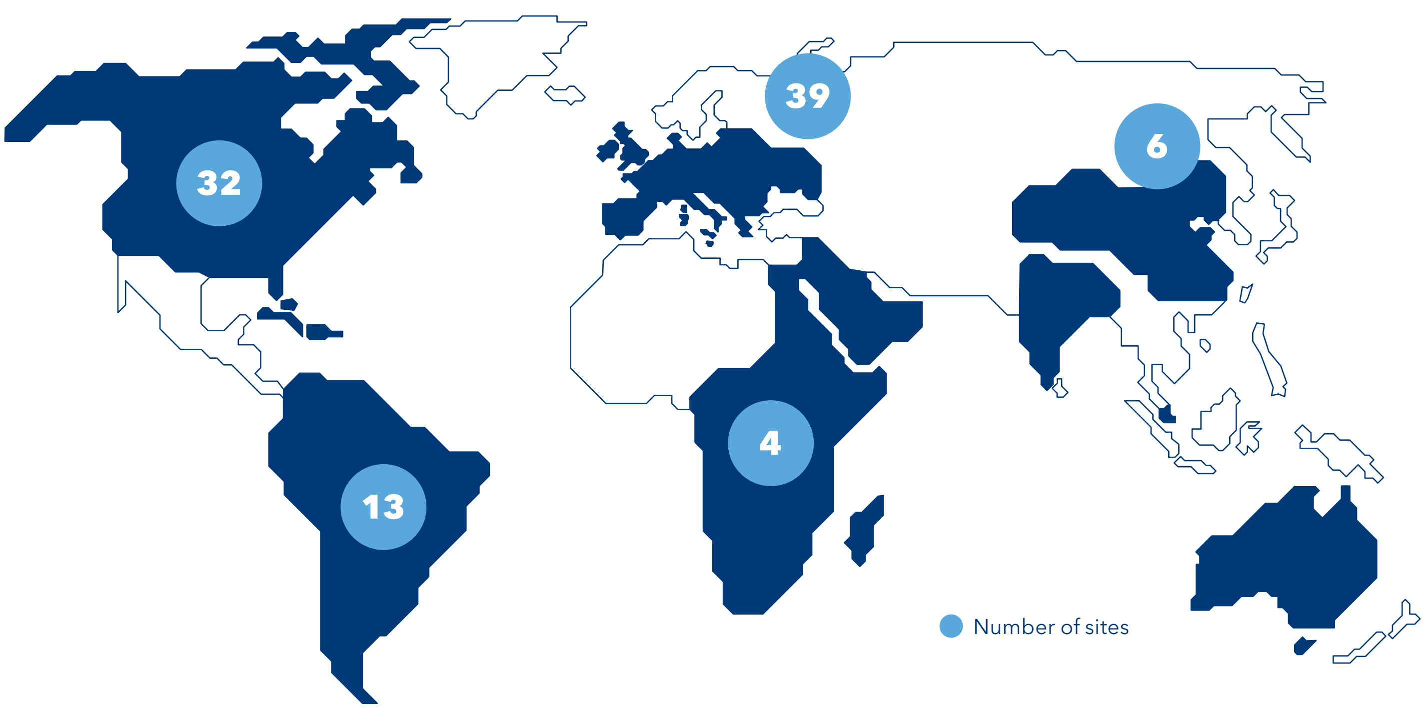
Annual Report 2019

www.kpluss.com

With its mineral products, K+S helps farmers secure the world's food supply, keeps industries running, enriches consumers' daily live's and ensures safety in winter. The focus is on the customer and their needs. In order to position ourselves successfully on a global scale in the long term, we are increasingly acting on the basis of innovative future concepts with which we can develop products and growth markets. This transformation phase is supported by our experience of more than 130 years. It allows us to navigate safely through the challenges of the reorganization: K+S is versatile.

K+S WORLDWIDE

We meet the growing demand for mineral products mainly from production sites in Europe, North and South America, and through a global distribution network.



TEN–YEAR SUMMARY K+S GROUP[1]

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Profit and Loss											
Revenues	€ million	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	4,070.7
EBITDA[2]	€ million	953.0	1,146.0	1,033.3	907.2	895.5	1,057.5	519.1	576.7	606.3	640.4
EBITDA–Margin	%	20.6	28.7	26.3	23.0	23.4	25.3	15.0	15.9	15.0	15.7
Depreciation[3]		238.5	239.8	229.2	251.3	254.3	275.9	289.8	305.9	379.1	431.9
Group earnings from continued operations, adjusted[4]	€ million	453.8	625.6	538.1	437.1	366.6	542.3	130.5	145.0	85.4	77.8
Earnings per share from continued operations, adjusted[4]	€	2.37	3.27	2.81	2.28	1.92	2.83	0.68	0.76	0.45	0.41
Cash flow											
Operating Cash flow	€ million	826.4	633.4	607.2	755.7	719.1	669.4	445.4	306.8	308.7	639.8
Capital expenditure[5]	€ million	188.6	293.1	465.5	742.5	1,153.2	1,278.8	1,170.8	810.8	443.2	493.3
Adjusted Free Cash flow	€ million	667.3	216.6	199.1	48.7	–306.3	–635.9	–776.8	–389.8	–206.3	139.7
Balance Sheet											
Balance sheet total	€ million	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	10,592.2
Equity	€ million	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	4,495.1
Equity ratio	%	47.6	50.9	51.4	45.3	50.6	51.9	47.2	42.7	41.6	42.4
Net financial liabilities as of Dec. 31[6]	€ million	19.3	–65.1	–39.4	190.4	590.9	1,363.6	2,401.1	2,974.1	3,241.5	3,116.6
Debt ratio (Net financial liabilities/EBITDA)[6]	x	0.0	–0.1	0.0	0.2	0.7	1.3	4.6	5.2	5.3	4.9
Working capital	€ million	959.4	840.9	1,025.7	844.9	768.1	945.9	894.6	968.1	1,126.7	1,037.9
Return on Capital Employed (ROCE)	%	22.0	25.2	19.9	15.2	12.7	12.5	3.0	3.2	2.6	2.3
Employees											
Employees as of Dec. 31[7]	number	14,186	14,338	14,362	14,421	14,295	14,383	14,530	14,793	14,931	14,868
Average number of employees[7]	number	14,091	14,155	14,336	14,348	14,295	14,276	14,446	14,654	14,904	14,693
The Share											
Book value per share	€	13.85	15.86	17.73	17.75	20.77	22.44	23.78	21.74	21.65	23.49
Dividend per share[8]	€	1.00	1.30	1.40	0.25	0.90	1.15	0.30	0.35	0.25	0.15
Dividend yield[8]	%	1.8	3.7	4.0	1.1	3.9	4.9	1.3	1.7	1.6	1.3
Closing price as of Dec. 31	XETRA, €	56.36	34.92	35.00	22.38	22.92	23.62	22.69	20.76	15.72	11.12
Market capitalization	€ billion	10.8	6.7	6.7	4.3	4.4	4.5	4.3	4.0	3.0	2.1
Enterprise value as of Dec. 31	€ billion	11.5	7.3	7.5	5.3	6.1	6.9	7.9	8.1	7.4	6.7
Average number of shares[9]	million	191.34	191.33	191.40	191.40	191.40	191.40	191.40	191.40	191.40	191.40

[1] Unless stated otherwise, information refers to the continued operations of the K+S Group. The discontinued operations of the nitrogen business are included up to 2010. The balance sheet and therefore the key figures working capital, net indebtedness, net financial liabilities 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.

[2] EBITDA is defined as earnings before interest, taxes, depreciation, and amortization, adjusted by the depreciation and amortization amount not recognized in profit and loss in the context of own work capitalized, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges and changes in the fair value of operating anticipatory hedges recognized in prior periods. A reconciliation can be found on page 61.

[3] Relates to amortization of intangible assets and depreciation of property, plant and equipment, adjusted for depreciation and amortization of own work capitalized recognized directly in equity.

[4] The adjusted key figures only include the result from operating forecast hedges of the respective reporting period reported, changes in the fair market value of outstanding operating forecast hedges are eliminated. In addition, related effects on deferred and cash taxes are eliminated; tax rate for 2019: 30.0% (2018: 30.0%).

[5] Relates to cash payments for investments in property, plant and equipment and intangible assets, taking claims for reimbursement from claim management into account excluding additions to leases in accordance with IFRS 16. The standard was applied for the first time as of January 1, 2019.

[6] From January 1, 2019 contains leasing obligations arising explicitly from finance lease contracts concluded. Prior-year figures are unadjusted.

[7] FTE: Full-time equivalents; part-time positions are weighted in accordance with their respective share of working hours.

[8] The figure for 2019 corresponds to the dividend proposal; the dividend yield is based on the year-end closing price.

[9] 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.

THREE–YEAR SUMMARY OF THE K+S GROUP REGARDING SUSTAINABILITY KPIS

		2017[1]	2018	2019
People				
Lost time incident rate	LTI Rate	8.6	8.5	10.3
Positive perception of an inclusive working environment by employees[2]	%	–	–	54.4
Sites covered by a human rights due diligence process	%	0.0	0.0	7.8
Environment				
Deep well injection of saline wastewater in Germany	million m³ p.a.	1.2	1.0	1.1
Additional reduction of saline process water from potash production in Germany[3]	million m³ p.a.	0.0	0.4	0.8
Amount of residue used for other purposes than tailings or increased amount of raw material yield	million t p.a.	0.2	1.0	1.5
Additional area of tailings piles covered	ha	0.0	5.9	8.7
Carbon footprint for power consumed (kg CO_2/MWh)	%	0.0	–1.5	–1.7
Specific greenhouse gas emissions (CO_2) in logistics (kg CO_2e/t)	%	0.0	–2.0	–11.1
Business Ethics				
Critical suppliers aligned with the K+S Group Supplier Code of Conduct (SCoC)	%	0.0	14.7	23.2
Spend coverage of the K+S Group SCoC	%	0.0	29.4	44.9
All employees reached by communication measures and trained appropriately in compliance matters	%	59.1	70.9	100.0

[1] The base year for all our non-financial performance indicators is 2017.
[2] Deviating base year: 2019.
[3] Excluding a reduction due to the KCF facility and the discontinuation of production in Sigmundshall 2018.

ABOUT THIS REPORT

The reporting period covers the period from January 1, to December 31, 2019. 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 March 12, 2020

KEY

- Audited reference within the Annual Report
- Unaudited reference within the Annual Report
- Unaudited reference to internet site

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LETTER TO THE SHAREHOLDERS

Dr. Burkhard Lohr
Chairman of the Board of Executive Directors

Dear shareholders, ladies and gentlemen,

“When it rains, it pours” is the advertising slogan for our US subsidiary Morton Salt. It describes the product perfectly, because Morton’s table salt pours without clogging even when humidity is high. Unfortunately, the saying also applies to us in a different way. When something bad happens, other bad things usually happen at the same time. And that is an accurate description of what has been going on at K+S these past two years. While the extreme drought weighed on our results in 2018 by causing disposal problems, the downturn in the potash market had a negative impact on our earnings in the year under review. This means that, for the second time in a row, it is largely external factors that have led to a year of disappointing earnings, to which we have responded by readjusting our strategy. But first things first.

I am still firmly convinced that the SHAPING 2030 strategy will bring the right answers to the challenges of our markets and the megatrends relevant to us. In the past year, we made very good progress in its implementation. The reorganization of the Group into a customer-focused “One company” progressed further. For example, we merged a number of K+S subsidiaries to make it easier for us to harness synergies and hone the way we respond to our customers’ demand. Our new corporate culture is now embedded in ONE K+S values, which have been communicated throughout the Group. One of these values – sustainability – is an integral part of SHAPING 2030. We made considerable advances in implementing our sustainability program in 2019. We are vigorously pursuing our objectives in the areas of people, the environment, and business ethics. We measure our performance in this area against specific key figures, as described from page 52 onward in this Annual Report. Through SHAPING 2030, we leveraged synergies of more than €100 million in procurement, logistics, production, and sales and marketing in the past year. From the end of 2020 onward, we will, as promised, generate synergies of €150 million a year.

However, the deterioration in general conditions for a large part of our business and uncertainty in the global economy have necessitated some fine-tuning of our strategy. The potash market started to weaken in early fall of 2019. Freak weather in important sales regions and a temporary import ban on potash in China led to a massive decline in demand and prices. In response, we – along with our competitors – cut production last year and were forced to revise our original earnings expectations significantly downwards. Despite these factors, we still generated a 6% increase in EBITDA year on year, to a total of €640 million in 2019. But in terms of free cash flow, we really delivered! For the first time since 2013, we succeeded in achieving positive free cash flow of €140 million. This is all the more important because reducing our indebtedness is the only way forward.

Our indebtedness rose sharply, firstly following the strategically important investment in the construction of our new potash plant in Canada. Secondly, it reflects the large investments in environmental protection measures at our German production sites. In the past eight years, we have spent almost €1 billion in total on these projects. However, given the market conditions described above, we are not in a position, based on operational performance alone, to generate enough available liquidity that would allow us to reduce our debt significantly within the specified time frame. But we need a solid financial basis to enter the planned growth phase of our strategy. This will also make the Company more robust.

Together with the Supervisory Board, we therefore resolved in December 2019 to accelerate the implementation of SHAPING 2030 by adopting a comprehensive package of measures. These measures are aimed at selling parts of the Company in the short term, thereby quickly realizing value. A key focus area of these value-creating measures is on the Americas operating unit. For the salt business located there, we can envisage, for example, the sale of an interest. In the Europe+ operating unit, the emphasis is on further increases in efficiency and production, as well as portfolio optimization. Our German production sites have to generate positive free cash flows on a sustainable basis, a principle that applies to every plant. In the current situation we simply cannot carry on with “business as usual,” solely for reasons of costs, because this would put our international competitiveness at risk. What is more, we want to sell assets that are not part of our core business. Activities that don’t add value will be restructured or sold.

In addition to reducing our debt, we want to make the existing values of K+S a lot more visible so that they translate into an appropriate market capitalization. Weakness in the potash market, combined with our high leverage ratio, led to a fall of almost 30% in the K+S share price in the 2019 calendar year. A performance with which we are very dissatisfied, of course. This applies particularly in view of the continued failure to adequately show the value of our business on the capital market. With the announcement of the package of measures, we decided not to wait for a recovery in the potash market, but to take matters into our own hands.

Ladies and gentlemen,
As you are aware, through our new SHAPING 2030 strategy, we are implementing major changes in our Company. We are aligning K+S even more closely with our customers and their needs. This transformation entails great opportunities, which we illustrate for you in this report, starting on page 49.

Those who know me will know that I am an optimist whose glass is always half-full. Despite the challenges of the past two years, I am also optimistic about our Company. We are already generating positive cash flows from operations in our Canadian potash plant in Bethune. Product quality has meanwhile reached the high levels expected not only by our customers, but also by ourselves. We are implementing the announced package of measures with speed and determination in order to reveal the kind of value we actually have in our Company. Our business model is as robust as the markets in which we operate. The positioning of our products is excellent. And last but not least, our corporate SHAPING 2030 strategy will bring the right solutions to the challenges ahead.

Thank you for staying loyal to K+S in 2019, even though this was certainly not always easy. I can assure you that we are working with considerable drive and determination on the tasks ahead in order to guide our Company through this difficult phase.

All the best!

Dr. Burkhard Lohr
Chairman of the Board of Executive Directors

Kassel, March 12, 2020

OUR BOARD OF EXECUTIVE DIRECTORS

Sustainability is an integral element of the corporate strategy SHAPING 2030. A member of the Board of Executive Directors is a sponsor for each of the three areas – environment, people, and business ethics – and actively pursues their implementation.

Dr. Burkhard Lohr

Chairman of the Board of Executive Directors,
Labor Relations Director
Sustainability area: Environment

Dr. Burkhard Lohr is the sponsor for the sustainability area environment and is responsible for implementing the goals in the areas of water, waste (solid residues), and energy. Within the scope of the innovative crowdsourcing initiative "K+S Brine Challenge," in 2019, K+S honored two ideas to cover the tailings piles from potash production and, as a result, expanded its own expertise.

CV – Dr. Burkhard Lohr (born in 1963 in Essen, Germany) has been appointed to the Board of Executive Directors of K+S AKTIENGESELLSCHAFT on June 1, 2012 and became Chairman of the Board of Executive Directors on May 12, 2017. He is Chairman of the Board of Executive Directors and Labor Relations Director and is responsible for the Europe+ operating unit as well as the central functions Communications & Brands, Corporate Board Office, Corporate Secretary, Environmental & Regulatory Affairs, Health, Safety, Management Systems & Sustainability, Human Resources, Investor Relations, Legal & GRC, Legal Europe, and Strategy & Development.

Mark Roberts

Member of the Board of Executive Directors
Sustainability area: People

Mark Roberts is the sponsor for the sustainability area people. He is responsible for implementing the goals in the areas of Health & Safety, Diversity & Inclusion, and Human Rights. In 2019, K+S developed a comprehensive method for human rights due diligence and applied this successfully in a pilot project in Chile.

CV – Mark Roberts (born in 1963 in New Jersey, USA) has been a member of the Board of Executive Directors of K+S AKTIENGESELLSCHAFT since October 1, 2012 with responsibility for the Americas operating unit. He is also responsible for the central functions Global Marketing, Commercial and Supply Chain Excellence with the subunits Agriculture, Consumers, Industry, Communities, Supply Chain Management Excellence, and Commercial Excellence, as well as the Operations and Technical Excellence Center.

Thorsten Boeckers

Member of the Board of Executive Directors
Sustainability area: Business ethics

Thorsten Boeckers is the sponsor for the sustainability area business ethics and is responsible for achieving the goals in the areas of supply chains and compliance. K+S reached the first goal in the 2019 financial year: 100% of K+S employees were reached with communication measures and trained appropriately in compliance topics.

CV – Thorsten Boeckers (born in 1975 in Würselen, Germany) has been a member of the Board of Executive Directors of K+S AKTIENGESELLSCHAFT and Chief Financial Officer since May 12, 2017. Among other duties, he is responsible for the central functions Controlling, Finance & Accounting, Innovation & Digitalization, Insurance, Internal Auditing, IT, Procurement, and Tax.

Fruit from the desert

Throughout the world, areas under cultivation are becoming scarcer while, at the same time, demand for agricultural products is growing. Thus, it is important to utilize every single square yard – even where no plants have been cultivated in the past. In especially hot and arid regions, farmers use what is known as “fertigation,” a combination of irrigation and fertilization.

Fertigation conserves resources

Harvesting even when water is scarce

In this process, nutrient salts that are fully soluble in water are used. The water-fertilizer mixture is applied drop by drop to the soil directly next to the plant. Even in desert regions, almost all the liquid reaches the roots without evaporating beforehand. But the best thing about this is that the plants are fertilized exactly as needed so that they receive the right nutrients at every point in their growth. Fertigation literally makes the desert bloom. For example, the method is popular in regions in the Middle East and North Africa, where farmers are now able to grow cucumbers, tomatoes, and fruit. But fertigation is not only useful in hot, arid areas – it can also increase yield in wine-growing regions. Because of climate change, the world will have to adjust to more extreme periods of hot weather and drought. Fertigation is one way to feed a growing global population even under these changing conditions. With our reliable water-soluble fertilizers – including products for organic farming – and our strong brands, we are making a contribution towards the expected growth in this area.

Photo above:
Pomegranate plantation in the Bhuj region in the state of Gujarat in northwest India.

Photo left:
Growing tomatoes in a greenhouse: So that produce such as tomatoes – can grow optimally, water-soluble potassium chloride and potassium sulfate are used for fertilization.

Opportunities

- Resource conservation
- Highly efficient fertilization
- Autonomy in arid farming areas
- Optimizing agricultural production

Productive ideas in the fields and in the city

To feed a continuously growing world population, we need new ideas. Especially since the available areas for cultivation are becoming smaller. This is one of the reasons why we are promoting resource conserving farming with artificial intelligence (AI). But we are also using AI to examine whether it is economically viable to cultivate algae on an industrial scale.

Innovations for our future

Growing with new ideas

Fertilizing the complete field uniformly – that was yesterday. Because the need for fertilizer can change considerably every few yards within productive land, it is important to ensure that nutrients are provided as precisely as possible. This is where satellites and smartphones come into play: In collaboration with the Darmstadt-based start-up Spacenus and the Institute of Applied Plant Nutrition (IAPN) in Göttingen, Germany, we are developing the Plant Nutrient Detection (PND) system.

Artificial intelligence developed by Spacenus uses smartphone photos to detect the supply status of individual plants and, with satellite photos, recognizes the level of nutrient supply on the field. To calculate the correct volume of fertilizer, AI needs appropriate data about plant growth. Together with the IAPN, we are generating this data in experiments with wheat. For the 2020 fertilizing season, PND will be tested in practice with some pilot farmers.

Marine algae can be found on menus in many parts of the world. This is a good thing, as the plants are rich in proteins. In addition, many types of algae contain carrageen – an important raw material for the cosmetic, pharmaceutical, food, and animal feed industries.

Macroalgae pilot plant at Innopark Sigmundshall.

At present, algae is mainly grown in aquacultures or is harvested directly from the sea, which, for quality and availability reasons, is not a long-term solution. We see a lot of potential in the business area of mass cultivation of single-varieties of marine algae. After a one-year feasibility study with advice from marine biologist professor Klaus Lüning, we now plan to build a larger pilot plant at Innopark Sigmundshall. In this project, we can use our experience in the extraction, processing, and marketing of raw materials in accordance with certified quality standards to develop new business models.

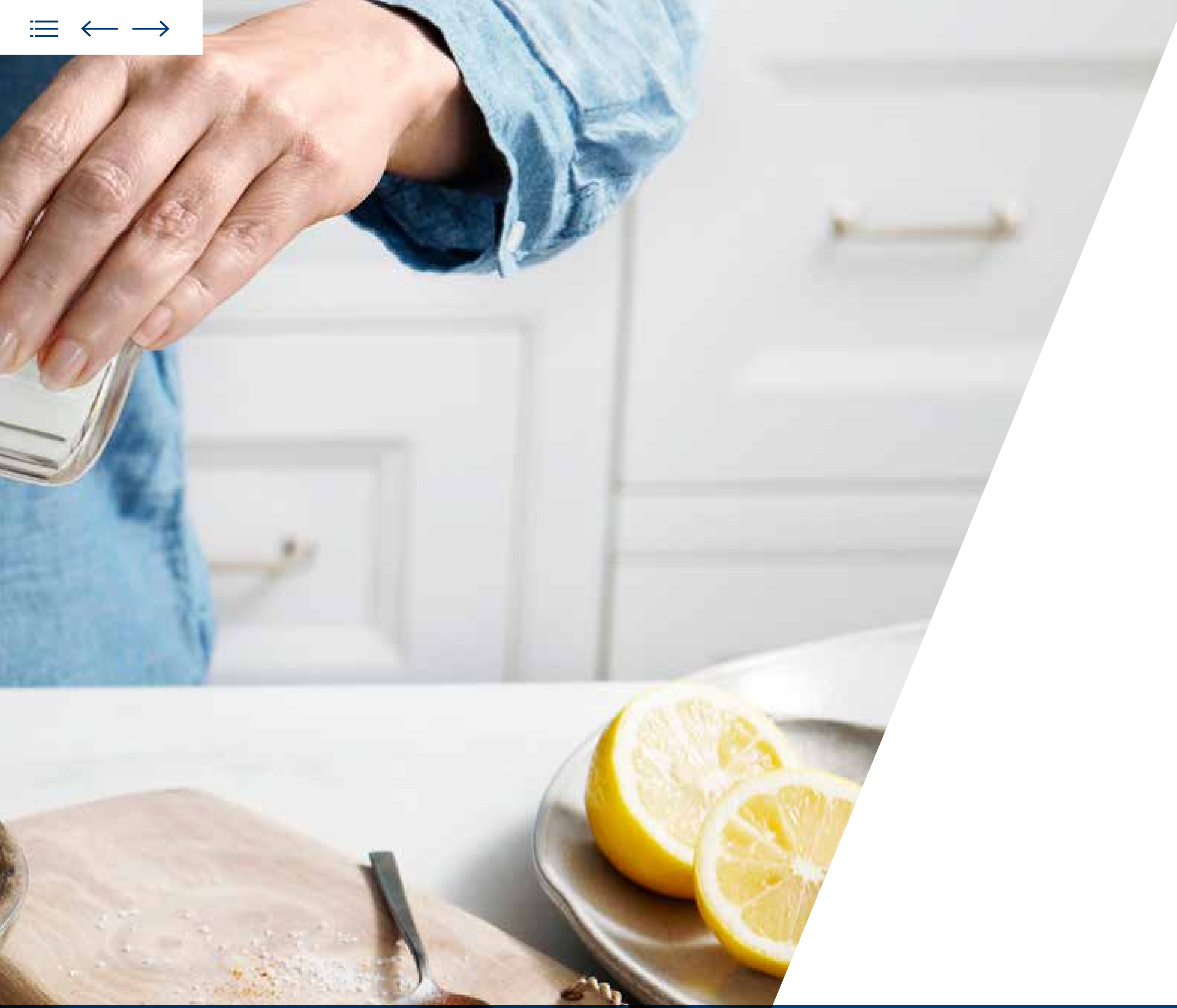
Plant growth knows no borders

The German Federal Ministry of Education and Research (BMBF) is sponsoring the NewFood-Systems (NFS) innovation program with up to €20 million for a period of five years. We have successfully cooperated in drafting the application and are one of several German industrial partners. The innovation program is coordinated by the Max Rubner Institute (MRI) in close collaboration with the Fraunhofer Institute for Process Engineering and Packaging (IVV) and unites more than 50 partners from science, industry, and society. The aim of NFS is to make a contribution towards the sustainable nutrition and health of human beings. The focus of the project is scientific and technical solutions for food and production processes. We will be focusing on the innovation area of Controlled Environment Cultivation (CEC). This deals with the cultivation of organisms, such as plants and algae (micro and macro algae), in enclosed, controllable systems. But what could a system such as this be? The underground area of a former mine, for example. We plan to investigate whether that will produce the desired results in practice with our existing infrastructure in Sigmundshall.

In any case, the potential benefits are enormous: CEC offers a possibility to grow new plant products in premium qualities – regardless of the weather conditions and with several harvests each year. The process runs almost without the need for pesticides and allows water and nutrients from residual and waste substances to be recycled. New sources of protein can also be developed, which can be used in food and feed production processes as well as for the production of other high-quality ingredients, such as special fatty acids, carotenoids, and other colorants, aroma components, and dietary fibers.

Opportunities

- Develop new business areas
- Synergies from partnerships with other companies and start-ups
- Jobs in the region
- Reuse of existing Company grounds



Our everyday versatility

K+S is part of people's lives all around the globe. Many of our products have well-known brand names, while others stay more in the background. Some have been established for many years, others are answers to new customer requirements. The products in our portfolio cover many areas of application, but still they all have one thing in common: They fulfill our high demands with regard to quality and user friendliness.

Products for more quality of life

Brands that work

Fine sea salt from Morton Salt is very popular with cooks in the US.

If you think about table salt, you often think of our brands. In the US, for example, the "Umbrella Girl" from Morton Salt has become almost synonymous with table salt. And in European markets, the brand products from SALDORO have also become a familiar sight in the kitchen. It is therefore not really surprising that German trade journal *Lebensmittel Praxis* gave SALDORO sea salt the title "Product of the Year 2019" and that SALDORO won the German Brand Award 2019.

However, we also offer new brands for new customer requirements. For example, in North and South America and also in Asia, there is growing demand for sodium-reduced nutrition. Because people who consume too much sodium are at risk of damaging their health and, for example, developing high blood pressure. Studies predict that the market for mineral salts to replace sodium will grow by 10% per annum.

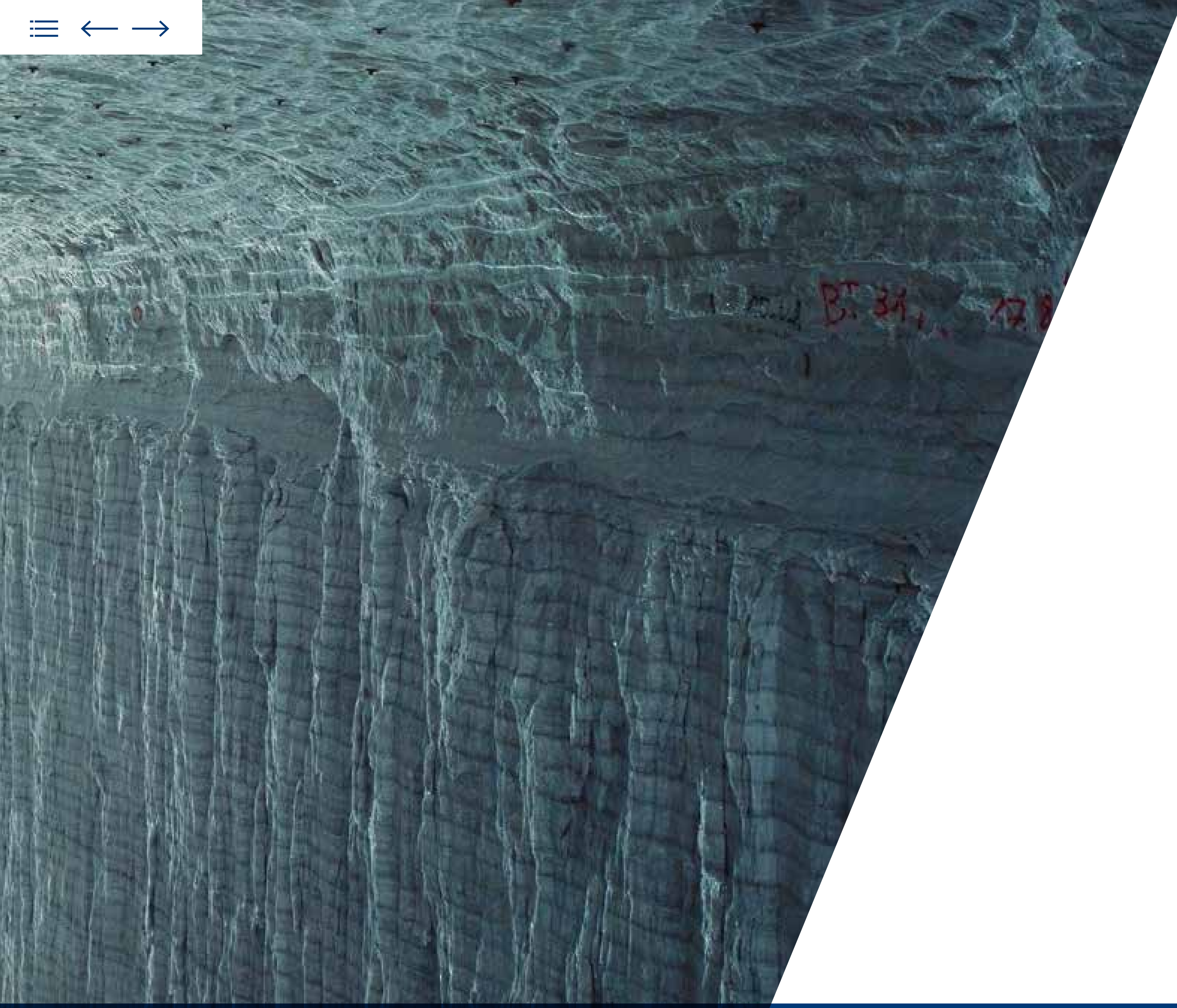
This is a good outlook for us, since with our KaliSel brand, we offer a unique product for this demand: food-certified potassium chloride. It helps lower the sodium content of food and beverages without affecting the taste. We already export KaliSel to 35 countries, where it is used in the production of bread and baked goods, meat and sausage products, ready-to-serve meals, dairy products, and baby and infant foods.

We produce KaliSel at the Zielitz site within the scope of our industrial potash production. High-purity potassium chloride solution is cleaned, filtered, cooled, crystallized, dehydrated, dried, and sieved. All of this is done under clean-room conditions, complying with the highest quality standards that are used in food production: the IFS (International Featured Standards). In other words, a task for the experts – and probably also why we are the world's number one for food-certified potassium chloride.

You also find our products where you would least expect them
The next time you take delivery of a parcel, it may contain a little K+S. Or to be more precise, the box. This is because one of our specialty products – magnesium sulfate anhydrous – is used in the paper industry. It helps separate the two components of wood, cellulose, and lignin, and is used to optimize the subsequent cellulose bleaching process. This works best when the magnesium sulfate is as free as possible of heavy metals – and dissolves well in water. Two properties that are especially characteristic for our product. This is why some paper mills have been using our high-quality products for decades. However, magnesium sulfate anhydrous is not only a preferred material in the paper industry. The all-rounder is used in many other manufacturing processes.

Opportunities

- Multifaceted product portfolio
- High quality standards
- Growth markets



Consistently strong: K+S competences

Sustainable growth needs strong roots. This is why, during the transformation phase, we are building on our foundations. A 130-year tradition of expertise, a focus on values, and the urge to explore make sure that we will approach the realignment of our Group with courage and determination.

Tried-and-tested expertise

ONE K+S: A lot of tradition. More future.

We have always carried out research work at K+S. For example, to find the best ways to extract and use potash. As opposed to the "classic" salt that people have used for thousands of years, potash is a relatively new raw material. So new that a potash research institute was established in Stassfurt, Germany, in 1919. This was a worthwhile idea. These days, there are no doubts as to the importance of potash for agriculture and industry. Our Analytics and Research Center is now located in Unterbreizbach, where innovative production processes and improvements are developed. With modern equipment and sophisticated laboratory automation, the center processes more than 30,000 samples and carries out more than 400,000 analyses each year. Thanks to this expertise in the field of potash research, we can look to the future with confidence. This is the basis for us to continue to meet the demands of our customers in the future and offer them new solutions tailored to their specific needs. In summary, at K+S, we have always been innovative.

Analysis of salt samples in an X-ray diffractometer in the K+S Analytics and Research Center.

K+S miners in the underground mine of the Werra facility.

K+S is now the world's largest supplier of salt products, the fifth-largest potash producer in the world, and the biggest supplier of potash and magnesium products in Western Europe. We have a very wide range of products and in many industries we have established our reputation as a reliable partner. Our potash research focuses on environmental protection and sustainability. Our research work and our innovation activities are an expression of our responsibility as a global group and our response to the topics that concern the world today. A growing global population, climate change, and changes in consumer behavior throughout the world cause sustainable food security to come to the fore as an urgent challenge of our time. This is why we are developing new ideas for the agriculture and nutrition of the future.

K+S adapts along with the markets and the requirements of our customers. In the future we will continue to do what we are really good at – mine and refine minerals. Since we think in the long term, we are not afraid to take a critical look at ourselves. We will continue to implement our ambitious strategy SHAPING 2030 consistently. With the courage to develop something new, we are investing in collaborations with start-ups and developing associated business areas. We counter volatile markets and fluctuating prices with our unique expertise and the knowledge that, in the final analysis, quality always comes out on top.

Non-negotiable: Our values

- Safe & sustainable
- Collaborative
- Entrepreneurial
- Agile
- Innovative
- Optimistic

SUPERVISORY BOARD REPORT

Dr. Andreas Kreimeyer
Chairman of the Supervisory Board

Dear Shareholders

The 2019 financial year again presented us with major challenges and highlighted the fact that K+S is currently navigating a difficult path.

Following an encouraging first half of the year, geopolitical turbulence and the increasingly unfavorable business conditions for potash fertilizers in the second half year led to increasing inventories at our customers, price pressure on our products, and lower production volumes, negatively impacting profitability. As a result, we were unable to meet our EBITDA targets and reduce debt as planned. Consequently, our share price dropped.

The high level of indebtedness is essentially due to two factors:

FIRSTLY
to the successful completion of the new potash production plant in Canada. This investment was approved in 2011 and was a key strategic move to secure the future viability of K+S. Although the expected potash price development currently falls short of our initial planning, K+S is set to achieve healthy profits on the potassium chloride volumes produced following the full ramp-up of the Bethune plant, which is among the world's most competitive facilities!

SECONDLY
by the continuously rising demand for major investment in environmental protection measures at the German sites, which are now almost impossible to predict. Over the past eight years, K+S has already invested around €1 billion in environmental measures to enable us to keep our domestic facilities in operation.

We have always been clear that the rapid reduction of our high level of indebtedness must be a core objective of our SHAPING 2030 strategy. In light of this, we formulated specific targets: K+S intends to halve its indebtedness by 2020 and fulfill the requirements to regain an investment grade rating in 2023.

We were already well on track by mid-2019. However, in the course of the second half of the year, the rapid deterioration of business conditions – due in particular to the trade dispute between the USA and China and China's import ban on potash – made it apparent that these targets would be unachievable by the specified dates without more extensive measures.

The central aim of the additional measures developed in 2019 and communicated in December 2019 is therefore to step up debt reduction in order to rapidly and sustainably reduce our indebtedness. We do not plan to rely on the market's self-healing powers to do this. Instead, we will act boldly and decisively to consistently drive forward our value-generating and cost-cutting projects.

On behalf of the Supervisory Board, I would like to thank all employees for their hard work and commitment. Our thanks also go to the members of the Board of Executive Directors, who are guiding K+S through this difficult period, as well as to our employee representatives and Works Council members who have constructively contributed to the achievement of our ambitious targets with a focus on the future.

Special thanks go to you, our shareholders, for critically, but always constructively, standing by us through the challenging conditions in 2019.

ADVISING THE BOARD OF EXECUTIVE DIRECTORS AND MONITORING OF MANAGEMENT

During the 2019 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 financial position, net assets, and results of operations, 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 regularly 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 2019, five Supervisory Board meetings were held. The average attendance rate of the 16 Supervisory Board members at these meetings was 95% in the reporting period. One meeting was attended by all Supervisory Board members and at each of the four remaining meetings one member was unable to attend. All absences were excused. Of the four physical **Audit Committee** meetings, three were attended by all committee members and one member was excused from the remaining meeting. The **Nomination Committee** held three sessions, fully represented. Six of the seven meetings of the **Personnel Committee** were attended by all committee members; at one meeting one member was excused. The **Strategy Committee** met on two occasions, with full attendance at both meetings.

COMPOSITION OF THE BOARD OF EXECUTIVE DIRECTORS AND THE SUPERVISORY BOARD

The Supervisory Board appointed Ms. Fabíola Fernandez Grund to the Board of Executive Directors at its meeting of November 13, 2019. On assuming this role, Ms. Fernandez Grund will also become the Company's Labor Relations Director.

The composition of the Supervisory Board did not change in the year under review.

SUPERVISORY BOARD MEETINGS

One extraordinary and four ordinary Supervisory Board meetings were held during the 2019 financial year.

At the ordinary meeting held on March 13, 2019, the Supervisory Board examined the annual financial statements, the consolidated financial statements, and the management reports for the 2018 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 2019 Annual General Meeting were also approved. In addition, the findings of the audit of the non-financial statement were discussed with the auditors. Furthermore, the target agreements of the members of the Board of Executive Directors for the 2019 financial year and the determination of target achievement in 2018 as well as the adjustment of the pension ceilings were resolved. Lastly, we discussed potential acquisitions with the Board of Executive Directors.

At the ordinary meeting on May 14, 2019, the Board of Executive Directors briefed the Supervisory Board in detail on the development of the business situation, earnings in the first quarter of 2019, potential acquisitions and the status of the "Operations Excellence" project. Furthermore, the gender ratio for the Board of

Executive Directors was redefined. In addition, candidates for election to the Supervisory Board by the 2020 Annual General Meeting were nominated. In advance of this, the shareholder representatives submitted an application for separate fulfillment and forwarded it to the Chairman of the Supervisory Board.

