a change in business development (e.g. price or volume changes) or a change in the K+S GROUP’s business model, there may be an impact from the application of IFRS 15 in future periods.

**ADJUSTMENTS DUE TO INITIAL APPLICATION OF IFRS 15 (BALANCE SHEET)**

TAB. 3.18

in € million	Carrying amount as at 31 Dec 2018	Adjustment due to IFRS 15	Carrying amount without applying IFRS 15
Other non-financial assets	172.5	5.5	167.0
Current assets	2,015.0	5.5	2,009.5
<b>TOTAL ASSETS</b>	<b>9,966.2</b>	5.5	9,960.7
Other non-financial liabilities	49.9	5.5	44.4
Current liabilities	1,293.7	5.5	1,288.2
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>9,966.2</b>	5.5	9,960.7

**ADJUSTMENTS DUE TO INITIAL APPLICATION OF IFRS 15 (STATEMENT OF COMPREHENSIVE INCOME)**

TAB. 3.19

in € million	Carrying amount as at 31 Dec 2018	Adjustment due to IFRS 15	Carrying amount without applying IFRS 15
Revenues	4,039.1	−1.2	4,040.3
Gross profit	1,259.6	−1.2	1,260.8
Selling expenses	779.8	−1.2	781.0

The table 3.18 shows the adjustments resulting from the application of IFRS 15 required for each item in the balance sheet, arising from a comparison of amounts before and after amendments to the applicable rules. TAB. 3.18

The table 3.19 below shows the adjustments resulting from the application of IFRS 15 required for each item in the statement of comprehensive income, arising from a comparison of amounts before and after amendments to the applicable provisions. TAB. 3.19

The first-time application of IFRS 15 does not affect any other items in the balance sheet or statement of comprehensive income. IFRS 15 does not impact on the cash flow statement either.

## NEW OR AMENDED FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS YET TO BE APPLIED

The following financial reporting standards and interpretations were published by the IASB by the balance sheet date, although application by the K+S GROUP is only required at a subsequent date. TAB. 3.20

## IFRS 16 LEASES

IFRS 16 replaces the current IAS 17 "Leases" as well as the associated interpretations: IFRIC 4 "Determining whether an Arrangement Contains a Lease", SIC 15 "Operating Leases – Incentives" and SIC 27 "Evaluating the Substance of Transactions in the Legal Form of a Lease". The core concept of the new standard is to standardise the accounting treatment of all leases by the lessee. The previously required differentiation between finance and operating leases no longer applies to the lessee. In future, all rights and obligations arising from leases must be recognised in the balance sheet as right of use assets and lease liabilities. The only exceptions are short-term leases of up to one year for low-value assets.

Because of the growth in the balance sheet, other financial liabilities will increase and the equity ratio will decline accordingly. For leases currently classified as operating leases, the lessee will in future recognise depreciation and impairment on the right-of-use asset and interest expenses on the carrying amount of the lease liability, instead of lease expenses. This change will lead to an improvement in key figures such as EBIT I, EBIT II and EBITDA.

Standard/Interpretation		Date of mandatory application in the K+S Group <sup>1</sup>
New	IFRS 16	Leases 1 January 2019
New	IFRIC 23	Uncertainty over Income Tax Treatments 1 January 2019
Amendment	IFRS 9	Prepayment Features with Negative Compensation 1 January 2019
Amendment	IAS 1, IAS 8	Definition of "material" open
Amendment	IAS 19	Plan Amendments, Curtailments and Settlements open
Amendment	IAS 28	Investments in Associates and Joint Ventures 1 January 2019
Amendment	IFRS 3	Definition of a Business open
Amendment	Diverse	Updating a Reference to the Conceptual Framework in IFRSs open
Amendment	Collective standard to amend several IFRSs	Annual improvements to IFRSs, 2015–2017 cycle open

<sup>1</sup> Initial application for companies whose registered office is in the EU for reporting periods beginning on or after this date. The application of new or amended IFRS standards or interpretations for companies whose registered office is in the EU is subject to endorsement by the European Commission. Until then, the date of mandatory application for companies whose registered office is in the EU remains open. Early application of IFRS standards or interpretations (if provided for by the IASB) is subject to EU endorsement. Occasionally, the date of mandatory application determined by the European Commission may differ from the first-time application date stipulated by the IASB.

Changes in the way lease expenses from operating leases are reported will also result in an improvement in cash flows from operating activities and a deterioration in cash flows from financing activities. Moreover, IFRS 16 will require new qualitative and quantitative disclosures.

The new standard must be applied to financial years beginning on or after 1 January 2019. The K+S Group will apply the new guidance from 1 January 2019 onwards using the modified retrospective method and opts not to restate prior-year figures. The cumulative effect of the transition will be recognised directly in equity at the time of transition. The effect on equity is not expected to be significant. K+S will exercise the option that allows entities not to recognise assets for short-term leases of all classes of assets and leases of low-value assets. Moreover, for individual classes of leased assets, lease and non-lease components will not be separated. At the time of initial application, the simplification will be used in part to treat leases with a contract term in 2019 as short-term leases and not apply a balance sheet approach.

To assess the effects and to implement the new regulations, a group-wide project was set up to collect the balance sheet

relevant data of the existing leases. The obligations from operating leases identified on the basis of this analysis as of 31 December 2018 can be found in the Notes on page 204. As of 1 January 2019, these obligations will be discounted at the respective marginal interest rate in accordance with the provisions of IFRS 16 in order to recognise the lease liability for initial application date to be determined. The right of use to be capitalized corresponds to the lease liability, which may be adjusted by prepayments and deferred lease liabilities or provisions. As of 1 January 2019, additional lease liabilities of approx. €200–220 million, additional usage rights of approx. €190–210 million and a reduction in the equity ratio of approximately 0.8 percentage points. The additionally applicable lease liabilities include non-lease components that were waived due to the exercise of the option to separate them from the leasing component and that are not included in the obligations under operating leases as at 31 December 2018.

#### OTHER AMENDMENTS

As things stand at present, the other changes to the financial reporting standards and interpretations will have no material impact on the consolidated financial statements of the K+S GROUP.

## NOTES TO THE INCOME STATEMENT AND STATEMENT OF COMPREHENSIVE INCOME

The income statement and statement of comprehensive income are presented on page 145. The income statement has been prepared in accordance with the cost of sales method.

The K+S GROUP uses derivatives to hedge market risk. The hedging strategy is explained in more detail in Note (19). Hedge accounting according to IFRS 9 is not applied to the derivatives and hedged items described above, so that fluctuations in the fair values of the outstanding derivatives are recognised through profit or loss at each balance sheet date. In addition, the exercise/settlement, sale or expiry of derivatives used for hedging purposes also have an effect on profit or loss.

Depending on the purpose of the hedge, the effects of hedging are reported under the following items in the income statement:

### **A) GAINS/(LOSSES) ON OPERATING ANTICIPATORY HEDGES**

All effects on profit or loss arising from anticipatory hedges of operating transactions to be recognised in profit or loss in future periods are combined in this income statement line item. "Anticipatory" refers to hedged items expected with a high degree of probability, although they have not yet been recognised in the balance sheet or income statement. "Operating" relates to hedged items that will have an effect on EBIT. Significant cases of application are

- + hedging forecasted revenues in USD
- + hedging forecasted cash outflows (capital expenditure, operating expenses) in Canadian dollars

### **B) OTHER OPERATING INCOME/EXPENSES**

This item includes effects on profit or loss from hedging existing foreign currency receivables (e.g. hedging USD receivables against exchange rate fluctuations with a EUR/USD forward exchange contract).

### **C) FINANCIAL RESULT**

Effects on profit or loss from hedging items with a financing element that affect EBIT I and II neither in the current financial year nor in future financial years are reported in the financial result (e.g. interest rate derivatives).

Internal control of the K+S GROUP is performed on the basis of EBITDA, which is in turn determined on the basis of operating earnings (EBIT I). EBIT I differs from the EBIT II reported in the income statement in that fair value fluctuations arising from operating anticipatory hedges are not taken into account if they result from fair value measurement during the term of the hedging instrument as specified in IFRS 9. As a result, the following effects must be eliminated from EBIT II reported in the income statement:

- + **Income/expenses arising from changes in the fair value of outstanding operating anticipatory hedges**

Until maturity, the hedging transactions must be measured at fair value as at each balance sheet date. Any difference from the carrying amount is recognised as income or expense.

- + **Elimination of prior-period changes in the fair value of operating anticipatory hedges**

The carrying amount of the hedging instrument is derecognised at the time it is realised. It is realised when the hedging instrument is exercised/settled, expires or is sold. The difference between the realised amount and carrying amount is the income or expense recognised in the current period. Since EBIT I is intended to show earnings that exclude the effects of fair value measurement in accordance with IFRS 9, changes in fair value from earlier periods included in the carrying amount are eliminated.

Due to the elimination of all fair value changes during the term, the gain or loss on operating anticipatory hedges included in EBIT I corresponds to the value of the hedging transaction at the time of realisation (difference between the spot rate and hedging rate); in the case of options, it is reduced by the premium paid or increased by the premium received.

If the currency hedge relates to the expected capital expenditure denominated in Canadian dollars for the Bethune plant, EBIT I is adjusted for not only the above-mentioned items, but all effects on profit or loss. Since the hedged items (capital expenditure in Canadian dollars) affect EBIT I only with a time lag through depreciation and amortisation, the fact that the hedged items do not affect profit or loss means that to report the effect on profit or loss of these hedges arising on maturity would not produce meaningful information on the profitability figure expressed in EBIT I. **TAB. 3.21**

## (1) REVENUES

The K+S GROUP's revenues amounted to €4,039.1 million (2017: €3,627.0 million) and can be broken down as follows:

**TAB. 3.22**

The chosen breakdown of revenues reflects the influence of economic factors on the nature, amount, timing and uncertainty of revenues and cash flows.

The regional breakdown of revenues is shown in the Segment Reporting Disclosures under Note (37).

### RECONCILIATION TO OPERATING EARNINGS (EBIT I) AND EBITDA<sup>2</sup>

**TAB. 3.21**

in € million	2017	2018
<b>Earnings after operating hedges (EBIT II)</b>		
Income (-)/expenses (+) arising from changes in the fair value of outstanding operating anticipatory hedges	327.3	165.3
Elimination of prior-period changes in the fair value of operating anticipatory hedges	-37.2	25.7
Realised gains (-)/losses (+) from currency hedging for capital expenditure in Canada	-10.3	36.2
<b>Operating earnings (EBIT I)</b>	<b>270.8</b>	<b>227.2</b>
Depreciation and amortisation (+)/impairment losses (+)/reversals of impairment losses (-) on non-current assets	330.0	385.0
Capitalised depreciation expenses recognised directly in equity <sup>1</sup> (-)	-24.1	-5.9
<b>EBITDA<sup>2</sup></b>	<b>576.7</b>	<b>606.3</b>

<sup>1</sup> Relates to depreciation of assets used to create other items of property, plant and equipment. Depreciation is capitalised as part of cost and not recognized in profit or loss.

<sup>2</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. A reconciliation can be found on page 95.

### BREAKDOWN OF REVENUES BY SEGMENT/PRODUCT GROUP

**TAB. 3.22**

in € million	2017	2018
<b>Potash and Magnesium Products business unit</b>		
– Potassium chloride	1,703.5	1,973.0
– Fertilizer specialties	733.4	1,004.0
– Industrial products	710.5	727.4
	259.5	241.6
<b>Salt business unit</b>	<b>1,762.0</b>	<b>1,890.8</b>
– De-icing salt	613.2	739.8
– Consumer products	407.4	411.9
– Industrial salt	318.4	334.4
– Food processing	242.5	217.9
– Salt for chemical use	144.6	144.8
– Other	35.9	42.0
<b>Complementary Activities</b>	<b>159.9</b>	<b>172.4</b>
– Waste management and recycling	85.8	89.1
– Services and trading	74.1	83.3
<b>Reconciliation<sup>1</sup></b>	<b>1.6</b>	<b>2.9</b>
<b>Total</b>	<b>3,627.0</b>	<b>4,039.1</b>

<sup>1</sup> Revenues that cannot be allocated to business units are recorded separately and summarised under "Reconciliation".

The table below shows the opening and closing carrying amounts of trade receivables, receivables from customer-specific construction contracts and contract liabilities. **TAB. 3.23**

Deferred revenues of €4.3 million recognised in the opening balance sheet due to the first-time application of IFRS 15, which relate to transport services not yet provided, were reversed in full through profit or loss in the reporting period. Expenses in the same amount accrued in the opening balance sheet for transport services not yet provided were also reversed through profit or loss in the reporting period. The accumulated transaction price of all performance obligations still to be satisfied was €5.5 million as at

31 December 2018. It is expected that the resulting revenues will be realised in full within the next reporting period.

In addition, revenues as at 31 December 2018 include prior-period revenues of €10.1 million, which result primarily from the reversal of provisions for sales transactions through profit or loss.

## (2) OTHER OPERATING INCOME

Other operating income includes the following material items:

**TAB. 3.24**

### OPENING AND CLOSING CARRYING AMOUNTS

**TAB. 3.23**

in € million	Opening carrying amount as at 1 January 2018	Closing carrying amount as at 31 December 2018
Trade receivables	714.9	836.7
Receivables from customer-specific construction contracts	3.2	3.0
Contract liabilities	4.3	5.5

### OTHER OPERATING INCOME

**TAB. 3.24**

in € million	2017	2018
Gains on exchange rate differences/currency hedging transactions	37.4	50.0
Reversals of provisions	41.9	37.3
Compensation and refunds received	49.5	17.7
Income from the disposal of property, plant and equipment and intangible assets	28.3	5.9
Rental and leasing income	4.6	5.0
– of which from investment properties	1.5	1.3
Reversals of allowances for receivables	0.3	0.5
Other income	25.8	30.4
<b>Other operating income</b>	<b>187.8</b>	<b>146.8</b>

**(3) OTHER OPERATING EXPENSES**

Other operating expenses include the following material items:

TAB. 3.25

**(4) NET INCOME FROM EQUITY INVESTMENTS**

In the financial year under review, investment income of €4.3 million (2017: €4.5 million) was realised; impairment losses amounted to €0.1 million (2017: €0 million).

**OTHER OPERATING EXPENSES**

TAB. 3.25

in € million	2017	2018
Losses on exchange rate differences/currency hedging transactions	47.5	56.6
Expenses for consultancy, assessments and attorney's fees	1.4	23.8
Ancillary capital expenditure costs	16.7	23.4
Losses on the disposal of non-current assets	6.6	12.9
Prior-period expenses	10.7	10.5
Depreciation and amortisation	8.3	3.5
– of which impairment losses	4.9	–
Expenses for the Bethune plant until production start	30.4	–
Other expenses	64.5	40.9
<b>Other operating expenses</b>	<b>186.1</b>	<b>171.6</b>

**GAINS/(LOSSES) ON OPERATING ANTICIPATORY HEDGES**

TAB. 3.26

in € million	2017	2018
Gain/loss on the realisation of currency hedging transactions (expected USD revenues)	15.0	-23.8
– of which positive contributions to profit or loss	24.0	11.2
– of which negative contributions to profit or loss	-9.0	-35.0
Gain/loss on the realisation of currency hedging transactions (expected CAD capital expenditure)	9.0	–
– of which positive contributions to profit or loss	16.5	–
– of which negative contributions to profit or loss	-7.5	–
<b>Gain/loss on realised hedging transactions</b>	<b>24.0</b>	<b>-23.8</b>
Changes in the fair value of hedging transactions not yet due (expected USD revenues)	37.2	-25.7
– of which positive fair value changes	38.2	1.5
– of which negative fair value changes	-1.0	-27.2
Changes in the fair value of hedging transactions not yet due (expected CAD capital expenditure)	–	–
– of which positive fair value changes	–	–
– of which negative fair value changes	–	–
<b>Gain/loss from fair value fluctuations for hedging transactions not yet due</b>	<b>37.2</b>	<b>-25.7</b>
<b>Gains/(losses) on operating anticipatory hedges</b>	<b>61.2</b>	<b>-49.5</b>

**(5) GAINS/(LOSSES) ON OPERATING ANTICIPATORY HEDGES**

More information on “Gains/(losses) on operating anticipatory hedges” can be found in the “Notes to the Income Statement and Statement of Comprehensive Income” on page 173. TAB. 3.26

**(6) NET INTEREST**

In determining the borrowing costs to be capitalised, a weighted cost of capital of 2.7% was applied (2017: 2.6%). **TAB. 3.27**

The “Interest component from measurement of provisions for mining obligations” consists of the net balance of the following items:

**TAB. 3.28**

**INTEREST INCOME**

**TAB. 3.27**

in € million	2017	2018
Interest and similar income from securities	1.1	1.0
Bank interest	3.7	6.6
Interest income from pension provisions	0.1	0.1
Other interest and similar income	5.7	3.9
<b>Interest income</b>	<b>10.6</b>	<b>11.6</b>
Interest expense on bonds/promissory note loans	-71.4	-85.1
Interest component from measurement of provisions for mining obligations	-10.1	-25.1
Interest expense on pension provisions	-5.8	-5.2
Capitalisation of borrowing costs	51.4	17.5
Other interest and similar expenses	-17.5	-22.8
<b>Interest expense</b>	<b>-53.4</b>	<b>-120.7</b>
<b>Net interest</b>	<b>-42.8</b>	<b>-109.1</b>

**INTEREST COMPONENT OF PROVISIONS FOR MINING OBLIGATIONS**

**TAB. 3.28**

in € million	2017	2018
Interest rate effect from the change in the discount rate for provisions for mining obligations	-0.1	-
Increase in provisions for mining obligations due to passage of time (interest cost)	-32.0	-32.3
Interest rate effect from the reversal of provisions for mining obligations	22.0	7.2
<b>Interest component from measurement of provisions for mining obligations</b>	<b>-10.1</b>	<b>-25.1</b>

**OTHER FINANCIAL RESULT**

**TAB. 3.29**

in € million	2017	2018
Gain/loss on the realisation of financial assets/liabilities	-20.1	28.3
Income from the measurement of financial assets/liabilities	36.5	-31.4
<b>Other financial result</b>	<b>16.4</b>	<b>-3.1</b>

## (8) INCOME TAX EXPENSE

Deferred taxes in Germany were calculated using a tax rate of 30.0% (2017: 29.9%). In addition to an unchanged corporate income tax rate of 15.0% and an unchanged solidarity surcharge of 5.5%, an average trade tax rate of 14.2% (2017: 14.1%) was taken into account. Deferred taxes in other countries are calculated applying the respective national income tax rates for profit retention. **TAB. 3.30**

The following table reconciles expected to actual tax expense. The expected income tax expense was calculated based on a domestic Group income tax rate of 30.0% (2017: 29.9%). **TAB. 3.31**

An amount of €–26.0 million included in the effects of tax rate changes related to a special item from the remeasurement of deferred taxes due to the reduction in the corporate income tax rate in the USA from 35% to 21% in the prior year. The other effects of changes in tax laws relates to repatriation tax payable on a one-off basis in connection with the US tax reforms. This is because, under the reforms, there is a transition from the previous

global taxation system to a territorial taxation system, which will lead to tax being charged on previously untaxed earnings and profits generated at the level of foreign companies. Due to recent legislative findings in the course of 2018, the repatriation tax was reduced by €4.2 million.

INCOME TAX EXPENSE		TAB. 3.30
in € million	2017	2018
Current taxes	130.7	28.8
– in Germany	24.3	14.5
– other countries	106.4	14.3
Deferred taxes	–14.4	–17.9
– in Germany	16.4	–12.0
– other countries	–30.8	–5.9
– of which from loss carryforwards and tax credits	–2.3	21.4
– of which attributable to temporary differences	–12.1	–39.3
Income tax expense	116.3	10.9

## RECONCILIATION OF TAXES ON INCOME

TAB. 3.31

in € million	2017	2018
Earnings before tax	300.9	53.1
Expected income tax expense (Group tax rate: 30.0%; previous year: 29.9%)	90.0	15.9
Reduction in tax resulting from tax-free income and other items	–11.7	–8.9
– of which tax-free income from investments and gains on disposals	–0.9	–1.1
– of which other tax-free income	–10.8	–7.8
Trade tax additions/deductions	4.1	5.2
Increases in tax resulting from non-deductible expenses and other items	5.9	6.7
Permanent differences	–0.9	–0.1
Increases/reductions in tax resulting from the measurement of deferred tax assets	–3.2	–0.3
Effects of tax rate differences	6.4	–5.1
Effects of tax rate changes	–25.8	1.1
Effects of other changes in tax law	54.3	–4.2
Taxes for prior years	–2.0	0.5
Other effects	–0.8	0.1
<b>Actual tax expense</b>	<b>116.3</b>	<b>10.9</b>
<b>Tax rate<sup>1</sup></b>	<b>38.7%</b>	<b>20.5%</b>

<sup>1</sup> Based on consolidated profit before tax.

**(9) COST OF MATERIALS**

TAB. 3.33

**(10) PERSONNEL EXPENSES/EMPLOYEES**

TAB. 3.34, 3.35

- ◊ 'Employees', page 53;
- ◊ 'Remuneration Report', page 134

**(11) EARNINGS PER SHARE**

Undiluted earnings per share are calculated by dividing consolidated earnings after tax and non-controlling interests by the weighted average number of shares outstanding. Since none of the conditions resulting in the dilution of earnings per share are met in the K+S GROUP at present, undiluted earnings per share are the same as diluted earnings per share. TAB. 3.36

If the authorised capital is utilised or a conditional capital increase is implemented (see Note (20), page 187), earnings per share could be diluted in the future.

**COST OF MATERIALS**

TAB. 3.33

in € million	2017	2018
Expenses for raw materials and supplies and for purchased goods	523.6	532.2
Cost of purchased services	657.9	835.2
Energy costs	253.3	261.7
<b>Cost of materials</b>	<b>1,434.8</b>	<b>1,629.1</b>

**PERSONNEL EXPENSES**

TAB. 3.34

in € million	2017	2018
Wages and salaries	854.6	870.4
Social security costs	221.4	220.7
Pension	30.2	31.4
<b>Personnel expenses</b>	<b>1,106.2</b>	<b>1,122.5</b>

**EMPLOYEES INCLUDING TEMPORARY EMPLOYEES**

TAB. 3.35

Annual average (FTE)	2017	2018
Germany	10,100	10,405
Other countries	4,554	4,499
<b>Total</b>	<b>14,654</b>	<b>14,904</b>
– of which trainees	505	524

**EARNINGS PER SHARE<sup>1</sup>**

TAB. 3.36

in € million	2017	2018
Earnings after tax and non-controlling interests	184.6	42.1
Average number of shares (in millions)	191.4	191.4
<b>Earnings per share in € (basic = diluted)</b>	<b>0.96</b>	<b>0.22</b>

<sup>1</sup> Adjusted earnings per share as well as its calculation is described on page 96.

## NOTES TO THE BALANCE SHEET

The balance sheet is presented on page 146. The balance sheet is classified according to the maturity of the assets and liabilities. The gross carrying amounts and depreciation, amortisation and impairment losses on individual non-current assets are shown separately on page 152.