At the ordinary meeting on August 22, 2019, we addressed the new German Corporate Governance Code and the current business situation, among other things, and approved a financing measure. The Board of Executive Directors also informed the Supervisory Board about potential acquisitions and provided an update on the K+S GROUP's SHAPING 2030 strategy. In addition, we learned in detail about the status of the digitalization process and discussed the long-term succession planning in the Board of Executive Directors. The extension of the mandates of Dr. Lohr and Mr. Boeckers, the introduction of claw-back clauses in their contracts, the adjustment of the remuneration structure of the Board of Executive Directors and the adjustment of committee remuneration were resolved. In addition, a resolution was passed on the remuneration of non-Group mandates.

At the extraordinary meeting on November 13, 2019, we learned in detail about the preparations for the upcoming medium-term planning, the progress of the Bethune plant, and a package of measures to rapidly reduce debt. Furthermore, the filling of the additional position in the Board of Executive Directors was discussed and Ms Fernandez Grund was appointed to the Board of Executive Directors.

At the last ordinary meeting of the year, held on December 3, 2019, 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 2019 financial year. The planning of the K+S GROUP for 2020, including the capital expenditure and financing framework, was examined in depth (also in terms of consistency with strategic objectives) and subsequently approved. We then had a detailed discussion with the Board of Executive Directors on the package of measures to rapidly generate value and reduce indebtedness. The mandate of Mr. Roberts was extended. In addition, adjustments to age limits and election periods for Supervisory Board members and an adjustment to committee remuneration were resolved. Acting on a recommendation submitted by the Audit Committee following a structured tender procedure, we also supported a proposal to the Annual General Meeting on the election of the auditor for the annual and consolidated financial statements for the 2021 financial year. 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 2019/2020 declaration of conformity by the Board of Executive Directors and Supervisory Board was likewise approved.

'Declaration on corporate governance,' page 99

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 104 and on the K+S AKTIENGESELLSCHAFT website under "About K+S". There you can also find the bylaws for the Supervisory Board and its committees.

The **Audit Committee** met a total of four times in 2019. The committee, together with the Strategy Committee, addressed potential acquisitions on February 28. On March 1, 2019, 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 2018 annual financial statements of K+S AKTIENGESELLSCHAFT, the 2018 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 that the reappointment of DELOITTE GMBH WIRTSCHAFTSPRÜFUNGSGESELLSCHAFT as auditor be proposed to the Annual General Meeting. The committee also addressed the audit tender procedure for the 2021 financial year. On August 22, 2019, the committee discussed the K+S GROUP's internal control system (ICS) in detail, especially accounting and auditing processes 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 management system of the K+S GROUP. In addition, the recommendation to the plenary meeting of the Supervisory Board of two audit firms for the audit of the annual financial statements for financial year 2021 was agreed. Finally, the committee discussed focal points of the 2019 audit. At the meeting on December 3, 2019, 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 level of indebtedness, liquidity, and measures to reduce indebtedness were also discussed.

The respective Quarterly Reports and the Half-Yearly Financial Report awaiting publication were 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 May 8, August 12, and November 12, at the end of the respective quarters.

The **Personnel Committee**, which prepares personnel decisions of the Supervisory Board and is responsible for other Executive Board matters, met seven times in 2019. It dealt with the target agreements and achievement of targets 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 circles and the total workforce, the level of the fixed remuneration of the members of the Board of Executive Directors, the redefinition of the gender ratio, the adjustment of the pension ceilings, the introduction of claw-back clauses, the expansion of the Board of Executive Directors and the associated appointment of Ms. Fernandez Grund to the Board of Executive Directors, as well as the further development of the remuneration system for the Board of Executive Directors and the Supervisory Board. Furthermore, the extension of the mandates of the members of the Executive Board was discussed. In addition, the developments of the German Corporate Governance Code and the changes in legislation regarding the 2nd Shareholder Rights Directive (ARUG II) were discussed. It also dealt with short and long-term succession planning for the Board of Executive Directors. Detailed information on the amount of compensation for the Board of Executive Directors in 2019 and the structure of the current compensation system can be found on pages 142–146.

The members of the **Nomination Committee** met four times in 2019; the main topic of discussion was long-term succession planning for the Supervisory Board. It also dealt with the age limit and the limitation on the number of election periods for Supervisory Board members.

The **Strategy Committee** met twice in 2019. The main topics of discussion were potential acquisitions and the medium-term planning, as well as the package of measures to rapidly generate value and reduce indebtedness.

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 2019 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 2019 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 WIRTSCHAFTSPRÜFUNGSGESELLSCHAFT 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 March 2, 2020 and to the Supervisory Board at its meeting on March 11, 2020. 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 January 1, to December 31, 2019 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 aforementioned documents, the Board of Executive Directors' proposal concerning the appropriation of profits, and the audit reports of DELOITTE GMBH WIRTSCHAFTSPRÜFUNGSGESELLSCHAFT, 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 March 2, 2020, as well as at the Supervisory Board meeting held on March 11, 2020, 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 2019 financial year, thereby ratifying the 2019 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 99). 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.

All the best for the future!

On behalf of the Supervisory Board

Yours
Andreas Kreimeyer

Dr. Andreas Kreimeyer
Chairman of the Supervisory Board

Kassel, Germany, March 11, 2020

K+S ON THE CAPITAL MARKET

The K+S share performed well in the first half of 2019, but slid downward during the second half of the year as global demand for potash declined, and ended the financial year at a price of €11.12.

CAPITAL MARKET DATA

in € million		2015	2016	2017	2018	2019
Closing price on December 31	XETRA, €	23.62	22.69	20.76	15.72	11.12
Highest price	XETRA, €	38.81	23.62	24.83	25.75	18.61
Lowest price	XETRA, €	22.40	16.06	19.11	15.03	9.70
Average number of shares	million	191.4	191.4	191.4	191.4	191.4
Market capitalization on December 31	€ billion	4.5	4.3	4.0	3.0	2.1
Average daily trading volume	million units	2.21	1.74	1.26	1.34	1.40
Enterprise value (EV) on December 31	€ billion	6.9	7.9	8.1	7.4	6.7
Enterprise value to revenues (EV/revenues)	x	1.7	2.3	2.2	1.8	1.6
Enterprise value to EBITDA (EV/EBITDA)	x	6.5	15.3	14.1	12.3	10.5
Book value per share	€/share	22.44	23.78	21.74	21.65	23.49
Earnings per share, adjusted[1]	€/share	2.83	0.68	0.76	0.45	0.41
Dividend per share[2]	€/share	1.15	0.30	0.35	0.25	0.15
Total dividend payment[2]	€ million	220.1	57.4	67.0	47.9	28.7
Payout ratio[2,3]	%	40.6	44.0	46.2	55.6	36.9
Dividend yield (closing price)[2]	%	4.9	1.3	1.7	1.6	1.3

[1] 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 183). In addition, related effects on deferred and cash taxes are eliminated; tax rate for 2019: 30.0% (2018: 30.0%).

[2] The figure for 2019 corresponds to the dividend proposal.

[3] Based on adjusted earnings after tax.

THE SHARE

ECONOMY REMAINS LISTLESS FOR NOW

The economy continued to slow in 2019. It was dampened in part by the intensifying trade conflict between the United States and China. The long period of uncertainty regarding the date and form of the United Kingdom's withdrawal from the European Union created an additional drag on economic activity. Support was provided by the loosening of monetary policies, which are currently strongly expansive again in the world's advanced economies.

The DAX, Germany's blue-chip index, produced a gain of 25% in 2019 and closed the year at 13,249 points. The MDAX also rose – by more than 31% to finish 2019 at 28,312 points. The index DJ STOXX EUROPE 600 increased by about 23% and closed the year at 416 points. The MSCI WORLD index likewise trended upwards, rising 25% to finish the year at 2,358 points.

WEAK MARKETS AND PRODUCTION CUTS STRAIN THE K+S SHARE IN THE SECOND HALF OF THE YEAR

The K+S share, which is listed on the MDAX, rose slightly during the first quarter of 2019 and reached its high for the year of €18.51 on April 22. The share came under pressure during the second half of the year, primarily as a result of weakening demand in the global potash market and the related changes in earnings forecasts. On December 10, it reached its low for the year at €9.70. It finished the year under review at a price of €11.12 (closing price for 2018: €15.72.) The short ratio (only reportable shorts starting at 0.5% are included) was 7.55%, a relatively constant amount compared with the level of 7.42% at the beginning of the year (Source: *Bundesanzeiger*).

www.kpluss.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.

NUTRIEN generated a gain of 2%. But the MOSAIC share fell significantly by –27%. The COMPASS MINERALS share (–42%) performed even worse. During the same period, the K+S share lost about –29% of its value.

SHAREHOLDER STRUCTURE

Under the free float definition applied by DEUTSCHE BÖRSE AG, the K+S free float is 100%. As of the end of February 2020, the following shareholders notified us of holdings above the legal thresholds:

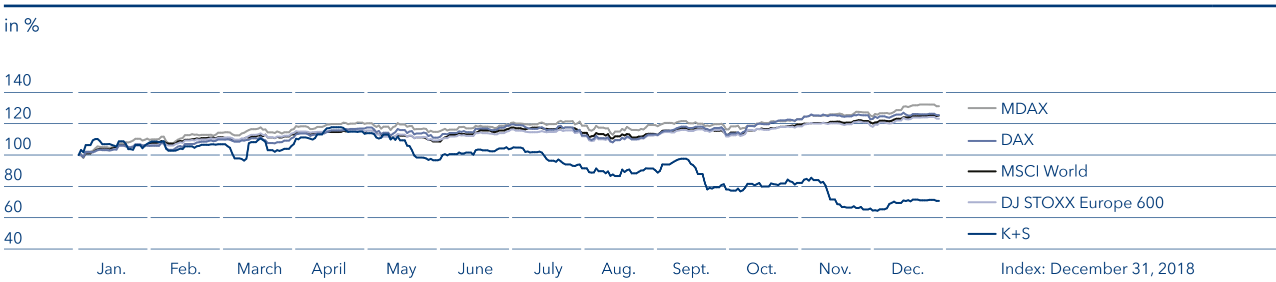
+ DWS Investment GmbH: 5.69 % (notification dated December 31, 2018)
+ Dimensional Holdings Inc.: 4.79 % (notification dated November 8, 2019)
+ BlackRock, Inc: 3.97 % (notification dated January 10, 2020)

AMERICAN DEPOSITARY RECEIPTS FOR TRADING IN NORTH AMERICA

In North America, we offer an American depositary receipts (ADR) program 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 program. The K+S ADRs are listed on the OTCQX trading platform.

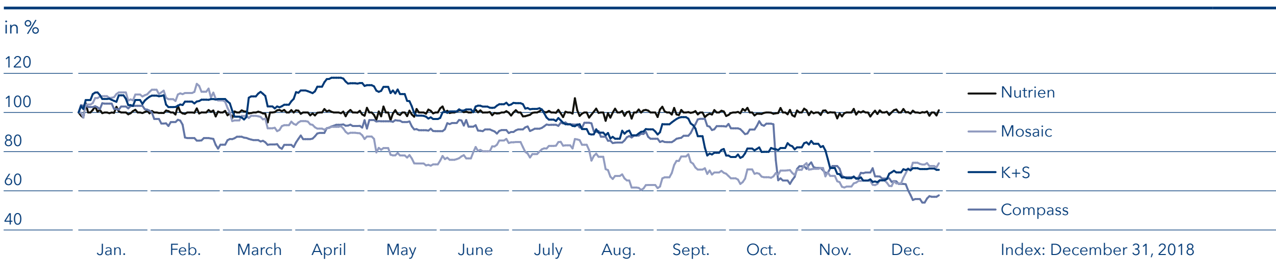
www.kpluss.com/adr
www.otcmarkets.com

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



Source: Bloomberg

K+S SHARE PRICE PERFORMANCE IN COMPARISON WITH COMPETITORS IN 2019



Source: Bloomberg

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 at a positive level 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, the rating agency STANDARD & POOR'S reduced our rating from BB to BB– in September 2019 and changed our outlook to "stable" (from "negative"). The primary reason for this decision was slow debt reduction resulting from the weak marketplace. 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 analyzing us on a regular basis range from an investment boutique with regional expertise to major banks with an international scope. During the 2019 financial year, 27 banks analyzed us on a regular basis (2018: 28).

www.kpluss.com/analysts

At the end of February 2020, Bloomberg reported that 11 banks rated us as "buy/accumulate," 9 "hold/neutral," and 7 "reduce/sell." The average upside target was about €10.56.

K+S INVESTOR RELATIONS OFFERS A COMPREHENSIVE RANGE OF INFORMATION

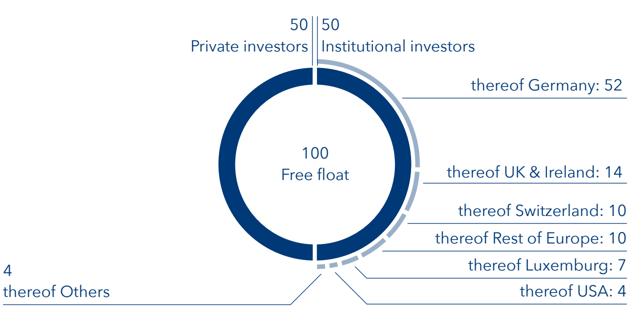
In the past year, we responded to the need for information on the part of the capital market by offering 51 roadshows and conference days (2018: 53). We spoke with investors in Europe, North America, and Asia. We also organized numerous one-on-one meetings and conference calls. By taking part in private 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

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.

SHAREHOLDER STRUCTURE

in %



BOND PRICES AND YIELDS

	31/12/2019	
	Price	Yield in %
K+S bond (December 2021); coupon: 4.125%	107.22	0.35
K+S bond (June 2022); coupon: 3.000%	105.06	0.91
K+S bond (April 2023); coupon: 2.625%	105.15	1.01
K+S bond (July 2024); coupon: 3.250%	107.11	1.61

COMBINED MANAGEMENT REPORT

B

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

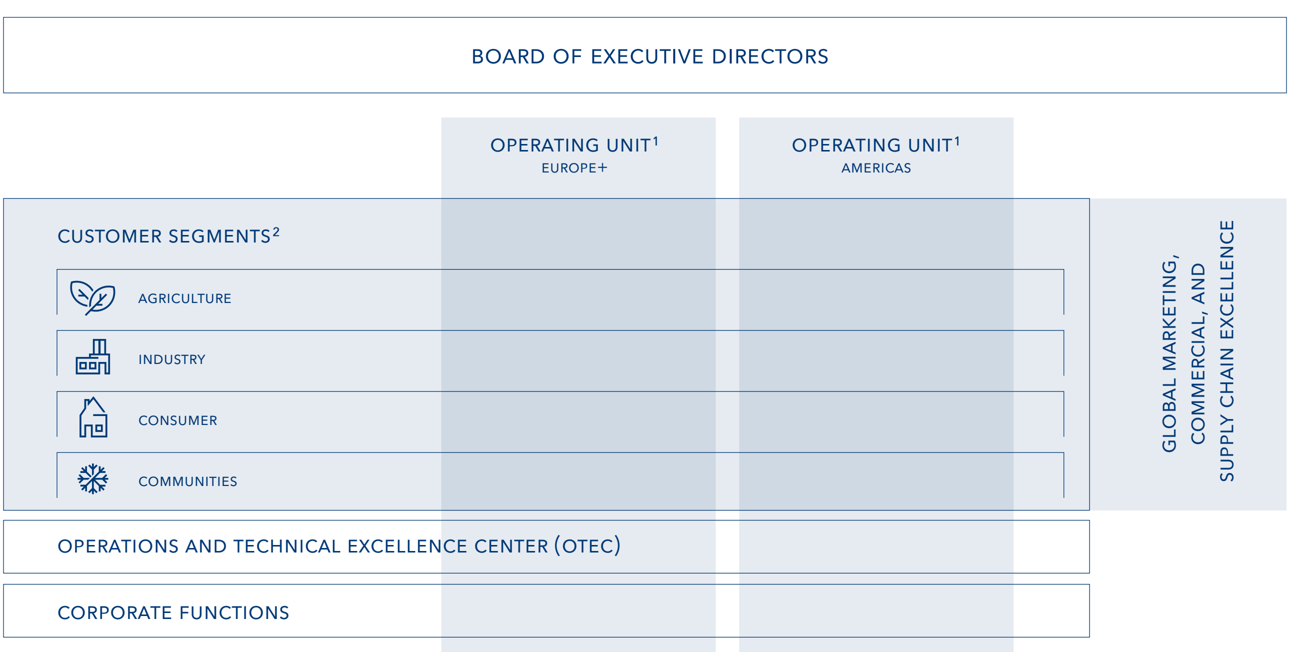
Within the scope of our corporate strategy, SHAPING 2030, we created a new structure in the spirit of "One Company." This allows us to leverage more synergies.

MATRIX STRUCTURE

In our matrix organization we link regionally focused operating units[1] with market-oriented customer segments[2] as well as central excellence functions so that we can leverage their respective strengths in projects and solutions on behalf of our customers everywhere. Our aim is to break down silos and network teams in different units and countries to a greater extent.

While we conduct our business operation in the two operating units Europe+ and Americas (see "operating units"), the customer segments Agriculture, Industry, Consumers, and Communities are aimed at combining common customer interests. The customer segments consist of the customer segments of the two operating units and are considered globally as well. There, 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 "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.

K+S MATRIX STRUCTURE B.1



[1] Segments according to IFRS 8.
[2] No segments according to IFRS 8.

The "Operations and Technical Excellence Center" (OTEC) unit is supposed to account for applied research of K+S globally and to ensure growth by one introduction of new technologies, by process improvements, by new product developments, and by the introduction of new applications.

The central functions 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 is reflected as of financial year 2019:

+ Europe+ operating unit, comprising the former Potash and Magnesium Products business unit including the Bethune mine, the former ESCO, and the former complementary activities (Waste Management and Recycling, Animal hygiene products, K+S TRANSPORT, CHEMISCHE FABRIK KALK)
+ Americas operating unit, comprising MORTON SALT, K+S WINDSOR SALT, and K+S SALT LA

The two operating units are structured in customer segments (no segments according to IFRS 8) and are also considered globally.

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. These customer segments can be found in both operating units according to the regional split.

The customer segment Agriculture, which can exclusively be found in the operating unit Europe+, 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.

CUSTOMER SEGMENTS

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

We sell our fertilizers virtually all over the world. They are used, for example, on the wheat fields of Europe, the rice terraces of Asia or 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. **B.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 specialities:

The fertilizer specialities differ from potassium chloride, either because they are chloride-free, because of different nutrient formulas with magnesium, sulfur, sodium, and trace elements, or because they are water-soluble. These products are used for crops that have a greater need for magnesium and sulfur, such as rapeseed or potatoes, as well as for chloride-sensitive crops, such as citrus fruits, grapes, or vegetables. Fully water-soluble fertilizers are used in applications such as fertigation (use of fertilizer in irrigation systems), particularly for fruit and vegetables. The fertilizer specialities 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®.

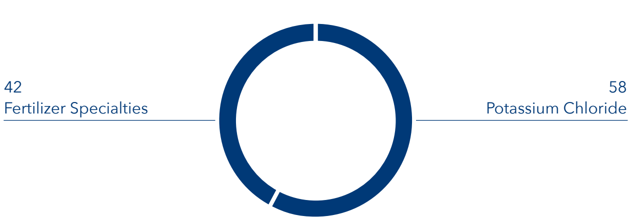
Important sales regions and competitive positions

Half of revenues in the customer segment Agriculture are generated in Europe. In this region, we benefit from the logistically favorable 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. **B.3**

As measured by sales volume, 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% (Source: IFA, K+S). Fertilizer specialities play an important role in our product portfolio, too. 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.

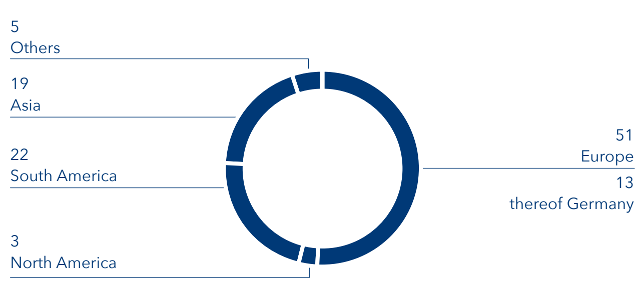
AGRICULTURE — REVENUES BY PRODUCT GROUP **B.2**

in %



AGRICULTURE — REVENUES BY REGION **B.3**

in %



INDUSTRY: WE WANT TO 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. Our minerals are also contained in nutrition solutions and in cosmetic and personal care products. We want to 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 chlor-alkali electrolysis in the chemical industry as a component of various plastics, to improve flavor 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 Industry customer segment include: APISAL®, AXAL®, BÄCKERSTOLZ®, KADD®, KASA®, K-DRILL®, MORTON® PUREX®, MORTON® STAR FLAKE® DENDRITIC, NUTRIKS®, and SOLSEL®. **B.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 and stored 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 aluminum industry. An additional business sector is the above-ground recycling of low-contaminated materials.

Furthermore, at the Salzdetfurth site extensive sections of the above-ground infrastructure of an inactive potash facility are used to granulate the well-known branded animal hygiene product CATSAN® for our customer MARS GMBH, among other applications.

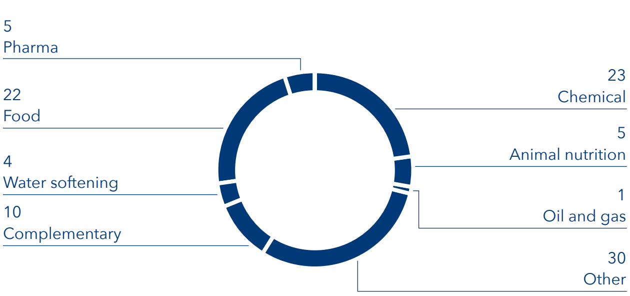
CHEMISCHE FABRIK KALK (CFK) trades in a selection of basic chemicals such as caustic soda, nitric acid, sodium carbonate (soda), as well as calcium chloride and magnesium chloride.

Important sales regions and competitive positions

Europe and North America each account for 50% or 35% of revenues in the Industry customer segment. Other sales regions are located in South America, particularly in Brazil, as well as in Asia. **B.5**

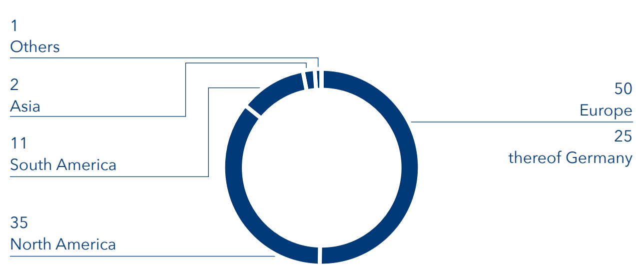
INDUSTRY — REVENUES BY PRODUCT GROUP **B.4**

in %



INDUSTRY — REVENUES BY REGION **B.5**

in %



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. K+S MINERALS AND AGRICULTURE is a leading supplier of salt products for the food industry and salts for industrial and commercial applications, along with its competitors SÜDWESTDEUTSCHE SALZWERKE, GROUPE SALINS, WACKER CHEMIE, and NOURYON (formerly: AKZONOBEL). With regard to underground reutilization, K+S MINERALS AND AGRICULTURE (formerly K+S KALI GMBH) is mainly active in Europe, where it is a leader in this area. 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: WE WANT TO ENRICH THE LIVES OF END CONSUMERS IN NUTRITION AND WATER SOFTENING

Our different brands can be found on shelves around the world. Thereby, the MORTON SALT brand has the highest share in our portfolio.

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 higher priced products such as sea salt, pink Himalayan 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 BIOSAL®, DIAMANTE BRANCO®, CÉRÉBOS®, LOBOS®, MORTON®, SALDORO®, VATEL®, and WINDSOR® for table salts, CLEAN AND PROTECT®, PURE AND NATURAL®, REGENIT®, and SYSTEM SAVER® for water softening and ACTION MELT®, SAFE-T-PET®, and SAFET-POWER® for de-icing salt. **B.6**

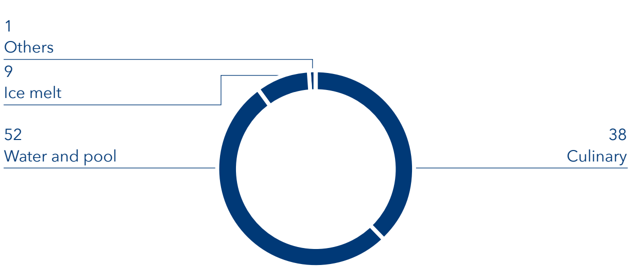
We relaunched our premium German table salt brand SALDORO® in April 2018. In 2019, we made further progress in introducing the brand: SALDORO® belongs to the product portfolio of more than 10,000 retailers in Germany.

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. **B.7**

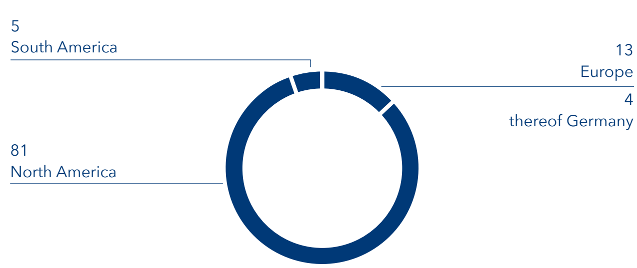
CONSUMERS — REVENUES BY PRODUCT GROUP **B.6**

in %



CONSUMERS — REVENUES BY REGION **B.7**

in %



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.

COMMUNITIES: WE WANT TO PROVIDE A SAFE ENVIRONMENT IN THE WINTER

Our de-icing salts are supposed to 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 works authorities, winter service providers, and large commercial consumers generally buy de-icing salt from K+S via public tender. 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. **B.8**

Important sales regions and competitive positions

Revenues of this customer segment are mainly generated in North America. Canada and the Midwest and East Coast regions of the USA are especially important. The main European sales regions include Germany, Scandinavia, Eastern Europe, Benelux, and France. **B.9**

In terms of production capacity, K+S is the largest supplier of salt products in the world. K+S MINERALS AND AGRICULTURE is a leading supplier in Europe along with its competitors SÜDWESTDEUTSCHE SALZWERKE and GROUPE SALINS. 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.

With our global production and logistics networks in Europe and North and South America, we are able to respond flexibly to weather-related fluctuations in demand for de-icing salt and thus ensure reliable delivery to our customers.

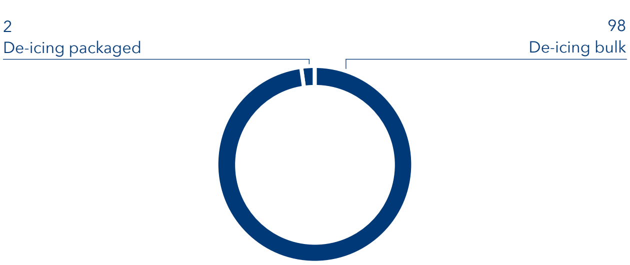
GROUP LEGAL STRUCTURE

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 of subordinate importance are not consolidated.

'Notes,' List of shareholdings, page 222

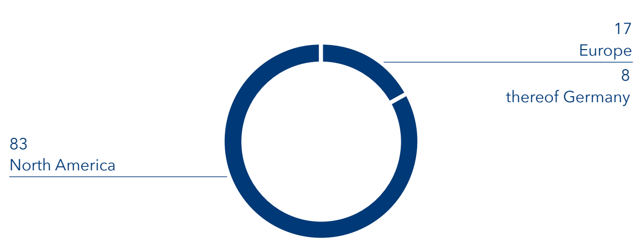
COMMUNITIES – REVENUES BY PRODUCT GROUP **B.8**

in %



COMMUNITIES – REVENUES BY REGION **B.9**

in %



Significant subsidiaries are the directly held K+S MINERALS AND AGRICULTURE GMBH, K+S HOLDING GMBH, and K+S FINANCE BELGIUM BVBA. K+S HOLDING GMBH encompasses K+S NETHERLANDS HOLDING B.V., which holds shares, for example, in Group companies in Canada, and K+S BELGIUM HOLDING BVBA, which holds shares in Group companies in Chile and Brazil. K+S FINANCE BELGIUM BVBA, together with K+S NETHERLANDS HOLDING B.V., holds shares in MORTON SALT, INC. (MORTON SALT) via subsidiaries. K+S MINERALS AND AGRICULTURE GMBH mainly holds its foreign companies via separate intermediate holding companies.

The scope of consolidation has changed as follows, compared with December 31, 2018: On July 25, 2019, the merger of K+S TRANSPORT GMBH and K+S ENTSORGUNG GMBH with K+S KALI GMBH was recorded in the commercial register with economic effect as of January 1, 2019. On August 30, 2019, MORTON SALT, INC sold its limited partner's interests in K+S NORTH AMERICA SALT ASSET MANAGEMENT GMBH & CO. KG and in K+S BAHAMAS SALT ASSET MANAGEMENT GMBH & CO. KG to K+S AKTIENGESELLSCHAFT; in this regard, K+S NORTH AMERICA ASSET MANAGEMENT GMBH is no longer a general partner in either company. On October 29, 2019, K+S SALZ GMBH was split up and K+S HOLDING GMBH was established, which now holds the shares in K+S NETHERLANDS HOLDING B.V. and in K+S BELGIUM HOLDING BVBA. On October 31, 2019, ESCO – EUROPEAN SALT COMPANY GMBH & CO. KG was merged with K+S SALZ GMBH; K+S SALZ GMBH was merged with K+S KALI GMBH with economic effect as of January 1, 2019, and K+S KALI GMBH was renamed K+S MINERALS AND AGRICULTURE GMBH.

Value creation[1]

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. **B.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.

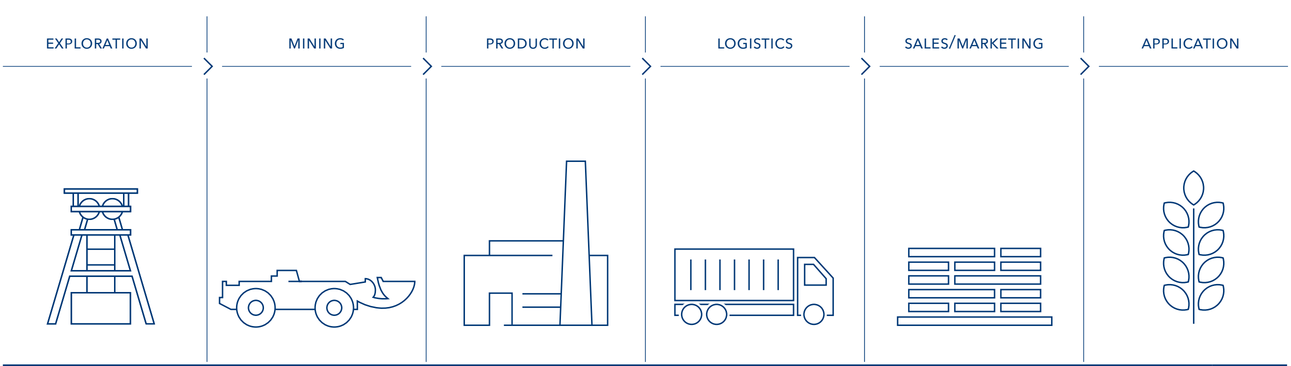
RESERVES AND RESOURCES

Our potash and rock salt deposits are either under the ownership of the K+S GROUP or located in places where we possess the appropriate licenses 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 248

[1] The content of this section is unaudited, voluntary content that was not part of the auditor's review.

VALUE CHAIN **B.10**



Our potash deposits in Germany contain reserves of around 0.9 billion metric tonnes of crude salt as well as resources of around 1.5 billion metric 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 1.2 billion tonnes in North and South America, plus virtually infinite reserves of solar salt. Furthermore, resources amounting to around 0.4 billion tonnes of rock salt can be disclosed in Europe and around 0.9 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 seawater. The broadly comparable mining methods make it possible to realize 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 sulfate ($MgSO_4$)/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 2019, 33.0 million tonnes of crude salt were mined from German potash deposits. In addition, 1.6 million tonnes potassium chloride were produced as marketable end product in Bethune. Some 4.6 million tonnes were mined from rock salt mineral deposits in Europe and 21.1 million tonnes in North and South America.

LONG-TERM PLANNING OF MINES

Once the raw material in a mining operation has been exhausted or is uneconomically viable, measures are initiated for the partial or complete closure of the mine. In Germany, decommissioning and aftercare 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 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. Besides these activities, K+S opened the "Innopark," in November 2019, an innovation center for the testing and establishment of new areas of business, at the Sigmundshall site.

'Employees,' page 80

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.

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

If no reasonable reuse of a decommissioned mine is possible, we are generally under obligation in Lower Saxony to flood the remaining caverns. A total of 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 as of July 1, 2021.

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 2019, the annual production capacity for potash and magnesium products reached up to 8 million tonnes.

In addition to potassium (between 11% and 25% potassium chloride content), the potash deposits in Germany also contain magnesium and sulfur (between 9% and 24% magnesium sulfate 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 Combined Non-Financial Statement on page 88.

'Glossary,' page 248

The potash deposit in Bethune, Canada, contains the mineral potassium (26% potassium chloride content). We use solution mining here, in which minerals are dissolved 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 reuse 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 crushed 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 centimeters thick can be harvested.

'Glossary,' page 248

K+S has acquired mining licenses 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 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. When this scoping was approved, we then started the actual environmental studies. At present, we are working on completing the feasibility study for the project. Only when all 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. To ensure that the effects are not of only short duration, Operations Excellence is also anchored in the organizational structure and will accompany extraction, production, and maintenance in the future.

PROCUREMENT

In 2019, K+S purchased technical goods and services (including logistics services), raw materials, consumables, and supplies for around €2.6 billion from around 16,000 suppliers (2018: €2.5 billion). 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 (40%) and the United States (24%), but also from Canada (19%), Chile (4%), the Netherlands (3%), and the rest of the world (10%). Overall, 99% of our contractual partners come from OECD countries.

'Combined non-financial statement,' Business ethics, page 97

Open and fair partnership is our aspiration 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 have long-term partnerships with our strategic suppliers and service providers, which also ensures supplies and cargo space in the long term.

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

Our own logistics service supplier is Chile-based EMPRESA MARÍTIMA S.A. K+S TRANSPORT GMBH was merged with K+S MINERALS AND AGRICULTURE GMBH within the scope of SHAPING 2030. K+S MINERALS AND AGRICULTURE GMBH operates the 'Kalikai' (potash quay) in Hamburg, one of the largest transshipment 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. To ensure onward transport of the goods, K+S MINERALS AND AGRICULTURE GMBH has a shareholding in MODAL 3 LOGISTIK GMBH (formerly BÖRDE CONTAINER FEEDER GMBH), which gives it access to a multimodal logistics service provider that promotes environmentally friendly concepts for container transport.

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 6.3 million tonnes of salt were loaded onto maritime vessels in 2019.

The state-of-the-art transshipment and storage facility for potash products in the port of Vancouver (Port Moody), has an unloading station for rail cars, 1,260 meters of conveyor belt and a 263 meter long storage shed that can hold up to 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 approximately 1,000 rail cars at its disposal to transport goods from the Bethune plant to the harbor. These have been designed especially for our requirements.

We have also invested in our own fleet of rail cars for European rail transport and, from March 2020, will have more than 404 cars.

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-focused, 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

Worldwide, K+S GROUP has 65 patent families (2018: 71), which are protected by 282 national rights. The patents are used, for example, in the areas of granulate production and flotation.

The number of K+S brand rights increased slightly in 2019. At the end of 2019, the K+S GROUP had 2,769 (2018: 2,743) national and regional trademark protection rights, resulting from 566 base brands (2018: 563).

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 optimize 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 optimize the supply of plant nutrients to crops even when general conditions change. We offer technical application advice for our industrial products worldwide.

In 2013, K+S began its involvement in Uganda with the "Growth for Uganda" project in cooperation with the SASAKAWA AFRICA ASSOCIATION. One of the aims of the project is to improve the income of small farmers by optimizing soil fertility and increasing crop yields. The second phase of the project involved implementing the idea of "Farming as a business." By the end of the five-year project, through the various measures more than 130,000 small farmers in the region were trained, which had a positive effect on the incomes of more than 450,000 people in the region.

Since then K+S has been working towards transferring the findings and cooperation into a sustainable business model and developing a platform for farmers. To continue the work locally, we identified GRAINPULSE LTD in the capital Kampala as a suitable partner, and K+S invested in this company in 2018. Together with GRAINPULSE, the project aims at ensuring that peasant farmers have good, efficient market access to all the relevant entities throughout the supply chain. For example, GRAINPULSE offers plant-specific fertilizer mixtures in small quantities that peasant farmers can simply spread in accordance with the fertilizer recommendations. On the other hand, GRAINPULSE buys the harvest, such as coffee and cereals, from farmers to then process them and sell them to the respective customers.

This trading platform is to be developed together with other partners by gradually offering digital solutions for the greatest challenges for farmers. One approach in this regard is the local agritech start-up AKORION LTD, in which K+S and the South African fintech company MFS AFRICA invested via a joint venture in 2019. The aim is to further develop the EzyAgric app developed by AKORION. This digital platform gives them access to agricultural supplies and to a marketplace for harvested products, but also to funding and insurance and agricultural consulting services.

These partnerships are another step towards becoming the leading agricultural platform in the African sub-Sahara region.

www.kpluss.com/uganda

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 amortization, 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). **B.11**

In 2019, our value added was €1,382.1 million (2018: €1,341.8 million). The majority (84%) of that, €1,161.9 million, was allocated to our employees (2018: €1,122.5 million (84%)). This share is composed of wages and salaries, social insurance contributions, and pension contributions. The communities received taxes and levies of €33.4 million (2%) (2018: €29.6 million (2%)). Some €109.0 million (8%) went as interest to lenders (2018: €104.2 million (8%)). It is assumed that the shareholders will receive the suggested dividend amounting to €28.7 million (2%) (2018: €47.9 million (3%)) and that the Company has retained €49.1 million (4%) in the form of reserves and other assets (2018: €37.6 million (3%)). **B.12**

GENERATION OF VALUE ADDED **B.11**

in € million	2018	2019
Revenues	4,039.1	4,070.7
Other income	136.4	199.4
Cost of materials	−1,629.1	−1,694.7
Depreciation	−385.0	−438.1
Other expenses	−819.6	−755.2
Value added	**1,341.8**	**1,382.1**

ALLOCATION OF VALUE ADDED **B.12**

in € million	2018	2019
To employees (wages, salaries, social)	1,122.5	1,161.9
To governments (taxes, fees)	29.6	33.4
To lenders (interest expenses)	104.2	109.0
To shareholders (dividend)[1]	47.9	28.7
To the Company (reserves)	37.6	49.1
Value added	**1,341.8**	**1,382.1**

[1] Dividends relate to the year under review and are paid in the subsequent year. The figure for 2019 corresponds to the dividend proposal.

CORPORATE STRATEGY

We are making good progress in implementing our corporate strategy SHAPING 2030. We have reached further milestones in 2019. At the end of the year, we adopted a comprehensive package of measures to generate value in the short term and to quickly reduce debt.

The realignment of the K+S GROUP began in 2017. We developed the strategy SHAPING 2030 after intensive discussions and taking the interests of our stakeholders into account. It is supposed to put K+S on an ambitious, robust, and sustainable course for growth. We are building upon our competence in the mining and processing of minerals and would like to take advantage of the opportunities offered by global megatrends. In the course of developing our strategy, we also fundamentally revised our vision and mission.

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[1] to €3 billion by 2030. To do this we will

+ think and act as 'One Company'
+ tap the full potential of our existing assets
+ explore new adjacent growth areas
+ increase the share of our specialities business."

www.kpluss.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: We want to focus on the customer and think and act as "One Company" – as "ONE K+S". We express this self-image, for example, on our newly designed website www.kpluss.com. The K+S logo has also been modernized in this context. In the communication with our customers we focus on the four customer segments Agriculture, Industry, Consumers, and Communities, for example at trade fairs or in product launches.

It is also important to us to make the success of our strategy quantifiable. We have therefore formulated the following ambitions for 2030: €3 billion EBITDA[1] with a return on capital employed (ROCE) of at least 15% and a portfolio, which can achieve an annual revenue growth of at least 4%. We plan to achieve much of this growth simply by continuing to develop our existing business and optimizing organization and processes.

At the same time, we have added sustainability targets to our strategy. We have set ourselves goals in the areas of people, the environment, and business ethics, which we have made verifiable with key figures and which we intend to implement by 2030 at the latest.

SHAPING 2030 is subject to permanent review and adjustment. We continuously evaluate the success of the strategic measures and make adjustments where necessary. For example, we have decided on a package of measures to realize value in the operating units at short notice and thus significantly reduce our indebtedness, even under the current difficult external conditions. It is aimed at realizing short-term value in the operating units and thus significantly reducing our indebtedness, even under the current difficult external conditions. The package of measures will be developed and implemented over the coming months.

[1] EBITDA is defined as earnings before interest, taxes, depreciation and amortization, adjusted by the depreciation and amortization amount not recognized in profit and loss in the context of own work capitalized, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognized in prior periods. A reconciliation can be found on page 61.

SHAPING 2030

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

www.kpluss.com/shaping2030

We are progressing well with our strategy. We are working on the measures we have already decided upon step by step.

Transformation phase

In the transformation phase, we want to create a stable foundation for future growth through organizational changes and efficiency enhancement measures. We are convinced that the best structure for this is the matrix organization. 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. At the core is the integration of our two former business units Potash and Magnesium Products and Salt into "ONE K+S" and the additional focus on our four customer segments – Agriculture, Industry, Consumers, and Communities.

'Business model,' page 37

In the year under review, we have made good headway in the implementation of the new matrix organization. The main management positions are filled, the teams have been established, and the new processes have been developed. We have also extended important change measures. 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 plan to achieve most of these in production and technology, administration and general costs, procurement, commercial excellence, supply chain, and logistics. For each of these areas, a member of the Board of Executive Directors will act as a sponsor and be responsible for ensuring that the planned synergies are leveraged. These efforts are already showing benefits in our earnings and we expect a positive earning effect in the amount of at least €150 million per annum before inflation from the end of 2020.

We reached some important milestones in 2019. For example, we merged four operating companies to form K+S MINERALS AND AGRICULTURE GMBH. We had already aggregated the waste management and logistics activities under K+S KALI GMBH. With this simplified structure we are taking a major step forward towards "ONE K+S," simplifying procedures, leveraging synergies, and getting closer to our customers.

The sale of the Baltic Train to MODAL 3 LOGISTIK GMBH (formerly: BÖRDE CONTAINER FEEDER GMBH) should also be seen in the context of SHAPING 2030. Although the Baltic Train had established itself as an attractive offer from our point of view through the bundling of combined traffic routes, for us its operation required a high level of administration expenditure. By selling it, we reduce the complexity in the Group and, at the same time, as a minority shareholder in MODAL 3 LOGISTIK, we remain connected with the Baltic Train.

A further step is the establishment of a shared service center for the Americas operating unit in Santiago (Chile) in order to bundle standardized and process-oriented activities at one location. This not only improves the service quality of these processes, but also the cost situation.

SHAPING 2030 is not just an organizational challenge but also a cultural challenge. After all, the way in which we run our business and work together will change dramatically. That's why it's all the more important to us to actively moderate the transformation process and optimally include our employees. Within the scope of numerous communication events and measures, the Board of Executive Directors, divisional managers, and executives explained the changes to all employees as transparently as possible in the year under review.

The success of our measures is already reflected in our figures. As announced, we will be able to report positive free cash flow in 2019 year – despite the challenging environment in some areas (see report on economic position). We were also able to reduce net financial liabilities in relation to EBITDA[1]. However, despite the progress made in implementing SHAPING 2030, the currently difficult external conditions are hindering the achievement of financial targets. It has become clear that we will not be able to generate sufficient liquidity from our operating activities alone to achieve our targets of halving our debt ratio by the end of 2020 and meeting the requirements for an investment grade rating again in 2023. In December 2019, we therefore published a package of measures with of about 30 individual possible measures to support the implementation of SHAPING 2030. In this context, new targets for the reduction of our debt ratio have also been defined.

Additional package of measures

The package of measures aims to realize value quickly and to reduce indebtedness rapidly. A key focus of these measures to generate value is on the Americas operating unit. For the salt business there, we can envisage, for example, the sale of an interest. In the Europe+ operating unit there are more extensive efficiency and production increases as well as portfolio optimizations, in order to ensure that our German production sites sustainably generate positive free cash flows. We want to fulfill our environmental obligations and, at the same time, optimize our capital expenditure requirements. In addition, we intend to sell assets that do not directly belong to our core business. By this, we want to reduce total net financial liabilities significantly, halve our net financial liabilities in relation to EBITDA[1], and to achieve a solid crossover rating. The timing of achieving these goals depends on when our package of measures to reduce debt will become effective.

Growth phase

We have drafted a roadmap setting out development goals and promising growth options for the growth phase up to 2030. These growth options are based on our assessments of megatrends, which we see confirmed through developments in 2019: by 2030, we expect to see a growing world population, higher average temperatures, increasing water scarcity, and a larger middle class. All of these developments will shape our business. This applies especially to farming, where farmers will have to increase their yields per hectare and make their plants more resistant to stress. This opens up opportunities in the specialities business as well as in new business areas, such as fertigation (liquid fertilization). But more salts will also be needed in industrial applications due to the growing population. This is why we would like to strengthen our product portfolio in the Industry customer segment and to expand our products for the pharmaceuticals industry.

Exploit potentials in existing business, expand the specialities business, develop new growth fields to complement our existing activities: these are the focuses in the growth phase of SHAPING 2030. We will also be focusing on strong growth regions like Africa and Asia. All of this will happen with the measurable target of increasing our EBITDA[1] to €3 billion by 2030.

Sustainability program[2]

K+S is clearly committed to sustainability with its corporate strategy SHAPING 2030. We have set ourselves ambitious goals in three areas: people, environment, and business ethics. We consider our main sustainability issues to be just as important as our financial targets and will report regularly on our progress in our Annual Report. In collaboration with our stakeholders, we will continue to develop our sustainability management program – locally at our facilities and also worldwide.

K+S GROUP ACTION AREAS

We assess topics and social developments that are relevant for our Company promptly and systematically. We last determined the major sustainability issues of the K+S GROUP in an online survey conducted in 2017. Worldwide 690 internal and external stakeholders were invited to evaluate sustainability aspects from the guideline of the GLOBAL REPORTING INITIATIVE GRI STANDARDS. 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. The Sustainability program of the K+S GROUP addresses the major issues and even goes beyond them in the action areas.

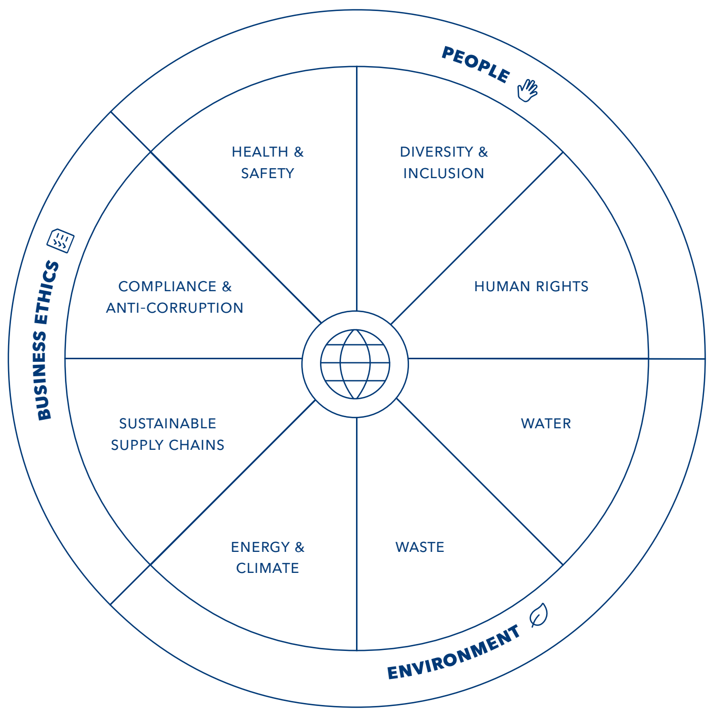
[1] EBITDA is defined as earnings before interest, taxes, depreciation and amortization, adjusted by the depreciation and amortization amount not recognized in profit and loss in the context of own work capitalized, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, and changes in the fair value of operating anticipatory hedges recognized in prior periods. A reconciliation can be found on page 61.
[2] This section is part of the combined non-financial statement, which contains the information pursuant to Sections 289c–289e HGB and 315c HGB and is not within the scope of the audit of content in accordance with Section 317 (2) Sentence 4 HGB.

K+S SUSTAINABILITY KPIS AND TARGETS 2030 **B.13**

Target	KPI[1]	Unit	Target value	2019	Dead-line	Achieve-ment of targets
PEOPLE						
HEALTH & SAFETY: Providing a healthy and safe working environment to protect our employees who are our most valuable capital.	Lost time incident rate	(LTI rate)	0	10.3	Vision 2030	0%
DIVERSITY & INCLUSION: 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.	Positive perception of an inclusive working environment by employees[2]	%	> 90	54.4	2030	0%
HUMAN RIGHTS: Establishing the respect towards internationally recognized human rights at all sites to ensure this core value is applied globally.	Sites covered by a human rights due diligence process	%	100	7.8	2030	8%
ENVIRONMENT						
WATER: Ending deep well injection of saline wastewater from potash production in Germany by end of 2021, no application for renewal.	Deep well injection of saline wastewater in Germany	million m³ p.a.	0	1.1	From January 2022	
Reducing saline process water.	Additional reduction of saline process water from potash production in Germany[3]	million m³ p.a.	–0.5	0.8	2030	0%
WASTE: 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 t p.a.	3	1.5	2030	46%
	Additional area of tailings piles covered	ha	155	8.7	2030	6%
ENERGY & CLIMATE: Reducing the carbon footprint and improving energy efficiency to increase competitiveness.	Carbon footprint for power consumed (kg CO_2/MWh)	%	–20	–1.7	2030	9%
	Specific greenhouse gas emissions (CO_2) in logistics (kg CO_2e/t)	%	–10	–11.1	2030	100%
BUSINESS ETHICS						
SUSTAINABLE SUPPLY CHAINS: Demanding 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)	%	100	23.2	End of 2025	23%
	Spend coverage of the K+S Group SCoC	%	> 90	44.9	End of 2025	50%
COMPLIANCE & ANTI-CORRUPTION: Establishing a zero tolerance policy against corruption and bribery to avoid the risks of liability, culpability, loss of reputation, and financial disadvantages.	All employees reached by communication measures and trained appropriately in compliance matters	%	100	100.0	End of 2019	100%

[1] The base year for all our non-financial performance indicators is 2017.
[2] Deviating base year: 2019.
[3] Excluding a reduction due to the KCF facility and the discontinuation of production in Sigmundshall.

Three-year summary of the K+S Group regarding Sustainability KPIs, inside cover page



SPECIFIC SUSTAINABILITY TARGETS THROUGH 2030

The definition of specific targets for 2030 and regular reporting of performance indicators makes our progress measurable. 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 also a personal sponsor of the targets and actively pursues their implementation.

'Combined non-financial statement,' page 83
'Corporate governance', page 108

Stakeholder dialogue[1] SDG 16.7

We consider stakeholders to be all individuals or organizations that influence or could influence issues with which our business activity is linked, or who could be impacted by our business operations. The ONE K+S Values are the basis of our collaboration and illustrate the claim that we make regarding our work. We always put safety first and act sustainably in everything we do to protect the environment, local communities, and the economy in the regions in which we operate (safe & sustainable). We believe in the success of K+S and are dedicated to strengthening the reputation of K+S

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

OVERVIEW OF STAKEHOLDER DIALOGUE: CONTENT AND DIALOGUE FORMATS B.15

EMPLOYEES 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.
CUSTOMERS AND BUSINESS PARTNERS 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.
SHAREHOLDERS/INVESTORS/ANALYSTS We portray our business, field questions from the capital market, and gather suggestions and ideas at regular roadshows and conferences.	Main topics	Company assessment, corporate strategy, targets, results, risks/opportunities, competition, sustainability topics, etc.
	Methods	Annual General Meeting, business report, quarterly reports, Capital Markets Day, meeting with analysts/investors, surveys, phone calls, conferences, roadshows, etc.
POLITICS AND ADMINISTRATION As a member of various associations and organizations, 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 license to operate, environmental issues, job security, etc.
	Methods	Meetings, workshops, committee activities, press and public relations activities, guided site tours, etc.
SITE COMMUNITIES It is important for us to be good neighbors to the communities and regions in which are sites are located. We create trust at our sites through dialogue with the municipalities and residents.	Main topics	Social license 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.
NON-GOVERNMENT ORGANIZATIONS/GENERAL PUBLIC We explain potash mining in Germany under the conditions of international competitiveness and international and national environmental laws in an understandable manner, using various formats.	Main topics	Social license to operate, potash mining, projects to improve water protection, environmental issues, job security, etc.
	Methods	Public information events, attending trade fairs and symposia, guided tours of facilities and mines, information office, personal meetings, etc.

as an industry leader, business partner, and employer of choice (optimistic). We support each other by treating one another with trust and respect and maintain positive relationships with our business partners, customers, and communities (collaborative). We are entrepreneurs and take on challenges courageously and put our customers at the center of everything we do and add value to their experience with K+S (entrepreneurial), act quickly to satisfy market and customer requirements (agile), and are adaptable and listen to new perspectives (innovative).

'ONE K+S Values,' page 107

The dialogue with our customers and business partners, the capital market, political representatives, non-government organizations, the communities in which our sites are located, and our employees is very important to us. The aim is to engage in dialogue that is beneficial for both sides, to seek new developments and to share viewpoints. K+S informs its stakeholders, using different formats, and uses various channels to share information and have discussions with specific target groups; events are particularly important as part of the communication strategy.

In the last financial year, we also facilitated dialogue with our stakeholders at various events. For instance, in the year under review the Board of Executive Directors, the heads of the operating units, and managers of the central functions offered opportunities to discuss the implementation of the new corporate strategy SHAPING 2030 within the scope of several employee events and in dialogue formats at our domestic and foreign sites. They also spoke directly with people in small groups, including "Breakfast with the Boss" and the KALI Cafés. The focus of these meetings was to provide information and to discuss site-specific challenges, the new organizational structure, business development in the Company, and current projects to improve efficiency.

In a first short survey (pulse survey) all K+S employees were asked about diversity and inclusion. The survey is intended to provide information about the extent to which K+S employees perceive their working environment as inclusive.

'Diversity and inclusion,' page 85

By adopting the SHAPING 2030 strategy, K+S has set itself the target of once again considerably increasing its focus on customers. This includes better and simpler provision of information for long-term and potential new customers. For this reason, K+S has also fundamentally revised its website in order to satisfy the needs of the target groups even better. We are also in continuous discussions with representatives of the capital market.

www.kpluss.com;

'Capital market,' page 32

We also have regular meetings with political representatives on site, state, and national levels. On a national level, our office in Berlin is especially important with regard to informing political actors, such as government representatives and members of parliament, about current business developments and for seeking meetings with them. If any of these persons are interested, the office can enable insights into the work underground at K+S locations. Attention is drawn to the importance of domestic raw material recovery and the general conditions of international competitiveness are explained. K+S also attends the summer fêtes of the state representatives in Berlin, such as Hessenfest. In addition, K+S also invites guests to take part in the traditional Barbara celebrations at various German sites.

In the year under review, we also continued the stakeholder dialogues with environmental associations, political representatives, communities, and interested members of the general public, especially with regard to current projects and plans.

The formats included information events, such as for the expansion of tailings piles and storing liquid residues underground, maintenance of a public information office in Hofgeismar until October 2019, and direct, personal meetings and offers of discussions at local and regional cultural events.

In the 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 June 2019, a jury comprising external experts and specialists from K+S chose two winners from more than 40 proposals submitted from 16 countries: a US chemical engineer and an Australian scientist. They each received €20,000 for their ideas. We will soon be testing one of the two ideas within the scope of an ongoing project to cover tailings piles. We will first carry out a detailed technical and economic analysis of the second proposal to review its feasibility. We are very satisfied with the results of the Brine Challenge. We will also use collaborative formats in the future to increase the innovative strength of K+S. At the same time, in this way we are seeking to talk with people who want to work together with us to find sustainable solutions.

www.kpluss.com/brine-challenge

At the end of November 2019, K+S invited interested parties to the Food Frontiers InnoDay in Sigmundshall under the motto "Bundling competencies for tomorrow's innovations." Around 100 participants discussed what alliances should be established between industry, research, and start-ups, and which innovative business models appear the most promising.

K+S is involved in the EXTRACTIVE INDUSTRIES TRANSPARENCY INITIATIVE (EITI) with the aim of fighting corruption and is therefore an active member of the multi-stakeholder group of D-EITI.

www.d-eiti.de

www.rohstofftransparenz.de

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 donations to political parties or to organizations or persons that are related or close to them. In 2019, donations for scientific and charitable purposes totaled €1.4 million (2018: almost €1.9 million).

www.kpluss.com/community

REPORT ON ECONOMIC POSITION

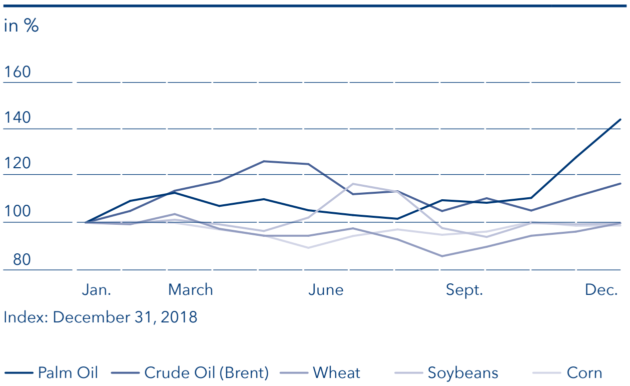
We increased both revenues and EBITDA[1] in the 2019 financial year. Revenues of the K+S GROUP rose from €4,039.1 million in the previous year to €4,070.7 million. EBITDA rose to €640.4 million, moderately higher than the previous year's figure (2018: €606.3 million).

Overview of the course of business

MACROECONOMIC ENVIRONMENT

Global gross domestic product rose by 3.0% in 2019, although the differences in economic momentum widened between different countries and regions. The economic situation in the United States deteriorated, especially because of the trade war with China. In the eurozone, too, the growth rate was slower: Value added in the industrial sector lost considerable momentum. Economic growth also slowed down in the emerging markets, albeit to very different degrees. In Brazil, Russia, and many Asian countries, the economy picked up in recent months, while the recession in Argentina and Turkey worsened further.

CHANGES IN COMMODITY PRICES ON A MONTHLY BASIS IN 2019 **B.16**



Source: World Bank

[1] EBITDA is defined as earnings before interest, taxes, depreciation and amortization, adjusted for depreciation and amortization of own work capitalized recognized directly in equity, gains/(losses) from fair value changes arising from operating anticipatory hedges still outstanding, and changes in the fair value of operating anticipatory hedges recognized in prior periods. A reconciliation can be found on page 61.

The prices of key soft commodities were stable at a low level in the course of 2019. The exception was palm oil, whose prices rose significantly, especially in the last quarter of 2019. In total, the price of this commodity increased by more than 40% in the course of 2019. **B.16**

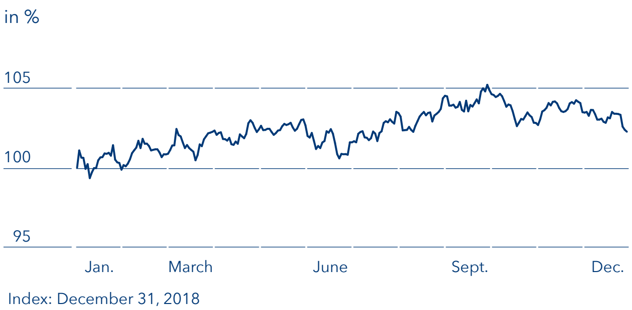
In December, the average price of Brent Crude was around USD 66 per barrel (December 31, 2018: USD 54). The average price for 2019 of around USD 64 was tangibly down on the previous year (2018: USD 72). The recovery in the oil price, particularly towards the end of 2019, was mainly attributable to production cuts by OPEC countries and the non-availability of Iran as an oil exporter due to US sanctions.

NCG Natural Gas Year Futures, which focus primarily on western and southern Germany, initially rose in the early part of the year from around €20/MWh to the year's high of around €22/MWh. The price saw a steady drop during the remainder of the year, trading at €14/MWh at the end of the year. The average figure decreased tangibly to around €18/MWh compared to the previous year (2018: €21/MWh). Henry Hub Natural Gas Futures, which focus primarily on North America, reported a significant decline from USD 2.8/mmBtu at the beginning of the year to USD 2.2/mmBtu at the end of 2019. In the meantime, the price picked up slightly and reached an annual high of USD 3.0/mmBtu on March 5, 2019. At USD 2.7/mmBtu, the average for 2019 was tangibly down on the prior-year level (2018: USD 3.1/mmBtu).

The value of the US dollar stood at €1.12/USD for the year on average and was therefore stronger than in the previous year (2018: €1.18/USD). **B.17**

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

CHANGES IN EUR/USD EXCHANGE RATES IN 2019 **B.17**



Source: Bloomberg

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. These costs rose slightly in the year under review, primarily because of increased production at the Bethune site. Our long-term purchase contracts with favorable conditions in our view make us less dependent on short-term market price changes.
+ Foreign currency hedging system: the use of hedging instruments for the Europe+ operating unit resulted in an average exchange rate of €1.16/USD including hedging costs in 2019 (2018: €1.14/USD). Overall, the exchange rate still had a positive effect on revenues, but a slightly negative impact on EBITDA.
  'Financial position,' page 65
+ The increase in palm oil and the yield prospects resulting from lower prices for various input materials led to an increased use of plant nutrients in the year under review in order to increase the yield per hectare.

SECTOR-SPECIFIC ENVIRONMENT

AGRICULTURE CUSTOMER SEGMENT

The industry situation in the Agriculture customer segment saw strong demand in the first half of the year. Apart from seasonal particularities in several regions (e.g., a staggered pricing system for fertilizer specialities in Europe), the international prices for potassium chloride and our specialities remained largely stable following the significant increases during 2018 in our main sales regions of Brazil, Asia, and Europe. In the third quarter of 2019, the Chinese import freeze also made buyers hold back in other sales regions and led to a decline in potassium chloride prices overseas. Overall, global potash demand amounted to around 69 million tonnes (2018: just under 72 million tonnes, including almost 5 million tonnes of potassium sulfate and potash grades with a lower mineral content). In response to the purchasing restraint, producers of potash fertilizers cut production by an estimated 4 million tonnes in the second half of 2019.

INDUSTRY CUSTOMER SEGMENT

Demand for products in the Industry customer segment in Europe developed overall positively in 2019. Demand for all product groups in the Americas rose. Due to a temporary decline in the availability of goods caused by the closure of the Sigmundshall mine at the end of 2018, we were unable to benefit from the healthy demand situation to the full extent.

CONSUMERS CUSTOMER SEGMENT

In Europe, demand for consumer products developed overall positively. Demand, especially for water-softening salts, increased in the Americas.

COMMUNITIES CUSTOMER SEGMENT

While in Europe the winter weather at the beginning of 2019 had a positive impact on tenders for the upcoming winter season, demand was below average in the fourth quarter for weather-related reasons. In North America, too, favorable weather conditions later on in the winter of 2018/2019, particularly in the Midwest and Canada, initially had a positive effect on tenders. On the US East Coast, competition remained fierce. Overall, fourth-quarter demand in North America was similar to the average of the past ten years.

KEY EVENTS AFFECTING THE COURSE OF BUSINESS

+ China's import freeze for potassium chloride, which has continued since September 2019, also caused other sales regions to hold back. Against this backdrop, potash producers made production cuts in the second half of the year. Back in September 2019, K+S already reported that the production of potassium chloride would be reduced by up to 300,000 tonnes by the end of the year. The production break was used for maintenance measures. The resulting effect on EBITDA was estimated at up to €80 million. In addition to this reduction in production, K+S reported in its quarterly report November 14, 2019 that it was carrying out additional maintenance measures also at German sites in the fourth quarter of 2019. As a result, potash production declined by a further amount of around 200,000 tonnes in the year under review. This affected EBITDA in another amount of around €50 million.

- In the 2019 financial year, we further increased the production at our new Bethune potash plant, which opened in 2017. Whereas around 0.5 million tonnes had been produced in 2017 and around 1.4 million tonnes in 2018, the production volume following the production cuts described above was just under 1.6 million tonnes in 2019.

COMPARISON OF ACTUAL AND PROJECTED COURSE OF BUSINESS

EARNINGS FORECAST

The EBITDA level expected in the 2018 Annual Report could not be achieved. With the publication of the Annual Report 2018 on March 14, 2019, we had expected the EBITDA of the K+S Group to be in a range between €700 million and €850 million. We confirmed this estimate when our financials for the first quarter of 2019 were published. In our 2019 Half-Yearly Financial Report, we adjusted our earnings expectations to a range between €730 and €830 million: this was based on the assumption that the positive effect on earnings of a change in the euro/dollar exchange rate (assumption of an average spot rate of USD 1.15/€ for the remaining months of the year instead of the previous USD 1.20/€) would more than offset a temporarily more cautious estimate in response to China's import freeze along with the effects on earnings of the maintenance break in Bethune, which was extended by one week. As described above, China's import freeze for potassium chloride lasted longer than initially expected and also caused other sales regions to hold back. Against this backdrop, K+S anticipated in its report on the third quarter that, given these effects, there would only be an increase to around €650 million (2018: €606.3 million). Despite the below-average performance of the de-icing salt business in Europe, the K+S Group's EBITDA of €640.4 million was close to this forecast in the 2019 financial year. **B.18**

For the Europe+ operating unit, we had expected a significant rise in EBITDA at the time the 2018 Annual Report was published. Following the above-mentioned adjustments, we generated EBITDA of €437.0 million here in the reporting period (2018: €443.3 million). This is slightly down on the prior-year figure and means that, for the reasons mentioned above, we have not met the forecast published in the 2018 Annual Report. In the Q3/2019 Quarterly Report, we were still expecting a slight increase. The Americas operating unit generated EBITDA of €230.0 million (2018: €221.8 million), thus returning a largely stable performance, as forecast in the 2018 Annual Report.

'Presentation of segments,' page 72

For adjusted consolidated earnings after tax, we had forecasted a significant year-on-year increase in the 2018 Annual Report (2018: €85.4 million). Given the decline to €77.8 million, we did not meet this forecast. In the course of adjusting our EBITDA forecast during the year, we already had to reduce the estimate for adjusted consolidated earnings after tax. In the Q3/2019 Quarterly Report, we had forecasted that the performance would be largely stable.

ROCE amounted to 2.3% and was thus on a level with the previous year (2018: 2.6%). Here, too, we had adjusted our forecast to indicate a stable performance in the course of the year for the reasons already mentioned, after we had assumed a "significant increase" at the time of publishing the 2018 Annual Report.

CASH FLOW FORECAST

We met our forecast, made in the 2018 Annual Report, of a positive adjusted free cash flow and a significant year-on-year improvement for the 2019 financial year. We even exceeded the forecast of adjusted free cash flow of at least €100 million made in the Half-Yearly Financial Report; this was due to our operating improvement to date, active working capital management, and our capital expenditure discipline. It amounted to €+139.7 million in the reporting period, up €346.0 million on the previous year (2018: €–206.3 million). The forecast of a year-on-year increase in capital expenditure turned out to be correct, the figure reaching €493.3 million (2018: €443.2 million).

TARGET/ACTUAL COMPARISON 2019 **B.18**

		ACTUAL 2018	Forecast in 2018 Annual Report	Forecast in Q1/2019	Forecast in H1/2019	Forecast in 9M/2019	ACTUAL 2019
K+S Group							
Revenues	€ million	4,039.1	moderate increase	moderate increase	moderate increase	slight increase	4,070.7
– Operating unit Europe+	€ million	2,585.2	moderate increase	moderate increase	moderate increase	slight increase	2,535.9
– Operating unit Americas	€ million	1,451.0	about stable	about stable	about stable	about stable	1,532.2
EBITDA[1]	€ million	606.3	700 to 850	700 to 850	730 to 830	around 650[3]	640.4
– Operating unit Europe+	€ million	443.3	significant increase	significant increase	significant increase	moderate increase	437.0
– Operating unit Americas	€ million	221.8	about stable	about stable	about stable	about stable	230.0
Consolidate earnings after tax, adjusted[2]	€ million	85.4	significant increase	significant increase	significant increase	stable	77.8
Adjusted free cash flow	€ million	–206.3	significant increase, positive	significant increase, positive	at least €100 million	significant increase, positive	139.7
ROCE	%	2.6	significant increase	significant increase	significant increase	stable	2.3
EUR/USD exchange rate	EUR/USD	1.18	1.20	1.19	1.16	1.14	1.14
Sales volumes Agriculture customer segment	million tonnes	6.8	6.9 to 7.2	6.9 to 7.2	6.9 to 7.1	around 6.4	6.3
Average price Agriculture customer segment	€/tonnes	254.2	moderate increase	moderate increase	moderate increase	moderate increase	272.4
Sales volumes Communities customer segment	million tonnes	13.3	12.5 to 13.0	12.5 to 13.0	12.5 to 13.0	12.5 to 13.0	12.7

[1] EBITDA is defined as earnings before interest, taxes, depreciation and amortization, adjusted by the depreciation and amortization amount not recognized in profit and loss in the context of own work capitalized, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognized in prior periods.
[2] The adjusted key indicators include the gains/(losses) from operating anticipatory hedges in the relevant reporting period, which eliminate the effects of changes in the fair value of the hedges. In addition, related effects on deferred and cash taxes are eliminated; tax rate for 2019: 30.0%.
[3] Forecast already reduced by €80 million on September 23, 2019.

Earnings position

REVENUES

In the 2019 financial year, K+S GROUP revenues amounted to €4,070.7 million compared to €4,039.1 million in the previous year. Both operating units benefited from the favorable EUR/USD exchange rate level. In addition, the Europe+ operating unit in particular benefited from positive price effects, which were offset by negative volume effects. Following the successful expansion of storage capacity, wastewater-related production standstills at the Werra site could be avoided this year, despite the exceptionally dry summer. However, production cuts in the second half of the year led to a decline in total sales volumes in the Agriculture customer segment, despite improved product availability. **B.21, B.22**

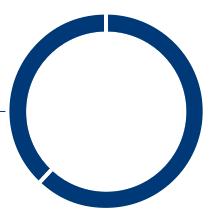
'Presentation of segments,' page 72

'Segment reporting,' page 162

Accounting for 62%, the Europe+ operating unit made the largest contribution to the K+S GROUP's total revenues (Americas operating unit: 38%). **B.19**

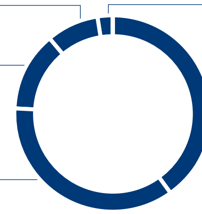
REVENUES BY SEGMENT **B.19**

in %



REVENUES BY REGION **B.20**

in %



The breakdown of revenues by region was largely unchanged compared with the previous year. We again generated most of our revenues, just over 40%, in Europe, followed by North America (36%). South America accounted for 13% and Asia for 9% of our total revenues. **B.20**

VARIANCE COMPARED WITH PREVIOUS YEAR **B.21**

in %	2019
Change in revenues	**0.8**
– volume/structure-related	–5.4
– price/pricing-related	+3.2
– currency-related	+2.9
– consolidation-related	–

REVENUES BY SEGMENT[1] **B.22**

in € million	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	%
Operating unit Europe+	2,585.2	691.8	626.8	621.1	596.2	2,535.9	–1.9
Operating unit Americas	1,451.0	571.2	251.2	282.6	427.2	1,532.2	+5.6
Reconciliation	2.9	0.5	0.5	1.2	0.4	2.6	–
K+S Group	**4,039.1**	**1,263.5**	**878.5**	**904.9**	**1,023.8**	**4,070.7**	**+0.8**
Share of total revenues (%)	–	31.0	21.6	22.2	25.1	100.0	–

[1] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.

ORDER DEVELOPMENT

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

In the de-icing salt business of both operating units, public-sector contracts in Europe, Canada, and the US are awarded through public tenders. As a rule, we participate in these tenders from the second quarter for the upcoming winter season, but also, in some cases, for subsequent winter seasons. The contracts include agreements on both prices and maximum volumes. If the contractually 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.

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

In the year under review, cost of goods sold declined from €3,410.4 million to €3,372.6 million; a currency-related increase in costs was more than offset by savings due to lower sales volumes in both operating units. Marketing, general, and administrative expenses rose to €362.8 million in the year under review, compared with €349.7 million in the previous year. Other operating income climbed to €133.3 million (2018: €118.0 million) and other operating expenses to €230.6 million (2018: €186.4 million). The losses on operating anticipatory hedges decreased to €16.9 million in 2019 (2018: €49.5 million).

'Consolidated financial statements,' page 156

The cost of materials, personnel expenses, energy, and freight costs had a particularly strong effect on the cost trend. The cost of materials slightly increased to €1,694.7 million (2018: €1,629.1 million) despite lower production volume due to exchange rate factors and higher maintenance costs. In 2019, personnel expenses amounted to €1,161.9 million, and were therefore slightly higher than the amount of the previous year (2018: €1,122.5 million). Despite lower volumes, freight costs increased slightly to €888.2 million, tracking higher prices and a negative currency effect (2018: €883.6 million). Energy costs were €267.4 million, up from €261.7 million in the previous year, with the increase due mainly to price and exchange rate movements.

'Notes,' page 186

EARNINGS DEVELOPMENT IN THE PAST FINANCIAL YEAR OPERATING EARNINGS AND EBITDA[1]

Since the 2018 financial year, we manage the Company primarily by utilizing the earnings figure EBITDA. **B.23**

EBITDA amounted to €640.4 million in the year under review, moderately higher than the previous year's amount (2018: €606.3 million). As described for the revenue trend, this increase was driven by price increases, although they were set against production cuts as well as a rise in total costs, especially for maintenance and logistics. The first-time application of IFRS 16 had a positive effect on EBITDA in an amount of €54.0 million. The deconsolidation of

RECONCILIATION TO OPERATING EARNINGS AND EBITDA **B.23**

in € million	2018	2019
Earnings after operating hedges	165.3	224.3
Income (–)/expenses (+) arising from changes in the fair value of outstanding operating anticipatory hedges	25.7	6.1
Elimination of prior-period changes in the fair value of operating anticipatory hedges	36.2	–22.0
Earnings before operating hedges	**227.2**	**208.4**
Depreciation and amortization (+)/impairment losses (+)/reversals of impairment losses (–) on non-current assets	385.0	438.1
Capitalized depreciation[1] (–)	–5.9	–6.1
EBITDA	**606.3**	**640.4**

[1] This relates to depreciation of assets used for the production of other assets, plant and equipment. Depreciation is capitalized as part of cost and not recognized in profit or loss.

EBITDA BY SEGMENT[1,2] B.24

in € million	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	%
Operating unit Europe+	443.3	177.1	128.4	67.3	64.2	437.0	–1.4
Operating unit Americas	221.8	107.6	13.6	25.3	83.4	230.0	3.7
Reconciliation[3]	–58.8	–14.8	–12.0	–12.0	12.2	–26.6	
K+S Group	**606.3**	**269.9**	**130.1**	**80.6**	**159.8**	**640.4**	**+5.6**
Share of total EBITDA (%)	–	42.1	20.3	12.6	24.9	100.0	–

[1] EBITDA is defined as earnings before interest, taxes, depreciation and amortization, adjusted by the depreciation and amortization amount not recognized in profit and loss in the context of own work capitalized, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognized in prior periods. A reconciliation can be found on page 61.
[2] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.
[3] Expenses and income that cannot be allocated to operating units are recorded separately and shown under "Reconciliation."

K+S REAL ESTATE GMBH & CO. KG (see information on the scope of consolidation on page 222) resulted in a positive effect on EBITDA[1] in the amount of the capital gain of €24.3 million. This effect was positively reflected in the reconciliation and was the main reason for the improvement in earnings to €–26.6 million (2018: €–58.8 million). **B.24**

FINANCIAL RESULT

The financial result improved significantly to €–97.3 million compared with the previous year (2018: €–112.2 million). The difference is firstly attributable to the non-recurrence of the additional negative effect of the timely refinancing of a bond in 2018, and secondly to positive currency effects arising from liquidity management.

The first-time application of IFRS 16 had a negative effect on the financial result in an amount of €15.3 million.

CONSOLIDATED EARNINGS AND EARNINGS PER SHARE

Consolidated earnings after tax rose significantly, to €88.9 million, in the year under review (2018: €42.1 million), driven by an improvement in the financial result and higher net gains on operating anticipatory hedges. The expected income tax expense was calculated based on a domestic Group income tax rate of 30.0% (2018: 30.0%). In the year under review, earnings per share reached €0.46 (2018: €0.22). As in the previous year, the calculation was based on an average number of 191.4 million no-par value outstanding shares. **B.25**

'Notes,' page 190

EARNINGS PER SHARE[1] B.25

	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	
Earnings per share (€)	0.22	0.57	0.07	–0.30	0.12	0.46	+111.1
Adjusted earnings per share (€)[2]	0.45	0.56	0.01	–0.22	0.06	0.41	–9.7
Average number of shares (millions)	191.40	191.40	191.40	191.40	191.40	191.40	–

[1] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.
[2] The adjusted key indicators include the gains/(losses) from operating anticipatory hedges in the relevant reporting period, which eliminate the effects of changes in the fair value of the hedges. In addition, related effects on deferred and cash taxes are eliminated; tax rate for 2019: 30.0% (2018: 30.0%).

[1] EBITDA is defined as earnings before interest, taxes, depreciation and amortization, adjusted by the depreciation and amortization amount not recognized in profit and loss in the context of own work capitalized, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognized in prior periods. A reconciliation can be found on page 61.

RECONCILIATION TO ADJUSTED CONSOLIDATED EARNINGS AFTER TAX **B.26**

in € million	2018	2019
Consolidated earnings after tax	42.1	88.9
Income (–)/expenses (+) arising from changes in the fair value of outstanding operating anticipatory hedges	25.7	6.1
Elimination of prior-period changes in the fair value of operating anticipatory hedges	36.2	–22.0
Elimination of resulting deferred taxes and cash taxes	–18.6	4.8
Adjusted consolidated earnings after tax	**85.4**	**77.8**

ADJUSTED CONSOLIDATED EARNINGS AND ADJUSTED EARNINGS PER SHARE

For the basis of our dividend, we also report adjusted consolidated earnings after tax, which eliminate the effects of operating anticipatory hedges and serve as an internal performance indicator at the same time. Furthermore, the effects on deferred taxes and cash taxes resulting from this adjustment are eliminated. The adjusted consolidated earnings after tax serve as a basis for calculating dividends in accordance with our distribution policy and are determined in table **B.26**.

Adjusted consolidated earnings after tax amounted to €77.8 million (2018: €85.4 million). In the year under review, adjusted earnings per share reached €0.41 (2018: €0.45). This figure, too, was based on 191.4 million no-par value shares. As at December 31, 2019, we held no treasury shares. At the end of the year, the total number of shares outstanding of the K+S GROUP was therefore unchanged at 191.4 million no-par value shares.