### (12) INTANGIBLE ASSETS

In the consolidated balance sheet, goodwill from business combinations is allocated to the following cash-generating units (cgus):

**TAB. 3.37**

The Salt business unit is divided into the cash-generating units Salt America and Salt Europe. The increase in goodwill is due to the effects of currency translation as at the reporting date.

In order to test goodwill for impairment, the net carrying amounts of the respective cash-generating units were compared with their values in use. Values in use were determined on the basis of the present value of the future cash flows of the cash-generating units. The cgu Salt America is based on the assumption of continuing use. The periods applied to the cgus Salt Europe and Potash and Magnesium Products are determined by the reserves of raw materials and annual production. The cash flow forecast is based on the latest mid-term planning of the K+S GROUP or the respective business units on the basis of plans of the company concerned. The mid-term planning is based on internal estimates of the performance of the operating business, market studies, the latest financial results and the best estimate of drivers such as energy and shipping costs or exchange rates.

For the cgu Salt America and the cgu Salt Europe, the mid-term planning is based on the detailed forecast period from 2019 to 2021. For the cgu Potash and Magnesium Products, the detailed forecast period covers the years 2019 to 2030. For years beyond the detailed forecast period, a growth rate of 2.0% has been assumed for the nominal cash flows (2017: 2.0%) to compensate for cost and revenue inflation. The forecast period of the cgu Potash and Magnesium Products, which ends in 2030, reflects the gradual expansion of production capacity at the new Bethune production facility in Canada.

For the cgu Potash and Magnesium Products, the forecast reflects a slight increase in sales volumes, based on the increase in production at the new Bethune location in Canada. In addition, a slight increase in the price of potassium chloride has been assumed.

The price and sales forecasts for the cgus Salt America and Salt Europe are based on the assumption of a constant development/ slight increase in sales volumes and slight price increases. While the assumed volume development is based on an anticipated normalisation of winter weather and on our strategy, the expected price trends primarily reflect our participation in the anticipated market performance.

The following discount rates were applied as at the end of the financial year: **TAB. 3.38**

The rates of interest for the cash-generating units correspond to the weighted cost of capital for the K+S GROUP before and after taxes.

▷ ‘Calculation of Cost of Capital’, page 97

The impairment tests conducted at the end of the 2018 financial year confirmed that the goodwill items were not impaired.

#### ALLOCATION OF GOODWILL BY CASH-GENERATING UNIT

**TAB. 3.37**

in € million	2017	2018
CGU Salt America	642.7	663.8
CGU Potash and Magnesium Products	16.3	15.7
CGU Salt Europe	13.7	13.7
<b>Total goodwill</b>	<b>672.7</b>	<b>693.2</b>

**DISCOUNT RATES USED IN THE IMPAIRMENT TEST**

TAB. 3.38

Interest rates in %	2017		2018	
	before tax	after tax	before tax	after tax
CGU Salt America	8.5	6.0	8.4	6.0
CGU Potash and Magnesium Products	8.5	6.0	8.4	6.0
CGU Salt Europe	8.5	6.0	8.4	6.0

According to our assessment, realistic changes in the fundamental assumptions on which the process of determining the values in use is based would not result in the carrying amount of the particular cash-generating unit exceeding its value in use.

Brand rights totalling €110.3 million (2017: €106.3 million) are, in view of their level of awareness in the relevant sales regions as well as their strategic relevance, classified as assets with indefinite useful lives. These brand rights are allocated to the cgu Salt America.

The impairment test on the brand rights with indefinite useful lives, which is conducted annually, was carried out by comparing the fair values of the brands less costs to sell with their book values. The fair value less costs to sell was determined using the relief-from-royalty method, which derives the brand value from the licence costs saved. The brand-specific revenues for the years 2019 to 2022 were determined on the basis of the corporate planning, and an annual growth rate of 2.0% (2017: 2.0%) was assumed for the period from 2023. The applicable licence prices for the brands were derived from third-party comparisons. The fair value less costs to sell was then determined by discounting the licence costs saved using a risk-adjusted pre-tax interest rate of 12.6% (2017: 12.7%). The impairment test on the brands carried out on this basis at the end of the 2018 financial year did not result in any impairment losses.

The customer relationships obtained as a result of the acquisition of the MORTON Group are a significant intangible asset. As at 31 December 2018, the carrying amount totalled €84.9 million (2017: €91.8 million), the remaining useful life as at the reporting date was around eight years (2017: nine years).

**(13) INVESTMENT PROPERTIES**

Investment properties are primarily leased properties. As at 31 December 2018, the fair values of investment properties amounted to €16.4 million (2017: €16.8 million). The fair values were estimated by internal specialist departments on the basis of local market conditions. In determining the values, particular account was taken of local property valuation records and, in part, of external valuation reports. The measurement methods correspond to Level 3 of the three-level fair value hierarchy set out in IFRS 13.

**(14) NON-CURRENT FINANCIAL ASSETS**

The financial assets mainly comprise the shares in subsidiaries, joint ventures and associated companies, which were not consolidated due to their minor importance.

**(15) SECURITIES AND OTHER FINANCIAL INVESTMENTS**

This item includes various investments (e.g. bonds and repo transactions). TAB. 3.39

**SECURITIES AND OTHER FINANCIAL INVESTMENTS**

TAB. 3.39

in € million	2017	2018
Securities and other financial investments (non-current)	7.0	7.0
Securities and other financial investments (current)	11.4	11.2
Securities and other financial investments	18.4	18.2

## (16) DEFERRED TAXES

The following deferred tax assets and liabilities recognised in the balance sheet relate to recognition and measurement differences for individual balance sheet line items and to tax loss carryforwards: TAB. 3.40

Deferred taxes totalling €22.0 million (2017: €21.9 million) were not capitalised as utilisation of the underlying loss carryforwards or the realisation of taxable income is considered unlikely. The underlying loss carryforwards amount to €216.0 million (2017: €216.3 million). They expire in the following periods. TAB. 3.41

For companies with a negative tax result in the current year or in the previous year, there was a surplus of deferred tax assets of €42.9 million (2017: €2.4 million). The basis for the development of these deferred taxes is the assessment that positive tax results will be achieved in future financial years.

In the year under review, a deferred tax credit of €3.8 million (2017: €-5.4 million) was recognised in other comprehensive income.

The amount of deferred taxes recognised in the balance sheet as at 31 December 2018 changed by €-19.9 million (2017: €-32.3 million); this change is made up of a decrease in deferred tax assets of €-2.6 million (2017: €-22.2 million) and a decrease in deferred tax liabilities of €-22.5 million (2017: €-54.5 million).

**DEFERRED TAXES**

TAB. 3.40

in € million	Deferred tax assets		Deferred tax liabilities	
	2017	2018	2017	2018
Intangible assets	1.7	2.8	64.3	62.7
Property, plant and equipment	47.6	51.9	468.9	451.7
Inventories	5.7	7.0	3.3	1.8
Trade receivables	0.7	0.5	1.6	4.6
Other assets	5.2	4.6	11.1	10.4
– of which derivative financial instruments	–	–	0.1	0.4
Provisions	234.1	248.8	3.7	8.1
Trade payables	–	–	0.1	2.9
Other liabilities	63.6	53.8	35.5	19.9
– of which derivative financial instruments	1.3	1.3	–	–
<b>Gross amount</b>	<b>358.6</b>	<b>369.4</b>	<b>588.5</b>	<b>562.1</b>
– of which non-current	317.3	336.6	560.0	534.5
Valuation allowances	-1.6	-1.0	–	–
Tax loss carryforwards	58.1	36.5	–	–
Consolidations	13.9	16.6	-2.1	-3.1
Netting	-333.8	-328.9	-333.8	-328.9
<b>Carrying amount (net)</b>	<b>95.2</b>	<b>92.6</b>	<b>252.6</b>	<b>230.1</b>

**EXPIRY OF UNRECOGNISED LOSS CARRYFORWARDS**

TAB. 3.41

in € million	2017	2018
Unrecognised loss carryforwards	216.3	216.0
of which loss carryforwards expiring within one year	–	0.1
of which loss carryforwards expiring after between two and five years	–	0.4
of which loss carryforwards expiring after five years	159.8	163.8
of which loss carryforwards that do not expire	56.5	51.7

Taking into account deferred tax credit of €3.8 million (2017: €-5.4 million) and currency translation effects of €-1.8 million (2017: €23.3 million) recognised in other comprehensive income in the year under review, this results in deferred tax income of €17.9 million disclosed in the income statement (2017: €14.4 million).

Temporary differences of €293.7 million (2017: €461.6 million) are related to shares in subsidiaries for which no deferred tax liabilities are recognised in accordance with IAS 12:39.

#### (17) INVENTORIES

Since inventories are carried at net realisable value, allowances of €8.0 million (2017: €9.8 million) were recognised in the period under review. TAB. 3.42

#### (18) TRADE RECEIVABLES AND OTHER FINANCIAL ASSETS

Other financial assets include receivables recognised in connection with accounting for customer-specific construction contracts; they have the following components: TAB. 3.43, 3.44

As in the previous year, there were no customer-specific construction contracts with negative balances as at 31 December 2018.

Current and non-current financial assets include an amount of €23.0 million relating to assets pledged as collateral for obligations (2017: €16.9 million).

Although allowances on trade receivables are always recognised in the amount of losses expected over the remaining term, K+S's strategy is to secure all trade receivables with suitable instruments. As at the reporting date, €676.9 million, or 95%, (2017: €556.5 million, or 93%) of the Group's trade receivables that can be secured were protected against default with credit insurance and other insurance instruments. Due to the excellent credit ratings of the credit insurers, the risk is largely limited to a small excess. Most of the trade receivables that cannot be secured were receivables from public-sector customers. Based on past default rates, no material defaults are expected for these receivables and the unsecured portion of trade receivables of €39.0 million, or 5%, (2017: €40.6 million, or 7%) that are in principle securable. There is no indication that future default rates will significantly differ from past default rates. Expected losses have therefore only been recognised for cases with objective evidence of impairment.

#### INVENTORIES

TAB. 3.42

	2017	2018
Raw materials, consumables and supplies	254.2	275.4
Work in progress	23.9	46.4
Finished goods and merchandise	412.8	369.7
<b>Inventories</b>	<b>690.9</b>	<b>691.5</b>

#### CUSTOMER-SPECIFIC CONSTRUCTION CONTRACTS

TAB. 3.43

	2017	2018
Contract costs incurred and contract profit recognised	40.1	49.3
Advances received	36.9	46.3
<b>Receivables from customer-specific construction contracts</b>	<b>3.2</b>	<b>3.0</b>

#### TRADE RECEIVABLES AND OTHER FINANCIAL ASSETS

TAB. 3.44

in € million	2017	of which remaining maturity of more than 1 year	2018	of which remaining maturity of more than 1 year
Trade receivables	714.9	—	836.7	—
Other financial assets	154.0	46.3	122.4	36.2
– of which derivative financial instruments	45.0	3.0	13.0	7.6
– of which claim for reimbursement for Morton Salt bond	19.8	19.6	20.4	20.2
– of which receivables from affiliated companies	6.7	—	6.5	—
<b>Trade receivables and other financial assets</b>	<b>868.9</b>	<b>46.3</b>	<b>959.1</b>	<b>36.2</b>

Objective evidence includes e.g. filing for insolvency, significant financial difficulties of the customer or receivables that are more than 90 days past due, unless they can be shown not to be impaired even though they are past due. For insured receivables, the maximum impairment loss recognised is the possible excess.

TAB. 3.45

The maximum risk of default on receivables and other financial assets is reflected in the carrying amount recognised in the balance sheet. As at 31 December 2018, the maximum amount in default in the highly unlikely event of a simultaneous default on all unsecured receivables was €170.8 million (2017: €169.6 million).

The table below shows the reconciliation of valuation allowances recognised on the basis of objective evidence at the beginning of the year to the figure at the end of the year. Due to immateriality, expected losses were not recognised and are therefore not

included in the table. Also for reasons of materiality, there is no further information on the default risk and expected credit losses for the balance sheet items concerned. TAB. 3.46

Impairment losses recognised on other financial assets amounted to €0.2 million as at the balance sheet date (2017: €0.2 million). In addition, the other financial assets item includes assets already impaired on acquisition with a carrying amount of €2.8 million (2017: €0 million) and a nominal repayment amount of €5.6 million (2017: €0 million). No allowances were recognised on customer-specific construction contracts (2017: €0 million).

If receivables have a residual term of more than one year, they are discounted applying interest rates as at the balance sheet date.

As at 31 December 2018, no non-interest-bearing and low-interest receivables were discounted (2017: €0.5 million).

**BREAKDOWN OF CARRYING AMOUNTS OF TRADE RECEIVABLES**

TAB. 3.45

in € million	2017	2018
Secured	556.5	676.9
Securable but unsecured	40.6	39.0
<b>Total securable receivables</b>	<b>597.1</b>	<b>715.9</b>
Not securable	129.0	131.8
<b>Total gross carrying amounts</b>	<b>726.1</b>	<b>847.7</b>
Valuation allowances	11.2	11.0
<b>Net carrying amounts</b>	<b>714.9</b>	<b>836.7</b>

**VALUATION ALLOWANCES ON TRADE RECEIVABLES**

TAB. 3.46

in € million	2017	2018
	IAS 39	IFRS 9
As at 1 January	10.1	11.2
Additions	2.2	0.4
Reversals	0.3	0.5
Utilisation	0.8	0.1
Other changes	–	–
<b>As at 31 December</b>	<b>11.2</b>	<b>11.0</b>

**RISK OF DEFAULT**

TAB. 3.47

in € million	Carrying amount	of which neither overdue nor impaired as at the reporting date	of which not impaired but overdue as at the reporting date for			
			< 30 days	> 31 and < 90 days	> 91 and < 180 days	> 180 days
<b>2018</b>						
Trade receivables	836.7	776.0	24.7	7.2	2.1	3.2
<b>2017</b>						
Trade receivables	714.9	662.1	21.0	4.8	1.0	2.3

Table 3.47 provides information about the extent of the risk of default contained in "Trade receivables". **TAB. 3.47**

As at the balance sheet date, an amount of €2.4 million (2017: €0.7 million) of the unimpaired other financial assets was overdue.

Receivables management is aimed at collecting all outstanding accounts punctually and in full, as well as at avoiding the loss of receivables. Invoices are issued on a daily basis and invoice data is transferred to debtor accounts online. Accounts receivable are monitored on an ongoing basis with system support, in accordance with the payment terms agreed with the customers. Most payment terms range from 10 to 180 days, with longer terms being customary in some markets. In the case of late payment, reminders are issued at regular two-week intervals.

#### **(19) DERIVATIVE FINANCIAL INSTRUMENTS**

Currency and interest rate management is performed centrally for all Group companies. This also applies to the use of derivative financial instruments, e.g. those aimed at limiting certain costs. The use of derivative financial instruments is regulated by guidelines and procedural instructions. Trading, settlement and control are strictly segregated. Derivative financial instruments are only traded with banks that have a good credit rating; they are monitored continually by means of appropriate instruments. As a rule, the entire portfolio of derivative financial instruments is distributed among several banks to reduce the risk of default. The level of default risk is limited to the amount of derivative financial assets.

The aim of interest rate management is to mitigate the risks arising from rising interest expense for financial liabilities as well as the risks arising from declining interest income from financial assets as a result of changes in the general level of interest rates. Since some of the promissory notes outstanding have floating interest rates, interest rate caps were acquired in order to eliminate the risk of higher interest charges. In the case of the financial assets, there is currently no identifiable need for action because of the short remaining maturities and the low interest rates, meaning that there is a minimal risk of declining rates.

Derivatives are used in currency hedging in order to limit the risks to which operating activities can be exposed as a result of changes in exchange rates. Exchange rate risks exist mainly with respect to the US dollar and the Canadian dollar, and, to a lesser extent, pound sterling and the Chilean peso. Hedging transactions are entered into for invoiced receivables and anticipated net positions on the basis of projected revenues. In this context, the net positions are determined on the basis of revenue and cost planning using safety margins and updated continuously to avoid excess hedging or hedging shortfalls.

The hedging transactions used for hedging of anticipated positions can have maturities of up to three years. The main objective is to hedge a worst-case scenario. Here, futures and plain vanilla options are used, although participation in favourable market developments is generally limited by the sale of simple options. This also serves to reduce premium expenses. In principle, it is also possible to use compound options consisting of an option on a plain vanilla option, which can be acquired at a later date for a fixed amount.

Based on the agreed payment terms, the maturities of instruments used to hedge invoiced receivables are less than one year.

The hedges of anticipated net positions described above are used in the Potash and Magnesium Products business unit for US dollar positions as well as for Canadian dollar positions for production in Canada. Hedges of invoiced receivables are entered into in the Potash and Magnesium Products business unit.

All the above-mentioned derivatives are traded over the counter only. Forward exchange and option contracts are always transacted via a trading platform through which quotations are obtained from several banks, so that a transaction can be entered into with the bank providing the best quotation.

Forward exchange contracts are subject to market risk on the respective reporting date. This is, however, offset by the opposite effects of currency-based measurement of receivables, which uses derivatives to hedge foreign currency receivables.

## DERIVATIVE FINANCIAL INSTRUMENTS

TAB. 3.48

in € million	2017		2018	
	Nominal values <sup>1</sup>	Fair values	Nominal values <sup>1</sup>	Fair values
GBP/EUR forward exchange contracts				
– of which maturing in 2018	6.9	–	–	–
– of which maturing in 2019	–	–	7.1	–
AUD/EUR forward exchange contracts				
– of which maturing in 2018	1.0	–	–	–
CAD/EUR forward exchange contracts				
– of which maturing in 2018	231.7	7.5	–	–
– of which maturing in 2019	–	–	124.2	-1.8
USD/EUR forward exchange contracts				
– of which maturing in 2018	733.4	8.3	–	–
– of which maturing in 2019	33.4	1.0	1,148.3	-7.7
– of which maturing in 2020	–	–	26.3	-0.4
USD/CLP forward exchange contracts				
– of which maturing in 2018	89.6	-0.2	–	–
– of which maturing in 2019	–	–	62.0	-1.5
– of which maturing in 2020	–	–	2.9	-0.1
Plain vanilla currency options purchased (USD/EUR)				
– of which maturing in 2018	259.8	15.1	–	–
– of which maturing in 2019	–	–	356.0	1.9
– of which maturing in 2020	–	–	200.8	6.1
Plain vanilla currency options sold (USD/EUR)				
– of which maturing in 2018	246.0	-0.3	–	–
– of which maturing in 2019	–	–	383.6	-6.1
– of which maturing in 2020	–	–	212.4	-3.5
Plain vanilla currency options purchased (CAD/USD)				
– of which maturing in 2018	89.4	4.6	–	–
– of which maturing in 2019	26.5	1.1	275.0	1.1
– of which maturing in 2020	–	–	80.9	1.3
Plain vanilla currency options sold (CAD/USD)				
– of which maturing in 2018	83.6	-0.2	–	–
– of which maturing in 2019	25.2	-0.4	258.6	-6.4
– of which maturing in 2020	–	–	77.1	-2.4
Interest caps purchased				
– of which maturing in 2019	140.0	–	140.0	–
– of which maturing in 2021	118.0	0.9	118.0	0.2
<b>Total derivative financial instruments</b>	<b>2,084.5</b>	<b>37.4</b>	<b>3,473.2</b>	<b>-19.3</b>

<sup>1</sup> In euros, translated using weighted average exchange rates.

The fair values determined in this process correspond to the hypothetical value they would have on early transfer on the balance sheet date. The values are determined using recognised financial methods generally used by market participants. These calculations were based, in particular, on the following inputs that applied on the balance sheet date:

- + the spot exchange and forward exchange rates of the currencies concerned,
- + the interest rate level,
- + the agreed hedging level and exercise prices,
- + the traded volatilities and
- + the counterparty risk.

The following foreign exchange derivative financial instruments existed as at 31 December 2018: **TAB. 3.48**

## (20) EQUITY

The changes in individual equity items are shown separately on page 149.

### ISSUED CAPITAL

The issued capital of K+S AKTIENGESELLSCHAFT is unchanged from the previous year at €191.4 million, divided into 191.4 million no-par-value registered shares. The shares are fully paid up. **TAB. 3.49**

- ◇ 'Disclosures in Accordance with Section 289a(1) and Section 315a(1) of the HGB as well as the Explanatory Report of the Board of Executive Directors in Accordance with Section 176(1) Sentence 1 of the AktG' on page 82.

### SHARE BUY-BACK

According to the resolution adopted by the Annual General Meeting on 12 May 2015, the Board of Executive Directors was authorised to acquire own shares of up to 10% of the share capital until 11 May 2020. K+S AKTIENGESELLSCHAFT did not make use of the authorisation in the 2018 financial year.

### ISSUED CAPITAL

**TAB. 3.49**

in € million	Outstand-ing shares on issue	Issued capital
31 December 2016	191.4	191.4
31 December 2017	191.4	191.4
<b>31 December 2018</b>	<b>191.4</b>	<b>191.4</b>

### AUTHORISED CAPITAL

The Board of Executive Directors was authorised by the Annual General Meeting on 12 May 2015 to increase the Company's share capital, with the consent of the Supervisory Board, by a total of up to €19,140,000.00, on one or several occasions, by issuing up to 19,140,000 new no-par-value registered shares (Authorised Capital) until 11 May 2020. The Board of Executive Directors was further authorised on 11 May 2016 to increase the Company's share capital, with the consent of the Supervisory Board, by a total of up to €19,140,000.00, on one or several occasions, by issuing up to 19,140,000 new no-par-value registered shares (Authorised Capital II) until 10 May 2021. K+S AKTIENGESELLSCHAFT did not make use of the authorisations in the 2018 financial year.

### CONDITIONAL CAPITAL

The share capital is increased by up to €19,140,000.00 by issuing up to 19,140,000 bearer shares with no par value (conditional capital).

The Board of Executive Directors is authorised until 11 May 2020, with the consent of the Supervisory Board, to issue bearer and/or registered convertible bonds and/or warrant-linked bonds on one or several occasions and to grant conversion rights to, or impose conversion obligations on the holders or creditors of bonds or to issue warrants on shares in the Company in a proportionate amount of the share capital of up to €19,140,000.00 in total. K+S AKTIENGESELLSCHAFT did not make use of the authorisation in the 2018 financial year.

### SHARE PREMIUM

The share premium mainly consists of the premium received as part of share issues of K+S AKTIENGESELLSCHAFT.

### OTHER RESERVES AND NET RETAINED EARNINGS

This item summarises retained earnings, net retained profits, currency translation differences, measurement of equity instruments at fair value and the remeasurement of pensions and similar obligations.

Net retained profits mainly consist of past earnings of the companies included in the consolidated financial statements, less dividends paid to shareholders. Currency translation differences mainly comprise differences from the translation of foreign business operations from the functional currency into the Group's reporting currency (euro). **TAB. 3.50**

#### **NET RETAINED PROFITS REPORTED IN THE SINGLE-ENTITY FINANCIAL STATEMENTS OF K+S AKTIENGESELLSCHAFT (HGB)**

The dividend distribution is based on the annual financial statements of K+S AKTIENGESELLSCHAFT as prepared in accordance with the German Commercial Code (Handelsgesetzbuch, HGB). There is an intention to propose to the Annual General Meeting that a dividend of €0.25 per share (2017: €0.35), i.e. €47.9 million in total (2017: €67.0 million), be distributed to the shareholders. The remaining amount of €26.6 million will be carried forward to the new account. As at the balance sheet date, the following net retained profits were reported in the single-entity financial statements of K+S AKTIENGESELLSCHAFT: **TAB. 3.51**

#### **(21) PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS**

The k+s GROUP has made a number of defined benefit pension commitments. Most of the commitments relate to Germany and Canada.