KEY INDICATORS ON RESULTS OF OPERATIONS

MARGIN KEY INDICATORS

The margin key indicators changed as follows in the year under review: our EBITDA of €640.4 million resulted in a slightly improved EBITDA margin (EBITDA/revenues) of 16% compared to 15% in the previous year. The return on revenues (adjusted consolidated earnings after tax/revenues) was unchanged at around 2% (2018: 2%). **B.27**

'Definition of key financial indicators,' page 246

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.

MULTIPLE PERIOD OVERVIEW OF MARGIN AND PROFITABILITY RATIOS[1] **B.27**

Key Indicators in %	2015	2016	2017	2018	2019
Gross margin[2]	45.9	36.3	33.4	15.6	17.1
EBITDA margin	25.3	15.0	15.9	15.0	15.7
Return on revenues[3]	13.0	3.8	4.0	2.1	1.9
Return on equity after taxes[3,4]	13.1	2.9	3.3	2.1	1.8
Return on total investments[3,4]	10.4	2.7	3.1	2.4	2.6
Working capital	945.9	894.6	968.1	1,126.7	1,037.9
Operating assets	5,900.3	6,639.0	7,377.6	7,464.0	8,140.6
Return on capital employed (ROCE)	12.5	3.0	3.2	2.6	2.3
Weighted average cost of capital before taxes	8.3	8.2	8.5	8.4	8.6
Value added (€ million)[5]	262.8	–391.7	–438.1	–500.8	–575.5

[1] Information refers to the continuing operations of the K+S Group.
[2] The presentation in the income statement was changed in line with the internal management structure and to improve industry benchmarking from the 2019 financial year onwards. The prior-year figure was adjusted as shown in the section on "Changes to the structure of the income statement."
[3] The adjusted key indicators include the gains/(losses) from operating anticipatory hedges in the relevant reporting period, which eliminate the effects of changes in the fair value of the hedges. In addition, related effects on deferred and cash taxes are eliminated; tax rate for 2019: 30.0% (2018: 30.0%).
[4] This information refers to continued and discontinued operations of the K+S Group.
[5] Value added = (ROCE – weighted average cost of capital before taxes) × (operating assets + working capital).

The returns expected by equity providers derive from a risk-free interest rate plus a risk premium. The present-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 at December 31, 2019, this was 0.34% (2018: 0.95%). The risk premium has been calculated using a market risk premium of 7.00% (2018: 6.25%) as well as the beta factor of 1.14 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 8.3% (2018: 7.9%).

The average interest on debt before taxes is 2.2% (2018: 3.1%) and results from the peer group company rating and a corresponding spread applicable to the risk-free base interest rate. After taking into account the adjusted Group tax rate of 30%, this results in an average cost of debt after taxes of 1.5% (2018: 2.2%).

As at December 31, 2019, the indebtedness calculated according to the peer group method is 51.8%. (2018: 48.5%).

In total, this resulted in a weighted average cost of capital of 6.0% (2018: 6.0%) after taxes for the K+S GROUP, as well as for the individual operating units. Based on an average figure for operationally tied up capital of €8,944.8 million for 2019, this resulted in a capital charge of €560.8 million (2018: €524.7 million). This corresponds to a cost of capital before taxes of 8.6% (2018: 8.4%).

PROFITABILITY RATIOS

In the year under review, the return on equity after taxes was 1.8% (2018: 2.1%) with the return on total investments amounting to 2.6% (2018: 2.4%). The return on capital employed (ROCE) of the K+S GROUP fell to 2.3% in the year under review compared to 2.6% in the previous year. In 2019 as well, ROCE was therefore below our cost of capital of 8.6% before taxes. As a result, the K+S GROUP recorded a negative value added of €–575.5 million for the past financial year (2018: €–500.8 million).

'Definition of key financial figures used,' page 246

CALCULATION OF ROCE **B.28**

in € million	2018	2019
ROCE = earnings before operating hedges/ capital employed (annual average)	**2.6%**	**2.3%**
Earnings before operating hedges	227.2	208.4
Intangible assets[1]	**807.6**	**824.6**
Property, plant and equipment	6,687.9	7,210.0
Investments in affiliated companies and other equity interests	88.8	106.0
Operating assets[1]	7,584.3	8,140.6
Inventories	**691.5**	**789.3**
Trade receivables	836.7	724.7
Other assets	316.8	294.4
Trade payables	–239.7	–241.3
Other liabilities	–330.2	–560.7
Current provisions	–314.6	–329.0
Working capital adjustments[2]	166.3	360.5
Working capital	1,126.7	1,037.9
Capital employed	**8,711.0**	**8,944.8**

[1] Adjusted for deferred tax included in goodwill from initial consolidation.
[2] Adjusted for CTA plan asset surpluses, receivables and liabilities from cash deposits, fair values of operating anticipatory hedges, reimbursement claims and corresponding obligations, as well as liabilities from finance leases.

The calculation of return on equity and return on total investments is presented in tables **B.28** and **B.29**.

CALCULATION OF RETURN ON EQUITY **B.29**

in € million	2018	2019
Equity	4,144.1	4,495.1
Effects of fair value changes from operating anticipatory hedges	16.9	5.8
Equity, adjusted as at Dec. 31	4,161.0	4,500.9
Adjusted equity (LTM)	**4,147.6**	**4,330.9**
Adjusted consolidated earnings after tax	**85.4**	**77.8**
Return on equity	**2.1%**	**1.8%**

CALCULATION OF RETURN ON TOTAL INVESTMENTS		B.30
in € million	2018	2019
Balance sheet total	9,966.2	10,592.2
Effects from fair value fluctuations	13.3	7.9
Effects from deferred tax	−267.3	−269.4
Reimbursement claims and corresponding obligations	−27.0	−23.2
Total assets, adjusted as at Dec. 31	**9,685.2**	**10,307.5**
Adjusted total assets (LTM)	**9,738.6**	**9,978.7**
Adjusted earnings before taxes	**235.7**	**255.3**
Return on total investment	**2.4%**	**2.6%**

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 optimizing the financial capability, and
+ reducing financial risks, including through the use of financial instruments.

Central cash management allows us to control liquidity and optimize the cash flows within the K+S GROUP. In order to maintain our capability for financing and to achieve a low capital charge 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 a stable crossover 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 key figures listed in Table **B.31**.

'K+S on the capital market,' page 32

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 goods or services supplied 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 of the euro against the US dollar, impact in particular on the Europe+ operating unit by affecting the amount of our revenues and the equivalent value of our receivables. Key net positions (net revenues in US dollars less freight and other costs denominated in US dollars) are therefore hedged using derivatives, normally options and futures.

KEY INDICATORS OF THE CAPITAL STRUCTURE — **B.31**

	2015	2016	2017	2018	2019
Net financial liabilities/EBITDA	1.3	4.6	5.2	5.3	4.9
Net debt/equity (%)	55.9	78.7	99.5	107.2	101.6
Equity ratio (%)	51.9	47.2	42.7	41.6	42.4

CURRENCY HEDGING, OPERATING UNIT EUROPE+[1] — **B.32**

	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019
EUR/USD exchange rate after premiums	1.14	1.17	1.17	1.15	1.17	1.16
Average EUR/USD spot rate	1.18	1.14	1.12	1.11	1.11	1.12

[1] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.

We use options and futures to hedge a worst-case scenario but, at the same time, there is an opportunity to benefit from more favorable exchange rate movements. In 2019, the rate realized for the euro against the US dollar in the Europe+ operating unit averaged €1.16/USD incl. hedging costs (2018: €1.14/USD). **B.32**

Furthermore, exchange rate 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 through 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 occur in the Europe+ and Americas operating units and are not hedged.

CAPITAL EXPENDITURE ANALYSIS

In 2019, the K+S GROUP invested a total of €493.3 million (2018: €443.2 million. A large part of this capital expenditure was attributable to maintenance. The year-on-year increase, as planned, is mainly due to environmental investments in wastewater management at the Werra facility, expenses for tailings pile expansions, and regulatory requirements. **B.34, B.35**

At the end of the year, there were capital expenditure obligations totaling €210.3 million related to ongoing investment projects.

'Presentation of segments,' page 72
'Environment,' page 88

We calculate capital expenditure as follows: **B.33**

RECONCILIATION OF CAPITAL EXPENDITURE **B.33**

in € million	2018	2019
Additions of other intangible assets and property, plant and equipment	**553.2**	**705.0**
– Leases[1]		54.8
– Interest cost	17.5	14.3
– Capitalization of depreciation	5.9	6.1
– Recultivation	39.1	135.9
– Reimbursement claims and other non-cash changes	47.5	0.6
Capital expenditure (capex)	**443.2**	**493.3**

[1] Leasing contracts newly concluded during the year that must be capitalized in accordance with IFRS 16. The previous year's figure was not adjusted.

LIQUIDITY ANALYSIS

Net cash flows from operating activities in the year under review were €639.8 million, up significantly on the previous year (2018: €308.7 million). Factors contributing to this result were the strong business performance, lower income tax payments, and an active working capital management. In 2019, net cash used in investing activities (adjusted for purchases/sales of securities and other financial investments) amounted to €–500.0 million (2018: €–512.7 million). At €139.7 million, the adjusted free cash flow (excluding purchases/sales of securities and other financial investments) showed a significant improvement compared to the previous year (2018: €–206.3 million). The positive effect of the first-time application of IFRS 16 described in EBITDA resulted in a positive effect on free cash flow of €45.0 million.

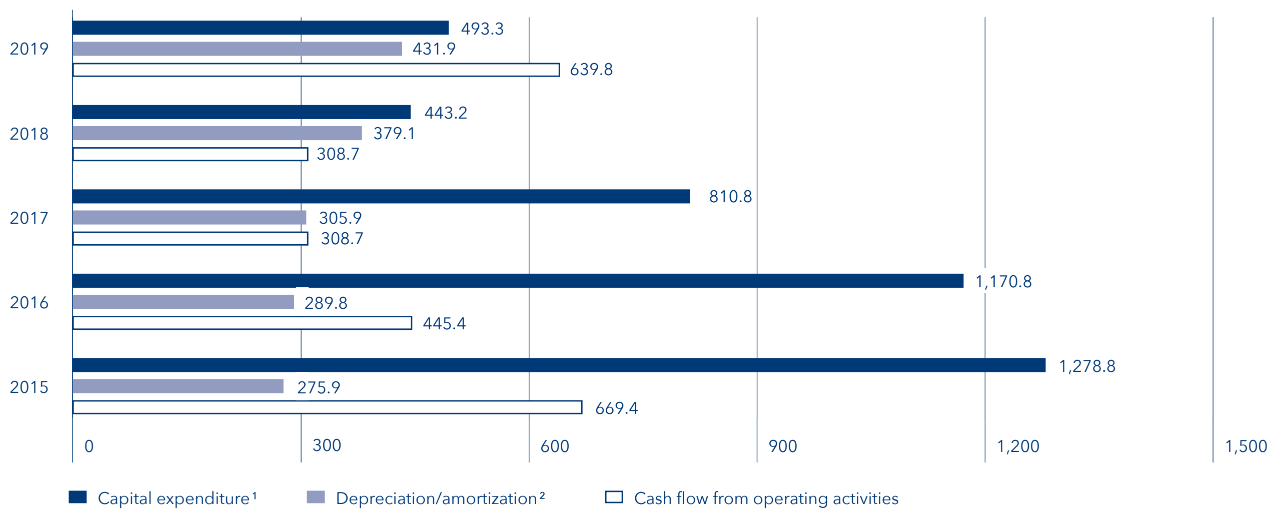
CAPITAL EXPENDITURE BY SEGMENT[1,2] **B.34**

in € million	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	%
Operating unit Europe+	351.5	57.8	74.0	125.2	147.1	404.1	15.0
Operating unit Americas	83.1	14.2	17.3	16.7	33.5	81.7	–1.7
Reconciliation	8.6	0.6	1.8	2.4	2.7	7.5	–12.8
K+S Group	**443.2**	**72.6**	**93.1**	**144.3**	**183.3**	**493.3**	**11.3**
Share of capital expenditure (%)	–	14.7	18.9	29.2	37.2	100.0	–

[1] Relates to cash payments for investments in property, plant and equipment and intangible assets, taking claims for reimbursement from claim management into account excluding additions to leases in accordance with IFRS 16. The standard was applied for the first time as at January 1, 2019.
[2] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.

CAPITAL EXPENDITURE COMPARED TO DEPRECIATION, AMORTIZATION, IMPAIRMENT LOSSES, AND CASH FLOWS FROM OPERATING ACTIVITIES B.35

in %



[1] Relates to cash payments for investments in property, plant and equipment, and intangible assets, taking claims for reimbursement from claim management into account.
[2] Depreciation, amortization, and write-downs (including impairment losses and reversals) recognized in profit or loss on property, plant and equipment, intangible assets, and investment properties, as well as impairment losses on financial assets.

OVERVIEW OF CASH FLOWS[1] B.36

in € million	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	%
Net cash flows from operating activities	308.7	324.4	193.2	–7.8	130.0	639.8	+107.3
Net cash flows used in investing activities	–512.7	–91.3	–91.5	–123.4	–193.8	–500.0	–2.5
Free cash flow	**–204.0**	**233.1**	**101.7**	**–131.2**	**–63.8**	**139.8**	
Adjustment for purchases/sales of securities and other financial investments	–2.3	–	–0.2	0.1	–	–0.1	
Adjusted free cash flow	**–206.3**	**233.1**	**101.5**	**–131.1**	**–63.8**	**139.7**	

[1] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.

Net cash flows from financing activities in the year under review fell to €11.0 million (2018: €187.3 million). This was mainly attributable to higher repayments compared to the previous year.

As at December 31, 2019, net cash and cash equivalents amounted to €316.3 million (December 31, 2018: €162.2 million). These consist of cash deposits, money market instruments, and comparable securities with maturities of less than three months. **B.36**

FINANCING ANALYSIS

As at December 31, 2019, 87% of financing resulted from equity and non-current debt, which in turn primarily consists of bond liabilities (December 31, 2018: 87%). Provisions also make up a large part of the debt.

EQUITY ABOVE PREVIOUS YEAR

Equity increased to €4,495.1 million as at the balance sheet date compared to €4,144.1 million in the previous year. The equity ratio improved to 42.4% (December 31, 2018: 41.6%). The change is mainly attributable to favorable exchange rate effects as at the reporting date.

DEBT RATIO DOWN SLIGHTLY

Non-current debt, including non-current provisions, rose to €4,721.1 million as at December 31, 2019 (December 31, 2018: €4,528.4 million). As a result, the ratio of non-current debt declined to 44.6% of total assets (December 31, 2018: 45.4%).

Current debt was €1,376.0 million at the balance sheet date (December 31, 2018: €1,293.7 million). Its ratio to total equity and liabilities therefore remained at 13.0% as at December 31, 2019 (December 31, 2018: 13.0%).

'Notes,' page 215

FINANCIAL LIABILITIES

As at December 31, 2019, financial liabilities amounted to €3,398.9 million (December 31, 2018: €3,283.3 million). Most recently, a corporate bond with a total volume of €600 million was issued in July 2018. 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.

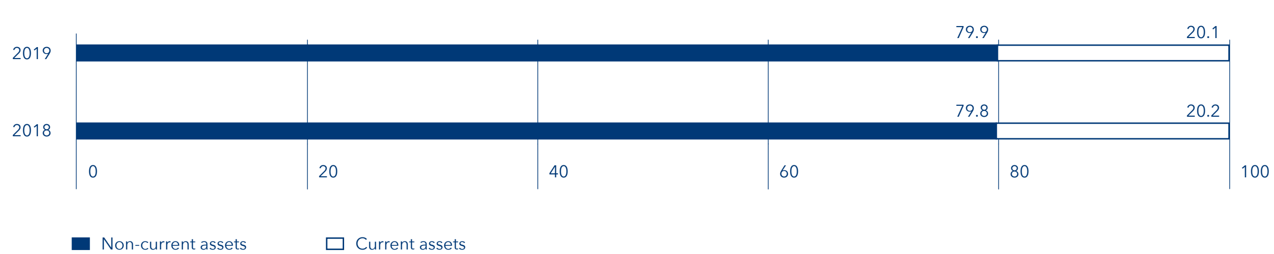
Provisions for long-term mining obligations declined tangibly to €910.6 million as at the balance sheet date; the reason was an adjustment of the average discount rate from 3.3% in 2018 to 3.5% in 2019 (December 31, 2018: €1,015.1 million).

Non-current provisions for pensions and similar obligations increased to €232.2 million (2018: €187.0 million). The average weighted interest rate for pensions and similar obligations was 2.2% as at December 31, 2019 (December 31, 2018: 3.1%). The actuarial valuation of pension provisions uses the projected unit credit method in accordance with IAS 19.

'Notes,' page 168

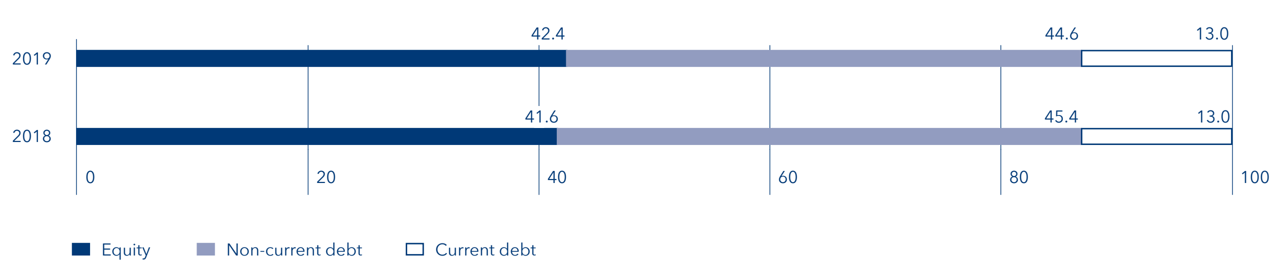
ASSETS **B.37**

in %



EQUITY AND LIABILITIES **B.38**

in %



NET DEBT B.39

in € million	Dec. 31, 2018	Dec. 31, 2019
Cash and cash equivalents	167.6	321.8
Non-current securities and other financial investments	7.0	7.0
Current securities and other financial investments	11.2	11.4
Financial liabilities	–3,283.3	–3,398.9
Lease liabilities from finance lease contracts [1]	–164.2	–78.2
Non-current reimbursement claim for Morton Salt bond	20.2	20.3
Net financial liabilities	**–3,241.5**	**–3,116.6**
Leasing obligations excluding liabilities from finance lease contracts [1]	—	–306.3
Provisions for pensions and similar obligations	–187.0	–232.2
Long-term provisions for mining obligations	–1,015.1	–910.6
Net debt	**–4,443.6**	**–4,565.7**

[1] Starting in the 2019 financial year, we distinguish between lease liabilities from financing agreements concluded with banks (lease liabilities from finance lease contracts) and other lease liabilities (leasing obligations excluding liabilities from finance lease contracts).. Prior-year figures are reported without corresponding adjustments.

SIGNIFICANCE OF OFF-BALANCE SHEET FINANCING INSTRUMENTS FOR THE FINANCIAL POSITION AND NET ASSETS

The initial application of IFRS 16 means that all leases are recognized in the balance sheet. Exceptions apply only to short-term, low value, and variable leases, which have no material impact on the economic position of the K+S GROUP.

MULTIPLE PERIOD OVERVIEW OF ASSETS **B.40**

in € million	2015	2016	2017	2018	2019
Property, plant and equipment and intangible assets	6,123.1	7,540.4	7,655.4	7,670.2	8,208.5
Financial assets, non-current securities and other financial investments	14.1	34.4	28.0	96.1	113.2
Inventories	705.3	710.4	690.9	691.5	789.3
Trade receivables	708.6	656.5	714.9	836.7	724.7
Cash and cash equivalents, current securities and other financial investments	163.1	154.5	194.0	178.8	333.2

Net assets

ANALYSIS OF ASSET STRUCTURE

Total assets of the K+S GROUP amounted to €10,592.2 million as at December 31, 2019 (December 31, 2018: €9,966.2 million). Property, plant and equipment increased moderately to €7,210.0 million (December 31, 2018: €6,687.9 million); the initial application of IFRS 16 increased property, plant and equipment as at January 1, 2019 by €206.3 million. Trade receivables went down to €724.7 million (December 31, 2018: €836.7 million). Cash and cash equivalents, current and non-current securities, and other financial investments grew to €340.2 million as at the balance sheet date (December 31, 2018: €185.8 million). Compared to the previous year, the ratio of non-current to current assets was almost unchanged at 80:20. **B.40**

The net debt of the K+S GROUP was €4,565.7 million as at December 31, 2019 (December 31, 2018: €4,443.6 million). The initial application of IFRS 16 increased net debt by €216.1 million as of January 1, 2019. Net financial liabilities, excluding non-current provisions, amounted to €3,116.6 million as at the reporting date (December 31, 2018: €3,241.5 million). The indebtedness ratio (net financial liabilities/EBITDA) stood at 4.9 (December 31, 2018: 5.3). In addition to the operating business, the package of measures described on page 51 is also expected to contribute to generating value and reducing debt. **B.41**

'Corporate strategy,' page 49
'Definition of key financial figures used,' page 246

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 that serve to fund pension obligations in Canada. Moreover, reinsurance arrangements are in place that are also to be classified as plan assets in accordance with IFRS. These types of obligations are presented on the balance sheet on a net basis in accordance with IFRS. In 2019, restricted assets in connection with pension obligations amounted to €448.1 million compared to €399.0 million in the previous year. In addition, as at the balance sheet date, plan assets for obligations from working lifetime accounts amounted to €44.3 million (2018: €19.3 million), which was also netted on the balance sheet.

'Notes,' note (22), page 207

ASSETS NOT RECOGNIZED ON THE BALANCE SHEET

As at December 31, 2019, other financial obligations totaled €210.3 million (December 31, 2018: €397.1 million) and relate to obligations arising from uncompleted capital expenditure projects. The decline is mainly attributable to new rules in IFRS 16, which require all leases to be recognized in the balance sheet.

EFFECTS OF CHANGES IN ACCOUNTING POLICIES

Since the beginning of the 2019 financial year, we have been applying the new requirements of IFRS 16 Leases. In accordance with our chosen transition method, prior-year figures are not restated. The new guidance results in all leases being recognized in the balance sheet as right-of-use assets and lease liabilities. The increase in lease liabilities to €386.6 million as at December 31, 2019 (December 31, 2018: €164.2 million) and in right-of-use assets arising from leases to €437.0 million (December 31, 2018: lease assets of €217.7 million) is largely attributable to this change in financial reporting. The current portion of lease liabilities amounts to €91.6 million (December 31, 2018: €15.7 million). The right-of-use assets are presented under property, plant and equipment, whereas the lease liabilities are disclosed under other financial liabilities. The initial application of IFRS 16 did not result in any significant changes in equity.

'Notes to the Consolidated Financial Statements' 'New or changed accounting standards and interpretations,' page 180

MULTIPLE PERIOD OVERVIEW OF THE FINANCIAL POSITION **B.41**

in € million	2015	2016	2017	2018	2019
Equity	4,295.6	4,552.2	4,160.7	4,144.1	4,495.1
Equity ratio (%)	51.9	47.2	42.7	41.6	42.4
Non-current liabilities	3,036.8	3,930.4	4,240.2	4,528.4	4,721.1
– thereof provisions for pensions and similar obligations	166.1	186.7	166.4	187.0	232.2
– thereof provisions for mining obligations	870.1	996.0	1,000.0	1,015.1	910.6
Non-current provisions as share of total equity and liabilities (%)	12.5	12.3	12.0	12.1	12.4
Current liabilities	941.2	1,162.9	1,353.5	1,293.7	1,376.0
– thereof trade payables	306.0	343.8	288.4	239.7	241.3
Financial liabilities	1,543.7	2,534.5	3,021.7	3,283.3	3,398.9
Net financial liabilities	1,363.6	2,401.1	2,974.1	3,241.5	3,116.6
Net debt	2,399.8	3,583.8	4,140.5	4,443.6	4,565.7
Financial liabilities/equity (%)[1]	35.9	55.7	72.6	79.2	75.6
Net debt/equity (%)[2]	55.9	78.7	99.5	107.2	101.6
Working capital	945.9	894.6	968.1	1,126.7	1,037.9
Net cash flows from operating activities	669.4	445.4	306.8	308.7	639.8
Free cash flow	–106.4	–756.0	–356.7	–204.0	139.8
Net cash flows from/(used in) financing activities	–151.5	769.1	411.5	187.3	11.0

[1] Financial liabilities/equity.
[2] Net debt/equity.

Presentation of operating units (segments according to IFRS 8)

OPERATING UNIT EUROPE+

REVENUES DOWN SLIGHTLY YEAR-ON-YEAR

The Europe+ operating unit's revenues of €2,535.9 million were down slightly compared with the previous year (2018: €2,585.2 million). All customer segments benefited from positive price and exchange rate effects. In the Agriculture customer segment, these positive factors were offset by lower sales volumes caused by production cuts. In the Industry customer segment, sales volumes were down on the previous year due to availability factors. In the Consumers customer segment, sales volumes were slightly lower, although we achieved a product mix with higher revenues and margins. In the Communities customer segment, a below-average winter in the fourth quarter resulted in a decrease in sales volumes compared with the strong total of the previous year. **B.42, B.43**

BREAKDOWN OF REVENUES BY CUSTOMER SEGMENT **B.42**

in € million	2018	2019
Operating unit Europe+	**2,585.2**	**2,535.9**
– Agriculture customer segment	1,741.3	1,715.6
– Industry customer segment	649.3	635.9
– Consumers customer segment	66.2	64.2
– Communities customer segment	128.4	120.2

EARNINGS DOWN SLIGHTLY YEAR ON YEAR

EBITDA decreased slightly in 2019, to €437.0 million (2018: €443.3 million). While the Agriculture customer segment's EBITDA increased, it was stable in the Consumers customer segment. Availability factors led to a decline in the Industry customer segment and there was a weather-related decrease in the Communities customer segment. The effects referred to in connection with revenue were also behind this development. The first-time application of IFRS 16 had a positive effect on EBITDA of €22.2 million.

OPERATING UNIT EUROPE+: VARIANCE COMPARED WITH PREVIOUS YEAR **B.43**

in %	2019
Change in revenues	**–1.9**
– volume/structure-related	–7.4
– price/pricing-related	+3.7
– currency-related	+1.8
– consolidation-related	–

CAPITAL EXPENDITURE ABOVE PREVIOUS YEAR

Our capital expenditure in the Europe+ operating unit amounted to €404.2 million in 2019, an increase of €52.7 million compared with the previous year (2018: €351.5 million). The year-on-year increase, as planned, is mainly due to environmental investments in wastewater management at the Werra facility, expenses for tailings pile expansions, and regulatory requirements. At the Bethune plant, we continued to drive the development of the cavern fields (pads) and the expansion of the pipeline network. At the Frisia salt production site in the Netherlands, we also progressed the development of a new brine field. In Germany, our capital expenditure went towards the purchase of new bulk material wagons.

POTASH PRODUCTION SCALED BACK

In addition to the maintenance break in Bethune intended to improve product quality, which was initially extended to two weeks, K+S announced on September 23, 2019, against the backdrop of the buying resistance caused by China's import freeze, that the production of potassium chloride would be cut by up to 300,000 tonnes until the end of the year. The associated effect on EBITDA was estimated at up to €80 million. The interruption in production was used to extend the maintenance shutdown at the Bethune site by a further week to a total of three weeks in September. In addition to this reduction in production, K+S carried out additional maintenance measures at German sites in the fourth quarter of 2019, thereby reducing potash production by a further 200,000 tonnes.

WASTEWATER MANAGEMENT

At the beginning of August, the Kassel regional council approved the permit for temporary underground storage of up to 400,000 m³ of saline wastewater for the first time. We thus increased the storage capacity at the Werra plant to a total of around one million m³ as planned. As a result, we were able to avoid wastewater-related production standstills at the Werra site despite another very dry summer. Utilization of the possibilities for off-site waste disposal of saline wastewater was another contributing factor.

At the end of 2021, we will suspend injection of saline water and want to strike out in new directions. Our aim is to be able to permanently place salt water underground in parts of the mine that are no longer in use. From our point of view, the permit for temporary storage received in 2019 is a first important step towards this goal and the results so far are promising. Storage of brine underground would further reduce environmental impacts on the Werra and the Weser from 2022.

PRODUCT QUALITY IMPROVEMENTS IN BETHUNE

As had been planned for quite some time, K+S succeeded in the year under review to significantly improve the quality of the potash products manufactured at its new potash plant in Bethune, Canada. Moreover, we extended the maintenance break planned for the month of September. The existing facilities were expanded by adding further components for crushing, screening, and cooling the products.

PRODUCT AVAILABILITY AT GERMAN PRODUCTION SITES

The year 2018 has shown that we still need to improve our efficiency in using our German deposits. The challenges we identified in the course of 2018 included, among other things, limited personnel and machinery availability at the Werra plant, low levels of recoverable materials (K2O) in mine sections of the Unterbreizbach site and geological challenges at the Neuhof site. We were able to make significant improvements in the course of 2019 as a result of numerous measures, such as the partial renewal of the underground vehicle fleet, and are now again able to produce according to our potential technical capacity. Other contributing factors were initial successes in the Operations Excellence project launched as part of our SHAPING 2030 strategy. We aim to increase efficiency significantly at all our sites by the end of 2020.

'Business model,' page 37

EUROPE+ KEY FIGURES[1] **B.44**

in € million	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	%
Revenues	2,585.2	691.8	626.8	621.1	596.2	2,535.9	−1.9
EBITDA	443.3	177.1	128.4	67.3	64.2	437.0	−1.4
Capital expenditure[2]	351.5	57.8	74.0	125.2	147.2	404.2	+15.0
Employees (FTE)[3]	10,572	10,222	10,013	10,269	–	10,318	−2.4

[1] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.
[2] Relates to cash payments for investments in property, plant and equipment and intangible assets, taking claims for reimbursement from claim management into account excluding additions to leases in accordance with IFRS 16. The standard was applied for the first time as at January 1, 2019.
[3] FTE: Full-time equivalents; part-time positions are weighted in accordance with their respective share of working hours.

OPERATING UNIT AMERICAS

MODERATE INCREASE IN REVENUES

The moderate year-on-year increase in revenues for the Americas operating unit in the year under review, to €1,532.2 million (2018: €1,451.0 million), was mainly attributable to the exchange rate; all customer segments contributed to this development. All customer segments recorded additional positive price effects, while the Communities customer segment was impacted by negative volume effects. **B.45, B.47**

BREAKDOWN OF REVENUES BY CUSTOMER SEGMENT **B.45**

in € million	2018	2019
Operating unit Americas	**1,451.0**	**1,532.2**
– Industry customer segment	483.4	512.0
– Consumers customer segment	387.6	420.5
– Communities customer segment	580.0	599.7

EBITDA SLIGHTLY UP ON PREVIOUS YEAR DESPITE HIGHER LOGISTICS AND MAINTENANCE COSTS

EBITDA improved slightly to €230.0 million from €221.8 million in the previous year; a decline in earnings in the Communities customer segment was more than offset by higher earnings in the Industry and Consumers customer segments. The revenue increase described above was set against a rise in total costs, especially for maintenance and logistics. The first-time application of IFRS 16 had a positive effect on EBITDA in an amount of €30.0 million.

OPERATING UNIT AMERICAS: VARIANCE COMPARED WITH PREVIOUS YEAR **B.47**

in %	2019
Change in revenues	**+5.6**
– volume/structure-related	–1.5
– price/pricing-related	+2.0
– currency-related	+5.1
– consolidation-related	–

STABLE CAPITAL EXPENDITURE

In 2019, the Americas operating unit's capital expenditure of €81.7 million was roughly in line with the previous year (2018: €83.1 million). One of the most significant multi-year projects in the year under review was the opening of the respective mining horizons at our Ojibway, Canada, and Weeks Island, USA, sites.

Customer segments (not segments according to IFRS 8)

The determination of revenue and sales in the customer segments is based on a predefined product matrix. Decisive for the assignment of the product matrix are the product features: customer group, sales region, and material. Production and sales costs directly attributable to the products are directly allocated to the customer segments. Indirect costs that are not directly attributable to customer segments (mainly administrative costs) are allocated using an allocation key to the customer segments. Once the direct and indirect costs have been allocated, the income statement by segment is available.

AMERICAS KEY FIGURES[1] **B.46**

in € million	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	%
Revenues	1,451.0	571.2	251.2	282.6	427.2	1,532.2	+5.6
EBITDA	221.8	107.6	13.6	25.3	83.9	230.0	+3.7
Capital expenditure[2]	83.1	14.2	17.3	16.7	33.5	81.7	–1.7
Employees (FTE)[3]	3,520	3,602	3,575	3,665	–	3,715	+5.5

[1] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.
[2] Relates to cash payments for investments in property, plant and equipment and intangible assets, taking claims for reimbursement from claim management into account excluding additions to leases in accordance with IFRS 16. The standard was applied for the first time as at January 1, 2019.
[3] FTE: Full-time equivalents; part-time positions are weighted in accordance with their respective share of working hours.

AGRICULTURE CUSTOMER SEGMENT

The Agriculture customer segment is assigned to the Europe+ operating unit.

Revenues in the Agriculture customer segment amounted to €1,715.6 million in the year under review, down slightly on the prior-year figure (2018: €1,741.3 million); both higher prices and positive exchange rate effects were able to offset the decline in sales volumes caused by the production cuts. In 2019, revenues from sales in Europe came to €874.6 million (2018: €875.1 million), while revenues from sales overseas stood at €841.0 million (2018: €866.2 million). Of total revenues in the Agriculture customer segment, an amount of €995.8 million was attributable to potassium chloride (2018: €974.9 million) and €719.8 million to fertilizer specialities (2018: €766.4 million). **B.48, B.49**

'Sector-specific environment,' page 57

The sales volume declined to a total of 6.30 million tonnes in 2019 (2018: 6.85 million tonnes). This development was mainly driven by production cuts in the second half of 2019. In the year under review, 3.16 million tonnes were sold in Europe (2018: 3.27 million tonnes) and 3.14 million tonnes were sold overseas (2018: 3.58 million tonnes). Of the total sales volume, 3.88 million tonnes of potassium chloride (2018: 4.09 million tonnes) and 2.42 million tonnes of fertilizer specialities were sold (2018: 2.76 million tonnes).

The decline in sales volumes of fertilizer specialities is attributable to limited availability due to the closure of the Sigmundshall mine.

EBITDA in the Agriculture customer segment increased moderately in 2019, to €294.9 million (2018: €274.5 million), driven above all by positive price effects.

AGRICULTURE[1] **B.48**

	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	%
Revenues	1,741.3	461.0	440.1	425.0	389.5	1,715.6	–1.5
Sales volumes (in million tonnes)	6.85	1.64	1.61	1.52	1.53	6.30	–8.1
EBITDA	274.5	124.2	95.3	46.1	29.3	294.9	7.4

[1] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.

CHANGES IN REVENUES, SALES VOLUMES AND AVERAGE PRICES BY REGION[1,2,3] **B.49**

		2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	%
Revenues	**€ million**	**1,741.3**	**461.0**	**440.1**	**425.0**	**389.5**	**1,715.6**	**–1.5**
Europe	€ million	875.1	274.4	209.5	182.6	208.2	874.6	–0.1
Overseas	USD million	1,022.1	211.9	259.2	269.6	200.8	941.5	–7.9
Sales volumes	**t million**	**6.85**	**1.64**	**1.61**	**1.52**	**1.53**	**6.30**	**–8.1**
Europe	t million	3.27	0.98	0.75	0.66	0.78	3.16	–3.3
Overseas	t million	3.58	0.66	0.87	0.86	0.75	3.14	–12.2
Average price	**€/t**	**254.2**	**281.7**	**272.6**	**279.7**	**254.9**	**272.4**	**+7.2**
Europe	€/t	267.6	281.2	280.5	277.5	267.9	277.0	+3.5
Overseas	USD/t	285.5	320.8	298.7	312.9	267.5	299.8	+4.9

[1] 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 entered into for most of these revenues. Prices are also affected by the relevant product mix and should therefore be taken as a rough indication only.

[2] The information is not comparable to the information on the Potash and Magnesium business unit in the 2018 Annual Report. The Agriculture customer segment comprises potassium chloride and fertilizer specialities, while the Potash and Magnesium business unit had additionally included industrial products.

[3] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.

INDUSTRY[1] **B.50**

	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	%
Revenues	1,132.8	281.8	282.5	292.9	290.8	1,148.0	1.3
Sales volumes (in million tonnes)	10.30	2.44	2.47	2.66	2.52	10.09	–2.0
EBITDA	225.5	58.5	55.8	44.8	58.7	218.0	–3.3

[1] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.

INDUSTRY CUSTOMER SEGMENT

Based on its regional allocation, the Industry customer segment operates in both operating units and is considered there as well as globally.

In the Industry customer segment, revenues in 2019 were lifted to €1,148.0 million (2018: €1,132.8 million) by higher prices as well as positive exchange rate effects.

'Sector-specific environment,' page 57

At 10.09 million tonnes, sales volumes were down on the prior-year level (2018: 10.30 million tonnes). While sales volumes of products for the food processing industry rose in the Americas operating unit, they were roughly stable in the Europe+ operating unit. Sales volumes for the oil and gas industry increased in the Europe+ operating unit but were below the prior-year level in the Americas operating unit. Sales volumes of animal feed products were largely stable in the Europe+ operating unit and were below the prior-year level in the Americas operating unit. The decrease in the sales volumes of products for the chemical industry in Europe owing to availability factors was not fully offset by increased demand in North and South America.

EBITDA amounted to €218.0 million, down from €225.5 million in the previous year. The rise in revenues was not enough to fully offset higher costs, especially logistics costs. **B.50**

CONSUMERS CUSTOMER SEGMENT

Based on its regional allocation, the Consumers customer segment operates in both operating units and is considered there as well as globally.

Revenues in the Consumers customer segment amounted to €484.7 million in the reporting period, slightly up on the previous year (2018: €453.7 million); higher prices, especially in North America, a shift in the product mix towards higher-quality products, and positive exchange rate effects more than offset a slightly negative volume effect.

'Sector-specific environment,' page 57

Sales volumes of 1.79 million tonnes were slightly lower than in the previous year (2018: 1.81 million tonnes). While sales volumes for table salt were roughly stable in both operating units, sales volumes of water and pool salts increased in the Americas operating unit and were roughly on a level with the previous year in the Europe+ operating unit. Sales volumes of de-icing salt for end consumers were down in both operating units.

EBITDA increased significantly in 2019, to €59.7 million (2018: €43.3 million), driven above all by positive price and structure effects. **B.51**

CONSUMERS[1] **B.51**

	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	%
Revenues	453.7	119.6	108.5	117.7	138.9	484.7	6.8
Sales volumes (in million tonnes)	1.81	0.48	0.40	0.42	0.49	1.79	–1.1
EBITDA	43.3	16.4	9.0	13.9	20.4	59.7	37.9

[1] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.

COMMUNITIES[1] **B.52**

	2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	2019	%
Revenues	708.4	400.6	47.0	68.2	204.1	719.9	1.6
Sales volumes (in million tonnes)	13.32	7.11	0.86	1.27	3.46	12.70	–4.7
EBITDA	121.8	85.6	–18.1	–12.2	39.1	94.4	–22.5

[1] The quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.

COMMUNITIES CUSTOMER SEGMENT

Based on its regional allocation, the Communities customer segment operates in both operating units and is considered there as well as globally.

Revenues in the Communities customer segment increased to €719.9 million in 2019 (2018: €708.4 million), driven in particular by positive exchange rate effects, which more than offset the lower sales volumes.