##### **GERMANY**

A significant pension plan in Germany is the k+s pension scheme, which consists primarily of a basic pension, supplementary benefits II as well as vested pension rights. The basic pension is based on a modular system under which notional contributions corresponding to a certain percentage of pensionable income are collected annually. The pension entitlement is calculated by applying a fixed percentage to total notional contributions. Supplementary benefits II are a final salary plan under which the entitlement is based on certain percentages of salary components above statutory and miners' insurance, multiplied by the number of pensionable years of service. Fixed euro amounts or vested rights to final-salary percentages were granted for periods

#### **OTHER COMPREHENSIVE INCOME**

**TAB. 3.50**

in € million	2017			2018		
	Before taxes	Tax effect	Net	Before taxes	Tax effect	Net
Items of other comprehensive income that may be reclassified to profit or loss in subsequent periods	-532.1	3.7	-528.4	-47.5	-1.5	-49.0
Exchange differences on translation of foreign operations	-532.1	3.7	-528.4	-47.5	-1.5	-49.0
– of which change in unrealised gains/losses	-532.1	3.7	-528.4	-47.5	-1.5	-49.0
Items of other comprehensive income not to be reclassified to profit or loss	13.0	-5.2	7.8	1.7	3.9	5.5
Measurement equity instruments at fair value	–	–	–	10.7	–	10.7
Remeasurement gains/(losses) on defined benefit plans	13.0	-5.2	7.8	-9.0	3.8	-5.2
<b>Other comprehensive income</b>	<b>-519.1</b>	<b>-1.5</b>	<b>-520.6</b>	<b>-45.8</b>	<b>2.3</b>	<b>-43.5</b>

#### **NET RETAINED PROFITS OF K+S AKTIENGESELLSCHAFT (HGB)**

**TAB. 3.51**

in € million	2017	2018
Net retained profits of K+S Aktiengesellschaft as at 1 January	76.8	67.0
Dividend distributed for previous year	-57.4	-67.0
Appropriation to other revenue reserves (resolution of Annual General Meeting)	-19.4	–
Earnings for the year of K+S Aktiengesellschaft	-112.4	74.5
Withdrawal from other revenue reserves	179.4	–
<b>Net retained profits of K+S Aktiengesellschaft as at 31 December</b>	<b>67.0</b>	<b>74.5</b>

of service before the introduction of the basic pension and supplementary benefits <sup>11</sup>. This pension plan has since been discontinued, so that no additional employees are eligible to acquire benefits.

Alongside the K+S pension scheme, numerous individual commitments were made, especially to members of the Board of Executive Directors and senior management. They are generally based on a modular system under which a certain percentage of pensionable annual income is converted into a lifelong pension applying an age-related factor. The total entitlement corresponds to the sum of the individual year-based modules. In some contracts, a predefined benefit level may not be exceeded.

In addition, there are other company-specific pension commitments in Germany, which were already discontinued some years ago. Most of the beneficiaries are already drawing pensions.

In Germany, all the pension obligations described above are covered by a contractual trust arrangement (CTA). The vehicle used for this is the K+S Vermögenstreuhänder e. V., which manages as a trustee the assets dedicated to the servicing of pension obligations. While the pension payments continue to be made by the respective company, the payments are normally reimbursed by the CTA as they occur. There are no minimum funding requirements.

Moreover, there are deferred compensation arrangements and commitments that will be met through a provident fund. These obligations are largely covered by reinsurance policies.

#### CANADA

In Canada, in addition to defined benefit pension commitments, there are pension-related plans that entail commitments, for example, to provide medical benefits to eligible beneficiaries after retirement.

The pension plans in principle provide for benefits that are calculated as a percentage of the average five highest annual salaries, while taking into account length of service. In this context, certain ceilings have to be observed. Since 1 January 2016, active plan

members can no longer earn new entitlements, but in return they participate in a defined contribution scheme. The commitment was switched prospectively, which means that benefits vested up to this date will remain unchanged. Pension plans in Canada are regulated by law, for example, by the Financial Services Commission in Ontario and the Canada Revenue Agency. There are minimum funding requirements under the Pension Benefits Act (Ontario). To satisfy them, an independent actuarial valuation is generally performed in the middle of the year. The aim is to determine the funded status of the pension plan in accordance with legal requirements. If the plan is underfunded, the shortfall must be made up within a period of five to ten years, based on the type of shortfall. The valuation differs from an IFRS valuation in that, for example, a different discount factor is applied.

The Canadian plan assets are held by an external company on a trust basis. It is responsible for the payment of pensions to pensioners as well as the management of plan assets. The trustee is selected by the Morton Salt, Inc. Employee Benefits Committee, which comprises company representatives and external advisors. It is also responsible for determining the investment strategy.

The pension-related benefit commitments cover payments for life, dental and medical insurance. The level of payments for the dental and medical insurance depends on the average claims ratio of the pensioners, whereas life assurance in principle involves a fixed-sum commitment. No plan assets were established for the pension-related benefit commitments and there are no minimum funding requirements.

#### OTHER COUNTRIES

The other pension commitments largely relate to pension-related plans in the United States and the Bahamas, which provide for payments towards medical and life assurance policies. No plan assets were established for these commitments and there are no minimum funding requirements. In addition, there are pension commitments of minor significance in other countries.

**ACTUARIAL ASSUMPTIONS – MEASUREMENT OF PENSION COMMITMENTS**

TAB. 3.52

In % (weighted average)	2017		2018	
	Germany	Other countries	Germany	Other countries
Pension commitments				
Discount rate	2.0	3.7	2.0	3.8
Expected annual rise in income	1.8	3.0	1.8	3.0
Expected annual rise in pensions	1.6	1.0	1.6	1.0
Other pension-related benefit commitments				
Discount rate	–	3.9	–	4.6

**ACTUARIAL ASSUMPTIONS – PENSION COMMITMENT EXPENSES**

TAB. 3.53

In % (weighted average)	2017		2018	
	Germany	Other countries	Germany	Other countries
Pension commitments				
Discount rate	1.8	3.9	2.0	3.7
Expected annual rise in income	1.8	3.0	1.8	3.0
Expected annual rise in pensions	1.6	1.0	1.6	1.0
Other pension-related benefit commitments				
Discount rate	–	4.3	–	3.9

The plans described above are subject to a number of risks, in particular:

- + Investment risks: the provisions for pensions and similar obligations are calculated using a discount rate based on AA-rated corporate bonds. If the yield on plan assets is below this interest rate, this will result in underfunding. The investments are spread widely, mainly in bonds and equities, with the latter being particularly exposed to significant market price fluctuations.
- + Inflation risks: In Germany, the German Company Pension Plan Act (Gesetz zur Verbesserung der betrieblichen Altersvorsorge, BetrAVG) requires a review of pension levels every three years, and this generally results in pensions being adjusted for inflation. Pension commitments in Canada are adjusted annually at a rate of 50% of the consumer price index (CPI). As a rule, an increase in the respective rates of inflation will therefore lead to a corresponding increase in the respective obligations.
- + Interest rate risks: a decrease in yields on corporate bonds and, consequently, in the discount rate leads to an increase in obligations, which is only partially offset by a corresponding change in the value of plan assets.

- + Healthcare cost trend (North America, in particular Canada and the Bahamas): since payments for medical benefit commitments are adjusted in line with cost trends in healthcare, an increase in medicine prices, hospital costs, etc. in the respective country will lead to an increase in obligations.
- + Longevity risks: life expectancy is taken into account in calculating obligation levels by using mortality tables. An increase in life expectancy results in a corresponding increase in the obligations.
- + Salary risks: if the actual trend in salaries exceeds the anticipated trend, this will result in an increase in obligation levels.

The K+S GROUP strives to mitigate the risks by, for example, changing over from defined benefit plans to defined contribution plans. For this reason, most of the workforce in Germany now receives defined contribution commitments only. In North America, too, benefit commitments have been either settled or frozen and transferred to a defined contribution system.

The assumptions in table 3.52 have been made in calculating provisions for pensions and similar obligations as at the balance sheet date. **TAB. 3.52**

To determine the pension expenses for 2018, the actuarial assumptions in table 3.53 – defined at the end of financial year 2017 – were used. **TAB. 3.53**

As at 31 December 2018, the following mortality tables were applied:

- + Germany: Heubeck mortality tables 2018 G (2017: Heubeck mortality tables 2005 G)
- + Canada: CPM 2014 Private Scale B with adjustment factor (2017: CPM 2014 Private Scale B with adjustment factor)

+ USA/Bahamas: RP 2014 Scale MP-2018 (2017: RP 2014 Scale MP-2017)

In the case of pension-related commitments for healthcare benefits, the following annual cost increases were assumed:

- + Canada (medicines): 6.1%, declining to 4.0% from 2040 (2017: 6.3%/5.0% from 2024)
- + Bahamas: 5.5% (2017: 5.5%)

The following tables show the changes in the projected benefit obligation and plan assets: **TAB. 3.54, 3.55**

CHANGES IN PROJECTED BENEFIT OBLIGATION

TAB. 3.54

in € million	2017				2018			
	Total	Germany	Other countries	Pension-related obligations	Total	Germany	Other countries	Pension-related obligations
Projected benefit obligation on 1 January	617.3	277.4	228.8	111.1	602.9	276.1	217.4	109.4
Changes to the scope of consolidation	-0.5	–	-0.5	–	–	–	–	–
Service costs	13.9	9.9	1.2	2.8	11.2	7.5	0.4	3.3
Past service costs	-9.9	–	0.1	-10.0	0.1	0.3	0.1	-0.3
Interest expense	17.7	4.9	8.3	4.5	17.3	5.4	7.6	4.3
Remeasurement <sup>1</sup>	14.1	-2.0	3.2	12.9	-16.1	2.8	-0.3	-18.6
– of which actuarial gains (-)/losses (+) from changes in demographic assumptions	-2.9	–	–	-2.9	2.4	2.8	–	-0.4
– of which actuarial gains (-)/losses (+) from changes in financial assumptions	17.4	-3.2	5.6	15.0	-20.2	-1.5	-2.5	-16.2
– of which actuarial gains (-)/losses (+) based on experience-based adjustments	-0.4	1.2	-2.4	0.8	1.7	1.5	2.2	-2.0
Pension payments	-27.0	-14.1	-10.7	-2.2	-26.7	-13.8	-10.5	-2.4
Plan amendments/settlements	–	–	–	–	-0.3	–	-0.3	–
Changes in exchange rates	-22.7	–	-13.0	-9.7	-6.4	–	-7.5	1.1
<b>Projected benefit obligation on 31 December</b>	<b>602.9</b>	<b>276.1</b>	<b>217.4</b>	<b>109.4</b>	<b>582.0</b>	<b>278.3</b>	<b>206.9</b>	<b>96.8</b>

<sup>1</sup> The actuarial losses arising from changes in financial assumptions in Germany include effects of the initial recognition of deferred compensation in an amount of €4.3 million.

For reconciliation to the carrying amounts, the projected benefit obligation must be offset against plan assets: **TAB. 3.56**

The amounts in table 3.57 were recognised in the statement of comprehensive income. **TAB. 3.57**

The service costs (including past service costs) are reported according to the allocation of employees to the respective EBIT functional area. Net interest expense or income is reported in net interest. Positive past service cost for pension-related obligations in other countries reported in the previous year is attributable to the introduction of minimum periods of service as an eligibility criterion.

The fair value of plan assets is distributed across the following investment classes: **TAB. 3.58**

Investments held through investment funds were allocated to the individual investment classes in the list above. A majority of the bonds are rated as investment grade. The shares are regularly traded on an active market. While the same generally applies to the bonds, the item includes promissory note loans with a carrying amount of €17.7 million (2017: €18.3 million) that are not traded on an active market. There is no active market for reinsurance arrangements. Own financial instruments are held in an amount of €3.0 million (2017: €3.0 million).

**CHANGES IN PLAN ASSETS**

**TAB. 3.55**

in € million						
	2017			2018		
	Total	Germany	Other countries	Total	Germany	Other countries
Plan assets on 1 January	434.7	220.9	213.8	441.3	230.5	210.8
Interest income	11.9	4.0	7.9	12.1	4.6	7.5
Employer contributions	3.6	3.0	0.6	2.2	1.9	0.3
Gains (–)/losses (+) from remeasurement of plan assets (excluding amounts recognised in interest income) <sup>1</sup>	27.1	16.7	10.4	-25.3	-15.9	-9.4
Pension payments	-23.9	-14.1	-9.8	-23.8	-13.8	-10.0
Changes in exchange rates	-12.1	-	-12.1	-7.5	-	-7.5
<b>Plan assets on 31 December</b>	<b>441.3</b>	<b>230.5</b>	<b>210.8</b>	<b>399.0</b>	<b>207.3</b>	<b>191.7</b>

<sup>1</sup> The remeasurement gain recognised in Germany includes effects of the initial recognition of deferred compensation in an amount of €4.3 million.

**RECONCILIATION TO CARRYING AMOUNTS OF PENSIONS AND SIMILAR OBLIGATIONS**

**TAB. 3.56**

in € million								
	2017				2018			
	Total	Germany	Other countries	Other countries	Total	Germany	Other countries	Other countries
				Pension-related obligations				Pension-related obligations
Projected benefit obligation on 31 December	602.9	276.1	217.4	109.4	582.0	278.3	206.9	96.8
Plan assets on 31 December	441.3	230.5	210.8	-	399.0	207.3	191.7	-
<b>Carrying amounts on 31 December</b>	<b>161.6</b>	<b>45.6</b>	<b>6.6</b>	<b>109.4</b>	<b>183.0</b>	<b>71.0</b>	<b>15.2</b>	<b>96.8</b>
– of which provisions for pensions and similar obligations (+)	166.4	50.4	6.6	109.4	187.0	75.0	15.2	96.8
– of which assets (-)	-4.8	-4.8	-	-	-4.0	-4.0	-	-

## EFFECTS ON THE STATEMENT OF COMPREHENSIVE INCOME

TAB. 3.57

in € million	2017				2018			
	Total	Germany	Other countries	Other countries	Total	Germany	Other countries	Other countries
			Pension-related obligations			Pension-related obligations		
Service costs	13.9	9.9	1.2	2.8	11.2	7.5	0.4	3.3
Past service costs	-9.9	-	0.1	-10.0	0.1	0.3	0.1	-0.3
Net interest expenses (+)/income (-)	5.8	0.9	0.4	4.5	5.2	0.8	0.1	4.3
Expenses (+)/income (-) from plan amendments/settlements	-	-	-	-	-0.3	-	-0.3	-
<b>Amounts recognised in the income statement</b>	<b>9.8</b>	<b>10.8</b>	<b>1.7</b>	<b>-2.7</b>	<b>16.2</b>	<b>8.6</b>	<b>0.3</b>	<b>7.3</b>
Gains (-)/losses (+) on remeasurement of plan assets (excluding amounts recognised in interest income)	-27.1	-16.7	-10.4	-	25.3	15.9	9.4	-
Actuarial gains (-)/losses (+) from changes in demographic assumptions	-2.9	-	-	-2.9	2.4	2.8	-	-0.4
Actuarial gains (-)/losses (+) from changes in financial assumptions	17.4	-3.2	5.6	15.0	-20.2	-1.5	-2.5	-16.2
Actuarial gains (-)/losses (+) based on experience-based adjustments	-0.4	1.2	-2.4	0.8	1.7	1.5	2.2	-2.0
<b>Amounts recognised in other comprehensive income<sup>1</sup></b>	<b>-13.0</b>	<b>-18.7</b>	<b>-7.2</b>	<b>12.9</b>	<b>9.2</b>	<b>18.7</b>	<b>9.1</b>	<b>-18.6</b>
<b>Total (amounts recognised in statement of comprehensive income)</b>	<b>-3.2</b>	<b>-7.9</b>	<b>-5.5</b>	<b>10.2</b>	<b>25.4</b>	<b>27.3</b>	<b>9.4</b>	<b>-11.3</b>

<sup>1</sup> As a result of the initial recognition of deferred compensation, the prior-year figures for Germany include actuarial losses from changes in financial assumptions and a remeasurement gain on plan assets in an amount of €4.3 million each.

## BREAKDOWN OF PLAN ASSETS BY ASSET CLASS

TAB. 3.58

in € million	2017				2018			
	Total	Germany	Other countries	Total	Germany	Other countries	Total	
		Pensions	Pensions		Pensions	Pensions		
Bonds	190.9	102.6	88.3	220.4	89.9	130.5		
– Government bonds	66.5	1.7	64.8	96.3	2.3	94.0		
– Corporate bonds	124.4	100.9	23.5	124.1	87.6	36.5		
Shares	191.1	75.1	116.0	127.8	73.6	54.2		
Reinsurance arrangements	29.0	29.0	-	31.3	31.3	-		
Cash and cash equivalents	21.5	16.4	5.1	10.6	5.2	5.4		
Other	8.8	7.4	1.4	8.9	7.3	1.6		
<b>Plan assets on 31 December</b>	<b>441.3</b>	<b>230.5</b>	<b>210.8</b>	<b>399.0</b>	<b>207.3</b>	<b>191.7</b>		

The sensitivity analysis shows how the present value of the obligation would change in the event of a change in actuarial assumptions. No correlation between individual assumptions was taken into account, which means that in the event of one assumption being changed, the other assumptions remained unchanged. The projected unit credit method used to determine the carrying amounts was also used in the sensitivity analysis. **TAB. 3.59**

The previous year's analysis identified the following values: **TAB. 3.60**

The following maturities of undiscounted payments of pensions and similar obligations are expected in subsequent years: **TAB. 3.61**

As at 31 December 2018, the weighted average duration of obligations in Germany was 14 years (2017: 14 years), for pension obligations outside Germany it was 13 years (2017: 13 years), and for pension-related obligations outside Germany it was 18 years (2017: 20 years). The duration and maturity profile of the obligations differ between individual companies, significantly so in some cases. The asset allocation generally takes this circumstance into

**SENSITIVITY ANALYSIS OF 31 DEC 2018**

**TAB. 3.59**

in € million	Change in assumption	Change in present value of obligations			
		Total	Germany	Other countries	Other countries
		Pensions	Pensions	Pensions	Pension-related obligations
Discount rate	+ 100 basis points	-73.3	-33.8	-24.3	-15.2
Discount rate	- 100 basis points	91.7	42.9	30.0	18.8
Expected annual rise in income	+ 50 basis points	1.6	0.5	1.1	-
Expected annual rise in income	- 50 basis points	-1.6	-0.5	-1.1	-
Expected annual rise in pensions	+ 50 basis points	26.4	15.2	11.2	-
Expected annual rise in pensions	- 50 basis points	-23.5	-13.8	-9.7	-
Medical cost trend	+ 50 basis points	7.9	-	-	7.9
Medical cost trend	- 50 basis points	-7.0	-	-	-7.0
Life expectancy	+ 1 year	21.2	10.9	5.7	4.6
Life expectancy	- 1 year	-21.1	-10.7	-5.8	-4.6

**SENSITIVITY ANALYSIS OF 31 DEC 2017**

**TAB. 3.60**

in € million	Change in assumption	Change in present value of obligations			
		Total	Germany	Other countries	Other countries
		Pensions	Pensions	Pensions	Pension-related obligations
Discount rate	+ 100 basis points	-78.0	-34.0	-25.7	-18.3
Discount rate	- 100 basis points	98.0	43.1	31.8	23.1
Expected annual rise in income	+ 50 basis points	2.4	1.0	1.4	-
Expected annual rise in income	- 50 basis points	-2.5	-1.0	-1.5	-
Expected annual rise in pensions	+ 50 basis points	26.6	14.9	11.7	-
Expected annual rise in pensions	- 50 basis points	-23.7	-13.5	-10.2	-
Medical cost trend	+ 50 basis points	9.8	-	-	9.8
Medical cost trend	- 50 basis points	-8.7	-	-	-8.7
Life expectancy	+ 1 year	19.7	8.6	5.9	5.2
Life expectancy	- 1 year	-19.3	-8.4	-5.7	-5.2

**EXPECTED PAYMENTS OF PENSIONS AND SIMILAR OBLIGATIONS**

TAB. 3.61

in € million	31 Dec 2017	31 Dec 2018
Up to 1 year	28.4	28.6
Between 1 and 5 years	115.2	114.6
Between 5 and 10 years	148.2	145.0
More than 10 years	984.8	946.2
<b>Total</b>	<b>1,276.6</b>	<b>1,234.4</b>

The pension benefits provided via the BASF pension fund are to be classified as a multi-employer plan within the meaning of IAS 19.32 et seq. In principle, the plan is a defined benefit plan. Since reliable information, in particular on plan assets, is only available for the pension fund as a whole and not specifically for the units attributable to the K+S GROUP, insufficient information is available for reporting the plan on the balance sheet. That is why the plan is accounted for as a defined contribution plan in accordance with IAS 19.34.

account, especially in Germany. The aim is to service the pension payments from current plan asset income.

In the 2019 financial year, a cash outflow of €2.9 million (2018: €3.5 million) is expected from pension and similar commitments. This outflow comprises allocations to plan assets and pension payments that are not covered by corresponding reimbursements from plan assets.

In addition, there are other pension plans for which no provisions need to be recognised, since there are no obligations other than contribution payments (defined contribution plans). These comprise both benefits funded solely by the employer and deferred compensation subsidies for employees.

Employers and employees made contributions under the – now closed – pension plan operated via the BASF pension fund. In 2011, the BASF pension fund terminated the regular memberships for K+S employees, so that, since then, only extraordinary membership is available for the employees concerned and those memberships are continued as vested pension rights. In addition, the BASF pension fund makes regular pension scheme payments to (former) K+S employees. K+S GROUP company employees with vested pension rights and pensioners account for less than 10% of the total BASF pension fund.

As a result of the termination of regular memberships, no further contributions are to be paid into the BASF pension fund. Due to a decrease in the discount rate at the BASF pension fund, the need for a special contribution was identified in 2017; under the technical business plan, the proportionate share attributable to K+S is €5.7 million. This amount was recognised through profit or loss and charged to the appropriate functional area in the previous year. Further special contributions in the future cannot be ruled out.

Moreover, the secondary liability governed by the German Company Pension Plan Act (Gesetz zur Verbesserung der betrieblichen Altersversorgung, BetrAVG) may give rise to an obligation to assume liabilities for K+S, especially for inflation adjustments to current pension payments. Pension adjustments not covered by the BASF pension plan must be assumed by K+S.

No contribution payments are expected to be made to the BASF pension fund in 2019.

In total, pension expenses are as follows for the period under review: TAB. 3.62

**PENSION EXPENSE**

TAB. 3.62

in € million	2017			2018		
	Total	Germany	Other countries	Total	Germany	Other countries
Defined contribution expenses	26.2	7.7	18.5	20.4	2.1	18.3
Defined benefit expenses	4.0	9.9	-5.9	11.0	7.8	3.2
<b>Pension expense (recognised in EBIT)</b>	<b>30.2</b>	<b>17.6</b>	<b>12.6</b>	<b>31.4</b>	<b>9.9</b>	<b>21.5</b>

**PROVISIONS FOR MINING OBLIGATIONS**

TAB. 3.63

in € million	2017		2018	
	Total	of which current	Total	of which current
Mine and shaft backfilling	361.1	16.2	373.9	0.6
Maintenance of tailings piles	565.2	—	563.8	—
Mining damage	39.1	6.1	35.0	6.4
Renaturation	41.0	—	42.1	—
Other	16.0	0.1	7.6	0.3
<b>Provisions for mining obligations</b>	<b>1,022.4</b>	<b>22.4</b>	<b>1,022.4</b>	<b>7.3</b>

In addition, contributions of €88.2 million (2017: €85.8 million) were paid to government pension funds.

**(22) PROVISIONS FOR MINING OBLIGATIONS**

Provisions for mining obligations are recognised as a result of legal and contractual requirements as well as conditions imposed by the authorities; details are primarily provided in operating plans and water permit decisions. These obligations, most of which are subject to public law, require surface securing and renaturation measures. Mining damage can result from underground extraction and any resulting subsidence, or from damage in the production process in the form of dust or saltwater intrusion. Any obligations arising as a result are covered by provisions. TAB. 3.63

The amount of the provisions to be recognised is based on expected expenditure or estimated compensation. It is determined by internal experts and – where necessary – with the help of third-party reports prepared using state-of-the-art techniques and in compliance with current legal requirements. Since some of the settlement dates are in the future, there may be differences between actual and estimated expenses, even though great care is taken in applying these techniques. These differences may arise, for example, from different cost trends, technological advances or changes in legal requirements. These circumstances are taken into account by regularly recalculating the provisions required.

Provisions for mining obligations are mainly non-current provisions, which are recognised at the settlement amount determined on the basis of expenses expected to be incurred in the future and discounted to the balance sheet date. In this process, a future price increase of 1.5% is assumed (2017: 1.5%). The discount rate for mining obligations in EU countries is 3.3% (2017: 3.3%). The discount rate used for mining obligations in North America is 5.0% in the USA (2017: 4.7%) and 4.1% in Canada (2017: 4.2%). The expected settlement dates largely depend on the remaining useful lives of the locations. Some of the obligations extend well beyond 2050.

The additions to mining provisions totalled €77.8 million (2017: €46.5 million) for the year under review. They were largely attributable to interest cost added to provisions and the remeasurement of existing provisions.

Mining provisions were used in an amount of €16.9 million (2017: €8.8 million), mainly to settle obligations to pay for subsidence damage and to secure mines.

Provisions totalling €60.2 million (2017: €30.3 million) were reversed, largely from provisions for maintaining tailings piles and mine and shaft backfilling.

**(23) NON-CURRENT PERSONNEL OBLIGATIONS**

The carrying amount of provisions for anniversary bonuses is €31.4 million (2017: €30.7 million) and therefore represents a significant item under non-current personnel obligations. They

are recognised for future payments in connection with 25, 40 and 50-year service anniversaries. They are measured using the projected unit credit method. Calculations are based on a discount rate of 2.0% (2017: 2.0%) with an anticipated annual increase in salaries and wages of 1.8% (2017: 1.8%). In addition, plan assets for obligations from working lifetime accounts amounted to €20.1 million (2017: €9.4 million), which are largely financed by plan assets amounting to €19.3 million (2017: €0 million). As at the balance sheet date, the provision recognized as a total amounted to €0.8 million (2017: €9.4 million).

#### (24) CURRENT PROVISIONS

Obligations arising from sales transactions relate primarily to discounts and price concessions; provisions for outstanding invoices are recognised on the basis of purchase contracts. Current personnel obligations mostly consist of provisions for performance-related remuneration and provisions for untaken vacation leave and non-working shifts.

- ⦿ ‘Employees’, page 53 ;
- ⦿ ‘Remuneration Report’, page 134

#### (25) FINANCIAL LIABILITIES

The following tables show the liquidity analysis of financial liabilities in the form of contractually agreed, undiscounted cash flows: TAB. 3.64, 3.65

LIQUIDITY ANALYSIS OF NON-DERIVATIVE FINANCIAL LIABILITIES IN 2018

TAB. 3.64

in € million	2018 carrying amount	2018 total	Cash flows		
			Remaining maturity < 1 year	Remaining maturity > 1 year and < 5 years	Remaining maturity > 5 years
Financial liabilities	3,283.5	3,603.9	623.8	2,370.3	609.8
– of which bonds	2,240.5	2,539.5	73.6	1,856.1	609.8
– of which promissory note loans	764.3	784.2	332.7	451.5	–
– of which commercial paper	179.0	179.0	179.0	–	–
– of which liabilities to banks	99.7	101.2	38.5	62.7	–
Trade payables	239.7	239.7	238.6	0.5	0.6
Liabilities from finance leases	164.2	187.7	16.9	119.7	51.1
Other non-derivative financial liabilities	70.5	70.5	70.5	–	–
<b>Non-derivative financial liabilities</b>	<b>3,757.7</b>	<b>4,101.8</b>	<b>949.8</b>	<b>2,490.5</b>	<b>661.5</b>

LIQUIDITY ANALYSIS OF NON-DERIVATIVE FINANCIAL LIABILITIES IN 2017

TAB. 3.65

in € million	2017 carrying amount	2017 total	Cash flows		
			Remaining maturity < 1 year	Remaining maturity > 1 year and < 5 years	Remaining maturity > 5 years
Financial liabilities	3,021.7	3,310.0	648.4	1,991.9	669.7
– of which bonds	2,142.4	2,401.1	569.6	1,202.4	629.1
– of which promissory note loans	763.8	791.9	7.7	743.6	40.6
– of which liabilities to banks	115.5	117.0	71.1	45.9	–
Trade payables	288.4	288.4	286.8	1.0	0.6
Liabilities from finance leases	173.0	202.0	21.8	119.2	61.0
Other non-derivative financial liabilities	62.9	62.9	62.9	–	–
<b>Non-derivative financial liabilities</b>	<b>3,546.0</b>	<b>3,863.3</b>	<b>1,019.9</b>	<b>2,112.1</b>	<b>731.3</b>

The bonds and promissory note loans issued break down as follows: TAB. 3.66

Tables 3.67 and 3.68 show the Group's liquidity analysis for derivative financial liabilities. The table is based on non-discounted gross cash which are settled on a gross basis. TAB. 3.67, 3.68

#### ISSUED BONDS<sup>1</sup> AND PROMISSORY LOAN NOTES

TAB. 3.66

	2017		2018	
	Nominal amount	Nominal interest rate	Nominal amount	Nominal interest rate
	in € million	p.a.	in € million	p.a.
2012/22 bond	500	3.000%	500	3.000%
2013/18 bond	500	3.125%	—	—
2013/21 bond	500	4.125%	500	4.125%
2017/23 bond	625	2.625%	625	2.625%
2018/24 bond	—	—	600	3.250%
Promissory note loans (fixed, mature 2019 – 23)	482	Average around ca. 1%	482	Average around ca. 1%
Promissory note loans (floating, mature 2019 – 22)	283	Basis EURIBOR	283	Basis EURIBOR

<sup>1</sup> In addition, there is a USD bond taken over in 2009 as part of the acquisition of MORTON SALT with a nominal value of USD 22.6 million and a maturity date in 2020. Interest and principal payments resulting from this bond are to be paid by ROHM & HAAS and are covered by a contractual bank guarantee. Reimbursement claims for payments of interest and principal resulting from this legal construct are reported under "Other financial assets", both current and non-current.

#### LIQUIDITY ANALYSIS OF DERIVATIVE FINANCIAL LIABILITIES IN 2018

TAB. 3.67

in € million	2018 carrying amount	2018 total	Remaining maturity < 1 year	Cash flows	
				Remaining maturity > 1 year and < 5 years	Remaining maturity > 5 years
Currency derivatives	-26.6	-7.8	-7.7	-0.2	—
Payment obligation <sup>1</sup>		-1,623.1	-1,546.0	-77.1	—
Payment claim <sup>1</sup>		1,615.3	1,538.4	76.9	—

<sup>1</sup> Translation of payment transactions in foreign currency at the spot rate.

#### LIQUIDITY ANALYSIS OF DERIVATIVE FINANCIAL LIABILITIES IN 2017

TAB. 3.68

in € million	2017 carrying amount	2017 total	Remaining maturity < 1 year	Cash flows	
				Remaining maturity > 1 year and < 5 years	Remaining maturity > 5 years
Currency derivatives	-7.6	-31.6	-31.6	—	—
Payment obligation <sup>1</sup>		-539.8	-539.8	—	—
Payment claim <sup>1</sup>		508.2	508.2	—	—

<sup>1</sup> Translation of payment transactions in foreign currency at the spot rate.

**(26) FURTHER DISCLOSURES ON FINANCIAL INSTRUMENTS**

The following table shows the carrying amounts and fair values of the Group's financial instruments: TAB. 3.69

CARRYING AMOUNTS AND FAIR VALUES OF FINANCIAL INSTRUMENTS

TAB. 3.69

in € million	Measurement category in accordance with IAS 39	31 Dec 2017		31 Dec 2018	
		Carrying amount	Fair value	Measurement category in accordance with IFRS 9	Carrying amount
Shares in affiliated companies and other equity investments	Available for sale	20.6	20.6	Fair value through other comprehensive income	88.8
Loans	Loans and receivables	0.4	0.4	Amortised cost	0.3
<b>Financial investments</b>		<b>21.0</b>	<b>21.0</b>		<b>89.1</b>
<b>Trade receivables</b>	<b>Loans and receivables</b>	<b>714.9</b>	<b>714.9</b>	<b>Amortised cost</b>	<b>836.7</b>
Derivatives with positive fair values	Held for trading	45.0	45.0	Fair value through profit or loss	13.0
Other non-derivative financial assets	Loans and receivables	109.0	109.0	Amortised cost	109.4
<b>Other financial assets</b>		<b>154.0</b>	<b>154.0</b>		<b>122.4</b>
<b>Securities and other financial investments</b>	<b>Loans and receivables</b>	<b>11.4</b>	<b>11.4</b>	<b>Amortised cost</b>	<b>11.2</b>
<b>Securities and other financial investments</b>	<b>Available for sale</b>	<b>7.0</b>	<b>7.0</b>	<b>Fair value through other comprehensive income</b>	<b>7.0</b>
<b>Cash and cash equivalents</b>	<b>Loans and receivables</b>	<b>182.6</b>	<b>182.6</b>	<b>Amortised cost</b>	<b>167.6</b>
<b>Financial liabilities</b>	<b>Financial liabilities at amortised cost</b>	<b>3,021.7</b>	<b>3,153.6</b>	<b>Amortised cost</b>	<b>3,283.3</b>
<b>Trade payables</b>	<b>Financial liabilities at amortised cost</b>	<b>288.4</b>	<b>288.4</b>	<b>Amortised cost</b>	<b>239.7</b>
Derivatives with negative fair values	Held for trading	7.6	7.6	Fair value through profit or loss	32.3
Other non-derivative financial liabilities	Financial liabilities at amortised cost	62.9	62.9	Amortised cost	70.6
Liabilities from finance leases	IFRS 7	173.0	173.0	IFRS 7	164.2
<b>Other financial liabilities</b>		<b>243.5</b>	<b>243.5</b>		<b>267.1</b>

The carrying amounts of the financial instruments, aggregated according to IAS 39/IFRS 9 measurement categories, are as follows: [TAB. 3.70](#)

The fair values of the financial instruments are mostly based on the market information available on the balance sheet date. They can be allocated to one of the three levels of the fair value hierarchy of IFRS 13.

Level 1 financial instruments are measured on the basis of quoted prices in active markets for identical assets and liabilities. Level 2 financial instruments are measured on the basis of inputs that can be derived from observable market data, or on the basis of market prices for similar instruments. Level 3 financial instruments are measured on the basis of inputs that cannot be derived from observable market data.

Tables 3.71 and 3.72 show the assets and liabilities measured at fair value: [TAB. 3.71](#), [TAB. 3.72](#)

The shares in affiliated companies and other long-term equity investments shown in the table have not been consolidated due to immateriality. They are always held for the long term and not for trading. For this reason, the OCI option was exercised, which allows changes in fair value to be recognised in other comprehensive income without reclassifying them to the income statement on disposal. Fair value was calculated as the present value of the figures in the latest three-year results planning (mid-term planning) and a subsequent perpetual annuity. The Company's

cost of capital has been used for discounting purposes. Changes in future results or the cost of capital will have a corresponding effect on the present value calculation. The table below shows the changes in fair values in the financial year under review. [TAB. 3.73](#)

The fair values of shares in affiliated companies and other long-term equity investments break down as follows (2017: valuation at cost): [TAB. 3.74](#)

The derivative financial instruments primarily consist of currency derivatives (forward exchange contracts, options). The fair value of forward exchange contracts is calculated by estimating future cash flows based on the quoted forward exchange rates as at the reporting date and the agreed forward exchange rates, which are subsequently discounted at an interest rate matching the respective maturities and currencies. Recognised option pricing models are applied when determining the fair value of currency options, using inputs observed in the market on the reporting date (in particular exchange rate, interest rate, volatility). In addition, the risk of counterparty default is taken into account when performing the calculations.

In the case of trade receivables, other non-derivative financial assets and cash and cash equivalents, the carrying amounts correspond to their fair values, because these instruments mostly have short maturities.

The fair values of securities and other financial investments correspond to the present values of the cash flows associated with these balance sheet items (Level 2).

**CARRYING AMOUNTS OF FINANCIAL INSTRUMENTS AGGREGATED BY MEASUREMENT CATEGORY**

**TAB. 3.70**

Measurement category in accordance with IAS 39 in € million	2017	Measurement category in accordance with IFRS 9 in € million	2018
Available-for-sale financial assets	27.6	Fair value through other comprehensive income	95.8
Loans and receivables	1,018.3	Amortised cost (financial assets)	1,125.2
Financial assets held for trading	45.0	Fair value through profit or loss (financial assets)	13.0
Financial liabilities at amortised cost	3,373.1	Amortised cost (financial liabilities)	3,593.6
Financial liabilities held for trading	7.6	Fair value through profit or loss (financial liabilities)	32.3

**ASSETS AND LIABILITIES MEASURED AT FAIR VALUE**

TAB. 3.71

in € million	Measurement category in accordance with IFRS 9	2018			
		Level 1	Level 2	Level 3	Total
<b>Assets</b>		—	20.0	88.8	108.8
Shares in affiliated companies and other long-term equity investments	Fair value through other comprehensive income	—	—	88.8	88.8
Derivative financial instruments	Fair value through profit or loss	—	13.0	—	13.0
Securities and other financial investments	Fair value through other comprehensive income	—	7.0	—	7.0
<b>Equity and liabilities</b>		—	32.3	—	32.3
Derivative financial instruments	Fair value through profit or loss	—	32.3	—	32.3

**ASSETS AND LIABILITIES MEASURED AT FAIR VALUE**

TAB. 3.72

in € million	Measurement category in accordance with IAS 39	2017			
		Level 1	Level 2	Level 3	Total
<b>Assets</b>		—	52.0	—	52.0
Derivative financial instruments	Held for trading	—	45.0	—	45.0
Securities and other financial investments	Available for sale	—	7.0	—	7.0
<b>Equity and liabilities</b>		—	7.6	—	7.6
Derivative financial instruments	Held for trading	—	7.6	—	7.6

**RECONCILIATION OF SHARES IN  
NON-CONSOLIDATED AFFILIATED COMPANIES  
AND OTHER EQUITY INVESTMENTS (LEVEL 3)**

TAB. 3.73

in € million	2018
As at 1 January (adjusted to IFRS 9)	72.2
Additions	6.7
Disposals	0.8
Measurement gains/losses (other comprehensive income)	10.7
Disposal gains/losses (other comprehensive income)	—
Currency translation differences	—
Transfers (from/to Level 3)	—
As at 31 December	88.8

**BREAKDOWN OF NON-CONSOLIDATED  
SHARES IN AFFILIATED COMPANIES  
AND OTHER EQUITY INVESTMENTS**

TAB. 3.74

in € million	2017	2018
Subsidiaries in Germany	5.9	8.1
Subsidiaries in Europe (excluding Germany)	2.5	49.5
Subsidiaries in rest of world	12.1	25.8
Joint ventures and associates	0.1	5.5
<b>Total</b>	<b>20.6</b>	<b>88.8</b>

**NET GAINS/LOSSES ON FINANCIAL INSTRUMENTS**

TAB. 3.75

	Measurement category in accordance with IAS 39		Measurement category in accordance with IFRS 9
in € million	2017	in € million	2018
Available-for-sale financial assets	4.5	Fair value through other comprehensive income	14.9
Loans and receivables	-39.8	Amortised cost (financial assets)	4.5
Financial assets and liabilities held for trading	28.9	Fair value through profit or loss	-36.7
Financial liabilities at amortised cost	71.8	Amortised cost (financial liabilities)	-29.6

In the case of financial liabilities, fair value is based on market prices, if active markets exist (Level 1); if not, the present value of future cash flows is used (Level 2). They are discounted using market interest rates with matching maturities.

In the case of trade payables and other non-derivative financial liabilities, it is assumed that the carrying amounts correspond to the fair values of these instruments, because these instruments mostly have short maturities.

For loans and liabilities from finance leases, we assume that carrying amounts correspond to fair values, because differences between market interest rates and discount rates are not material.

The table 3.75 shows the net gains or losses on financial instruments: TAB. 3.75

Net gains/losses on available-for-sale or fair value of other income financial assets primarily comprise gains or losses on dividend distributions and from 2018 measurement gains or losses on non-consolidated shares in affiliated companies and other equity investments. Net gains/losses on loans and receivables or financial assets recognized at amortized cost mainly include the effects of currency translation and changes in allowances. Net gains/losses on fair value measured financial assets and liabilities held for

trading consist mainly of effects arising from the fair value measurement and realisation of derivative financial instruments. Net gains/losses on financial liabilities measured at amortised cost come mainly from the effects of currency translation.

Total interest income and expenses for financial assets and liabilities measured at fair value through other comprehensive income were as follows: TAB. 3.76

**LIQUIDITY RISK**

A liquidity risk entails the failure to procure the financial means needed to meet payment obligations or the inability to do so in a timely manner. External factors, especially a general financial crisis, could make it impossible to replace credit lines or bonds on acceptable commercial terms should the need arise. There would also be a risk that the cost of procuring liquidity would rise. For this reason, the principal objective of our liquidity management activities is to ensure the ability to make payments at any given time. Liquidity is managed by the Central Treasury unit using a Group-wide cash pooling system. The liquidity requirement is

**INTEREST RESULT FROM FINANCIAL INSTRUMENTS**

TAB. 3.76

in € million	2017	2018
Interest income	10.5	11.4
Interest expenses before capitalization of borrowing interest	85.5	104.3
Capitalized borrowing costs	51.7	17.5
Interest expenses after Capitalization of borrowing interest	33.8	86.8

determined in our liquidity planning. Available liquidity amounted to €1,187.0 million as at 31 December 2018 (2017: €1,141.0 million); it consisted of short-term investments and cash and cash equivalents as well as the undrawn part of our syndicated credit line, which matures in 2020.

⇒ ‘Financial Risks and Opportunities’, page 123

#### RISK OF DEFAULT

The vast majority of customer receivables are hedged against default risk with appropriate insurance coverage and other hedging instruments. We only waive a security against non-payment following a critical review of the customer relationship and specific approval. The vast majority of unsecured receivables are receivables from public-sector customers.

⇒ ‘Financial Risks and Opportunities’, page 123

Default risks also exist with regard to partners with which we have concluded hedging transactions, credit lines exist or money was invested. A potential default of a bank or other party could have an adverse effect on the financial position.

#### MARKET RISKS

Interest rate risk arises from a change in market interest rates, which may have an impact on interest payable or receivable, and also on the fair values of financial instruments. This may also impact on earnings or equity. Under IFRS 7, interest rate risk must be presented using sensitivity analysis. This analysis is based on the following assumptions:

- + The effect on earnings or equity identified by way of sensitivity analysis relates to the total as at the balance sheet date and demonstrates the hypothetical effect over one year,
- + Changes in market interest rates for primary financial instruments with variable interest rates have an impact on net interest and are taken into account in an earnings-based sensitivity analysis,
- + Changes in market interest rates for primary financial instruments with fixed interest rates that are measured at amortised cost do not have an impact on earnings or equity and are therefore not taken into account during the sensitivity analysis. While these instruments are subject to interest rate risk on reinvestment, this is not taken into account in the sensitivity analysis carried out as at the balance sheet date.

⇒ ‘Financial Risks and Opportunities’, page 123

There were floating-rate liabilities as at the reporting date.

An increase in the reference interest rate by one percentage point would have led to further interest charges of €2.2 million for non-current floating-rate liabilities as at the balance sheet date (2017: €2.1 million). The purchased interest rate caps would have reduced this effect to an interest charge of €0.2 million. As in the previous year, a decrease in the reference interest rate by one percentage point would have had no impact on the interest expenses for non-current floating-rate liabilities.

In addition to receivables and liabilities denominated in Group currency, there are also items in foreign currency. Under IFRS 7, exchange rate risks must be presented using sensitivity analysis. If the euro had been 10% stronger or weaker against foreign currencies (mainly US dollar), the carrying amount of the net position of foreign currency receivables and liabilities would have increased or decreased by €32.1 million (2017: €16.8 million) through profit or loss.

As at the balance sheet date, there were also investments for which collateral had been provided by the counterparties, normally banks. They relate to repo transactions that have the features of secured term investments. The terms and limits for the collateral, which cannot be appropriated for any other purpose, are agreed with the counterparty on the basis of a collateral basket, which is primarily defined by asset class, rating, country and currency. The lending value up to which the collateral is taken into account depends on the above criteria, i.e. if the rating or tradability of the collateral declines, the lending value decreases, and additional collateral has to be provided. The appropriate terms and limits of the eligible collateral are based on our internal monitoring, which always takes the rating and the level of credit default insurance (using credit default swaps) into account.

#### (27) INFORMATION ON CAPITAL MANAGEMENT

The aim of capital management in the K+S GROUP is to ensure and efficiently control liquidity across the Group, maintain and optimise financing capability and reduce financial risk.

⇒ ‘Financial position’, page 98

**KEY INDICATORS OF THE CAPITAL STRUCTURE<sup>1</sup>**
**TAB. 3.77**

in € million	2014	2015	2016	2017	2018
Net debt/EBITDA <sup>2,3</sup> ratio	1.8	2.3	6.9	7.2	7.3
Net debt/equity (%)	40.9	55.9	78.7	99.5	107.2
Equity ratio (%)	50.6	51.9	47.2	42.7	41.6

<sup>1</sup> See "Definition of financial indicators used" on page 234.

<sup>2</sup> EBITDA is derived in "Notes to the Income Statement and Statement of Comprehensive Income" on page 174.

<sup>3</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada.

The financial policy instruments for meeting these aims include financing measures that involve both equity and borrowings. All financing measures in the Company, which also include cash, currency and interest rate management, are coordinated and managed by the Central Treasury unit.