'Sector-specific environment,' page 57

Total sales volumes of de-icing salt amounted to 12.70 million tonnes in the year under review, down on the high prior-year level (2018: 13.32 million tonnes) and close to the average of the past ten years. While, for weather-related reasons, the performance of the de-icing salt business in the Europe+ operating unit was average in the first quarter of 2019 and below average in the fourth quarter, the first quarter in the Americas operating unit was above and the fourth quarter roughly in line with the long-term average.

EBITDA decreased to €94.4 million from €121.8 million in the strong prior-year period. Here, lower sales volumes, higher maintenance, and logistics costs had a negative effect. **B.52**

ASSESSMENT OF THE CURRENT ECONOMIC SITUATION BY THE BOARD OF EXECUTIVE DIRECTORS[1]

Despite the progress made in implementing the corporate strategy SHAPING 2030, improving operating performance, increasing production capacity and quality in Bethune, and improving wastewater management, external factors once again led to a disappointing year in 2019 in terms of earnings. Since early fall 2019, the potash market has weakened. Freak weather in important sales regions as well as a temporary import stop for potassium chloride in China caused a massive decline in demand and prices. Against this backdrop, potash producers cut back production in the second half of the year. K+S also reduced production. In this connection, we had to revise our original earnings expectations significantly downwards. Nevertheless, in 2019, we have achieved a growth in EBITDA of 6% year on year to a total of €640.4 million. In terms of free cash flow, however, we were able to significantly exceed our forecast: For the first time since 2013, we achieved a significant positive adjusted free cash flow of €139.7 million. The gearing ratio (net financial liabilities/EBITDA) at the end of 2019 was 4.9 times (December 31, 2018: 5.3 times). Under the market conditions described above, we are not in a position to generate sufficient free cash flow from operations alone to significantly reduce our debt within the originally planned time frame. However, we need a solid financial base to enter the planned growth phase of our strategy. It also makes the Company more robust. We therefore decided in December 2019, together with the Supervisory Board, to create value through a comprehensive package of measures and to accelerate the implementation of SHAPING 2030 by reducing debt.

[1] As at: March 4, 2020.

RESEARCH AND DEVELOPMENT

We continuously develop our extraction and production processes internally and together with external cooperation partners and research facilities. Our aims are to improve the quality of the products, increase the efficiency of the processes, and make the processing methods even more sustainable. Our clear focus is to develop new, innovative products to satisfy our customers' specific needs and to enable growth.

Research key indicators

Research costs totaled €16.3 million and were thus slightly above the previous year's level (2018: €15.9 million). Of this, €9.5 million was spent on research activities in the Europe+ operating unit and €2.6 million in the Americas operating unit. Research intensity (research costs/revenue) is at the level of previous years at 0.4%. Capitalized development-related capital expenditure decreased to €0.4 million in the year under review (2018: €1.4 million) and mainly related to a development project in the field of brine mining at the Canadian Bethune site. **B.53**

Research facilities and cooperation agreements

We have our own research facilities available for research and development. We also work together in public-private partnerships, initiate research projects with universities and other research institutes, and cooperate with industrial partners.

RESEARCH AND DEVELOPMENT ACTIVITIES **B.53**

in € million	2018	2019
Research costs	**15.9**	**16.3**
Operating unit Europe+	9.7	9.5
Operating unit Americas	2.5	2.6
Other areas	3.7	4.2
Research intensity (research costs/revenues)	0.4%	0.4%
Capitalized development-related capital expenditure	1.4	0.4

K+S ANALYSIS AND RESEARCH CENTRE

More than 100 employees work for K+S in the Analysis and Research Center (AFZ) in Unterbreizbach in the Thuringian/Hessian potash district. In laboratories and test facilities, they carry out research to optimize existing processes and products and to develop new knowledge that can be used in practice. This work produces new products, processes, and specially adapted analysis methods. In 2019, around 26,000 samples were handled and almost 350,000 analysis parameters were determined in the central laboratory of the AFZ, which has DIN EN ISO/IEC 17025 accreditation.

MORTON SALT RESEARCH

In the research and development laboratory in Elgin, Illinois, the technical skills of our employees are developed in order to differentiate our existing products by modifying properties and identifying new potential areas of application.

INNOLABS

The two Innolabs AgTech and Industrial Science complement research and development to look out for new markets and business models. In November 2019, Innopark Sigmundshall was also opened at the former Sigmundshall potash facility. The Innopark is a place for start-ups; here, feasibility studies are carried out within the scope of research projects and pilot facilities are established. One of the first pilot projects is the planning and construction of a test facility to cultivate macroalgae.

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. The INTERNATIONAL MAGNESIUM INSTITUTE (IMI), located in Fuzhou, China, is a partnership between K+S and the FUJIAN AGRICULTURE AND FORESTRY UNIVERSITY. Last year's research focused on the relationship between abiotic stress factors in agriculture and optimized plant nutrition, especially with regard to the supply of potassium and magnesium to plants.

Selected research and development projects

- Within the scope of the project of "Salt solutions in underground mine cavities" various research projects were carried out for efficient processing of salt water and safe flooding.
- A continued focus is on covering tailings piles. For example, the water-repellent cover process was improved further. In this process, the natural leaching of the tailings pile is used to enrich a high-evaporation cover layer. For this purpose, an insoluble additive is added to the last fill (an approx. 10 meter-thick layer). The layer that forms on the surface of the tailings pile has a higher water retention capacity and a higher evaporation capacity. Investigations into the subsequent establishment of a biocrust on this cover layer are carried out in cooperation with the University of Rostock.
- The feasibility of the two winning ideas for alternative covering of tailings piles from the "Brine Challenge" crowdsourcing project is currently being investigated.

  www.kpluss.com/brine-challenge
- In the AFZ, together with local experts, quality optimization measures were developed for the potash products manufactured in the new Bethune potash mine in Canada, which are now in the process of being implemented.
- In 2019, with Roll-Kali we put the first optimized potash fertilizer with improved spreading properties on to the market; it is also suitable for specific fertilizer mixtures.

  www.kpluss.com/rollkali
- K+S is the only potash producer that uses the dry K+S-patented processing method of electrostatic separation (ESTA®). In the AFZ pilot facility new equipment developed by K+S is tested that improves performance and extends the areas of application.
- Within the scope of the "Material optimization and control" project, K+S is working together with the Heidelberg University on two geological research projects. The aim is to characterize the chemical compositions of the fluid phases and the formation age of saliferous rocks in order to obtain better geological predictions for future mining regions with regard to the occurrence of CO_2 gas.
- In cooperation with GHH Fahrzeuge, we are developing a new generation of electric loaders, which is part of the occupational exposure limits (OELs). project to reduce pollutant emissions at underground workplaces. The aim is to increase the share of emission-free electric loaders in underground crude salt extraction.
- Recognizing nutrient deficits in plants with a smartphone to prevent crop failure: This will be possible with Plant Nutrient Detection (PND) from Spacenus and will help farmers ensure the needs-based fertilization of crops. To develop this digital technology in the area of precision farming, K+S and Spacenus, a start-up based in Darmstadt, have agreed to work closely together.

  www.kpluss.com/spacenus

Patent portfolio

Worldwide, the K+S Group has 65 patent families (2018: 71), which are protected by 282 national rights. The patents are used, for example, in the areas of granulate production and flotation.

The number of K+S brand rights increased slightly in 2019. At the end of 2019, the K+S GROUP had 2,769 (2018: 2,743) national and regional trademarks, resulting from 565 basic brands (2018: 563).

EMPLOYEES

The implementation of the corporate strategy SHAPING 2030 will result in an extensive transformation on various levels: K+S is growing together into "One Company" and, as a result, shall use substantial synergies. In both operating units and in the central functions we are modernizing, standardizing, and digitizing important business processes.

ACTING AS "ONE COMPANY"

An important milestone on the road to ONE K+S was the merger of four operating companies into K+S MINERALS AND AGRICULTURE GMBH, which was completed in fall 2019. The functional areas, such as Human Resources, Procurement, and Finance & Accounting, which have been managed centrally since 2018, are now to gradually standardize their business processes, leverage synergies, and increasingly act in a global context.

In 2019, preparations were also made to introduce an integrated HR management system throughout the Group. With its implementation from 2020 on, we expect that all the main processes of employee management will improve considerably as a result of the optimized HR function. Employee management processes that were standardized throughout the Company are not only intended to increase our effectiveness and efficiency; they should also help us achieve our goals of the SHAPING 2030 strategy and support us during the transformation to "One Company."

OUR WORKFORCE

As of December 31, 2019, the K+S GROUP employed a total of 15,011 employees or 14,868 FTES (2018: 15,070 employees or 14,931 FTES). The reduction in employees is inter alia attributable to the closure of the Sigmundshall mine. **B.54**

Our workforce consists of 87.7% (2018: 88.3%) employees covered by a collective wage agreement, 8.2% (2018: 7.6%) employees not covered by a collective wage agreement, and 4.2% (2018: 4.0%) trainees. On average, our employees are 42 years old and have been working for us for 14 years. The turnover rate, i.e., the ratio of persons who leave the Company to average workforce size, is 8.0% (2018: 8.4%).

K+S respects the freedom of association and the right to collective bargaining. Around 73% of employees covered by a collective wage agreement in Group companies in Germany are members of trade unions. In our view, the relationship with the works councils as well as with Industriegewerkschaft Bergbau, Chemie, Energie (IG BCE) is characterized by a long-standing partnership built on trust. In Chile 54%, in the USA 57%, and in Canada no employees are members of trade unions.

EMPLOYEES BY UNIT **B.54**

in full-time equivalents as at Dec. 31 (FTE)[1]	2018	%	2019	%
Operating unit Europe+	10,572	70.8	10,318	69.4
Operating unit Americas	3,520	23.6	3,715	25.0
Other areas	839	5.6	835	5.6
K+S Group	14,931	100.0	14,868	100.0

[1] FTE: Full-time equivalents; part-time jobs are weighted according to their respective share of working time.

In June 2019, we agreed with the works council on a social plan to implement measures from SHAPING 2030. A balancing of interests was agreed for the majority of the functional areas. The ongoing negotiations regarding balancing of interests should be implemented by the end of 2020.

REMUNERATION

In 2019, personnel expenses amounted to €1,161.9 million, and were therefore around 4% higher than the previous year (2018: €1,122.5 million). In the year under review, personnel expenses per employee (FTE) were €79,076 (2018: €75,315) and are therefore higher than in the previous year. In 2019, the proportion of variable remuneration included in personnel expenses, which allows our employees to participate in the success of the Company in the context of a performance-related remuneration system, was €42.6 million or about 4% (2018: €35.7 million or about 3%).

DEVELOPING AND PROMOTING EMPLOYEES

The expertise and innovation of our workforce are a key driver for corporate success. This is why we continuously develop our employees' potentials and make the best possible use of them. At the same time, we are always on the lookout for talented people who will advance our continuous development process with fresh ideas.

TRAINING

We are of the opinion that we need very well-trained and committed professionals to ensure the success of our corporate strategy SHAPING 2030. As at December 31, 2019, a total of 595 women and men in the German companies of the K+S GROUP were in a vocational training program or in a cooperative study program (2018: 588). With 173 trainees hired in 2019, we are slightly below the previous year (2018: 201). At the end of the year, the training ratio, based on employees in Germany, was around the level of the previous year at 5.8% (2018: 5.6%). We offered jobs to around 80% of our trainees (2018: around 85%).

STAFF DEVELOPMENT

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

Within the scope of our talent management process, annual talent rounds take place in the management teams on local, regional, and, since 2018, also on global levels. The main aim of the talent management process is to identify employees with high potential and to promote them specifically in their continued development. We have set ourselves the goal of developing specific development measures within the scope of the talent rounds, which especially encourage learning within the scope of current tasks and learning from each other. This process is based on the annual performance and development review between employees and managers. This review offers the possibility for the discussion partners to share their wishes and expectations with regard to the professional and personal development of the employees on an equal footing and to agree on specific measures. Employees and supervisors exchange information on the respective status within the course of the year.

Our management development programs TRACK+S PROFESSIONAL and TRACK+S EXECUTIVE and the K+S Management Academy are important building blocks for our employees to implement the SHAPING 2030 strategy.

'Combined non-financial statement,' page 87

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 recognized by the Company, by reimbursing all or part of their tuition fees. Investment in continuing education and further training amounted to around €13.5 million in 2019 and therefore remained constant at the level of the previous year (2018: €13.4 million).

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, knowledge management/CIP is effective in large sections of Germany and North America. Other regions of K+S will be integrated successively within the scope of ONE K+S. In 2019, 12,852 ideas in total were submitted (2018: 12,259). At €18.5 million (2018: €13.8 million) the benefits over a period of 2.5 [1] years, in other words, the generated cost-efficiency effect minus the costs of knowledge management, set a new record.

COMPANY PENSION SCHEMES

K+S helps its employees secure their standard of living in old age. K+S supports all employees in the participating German companies who take advantage of one of the three models for Company age pensions. K+S subsidizes the pension benefits with an additional 13% of the sum of money that employees pay into the company pensions scheme from their wages that are subject to social insurance contributions. 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 subsidized by the employer. In 2019, we spent a total of €22.4 million on defined contribution pension plans (2018: €20.4 million).

'Notes': Note (20) 'Provisions for pensions and similar obligations,' page 199

[1] We measure the economic efficiency effect on the basis of an average value from a 3-year consideration, in which we determine for quantifiable ideas, which savings were achieved by these ideas. Since these savings are usually generated annually, this value was multiplied by a factor of 2.5 years minus all allocated costs from idea management. The factor 2.5 was determined by K+S.

COMBINED NON-FINANCIAL STATEMENT[1]

This combined non-financial statement (NFS) has been prepared in accordance with the provisions of Sections 289c–289e HGB and Section 315c HGB and according to the GRI STANDARDS of the GLOBAL REPORTING INITIATIVE, "CORE" OPTION, as an international framework. Unless specified otherwise, all statements and key indicators 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 including the relevant SUSTAINABLE DEVELOPMENT GOALS (SDGS).

INDEX FOR THE NON–FINANCIAL STATEMENT **B.55**

NFS component	Included in section	SDG relevant information	Reference
Business model	Business Model Corporate Strategy Sustainability Management	–	p. 37 p. 49–53 p. 108–109
Risks	Report on Risks and Opportunities	–	p. 119
Aspect	**Action area**		**Reference**
Environmental Matters	Water Waste (solid residue) Energy & Climate	SDG 12.2, 15.1 SDG 12.5 SDG 12.2, 13.1	p. 90 p. 92 p. 94
Employee Matters	Health & Safety Diversity & Inclusion	SDG 8.8 SDG 5.1, 5.5, 8.5	p. 84 p. 85
Social Matters	Stakeholder Dialogue	SDG 16.7	p. 53-55
Respect for Human Rights	Human Rights	SDG 8.7	p. 87
Anti-Corruption and Bribery Matters	Compliance & Anti-Corruption	SDG 16.5	p. 97
Supply Chain (self-determined)	Supply Chain	SDG 8.7	p. 97

We strive for sustainability and 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 K+S Sustainability program is part of the corporate strategy SHAPING 2030. We have set ourselves goals 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 goals verifiable with non-financial indicators.

A spreadsheet presentation of our action areas, with the associated sustainability goals and non-financial indicators, is contained in the chapter on corporate strategy. The order of aspects corresponds to the strategic logic of the action areas in the K+S Sustainability program.

In the context of its strategic corporate activities, the K+S GROUP also considers the SUSTAINABLE DEVELOPMENT GOALS (SDGS). In particular, by developing new growth fields and through our work on innovative products in the Agriculture customer segment, we

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

want to make a contribution towards feeding a growing global population and adapting to climate change. References to the SDGS on the level of its sub-targets that are relevant to the business activities of K+S can be found in the table above. In addition to the strategic activities of the Company, we appreciate the commitment of K+S employees. Looking to the future, we encourage them to act responsibly.

'Corporate strategy,' page 49

People

We work daily for the satisfaction of our customers. We want to live up to their expectations and those of our important stakeholders with selected sustainability activities and also make our contribution towards the SUSTAINABLE DEVELOPMENT GOALS (SDGS). In the action area 'Health & Safety' we offer safe working environments for our employees (SDG 8.8). Our activities in the action area 'Diversity & Inclusion' work against discrimination (SDG 5.1) enable full and effective participation of women and their equal opportunity (SDG 5.5) and decent work (SDG 8.5). In the action area 'Human Rights', we are opposed to forced labor and child labor (SDG 8.7).

'Employees,' page 80
'Sustainability management,' page 51
www.kpluss.com/people

HEALTH & SAFETY SDG 8.8

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 work constantly to provide a healthy, safe working environment for effective protection of our employees. Our "golden rules" include the fundamental duties for workplace safety and apply to the conduct of all employees and business partners at the sites of the K+S GROUP. Based on the K+S policy for health, safety, environment, energy, and quality, we continuously develop and improve our processes to protect health and to ensure workplace safety. For example, every meeting of the Board of Executive Directors begins with the topic of health and safety.

Wherever we discover hazards and work-related stress and health risks, we actively carry out measures to protect health and safety. We preventively brief our staff by means of training courses and campaigns. In the medium term, the K+S GROUP will introduce management systems following ISO 45001 at all production sites. A specific time schedule is being coordinated. A global "Management Systems" competence center helps to coordinate the implementation and integrate other management standards. It also serves as a platform to exchange best practice methods.

'Environment,' page 88
'Employees,' page 80

The development of occupational health and safety in the K+S GROUP is discussed in committees, competence centers 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 2019. The planned introduction of globally uniform awareness training for managers will be pursued with priority in 2020.

SAFETY

Goal: Providing a healthy and safe work environment to protect our employees who constitute our most valuable capital. The K+S vision is to completely avoid 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 2019, 822 work accidents occurred at our locations worldwide (2018: 754), of these 260 were accidents involving lost time (2018: 217)[1]. In 2019, the LTI rate for the K+S Group increased to 10.3 (2018: 8.5) compared to the base year 2017 at 8.6. The increase in lost time incidents and the LTI rate is due to an increase in accidents in Germany. During the same period, the number of working days lost due to accidents decreased and thus the average severity of accidents decreased worldwide. Among other things, we attribute this to the introduction and communication of our "Golden Rules." The accident rate (number of workplace accidents divided by the number of hours worked multiplied by one million) increased to 32.7 (2018: 29.5).[1] In 2019 we did not have a fatal accident.

[1] The previous year's figures were slightly adjusted to take account of late reports.

Our processes for risk assessments are designed to ensure that work-related health and safety risks are recognized and that appropriate countermeasures are taken. As legally required, we carry out risk assessments to prevent psychological distress at the workplace, especially at our sites in Germany (since 2019) and Chile (since 2014). From January 1, 2020, a standard operating procedure regulates the minimum safety requirements for dangerous work worldwide.

In 2019, we also implemented various measures and campaigns aimed at developing employees' decision-making abilities and promoting responsible health and safety behavior. This also includes raising awareness to prevent hand injuries within the scope of a hand safety campaign in Germany and vaccination campaigns in Germany and Chile.

HEALTH

Our workplace health promotion and prevention programs supplement the management systems with measures to improve health competencies. The programs 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. The programs and measures are planned specifically at each site. They are based on needs and on the local circumstances of the respective organization.

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 risk assessment and working conditions.

In 2018, Professor Horst Christoph Broding was appointed to the chair for industrial medicine and operational health management at the University of Witten/Herdecke, which is sponsored by K+S. He has many years of experience in mining and supports K+S in analyzing occupational health processes and developing projects at the sites in Germany.

An important aspect of health care is reliable compliance with occupational exposure limits (OELs). In the case of the OELs defined by the FEDERAL MINISTRY OF LABOR AND SOCIAL AFFAIRS (BMAS) in Germany for nitrous oxide gases and diesel particulate matter underground, we are continuing the broad implementation project for our German sites. For instance, the projects that were launched to use state-of-the-art diesel engine technology, test lower emission explosives, and optimize ventilation underground were brought forward. With a presentation of a corresponding interim report on underground mining in Germany in 2019, we met the conditions of the BMAS COMMITTEE ON HAZARDOUS SUBSTANCES. We also carried out a health study at two facilities to investigate the physiological effects of the named substances on employees. The results of the investigation should be available in 2020.

'Report on risks and opportunities', page 119
'Research and development', page 78

DIVERSITY AND INCLUSION SDG 5.1, 5.5, 8.5

At K+S, we want to continue developing diversity and inclusion as important elements of our corporate culture and use them more intensively in our collaboration. If we pool our different skills, views, and experiences, this will help us find solutions for our customers and encourage openness and competence in the teams. This is why diversity and inclusion are demanded and supported consistently by management and are promoted by HR functions as business partners in all employee processes.

The basis for diversity and inclusion is appreciation of all employees. At K+S, all employees must experience this appreciation, regardless of, for example, gender, nationality, ethnicity, religion or ideology, physical or mental impairments, age, sexual orientation, or identity. Diversity defines the makeup of our workforce, inclusion describes the active use of this diversity in our everyday work. We do not tolerate any discrimination.

We have defined the acknowledgement and promotion of diversity and inclusion in our ONE K+S VALUES. As a signatory to the UN GLOBAL COMPACT and CHARTA DER VIELFALT (Diversity Charter), we confirm our self-conception in the form of corporate voluntary obligations in Germany.

www.unglobalcompact.org;
www.charta-der-vielfalt.de

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.

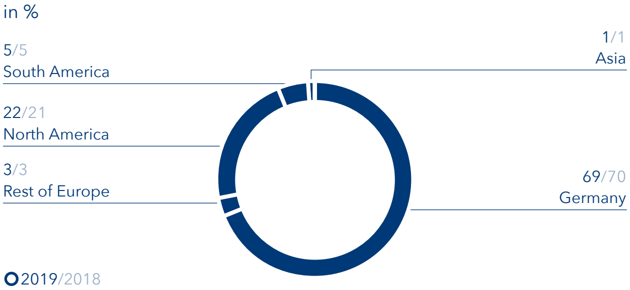
This goal will be achieved if, by 2030 at the latest, more than 90% of our employees perceive the working environment as inclusive.

Within the Company, sentiment is evaluated by pulse surveys on specific topics. Because the understanding of diversity and inclusion has changed, we no longer see the composition of the index as in the employee surveys from 2012 and 2015 as appropriate. In the past, the focus was on gender, but now topics such as work-life balance, caring for relatives, and heterogeneity in a culturally diverse society are discussed. Diversity and inclusion are part of our corporate culture and underpin a holistic approach that concerns all employees and especially managers. Based on the previously used Group-wide and specific US and Canadian questionnaires, the new questionnaire is aimed more specifically at perceptions of diversity and inclusion in the K+S GROUP and includes twelve questions (eleven of which are quantitative and building the index and one qualitative question) about interaction, trust, inclusion, idea generation, and collaboration.

In November 2019, we carried out the first pulse survey on a specific topic. So that we could reach all employees, we offered an online tool as well as paper questionnaires (online usage: 67%, paper 33%). In total, 30% of the workforce took part in the survey, of these, 65% in Europe, 20% in North America, 12% in South America, 2% other, and 2% were not reported. Some 79% of participants were male, 18% female and 3% did not provide any information. 52% of the participants stated that they were 40 years and older. 68% of the participants are employed in production (above or below ground), while 29% work in administrative jobs, and 4% did not report. In total, 37% of the participants are working in a management position.

EMPLOYEES BY REGION **B.56**

in %



The index on diversity and inclusion of the K+S Group in 2019 calculated on the basis of participating employees is 54% and is based on the approval rate “tend to agree” or “agree” on a scale of five. In the absence of a direct comparison, we regard the result as a solid starting position, which we intend to improve further in the coming years. From now on, the value of 54% forms the basis for the KPI on diversity and inclusion. The surveys on this topic are repeated regularly.

The measures to promote diversity and inclusion are cross-sectional tasks and will be adjusted to the requirements of the respective sites. Some 69% of our 15,011 employees work in Germany and about a quarter in the Americas.

Traditionally, more men than women work in mining. As of December 31, 2019, 87% of our workforce based on the number of employees was male and 13% female for the companies of the K+S GROUP. The average age of our workforce is 42 years. The share of severely disabled employees in the K+S GROUP in Germany is 6% (2018: 6%).

'Target figures,' page 106

When recruiting, we want to ensure that we get the best talents in all areas of the Company. K+S has intensified its efforts worldwide to increase the number of applicants free of discrimination and ensuring equal opportunity. For example, a cooperation was initiated with Saskatchewan University to promote women in engineering professions. In Germany, K+S supports Girls' Day and Boys' Day, which offers young people the opportunity of getting to know various professions, and also the INITIATIVE KLISCHEEFREI (Cliché Free Initiative).

Among other things, K+S raises awareness for diversity and inclusion by taking part in the GERMAN DIVERSITY DAY and in the specific expansion of its social media activities. We are committed to an unprejudiced working environment and working conditions without discrimination. We specifically invite our employees to share their personal experiences and perspectives with regard to our open corporate culture.

As part of our efforts to encourage loyalty among our employees and to ensure their continued development, we organize annual talent rounds within the management teams on local, regional, and global levels. The aim of these is to identify employees with high potential and help them develop. The focus is on learning with and from each other. The international K+S talent pool resulting from this presents a diverse mixture with regard to nationality, age, length of time with the Company, and gender. In particular, at 33% the share of women is high in relation to the number of women in the overall workforce.

In our management development programs TRACK+S PROFESSIONAL and TRACK+S EXECUTIVE, we encourage our employees and also ensure succession planning. In 2019, 16 employees with different nationalities from various sites worldwide and in different functional areas successfully completed the TRACK+S PROFESSIONAL program. In TRACK+S PROFESSIONAL, employees are helped to expedite their development at K+S by their own efforts. They are trained to network and make themselves visible in the Company and also to develop their own knowledge and skills. Three main elements are available for this purpose: (1) mentoring, (2) global interdisciplinary project work, and (3) three one-week modules organized by the Frankfurt School of Finance & Management.

The objective of the TRACK+S EXECUTIVE program is to develop future executive staff that have a holistic view for K+S and an entrepreneurial way of thinking and acting outside the box. The first group in 2019 consisted of seven participants who were chosen from internal and external applicants. TRACK+S EXECUTIVE is an individually designed rotation and development program that lasts between 14 and 18 months. Participants pass through various stations at home and abroad in administration and production areas. They are predominantly employed in cross-functional areas.

From an organizational aspect, we want to ensure that our employees in the matrix organization work together across all cultures. We have been promoting this since 2019 through a stronger mix of methods based on the 70:20:10 model. For instance, more emphasis on learning on the job with formal training will strengthen the positive exchange of K+S employees in projects, sitting in with other teams, and international experience.

The internal social network Yammer gives our employees worldwide the opportunity to network in mentoring programs. Every potential participant – mentors and mentees – announces their interest in (international) discussions about skills, competences, and professional and personal development. The self-organized matching of mentors and mentees can begin on the basis of these entries.

HUMAN RIGHTS SDG 8.7

The Company carries out its business in a manner that respects the human rights and dignity of all people who are impacted by our business activities, in other words, employees, contractors, and external stakeholders. We are a signatory to the UNITED NATIONS GLOBAL COMPACT. Our commitment to human rights is based on the UNITED NATIONS GUIDING PRINCIPLES ON BUSINESS AND HUMAN RIGHTS and the OECD GUIDELINES FOR MULTINATIONAL ENTERPRISES. Our approach is shaped by the INTERNATIONAL BILL OF HUMAN RIGHTS and the INTERNATIONAL LABOR ORGANIZATION DECLARATION ON FUNDAMENTAL PRINCIPLES AND RIGHTS AT WORK. In 2019, we included a new section on human rights in the K+S Global Organization Handbook and enshrined respect for human rights in our new Code of Business Conduct & Ethics.

Goal: Our Group-wide goal is the observance of internationally recognized 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. Since we developed our methodology in 2019 and carried out the first pilot project for a human rights impact assessment, we now have 8% covered (2018: 0%) and created the bases for the next steps.

The Sustainability department manages and coordinates the Group-wide activities of K+S with regard to respecting human rights. The operating units are responsible for implementation in the respective regions. For the practical implementation, such as for the impact assessments, representatives from the operating units and the Sustainability department work together in a global working group.

We want to implement our commitment through a due diligence process that is in harmony with the UN GUIDING PRINCIPLES and take into account the following five core elements as listed in the GERMAN NATIONAL ACTION PLAN ON BUSINESS AND HUMAN RIGHTS: 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 corporate human rights due diligence, in 2019, we began establishing a documented process based on a uniform methodology that takes account of country-specific circumstances and our business activities. Our approach to due diligence is described and embedded and the main topics are listed in the section on human rights in the K+S Global Organization Handbook. In spring 2019, the first pilot for a human rights impact assessment in Chile took place. In Chile, we spoke with more than 80 internal and external stakeholders at five sites. This means that we reached a large number of stakeholders in the supply chain, from the mine and the port, production, and packaging to the head office in Chile. Management was then informed of the findings and an action plan was developed for the operating unit Americas, which is now being implemented. Internally, we regularly report on the progress of the activities, such as in the Central Sustainability Committee, in the company-internal network, or in the employee magazine scoop. Externally, we report in workshops and at meetings with political representatives.

Our whistleblower system "SPEAK UP!" gives employees, contractors, and communities the opportunity to express their concerns, also with regard to human rights. They can do this anonymously and in various languages.

'SPEAK UP!' in the 'Compliance section,' page 98

Environment

The K+S GROUP works continuously to minimize the inevitable impact on nature associated with the extraction and processing of raw materials. With our investments in research and development, we are aware of what is happening in the industry and help develop the state of the art. 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. In connection with the K+S SUSTAINABILITY GOALS 2030, we have set ourselves goals in the areas of "water," "mining waste," and "energy & climate."

www.kpluss.com/environment

We regularly track the progress of our environmental targets and make a measurable contribution towards achieving the SUSTAINABLE DEVELOPMENT GOALS (SDGS). We promote the efficient use of natural resources and prevention of waste (SDG 12.2, SDG 12.5) also the conservation, restoration, and sustainable use of terrestrial and inland freshwater ecosystems (SDG 15.1). We strengthen our resilience and adaptive capacity to climate-related hazards and natural disasters operationally and strategically (SDG 13.1), such as by analyzing our product portfolio with regard to megatrends.

Our environmental management helps us reach our goals. It is coordinated throughout the Group and across various topics. The Group companies specify requirements and support the sites in their implementation. Based on our integrated policy for health, safety, energy, and quality, we aim to standardize and continuously improve our management systems and HSE performance at the main sites through the ongoing worldwide introduction of management systems based on DIN EN ISO 14001:2015 for environmental management and DIN EN ISO 50001:2015 for energy management. National and international committees of experts have been set up to increase efficiency and exchange experience.

Environmental performance indicators at site and Group company level are collected and evaluated using environmental data software that has been implemented at all production sites. We gather the reported environmental indicators for all the main consolidated potash and salt production sites.

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 236

CAPITAL EXPENDITURE AND OPERATING COSTS FOR ENVIRONMENTAL PROTECTION

At €97.6 million, capital expenditure on environmental protection in 2019 was on about the same level as a year ago (2018: €99.1 million). As in the previous year, capital expenditure was largely determined by projects in the area of water protection. While 2018 was mainly characterized by the completion of the major kainite crystallization and flotation plant (KKF) project at the Hattorf site and the acquisition of land for the requested extension of the tailings pile at the Zielitz potash site, in 2019, the focus was on capital expenditure on wastewater management at the Werra site and on tailings pile expansions.

In order to be able to react even more flexibly to the water supply of the Werra site and to maintain production also during longer dry periods, a new intermediate storage facility for saline wastewater was set up in 2019 in a disused mine field of the Werra site. The capacity is designed for the temporary storage of about 400,000 m^3 of production wastewater. For operations, a pipeline with a total length of 12 km was installed within the mine alone. A further focal point in 2019 was the first measures for the planned storage of process water from the Werra site in the old mining area of the Springen mine from 2022 onwards. These included investments in pipelines, pumps, and the electrical engineering. The realization of the project is intended to permanently replace the deep-well injection into the plate dolomite, to remediate contaminated mining sites, to relieve the environment, and to make production on the Werra future-proof. The significantly higher investment volume for the tailings pile expansions in 2019 is divided between the already ongoing expansion of the tailings pile at the potash site Hattorf (Phase I) as well as the applied-for pile expansions at the Wintershall and Zielitz sites. The largest subprojects in terms of value were the construction of a new tailings pile water basin for the collection and discharge of tailings pile water in Hattorf as well as additions to property, plant and equipment in the Energy Supply and tailings management sectors. Further increases in the Water Protection unit resulted from the start of construction of a partition wall to seal off the tailings area at the Canadian potash mine in Bethune.

The lower capital expenditure in the area of nature conservation and soil decontamination is attributable to the project implemented in 2018 for the surface sealing and drainage of a former building rubble landfill at the Neuhof-Ellers potash site. The deviations in the areas of air pollution control and climate protection or waste management can be explained by smaller projects that were completed or newly started. **B.57**

CAPITAL EXPENDITURE ON ENVIRONMENTAL PROTECTION[1] **B.57**

in € million	2018	2019	deviation	%
Water protection	90.1	90.9	0.8	0.9
Prevention of air pollution and climate protection	0.9	0.1	–0.8	–88.9
Waste management	2.1	3.3	1.2	57.1
Nature conservation[2] and soil decontamination	5.1	2.9	–2.2	–43.1
Other	0.9	0.4	–0.5	–55.6
Total	**99.1**	**97.6**	**–1.5**	**–1.5**

[1] 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.
[2] Including landscape conservation.

OPERATING COSTS FOR ENVIRONMENTAL PROTECTION[1] **B.58**

in € million	2018	2019	deviation	%
Water protection	169.9	158.7	–11.2	–6.6
Prevention of air pollution and climate protection	31.0	29.2	–1.8	–5.8
Waste management	16.5	15.4	–1.1	–6.7
Nature conservation[2] and soil decontamination	2.1	1.9	–0.2	–9.5
Other	5.1	5.1	–	–
Total	**224.6**	**210.3**	**–14.3**	**–6.4**

[1] 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.
[2] Including landscape conservation.

The operating costs for environmental protection decreased in the 2019 reporting year by €14.3 million to €210.3 million compared to the previous year (€224.6 million). The moderately lower cost level is due in particular to special effects that are reflected in the water protection area. As a result of the shutdown of potash production at the Sigmundshall site at the end of 2018, high expenses for recultivation obligations, which ceased to apply in 2019, had to be taken into account above all in 2018. In addition, the parameters for the remaining useful life of the Neuhof-Ellers potash site were reviewed and reassessed at the end of 2018. Within the framework of an update of the cost calculation, it was also possible to reduce the costs of tailings pile maintenance following the closure of the site. In connection with the balance sheet term being extended by five years, the recalculated expenses for post-closure care obligations for tailings pile maintenance at Neuhof-Ellers are now spread over a longer period of time, with lower annual amounts to be registered from 2019 onwards.

By contrast, the Werra potash site recorded a significant increase in costs in the water protection sector. This was due to higher expenses for the disposal of solid production residues in 2019. At the Unterbreizbach site, this related to the costs of operating a wet backfilling plant, which has been used since the fourth quarter of 2019 for the disposal of factory residues in the mine caverns. The also higher cost level at the Hattorf and Wintershall sites resulted in particular from maintenance work on the tailings pile engineering and the pile water edge trenches of the existing piles, as well as costs incurred in connection with the necessary expansion of the tailings piles. The expansion of the Hattorf tailings pile, which has been ongoing since 2018 (Phase I), resulted in additional personnel requirements and additional costs for scheduled depreciation of base sealing, machinery, and equipment. At the Wintershall site, this was due to the necessary extension of the tailings pile strips, which are planned for the requested pile expansion.

Further cost increases in the Water Protection segment are attributable to the planned premature flooding of the disused Sigmundshall mine with saline wastewater from the Werra site. In order to prepare for the start of flooding, which is planned for mid-2021, higher costs for personnel, the dismantling of underground facilities, and the commencement of construction of the above-ground unloading point have already been registered at Sigmundshall.

The decline in costs in the area of air pollution control and climate protection is mainly attributable to the decommissioning of ventilation and filter facilities at the former Sigmundshall potash site. The costs in the waste management area, which were also lower, resulted from the project completed in 2018 to cover and seal off mining waste, which was removed in the past during the cleaning of saline wastewater storage basins and deposited in the old tailings pile at the Hattorf site.

The operating costs mainly comprise supplementary measures for environmental protection. These measures relate in particular to water pollution control, air pollution control and climate protection, waste management, nature conservation and soil remediation, and concern facilities that are separate from the rest of the production process. Operating costs and depreciation for production facilities for water protection that are integrated into the production processes and enable the manufacture of additional sales products are not included. Taken as a whole, both the costs of the complementary environmental protection measures and the integrated environmental costs not shown here are components of the production costs, thus increasing the specific costs per tonne of product produced. **B.58**

WATER SDG 12.2, 15.1

Water is also a very important resource for K+S. We use different qualities of water in many processes. We need water for extraction and production at certain deposits, in production, and when using certain products, such as 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. Across the Group we want to reduce water-related impacts to an absolute minimum. To do this, we have set ourselves specific goals.

WATER WITHDRAWAL **B.59**

in million m³	2018	2019
Seawater and other saline water	276.2	232.1
River water	137.0	133.9
Groundwater	8.3	7.8
Drinking water and water from municipal water utilities	1.3	1.5
Total volume of water withdrawn	**422.8**	**375.3**

We assess environmentally relevant business risks within the scope of our Group-wide risk and opportunity management system. In 2017, we also carried out a Group-wide water risk analysis, taking account of water stress for all relevant production sites. The results are incorporated into environmental management concepts at the sites. A global standard for water risk and opportunity management is currently being developed and, in the future, will regulate site-related water risk considerations and the prioritization of water-related measures.

'Opportunities and risk report,' page 119

WATER WITHDRAWAL

In 2019, the K+S GROUP withdrew 375.3 million m³ (2018: 422.8 million m³) of water from various sources to extract and produce products. At 133.9 million m³ (2018: 137.0 million m³), the river water withdrawal in 2019 is at about the same level as in the previous year. The withdrawal of saline water from seas and other saline sources fell to 232.1 million m³ (2018: 276.2 million m³) compared with the previous year. Most of our water (89% (2018: 89%)) is withdrawn at locations without high 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.

WASTEWATER **B.60**

in million m³	2018[2]	2019
Wastewater		
Wastewater discharged into municipal sewage treatment plants	0.7	0.5
Process water in river water	112.1	111.5
Saline wastewater[1]		
Injection	8.0	9.0
Saline wastewater in mine workings		1.1
Saline wastewater discharged into seawater and other saline waters	50.8	48.6
Saline wastewater discharged into surface water	10.8	10.7
Saline wastewater in potash production	4.9	4.8
Saline wastewater in salt production	5.9	5.8

[1] Total dissolved solids (TDS) > 1 g/l.
[2] The previous year's figures were adjusted because of an improved classification of waste water.

In 2019, throughout the Group, the volume of saline wastewater that was discharged to surface water in relation to potash production was 4.8 million m³ (2018: 4.9 million m³) and for salt production 5.8 million m³ (2018: 5.9 million m³). A further 9.0 million m³ (2018: 8.0 million m³) of saline wastewater was injected underground. Injection in Germany remained at a low level. Due to the increased production of the Bethune site in Canada, the amount for total injection is increasing.

Due to the dryness in Germany and the associated low water level of the Werra, the volume of saline wastewater from the potash industry was once again below the normal level in 2019. With a range of measures, such as temporary expansion of storage capacities for saline wastewater throughout the year and measures in the area of tailings piles, K+S was able to secure disposal of the saline wastewater with no production stoppages in the Werra site.