Capital management is guided by financial indicators such as net debt/EBITDA ratio, net debt/equity and the equity ratio. TAB. 3.77

The managed capital is as follows as at the reporting date:  
TAB. 3.78

exclusively to uncompleted capital expenditure projects in property, plant and equipment. For additional financial liabilities due to leasing, see the disclosures in Note (29).

**(29) LEASES**

Certain technical equipment and machinery, such as supply networks, dedicated railway sidings, railway goods carriages, is used in the context of finance leases; it is capitalised because beneficial ownership of the leased asset is attributable to the K+S GROUP. Specifically, this applies to the following items: TAB. 3.79

The relevant payment obligations from finance leases are due as shown in table 3.81. TAB. 3.81

The K+S GROUP only acts as lessor to an insignificant extent.

**LEASE ASSETS**
**TAB. 3.79**

in € million	2017	2018
Land, land rights and buildings	0.2	0.1
Technical equipment and machinery	235.5	216.9
Ships	0.8	0.7
Prepayments and assets under construction	–	–
<b>Total</b>	<b>236.5</b>	<b>217.7</b>

**OBLIGATIONS FROM OPERATING LEASES**
**(NOMINAL VALUES)**
**TAB. 3.80**

in € million	2017	2018
– due in the following year	45.2	40.0
– due within 2–5 years	102.7	101.3
– due after 5 years	92.3	78.8
<b>Total</b>	<b>240.2</b>	<b>220.0</b>

**MANAGED CAPITAL**
**TAB. 3.78**

in € million	2017	2018
Equity	4,160.7	4,144.1
Non-current liabilities	4,240.2	4,528.4
Current liabilities	1,353.5	1,293.7

**LEASE OBLIGATIONS**

TAB. 3.81

in € million	Minimum lease payments		Included interest share		Leasing obligations	
	2017	2018	2017	2018	2017	2018
Maturity < 1 year	21.8	16.9	2.6	1.2	19.2	15.7
Maturity 2–5 years	119.2	119.7	11.2	12.0	108.0	107.7
Maturity > 5 years	61.0	51.1	15.2	10.3	45.8	40.8
<b>Total</b>	<b>202.0</b>	<b>187.7</b>	<b>29.0</b>	<b>23.5</b>	<b>173.0</b>	<b>164.2</b>

The K+S GROUP is also a lessee in operating leases. Given the relevant contractual arrangements, these assets are not recognised as non-current assets. Operating lease expenses incurred in 2018 amounted to €53.2 million (2017: €54.2 million). The nominal amount of future minimum lease payments from non-cancellable operating leases is allocated to future periods as follows:

TAB. 3.80

The main operating leases relate to vehicles, office premises, storage capacity, technical equipment and machinery and railway goods carriages.

Both finance and operating leases sometimes contain lease renewal and/or purchase options and price adjustment clauses. In the case of operating leases, the price of exercising the purchase option is not significantly lower than the fair value of the assets concerned at the time the option can be exercised.

**NOTES TO THE CASH FLOW STATEMENT**

The cash flow statement is presented on page 148. No cash transactions from discontinued operations had to be included.

⇒ ‘Financial position’, page 98

**NET CASH AND CASH EQUIVALENTS**

TAB. 3.82

in € million	2017	2018
Cash and cash equivalents (as recognised in balance sheet)	182.6	167.6
Cash deposits received from affiliated companies	-6.9	-5.4
<b>Net cash and cash equivalents</b>	<b>175.7</b>	<b>162.2</b>

**RECONCILIATION OF NET CASH FLOWS FROM/(USED IN) FINANCING ACTIVITIES**

TAB. 3.83

in € million	Carrying amount 1 Jan 2018	Cash flows from financing activities (net)	Changes to the scope of consolidation	Additions to finance leases	Changes in exchange rates	Other effects	Carrying amount 31 Dec 2018
Bonds	2,142.4	101.1	–	–	0.9	-3.9	2,240.5
Promissory note loans	763.8	–	–	–	–	0.5	764.3
Commercial Paper	–	179.0	–	–	–	–	179.0
Liabilities to banks	115.5	-15.9	–	–	0.1	–	99.7
Total financial liabilities (as recognized in balance sheet)	3,021.7	264.2	–	–	1.0	-3.4	3,283.5
Liabilities from finance leases	173.0	-9.8	–	0.5	-6.1	6.6	164.2
Reimbursement claim Morton Salt bond	-19.6	–	–	–	-0.9	0.3	-20.2
<b>Total</b>	<b>3,175.1</b>	<b>254.4</b>	<b>–</b>	<b>0.5</b>	<b>-6.0</b>	<b>3.5</b>	<b>3,427.5</b>

**RECONCILIATION OF NET CASH FLOWS FROM/(USED IN) FINANCING ACTIVITIES**

TAB. 3.84

in € million	Carrying amount 1 Jan 2017	Cash flows from financing activities (net)	Changes to the scope of consolidation	Additions to finance leases	Changes in exchange rates	Other effects	Carrying amount 31 Dec 2017
Bonds	1,516.1	625.0	–	–	–2.7	4.0	2,142.4
Promissory note loans	698.6	65.0	–	–	–	0.2	763.8
Liabilities to banks	319.8	–204.3	–	–	–	–	115.5
Total financial liabilities (as recognized in balance sheet)	2,534.5	485.7	–	–	–2.7	4.2	3,021.7
Liabilities from finance leases	50.7	–16.6	–	139.6	–6.2	5.4	173.0
Reimbursement claim Morton Salt bond	–22.6	–	–	–	2.7	0.3	–19.6
<b>Total</b>	<b>2,562.6</b>	<b>469.1</b>	<b>–</b>	<b>139.6</b>	<b>–6.2</b>	<b>9.9</b>	<b>3,175.1</b>

**(30) OTHER CASH FLOW STATEMENT DISCLOSURES**

Cash and cash equivalents include cash on hand and balances with banks, as well as financial investments with a maturity that generally does not exceed three months from the date of acquisition. These financial investments consist predominantly of short-term deposits at credit institutions and other cash-equivalent investments.

The inflows and outflows from securities transactions in the cash flow from investing activities result from the investment during the year or the repayment of cash deposits with residual maturity > three months.

Cash deposits with affiliated companies are reported under "Other financial assets" (current) and cash deposits received from affiliated companies are reported under "Other financial liabilities" (current).

Dividend payments and profit transfers from non-consolidated companies totalled €4.4 million in the reporting period (2017: €3.9 million).

As at the balance sheet date, there were liabilities from finance leases as well as trade payables and short-term provisions totaling €224.0 million (2017: €300.7 million) resulting from non-cash additions to property, plant and equipment. These are mainly due to the new Bethune plant.

**SEGMENT REPORTING DISCLOSURES**

Segment reporting is presented on page 150.

**(31) DEFINITION OF SEGMENTS**

Segments are defined according to products. This corresponds to the internal organisational and reporting structure of the K+S GROUP in the financial year 2018.

The Potash and Magnesium business unit combines the production and marketing of potash fertilizers and fertilizer specialties as well as potash and magnesium compounds for technical, industrial and pharmaceutical applications.

The Salt business unit encompasses the production and marketing of consumer products, salt for food processing, industrial salt and salt for chemical use, de-icing salt and sodium chloride brine.

The Complementary Activities bundle together not only recycling activities and waste disposal and/or reutilisation in potash and rock salt mines and CATSAN® and THOMAS® granulation, but also other activities important for the K+S GROUP. The K+S GROUP has its own logistics service provider: K+S TRANSPORT GMBH. CHEMISCHE FABRIK KALK GMBH trades in different basic chemicals.

The accounting policies applied to determine the segment information are the same as those of the K+S GROUP.

### (32) PRINCIPLES OF SEGMENT ASSET AND LIABILITY ALLOCATION

Assets, provisions and liabilities are allocated to a segment according to their use or origin. If they are used by or originate in more than one segment, they are allocated based on appropriate formulas.

Financial assets (with the exception of equity interests) and non-current financial liabilities are not allocated to segments.

### (33) PRINCIPLES OF SEGMENT PROFIT OR LOSS ALLOCATION

The data for determining segment profit or loss is based on income statements produced according to the internal reporting structure of the K+S GROUP. Income statements of the companies included in segment profit or loss are allocated to segments in accordance with profit centre accounting.

EBITDA<sup>1</sup> is used by the K+S GROUP as the most important internal profitability variable and performance indicator. The calculation of EBITDA is based on EBIT I. Net interest and tax expense as well as other income and expenses affecting the financial result are not included in the calculation. In addition, certain gains or losses arising from operating anticipatory hedging transactions are eliminated, taking tax effects into account (see "Notes to the Income Statement and Statement of Comprehensive Income" on page 173). EBITDA is calculated by adding the included depreciation and amortisation to EBIT I, but adjusted for the depreciation and amortisation recognised directly in equity for own work capitalised. In the year under review, the adjusted depreciation and amortisation amount recognised directly in equity was €5.9 million (2017: €24.1 million).

<sup>1</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. A reconciliation can be found on page 95.

#### RECONCILIATION OF SEGMENTS

TAB. 3.85

in € million	2017	2018
<b>Reconciliation of segment profit or loss (EBITDA)<sup>1,2</sup></b>	<b>-47.6</b>	<b>-58.8</b>
EBIT I before consolidation	20.7	214.8
Consolidation effects	-77.7	-280.3
Depreciation	9.4	6.7
<b>Reconciliation of segment assets</b>	<b>247.9</b>	<b>255.8</b>
Non-current assets	88.3	110.6
Deferred tax assets	95.2	92.6
Fair values of derivatives	29.0	-12.0
Income tax refund claims	31.7	77.3
Other receivables	91.4	110.5
Cash and cash equivalents	67.3	98.7
Consolidation effects	-155.0	-221.8
<b>Reconciliation of segment liabilities</b>	<b>3,510.1</b>	<b>3,607.2</b>
Provisions for pensions and similar obligations	28.5	44.7
Other provisions	40.2	42.1
Deferred tax liabilities	252.6	230.1
Fair values of derivatives	-5.8	15.3
Financial liabilities	3,021.7	3,283.4
Other liabilities	256.6	241.8
Income tax liabilities	54.6	35.3
Consolidation effects	-138.3	-285.5

<sup>1</sup> The reconciliation of EBIT II to operating earnings (EBIT I) and EBITDA is presented in the notes (see "Notes to the Income Statement and the Statement of Comprehensive Income" on page 174).

<sup>2</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada.

Business unit profit or loss is presented on a consolidated basis. Intragroup supplies of goods and services are consolidated.

#### (34) PRINCIPLES OF INTERSEGMENT TRANSFER PRICING

Transfer prices for supplies of goods and services between segments are set on an arm's length basis, as they would be payable by an unrelated third party. Transfer pricing methods are documented on a timely basis and retained continuously. The comparable uncontrolled price method, the resale price method, the cost plus method or a combination of all three may be used when determining transfer prices for goods and services. We select the method that best reflects the way external prices are determined in comparable markets.

#### (35) ADDITIONAL SEGMENT DISCLOSURES

##### POTASH AND MAGNESIUM PRODUCTS BUSINESS UNIT

Provisions amounting to €30.6 million (2017: €23.1 million) were reversed in the reporting period for unused obligations. Insurance pay-outs of €8.7 million (2017: €33.4 million) were recognised as income during the year under review.

##### SALT BUSINESS UNIT

Provisions amounting to €4.8 million (2017: €13.6 million) were reversed in the reporting period for unused obligations. Insurance pay-outs of €8.1 million (2017: €13.4 million) were recognised as income during the year under review. The disposal of items of property, plant and equipment resulted in a profit of €28.1 million in 2017. No impairment charges were recognized in the year under review (2017: €4.9 million).

#### (36) NOTES TO THE RECONCILIATION ITEMS

The reconciliation of segment figures to the corresponding items in the consolidated financial statements of the K+S GROUP includes items allocated to central functions as well as consolidation effects. The main items are: TAB. 3.85

#### (37) REVENUES BY REGION

The breakdown of the K+S GROUP's revenues by region is as follows:

TAB. 3.86

#### REVENUES BY REGION

TAB. 3.86

in € million	2017	2018
Europe	1,586.6	1,655.7
– of which Germany	592.7	602.8
North America	1,286.2	1,398.3
– of which USA	998.1	1,031.6
South America	388.5	523.4
Asia	291.8	364.6
Africa, Oceania	73.9	97.1
<b>Total revenues</b>	<b>3,627.0</b>	<b>4,039.1</b>

The allocation is based on the registered office of customers. No single customer accounted for more than 10% of total revenues in the 2018 and 2017 financial years.

#### (38) NON-CURRENT ASSETS BY REGION

The non-current assets of the K+S GROUP comprise intangible assets, property, plant and equipment and investment properties. They break down into regions as follows: TAB. 3.87

The allocation is based on the location of the relevant assets.

#### NON-CURRENT ASSETS BY REGION

TAB. 3.87

in € million	2017	2018
Europe	1,760.2	1,861.2
– of which Germany	1,700.4	1,803.4
North America	5,392.0	5,284.4
– of which USA	1,017.1	1,078.8
– of which Canada	4,340.0	4,169.7
South America	493.8	515.7
– of which Chile	485.6	502.8
Asia	10.9	10.6
Africa, Oceania	3.8	4.7
<b>Total assets</b>	<b>7,660.7</b>	<b>7,676.6</b>

## OTHER DISCLOSURES

### GOVERNMENT GRANTS

The investment grants/subsidies reported here relate to amounts received for developing areas in the Federal Republic of Germany and North America. For investment grants/subsidies amounting to €0.5 million (2017: €0 million) the conditions for the appropriation are not (fully) met as of the reporting date.

**TAB. 3.88**

<b>GOVERNMENT GRANTS</b>		<b>TAB. 3.88</b>
in € million	2017	2018
Investment grants/subsidies .....	1.7	0.7
<b>Government grants</b>	<b>1.7</b>	<b>0.7</b>

### SHARE-BASED PAYMENT PROGRAMME (IFRS 2)

The k+s Group's share-based payment programme is a cash-settled share-based payment plan that forms a component of performance-related pay (LTI II programme). The share-based payment programme (LTI II) went live on 1 January 2018. A new programme begins on 1 January of each year. Eligible to join the programme are non-payscale managers and specialists who have an active contract of employment as at 1 January of the year concerned, as well as all members of the Board of Executive Directors.

◇ 'Remuneration report', page 134

The programme has a three-year observation period. Decisive for the LTI II is the performance of k+s shares (incl. dividends) as compared to the performance of the MDAX (performance index). If the k+s share price performance is equal to the performance of the MDAX during the reference period, target achievement is 100%. If the price performance of the k+s share exceeds or falls short of the performance of the MDAX, the percentage rate of target achievement increases or decreases on a linear basis by the same percentage. Maximum target achievement is 200% and minimum achievement is 0%. The amount to be paid is determined by multiplying the individual target amount of the eligible beneficiary at the start of the programme by the degree of target achievement of the respective completed programme.

Payment is made in April of the year following the end of the programme. In the event of termination of an employment contract or reaching retirement age, a discounted pro-rata payment for all current tranches is generally made in April of the following year.

For cash-settled share-based payment (LTI II), provisions of €3.8 million (2017: €0 million) were recognised as at 31 December 2018. Personnel expenses from additions to provisions in 2018 amounted to €3.8 million (2017: €0 million).

### RELATED PARTIES

#### RELATED COMPANIES

In addition to the subsidiaries included in the consolidated financial statements, the k+s Group has relations with other related companies; these include non-consolidated subsidiaries, joint ventures and companies over which the k+s GROUP can exercise significant influence (associates). A complete summary of all related companies can be found in the list of shareholdings on page 212.

Table 3.89 shows k+s Group transactions with non-consolidated subsidiaries in the reporting period. The transactions were conducted at arm's length. **TAB. 3.89**

Trade revenues are mostly the result of goods sold by consolidated companies to foreign distribution companies. Goods and services received largely consist of supplies of explosives and chemical products by a German subsidiary as well as commissions invoiced by foreign distribution companies.

On 31 December 2018, the outstanding balances in table 3.90 with non-consolidated subsidiaries were reported: **TAB. 3.90**

As in the previous year, there were no allowances on receivables from affiliated companies as at the balance sheet date. There are no contingency insurance policies for receivables from non-consolidated subsidiaries. Banking receivables are the result of centralised withdrawals and deposits of cash at k+s AKTIENGESELLSCHAFT (cash pooling). As at the balance sheet date, there were no loans to non-consolidated subsidiaries.

Long-term loans with a book value of €2.8 million (2017: €0 million) exist at the reporting date for joint ventures and associated companies.

## RELATED PERSONS

Related persons are defined as persons who are responsible for the planning, management and monitoring of a company. They include the Board of Executive Directors and the Supervisory Board.

The remuneration of related persons is presented in the following section as well as in the Remuneration Report section in the combined Management Report. There were no other material transactions with related persons.

The remuneration system for the Board of Executive Directors has the following elements:

- + regular monthly payments (fixed salary) to which non-cash benefits are added
- + performance-related one-off payment (STI incl. performance factor)
- + long-term incentive (LTI) programme

The total remuneration of the Executive Board in the year under review was made up of four members, three of whom were in office year-round. In the previous year, the board consisted of five members, three of whom were in office year-round.

The individual remuneration received by the members of the Board of Executive Directors in the 2018 financial year is disclosed in the Remuneration Report section of the combined Management Report on page 138.

The remuneration system for the Supervisory Board has the following elements:

- + Fixed remuneration
- + Additional fixed remuneration, depending on membership of one or more committees
- + Attendance fees

In addition to the Supervisory Board remuneration, employee representatives who are employees of the k+s Group receive remuneration that is not related to activities performed for the Supervisory Board.

## TRANSACTIONS WITH NON-CONSOLIDATED SUBSIDIARIES

TAB. 3.89

in € million	2017	2018
Trade revenues	29.8	24.4
Goods and services received	20.5	25.7
Income from dividend payments and profit transfers	4.6	4.3
Other income	0.2	0.2
Other expenses	1.4	1.4

## BALANCES WITH NON-CONSOLIDATED SUBSIDIARIES

TAB. 3.90

in € million	2017	2018
Receivables from affiliated companies	6.7	6.5
– of which banking receivables	–	–
Liabilities to affiliated companies	11.0	10.6
– of which banking receivables	6.9	5.4

## RELATED PARTY DISCLOSURES (IAS 24)

TAB. 3.91

in € million	2017	2018
Short-term benefits	4.7	3.6
Post-employment benefits	3.1	2.3
Other long-term benefits	–	–
Termination benefits of the employment relationship	3.1	–
Share-based payment	–	0.6
Other transactions with related persons	2.0	2.0

A member of the family of a Supervisory Board member is employed by the k+s Group. Remuneration is in accordance with the internal remuneration guidelines of the k+s Group and corresponds to the usual remuneration of persons in comparable positions.

The individual remuneration received by the members of the Supervisory Board in the 2018 financial year is disclosed in the Remuneration Report section of the combined Management Report on page 142.

**DISCLOSURES ON REMUNERATION IN ACCORDANCE WITH SECTION 314 (1) NO. 6A OF THE HGB****TAB. 3.92**

in € million	2017	2018
Total remuneration of the Supervisory Board	2.1	2.0
– of which fixed	2.1	2.0
Total remuneration of the Board of Executive Directors	4.7	5.1
– of which fixed	2.4	2.2
– of which performance-related	2.1	1.4
– of which share-based payments	–	1.6
Total remuneration of former members of the Board of Executive Directors and their surviving dependants	2.1	2.1

**MEMBERS OF THE BOARD OF EXECUTIVE DIRECTORS**

A list of members of the Board of Executive Directors and its responsibilities can be found in the Management Report on page 74; this list is also part of the Notes to the Consolidated Financial Statements.

**LIST OF SHAREHOLDINGS IN ACCORDANCE****WITH SECTION 313 OF THE HGB**

The figures in the following tables also apply to the previous year. If there are any deviations, these are commented on in a footnote on the company concerned. TAB. 3.93

**MEMBERS OF THE SUPERVISORY BOARD**

A list of members of the Supervisory Board and its committees can be found in the Management Report on page 69; this list is also part of the Notes to the Consolidated Financial Statements.

**SHARES HELD IN K+S AKTIENGESELLSCHAFT**

On 27 December 2018, DIMENSIONAL HOLDINGS INC., Austin (USA), notified us that its share of the voting rights had exceeded the threshold of 3% and that it now holds 3.005% of the company. On 31 December 2018, DWS INVESTMENT GMBH, Frankfurt (Germany), now holds 5.69% of the company. Until the end of February, no other shareholder notified us of shareholdings above the legal reporting threshold of 3%.

**LIST OF SHAREHOLDINGS IN ACCORDANCE WITH SECTION 313 OF THE HGB**

**TAB. 3.93**

in %	Company's registered office	Interest held	Share of voting rights
<b>Fully consolidated German companies (16 companies)</b>			
K+S Aktiengesellschaft	Kassel	Germany	—
Chemische Fabrik Kalk GmbH	Cologne	Germany	100.00
Deutscher Straßen-Dienst GmbH	Hanover	Germany	100.00
esco – european salt company GmbH & Co. KG <sup>1,2</sup>	Hanover	Germany	100.00
esco international GmbH <sup>2</sup>	Hanover	Germany	100.00
K+S Bahamas Salt Asset Management GmbH & Co. KG <sup>1,7</sup>	Kassel	Germany	100.00
K+S Baustoffrecycling GmbH <sup>3</sup>	Sehnde	Germany	100.00
K+S Beteiligungs GmbH <sup>2,3</sup>	Kassel	Germany	100.00
K+S Entsorgung GmbH <sup>2,3</sup>	Kassel	Germany	100.00
K+S Kali GmbH <sup>2,3</sup>	Kassel	Germany	100.00
K+S North America Asset Management GmbH <sup>2</sup>	Kassel	Germany	100.00
K+S North America Salt Asset Management GmbH & Co. KG <sup>1,7</sup>	Kassel	Germany	100.00
K+S Salz GmbH <sup>2,3</sup>	Hanover	Germany	100.00
K+S Transport GmbH <sup>2,3</sup>	Hamburg	Germany	100.00
K+S Versicherungsvermittlungs GmbH	Kassel	Germany	100.00
Kali-Union Verwaltungsgesellschaft mbH <sup>2,3</sup>	Kassel	Germany	100.00
<b>Fully consolidated foreign companies (42 companies)</b>			
Canadian Brine, Ltd.	Pointe-Claire	Canada	100.00
Compania Minera Punta de Lobos Ltda.	Santiago de Chile	Chile	100.00
Empresa de Servicios Ltda.	Santiago de Chile	Chile	100.00
Empresa Maritima S.A.	Santiago de Chile	Chile	99.59
esco benelux N.V.	Diegem	Belgium	100.00
esco france S.A.S.	Levallois-Perret	France	100.00
esco Spain S.L.	Barcelona	Spain	100.00
Frisia Zout B.V.	Harlingen	Netherlands	100.00
Glendale Salt Development, LLC	Chicago	USA	100.00
Inagua General Store, Ltd.	Nassau	Bahamas	100.00
Inversiones Columbus Ltda.	Santiago de Chile	Chile	100.00
Inversiones Empremar Ltda.	Santiago de Chile	Chile	100.00
Inversiones K+S Sal de Chile SpA	Santiago de Chile	Chile	100.00
K plus S Salt Australia Pty Ltd	Perth	Australia	100.00
K+S Asia Pacific Pte. Ltd.	Singapore	Singapore	100.00
K+S Belgium Holding B.V.B.A.	Diegem	Belgium	100.00
K+S Canada Holdings Ltd.	Vancouver	Canada	100.00
K+S Chile S.A.	Santiago de Chile	Chile	99.64
K+S Czech Republic a.s.	Prague	Czech Republic	100.00
K+S Finance Belgium BVBA	Diegem	Belgium	100.00
K+S Finance Ltd.	St. Julians	Malta	100.00
K+S France S.A.S.	Dombasle-sur-Meurthe	France	100.00
K+S (Huludao) Magnesium Products Co. Ltd.	Huludao	China	100.00
K+S Investments Ltd.	St. Julians	Malta	100.00

## LIST OF SHAREHOLDINGS IN ACCORDANCE WITH SECTION 313 OF THE HGB

TAB. 3.93

in %	Company's registered office		Interest held	Share of voting rights
K+S KALI France S.A.S.	Reims	France	100.00	100.00
K+S KALI Wittenheim S.A.S.	Wittenheim	France	100.00	100.00
K+S Montana Holdings, LLC	Chicago	USA	100.00	100.00
K+S Netherlands Holding B.V.	Harlingen	Netherlands	100.00	100.00
K+S North America Corporation	Chicago	USA	100.00	100.00
K+S Perú S.A.C.	Lima	Peru	100.00	100.00
K+S Potash Canada General Partnership	Vancouver	Canada	100.00	100.00
K+S Salt LLC	Chicago	USA	100.00	100.00
K+S Windsor Salt Ltd.	Vancouver	Canada	100.00	100.00
Montana US Parent Inc.	Chicago	USA	100.00	100.00
Morton Bahamas Ltd.	Nassau	Bahamas	100.00	100.00
Morton Salt, Inc.	Chicago	USA	100.00	100.00
Salina Diamante Branco Ltda.	Rio de Janeiro	Brazil	100.00	100.00
Salines Cérébos S.A.S.	Levallois-Perret	France	100.00	100.00
Servicios Marítimos Patillos S.A.	Santiago de Chile	Chile	100.00	100.00
Servicios Portuarios Patillos S.A.	Santiago de Chile	Chile	99.89	99.89
VATEL Companhia de Produtos Alimentares S.A.	Alverca	Portugal	100.00	100.00
Weeks Island Landowner, LLC	Chicago	USA	100.00	100.00
<b>Non-consolidated German companies (7 companies)<sup>4</sup></b>				
4. K+S Verwaltungs GmbH	Kassel	Germany	100.00	100.00
Beienrode Bergwerks-GmbH	Kassel	Germany	89.81	89.81
esco Verwaltungs GmbH	Hanover	Germany	100.00	100.00
Ickenroth GmbH	Staudt	Germany	100.00	100.00
K+S An-Instituts Verwaltungsgesellschaft mbH	Kassel	Germany	100.00	100.00
MSW-Chemie GmbH	Langelsheim	Germany	100.00	100.00
Wohnbau Salzdetfurth GmbH	Bad Salzdetfurth	Germany	100.00	100.00
<b>Non-consolidated foreign companies (17 companies)<sup>4</sup></b>				
Al Bariq for Fertilizer Plant Co. Ltd. <sup>8</sup>	Riyadh	Saudi Arabia	30.00	30.00
Imperial Thermal Products, Inc.	Chicago	USA	100.00	100.00
ISX Oil & Gas Inc.	Calgary	Canada	100.00	100.00
K plus S Africa (Pty) Ltd.	Johannesburg	South Africa	100.00	100.00
K plus S Middle East FZE	Jebel Ali, Dubai	United Arab Emirates	100.00	100.00
K+S Brasileira Fertilizantes e Produtos Industriais Ltda.	São Paulo	Brazil	100.00	100.00
K+S Denmark Holding ApS	Hellerup	Denmark	100.00	100.00
K+S Entsorgung (Schweiz) AG	Delémont	Switzerland	100.00	100.00
K+S Fertilizers (India) Private Limited	New Delhi	India	100.00	100.00
K+S Italia S.r.l.	Verona	Italy	100.00	100.00
K+S Legacy GP Inc.	Vancouver	Canada	100.00	100.00
K+S Mining Argentina S.A.	Buenos Aires	Argentina	100.00	100.00
K+S Polska Sp. z o.o.	Poznan	Poland	100.00	100.00
K+S UK & Eire Ltd.	Hertford	United Kingdom	100.00	100.00

**LIST OF SHAREHOLDINGS IN ACCORDANCE WITH SECTION 313 OF THE HGB**

**TAB. 3.93**

in %	Company's registered office	Interest held	Share of voting rights
Kali AG	Frauenkappelen Switzerland	100.00	100.00
OOO K+S Rus	Moscow Russian Federation	100.00	100.00
Shenzhen K+S Trading Co. Ltd.	Shenzhen China	100.00	100.00
<b>Associates and joint ventures (4 companies)<sup>5</sup></b>			
Börde Container Feeder GmbH	Haldensleben Germany	33.30	33.30
Grainpulse Limited	Kampala Uganda	44.00	44.00
Morton China National Salt (Shanghai) Salt Co., Ltd.	Shanghai China	45.00	45.00
Werra Kombi Terminal Betriebsgesellschaft mbH	Philippsthal Germany	50.00	50.00
<b>Other equity investments (6 companies)<sup>6</sup></b>			
Fachschule f. Wirtschaft und Technik Gem. GmbH	Clausthal Germany	9.40	9.40
Lehrter Wohnungsbau GmbH	Lehrte Germany	6.67	6.67
Nieders. Gesellschaft zur Endab Lagerung von Sonderabfall mbH	Hanover Germany	0.10	0.10
Poldergemeinschaft Hohe Schaar	Hamburg Germany	8.66	8.66
Pristav Pardubice a.s.	Pardubice Czech Republic	0.41	0.41
Zoll Pool Hamburg AG	Hamburg Germany	1.43	1.43

<sup>1</sup> Exemption of section 264b of the HGB applied.

<sup>2</sup> Exemption of section 291 of the HGB applied.

<sup>3</sup> Exemption of section 264(3) of the HGB applied.

<sup>4</sup> Not consolidated due to immateriality.

<sup>5</sup> Not equity-accounted due to immateriality.

<sup>6</sup> Amount of equity and prior-year profit/loss not disclosed due to immateriality.

<sup>7</sup> Unlimited liability of the parent company or another consolidated company.

<sup>8</sup> Control assumed on the basis of potential voting rights.

**AUDITOR'S FEES**

The audit services include the audit of the consolidated financial statements and annual financial statements of all consolidated German companies. The other assurance services relate primarily to the issuance of comfort letters, energy law compliance audits and the EMIR audit. The auditor provided tax advisory of €20,000 as well as other consultancy services amounting to €10,000.

**AUDITOR'S FEES**

**TAB. 3.94**

in € million	2017	2018
Audit services	0.7	0.8
Other assurance services	0.4	0.4
<b>Auditor's fees</b>	<b>1.1</b>	<b>1.2</b>

**DECLARATION OF CONFORMITY WITH THE GERMAN CORPORATE GOVERNANCE CODE**

The declaration of conformity pursuant to section 161 of the German Stock Corporation Act (Aktiengesetz, AktG) with the recommendations of the Government Commission on the German Corporate Governance Code was issued by the Board of Executive Directors and the Supervisory Board of k+s Aktiengesellschaft for 2018/2019. It is available to shareholders on the k+s GROUP website ([www.k-plus-s.com](http://www.k-plus-s.com)) and also published on page 77 of the combined Management Report.

**EVENTS AFTER THE BALANCE SHEET DATE**

No significant changes have occurred in the general economic environment or in the situation of the industry since the end of the financial year under review.

Kassel, 5 March 2019

**K+S AKTIENGESELLSCHAFT  
BOARD OF EXECUTIVE DIRECTORS**

# INDEPENDENT AUDITOR'S REPORT

To K+S AKTIENGESELLSCHAFT, Kassel

## REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND THE COMBINED MANAGEMENT REPORT

### AUDIT OPINIONS

We audited the consolidated financial statements of K+S AKTIENGESELLSCHAFT, Kassel, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2018, the consolidated income statement and statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statements of cash flows for the financial year from 1 January 2018 through 31 December 2018 as well as the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we audited the group management report of K+S AKTIENGESELLSCHAFT, Kassel, which is combined with the company's management report, for the financial year from 1 January 2018 through 31 December 2018. In conformity with German legal regulations, we have not audited the parts of the combined management report specified in the Annex to the independent auditor's report with regard to their content.

In our opinion, based on our knowledge obtained during the audit,

- + the accompanying consolidated financial statements comply with IFRS as adopted by the EU and the supplementary German legal regulations to be applied in accordance with Section 315e(1) of the HGB (German Commercial Code) in all material respects and give a true and fair view of the Group's net assets and financial position as of 31 December 2018 as well as its results of operations for the financial year from 1 January 2018 through 31 December 2018 in accordance with these requirements and
- + the accompanying combined management report as a whole provides a suitable view of the Group's position. In all material respects, this combined management report is consistent

with the consolidated financial statements, complies with German legal requirements and suitably presents the opportunities and risks of future development. Our audit opinion on the combined management report does not extend to the content of the parts of the combined management report detailed in the Annex to the independent auditor's report.

Pursuant to Section 322(3) Sentence 1 of the HGB, we state that our audit has not led to any reservations with respect to the propriety of the consolidated financial statements and the combined management report.

### BASIS FOR THE AUDIT OPINIONS

We conducted our audit of the consolidated financial statements and the combined management report in accordance with Section 317 of the HGB and the EU Audit Regulation (No. 537/2014; hereinafter referred to as "EU Audit Regulation"), and generally accepted German standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer, IDW). Our responsibilities under these requirements and principles are further described in the Section "Auditor's responsibility for the audit of the consolidated financial statements and the combined management report" of our report. We are independent of the group companies in accordance with European and German commercial law and rules of professional conduct and we have fulfilled our other ethical responsibilities applicable in Germany in accordance with these requirements. In addition, pursuant to Article 10(2) lit. f EU Audit Regulation, we declare that we have not provided any prohibited non-audit services pursuant to Article 5(1) 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 combined 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 2018 through 31 December 2017. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our opinion thereon but we do not provide a separate opinion on these issues.

In the following we present the key audit matters in our view:

1. Provisions for mining obligations
2. Impairment of goodwill for "Salt America"
3. Impairment of goodwill for "Potash and Magnesium Products"

Our presentation of these key audit matters is structured as follows:

- a) Description (including reference to corresponding information in the consolidated financial statements)
- b) Auditor's response
- c) Important findings, if applicable

### 1. MINING PROVISIONS

a) In the consolidated financial statements of k+s Aktiengesellschaft as of 31 December 2018, mining provisions of €1,015.1 million (equivalent to 10.2% of total Group assets) are reported under non-current provisions (€73 million is reported under current provisions). Changes in interest rates can significantly impact the measurement of this major balance sheet item. Due to their long-term nature, furthermore, the provisions are heavily based on estimates and assumptions by the legal representatives with regard to future cost developments and technological innovations. As estimated values result in an increased risk of incorrect information in financial reporting and measurement decisions by the legal representatives have a direct and significant impact on the consolidated financial statements, we rated this matter as particularly significant.

The disclosures about the mining provisions are contained in Section 22 of the notes to the consolidated financial statements

b) In the course of our audit, we critically assessed the development of the liabilities reported in the previous year and analysed the measures taken by the legal representatives to assess the completeness and valuation of the mining obligations. In this connection, we examined the structures and procedures of the process for establishing mining provisions with regard to their appropriateness and the effectiveness of the audit-relevant controls. In doing so, we have prepared our analysis based on our knowledge of the legal, contractual and regulatory requirements, the up-to-dateness of the respective mine stabilisation concepts and cost rates, and our audit results from the previous year, and examined the current level of the financial obligations resulting from regulatory requirements and mine sealing concepts by means of evidence in the form of correspondence with the mining authorities and individual audit reports. In examining the discount rate, we received verification of the applied parameters.

### 2. IMPAIRMENT OF GOODWILL FOR "SALT AMERICA"

a) In the consolidated financial statements of k+s Aktiengesellschaft as of 31 December 2018, goodwill of EUR 663.8 million (equivalent to 6.7% of total Group assets) from the cash-generating unit (cgu) "Salt America" is recognised under the balance sheet item "Goodwill from acquisitions of companies." The company subjects this material item of goodwill to an impairment test at the cgu level on the closing date of the financial year. The value in use to be compared to the respective carrying amount is determined according to the discounted cash flow method using a valuation model. The expected future cash flows are discounted using the weighted cost of capital of the respective cash-generating unit.

As the result of this valuation depends heavily on the estimates of the legal representatives with regard to the future cash flows and the applied discount rate and growth rate, this matter was a special focus of our audit.

The disclosures about goodwill are contained in Section 12 of the notes to the consolidated financial statements.

b) In the course of our audit, we examined the structures and procedures of the process for measuring goodwill with regard to their appropriateness and the effectiveness of the audit-relevant controls with the help of valuation specialists. To examine the appropriateness of the future cash flows used in the calculation, we, for example, compared these figures with the current budgets from the three-year planning adopted by the legal representatives and approved by the supervisory board, as well as with general and industry-specific market expectations.

As even relatively small changes in the applied discount rate can have significant effects on the determined value in use, we also received verification of the parameters applied to determine the discount rate, including particularly the risk-free interest rate, the market risk premium and the beta factor, including the weighted average cost of capital, as well as the assumptions on which the model is based, and reconstructed the calculation scheme for value in use.

Due to the materiality of the goodwill allocated to the cgu "Salt America" and to the fact that the measurement of this goodwill also depends on the general price development and economic conditions, which cannot be influenced by the Group, we carried out sensitivity analyses to audit whether the goodwill is sufficiently covered by the discounted cash flow surpluses.

We also examined the completeness and accuracy of the information required to be disclosed in the notes to the consolidated financial statements pursuant to IAS 36.

c) An increase in the discount factor by 1 percentage point to 7.0% does not cause the carrying amount of the goodwill allocated to "Salt America" to exceed its value in use according to the conducted sensitivity analysis.

### **3. IMPAIRMENT OF GOODWILL FOR "POTASH AND MAGNESIUM PRODUCTS"**

a) In the consolidated financial statements of K+S Aktiengesellschaft as of 31 December 2018, goodwill of EUR 15.7 million (equivalent to 0.2% of total Group assets) allocated to the cgu "Potash and Magnesium Products" is recognized under the balance sheet item "Goodwill from acquisitions of companies." The company subjects this item of goodwill to an impairment test at the cgu level on the closing date of the financial year. The value in use to be compared to the respective carrying amount is determined according to the discounted cash flow method using a measurement model.

The result of this valuation depends heavily on uncertainties with regard to the future cash flows and the applied discount rate. The uncertainties with regard to the cash flows result from the current state of the potash market and the price development, the legal uncertainties with regard to the discharge of saline wastewater from the Werra plant and the risks pertaining to the startup phase of the new potash mine in Bethune. This matter was therefore a special focus of our audit.

The disclosures about goodwill are contained in Section 12 of the notes to the consolidated financial statements.

b) To examine the appropriateness of the future cash flows used in the calculation of goodwill, we, for example, compared these figures with the current budgets from the planning adopted by the legal representatives and approved by the supervisory board, as well as with general and industry-specific market expectations, against the background of the current state of the potash market and the price development. We also critically evaluated the legal representatives' assessment of the consequences that the disposal of saline wastewater could have for the Group. With regard to the Bethune site, we compared the projected cash flow surpluses of the cgu through 2030, which take into account the successive establishment of production capacities, with market expectations. Considering that even relatively small changes in the applied discount rate can have significant effects on the determined value in use, we also received verification of the parameters applied to determine the discount rate, including particularly the risk-free interest rate, the market risk premium and the beta factor, including the weighted average cost of capital, as well as the assumptions

on which the model is based, and reconstructed the calculation scheme for value in use with regard to consistency and the calculation system. Due to the uncertainties related to the goodwill allocated to the cgu "Potash and Magnesium Products" and to the fact that the measurement of this goodwill also depends on the general price development and economic conditions, which cannot be influenced by the Group, we used sensitivity analyses to determine whether the goodwill is sufficiently covered by the discounted cash flow surpluses.

We also examined the completeness and accuracy of the information required to be disclosed in the notes to the consolidated financial statements pursuant to IAS 36.

c) An increase in the discount factor by 1 percentage point to 7.0 percent does not cause the carrying amount of the goodwill allocated to "Potash and Magnesium Products" to exceed its value in use according to the conducted sensitivity analysis.

#### **OTHER INFORMATION**

The legal representatives are responsible for the other information. The other information comprises:

- + the unaudited sections of the combined management report mentioned in the Annex to the independent Auditor's report,
- + assurance pursuant to Sections 297(2) Sentence 4 of the HGB to the consolidated financial statements and assurance pursuant to Section 315(1) Sentence 5 of the HGB to the group management report, and
- + the remaining components of the annual report, with the exception of the audited consolidated financial statements and the combined management report and our Auditor's Report.

Our audit opinions on the consolidated financial statements and the combined management report do not extend to cover the other information, and accordingly we do not issue an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, to consider whether the other information

- + is materially inconsistent with the consolidated financial statements, the combined management report or our knowledge obtained in the audit, or
- + otherwise appears to be substantially misstated.

#### **RESPONSIBILITIES OF THE LEGAL REPRESENTATIVES AND THE SUPERVISORY BOARD FOR THE CONSOLIDATED FINANCIAL STATEMENTS AND THE COMBINED MANAGEMENT REPORT**

The legal representatives are responsible for the preparation of the consolidated financial statements which comply with IFRS as adopted by the EU and the supplementary requirements of the German legal regulations pursuant to Section 315e(1) of the HGB in all material respects, so that the consolidated financial statements give a true and fair view of the net assets, financial position, and results of operations of the Group in accordance with these requirements. In addition, the legal representatives are responsible for the internal controls they have identified as necessary in order to enable the preparation of consolidated financial statements that are free from material misstatements, whether intentional or unintentional.

In preparing the consolidated financial statements, the legal representatives are responsible for assessing the Group's ability to continue as a going concern. Furthermore, they have the responsibility to disclose matters relating to the Group's ability to continue as a going concern, if relevant. In addition, they are responsible for using the going concern basis of accounting, unless the intention is to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

In addition, the legal representatives are responsible for the preparation of the combined management report, which as a whole provides a suitable view of the Group's position, is consistent with the consolidated financial statements in all material respects, complies with German legal regulations and suitably presents the opportunities and risks of future development. Furthermore, the legal representatives are responsible for such arrangements and measures (systems) which they have deemed necessary in order to enable the preparation of a combined management report in accordance with the applicable German legal regulations and to furnish sufficient and appropriate evidence for the statements in the combined management report.

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

## **AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND THE COMBINED MANAGEMENT REPORT**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatements, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the findings of the audit, is in accordance with the German legal regulations, 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 the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 of the HGB and the EU Audit Regulation and generally accepted German standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (IDW) will always detect a material misstatement when it exists. 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 combined management report.

As part of an audit, we exercise professional judgement and maintain professional scepticism. We also

- + identify and assess the risks of material misstatements in the consolidated financial statements and in the combined 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 one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the overriding of internal controls.
- + obtain an understanding of internal controls relevant to the audit of the consolidated financial statements and the arrangements and measures relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

- + evaluate the appropriateness of the accounting policies used by the legal representatives and the reasonableness of accounting estimates and related disclosures made by the legal representatives.
- + form a conclusion on the appropriateness of the legal representatives' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists relating to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that there is a material uncertainty, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements and combined management report, or, if such disclosures are inadequate, to modify our opinion. 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 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 represent the underlying transactions and events in a manner such that the consolidated financial statements give a true and fair view of the net assets and financial position as well as the results of operations of the Group in accordance with IFRS as adopted by the EU and the supplementary requirements of German law pursuant to Section 315e(1) of the HGB.
- + obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and the combined 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 combined management report with the consolidated financial statements, its legal consistency, and the view provided of the Group's position.
- + perform audit procedures on the forward-looking information presented by the legal representatives in the combined management report. On the basis of sufficient appropriate audit evidence, we particularly evaluate the significant assumptions underlying the forward-looking information by the legal representatives and evaluate the correct derivation of forward-looking information from these assumptions. We do not issue an independent opinion on the forward-looking

information or on the underlying assumptions. There is a significant unavoidable risk that future events will differ materially from the forward-looking information.

We communicate with those charged with governance among other matters, on the planned scope and timing of the audit and significant audit findings, including any deficiencies in internal control, which we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, 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 reporting period and are therefore the key audit matters. We describe these matters in our auditor's report on the consolidated financial statements unless law or regulation precludes public disclosure about the matter.

## OTHER LEGAL AND REGULATORY REQUIREMENTS

### **OTHER INFORMATION PURSUANT TO ARTICLE 10 EU AUDIT REGULATION**

We were appointed by the Annual General Meeting on 15 May 2018 to audit the consolidated financial statements. We were engaged by the Supervisory Board on 23 August 2018. We have been engaged continuously as the auditors of k+s Aktiengesellschaft, Kassel, since the financial year 1972.

We confirm that the audit opinions contained in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 EU Audit Regulation ("Prüfungsbericht").

**RESPONSIBLE AUDITOR**

The auditor responsible for the audit is Dr Christian H. Meyer.

Hanover, 5 March 2019

DELOITTE GMBH  
Wirtschaftsprüfungsgesellschaft

(Heiner Kompenhans)	(Dr Christian H. Meyer)
Auditor	Auditor

**ANNEX TO THE INDEPENDENT AUDITOR'S  
REPORT: UNAUDITED PARTS OF THE COMBINED  
MANAGEMENT REPORT**

The content of the following parts of the combined management report has not been audited by us:

- + the Non-Financial Statement contained in the chapter "Non-financial statement" as well as in the chapter "Corporate strategy" in the sections "Sustainability programme", "k+s Group action areas", "Concrete sustainability targets through 2030" and "Stakeholder dialogue" as well as in the chapter "Declaration on corporate governance" in the section "Sustainability management" in accordance with Sections 289b-289e of the HGB as well as Sections 315b and 315c of the HGB,
- + the declaration on corporate governance contained in the section "Declaration on Corporate Governance" of the combined management report in accordance with Sections 289f and 315d of the HGB.

# INDEPENDENT AUDITOR'S REPORT ON A LIMITED ASSURANCE ENGAGEMENT

To the Supervisory Board of the k+s Aktiengesellschaft, Kassel/Germany

## OUR ENGAGEMENT

According to our engagement, we have performed a limited assurance engagement on the non-financial Group Report of k+s Aktiengesellschaft, Kassel/Germany, (hereinafter: "the Company") in accordance with Section 315b German Commercial Code (HGB), for the period from January 1 to 31 December 2018 (hereinafter: "Non-Financial Group Report").

Our engagement has not covered the references on websites of the Company.

## RESPONSIBILITY OF THE EXECUTIVE DIRECTORS

The executive directors of k+s Aktiengesellschaft are responsible for the preparation of the Non-Financial Group Report in accordance with Sections 315b, 315c German Commercial Code (HGB) in connection with Sections 289b to 289e as well as 315b, 315c in connection with Sections 289c to 289e German Commercial Code (HGB).