For the disposal of saline wastewater from the potash industry, we use the route of discharge into surface waters and injection. In addition, in 2019 we have 1.1 million m³ of saline wastewater was transported to suitable mines or caverns and disposed of there or used for storage work.

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

Goal: After 2021, K+S will no longer inject saline water below ground in Germany. This will also allow us to fulfill a key measure of the Weser river basin management. In 2019, the K+S GROUP injected 1.1 million m³ (2018: 1.0 million m³) of saline wastewater underground at the Hattorf site. In accordance with the agreement reached with FRIENDS OF THE EARTH GERMANY E.V. (BUND FÜR UMWELT UND NATURSCHUTZ DEUTSCHLAND, BUND), by 2021 we intend to inject up to 1 million m³ less processing wastewater underground in relation to the approved volume. We already achieved 80% of this target in 2019.

Since 2018, we have injected about 0.8 million m³ less process wastewater. The process of storing process water in old underground mining areas is currently being developed for disposal of the water after 2021. In a first step, our goal is to dispose of 1.5 million m³ per year in suitable cavities in the Werra site. In 2019, we implemented the first infrastructure measures above and below ground and are now at the approval stage for this project.

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 m³ per year. 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 site in Sigmundshall in 2018. It is therefore expected that from 2030 onwards, only 2.2 million m³ of process water from potash production will be disposed of. The planned savings of 500,000 m³ of saline process water include our established potash sites in Germany. The K+S site 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 2019, a total of 3.5 million m³ (2018: 3.4 million m³) of saline process water was generated at the potash sites in Germany. Based on the adjusted base year 2017, which takes into account the full effect of the KCF facility (–1.5 million m³) and the end of production at the Sigmundshall facility (–0.3 million m³), the saline process water volume increased by 0.8 million m³ in 2019. This effect is due to a weather-related reduction in production in the base year.

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 optimize 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 119
'Research and development,' page 78

WASTE (SOLID RESIDUES) SDG 12.5

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 minimize the impact on the environment through development of the state-of-the-art. As part of our extensive approval procedures, which last several years, environmental impacts are analyzed and avoidance options optimized. Our operational environmental management, compliance with official requirements and the relevant legislation, as well as the professional exchange of ideas and information in various committees, ensure continuous monitoring and improvement of standards.

TAILINGS PILE MANAGEMENT

In 2019, at our potash sites we disposed of 27.1 million t (2018: 27.6 million t) of solid residues on tailings piles. Comprehensive monitoring programs 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 currently being implemented. Approval was granted for an area of around 27 ha to the north-west of the existing tailings pile. It provides enough space for five to six years. Phase II of the tailings pile expansion is also in the planning phase. The capacity should be sufficient until the beginning of the 2040s.
- K+S submitted the application documents for the process of extending the tailings piles at the Zielitz site to the relevant authorities in October 2017. Public participation took place in summer 2018. The public hearing took place in the second quarter of 2019. Approval for the early start, including preparation of the required areas and construction of the infrastructure measures, was given in October 2019.
- K+S submitted the application documents for the planned expansion of tailing piles at the Wintershall site in April 2018. In the run-up to the approval process, we briefed the general public comprehensively on the project at several information events as well as through flyers and information published on the K+S website. After the declaration of completeness was issued by the Kassel regional authority, the public hearing was held in November 2019.

The tailings pile expansions will entail comprehensive compensatory and replacement measures. The compensatory measures include long-term, large scale projects with the aim of creating new habitats for flora and fauna and upgrading existing habitats. 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. Before work begins, we will carry out species conservation measures to ensure ecological-functional continuity with no interruption.

Goal: Our Group-wide goal is to further reduce the environmental impacts and conserve natural resources with a renewed review of the utilization and marketing potential of residues that are stored on tailings piles. From 2030, we want to use 3 million tonnes of residue each year for other purposes rather than disposing of them on 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 2019, we recovered 1.5 million tonnes (2018: 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. We continued the measures initiated in 2018 to reduce residues, such as improved research into recyclable materials, prior separation of rock salt underground, and the process step of optical sorting. In 2020, we will continue to work hard on the options to increase raw material exploitation.

Goal: By 2030 we aim to cover another 155 ha of tailings pile surface area, further reducing or preventing tailings pile runoff. This involves covering large and medium-sized tailings piles that will be implemented in addition to the existing cover in the base year 2017 (approx. 70 ha). By 2030, we will thus have covered a total of 225 ha of tailings pile surface area. The covered tailings pile area also relates to reducing the footprint of the tailings pile that is relevant for 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.

In 2019, we were able to cover an additional 2.8 ha (2018: 5.9 ha) of tailings piles. Since the base year 2017, we have thus covered a total area of 8.7 ha.

- Already in 2018, we completed a semi-technical experiment for thin film covering on an area of 0.5 ha at the Hattorf site. Since then, investigation results and information from the experiment have been gathered and evaluated. The focus is on the technical feasibility and the long-term behavior of the material. At the beginning of 2019 the Werra facility constructed a 1.0 ha polder on the top of the Hattorf tailings tip. Constructional preparations are being carried out for further cover measures in the form of polders and these should be implemented in 2020. It is also planned to cover the former kieserite tailings pile.
- In 2019, K+S set up a test area on top of the tailings pile at the Neuhof-Ellers facility to cover it with erosion control and an associated lysimeter field. This will provide long-term information about evaporation capacity and material behavior. Currently, the approval proceedings are ongoing for an area of 1 ha of INNOVATIVE EROSION CONTROL on top of the tailings pile.

+ At the same time, a pilot project has been running in Zielitz since 2013 to develop a site-appropriate covering option, the infiltration inhibition layer. For this purpose, various tipping experiments have been and are being carried out.

In accordance with our strategy for legacy tailings piles, K+S has continued covering the Friedrichshall tailings pile as follows. The remainder will soon be completed. Completion of the tailings pile cover, including all the remaining work, is scheduled for the end of 2021. K+S has also applied to cover the Lower Saxony tailings pile near Wathlingen. Within the scope of the approval proceedings, the public hearing was held in 2019 and approval was given for an early start to build the recycling area. K+S expects the planning permission to be issued in 2020.

At the Sigmundshall site we are continuing to cover the tailings pile and are covering more areas of the top and sides of the pile. The tried-and-tested site-specific covering process will be continued in the coming years.

'Report on risks and opportunities,' page 119

ENERGY & CLIMATE

SDG 12.2, 13.1

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 sites 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: We want to reduce our specific carbon footprint for total electricity consumption at our production sites by 20% by 2030 (base year 2017: 302.51 kg CO_2e/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 2019 financial year, our carbon footprint for electricity consumed was 297.4 kg CO_2e/MWh (2018: 298.1 kg CO_2e/MWh), a change of –1.7% to the base year 2017. The further reduction is due to a production-related higher share of CHP own electricity generation in total electricity consumption.

We are currently working on a long-term CO_2 strategy for the period after 2030.

ENERGY INPUT BY ENERGY SOURCE AND GREENHOUSE GAS EMISSIONS SCOPE 1, 2 AND 3 **B.61**

		2018	2019
Direct energy sources	GWh	**11,403.1**	**11,546.2**
(Scope 1)	million t CO_2e	**2.4**	**2.4**
Natural gas	GWh	10,683.9	10,827.0
Coal	GWh	295.5	318.0
Diesel	GWh	406.2	384.2
Fuel oil	GWh	1.3	1.3
LPG	GWh	10.9	10.2
Petrol	GWh	5.3	4.7
Indirect energy sources	GWh	**2,231.8**	**2,138.5**
(Scope 2)	million t CO_2e	**0.2**	**0.2**
Electricity purchased externally	GWh	707.8	657.5
Steam purchased externally	GWh	1,521.3	1,477.9
Heat purchased externally	GWh	2.8	3.1
Total energy consumption	GWh	**13,634.9**	**13,684.7**
(Scope 1 & 2)	million t CO_2e	**2.6**	**2.8**
Purchased electricity	GWh	**42.0**	**65.1**
(Scope 3) Emissions from outgoing transport (logistics emissions)	million t CO_2e	**1.0**	**0.9**

Energy consumption

We operate a DIN EN ISO 50001 certified energy management system in all German Group companies with production sites. We regularly conduct energy audits in accordance with DIN EN ISO 16247 at all other German Group companies. A Group-wide concept for energy management has been developed and the introduction of ISO 50001 at our sites outside Germany with energy requirements in excess of 10 GWh has been continued. Up until 2019, we covered about 52% of worldwide energy requirements following ISO 50001.

We are including the ambition of the ENERGY EFFICIENCY NETWORK (KEEN) in our internal expert group "KEEN global," which launched in 2018, and are examining usability and implementation on a global level. The group will also manage measures for achieving the "Energy & Climate" sustainability goal by 2030.

www.effizienznetzwerke.org/initiative/unsere-netzwerke/

At 13,684.7 GWh (2018: 13,634.9 GWh), total energy consumption in 2019 remained at about the same level as in the previous year.

Energy sources

The energy sources used differ depending on the location of the mines and production facilities. Some 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 site. In 2019, six of our seven potash sites in Germany had their own power plants, which are operated according to the combined heat and power (CHP) principle. Their efficiency level is 90%. We also operate two out of seven drying facilities using the CHP system. In 2018, CHP energy conversion at the Hattorf site was expanded for the operation of the KCF facility. This measure enabled a further 15 MW of electricity from CHP to be generated, replacing the need for external electricity.

Other measures to increase energy efficiency are being implemented by 2020 and 2021: include the replacement of a gas turbine and a gas boiler at our German sites. Both projects can be funded in terms of the public energy efficiency promotion programs and, by optimizing our own energy generation, they make a significant contribution towards preventing CO_2 emissions.

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 CLIMATE 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 conclusively at the 2019 UN CLIMATE CHANGE CONFERENCE in Madrid, Spain. 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 twelve power plants and drying facilities in Germany that are obliged to trade emission certificates. They record their emissions on the basis of applicable EU monitoring guidelines and these are verified by external auditor organizations. In 2019, the law on a national certificates trading system for fuel emissions (FUEL EMISSIONS LAW [*Brennstoffemissionshandelsgesetz*, BEHG]) was passed in Germany and will come into effect from 2021. This will not affect our facilities in the EU ETS. Only part of the primary energy requirements (13%) of K+S in Germany will be impacted by BEHG. We take into account the pricing of fuel emissions of our logistics service providers in Germany (Scope 3 emissions) in our medium-term plans.

Within the scope of the third trading period (to 2020) we expect no additional costs for emissions trading. The Canadian government has introduced a system to evaluate greenhouse gas emissions. Our Bethune mine is covered by the provincial system and will likely be affected from 2021. The aim is to achieve a 5% reduction in emission intensity by 2030.

We report our emissions completely within the Scope 1 and Scope 2 areas under consideration and Scope 3 for our logistics emissions for outgoing transport in CO_2 equivalents (CO_2e). These indicate the specific global warming potential of greenhouse gases compared with that for CO_2. In 2019, CO_2e emissions from the consumption of all direct and indirect energy sources (Scope 1 and 2) amounted to 2.6 million tonnes of CO_2e (2018: 2.6 million t CO_2e). The emission factors from the GREENHOUSE GAS PROTOCOL are used to calculate the volume of CO_2e.

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 optimized so as to guarantee a high level of efficiency. By way of local and national initiatives, K+S is contributing to the optimization of value chain emissions. K+S participates in the sustainability initiative BUSINESS MITIGATES CLIMATE CHANGE promoted by the FEDERAL MINISTRY FOR THE ENVIRONMENT, NATURE CONSERVATION AND NUCLEAR SAFETY (BMU) and, together with other companies, develops concrete climate protection measures.

Goal: Our goal is to continue to reduce 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% compared to the year 2017. This applies to the emissions of our outgoing shipments measured in kilograms of CO_2 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 0.9 million tonnes CO_2e (2018: 1.0 million tonnes CO_2e), 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 2019 was 16.3 kg CO_2e/t (2018: 17.9 kg CO_2e/t). Compared to the base year 2017 this represents a decrease of −11.1%. The reduction in our specific logistics emissions was caused by the changed structure of our logistics flow of goods and was significantly influenced by external market and environmental requirements. Various measures, including increasing the utilization of transportation capacity and optimizing the transportation network, also contributed to the positive development of emissions, particularly in our operating unit Americas. In the operating unit Europe+, we achieved positive effects by using lower-emission means of transport, such as rail instead of truck, but also by increasing the degree of utilization of the means of transport.

By optimizing our logistics network in Europe from 2019, we expect to reduce emissions from logistics operations and increase the capacity utilization of our transport vehicles. Emissions are currently calculated on the basis of DIN EN 16258. To also be able to show the impacts of our supplier engagement activities in the Americas and 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. Already today we engage in the SMARTWAY program of the UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (US EPA). The program supports, companies to advance supply chain sustainability by measuring, benchmarking, and improving freight transportation efficiency.

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. With our strategic goals and activities, we also make a contribution towards the SUSTAINABLE DEVELOPMENT GOALS (SDGS). In the action area "Compliance & Anti-Corruption" we help reduce corruption and bribery (SDG 16.5). In the action area "Sustainable Supply Chains" we do not tolerate forced labor or child labor (SDG 8.7).

'Diversity and Inclusion,' page 85
'Compliance Management,' page 107
www.kpluss.com/businessethics

SUSTAINABLE SUPPLY CHAINS SDG 8.7

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 LABOR STANDARDS and the OECD GUIDELINES FOR MULTINATIONAL ENTERPRISES. It covers human and labor rights, health and safety, environmental considerations, and responsible business.

www.kpluss.com/codeofconduct

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.

In 2019, we significantly extended the global introduction of the Code. It already covers 45% (2018: 29%) of our purchasing volume. Some 23% (2018: 15%) of our "critical" suppliers have committed to the Supplier Code of Conduct. The "critical" suppliers are determined annually. This determination considers things such as the Corruption Perceptions Index (CPI) and the environmental compatibility of the main products and services delivered by the suppliers. Clear processes and responsibilities are defined in the event that a breach of the Supplier Code of Conduct becomes known.

The coverage by the Code will be extended in 2020. Compliance and consideration of sustainability aspects are important to us when choosing our business partners. We are working on a monitoring concept for both suppliers and customers. Following this, a concept for supplier development will be established and introduced.

COMPLIANCE & ANTI-CORRUPTION SDG 16.5

Compliance is an integral element of the corporate company culture at K+S based on our ONE K+S VALUES. It is important to us that "good corporate governance" is experienced on all levels. We understand this to be more than just compliance with statutory regulations, official approvals, regulatory standards acknowledged by the Company, such as our acknowledgement of the UN GLOBAL COMPACT, and internal regulations.

We want to encourage entrepreneurial action within clearly defined limits. Breaches of legal regulations and internal regulations are not acceptable from a legal aspect nor in terms of our understanding of compliance. This is why we promptly pursue indications of breaches of legal regulations and internal regulations and clarify the facts. Corrective action is immediately taken against compliance breaches and, if necessary, consistent, appropriate sanctions are imposed.

All employees are familiarized with our ONE K+S VALUES and internal regulations. Employees receive target group-specific training for special topics (e.g., antitrust law, anti-corruption, money laundering and funding terrorism, handling social media, data security, environmental protection, workplace safety, anti-discrimination, and sexual harassment).

'Compliance management,' page 107

Goal: K+S is pursuing a zero tolerance policy against 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; they are also measured with a performance indicator and underpinned with measures.

We were able to achieve our goal of having reached all employees by the end of 2019 through communication measures and having trained them appropriately in compliance issues (2018: 71%, of which 100% was communication and 42% training). We were able to train more than 14,900 employees in compliance topics in 2019. Employees on long-term sick leave or employees on parental leave who could not be reached are not included in the calculation.

We were able to achieve this value because the employees in the K+S GROUP took part in mandatory training. Through the introduction of mandatory compliance training, all employees were informed in portal messages, articles in the employee magazine, posters, and messages on screens in various parts of the Company. In the course of the training, various compliance topics will be dealt with in a three-year cycle. In the first period, the training concerned business ethics, corruption and bribery, conflicts of interest, and social media. Employees were also familiarized again with the ONE K+S VALUES and informed about the K+S Global Organization Handbook, which contains all the internal regulations of the K+S Group that apply globally. The new Code of Conduct summarizes the core statements for all employees in an easy to understand format. Other compliance training courses with regard to business partner compliance and "Know Your Customer" were developed and included in the training schedule.

The new worldwide compliance hotline "SPEAK UP!" was established to increase availability and reduce potential hurdles that could prevent people reporting their suspicions. All employees can obtain advice on issues relating to compliance. Our compliance hotline "SPEAK UP!" enables employees and third parties to report possible or actual breaches of laws or regulations – they can do this anonymously – and they can also ask questions about compliance issues. The contact details are available on the K+S website and in the portal (intranet) or on notice boards. Of course, anyone who reports a suspicion will not suffer any disadvantages whatsoever (non-retaliation).

'Business model,' page 37

www.kpluss.com/compliance-hotline, phone +49 (0)561 9301-1177

E-mail: compliance@k-plus-s.com

Since compliance in the Company is very important, we plan to maintain the high level of training and continue communicating relevant topics. The basic training with more compliance topics will also be mandatory for all employees in 2020. Training courses for specific target groups will also be intensified. In addition, we are working on a uniform business partner compliance process with which the existing processes will be harmonized and sustainability aspects will be integrated in the upstream and downstream supply chains.

'Sustainable supply chain,' page 97

DECLARATION ON CORPORATE GOVERNANCE[1]

In accordance with sections 289f and 315d *Handelsgesetzbuch* (HGB – German Commercial Code), 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 the requirements of the German Corporate Governance Code:

DECLARATION ON CORPORATE GOVERNANCE[1]

Declaration of compliance

In December 2019, the Company's Board of Executive Directors and the Supervisory Board made the following joint declaration pursuant to Section 161 of the German Stock Corporation Act (AktG):

"We declare that the recommendations of the Government Commission on the German Corporate Governance Code in the version dated February 7, 2017, published by the Federal Ministry of Justice in the official section of the Federal Gazette were fully complied with in 2019 and will be fully complied with in 2020.

Kassel, December 2019"

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 *Aktiengesetz* (AktG – German Stock Corporation Act), *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.kpluss.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.kpluss.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. Every

[1] In accordance with Section 317 (2) sentence 6 HGB, the information contained in the declaration on corporate governance pursuant to Section 289f and Section 315d HGB is not within the scope of the audit.

two years, the Supervisory Board carries out an efficiency review in order to obtain pointers for the future work of the Supervisory Board and its committees.

'Supervisory Board report,' page 24

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 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, organizational changes, or restructuring. Further, it advises the Board of Executive Directors on corporate strategy matters and on projects of a strategic nature. The Chairman of the Supervisory Board is also the chairman of this committee. The Strategy Committee has four members; two are shareholder representatives, and two are employee representatives.
+ The Audit Committee performs the tasks set out in 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.kpluss.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. The Supervisory Board is convinced that the performance of the body as a whole depends considerably 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 2019 FINANCIAL YEAR (INFORMATION ON OTHER SUPERVISORY BOARD APPOINTMENTS AND SUPERVISORY BOARD BODIES: DECEMBER 31, 2019)

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 Executive Director at BASF Aktiengesellschaft, Ludwigshafen (now: BASF SE, Ludwigshafen))

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

Other supervisory board appointments:
+ Karlsruhe Institute of Technology (KIT), Karlsruhe (Deputy Chairman of the Supervisory Board) (until August 31, 2019)

Other supervisory bodies:
+ C.H. Boehringer Sohn AG & Co. KG, Ingelheim (Member of the Advisory Council)

Ralf Becker (born in 1965), Trade Union Secretary
Deputy Chairman
Employee representative

State District Manager North of IG Bergbau, Chemie, Energie (Mining, Chemical, and Energy Union), Hanover

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

Other supervisory board appointments:
+ Continental Reifen Deutschland GmbH, Hanover (Deputy 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 (co-determination/legal/occupational health protection), IG Bergbau, Chemie, Energie (Mining, Chemical, and Energy Union), Hanover

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

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

André Bahn (born in 1968), Electrician
Employee representative

Deputy Chairman of the General Works Council of the K+S GROUP
Chairman of the Works Council of the Werra plant, K+S MINERALS AND AGRICULTURE GMBH, Kassel (formerly: K+S KALI GMBH, Kassel)

In office until the end of the 2023 Annual General Meeting
First appointed: May 15, 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: May 7, 2003

Other supervisory bodies:
+ A.S. Création Tapeten AG, Gummersbach (Deputy Chairwoman)

Peter Bleckmann (born in 1962), Mechanic
Employee representative

Deputy Chairman of the General Works Council of the K+S GROUP
Chairman of the Works Council of the Borth plant, K+S MINERALS AND AGRICULTURE GMBH, KASSEL (FORMERLY: ESCO – EUROPEAN SALT COMPANY GMBH & CO. KG, HANOVER)

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

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

Entrepreneur/Agriculturist

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

Other supervisory bodies:
+ Bernard Krone Holding SE & Co. KG, Spelle (Chairman of the Supervisory Board) (until December 31, 2019, from January 1, 2020 full member)
+ DF World of Spices GmbH, Dissen (Member of the Advisory Board)
+ Grimme GmbH & Co. KG, Damme (Chairman of the Advisory Board)

George Cardona (born 1951), Economist
Shareholder representative

Economist

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

Other supervisory bodies:
+ Board of Banque Havilland (Monaco) S.A.M., Monaco (Chairman, since October 5, 2019)

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: May 15, 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., Ostend/Belgium
+ TUI Nederland N.V., Rijswijk/Netherlands

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

Retiree (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: May 15, 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 MINERALS AND AGRICULTURE GmbH, Kassel (formerly: K+S KALI GMBH, Kassel)

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

Michael Knackmuß (born in 1975), Mechanic
Employee representative

Chairman of the works council of the Zielitz plant, K+S MINERALS AND AGRICULTURE GmbH, Kassel (formerly: K+S KALI GMBH, Kassel)

In office until the end of the 2023 Annual General Meeting
First appointed: July 11, 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: May 10, 2017

Other Supervisory Board appointments:
Group companies of Südzucker Group
+ CropEnergies AG, Mannheim (Deputy 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) (until July 31, 2019)
+ 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: January 1, 2016

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

Independent consultant/entrepreneur, NLM Management Inc., London, Canada

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

Other supervisory bodies:
+ Board Member of the BioEnterprise Corporation (non-profit Canadian company)

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

Chairwoman of the Works Council of the Hanover site, K+S MINERALS AND AGRICULTURE GmbH, Kassel (formerly: ESCO – EUROPEAN SALT COMPANY GMBH & CO. KG, Hanover)
Employee in the customer segment Communities, K+S MINERALS AND AGRICULTURE GMBH, Kassel (formerly: ESCO – EUROPEAN SALT COMPANY GMBH & CO. KG, Hanover)

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

www.kpluss.com/supervisoryboard

SUPERVISORY BOARD COMMITTEES

MEDIATION COMMITTEE

+ Dr. Andreas Kreimeyer (Chairman)
+ Ralf Becker
+ Axel Hartmann
+ Thomas Kölbl

STRATEGY COMMITTEE

+ Dr. Andreas Kreimeyer (Chairman)
+ André Bahn (since December 3, 2019)
+ Ralf Becker
+ Philip Freiherr von dem Bussche

AUDIT COMMITTEE

+ Thomas Kölbl (Chairman)
+ Petra Adolph
+ Ralf Becker
+ Jella Benner-Heinacher
+ Axel Hartmann
+ Dr. Andreas Kreimeyer

PERSONNEL COMMITTEE

+ Dr. Andreas Kreimeyer (Chairman)
+ Ralf Becker
+ Dr. Elke Eller
+ Michael Knackmuß

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 co-operation 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. Matters such as this should, where possible, be discussed at board meetings held every two to three weeks, where, if applicable, measures should be adopted; a resolution must be passed for important business and actions.

www.kpluss.com/statutes

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. From January 1, until December 31, 2019, the Board of Executive Directors consisted of three male members.

The 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 consideration of equal participation of women and men in management positions, at its meeting on May 14, 2019, the Supervisory Board determined a new target of 25%. This is to be achieved by December 31, 2023.

MEMBERS OF THE BOARD OF EXECUTIVE DIRECTORS

(Information on responsibilities and appointments as of December 31, 2019, unless otherwise stated)

Dr. Burkhard Lohr (born in 1963), Degree in Business Administration, Chairman, Labor Relations Director

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

In office until May 31, 2025
First appointed: June 1, 2012

Supervisory board appointments:

+ K+S MINERALS AND AGRICULTURE GMBH (Chairman), Kassel[1] (formerly: K+S KALI GMBH, Kassel)

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

+ Controlling
+ Finance & Accounting
+ Innovation & Digitalization (since February 1, 2020)
+ Insurance
+ Internal Auditing
+ 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 May 11, 2025
First appointed: May 12, 2017

Supervisory board appointments:

+ K+S MINERALS AND AGRICULTURE GMBH, Kassel[1] (formerly: K+S KALI GMBH, Kassel)

[1] Group mandate.

Mark Roberts (born in 1963), Bachelor of Science (Marketing)

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

In office until September 30, 2023
First appointed: October 1, 2012

www.kpluss.com/executivedirectors
www.kpluss.com/corporategovernance

REMUNERATION FOR THE BOARD OF EXECUTIVE DIRECTORS AND THE SUPERVISORY BOARD

Remuneration for the Board of Executive Directors and the Supervisory Board is reported in the remuneration report as a part of the management report and can be viewed on the Company website.

'Remuneration Report,' page 142

www.kpluss.com/corporategovernance

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.kpluss.com/statutes

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.

For the Supervisory Board and the Board of Executive Directors, the directors' dealings in 2019 were disclosed as follows: **B.62**

www.kpluss.com/directorsdealings

On December 31, 2019, 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 1ST AND 2ND LEVEL BELOW THE BOARD OF EXECUTIVE DIRECTORS

With regard to the Act on the Equal Participation of Women and Men in Management Positions, we have defined target figures for the proportion of women in management levels below the level of the Board of Executive Directors of K+S AKTIENGESELLSCHAFT by December 31, 2021. Although we were able to increase the proportion of women on the first level below the Board of Executive Directors by just under one percentage point, the target figure of 13% could not yet be achieved as of December 31, 2019. Due to a slight decline in the total number of management functions at this management level, the proportion of women was 9% as of the reporting date (2018: 8%). Encouragingly, at the second level below the Board of Executive Directors, the target figure of 11% was exceeded with slightly more than 15% as of December 31, 2019 (2018: 22%). The year-on-year decline is due to an increase in the total number of management functions.

'Combined non-financial statement,' page 87

DIRECTORS' DEALINGS OF THE MEMBERS OF THE SUPERVISORY BOARD AND THE BOARD OF EXECUTIVE DIRECTORS **B.62**

	Date	Transaction	ISIN	Volume
Thorsten Boeckers	August 26, 2019	Share purchase	DE000KSAG888	€35,625.00
Dr. Andreas Kreimeyer	August 26, 2019	Share purchase	DE000KSAG888	€71,345.37
Philip Freiherr von dem Bussche	August 26, 2019	Share purchase	DE000KSAG888	€93,206.82

GOVERNANCE

Each organizational 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.

ONE K+S Values

The new global values program was completed in the second half of 2019: the ONE K+S Values. This Company-wide catalogue of values helps coordinate the corporate culture and conduct at workplaces worldwide. This is an important step on the road to "One Company" – ONE K+S. Identification of the K+S GROUP with shared values will enable the development of a stronger corporate culture:

+ SAFE & SUSTAINABLE: We always put safety first and act sustainably in everything we do
+ COLLABORATIVE: We support each other by treating one another with trust and respect
+ ENTREPRENEURIAL: We are entrepreneurs and take on challenges courageously
+ AGILE: We utilize lean and flexible structures to work quickly and efficiently
+ INNOVATIVE: We are adaptable and encourage innovation
+ OPTIMISTIC: We believe in the success of K+S

www.kpluss.com/values

CODE OF CONDUCT

The K+S GROUP has defined a code of conduct for itself based on the Global Organization Handbook for the K+S GROUP and the ONE K+S Values.

This provides orientation so that everyone can make good decisions in their everyday work. As ONE K+S, it is important that we treat each other with respect all over the world and that we align our actions to the ONE K+S Values. Collaboration is important so that, together, we can set a high ethical standard for the way in which we manage our businesses in and outside K+S.

www.kpluss.com/codeofconduct

The sub systems that are relevant for the governance and monitoring components of the system, i.e., governance, compliance management, risk and opportunity management, and sustainability management, are described below. These complement one another and overlap in part. Finally, governance and internal monitoring are explained.

COMPLIANCE MANAGEMENT

With our compliance management system we ensure that applicable laws and our internal, equally important regulations are known throughout the Group 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.

'Combined non-financial statement,' page 97
www.kpluss.com/compliance

At K+S, the risk of compliance breaches, including corruption risks, are taken into account in the risk management process. Compliance risks can also be identified through regular audits of compliance topics by Internal Audit.

'Risk and opportunity report,' page 130

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. He or she reports directly to the Chairman of the Board of Executive Directors and manages the global Governance, Risk, and Compliance Committee (GRC Committee), to which the compliance officers of the operating units and the heads of compliance-relevant central functions of the Company belong (e.g., internal Audit, Legal, HR). The tasks of the GRC Committee include providing advice on, and coordinating general topics of, compliance management, analyzing the general suitability of the compliance management system, and, if a need for action is identified, making recommendations to the responsible management. 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 2019, there were again no incidents of corruption and no penalties had to be paid.

'Combined non-financial statement,' page 97

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.

The Management of Risk and Opportunities section in the Global Organization Handbook regulates the tasks and authorities of those involved in the risk management process and the risk and opportunity management process itself and defines the requirements for reporting risks and opportunities.

The GRC Committee has the task of advising on and coordinating general topics associated with risk and opportunity management throughout the Group. It also has the task of analyzing 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, an explanation of risk management in relation to financial instruments (IFRS 7), and significant risks and opportunities can be found in the risk and opportunity report from page 119.

'Risk and opportunity report,' page 119

SUSTAINABILITY MANAGEMENT[1]

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.

'Corporate Strategy', page 58

The Board of Executive Directors is responsible for setting the strategic sustainability goals of the K+S GROUP. Each of the sustainability goals set by the Board of Executive Directors is sponsored by a member of the Board. 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.

[1] This section is part of the combined 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.

Sustainability goals	Responsible member of the Board of Executive Directors (sponsor)
Health & Safety	Mark Roberts, Member of the Board[2]
Diversity & Inclusion	Mark Roberts, Member of the Board[2]
Human Rights	Mark Roberts, Member of the Board[2]
Water	Dr. Burkhard Lohr, CEO
Waste	Dr. Burkhard Lohr, CEO
Energy & Climate	Mark Roberts, Member of the Board[2]
Sustainable Supply Chains	Thorsten Boeckers, CFO
Compliance & Anti-Corruption	Thorsten Boeckers, CFO

[2] Mark Roberts held the position as COO until December 2019.

Sustainability management of the K+S GROUP is a part of the "Health, Safety, Management Systems & Sustainability" unit. Its head reports directly to the Chairman of the Board of Executive Directs 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, analyzes, and prioritizes 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 analyzes 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. In 2019, the committee was convened three times to monitor implementation of the K+S Sustainability program 2030 and to discuss specific actions and programs. The Committee has defined fundamental sustainability governance processes for the holistic control of sustainability topics. It also coordinates comprehensive communication measures and employee commitment through various communication channels and information about current trends and political developments.

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 report quarterly to the Board of Executive Directors on the progress of achieving the targets through the efforts of sustainability management.

'Corporate Governance and monitoring,' page 111

CORPORATE GOVERNANCE AND MONITORING

The target status of an effective, legally compliant system for corporate governance and monitoring (internal control system in a broader sense) in the K+S GROUP is defined in the section on "Corporate Governance and Monitoring" of the Global Organization Handbook in addition to the corresponding legal standards. This guideline also stipulates the regulatory and organizational 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 coordinating Group-level development and maintenance of an equally effective and legally compliant governance and monitoring system.

The task of the central Governance, Risk, and Compliance (GRC) Committee is to analyze 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.

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 fulfillment 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 management in the central functions as well as the management of the operating units, which in turn are broken down in a cascading process to the respective subordinated organizational 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. Consequently, they must be specific, measurable, accepted, and realistic, they must have time limits set, and must 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 function/unit.

Significant control tools include medium-term plans, annual plans, and 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. The main key figures are planned in numerous subprocesses and with central specification of the most important planning assumptions by the operating units and units of K+S AKTIENGESELLSCHAFT. 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.

The monthly planning is based on the endorsed annual plan. Here, generally each month, important 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 analyzed and assessed as part of the monthly planning and are used to manage business operations. The Board of Executive Directors and the Supervisory Board receive a written and verbal explanation of the consolidated monthly planning of the K+S GROUP.

As part of our SHAPING 2030 strategy, the previous planning and estimation processes were put to the test in order to identify possible efficiency improvements. The newly designed processes will be implemented from the 2020 financial year. While the focus in medium-term planning is on closer integration with strategic planning and a shorter time frame for the preparation of the plan, the estimation of key financial figures updated during the year will be carried out in a leaner process.

KEY FINANCIAL PERFORMANCE INDICATORS

The Company's activities are managed based on the following key financial performance indicators, which are the most important financial performance indicators within the meaning of the German Accounting Standard (DRS) 20:

+ EBITDA[1] (K+S GROUP, operating units)
+ Group earnings after tax, adjusted (K+S GROUP)
+ Capital expenditures (K+S GROUP)
+ Adjusted free cash flow[2] (K+S GROUP)
+ Return on capital employed (ROCE)[3] (K+S GROUP)
+ Net financial liabilities/EBITDA[1] (K+S GROUP)

'Definition of key financial figures used,' page 246
'Glossary,' page 248

[1] EBITDA is defined as earnings before interest, taxes, depreciation and amortization, adjusted by the depreciation and amortization amount not recognized in profit and loss in the context of own work capitalized, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognized in prior periods. A reconciliation can be found on page 61.
[2] The calculation of the "Adjusted free cash flow" performance indicator can be found in the economic report on page 67.
[3] The calculation of the "ROCE" performance indicator can be found in the economic report on page 64.

The 2018 financial year, we control the Company primarily by utilizing the earnings figure EBITDA[1]. A derivation of this can be found in the economic report on page 61. 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 employees has been based on a comparison of the planned EBITDA of the K+S Group with the actual EBITDA[1] achieved. As part of our growth strategy, SHAPING 2030, we have set an EBITDA[1] target for 2030 and published it as a long-term value perspective for the Group. This emphasizes the relevance we place on EBITDA[1] 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 the key financial performance indicator of adjusted free cash flow including the cash effective capital expenditures. A derivation of the two figures can be found on the pages 66 and 67 of the economic report. In this way, we are pushing our goal of reducing our indebtedness (net financial liabilities/EBITDA[1]). The derivation of net financial liabilities can be found on page 69 of the economic report. The key performance indicators capital expenditure and net financial liabilities/EBITDA are considered as key performance indicators since financial year 2019.

'Remuneration report,' page 142

We use the performance indicator "return on capital employed" (ROCE[3])to monitor our financial objective; its relevance was emphasized again when communicating our SHAPING 2030 strategy. The derivation can be found on page 67 of the economic report. We derive economic value added on the basis of ROCE[3], 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 eligible 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 derivation can be found on page 63 of the economic report.

The comparison of the actual and projected course of business on page 59 includes, among 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 63 and that of cash flow in the financial position section on page 71.

NON-FINANCIAL PERFORMANCE INDICATORS

In the context of sustainability management, the requirements of the K+S GROUP and those imposed on it are determined, analyzed, and prioritized 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. Starting in the 2020 financial year, we also steer the Company with the following non-financial key performance indicators. As of 2020, they build the basis for a part of the long term incentive (LTI) as a variable component of the Executive Board's compensation. They are the most important non-financial key performance indicators within the meaning of German Accounting Standard (DRS) 20.

The relevant non-financial performance indicators comprise:

+ Lost time incident rate (LTI-Rate)
+ Saline process water
+ Sustainable supply chains concretized by the performance indicators "Critical suppliers aligned with the K+S GROUP Supplier Code of Conduct" and "Coverage of the purchasing volume by the Supplier Code of Conduct of the K+S GROUP"

The so-called LTI rate measures occupational accidents with lost time in relation to one million hours worked. Saline process water is the saline water arising in the mining treatment processes used in potash production that can no longer be used in the production processes, used in other ways, or sold as a product and for which there is thus a need for disposal. This is the second non-financial key performance indicator. The "percentage of critical suppliers who have recognized the K+S GROUP Supplier Code of Conduct" as well as the "rate of recognition of the K+S GROUP Supplier Code of Conduct" in relation to purchasing volume in percent are the subgoals of the third key performance indicator "Sustainable Supply Chains." A detailed description can be found in the Remuneration Report on pages 143 and 144.

'Sustainability program,' page 51
'Remuneration report,' page 142

Other financial and non-financial performance indicators that are relevant for the K+S GROUP include sales revenue, sales volumes, average earnings, and number of employees. However, these figures are not considered key performance indicators within the meaning of German Accounting Standard (DRS) 20.

MONITORING

The monitoring system is intended to ensure fulfillment 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: The management responsible for an internal process must identify and analyze risks associated with achieving targets that are legally compliant and also comply with internal regulations. 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 materialized 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) OR SECTION 315 (4) GERMAN COMMERCIAL CODE (HGB))/FINAL 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 formalized requirements for the reporting of the consolidated companies. The effects of new external accounting regulations are analyzed promptly and, if they are relevant for us, are implemented by means of an internal regulation in the accounting process. 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 standardized accounting processes. This standardization 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 formalized manner by the system, thus ensuring that intra-Group 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 2019 audit was conducted by DELOITTE GMBH WIRTSCHAFTSPRÜFUNGSGESELLSCHAFT, 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 entire mandate was supervised by auditor/tax adviser Professor Dr. Frank Beine as the responsible partner. DELOITTE GMBH WIRTSCHAFTSPRÜFUNGSGESELLSCHAFT issued the statement of independence in accordance with Section 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 AktG.

DISCLOSURES IN ACCORDANCE WITH SECTION 289A (1) AND SECTION 315A (1) HGB AS WELL AS THE EXPLANATORY REPORT OF THE BOARD OF EXECUTIVE DIRECTORS IN ACCORDANCE WITH SECTION 176 (1) SENTENCE 1 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 ASSOCATION 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 members of the Board of Executive Directors are governed by Section 84 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) 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

AUTHORITIES TO GENERATE NEW AUTHORISED CAPITAL OR AUTHORISED CAPITAL II WITH THE POSSIBILITY OF EXCLUDING THE SUBSCRIPTION RIGHT OF THE SHAREHOLDERS

The Board of Executive Directors was authorized by the Annual General Meeting on May 12, 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 May 11, 2020. The Board of Executive Directors was further authorized on May 11, 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 (authorized capital II) in return for cash and/or non-cash contributions during the period to May 10, 2021. Shareholders are generally offered the right to subscribe when increasing capital from the authorized capital or authorized 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.kpluss.com/agm2015
www.kpluss.com/agm2016

The Board of Executive Directors is authorized, both for the authorized capital and for the authorized 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 assets in kind 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 new shares are to be used as payment by the Company to acquire a company or a shareholding in a 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 authorizations 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 authorizations nor on the date they are respectively exercised. If other authorizations 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 authorized capital or authorized capital II until their respective utilization thus excluding the right to subscribe, this must be credited against the 10% ceiling referred to above.

The Board of Executive Directors is authorized to determine the further details of capital increases from the authorized capital or the authorized 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 May 11, 2020 (authorized capital) or May 10, 2021 (authorized 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.

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

Authorization to issue convertible bonds and bonds with warrants

The Board of Executive Directors is authorized until May 11, 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.