In preparing the Non-Financial Group Report, the executive directors used the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) stated under the "Core" option and have indicated these within the Non-Financial Group Report.

The responsibility of the Company's executive directors includes the selection and application of appropriate methods for preparing the Non-Financial Group Report as well as making assumptions and estimates related to individual non-financial disclosures, which are reasonable in the circumstances. In addition, the executive directors are responsible for such internal control they have determined necessary to enable the preparation of the Non-Financial Group Report that is free from material misstatements, whether intentional or unintentional.

## PRACTITIONER'S RESPONSIBILITY

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

We are independent of the Company in accordance with the provisions under German commercial law and professional requirements, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Our audit company applies the German national legal requirements and the German profession's pronouncements for quality control, in particular the by-laws governing the rights and duties of public auditors and chartered accountants (Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer) as well as the IDW Standard on Quality Control 1: Requirements for Quality Control in Audit Firms [IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis (IDW QS 1)], which comply with the International Standard on Quality Control 1 (ISQC 1) issued by the International Auditing and Assurance Standards Board (IAASB).

We conducted our assurance engagement in compliance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information" issued by the IAASB. This standard requires that we plan and perform the assurance engagement in a form that enables us to conclude with limited assurance that nothing has come to our attention that causes us to believe that the information disclosed in the Non-Financial Group Report has not complied, in all material respects, with Sections 315b, 315c in connection with Sections 289c to 289e German Commercial Code (HGB). In a limited assurance engagement the assurance procedures are less in extent than for a reasonable assurance engagement and, therefore, a substantially lower level of assurance is obtained. The assurance procedures selected depend on the practitioner's professional judgment.

Within the scope of our limited assurance engagement, which was performed from September 2018 to March 2019, we conducted, amongst others, the following audit procedures and other activities:

- + Obtaining an understanding of the structure of the sustainability organisation and of the stakeholder engagement
- + Interview of the executive directors and relevant employees that participated in the preparation of the Non-Financial Group Report about the process of preparation, the measures on hand and precautionary measures (system) for the preparation of the Non-Financial Group Report as well as about the information within the Non-Financial Group Report
- + Identification of the possible risks of material misstatement within the Non-Financial Group Report
- + Analytical assessment of disclosures within the Non-Financial Group Report
- + Review of selected internal and external documents
- + Assessment of the data collection, validation and reporting processes as well as the reliability of the reported data through sample surveys
- + Reconciliation of the disclosures within the Non-Financial Group Report with the respective data within the consolidated financial statements as well as the combined management report
- + Evaluation of the presentation of the disclosures

#### **PRACTITIONER'S CONCLUSION**

Based on the assurance work performed and evidence obtained, nothing has come to our attention that causes us to believe that the information disclosed in the Non-Financial Group Report of the Company, for the period from 1 January to 31 December 2018 has not complied, in all material aspects, with Sections 315b, 315c German Commercial Code (HGB) in connection with Sections 289c to 289e German Commercial Code (HGB).

Our audit opinion does not refer to the references on websites of the Company.

#### **PURPOSE OF THE ASSURANCE STATEMENT**

We issue this report on the basis of the engagement agreed with the Supervisory Board of k+s Aktiengesellschaft. The limited assurance engagement has been performed for purposes of the Company's Supervisory Board and the report is solely intended to inform the Company's Supervisory Board on the results of the assurance engagement.

#### **LIABILITY**

The report is not intended to provide third parties with support in making (financial) decisions. Our responsibility exclusively refers to the Company and is also restricted under the engagement agreed with the Company on 21 December 2018 as well as in accordance with the "General engagement terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (German public auditors and German public audit firms)" from 1 January 2017 of the Institut der Wirtschaftsprüfer in Deutschland e.V. We do not assume any responsibility to third parties.

Hanover/Germany, 5 March 2019

DELOITTE GMBH

Wirtschaftsprüfungsgesellschaft

Signed: Heiner Kompenhans  
(German Public Auditor)

Signed: Christian Meyer  
(German Public Auditor)

# FURTHER INFORMATION

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## ABOUT THIS REPORT

The k+s Annual Report combines the financial and sustainability reporting. The information relates to the reporting period from 1 January 2018 to 31 December 2018 and is currently reported on a yearly basis.

### NON-FINANCIAL STATEMENT

Statements on relevant sustainability issues are contained in the non-financial statement of the combined management report in accordance with the CSR Directive Implementation Act (CSR-RUG) and are supplemented by references to other sections in the management report. References to information outside of the combined management report are additional information and are not part of the non-financial statement.

### AUDIT

DELOITTE GmbH Wirtschaftsprüfungsgesellschaft (Hanover) has issued the non-financial statement in accordance with §§ 315b, 315c in conjunction with §§ 289c to 289e HGB of K + S AKTIENGESELLSCHAFT for the financial year from 1 January to 31 December 2018 according to ISAE 3000 with limited assurance.

The results of the audit were presented to and discussed by the Supervisory Board. The Supervisory Board included the vote of the auditor in its independent audit and approved the non-financial statement.

### REPORTING STANDARDS

At the same time, the 2018 Annual Report is the so-called "Communication on Progress" (CoP) for the UN GLOBAL COMPACT, to which the Board of Executive Directors is explicitly committed. As a member of the UN GLOBAL COMPACT, k+s supports the ten

principles of human rights, labor standards, environmental protection and anti-corruption.

The published sustainability information is based on the internationally recognised guidelines of the GLOBAL REPORTING INITIATIVE (GRI). This report has been prepared in accordance with the GRI standards: Option 'Core'. In addition, k+s takes into account the GRI G4 Sector Disclosures: Mining and metals.

 [GRI INDEX](#) and [UN GLOBAL COMPACT Principles](#), pages 228–233

The following table presents the key topics of k+s, the associated GRI standards and the respective distinction of the topic with regard to its economic, ecological and social impact according to [GRI 103-1. TAB. 4.1](#)

### SUSTAINABLE DEVELOPMENT GOALS (SDGS)

For achieving the 17 Sustainable Development Goals (SDGs) companies are important partners. And k+s is also actively committed to these. This involves "Transforming our world: the 2030 Agenda for Sustainable Development". The k+s GROUP assesses its current operations with the SDGs and considers these strategically as part of its sustainability management activities.

k+s recognises that the SDGs and targets are integrated and indivisible. For transparency reasons, we have used the level of 169 targets (and somehow the level of 230 indicators) as reference point for the SDGs. With its products for the customer segment Agriculture, k+s contributes to SDG2 "Zero Hunger", especially to targets 2,1; 2,3 and 2,4.

**BOUNDARIES OF K+S ACTION AREAS RELATED TO VALUE CHAIN (GRI 103-1)**

TAB 4.1

K+S Action area	GRI Standards	Boundaries						SDGs targets
		Exploration	Mining	Production	Logistics	Sales/Marketing	Application	
Health & Safety	GRI 403: Occupational Health and Safety 2018; GRI 416: Customer Health Safety 2016	x	x	x	x		x	 8.8
Diversity & Inclusion	GRI 405: Diversity and Equal Opportunity 2016; GRI 406: Non-discrimination 2016		x	x	x	x	x	 5.1  5.5  8.5
Human Rights	GRI 407: Freedom of Association and Collective Bargaining 2016; GRI 408: Child Labor 2016; GRI 409: Forced or Compulsory Labor 2016; GRI 412: Human Rights Assessment 2016	x	x	x	x	x	x	 8.7
Water	GRI 303: Water and Effluents 2018		x	x			x	 12.2  15.1
Waste Management	GRI 306: Effluents and Waste 2016			x				 12.5
Energy & Climate	GRI 302: Energy 2016; GRI 305: Emissions 2016		x	x	x		x	 12.2  13.1
Sustainable Supply Chains	GRI 308: Supplier Environmental Assessment 2016; GRI 414: Supplier Social Assessment 2016	x	x	x	x	x		 8.7
Compliance & Anti-Corruption	GRI 102: General Disclosures; GRI 205: Anti-corruption 2016; GRI 206: Anti-competitive Behavior 2016; GRI 307: Environmental Compliance 2016; GRI 415: Politische Einflussnahme 2016; GRI 419: Socioeconomic Compliance 2016	x	x	x	x	x	x	 16.5
Stakeholder Dialogue	GRI 102: General Disclosures (40-44)	x	x	x	x	x	x	 16.7

## DATA RECORDING AND REPORTING LIMITS

The consolidated financial statements not only include K+S AKTIENGESELLSCHAFT, but also all major Group companies. Subsidiaries of minor significance are not consolidated. For the worldwide collection of financial data, SAP systems are widely used. In the present Annual Report, these are disclosed for all fully consolidated Group companies.

We also collect most of our personnel key figures worldwide with SAP systems. They cover all fully consolidated companies. Key figures concerning human rights due diligence are currently recorded centrally with individual data sheets and for all fully consolidated and non-consolidated companies of the K+S GROUP.

The majority of HSE key figures are recorded using an SAP system for all fully consolidated and non-consolidated companies in which K+S AKTIENGESELLSCHAFT directly or indirectly holds a majority interest or in which K+S AKTIENGESELLSCHAFT exercises direct or indirect joint control or takes influence in decisions by Articles of Association or by-laws.

We record the environmental key figures of all fully consolidated production sites. For uniform recording, K+S uses the site information system SoFi. Performance indicators in terms of CSR-RUG are calculated based on measured and extrapolated values using individual data sheets. Reporting limits other than the scope of consolidation are presented accordingly in the section "Environment".

The purchase volume ordered by the purchasing department is mainly entered into the SAP system for all fully consolidated companies.

At present, we record our compliance key figures using individual data sheets for fully consolidated and non-consolidated companies.

▷ 'List of shareholdings', page 211–214.

# GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES

## GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES

TAB. 4.2

GRI-Standard	Page	Comment and online addition	UN Global Compact
GRI 101: Foundation 2016			
GRI 102: General Disclosures 2016			
<b>Organizational Profile</b>			
102-1 Name of the organization	Back cover		
102-2 Activities, brands, products, and services	31–42		
102-3 Location of headquarters	Back cover		
102-4 Location of operations	Front cover		
102-5 Ownership and legal form	28, 36, 212–214		
102-6 Markets served	32–36		
102-7 Scale of the organization	243–244		
102-8 Information on employees and other workers	53–54	For legal reasons we are not allowed to report on the not published information required by GRI.	6
102-9 Supply chain	40–41		
102-10 Significant changes to the organization and its supply chain	36–37, 212–214		
102-11 Precautionary principle or approach	110–125		
102-12 External initiatives	66, 225		
102-13 Membership of associations		Available at: <a href="http://www.k-plus-s.com/en/nachhaltigkeitsstrategie/stakeholder/verbaende.html">http://www.k-plus-s.com/en/nachhaltigkeitsstrategie/stakeholder/verbaende.html</a>	
<b>Strategy and Analysis</b>			
102-14 Statement from senior decision-maker	2–5		
102-15 Key impacts, risks, and opportunities	45–47, 110–125		
<b>Ethics and Integrity</b>			
102-16 Values, principles, standards, and norms of behavior	76		10
102-17 Mechanisms for advice and concerns about ethics	65–66, 77		10
<b>Governance</b>			
102-18 Governance structure	67–77		
102-19 Delegating authority	78–79		
102-20 Executive-level responsibility for economic, environmental, and social topics	78–79		
102-21 Consulting stakeholders on economic, environmental, and social topics	48–49		
102-22 Composition of the highest governance body and its committees	67–77		
102-23 Chair of the highest governance body	18–25, 69		

**GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES****TAB. 4.2**

<b>GRI-Standard</b>		<b>Page</b>	<b>Comment and online addition</b>	<b>UN Global Compact</b>
102-24	Nominating and selecting the highest governance body	67–77		
102-25	Conflicts of interest	67–77		
102-26	Role of highest governance body in setting purpose, values, and strategy	18–25, 43–49		
102-27	Collective knowledge of highest governance body	67–77		
102-28	Evaluating the highest governance body's performance	67–77		
102-29	Identifying and managing economic, environmental, and social impacts	45–49, 78–79		
102-30	Effectiveness of risk management processes	78, 110–125		
102-31	Review of economic, environmental, and social topics	55–66		
102-32	Highest governance body's role in sustainability reporting	21–25, 222–223		
102-33	Communicating critical concerns	77		
102-34	Nature and total number of critical concerns	77		
102-35	Remuneration policies	134–143		
102-36	Process for determining remuneration	134–143		
102-37	Stakeholders' involvement in remuneration	134–143		
102-38	Annual total compensation ratio	53, 134–143		
102-39	Percentage increase in annual total compensation ratio	134–143		
<b>Stakeholder Engagement</b>				
102-40	List of stakeholder groups	49		
102-41	Collective bargaining agreements	53–54		3
102-42	Identifying and selecting stakeholders	48–49		
102-43	Approach to stakeholder engagement	48–49		
102-44	Key topics and concerns raised	48–49		
<b>Identified Material Aspects and Boundaries</b>				
102-45	Entities included in the consolidated financial statements	156–158, 212–214		
102-46	Defining report content and topic boundaries	45–49, 225–227		
102-47	List of material topics	45–47		
102-48	Restatements of information	225–227		
102-49	Changes in reporting	225–227		
102-50	Reporting period	225		
102-51	Date of most recent report		15 March 2018	
102-52	Reporting cycle	225		
102-53	Contact point for questions regarding the report	Back cover		
102-54	Claims of reporting in accordance with the GRI Standards	55, 225		
102-55	GRI content index	228–233		
102-56	External assurance	55, 222–223, 225		

GRI-Standard	Page	Comment and online addition	UN Global Compact
<b>GRI 200: Economic Standards</b>			
<b>GRI 103: Management Approach 2016</b>			
103-1 Explanation of the material topic and its Boundary	31–42, 45–49, 55–66, 78–79, 225–227		
103-2 The management approach and its components	45–49, 55–66, 78–79		
103-3 Evaluation of the management approach	45–47, 78–79		
<b>GRI 201: Economic Performance 2016</b>			
201-1 Direct economic value generated and distributed	42		
201-2 Financial implications and other risks and opportunities due to climate change		We provide additional information via our participation in CDP <a href="https://www.cdp.net/en/saml/new">https://www.cdp.net/en/saml/new</a>	7
201-3 Defined benefit plan obligations and other retirement plans	188–196		
201-4 Financial assistance received from government	209		
<b>GRI 205: Anti-corruption 2016</b>			
205-1 Operations assessed for risks related to corruption	47, 65–66, 77		10
205-2 Communication and training about anti-corruption policies and procedures	47, 65–66		10
<b>GRI 206: Anti-competitive Behavior 2016</b>			
206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	77		10
<b>GRI 300: Environmental Standards</b>			
<b>GRI 103: Management Approach 2016</b>			
103-1 Explanation of the material topic and its Boundary	45–49, 55–66, 78–79, 225–227		
103-2 The management approach and its components	45–49, 55–66, 78–79		
103-3 Evaluation of the management approach	45–47, 78–79		
<b>GRI 302: Energy 2016</b>			
302-1 Energy consumption within the organization	63–65		7, 8
302-2 Energy consumption outside of the organization	64		7, 8
<b>GRI 303: Water and Effluents 2018</b>			
303-1 Interactions with water as a shared resource	60–62	The determination of waste- and process-water-related effects takes place in the context of the water permit procedure.	7, 8

**GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES****TAB. 4.2**

<b>GRI-Standard</b>		<b>Page</b>	<b>Comment and online addition</b>	<b>UN Global Compact</b>
303-2	Management of water discharge related impacts	60–62	We comply with the applicable laws and operating permits. Information on water protection can be found here: <a href="http://www.k-plus-s.com/en/gewaesserschutz/index-uebersicht.html">http://www.k-plus-s.com/en/gewaesserschutz/index-uebersicht.html</a>	7, 8
303-3	Water withdrawal	60–62		7, 8
303-4	Water discharge	60–62		7, 8
<b>GRI 305: Emissions 2016</b>				
305-1	Direct (Scope 1) GHG emissions	63–65		7, 8
305-2	Energy indirect (Scope 2) GHG emissions	63–65		7, 8
305-3	Other indirect (Scope 3) GHG emissions	63–65	We record our Scope 3 emissions for upstream transport and distribution.	7, 8
<b>GRI 306: Effluents and Waste 2016</b>				
MM3	Total amounts of overburden, rock, tailings, and sludges and their associated risks	62–63		
<b>GRI 307: Environmental Compliance 2016</b>				
307-1	Non-compliance with environmental laws and regulations	77		7, 8
<b>GRI 308: Supplier Environmental Assessment 2016</b>				
308-1	New suppliers that were screened using environmental criteria	66	One of the goals of the K+S GROUP is to cover more than 90 percent of its procurement spend with the K+S Supplier Code of Conduct (SCoC) by 2025. In the long term, this will also include our new suppliers. The SCoC contains extensive requirements in the environmental area.	7
<b>GRI 400: Social Standards</b>				
<b>GRI 103: Management Approach 2016</b>				
103-1	Explanation of the material topic and its Boundary	45–49, 55–66, 78–79, 225–227		
103-2	The management approach and its components	45–49, 55–66, 78–79		
103-3	Evaluation of the management approach	45–49, 78–79		
<b>GRI 401: Employment 2016</b>				
401-1	New employee hires and employee turnover	53	For legal reasons we are not allowed to report on the not published information required by GRI.	6
<b>GRI 402: Labor/Management Relations 2016</b>				
402-1	Minimum notice periods regarding operational changes	53		3
MM4	Number of strikes and lock-outs exceeding one week's duration, by country		In 2018, there were no strikes and lock-outs at the K+S Group facilities.	3

GRI-Standard	Page	Comment and online addition	UN Global Compact
<b>GRI 403: Occupational Health and Safety 2018</b>			
403-1 Occupational health and safety management system	55–57		
403-2 Hazard identification, risk assessment, and incident investigation	55–57		
403-3 Occupational health services	56–57		
403-4 Worker participation, consultation, and communication on occupational health and safety	55–57		
403-5 Worker training on occupational health and safety	55–57		
403-6 Promotion of worker health	55–57		
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	55–57, 66		
403-8 Workers covered by an occupational health and safety management system		The future implementation of ISO 45001 covers all employees of the K+S Group as well as contractor employees whose workplaces are controlled by the K+S Group.	
403-9 Work-related injuries	56		
<b>GRI 404: Training and Education 2016</b>			
404-1 Average hours of training per year per employee	54		6
404-2 Programs for upgrading employee skills and transition assistance programs	53–54		
404-3 Percentage of employees receiving regular performance and career development reviews	54		6
<b>GRI 405: Diversity and Equal Opportunity 2016</b>			
405-1 Diversity of governance bodies and employees	57–58, 68–69, 76	For legal reasons we are not allowed to report on the not published information required by GRI.	6
405-2 Ratio of basic salary and remuneration of women to men	53		6
<b>GRI 406: Non-discrimination 2016</b>			
406-1 Incidents of discrimination and corrective actions taken	57–58, 76		1, 2, 6
<b>GRI 407: Freedom of Association and Collective Bargaining 2016</b>			
407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	76, 225	As part of our compliance management, no violation of trade union freedom of association was reported.	3
<b>GRI 408: Child Labor 2016</b>			
408-1 Operations and suppliers at significant risk for incidents of child labor	76, 225	No case of child labour was reported as part of our compliance management.	1,2,5

**GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES****TAB. 4.2**

<b>GRI-Standard</b>	<b>Page</b>	<b>Comment and online addition</b>	<b>UN Global Compact</b>
<b>GRI 409: Forced or Compulsory Labor 2016</b>			
409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	76, 225	No case of forced or compulsory labour was reported as part of our compliance management.	1,2,4
<b>GRI 412: Human Rights Assessment 2016</b>			
412-1 Operations that have been subject to human rights reviews or impact assessments	47, 58		1,2
412-2 Employee training on human rights policies or procedures	58, 65–66		1,2
<b>GRI 414: Supplier Social Assessment 2016</b>			
414-1 New suppliers that were screened using social criteria	66	One of the goals of the K+S Group is to cover more than 90 percent of its procurement spend with the K+S Supplier Code of Conduct (SCoC) by 2025. In the long term, this will also include our new suppliers. The SCoC contains extensive requirements in the social area.	1,2
<b>GRI 415: Public Policy 2016</b>			
415-1 Political contributions	66		10
<b>GRI 416: Customer Health and Safety 2016</b>			
416-1 Assessment of the health and safety impacts of product and service categories	41		
<b>GRI 417: Marketing and Labeling 2016</b>			
417-1 Requirements for product and service information and labeling	41		
<b>GRI 418: Customer Privacy 2016</b>			
418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data		No violation was reported as part of our compliance management. K+S strictly observes the General Data Protection Regulation (DSGVO).	
<b>GRI 419: Socioeconomic Compliance 2016</b>			
419-1 Non-compliance with laws and regulations in the social and economic area	77		
<b>GRI MM: Closure Planning</b>			
MM10 Closure Planning	38–39, 53, 107–108, 165		

## DEFINITIONS OF KEY FINANCIAL INDICATORS

<b>BOOK VALUE PER SHARE =</b>	$\frac{\text{Equity}}{\text{Total number of shares as of 31 Dec}}$
<b>EBIT I MARGIN =</b>	$\frac{\text{Operating Earnings (EBIT I)}}{\text{Revenues}}$
<b>EBITDA MARGIN =</b>	$\frac{\text{EBITDA}}{\text{Revenues}}$
<b>ENTERPRISE VALUE =</b>	Market capitalisation + net debt
<b>DEBT I =</b>	$\frac{\text{Bank loans and overdrafts}}{\text{Equity}}$
<b>DEBT II =</b>	$\frac{\text{Net Debt}}{\text{Equity}}$
<b>GROSS CASH FLOW =</b>	EBIT I + write-downs/- write-ups on intangible assets, property, plant and equipment and financial assets + increase/- decrease in non-current provisions (without interest rate effects) + interests and dividends received and similar income + gains/- losses from the realisation of financial assets/ liabilities – interest paid – income taxes paid + other non-cash expenses – other non-cash income
<b>NET FINANCIAL LIABILITIES =</b>	Financial liabilities – cash on hand and balances with banks – securities and other financial investments
<b>NET DEBT =</b>	Financial liabilities + provisions for pension and similar obligations + non-current provisions for mining obligations – cash on hands and balances with banks – securities and other financial investments
<b>OPERATING ASSETS =</b>	Intangible assets <sup>4</sup> + property, plant and equipment + shares in affiliated companies + participating interests
<b>RETURN ON CAPITAL EMPLOYED (ROCE) =</b>	$\frac{\text{Operating Earnings (EBIT I)}}{\text{OPERATING ASSETS}^2 + \text{working capital}^{2,4}}$

<b>RETURN ON EQUITY =</b>	$\frac{\text{Adjusted Group earnings after tax}^1}{\text{Adjusted equity}^{1, 2}}$
<b>RETURN ON REVENUES =</b>	$\frac{\text{Adjusted Group earnings after tax}^1}{\text{Revenues}}$
<b>RETURN ON TOTAL INVESTMENT =</b>	$\frac{\text{Adjusted earnings before tax}^1 + \text{interest expenses}}{\text{Adjusted balance sheet total}^{1, 2, 3}}$
<b>VALUE ADDED =</b>	$(\text{ROCE} - \text{weighted average cost of capital before taxes}) \times (\text{operating assets}^2 + \text{working capital}^{2, 4})$
<b>WORKING CAPITAL =</b>	$\text{Inventories} + \text{accounts receivable trade} + \text{other assets}^5 - \text{current provisions} - \text{accounts payable trade} - \text{other payables}^5$

<sup>1</sup> Adjusted for the effects of market value changes of operating forecast hedges; for adjusted Group earnings, the related effects on deferred and cash taxes are also eliminated.