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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 authorized 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 authorized with the approval of the Supervisory Board to exclude subscription rights, in full or in part, in the following cases:

+ If the bonds are issued for cash and the issue price is not significantly less than the theoretical market value of the bonds determined according to recognized 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 authorization 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 authorization period in connection with another increase in capital where subscription rights are excluded in direct or indirect application of Section 186 (3) sentence 4 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 authorization period, where subscription rights are excluded in direct or indirect application of Section 186 (3) sentence 4 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 fulfillment 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 authorizations 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 authorization 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 authorize 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) AktG, insofar as the adjustment is not already stipulated by law. The bond terms and conditions may also include a value-preserving adjustment of the pre-emptive rights and/or conversion rights/obligations in the case of a capital decrease or other extraordinary measures or incidents (such as control acquired by a third party, unusually high 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 authorized, 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 authorization before May 11, 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 May 11, 2020 based on the authorizing resolution of the Annual General Meeting held on May 12, 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 May 11, 2020 based on the authorizing resolution of the Annual General Meeting held on May 12, 2015, who are required to convert, fulfill their conversion obligation; or if the Company elects before May 11, 2020, based on the authorizing resolution of May 12, 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 fulfillment 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 authorized 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 favorable 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 authorization 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.

AUTHORIZATION TO ACQUIRE AND USE OWN SHARES WITH THE OPTION TO EXCLUDE SHAREHOLDERS' RIGHT TO SUBSCRIBE

The Board of Executive Directors is authorized 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 May 11, 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 computerized 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 an allocation basis. Provision may be made for preferential acceptance of small quantities of up to 100 shares offered for sale per shareholder.

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Furthermore, the Board of Executive Directors is authorized, with the consent of the Supervisory Board, to sell shares in the Company, which are or were acquired based on the authorization above or authorization previously granted by the Annual General Meeting pursuant to Section 71 (1) (8) 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 authorization given by the Annual General Meeting

The authorization 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 authorization is exercised. If use is made of other authorizations to issue or sell Company shares or to issue rights, which enable or obligate the acquisition of Company shares, during the term of this authorization 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 authorized, with the consent of the Supervisory Board, to withdraw shares in the Company from circulation, which are or were acquired based on the authorization above or authorization previously granted by the Annual General Meeting pursuant to Section 71 (1) (8) 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) 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) AktG. The Board of Executive Directors is authorized pursuant to Section 237 (3) (3) clause 2 AktG to adjust the number of shares indicated in the Articles of Association.

The authorizations 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 authorization 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 fulfill 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 2019, K+S concluded a syndicated credit line for €800 million. 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 151. 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 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 99

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 initially carried out 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 as to 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 countermeasures 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. If the risk materializes, 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 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 combined non-financial statement.

'Combined non-financial statement,' page 83

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 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 non-financial aspects as defined by the CSR Directive Implementation Act should at least have a significant loss potential and are more likely than not to occur (> 50%). No such risks were identified in the past financial year. However, where the occurrence of identified 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, 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 standardized reporting. Significant risks that arise in the short term are communicated directly to the Board of Executive Directors without delay. 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 UTILIZATION 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 centralized 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 65

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 recognized underlying transactions (usually receivables). Secondly, we enter into hedging transactions for future business that can be anticipated with a high level of probability based on empirically reliable findings (anticipatory hedges).

'Notes,' page 196

RISKS AND OPPORTUNITIES 2020–2022

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 **B.64** 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 operating units are aggregated before being 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 operating unit is specified, the risks apply to the entire K+S GROUP.

OVERVIEW OF OPPORTUNITIES

Table **B.63** 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 operating units are aggregated before being 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 operating unit is specified, the opportunities apply to the entire K+S GROUP.

OPPORTUNITIES **B.63**

	Likelihood of occurrence		Benefit potential	
External and industry-specific opportunities				
Macroeconomic developments	Possible		Moderate	
Increase in demand/price increase	Possible		Significant	↑
Weather-related fluctuations in demand	Possible		Significant	
Operational opportunities				
Market penetration, market development, expansion in capacity, cost optimization, 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	
Financial opportunities				
Currency/exchange rate fluctuations	Possible		Significant	
Change in the general interest rate level	Possible		Moderate	
Upgrading of the Company rating	Possible		Moderate	

RISKS **B.64**

	Likelihood of occurrence	Loss potential
External and industry-specific risks		
Macroeconomic developments	Possible	Significant
Reduced demand/increased supply/drop in prices	Possible	Significant
Weather-related fluctuations in demand	Possible	Significant
Additional weather-related costs	Possible	Moderate
Risks arising from changes in the legal environment		
Management planning in accordance with the Water Framework Directive or amendment, refusal or revocation by a court of official licenses 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
Operational risks		
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
Changes in the composition of crude salt	Possible	Moderate
Carbon dioxide pockets in deposits	Possible	Moderate
Damage due to rock bursts	Unlikely	Significant
Water inflow	Unlikely	Significant
Compliance	Unlikely	Significant
Non-compliance with regulations on occupational exposure limits underground	Unlikely	Significant
Loss of suppliers and supply bottlenecks	Unlikely	Moderate
Personnel	Unlikely	Moderate
IT security	Unlikely	Moderate
Reputation	Unlikely	Moderate
Financial risks		
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

EXTERNAL AND SECTOR-SPECIFIC RISKS AND OPPORTUNITIES

MACROECONOMIC DEVELOPMENTS

Demand for the mineral fertilizers and fertilizer specialities of the Europe+ operating unit is influenced significantly 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 rose significantly in the course of 2018, continuing the positive trend seen since mid-2016. In the first half of 2019, prices remained more or less stable. Since September 2019, however, market conditions have been challenging, especially due to the Chinese import ban. Overall, we believe that the level of agricultural prices over the medium term should once again provide an incentive for farmers to also increase their yield per hectare 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 56

The impact of the general economic situation on demand for de-icing salt and salt products for industrial applications as well as salt products for end consumers is of minor importance, since this business is largely independent of economic conditions.

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 Southeast Asia, this could lead to positive deviations from planning.

We would respond to the effects described above with demand-oriented production management.

Environmental and industrial policy remains in flux worldwide. Where relevant, the effects of Germany's climate policy package have been included in our planning or factored into the risk under consideration. The consequences of the EU's Green Deal, which is intended to introduce climate neutrality and higher environmental standards, may be more ambitious than the German goals and are not yet foreseeable.

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 2020.

REDUCED DEMAND/INCREASED SUPPLY/DROP IN PRICES

In particular, products in the Agriculture customer segment of the Europe+ operating unit could be threatened by substantial falls in demand caused by external influences. These often lead to significant price declines.

In terms of demand, macroeconomic factors such as unfavorable 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. For example, the import ban on potassium chloride, which has been in place in China since September 2019, has led to buyer restraint and falling prices in other regions as well. Environmental factors such as diseases in certain crops, the occurrence of animal epidemics, or unfavorable weather conditions could likewise lead to a decline in demand with a simultaneous drop in prices. Moreover, demand and prices 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. Should the market not be ready to absorb additional volumes entirely, this could increase competitive pressure during a transitional period and lead to a drop in prices. 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 with price erosion.

Major increases in capacity and its utilization, 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. 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 demographic change, population growth, and 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 organizational structures and expand our fertilizer specialities.

INCREASE IN DEMAND/PRICE INCREASE

Opportunities with significant positive effects essentially lie in demand for the mineral fertilizers and fertilizer specialities of the Europe+ operating unit.

Until September 2019, the industry situation in the Agriculture customer segment of the Europe+ operating unit was characterized by both strong demand and good price levels. Since September 2019, however, market conditions have been challenging in light of the Chinese import ban. If farmers utilize 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 Communities customer segment of the Europe+ and Americas operating units, 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.

In the Europe+ operating unit, a sales risk and lower prices could arise in the Agriculture customer segment 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

At some production sites in the Europe+ operating unit, the water law framework is particularly important for the unrestricted use of the technical production capacity available. K+S has therefore increased the flexibility of wastewater management at the Werra plant significantly. Given the continuous expansion of basin capacity above ground, the commissioning of the kainite crystallization and flotation facility (KCF facility) in January 2018, and the approval of underground temporary storage capacity in August 2019, we believe that production at the Werra plant under the existing permits is secured in a normal hydrological year, assuming unobstructed use of deep-well injection and/or ongoing underground storage as of 2022 as planned. In a dry year, however, larger 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/fall 2018) with an unusually low water flow in the Werra river over a prolonged period, production standstills could occur if all available resources for off-site waste disposal are exhausted. In addition to the low water flow, the water temperature can 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.

RISKS ARISING FROM CHANGES IN THE LEGAL ENVIRONMENT

A large number of licenses 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 licenses 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 licenses or permits after they have been granted and that these will be revoked by courts. Furthermore, extensions of existing licenses 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 AND AMENDMENT, LEGAL REFUSAL, OR REVOCATION OF OFFICIAL LICENSES FOR THE DISPOSAL OF LIQUID AND SOLID PRODUCTION RESIDUES IN GERMANY

In the Europe+ operating unit, 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 from 2015 to 2021 of the individual river authorities (FGG) are relevant in this regard.
'Environment,' page 88

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 during this period. Further measures and target values for the third management period from 2021 to 2027 are currently being redefined. If the aspects included in the management plan of the Weser FGG for the period from 2015 to 2021 (in particular the target values in bodies of water) also appear in the plan for the period from 2022 onwards 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 for the Werra and Neuhof plants 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^3 and it also limits the daily injection volume to 5,000 m^3 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 standstills 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 of deep-well injection on the groundwater can be ruled out. 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. One key measure here is the underground storage of saline water at the Springen mining field (Merkers mine) as of 2022. This measure is intended to permanently replace deep-well injection, which will cease at the end of 2021. Underground storage rules out the possibility of groundwater salinization. The approval process is on schedule. This is intended to ensure that production and tailings pile wastewater can be disposed of by means of discharge into the Werra river and underground storage. Research and development as well as innovation activities are also being continued. The aim of these measures is to maintain added value and safeguard the associated jobs over the long term, 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 88

REFUSAL OR REVOCATION BY A COURT OF OFFICIAL PERMITS FOR THE DISPOSAL OF SOLID PRODUCTION RESIDUES

If licenses 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 licenses 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 licenses 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 October 11, 2018. In an initial step, 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.

Approval for "early commencement" of measures to expand tailings pile capacity at the Zielitz potash plant was granted on October 1, 2019. This allows the plant to carry out the preparatory infrastructure measures required in order to continue production at the Zielitz site. The raising of tailings piles in the expansion area is due to begin in 2021. This requires a planning approval decision, which is expected to be issued at the end of 2020. In this context, extensive investments in environmental protection are also being made. This includes covering the old tailings piles as of 2025 as well as further technical measures to improve the environmental situation.

The approval procedure for the expansion of the tailings pile capacity at the Wintershall site is developing positively. The application for approval of the "early commencement" of land clearance was approved on December 19, 2019. We are also confident that we will receive the necessary additional permits for the expansion of the tailings pile at the Wintershall site in 2020.

'Tailings pile management,' page 92

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 by recognizing 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. An increasingly restrictive interpretation of the term "mining waste" limits the type of mining waste that may be stored underground. As a result, the type of mining waste that must be disposed of above ground and therefore at a higher cost increases. 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 OPTIMIZATION, 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 organizational reorientation. In addition, possibilities to optimize costs (e.g., by way of process digitalization at the underground mines or by increasing the efficiency of machinery, processes, and organizational structures) are closely reviewed and – where it makes sense to do so – implemented on an ongoing basis.

Through the systematic implementation of the growth initiatives defined in detail in our Group strategy, SHAPING 2030, we want to make successful use of the opportunities presented and achieve sustainable, profitable growth.

'Corporate strategy,' page 49

LEVERAGING OF SYNERGIES

K+S anticipates synergies of at least €150 million before inflation as of the end of 2020 compared with the cost base in 2017. Significant deviations from projected effects represent both a risk and an opportunity.

RAMP-UP PHASE AT THE BETHUNE SITE

In the mid-2020s, 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. Internal measures are taken to ensure a continuous claim management process with the aim of processing K+S's existing receivables from suppliers and recovery claims so as to achieve the best possible outcome.

As a mine owner, K+S MINERALS AND AGRICULTURE 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 Meiningen 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 damaged 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 Meiningen administrative court. A decision by 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. Fulfillment of the tax assessment notices was suspended by the tax authorities in conformity with the judicial order. The appeal procedures have not yet been finalized. It is considered unlikely that the tax authorities will assert their opinion in a court case.

All other litigation 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. Effects of the Omnibus Energy Act (EnSaG), the draft Act on Fuel Emissions Trading (BEHG), and phase four of the European Emissions Trading System (EU ETS) have been reflected in the planning. 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,' page 94
'Environment,' page 88

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 characterized by a high degree of complexity and efficiency. As a result of increasing age and the operational and accident risks to which our facilities, production plants, and 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. Programs are implemented with a view to ensuring the availability of critical facilities such as conveyor systems, steam production, buildings, etc., through the efficient use of capital.

CHANGES IN THE COMPOSITION OF CRUDE SALT

The extraction of crude salt in our mining operations forms the basis for production in all customer segments and operating units. We are implementing an extensive geological investigation program 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_2.

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 recognized. 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 recognized 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). In addition, in 2019, basic training on compliance matters was provided for all employees and a new reporting system introduced for suspected compliance issues. Compliance management is continuously reviewed and adjusted as required, for example based on recent developments.

'Declaration on corporate governance,' page 99

NON-COMPLIANCE WITH REGULATIONS ON OCCUPATIONAL EXPOSURE LIMITS UNDERGROUND

The Federal Ministry of Labor 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 October 31, 2021 or from October 31, 2022, respectively. To satisfy them, K+S has in recent years made substantial efforts to comply with the occupational exposure limits applicable following the aforementioned transition period. The latest diesel engine technology, alternative drive technologies, the development of low-emission explosive substances, and the optimization of ventilation underground, for example, have been investigated as part of an extensive project. There is a risk that the investments considered in the planning will not suffice. There might also not be enough time to fulfill the requirements (e.g., insufficient market availability of machinery, explosive substances). Based on our current knowledge, we believe that we will meet the technical requirements prescribed by law on a long-term basis. Although we are pressing ahead with the systematic implementation of the relevant measures, we consider the period of time available to implement the technical developments to be critical. Due to the greater amount of time required to implement the measures, the existing transition periods will not suffice and it is foreseeable that an appropriate extension will be required. If this is not granted, there is a risk that, in an extreme case, German sites could close down temporarily 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 countermeasures 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 potential loss of employees in key positions constitutes a fundamental risk. Moreover, we will be facing demographic challenges in 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 wants to permanently motivate employees and retain qualified managers and specialists for the long term. In addition, our focus on diversity in our workforce we want to unlock all potential in the labor market. By adopting this strategy and increasing cooperation with selected higher education institutions, we offer qualified managers and specialists promising career prospects.

'Employees,' page 80

IT SECURITY
Our IT systems support almost all corporate functions in large measure. IT security risk lies primarily in the loss of availability, integrity and confidentiality of information due to external attacks (for example, hackers, viruses) and internal risks (for example, technical failure, sabotage). If this risk were to materialize, 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 want to 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 cyberattacks with a loss amount of €50 million.

REPUTATION
The materialization 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 that 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 an 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 level of earnings, receivables, costs, and liabilities in the Agriculture customer segment of the Europe+ operating unit.
'Financial position,' page 65

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 196

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 recognized 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 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. In 2019, there were no maturity-matched interest rates available on the capital market for the very long-term mining obligations in particular. The existing practice of extrapolating the interest rates available on the market for those obligations at the reporting date therefore resulted in inappropriate real interest rates. For this reason, average yields on government bonds were also used to estimate the interest rate for long-term mining obligations. In future, a change in market interest rates compared with the preceding reporting date could lead to changes in the discount rates and therefore to the adjustment of non-current provisions. Both falling and rising interest rates could 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 unfavorable 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 196

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.
'Financial position,' page 65

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.

In addition, a financial covenant has been agreed for a portion of these committed credit lines. This stipulates a specific ratio between net financial liabilities (including all lease liabilities) and EBITDA for the respective quarterly financial statements. If this ratio is exceeded on the agreed date, the lenders have the right to terminate the agreement. In this case, the remaining financial liabilities are also cancelable via a cross default. This would result in higher liquidity procurement costs.

Our planning for adjusted free cash flow includes measures to improve working capital. If these measures were to be discontinued or not to take effect, this would have a negative impact on the expected free cash flow. We consider this risk to be part of the liquidity risk.

Liquidity is managed by the central treasury department using cash pooling systems. As of December 31, 2019, the available liquidity amounted to €1,140.2 million and consisted of cash invested, cash on hand and bank balances and 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 optimizing the income earned from cash on hand and bank balances at low risk.
Notes (25) 'Further disclosures on financial instruments,' page 213

DEFAULT ON RECEIVABLES FROM CUSTOMERS

We maintain comprehensive business relationships with many customers. If one or more major customers are not in a position to fulfill 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. The potential default of a bank or other party could have an adverse effect on the financial position of K+S. K+S is not especially dependent on any one financial institution.

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 **B.63** and **B.64** on pages 121 and 122.

Risks in the Europe+ operating unit in relation to the disposal of liquid and solid production residues continue to be significant on account of the legal framework. 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%.

Measures in preparation for the expansion of tailings pile capacity in Zielitz and Wintershall have been approved.

As a result of the current volatile market situation, we expect that fluctuations in demand and fertilizer prices with significant effects are possible.

The findings of our intensive investigations elucidate in greater detail the risk of non-compliance with regulations on occupational exposure limits underground. We believe that we will meet the technical requirements prescribed by law on a long-term basis. However, we consider the period of time available to implement the technical developments to be critical.

The increase in heavy metal values in the ground and surface water in the surrounding area of the tailings piles does not have to be reported, as the expected loss potential is now well below the thresholds for reporting.

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, jeopardizing its continued existence as a going concern.

K+S's risk position has deteriorated in particular because of the challenging developments on the potash market as well as the absence of winter at the beginning of the financial year 2020.

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 largely unchanged compared with the previous year and will continue to receive considerable attention owing to the general conditions in the Europe+ operating unit.

REPORT ON EXPECTED DEVELOPMENTS

The current high volatility in potassium chloride prices in the overseas regions makes it particularly difficult to forecast earnings; in addition, the further spreading of the coronavirus could additionally exacerbate uncertainty. Thus, for 2020, EBITDA is expected to range between €500 million and €620 million (2019: €640.4 million). In the Agriculture customer segment, negative price effects will be set against higher sales volumes following the production cuts in the previous year. After a weak start in the de-icing salt business in the first quarter, we expect lower total sales volumes in the Communities customer segment than in the previous year.

Future macroeconomic situation

The following details on the future macroeconomic situation are based on forecasts by the INTERNATIONAL MONETARY FUND (IMF) and the KIEL INSTITUTE FOR THE WORLD ECONOMY (IFW). **B.65**

The INTERNATIONAL MONETARY FUND as well as the experts at IFW in Kiel forecast that the growth rate in global gross domestic product in 2020 will be slightly higher than in 2019, at 3.3% and 3.1%, respectively (2018: 2.9% and 3.0%). This forecast is based on the assumption that the world economy will slowly start to gain traction again on the back of loose financial policies. The increase in production will remain subdued, however, not least because the US economy, which has thus far been relatively robust, will initially lose momentum, and growth of the Chinese economy will continue its slight deceleration. The eurozone's economy, by contrast, is expected to revive slightly.

Another significant decline in the rate of expansion of the global economy could lead to a further tangible deterioration in the general conditions for international trade and additionally weigh on the investment climate. Additionally, the further spreading of the coronavirus could slow the rate of expansion. A global downturn could then develop negative momentum, in particular if the weakness affecting industry impacts on activities in the rest of the economy to a greater extent than seen thus far.

Inflation is anticipated to change only very little in 2020. Energy prices are not likely to make any substantial contribution to the inflation trend.

Brexit is not expected to have any significant direct impact on our future earnings, financial, and asset position. The United Kingdom only accounts for a low single-digit percentage of the K+S GROUP's total revenues.

PERCENTAGE CHANGE IN GROSS DOMESTIC PRODUCT **B.65**

in %; in real terms	2016	2017	2018	2019e	2020e
Germany	+2.2	+2.5	+1.5	+0.5	+1.1
Euro area	+1.9	+2.4	+1.8	+1.2	+1.3
World	+3.3	+3.8	+3.7	+2.9	+3.3

Source: IWF

Future industry situation

AGRICULTURE

Also 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. Price levels of agricultural products should likewise 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.

At the beginning of 2020, restraint on potassium chloride purchases has persisted in overseas regions because the agreement with China has still not been signed. Some producers have again responded with production cuts. The onset of the spring fertilizing season in the northern hemisphere and the improved earnings situation for farmers in Southeast Asia should stimulate demand and lead to a reduction in inventory levels that built up in customer regions in 2019. A new agreement expected to be entered into for supplies to China should also help revive demand there. Overall, we expect global potash sales to increase by just over 3 million tonnes to around 72 million tonnes (including just under 5 million tonnes of potassium sulfate and potash grades with a lower mineral content) in full-year 2020. We expect demand to be stable for the fertilizer specialty potassium sulfate.

Starting with declining prices for potassium chloride in the fourth quarter of 2019 and at the beginning of 2020, we anticipate that the downward trend will bottom out in the course of the first quarter and that prices will improve slightly in the second quarter, before stabilizing at a tangibly higher level in the second half of the year. For fertilizer specialities, we also expect lower average prices for the year as a whole, although to a significantly lower extent.

INDUSTRY

Total demand for potash, magnesium, and salt products in the Industry customer segment, which is allocated to both operating units according to the regional breakdown, is expected to rise slightly in the medium term. Global demand for products for chemical applications should increase tangibly. Aided by the aging population, demand for pharmaceutical products should continue to support moderate growth rates.

In 2020, demand for products in the Industry customer segment should follow a positive overall trend in the Europe+ operating unit. Despite a slight slowdown in economic conditions, demand for chemical applications is expected to continue at a good level.

For the Americas operating unit, we also expect demand for products of the Industry customer segment in North America to be stable on the whole in 2020. In South America, we anticipate a slight rise in demand in the chemical industry and a stable trend in the other subsegments.

CONSUMERS

The consumer customer segment is allocated to both operating units according to the regional breakdown; North America is the most significant region for this business. For table salt, both operating units expect the trend toward premium products, such as sea salt or kosher salt. For water-softening salt, we forecast a slight increase in regional demand for the Europe+ operating unit, while stable demand is expected for the Americas operating unit. Demand for packaged de-icing salt is again expected to be weak in Europe for weather-related reasons, while average demand across the various regions in North America should be relatively stable.

COMMUNITIES

Due to mild temperatures at the beginning of the year, we anticipate that demand for de-icing salt in the Europe+ operating unit will be strongly below average in the first quarter as a whole. This is also likely to have an impact on the early purchase business and on total sales volumes, even if there is a normal winter in the fourth quarter. Due to a below-average first quarter in the operating unit Americas, we anticipate demand below the moving average for the past ten years across all regions for the remainder of the year. As seen in 2019, we expect competition to remain fierce on the east coast of the United States.

Expected development of revenues and earnings, financial position and planned capital expenditure

The current high volatility in potassium chloride prices in the overseas regions makes it particularly difficult to forecast earnings. Against this background, EBITDA of the K+S GROUP is expected to be between €500 million and €620 million (2019: €640.4 million).

Our assessment for full-year 2020 is mainly based on the following assumptions:

+ Based on our assessment of market conditions in the Agriculture customer segment, which is allocated to the Europe+ operating unit, we anticipate that average prices for potash and magnesium fertilizers in our portfolio will be slightly lower in 2020 as a whole than in the fourth quarter of 2019 (€255). This will require the price development for the customer segment Agriculture described in the future industry situation.
+ Due in particular to the resumption of normal production in Germany and the continuing ramp-up in Bethune (no production cuts), the sales volumes for all products in the Agriculture customer segment is expected to amount to more than 7 million tonnes (2019: 6.30 million tonnes).
+ Owing to the generally very poor start in the de-icing salt business for weather-related reasons, we expect sales volumes between 8 and 9 million tonnes for the 2020 financial year (normal year: between 12.5 and 13.0 million tonnes; 2018: 12.7 million tonnes) in the Communities customer segment, which is allocated to both operating units according to the regional breakdown.
+ An average spot rate of 1.12 EUR/USD (2019: 1.12 EUR/USD) has been assumed for the EUR/USD exchange rate.

In the Europe+ operating unit (segment within the meaning of IFRS 8), higher sales volumes in the Agriculture customer segment following the previous year's production cuts should stand against negative price effects. Depending on further market trends in the Agriculture and Communities customer segments, EBITDA performance is expected to range between a tangible decline and stable (EBITDA Europe+ in 2019: €437.0 million). Given the below-average overall performance of the de-icing salt business, EBITDA of the Americas operating unit (segment within the meaning of IFRS 8) is expected to decrease slightly to tangibly (EBITDA Americas in 2019: €230.0 million).

The following key figures follow the described EBITDA corridor:

We expect that adjusted Group earnings after tax will decrease significantly for reasons that include a higher depreciation (2019: €77.8 million).

Although the capital expenditure of the K+S GROUP should be significantly higher in 2020 than in the previous year (€493.3 million), in particular as a result of the continuing expansion of our tailings pile capacities in Germany, we expect the adjusted free cash flow to break more or less even at the midpoint of the EBITDA range (2019: €+139.7 million) because of further planned measures to improve working capital. The return on capital employed (ROCE) is expected to be down significantly (2019: 2.3%).

Should the level of net financial liabilities be unchanged compared to year-end 2019 (€3,116.6 million), the ratio of net financial liabilities in relation to EBITDA at the end of 2020 would increase moderately to tangibly (2019: 4.9x) depending on the described EBITDA range. The level of net financial liabilities at the end of the year depends on when our package of measures to reduce debt will become effective.

'Corporate strategy,' page 49

Proposed dividend for the 2019 financial year

Our earnings-oriented dividend policy is normally reflected in a distribution ratio of 40% to 50% of adjusted Group earnings after tax. Given the lower adjusted Group earnings after taxes, the forecast for 2020, and the package of measures to reduce debt, the Board of Executive Directors and the Supervisory Board intend to propose a dividend of €0.15 per share (previous year: €0.25 per share) to the Annual General Meeting on May 12, 2020. This means that the distribution ratio of 37% (previous year: 56%) is slightly below the corridor specified in the dividend policy.

Expected development of non-financial performance indicators

Since sustainable corporate governance has an increasingly significant influence on a company's performance, the Supervisory Board resolved to tie a significant portion of the remuneration of the Board of Executive Directors to sustainability targets.

'Remuneration report,' page 142
'Combined Non-Financial Statement,' page 83

LOST TIME INCIDENT RATE (LTI RATE)

The LTI rate measures working hours lost per one million hours worked. This rate has to be reduced by three points over a three-year period in order to achieve 100% target fulfillment. For 2020, we aim to reduce the LTI rate significantly compared with 2019 as a result of the actions we have taken (2019: 10.3).

REDUCTION IN SALINE PROCESS WATER

The Company has set itself the target to reduce saline process water from potash production in Germany by 500,000 m³ by 2030 compared with 2017 levels. In order to achieve 100% target fulfillment, the volume of process water must be reduced by 115,385 m³ over a three-year period. For 2020, we anticipate a significant reduction as against 2019 (3.5 million m³), which will put us well on the way toward meeting the target.

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 (the Code).

The first target is to have a commitment rate to the Code for more than 90% of our purchasing volume by 2025. In order to achieve 100% target fulfillment for the spend coverage, the commitment rate must be raised every year along a flattening curve (see diagram in the remuneration report) over a three-year period. We expect that the commitment rate to the code for our purchasing volume aimed for in 2020 according to the diagram (62.0%) will be achievable (commitment rate in 2019: 44.9%).

Another target, which carries equal weight, is that all of our "critical" suppliers, in other words suppliers with a high sustainability risk, commit to the Code by 2025. In order to achieve 100% target fulfillment for the commitment rate among critical suppliers, the commitment rate must be raised by 33.3 percentage points per year over a three-year period. According to this, we would aim for an increase in the commitment rate of critical suppliers of 11.1 percentage points. For 2020, we should be able to outperform this increase (commitment rate in 2019: 23.2%).

General statement on the expected development of the K+S GROUP

Despite progress made with the implementation of the SHAPING 2030 corporate strategy, the improvement in operating performance, the increase in production capacity and quality in Bethune, and improved wastewater management, the persistently difficult market environment for potassium chloride, and the very weak start for the de-icing salt business for weather-related reasons are dampening the outlook for 2020. Against this backdrop, the Board of Executive Directors of K+S AKTIENGESELLSCHAFT anticipates EBITDA to be in a range between €500 million and €620 million for the K+S GROUP in 2020. In addition, the K+S GROUP's adjusted free cash flow is expected to break more or less even at the midpoint of the EBITDA corridor.

K+S AKTIENGESELLSCHAFT (EXPLANATIONS BASED ON THE GERMAN COMMERCIAL CODE, HGB)

The management report of K+S AKTIENGESELLSCHAFT and the Group management report for the 2019 financial year have been combined. 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 99.

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 113.

Remuneration Report

The information to be disclosed in accordance with Section 289a (2) of the German Commercial Code (HGB) is provided on page 142.

Business operations, corporate strategy, corporate management and monitoring, overview of the business performance

Information on business operations, corporate strategy, corporate management and monitoring as well as an overview of business performance can be found on pages 37–59 and 109–118.

Results of operations

At €137.3 million, K+S AKTIENGESELLSCHAFT's revenues were marginally lower than in the previous year (2018: €137.8 million). Revenues from animal hygiene products, IT, and other revenues were close to the prior-year level.

In particular, higher costs for IT reorganization in the previous year led to a decline in the cost of sales for services rendered to generate revenues from €152.4 million in 2018 to €147.1 million.

Other operating income was increased significantly, by €341.9 million to €442.4 million (2018: €100.5 million). The main reasons for this were the realization of hidden reserves as a result of the reorganization of corporate structures and higher income from costs charged to Group companies. This was countered by lower income from currency hedging.

INCOME STATEMENT OF K+S AKTIENGESELLSCHAFT [1] **B.66**

in € million	2018	2019
Revenues	**137.8**	**137.3**
Cost of sales	152.4	147.1
Gross profit	**−14.6**	**−9.8**
Sales and distribution, general and administrative expenses and research costs	37.3	36.7
Other operating income and expenses	−18.5	348.1
Income from equity investments, net	324.0	147.2
Net interest	−168.7	−135.5
Write-downs of long-term financial assets and securities classified as current assets	0.1	0.0
Expenses from transfer of losses	–	–
Earnings before tax	**84.8**	**313.3**
Income tax expense	10.3	25.2
Earnings for the period	**74.5**	**288.2**
Profit transfer from income after tax	**–**	**26.6**
Allocation from earnings for the period to other revenue reserves	**0.0**	**144.1**
Accumulated profit	**74.5**	**170.7**

[1] A detailed income statement is included in the 2019 Annual Financial Statements of K+S Aktiengesellschaft.

BALANCE SHEET OF K+S AKTIENGESELLSCHAFT – ASSETS B.67

in € million	December 31, 2018	December 31, 2019
Intangible assets	9.9	11.4
Tangible fixed assets	61.4	57.0
Financial investments	6,663.0	6,206.6
Fixed assets	**6,734.3**	**6,274.9**
Inventories	4.8	7.7
Receivables and other assets	754.1	511.8
Securities	6.1	6.3
Cash on hand and bank balances	78.9	156.7
Current assets	**843.9**	**682.5**
Prepaid expenses	**10.3**	**5.7**
Excess of plan assets over post-employment benefit liability	**–**	**1.3**
TOTAL ASSETS	**7,588.6**	**6,964.5**

BALANCE SHEET OF K+S AKTIENGESELLSCHAFT – EQUITY AND LIABILITIES B.68

in € million	December 31, 2018	December 31, 2019
Issued capital	191.4	191.4
Share premium	701.6	701.6
Retained earnings	1,006.4	1,150.5
Accumulated profit	74.5	170.7
Equity	**1,973.9**	**2,214.2**
Provisions for pensions and similar obligations	24.5	29.6
Tax provisions	9.7	5.2
Other provisions	224.6	227.5
Provisions	**258.8**	**262.3**
Liabilities	**5,351.4**	**4,484.1**
Deferred income	**4.5**	**3.8**
TOTAL EQUITY AND LIABILITIES	**7,588.6**	**6,964.5**

Other operating expenses decreased from €119.0 million to €94.3 million. This was due mainly to lower currency translation losses. This effect was countered by higher consulting costs.

Income from investments decreased from €324.0 million in 2018 to €147.2 million in 2019. In 2018, income from investments contained income of €44.1 million from K+S SALZ GMBH and €40.4 million from K+S FINANCE BELGIUM BVBA. The profit transfer from K+S MINERALS AND AGRICULTURE GMBH dropped from €217.5 million in 2018 to €146.3 million in 2019. Further income from equity investments comprised a profit transfer of €0.8 million (2018. €1.0 million) from K+S VERSICHERUNGSVERMITTLUNG GMBH.

Other interest and similar income dropped from €10.5 million to €8.4 million, principally due to lower interest income on tax refunds.

Interest and similar expenses dropped from €179.2 million to €143.8 million, mainly as a result of the positive effects from the measurement of plan assets, lower expenses for interest expense added to provisions, a reduction in interest payable to Group companies, and lower interest expenses resulting from the bonds issued.

Income after taxes increased by €213.7 million to €288.2 million (2018: €74.5 million). **B.66**

Financial position

Fixed assets declined by €459.4 million to €6,274.9 million (2018: €6,734.3 million). This was principally due to the capital decrease at affiliated companies in connection with the reorganization of corporate structures. Fixed assets therefore accounted for 90% of total assets (2018: 89%). Overall, total assets decreased by €624.1 million to €6,964.5 million in 2019. Current assets fell by €161.4 million to €682.5 million (2018: €843.9 million). As a result of lower receivables from profit transfers and cash pool receivables, receivables from affiliated companies decreased from €646.5 million in 2018 to €419.6 million in 2019. **B.67**

Equity was above the prior-year level at €2,214.2 million (2018: €1,973.9 million). The equity ratio was unchanged at 32% as of the reporting date (2018: 26%). Liabilities to affiliated companies of €1,067.8 million (2018: €2,083.9 million) primarily consisted of cash pooling liabilities.

In 2019, total liabilities declined by €867.3 million to €4,484.1 million (2018: €5,351.4 million), principally as a consequence of the repayment of short-term loans to subsidiaries. As of the reporting date, the Company reported provisions of €262.3 million with a predominantly long-term character. The Company's financing came to a considerable extent from funds available in the long term. **B.68**

Employees

K+S AKTIENGESELLSCHAFT had an annual average of 1,033 employees (2018: 1,029 employees). As in the previous year, 35% were women and 65% were men (2018: 35% women, 65% men). The headcount includes 25 trainees (2018: 22 trainees). The number of occupational accidents was 31 (2018: 30). That gives an accident rate of 19.3 per million working hours (2018: 18.2) and 1.9 accidents involving downtime per million working hours (2018: 3.7). In 2019, the proportion of severely disabled employees was also at the previous year's level at 4.6% of (2018: 4.6%).

Dividend

K+S AKTIENGESELLSCHAFT reports accumulated profit of €170.7 million for the 2019 financial year (2018: €74.5 million).

The Board of Executive Directors and the Supervisory Board intend to propose to the Annual General Meeting on May 12, 2020 that the accumulated profit of K+S AKTIENGESELLSCHAFT for the 2019 financial year should be used as shown in **B.69**

APPROPRIATION OF PROFITS **B.69**

in € million	2018	2019
Dividend per share (€)	0.25	0.15
Total dividend payment based on 191,400,000 no-par value shares eligible for dividend	47.9	28.7
Transfer to retained earnings	–	142.0
Allocation to other reserves	26.6	–
Accumulated profit	**74.5**	**170.7**

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 78.

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 equity investments and subsidiaries according to its respective interest. More information can be found in the 'Risk and opportunity report' on page 119.

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 112.

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 134.

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, March 4, 2020

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 – materialize, 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 nature 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 performance-related portion 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. Effective **January 1, 2020**, contracts with members of the Board of Executive Directors contain a **claw-back clause.**

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.

The performance-related remuneration components have 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. The first component (LTI I) is linked to value added and will be linked to sustainability targets starting on January 1, 2020. The second component (LTI II) is linked to share price performance. Both components are measured over a three-year period.

ILLUSTRATIVE CALCULATION OF THE ANNUAL REMUNERATION OF AN ORDINARY MEMBER OF THE BOARD OF EXECUTIVE DIRECTORS **B.70**

in € thousand	Relative structure annual remuneration	Relative structure total remuneration	Target achievement 100%	Target achievement 0%	Maximum target achievement
Fixed remuneration	60%	37%	550.0	550.0	550.0
Bonus[10]	40%	25%	380.0[1]	0.0[2]	912.0[3]
Annual remuneration	**100%**		**930.0**	**550.0**	**1,462.0**
LTI I[10]		38%	285.0[4]	0.0[5]	570.0[6]
LTI II[10]			285.0[7]	0.0[8]	570.0[9]
Total remuneration		**100%**	**1,500.0**	**550.0**	**2,602.0**

[1] Actual EBITDA ≙ planned EBITDA; performance factor ≙ 1.0.
[2] Actual EBITDA ≙ 0%.
[3] Actual EBITDA ≙ 200%; performance factor ≙ 1.2.
[4] Actual Value Added (average performance period) ≙ plan Value Added (average reference value).
[5] Actual Value Added (average performance period) ≙ 0%.
[6] Actual Value Added (average performance period) ≙ 200%.
[7] K+S share price (average for performance period) ≙ performance of MDAX (average benchmark).
[8] K+S share price (average for performance period) ≙ 0%.
[9] K+S share price (average for performance period) ≙ 200%.
[10] If applicable, pro rata up to end of appointment.

The **STI** is measured against reaching the **EBITDA**[1] 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 straight line by the same percentage. Maximum target achievement is 200% and minimum achievement is 0%. The Supervisory Board has no discretion to influence target achievement.

After the end of the respective financial year, the Supervisory Board specifies a **performance factor** for the entire Board 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 the achievement of annual targets defined between the Supervisory Board and the entire Board of Executive Directors. For the years from 2018 through 2020, the specific target is to reach the milestones of the SHAPING 2030 strategy, e.g., to reduce indebtedness (Net financial liabilities/EBITDA) and to identify potential candidates.