<sup>2</sup> Annual average.

<sup>3</sup> Adjusted for reimbursement claims and corresponding obligations.

<sup>4</sup> Adjusted by deferred tax influencing goodwill from initial consolidation.

<sup>5</sup> Without the market value of operating forecast hedges still outstanding as well as derivatives no longer in operation, but including premiums paid for derivatives used for operating purposes; without receivables and liabilities from financial investments; adjusted for reimbursement claims as well as the surplus of the cta plan assets.

# GLOSSARY

## BULK BLENDERS

Operators of bulk fertilizer equipment, in which various nutrients are combined.

## BRINE

Aqueous rock salt solution. Natural brine is obtained through drilling underground deposits of brine or through the controlled drill-hole solution mining procedure and also produced through the dissolution of mined rock salt.

## CARBON DIOXIDE

Carbon dioxide ( $\text{CO}_2$ ) is a chemical compound comprising carbon and oxygen. It is produced during the combustion of fuels containing carbon or fossil fuels.

## CASH FLOW

Net balance of incoming and outgoing payments during a reporting period. The cash flow provides information about the earning and financial power of a company.

## CAVERN

In mining, a cavern is a large, artificially created underground cavity.

## CHLORINE-ALKALINE ELECTROLYSIS

In chlorine-alkaline electrolysis, chlorine, caustic soda solution and hydrogen are produced as a result of the decomposition of the basic substance sodium chloride with the aid of electricity. Alternatively, potassium hydroxide solution is produced by the application of potassium chloride. The important basic chemicals of chlorine, caustic soda solution, hydrogen and potassium hydroxide solution form the basis of numerous chemical products.

## COGENERATION

Cogeneration is a method enabling the generation of useful heat at the same time as producing electricity. Compared with separate production facilities, cogeneration plants use the respective fuel, for example, natural gas, more efficiently. The heat generated during the cogeneration process is available in the form of hot water or high-pressure steam.

## COMPLEX FERTILIZERS

Complex fertilizers contain more than one nutrient, as a rule nitrogen, phosphorus and potassium as well as – depending on need and application – magnesium, sulphur or trace elements. As a result of the combination of raw materials in the production process and subsequent granulation, every single grain of the fertilizer contains precisely the same combination of nutrients; this allows for even spreading of the nutrients on the field.

## COMPLIANCE

Compliance (conforming with regulations) denotes adherence to mandatory laws, internal regulations and regulatory standards recognised by the company. A compliance management system is intended to ensure compliance and avoid penalties and fines resulting from breaches of compliance and claims for damages as well as other direct or indirect negative influences (caused particularly as a result of damage to image), by identifying and evaluating compliance risks promptly and taking steps to reduce the likelihood of materialisation and their loss potential. Moreover, structured internal compliance reporting should be ensured.

## COST OF CAPITAL

also WACC (weighted average cost of capital); denotes the opportunity costs arising for equity providers and/or lenders through capital made available to the company. The weighted average cost of capital rate is calculated from the aggregate of the expected returns of equity providers in terms of their equity share as well as the interest on debt in respect of the share of interest-bearing debt in total capital. As this is considered from an after-tax perspective, the average interest on debt is reduced by the corporate tax rate.

## CRYSTALLISED SALT

In contrast to liquid brine, crystallised salt exists in solid form, such as food grade salt and de-icing salt.

**EBIT I****(EARNINGS BEFORE INTEREST AND TAXES)**

Due to the elimination of all market value fluctuations during the term, the earnings from operating forecast hedges included in EBIT I correspond to the value of the hedging transaction at the time of realisation (difference between the spot rate and hedging rate), less the premium paid or plus the premium received in the case of options.

**EBIT II**

In accordance with IFRS, fluctuations in market value from hedging transactions are reported in the income statement. EBIT II includes all earnings from hedging transactions, i.e., both valuation effects as at the reporting date and earnings from realised operating hedging derivatives. Earnings effects arising from the hedging of underlying transactions with a financing character, whose effects impact on EBIT neither in the current financial year nor in future financial years, are stated in the financial result.

**EBITDA****(EARNINGS BEFORE INTEREST, TAXES, DEPRECIATION AND AMORTISATION)**

is intended to enable comparisons of operational earnings power between companies and describes the profitability of companies. K+S calculates EBITDA based on operating earnings EBIT I plus depreciation and amortisation of property, plant and equipment and intangible assets; EBITDA is adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada.

**ENTERPRISE VALUE**

Enterprise value is an indicator frequently used to determine the value of a company. It is often related to other indicators (for example, revenues, EBIT).

**EVAPORATED SALT**

is produced by evaporating saturated brine, whereby sodium chloride crystallises.

**ELECTROSTATIC SEPARATION PROCESS (ESTA®)**

The ESTA® process is a dry processing method for potash crude salts, patented by K+S. With this process, the individual crude salt elements are charged differently, to ultimately be separated into the components sodium chloride and potassium chloride with the aid of an electric field. In comparison with classical, wet processing methods, energy inputs and production residues are significantly reduced.

**FLOTATION**

In production, the flotation process separates rock salt and potash or kieserite from the crude salt without heat supply. During the process, the minerals are separated into their components in a saturated saline solution as air is supplied. With the addition of flotation agents, the reusable substances adhere to the air bubbles and can thus be skimmed off after floating to the surface.

**FREE FLOAT**

The number of shares not held by major shareholders owning more than 5% of the shares of a company (with the exception of shares held by investment companies and asset managers).

**GRANULATE PRODUCTION**

Granulate production describes the production of spreadable fertilizer granules that can be distributed using an agricultural fertilizer spreader.

**GREENHOUSE GAS (GHG) PROTOCOL**

The Greenhouse Gas Protocol is a tool for calculating and managing the greenhouse gas emissions of companies and organisations. It includes direct emissions from core corporate areas (Scope 1), indirect emissions from the use of purchased electricity, heat and steam (Scope 2) and indirect emissions, which are upstream or downstream of corporate activities (Scope 3). To compare the global warming potential of different greenhouse gases, each greenhouse gas is converted in CO<sub>2</sub> equivalents. A CO<sub>2</sub> equivalent has the same global warming potential as one unit of CO<sub>2</sub>.

**GRI – GLOBAL REPORTING INITIATIVE**

The Global Reporting Initiative is an independent international multi-stakeholder organisation that develops cooperatively a framework for global sustainability reporting. The GRI reporting guideline specifies principles and indicators for organisations to measure their economic, environmental and social performance. The purpose is to promote transparency and comparability for sustainability reports.

**INTEGRATED REPORTING**

Integrated reporting is a standard concept that combines traditional financial reporting with non-financial reporting elements. The focus should be the company's business model and its strategy. The aim is reporting which considers all the stakeholders' interests. The goal is to reflect the interdependencies between environmental, social, governance and financial factors of decisions, which influence a company's long-term financial performance and position, by clarifying the connection between sustainability and economic values.

## KAINITE CRYSTALLISATION AND FLOTATION FACILITY

### (KCF)

The KCF (kainite crystallisation and flotation) facility represents a new process to significantly reduce saline wastewater and at the same time to increase the yield of valuable substances. By using heat energy, water is evaporated. Thereby crystallises a salt mixture, which also includes kainite – a salt containing potassium and magnesium salt. The kainite is separated by using a sorting technique (flotation) and is subsequently used for potassium sulfate production.

## KIESERITE

$Mg[SO_4] \cdot H_2O$ , Kieserite is a mineral component of crude salt, which is composed of the water-soluble minerals magnesium and sulphur. From a chemical perspective, it is aqueous magnesium sulphate. Kieserite is used as a basic raw material in the production of plant nutrients.

## OECD GUIDELINES FOR MULTINATIONAL COMPANIES

The OECD guidelines for multinational companies are government recommendations for the multinational companies which operate in or from the member states. They contain non-legally binding principles and benchmarks in the areas of basic obligations, information policy, human rights, employment policy, environmental protection, anti-corruption, consumer interests, science and technology, competition and taxation.

## OPEN-CAST MINING

Open-cast mining is a form of mining for raw material deposits that takes place close to the surface. In contrast to other forms of mining, no underground tunnels or shafts are created.

## OPERATING FORECAST HEDGES

To hedge future currency positions (mainly in US dollars), we use operating derivatives in the form of options and futures (see also transaction risks).

## PADS

A solution mining operation typically consists of a wellfield and a processing facility. The wellfield thereby is organized into so called pads. Each pad is a relatively flat surface location with a surface of approximately 100x100m, that is used for drilling wells, creating caverns and has additional above ground facilities used for pumping water into the deposit and handling brine which is then sent via a pipeline system to the processing facility.

## PLANNING APPROVAL PROCEDURE

The planning approval procedure is an approval process for specific construction/infrastructure projects to reach planning approval decisions. As an administrative act, this decision is a planning permission with a concentration effect. Therefore, a permission includes many others. The process of the procedure is formalised in the Administrative Procedure Act. The procedure always includes an involvement of concerned parties in consultations to consider their interests.

## PLATE DOLomite (LEINE CARBONATE)

The plate dolomite (Leine carbonate) is above the salt deposits at a depth of approximately 400 to 500 metres and is covered by clay layers on both sides. It is approximately 10 metres thick and consists of limestone and dolomite rock, which already contains naturally mineralised water.

## POTASSIUM CHLORIDE (KCl)

Potassium chloride (KCl) is a potassium salt used as fertilizer. In addition, it is the basic raw material for all inorganic and organic potassium compounds.

## POTASSIUM SULPHATE (SOP)

Potassium sulphate is used as a fertilizer. It can be produced from mined mineral raw materials as well as using a chemical process that involves the reaction of potassium chloride with sulphuric acid.

## RATING

Rating agencies award ratings of a company's ability to meet its future interest and repayment obligations in a timely manner in the form of standard categories.

## RETURN ON CAPITAL EMPLOYED (ROCE)

Return on Capital Employed (ROCE) is a financial ratio that measures a company's profitability and the efficiency with which its capital is employed.

## SODIUM CHLORIDE

Sodium chloride (NaCl) or table salt is a crystalline mineral extracted from rock salt and sea salt. As food grade salt, sodium chloride is an indispensable mineral supplier to the human body. Sodium chloride is also used to maintain road safety and as an important element in the production of glass, paper and plastic.

**SOLAR SALT**

Sea water flows through large, open evaporation ponds for the production of solar salt. After several months of sunshine, the salt crystallises in the final pond.

**SOLUTION MINING**

In solution mining, fresh water is brought into solvent (salt) rock through a drill hole, thus creating chambers filled with a water-salt solution, so-called caverns. In a subsequent step, the saturated brine is brought to surface level along a further pipeline.

**STAKEHOLDER**

Stakeholders are interest groups in the working environment or in an organisation, who are directly or indirectly affected by corporate activities, currently or in the future, and are thus in an interdependent relationship. They include employees, customers, investors, suppliers, local residents and policymakers.

**SYNTHETIC MAGNESIUM SULPHATE (SMS)**

Synthetic magnesium sulphate is soluble in water and, among others, has a positive influence on root development, water absorption, crop yield and plant quality parameters.

**TRANSACTION RISK**

A transaction risk is a currency risk that may arise in connection with existing receivables or liabilities in a foreign currency if a transaction in a foreign currency is to be converted to the Group currency and thus represents a risk in terms of payment.

**TRANSLATION RISK**

A translation risk is a currency risk, which may arise as a result of translating profit, cash flow or balance sheet items to other periods or reporting dates, which are accrued in a currency other than the Group currency. This is therefore a non-cash risk.

**UNITED NATIONS GLOBAL COMPACT**

The United Nations Global Compact is a voluntary strategic initiative for companies designed to promote sustainable development and social commitment. The participating companies acknowledge the ten principles of the Global Compact in the areas of human rights, working standards, environmental protection and anti-corruption.

**VALUE ADDED**

This key figure is based on the assumption that a company creates added value for the investor when the return on the average capital employed exceeds the underlying cost of capital. This excess return is multiplied by the average capital employed (annual average for operating assets and working capital) to give the company's added value for the year under review.

**WATER-SOFTENING SALTS**

Water-softening salts remove hardeners such as calcium and magnesium from the water through an ion exchange process. Soft water is necessary or advantageous for numerous industrial processes, but also in private households.

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## UNITS AT A GLANCE

### POTASH AND MAGNESIUM PRODUCTS BUSINESS UNIT

		Q1/18	Q2/18	H1/18	Q3/18	9M/18	Q4/18	FY/18
Revenues	€ million	488.7	440.5	929.2	422.2	1,351.4	621.6	1,973.0
EBITDA <sup>1</sup>	€ million	120.8	90.6	211.4	3.4	214.8	144.5	359.3
EBIT I	€ million	52.5	21.1	73.6	-68.5	5.1	64.5	69.6
Capital expenditure	€ million	48.1	70.0	118.1	89.4	207.5	109.2	316.7

<sup>1</sup> Adjusted for the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised.

### SALT BUSINESS UNIT

		Q1/18	Q2/18	H1/18	Q3/18	9M/18	Q4/18	FY/18
Revenues	€ million	635.6	326.9	962.5	375.0	1337.5	553.3	1,890.8
EBITDA	€ million	120.9	23.3	144.2	41.5	185.7	88.9	274.5
EBIT I	€ million	102.1	4.0	106.1	21.7	127.9	69.0	196.8
Capital expenditure	€ million	13.5	18.9	32.3	31.1	63.4	47.7	111.2

### COMPLEMENTARY ACTIVITIES

		Q1/18	Q2/18	H1/18	Q3/18	9M/18	Q4/18	FY/18
Revenues	€ million	44.9	43.9	88.7	41.7	130.4	41.9	172.4
EBITDA	€ million	9.8	8.0	17.9	6.2	24.1	7.2	31.3
EBIT I	€ million	8.7	6.8	15.4	5.0	20.4	5.9	26.4
Capital expenditure	€ million	0.3	1.1	1.4	1.1	2.5	4.3	6.8

### RECONCILIATION

		Q1/18	Q2/18	H1/18	Q3/18	9M/18	Q4/18	FY/18
Revenues	€ million	0.6	0.6	1.2	1.2	2.4	0.5	2.9
EBITDA	€ million	-14.7	-16.8	-31.5	-14.7	-46.2	-12.6	-58.8
EBIT I	€ million	-16.3	-18.5	-34.8	-16.3	-51.1	-14.4	-65.5
Capital expenditure	€ million	0.6	1.2	1.9	2.8	4.7	4.0	8.6

### K+S GROUP

		Q1/18	Q2/18	H1/18	Q3/18	9M/18	Q4/18	FY/18
Revenues	€ million	1,169.8	811.9	1981.7	840.1	2,821.8	1,217.3	4,039.1
EBITDA	€ million	236.8	105.1	341.9	36.4	378.3	228.0	606.3
EBIT I	€ million	147.0	13.4	160.4	-58.1	102.3	124.9	227.2
Capital expenditure	€ million	62.5	91.2	153.7	124.4	278.1	165.1	443.2

## Ten-year summary K+S Group<sup>1</sup>

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Profit and Loss</b>											
Revenues	€ million	3,573.8	4,632.7	3,996.8	3,935.3	3,950.4	3,821.7	4,175.5	3,456.6	3,627.0	4,039.1
– thereof Potash and Magnesium											
Products business unit	€ million	1,421.7	1,867.0	2,133.6	2,290.6	2,037.6	1,884.0	2,091.3	1,531.6	1,703.5	1,973.0
– thereof Salt business unit	€ million	1,014.6	1,728.8	1,710.1	1,484.8	1,751.4	1,778.5	1,925.2	1,762.2	1,762.0	1,890.8
EBITDA <sup>2</sup>	€ million	411.8	953.0	1,146.0	1,033.3	907.2	895.5	1,057.5	519.1	576.7	606.3
– thereof Potash and Magnesium											
Products business unit	€ million	317.2	567.1	833.8	867.2	667.5	618.5	689.2	184.8	268.8	359.3
– thereof Salt business unit	€ million	200.3	369.7	337.9	179.5	235.9	276.0	381.0	322.3	325.2	274.5
EBITDA-Marge	%	11.5	20.6	28.7	26.3	23.0	23.4	25.3	15.0	15.9	15.0
– Potash and Magnesium											
Products business unit	Mio. €	22.3	30.4	39.1	37.9	32.8	32.8	33.0	12.1	15.8	18.2
– Salt business unit	Mio. €	19.7	21.4	19.8	12.1	13.5	15.5	19.8	18.3	18.5	14.5
Depreciation <sup>3</sup>	€ million	173.8	238.5	239.8	229.2	251.3	254.3	275.9	289.8	305.9	379.1
Operating earnings (EBIT I)	€ million	238.0	714.5	906.2	804.1	655.9	641.3	781.6	229.3	270.8	227.2
– thereof Potash and Magnesium											
Products business unit	€ million	231.7	475.9	739.5	770.9	552.5	488.8	546.1	33.6	81.4	69.6
– thereof Salt business unit	€ million	140.4	238.1	211.4	61.6	117.8	172.9	266.3	203.7	223.0	196.8
EBIT I margin	%	6.7	15.4	22.7	20.4	16.6	16.8	18.7	6.6	7.5	5.6
Group earnings from continued operations, adjusted <sup>4</sup>	€ million	93.6	453.8	625.6	538.1	437.1	366.6	542.3	130.5	145.0	85.4
Earnings per share from continued operations, adjusted <sup>4</sup>	€	0.56	2.37	3.27	2.81	2.28	1.92	2.83	0.68	0.76	0.45
<b>Cash flow</b>											
Operating Cash flow	€ million	534.8	826.4	633.4	607.2	755.7	719.1	669.4	445.4	306.8	308.7
Capital expenditure <sup>3</sup>	€ million	177.6	188.6	293.1	465.5	742.5	1,153.2	1,278.8	1,170.8	810.8	443.2
Adjusted Free Cash flow	€ million	-811.1	667.3	216.6	199.1	48.7	-306.3	-635.9	-776.8	-389.8	-206.3
<b>Balance Sheet</b>											
Balance sheet total	€ million	5,217.1	5,573.7	6,056.9	6,596.6	7,498.2	7,855.2	8,273.6	9,645.5	9,754.4	9,966.2
Equity	€ million	2,094.6	2,651.6	3,084.6	3,393.9	3,396.6	3,974.5	4,295.6	4,552.2	4,160.7	4,144.1
Equity ratio	%	40.1	47.6	50.9	51.4	45.3	50.6	51.9	47.2	42.7	41.6
Net debt as of 31 Dec	€ million	1,351.3	732.5	610.8	827.3	1,037.0	1,626.2	2,399.8	3,583.8	4,140.5	4,443.6
Net debt/EBITDA	x	3.3	0.8	0.5	0.8	1.1	1.8	2.3	6.9	7.2	7.3
Working capital	€ million	970.5	959.4	840.9	1,025.7	844.9	768.1	945.9	894.6	968.1	1,126.7
Return on Capital Employed (ROCE)	%	9.3	22.0	25.2	19.9	15.2	12.7	12.5	3.0	3.2	2.6
<b>Employees</b>											
Employees as of 31 Dec <sup>5</sup>	number	15,208	14,186	14,338	14,362	14,421	14,295	14,383	14,530	14,793	14,931
Average number of employees <sup>5</sup>	number	13,044	14,091	14,155	14,336	14,348	14,295	14,276	14,446	14,654	14,904
<b>The Share</b>											
Book value per share	€	10.94	13.85	15.86	17.73	17.75	20.77	22.44	23.78	21.74	21.65
Dividend per share <sup>6</sup>	€	0.20	1.00	1.30	1.40	0.25	0.90	1.15	0.30	0.35	0.25
Dividend yield <sup>6</sup>	%	0.5	1.8	3.7	4.0	1.1	3.9	4.9	1.3	1.7	1.6
Closing price as of 31 Dec <sup>7</sup>	XETRA, €	39.99	56.36	34.92	35.00	22.38	22.92	23.62	22.69	20.76	15.72
Market capitalisation	€ billion	7.7	10.8	6.7	6.7	4.3	4.4	4.5	4.3	4.0	3.0
Enterprise value as of 31 Dec	€ billion	9.0	11.5	7.3	7.5	5.3	6.1	6.9	7.9	8.1	7.4
Average number of shares <sup>8</sup>	million	166.15	191.34	191.33	191.40	191.40	191.40	191.40	191.40	191.40	191.40

<sup>1</sup> Unless stated otherwise, information refers to the continued operations of the K+S Group. The discontinued operations of the COMPO business are also included up to 2009, and also the discontinued operations of the nitrogen business up to 2010. The balance sheet and therefore the key figures working capital, net indebtedness, net indebtedness/EBITDA and book value per share also include in 2010 the discontinued operations of the COMPO business and in 2011 also the discontinued operations of the nitrogen business.

<sup>2</sup> The EBITDA is defined as earnings before interest, taxes, depreciation and amortisation, adjusted by the depreciation and amortisation amount not recognised in profit and loss in the context of own work capitalised, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognised in prior periods and in the prior year profit/loss from currency hedging for capital expenditure in Canada. A reconciliation can be found on page 95.

<sup>3</sup> Concerns cash investments as well as depreciation of property, plant and equipment and amortisation of intangible assets, taking claims for reimbursement from claim management into account.

<sup>4</sup> The adjusted key figures only include the result from operating forecast hedges of the respective reporting period reported in EBIT I (see also 'Notes to the income statement and the statement of comprehensive income' on page 173). In addition, related effects on deferred and cash taxes are eliminated; tax rate for 2018: 30.0% (2017: 29.9%).

<sup>5</sup> FTE: Full-time equivalents; part-time positions are weighted in accordance with their respective share of working hours.

<sup>6</sup> The figure for 2018 corresponds to the dividend proposal; the dividend yield is based on the year-end closing price.

<sup>7</sup> The price of the K+S share since the capital increase in December 2009 has been traded ex subscription right. Historical values were not adjusted.

<sup>8</sup> Total number of shares less the average number of own shares held by K+S.

In this Annual Report rounding differences may arise in percentages and numbers.

# **FINANCIAL CALENDAR, ONLINE SERVICE, IMPRINT**

## **FINANCIAL CALENDAR**

Quarterly Report, 31 March 2019	14 May 2019
Annual General Meeting, Kassel	15 May 2019
Dividend payment	20 May 2019
Half-Yearly Financial Report, 30 June 2019	15 August 2019
Quarterly Report, 30 September 2019	14 November 2019
2019 Annual Report	12 March 2020

## **ONLINE SERVICE**

Annual report (PDF)	<a href="http://www.k-plus-s.com/fy2018">www.k-plus-s.com/fy2018</a>
Annual General Meeting	<a href="http://www.k-plus-s.com/agm">www.k-plus-s.com/agm</a>
Other publications	<a href="http://www.k-plus-s.com/publications">www.k-plus-s.com/publications</a>

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