Example calculation for applying the performance factor:

STI achievement level, e.g., 100% x performance factor, e.g., 1.1 = 110% or 0.9 = 90%

LTI I PROGRAM IN FORCE UNTIL DECEMBER 31, 2019

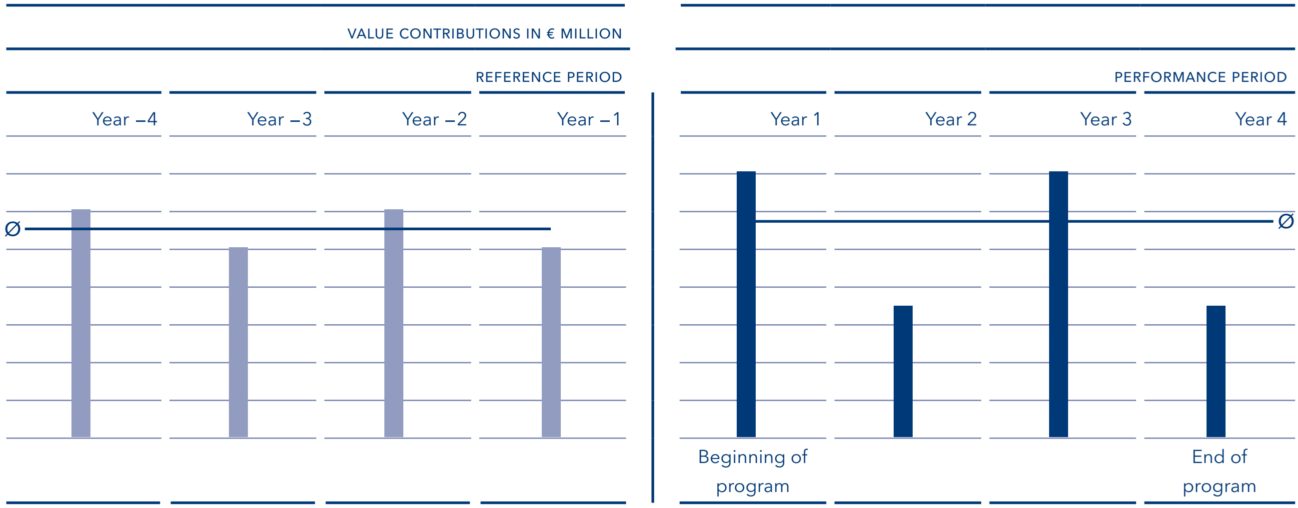
The Executive Directors have claims under ongoing LTI programs from 2018 and 2019, which are outlined below:

To determine **LTI I** for 2018 and 2019, before the performance period began, the Supervisory Board used the mid-term planning to define the **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 contribution is compared to planned value contribution. If actual and planned value contribution are the same, target achievement is 100%. If the actual value contribution exceeds or falls short of the planned value contribution, the percentage target achievement increases or decreases in a straight line by the same percentage. The maximum target achievement is 200% and the minimum achievement is 0%.

LTI II PROGRAM

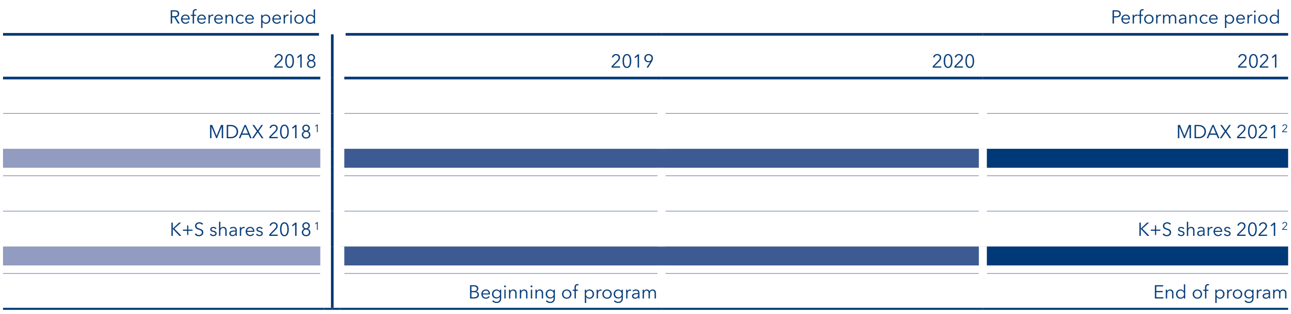
LTI II is based on the **K+S share price performance** (incl. dividends paid) compared to the performance of the **MDAX (performance index)**. If the K+S share price performance is equal to the performance of the MDAX during the reference period, target achievement is 100%. If the price performance of the K+S share exceeds

LTI I–PROGRAM (2018–2019) **B.71**



[1] EBITDA is defined as earnings before interest, taxes, depreciation and amortization, adjusted by the depreciation and amortization amount not recognized in profit and loss in the context of own work capitalized, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognized in prior periods. A reconciliation can be found on page 61.

LTI II—PROGRAM B.72



[1] Average for the stock market year; reference base.
[2] Average for the stock market year 2021; reference base for comparison of performance with 2018.

or falls short of the performance of the MDAX, the percentage rate of target achievement increases or decreases on a straight-line basis 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."

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 I PROGRAM FROM JANUARY 1, 2020 ONWARD

Sustainable corporate governance has an increasingly significant influence on a company's performance. For this reason, the Supervisory resolved to tie a significant portion of the remuneration of the Board of Executive Directors to sustainability targets. New rules have been set in this context for **LTI I**, which accounts for 50% of the long-term incentive.

As described on page 52 of the Annual Report, the Company has set itself sustainability targets in three categories: "people," "environment," and "business ethics." One target has been chosen from each category for LTI I, which continues to have a three-year period. Plan values have been set as a benchmark for the target achievement.

For the "people" category, the **"health and safety"** target has been chosen, with a reduction in the lost time incident rate. The "environment" category target is **"water,"** with an additional reduction in saline process water from potash production in Germany, while **"sustainable supply chains"** has been chosen for the "business ethics" category, with the sub-targets:

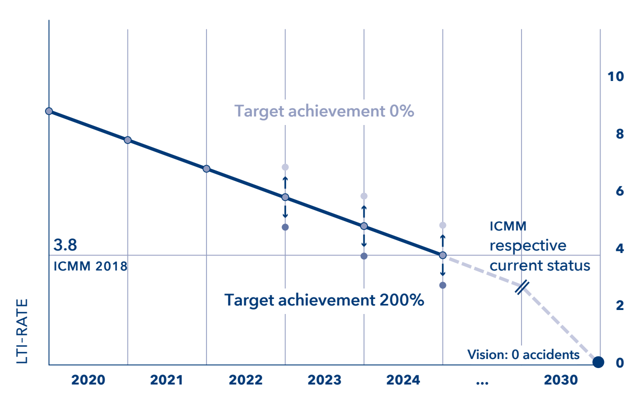
1. of maximizing the number of "critical suppliers aligned with the K+S GROUP Supplier Code of Conduct (SCoC)" and
2. of increasing the "spend coverage of the K+S GROUP SCoC."

The three primary targets are ranked equally alongside each other.

I. People: health and safety – lost time incident rate (LTI rate)

The LTI rate measures working hours lost per one million hours worked. This rate is to be reduced by three points over a three-year period in order to reach 100% target achievement. If actual performance is below or above target, the percentage is reduced to 0% or increased to 200% on a straight-line basis.

PEOPLE – LOST TIME INCIDENT RATE (UNTIL 2024) B.73



Schematic illustration

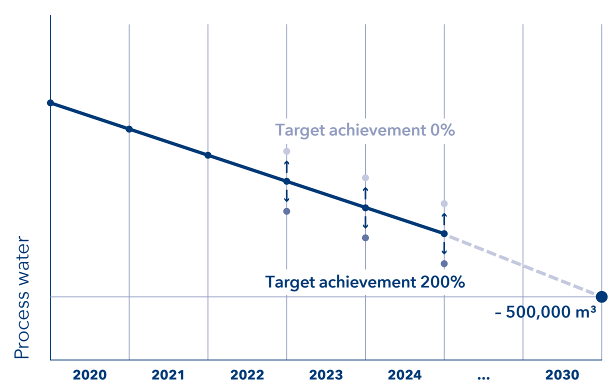
Example calculation LTI I program (2020–2022):

LTI rate 5.8 = 100% target achievement
LTI rate 7.3 = 0% target achievement
LTI rate 4.3 = 200% target achievement

II. Environment: water – reduction in saline process water

In this category, the Company has set itself the target to reduce saline process water from potash production in Germany by 500,000 m³ p.a. by 2030 compared with 2017 levels. In order to reach 100% target achievement, the volume of process water must be reduced over a three-year period – under the assumption of the production volume in 2017 – by 115,385 m³ (plan value). If actual performance is below or above target (comparison of plan and actual value), the percentage is reduced to 0% or increased to 200% on a straight-line basis.

ENVIRONMENT – PROCESS WATER (UNTIL 2024) **B.74**



Schematic illustration

Example calculation LTI I program (2020–2022)[1]:

Process water reduction –115.385 m³ = 100% target achievement
Process water reduction –57.692 m³ = 0% target achievement
Process water reduction –173.078 m³= 200% target achievement

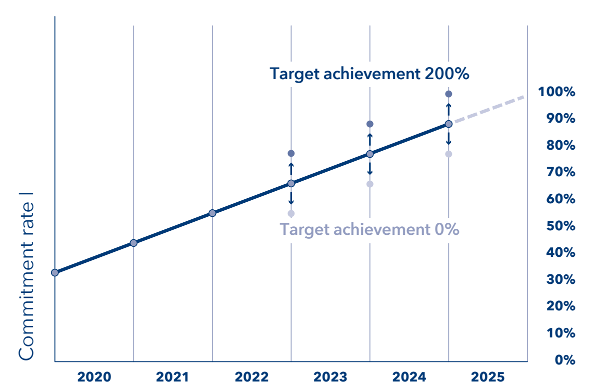
III. Business ethics: sustainable supply chains – Supplier Code of Conduct

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 (the Code). The target is to have a commitment rate to the Code for more than 90% of our purchasing volume by 2025 (commitment rate II). Another goal is that all of our "critical suppliers," in other words suppliers with a high sustainability risk, commit to the Code by 2025 (commitment rate I).

The two sub-targets in this category carry equal weight.

In order to reach 100% target achievement for the commitment rate among critical suppliers, the commitment rate must be raised by 33.3 percentage points over a three-year period (plan value). If actual performance is below or above target (comparison of plan and actual value), the percentage is reduced to 0% or increased to 200% on a straight-line basis.

BUSINESS ETHICS – SUSTAINABLE SUPPLY CHAINS (UNTIL 2024) CRITICAL SUPPLIERS **B.75**



Schematic illustration

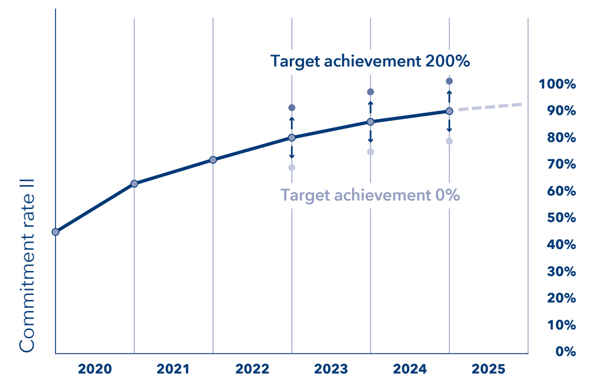
Example calculation LTI I program (2020–2022):

Commitment rate I 66.6% = 100% target achievement
Commitment rate I 50.0% = 0% target achievement
Commitment rate I 83.3% = 200% target achievement

[1] Assumption: production volume in 2017.

In order to reach 100% target achievement for the spend coverage, the commitment rate must be raised over a three-year period according to the following diagram (plan value). Since the expectation is that the commitment rate will increase at a faster pace at the beginning than at subsequent stages, the shape of the curve is digressive. If actual performance is below or above target (comparison of plan and actual value), the percentage is reduced to 0% or increased to 200%.

BUSINESS ETHICS – SUSTAINABLE SUPPLY CHAINS (UNTIL 2024) SPEND COVERAGE **B.76**



Schematic illustration

Example calculation LTI I program (2020–2022):

Commitment rate II 79.0% = 100% target achievement
Commitment rate II 62.0% = 0% target achievement
Commitment rate II 96.1% = 200% target achievement

ILLUSTRATIVE CALCULATION OF THE ANNUAL REMUNERATION OF AN ORDINARY MEMBER OF THE BOARD OF EXECUTIVE DIRECTORS FROM JANUARY 1, 2020 ONWARD **B.77**

in € thousand	Relative structure annual remuneration	Relative structure total remuneration	Target achievement 100 %	Target achievement 0 %	Maximum target achievement
Fixed remuneration	60%	37%	550.0	550.0	550.0
Bonus [10]	40%	25%	380.0[1]	0.0[2]	912.0[3]
Annual remuneration	**100%**		**930.0**	**550.0**	**1,462.0**
LTI I [10]			285.0[4]	0.0[5]	570.0[6]
– People			95.0	0.0	190.0
– Environment		38%	95.0	0.0	190.0
– Business ethics			47.5	0.0	95.0
			47.5	0.0	95.0
LTI II [10]			285.0[7]	0.0[8]	570.0[9]
Total remuneration		**100%**	**1,500.0**	**550.0**	**2,602.0**

[1] Actual EBITDA ≙ planned EBITDA; performance factor ≙ 1.0.
[2] Actual EBITDA ≙ 0%.
[3] Actual EBITDA ≙ 200%; performance factor ≙ 1.2.
[4] 100% target achievement sustainability KPIs.
[5] 0% target achievement sustainability KPIs.
[6] 200 % target achievement sustainability KPIs.
[7] K+S share price (average for performance period) ≙ performance of MDAX (average benchmark).
[8] K+S share price (average for performance period) ≙ 0%.
[9] K+S share price (average for performance period) ≙ 200%.
[10] If applicable, pro rata up to end of appointment.

OLD SYSTEM OF LTI—PROGRAM 2016 – 2017 **B.78**

in € million	2012	2013	2014	2015	2016	2017	2018	2019	2020	Result
				Average 234				(average: –476)		Difference = €–710 million
LTI 2016	384	222	102	226	–396	–437	–502	–568	–	Disbursement[1] = €0 thousand
					Average 39	Not yet complete (previous average: –502)				
LTI 2017	–	222	102	226	–396	–437	–502	–568	–	

Reference period
Performance period

[1] For an ordinary member of the Board of Executive Directors, payment is made in April of the year following the end of the program.

LTI PROGRAM IN FORCE UNTIL DECEMBER 31, 2017

The Executive Directors have claims under ongoing LTI programs from 2016, and 2017, which are outlined below:

The system is based on a multi-year assessment in accordance with the value contributions (LTI until 2017) achieved. The value contribution (LTI until 2017) is derived as follows:

Earnings before operating hedges

+ interest income for the financial year
– capital charge (before taxes) for the financial year
= value contribution (LTI until 2017)

The Company's success is thereby determined on the basis of two four-year periods. 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 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 program. 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 the case of underperformance, the payment decreases on a straight-line basis to 0% in line with the percentage deviation. In the case of outperformance, the payment increases accordingly up to an upper limit of 200%. 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 program. In the event of termination of a service 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 **B.78**, the value contributions generated in the four-year performance period were below those generated in the reference period.

REMUNERATION AMOUNT

Details of the individual remuneration of the Board of Executive Directors in the 2019 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.

REMUNERATION OF THE BOARD OF EXECUTIVE DIRECTORS (BENEFITS GRANTED)

	Dr. Burkhard Lohr Chairman Board member since June 2012				Thorsten Boeckers CFO Board member since May 2017			
in € thousand	2018	2019	2019 (min.)	2019 (max.)	2018	2019	2019 (min.)	2019 (max.)
Fixed remuneration	727.5	825.0	825.0	825.0	485.0	550.0	550.0	550.0
Fringe benefit[1]	28.5	42.8	42.8	42.8	20.1	20.8	20.8	20.8
Total	**756.0**	**867.8**	**867.8**	**867.8**	**505.1**	**570.8**	**570.8**	**570.8**
One-year variable remuneration[3]	570.0	570.0	0.0	1,368.0	380.0	380.0	0.0	912.0
Multi-year variable remuneration[3]	950.1	2,565.0	0.0	5,130.0	613.4	1,710.0	0.0	3,420.0
– LTI I (from 2018)	344.4	427.5	0.0	855.0	224.6	285.0	0.0	570.0
– LTI II (2018–2020)	344.4	83.1	0.0	166.2	224.6	60.4	0.0	120.8
– LTI II (2019–2021)	201.9	225.6	0.0	451.2	129.6	155.4	0.0	310.8
– LTI II (2020–2022)	59.4	368.1	0.0	736.2	34.6	250.4	0.0	500.8
– LTI II (2021–2023)	–	427.5	0.0	855.0	–	285.0	0.0	570.0
– LTI II (2022–2024)	–	427.5	0.0	855.0	–	285.0	0.0	570.0
– LTI II (2023–2025)	–	344.4	0.0	688.8	–	224.6	0.0	449.2
– LTI II (2024–2026)	–	201.9	0.0	403.8	–	129.6	0.0	259.2
– LTI II (2025–2027)	–	59.4	0.0	118.8	–	34.6	0.0	69.2
Total	**2,276.1**	**4,002.8**	**867.8**	**7,365.8**	**1,498.5**	**2,660.8**	**570.8**	**4,902.8**
– Service costs	743.4	957.1	957.1	957.1	719.8	936.6	936.6	936.6
Total remuneration	**3,019.5**	**4,959.9**	**1,824.9**	**8,322.9**	**2,218.3**	**3,597.4**	**1,507.4**	**5,839.4**

REMUNERATION OF THE BOARD OF EXECUTIVE DIRECTORS (BENEFITS RECEIVED)

	Dr. Burkhard Lohr Chairman Board member since June 2012		Thorsten Boeckers CFO Board member since May 2017	
in € thousand	2019	2018	2019[2]	2018[2]
Fixed remuneration	825.0	727.5	550.0	485.0
Fringe benefits	42.8	28.5	20.8	20.1
Total	**867.8**	**756.0**	**570.8**	**505.1**
One-year variable remuneration	383.7	469.6	255.9	313.1
Multi-year variable remuneration	0.0	0.0	0.0	0.0
– LTI until 2017	0.0[3]	0.0[4]	0.0[3]	0.0[4]
– LTI I from 2018	–	–	–	–
Other	–	–	–	–
Total	**1,251.5**	**1,225.6**	**826.7**	**818.2**
– Pension cost	957.1	743.4	936.6	719.8
Total remuneration	**2,208.6**	**1,969.0**	**1,763.3**	**1,538.0**

B.79

	Mark Roberts[2] Boar member since October 2012			
	2018	2019	2019 (min.)	2019 (max.)
	485.0	550.0	550.0	550.0
	53.6	60.0	60.0	60.0
	538.6	**610.0**	**610.0**	**610.0**
	380.0	380.0	0.0	912.0
	760.2	1,140.0	0.0	2,280.0
	261.3	285.0	0.0	570.0
	261.3	23.7	0.0	47.4
	166.3	118.7	0.0	237.4
	71.3	213.7	0.0	427.4
	–	261.3	0.0	522.6
	–	166.3	0.0	332.6
	–	71.3	0.0	142.6
	–	0.0[4]	0.0[4]	0.0[4]
	–	0.0[4]	0.0[4]	0.0[4]
	1,678.8	**2,130.0**	**610.0**	**3,802.0**
	538.9	717.1	717.1	717.1
	2,217.7	**2,847.1**	**1,327.1**	**4,519.1**

[1] Fringe benefits are capped at €75,000.
[2] Before compensation for exchange rates: a US dollar rate is stipulated for the translation of remuneration. Since payments are initially converted using current rates, compensation may be required after the end of the year.
[3] If applicable, pro rata up to end of appointment.
[4] Appointment ends September 30, 2023.

B.80

	Mark Roberts[1] Boar member since October 2012	
	2019	2018
	649.4	536.8
	60.0	53.6
	709.4	**590.4**
	302.3	346.5
	0.0	0.0
	0.0[3]	0.0[4]
	–	–
	–	–
	1,011.7	**936.9**
	717.1	538.9
	1,728.8	**1,475.8**

[1] Including exchange rate compensation.
[2] Assumption of the remaining periods of the LTI entitlements that Mr. Boeckers received as the Head of Investor Relations of K+S Aktiengesellschaft.
[3] 2016–2019 term.
[4] 2015–2018 term.

DISCLOSURES IN ACCORDANCE WITH SECTION 314 (1) NO. 6A) OF THE HGB B.81

	Fixed remuneration[1]	STI	LTI until 2017	LTI I from 2018	LTI II from 2018	Total
Dr. Burkhard Lohr	867.8	383.7	0.0	–	2,137.5	**3,389.0**
Thorsten Boeckers	570.8	255.9	0.0	–	1,425.0	**2,251.7**
Mark Roberts	709.4[2]	302.3[2]	0.0	–	855.0	**1,866.7**

[1] Including fringe benefits.
[2] Including exchange rate compensation.

DISCLOSURES IN ACCORDANCE WITH IFRS 2 B.82

	Expenses for LTI II	Provisions for LTI II
Dr. Burkhard Lohr	337.2	575.2
Thorsten Boeckers	224.0	380.1
Mark Roberts	120.0	293.0
Total	**681.2**	**1,248.3**

In the course of the reduction of the Executive Board from five to three members and the associated greater responsibility of the individual Executive Board members, the Supervisory Board increased the fixed remuneration of the Executive Board to €550,000 with effect from January 1, 2019. The Chairman of the Board of Executive Directors receives 1.5 times this amount.

Mark Roberts receives his remuneration in euros. In order to limit exchange rate risks, a clause has been agreed according to which compensation is paid for exchange rate movements 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 6.0 times (2018: 5.2 times) that of senior executives worldwide and 27.0 times (2018: 23.6 times) that of the total workforce.

The total remuneration of the Board of Executive Directors related to three members, all of whom were in office for the whole year. In the previous year, the Board had four 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 2019 modules for the members of the Board of Executive Directors are between 10.5% and 17.5%, depending on their age. These factors decline with increasing age. The individual pension modules earned during the respective financial years are totaled and, when the insured event occurs, the respective member of the Board of Executive Directors or, if applicable, his or her surviving dependents, receive the benefit to which they are entitled. The upper limit for the Chairman of the Board of Executive Directors is €340,000 following a regular review in 2019, and for an ordinary member of the Board of Executive Directors it is €255,000. These amounts are reviewed every three years and adjusted if necessary – the next review is scheduled for 2022.

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.

PENSIONS OF THE MEMBERS OF THE BOARD OF EXECUTIVE DIRECTORS[1] **B.83**

in € thousand		Age	Present value as of Jan. 1	Pension expense[2]	Present value as of Dec. 31
Dr. Burkhard Lohr	2019	56	4,515.9	1,047.4	6,799.0
	2018		3,545.3	814.3	4,515.9
Thorsten Boeckers[3] (member since May 12, 2017)	2019	44	1,621.2	969.0	3,494.3
	2018		796.0	735.8	1,621.2
Dr. Thomas Nöcker (member since Aug. 31, 2018)	2019	61	–	–	–
	2018		6,602.0	415.3	7,326.0
Mark Roberts	2019	56	3,907.8	795.2	5,940.1
	2018		3,068.6	600.3	3,907.8
Total	**2019**		**10,044.9**	**2,811.6**	**16,233.4**
	2018		**14,011.9**	**2,565.7**	**17,370.9**

[1] Information provided in accordance with IFRS.
[2] Including interest expense.
[3] Includes pension entitlements from his time as the Head of Investor Relations of K+S Aktiengesellschaft.

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 notionally 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 2019, the following amounts were allocated to pension provisions for members of the Board of Executive Directors: **B.83**

The pension module earned by each of the members of the Board of Executive Directors in 2019 gives rise to pension expenses, which are calculated in accordance with actuarial principles. The increase in present values compared to the prior-year 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 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.

CLAW-BACK CLAUSE FROM JANUARY 1, 2020 ONWARD

The service contracts of all members of the Board of Executive Directors contain claw-back clauses. If there is a serious violation of legal requirements or of obligations arising from the Company's Articles of Association or from the Board member's contract of service, the Company has the right to demand back or retain any LTI tranches (LTI I and LTI II) that are current at the time of the violation.

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 service 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 €2.4 million in the year under review (2018: €2.1 million).

REMUNERATION OF THE SUPERVISORY BOARD

REMUNERATION STRUCTURE

The remuneration of the Supervisory Board is governed 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 Deputy Chairman 1.5 times this amount.

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 Supervisory Board will propose to the ordinary Annual General Meeting in May 2020 remuneration for the Strategy Committee, which has to date worked without remuneration. This will be done to fairly compensate for the considerable effort, as provided for in the German Corporate Governance Code, as amended. Each committee chair receives twice this amount and a deputy chair 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 2019 financial year are shown in the table below. **B.84**

Additionally, in 2019, members of the Supervisory Board were reimbursed expenses totaling €48.9 thousand (2018: €79.7 thousand). In 2019, 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 member of the family of a Supervisory Board member is employed by the K+S GROUP. Remuneration is paid in accordance with the internal remuneration guidelines of the K+S GROUP and corresponds to the usual remuneration of individuals in comparable positions.

AGE LIMIT AND MAXIMUM TERMS OF OFFICE

Candidates for the Supervisory Board may not be older than 70 when elected. In addition, members may serve on the Supervisory Board for a maximum of two terms of office – three in exceptional cases. This does not affect the statutory co-determination rules.

ABSENCE FROM MEETINGS

The following table **B.85** provides an individualized overview of members' attendance of meetings of the Supervisory Board and its committees in 2019.

SUPERVISORY BOARD REMUNERATION[1] B.84

in €		Fixed remu-neration	Audit Committee	Personnel Committee	Nomi-nation Committee	Strategy Committee[3]	Attendance fees[4]	Total
Dr. Andreas Kreimeyer	2019	200,000	15,000	15,000	15,000	0	16,500	261,500
	2018	200,000	10,000	15,000	15,000	0	8,250	248,250
Ralf Becker (Deputy Chairman since May 15, 2018)	2019	150,000	15,000	7,500	–	0	15,000	187,500
	2018	133,333	15,000	5,000	–	0	6,750	160,083
Petra Adolph (since May 15, 2018)	2019	100,000	15,000	–	–	–	8,250	123,250
	2018	66,667	10,000	–	–	–	1,500	78,167
André Bahn (since May 15, 2018)	2019	100,000	–	–	–	0	3,750	103,750
	2018	66,667	–	–	–	–	2,250	68,917
Jella S. Benner-Heinacher	2019	100,000	15,000	–	7,500	–	11,250	133,750
	2018	100,000	10,000	3,125	7,500	–	8,250	128,875
Peter Bleckmann (since May 15, 2018)	2019	100,000	–	–	–	–	3,750	103,750
	2018	66,667	–	–	–	–	2,250	68,917
George Cardona	2019	100,000	–	–	7,500	–	6,000	113,500
	2018	100,000	–	–	7,500	–	5,250	112,750
Dr. Elke Eller (since May 15, 2018)	2019	100,000	–	7,500	–	–	9,000	116,500
	2018	66,667	–	5,000	–	–	1,500	73,167
Gerd Grimmig (since May 15, 2018)	2019	100,000	–	–	–	–	3,750	103,750
	2018	66,667	–	–	–	–	2,250	68,917
Axel Hartmann	2019	100,000	15,000	–	–	–	7,500	122,500
	2018	100,000	15,000	–	–	–	6,000	121,000
Michael Knackmuß	2019	100,000	–	7,500	–	–	8,250	115,750
	2018	100,000	–	5,000	–	–	4,500	109,500
Thomas Kölbl	2019	100,000	30,000	–	–	–	8,250	138,250
	2018	100,000	25,000	–	–	–	5,250	130,250
Gerd Kübler	2019	100,000	–	–	–	–	3,750	103,750
	2018	100,000	–	–	–	–	3,750	103,750
Nevin McDougall (since May 15, 2018)	2019	100,000	–	–	–	–	3,750	103,750
	2018	66,667	–	–	–	–	1,500	68,167
Anke Roehr	2019	100,000	–	–	–	–	3,000	103,000
	2018	100,000	–	–	–	–	3,750	103,750
Philip Freiherr von dem Bussche	2019	100,000	–	–	7,500	0	7,500	115,000
	2018	100,000	–	–	7,500	0	6,000	113,500
Total	**2019**	**1,750,000**	**105,000**	**37,500**	**37,500**	**0**	**119,250**	**2,049,250**
	2018[2]	**1,533,335**	**85,000**	**33,125**	**37,500**	**0**	**69,000**	**1,757,960**

[1] Figures exclude compensation for value added tax payable by Supervisory Board members for their work.
[2] Excludes members who stepped down in 2018.
[3] No remuneration at present; introduction of remuneration to be proposed to AGM in 2020.
[4] On February 28, 2019, a joint meeting of the Audit Committee and Strategy Committee was held, but only one attendance fee was paid.

ATTENDANCE OF MEETINGS BY MEMBERS OF THE SUPERVISORY BOARD OF K+S AKTIENGESELLSCHAFT IN THE 2019 FINANCIAL YEAR

B.85

Supervisory Board members	Meetings, incl. committee meetings	Total number of full Board meetings	Attendance of full Board meetings	Total number of committee meetings	Attendance of committee meetings	Attendance as a percentage of total
Dr. Andreas Kreimeyer	24	5	5	19	19	**100%**
Ralf Becker	21	5	5	16	16	**100%**
Petra Adolph	12	5	4	7	7	**92%**
André Bahn	5	5	5	–	–	**100%**
Jella S. Benner-Heinacher	15	5	5	10	10	**100%**
Peter Bleckmann	5	5	5	–	–	**100%**
George Cardona	8	5	5	3	3	**100%**
Dr. Elke Eller	12	5	5	7	7	**100%**
Gerd Grimmig	5	5	5	–	–	**100%**
Axel Hartmann	12	5	4	7	6	**83%**
Michael Knackmuß	12	5	5	7	6	**92%**
Thomas Kölbl	12	5	4	7	7	**92%**
Gerd Kübler	5	5	5	–	–	**100%**
Nevin McDougall	5	5	5	–	–	**100%**
Anke Roehr	5	5	4	–	–	**80%**
Philip Freiherr von dem Bussche	10	5	5	5	5	**100%**
Total	**168**	**80**	**95%**	**88**	**98%**	**96%**

CONSOLIDATED FINANCIAL STATEMENTS

C

INCOME STATEMENT[1] C.1

in € million	Note	2018 (adjusted)	2019
Revenues	**(1)**	**4,039.1**	**4,070.7**
Cost of goods sold[2]	(2)	3,410.4	3,372.6
Gross profit		**628.7**	**698.1**
Selling, general and administrative expenses[2]	(2)	349.7	362.8
Other operating income[2]	(3)	118.0	133.3
Other operating expenses[2]	(4)	186.4	230.6
Income from equity investments, net	(5)	4.2	3.2
Gains/(losses) on operating anticipatory hedges	(6)	–49.5	–16.9
Earnings after operating hedges[3]		**165.3**	**224.3**
Interest income	(7)	11.6	9.2
Interest expense	(7)	120.7	144.2
Other financial result	(8)	–3.1	37.7
Financial result		**–112.2**	**–97.3**
Earnings before tax		**53.1**	**127.0**
Income tax expense	(9)	10.9	38.1
— of which deferred taxes		–17.9	–29.4
Earnings for the period		**42.2**	**88.9**
Non-controlling interests		0.1	–
Earnings after tax and non-controlling interests		42.1	88.9
Earnings per share in € (basic ≙ diluted)	(11)	**0.22**	**0.46**

[1] Rounding differences may arise in percentages and numbers.
[2] Prior-year figures were adjusted as shown in the section on "Changes to the structure of the income statement."
[3] Key indicators not defined in IFRS.

STATEMENT OF COMPREHENSIVE INCOME[1] C.2

in € million	Note	2018	2019
Earnings for the period		**42.2**	**88.9**
Exchange differences on translation of foreign operations		–49.0	317.4
Items of other comprehensive income that may be reclassified to profit or loss in subsequent periods		**–49.0**	**317.4**
Remeasurement gains/(losses) on net liabilities/assets under defined benefit plans		-5.2	–17.1
Gains/(losses) on equity instruments measured at fair value		10.7	9.7
Items of other comprehensive income not to be reclassified to profit or loss		**5.5**	**–7.4**
Other comprehensive income (after tax)	**(19)**	**–43.5**	**310.0**
Total comprehensive income for the period		**–1.3**	**398.9**
Non-controlling interests		0.1	–
Total comprehensive income for the period, net of tax and non-controlling interests		**–1.4**	**398.9**

[1] Rounding differences may arise in percentages and numbers.

BALANCE SHEET — ASSETS[1] C.3

in € million	Note	Dec. 31, 2018	Dec. 31, 2019
Intangible assets	(12)	982.3	998.5
— of which goodwill from acquisitions of companies	(12)	693.2	712.4
Property, plant and equipment		6,687.9	7,210.0
Investment properties	(13)	6.4	6.3
Financial assets	(14)	89.1	106.2
Other financial assets	(17, 18)	36.2	6.0
Other non-financial assets		21.9	30.2
Securities and other financial assets		7.0	7.0
Deferred taxes	(15)	92.6	95.5
Income tax refund claims		28.0	–
Non-current assets		**7,951.2**	**8,459.6**
Inventories	(16)	691.5	789.3
Trade receivables	(17)	836.7	724.7
Other financial assets	(17, 18)	86.2	141.6
Other non-financial assets		172.5	116.6
Income tax refund claims		49.3	27.4
Securities and other financial assets		11.2	11.4
Cash and cash equivalents	(29)	167.6	321.8
Current assets		**2,015.0**	**2,132.6**
TOTAL ASSETS		**9,966.2**	**10,592.2**

[1] Rounding differences may arise in percentages and numbers.

BALANCE SHEET — EQUITY AND LIABILITIES[1] C.4

in € million	Note	Dec. 31, 2018	Dec. 31, 2019
Issued capital	(19)	191.4	191.4
Share premium	(19)	645.7	645.7
Other reserves and net retained earnings	(19)	3,305.4	3,656.4
Total equity attributable to shareholders of K+S Aktiengesellschaft		4,142.5	4,493.5
Non-controlling interests		1.6	1.6
Equity		**4,144.1**	**4,495.1**
Financial liabilities	(24)	2,741.4	2,873.0
Other financial liabilities	(18, 24)	154.9	296.1
Other non-financial liabilities		13.2	17.5
Income tax liabilities		46.6	22.8
Provisions for pensions and similar obligations	(20)	187.0	232.2
Provisions for mining obligations	(21)	1,015.1	910.6
Other provisions	(21, 22)	140.1	166.4
Deferred taxes	(15)	230.1	202.4
Non-current liabilities		**4,528.4**	**4,721.1**
Financial liabilities	(24)	541.9	525.9
Trade payables	(24)	239.7	241.3
Other financial liabilities	(18, 24)	112.3	175.8
Other non-financial liabilities		49.9	71.3
Income tax liabilities		35.3	32.7
Provisions	(21, 23)	314.6	329.0
Current liabilities		**1,293.7**	**1,376.0**
TOTAL EQUITY AND LIABILITIES		**9,966.2**	**10,592.2**

[1] Rounding differences may arise in percentages and numbers.

STATEMENT OF CASH FLOWS[1] **C.5**

in € million	Note	2018	2019
Earnings after operating hedges	(29)	165.3	224.3
Income (–)/expenses (+) arising from changes in the fair value of outstanding operating anticipatory hedges		25.7	6.1
Elimination of prior-period changes in the fair value of operating anticipatory hedges		36.2	–22.0
Depreciation, amortization, impairment losses (+)/reversals of impairment losses (–)		379.1	431.9
Increase (+)/decrease (–) in non-current provisions (excluding interest rate effects)		5.7	–14.1
Interest received and similar income		8.3	13.4
Realized gains (+)/losses (–) on financial assets/liabilities		27.9	35.3
Interest paid and similar expense (–)		–91.6	–113.6
Income tax paid (–)		–99.6	–45.9
Other non-cash expenses (+)/income (–)		–0.1	1.5
Gain (–)/loss (+) on sale of assets and securities		6.7	–19.9
Increase (–)/decrease (+) in inventories		6.8	–82.7
Increase (–)/decrease (+) in receivables and other operating assets		–134.7	205.3
Increase (+)/decrease (–) in current operating liabilities		–37.6	32.3
Increase (+)/decrease (–) in current provisions		32.1	14.8
Allocations to plan assets		–21.5	–26.9
Net cash flows from operating activities		**308.7**	**639.8**
Proceeds from sale of assets		6.4	11.8
Purchases of intangible assets		–10.0	–12.6
Purchases of property, plant and equipment		–504.7	–493.3
Purchases of financial assets		–6.7	–4.9
Cash and cash equivalents of companies deconsolidated in the year under review		–	–1.1
Proceeds from sale of securities and other financial assets		297.8	15.2
Purchases of securities and other financial assets		–295.5	–15.1
Net cash flows used in investing activities		**–512.7**	**–500.0**
Dividends paid		–67.0	–47.9
Repayment (–) of borrowings		–754.3	–1,416.2
Proceeds (+) from borrowings		1,008.6	1,475.0
Net cash flows/(used in) from financing activities		**187.3**	**11.0**
Cash change in cash and cash equivalents		**–16.7**	**150.8**
Exchange rate-related change in cash and cash equivalents		3.2	3.3
Net change in cash and cash equivalents		**–13.5**	**154.1**
Net cash and cash equivalents as of January 1		**175.7**	**162.2**
Net cash and cash equivalents as of December 31		**162.2**	**316.3**
– of which cash on hand and bank balances		167.6	321.8
– of which overdrafts		–	–0.7
– of which cash received from affiliated companies		–5.4	–4.8

[1] Rounding differences may arise in percentages and numbers.

STATEMENT OF CHANGES IN EQUITY[1] C.6

Note (19)

in € million	Issued capital	Share premium	Net retained profits/ revenue reserves	Currency translation differences	Remeasurement gains/ (losses) on defined benefit plans	Gains/(losses) on equity instruments measured at fair value	Total equity attributable to shareholders of K+S AG	Non-controlling interests	Equity
As of January 1, 2019	191.4	645.7	3,324.2	12.5	-93.6	62.3	4,142.5	1.6	4,144.1
Earnings for the period	–	–	88.9	–	–	–	88.9	–	88.9
Other comprehensive income (after tax)	–	–	–	317.4	–17.1	9.7	31.0	–	31.0
Total comprehensive income for the period	**–**	**–**	**88.9**	**317.4**	**–17.1**	**9.7**	**398.9**	**–**	**398.9**
Dividend for the previous year	–	–	–47.9	–	–	–	–47.9	–	–47.9
As of Dec. 31, 2019	**191.4**	**645.7**	**3,365.2**	**329.9**	**–110.7**	**72.0**	**4,493.5**	**1.6**	**4,495.1**
As of Jan. 1, 2018	191.4	645.7	3,349.0	61.5	–88.4	0.0	4,159.2	1.5	4,160.7
Adjustments resulting from the first-time application of IFRS 9	–	–	–	–	–	51.6	51.6	–	51.6
As of Jan. 1, 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
Total comprehensive income for the period	**–**	**–**	**42.1**	**–49.0**	**–5.2**	**10.7**	**–1.4**	**0.1**	**–1.3**
Dividend for the previous year	–	–	–67.0	–	–	–	–67.0	–	–67.0
Other changes in equity	–	–	0.1	–	–	–	0.1	–	0.1
As of Dec. 31, 2018	**191.4**	**645.7**	**3,324.2**	**12.5**	**–93.6**	**62.3**	**4,142.5**	**1.6**	**4,144.1**

[1] Rounding differences may arise in percentages and numbers.

SEGMENT REPORTING[1,2]

	Note	Total revenues		of which revenues with third parties (35)	
in € million		2018	2019	2018	2019
Operating unit Europe+		2,597.8	2.549,1	2,585.2	2,535.9
Operating unit Americas		1,455.1	1,532.2	1,451.0	1,532.2
Segment total		**4,052.9**	**4,081.3**	**4,036.2**	**4,068.1**
Reconciliation[3]	(34)	–13.8	–10.6	2.9	2.6
K+S total	**(30–36)**	**4,039.1**	**4,070.7**	**4,039.1**	**4,070.7**

[1] Rounding differences may arise in percentages and numbers.
[2] Since financial year 2019, the operating business has been managed by the Europe+ and Americas operating units, which therefore also represent the segments within the meaning of IFRS 8. Prior-year figures have been adjusted, see Note (30) Definition of segments.
[3] Figures for operating units are shown before inter-segment consolidation. Expenses and income that cannot be allocated to operating units are recorded separately and aggregated under "Reconciliation".
[4] EBITDA is defined as earnings before interest, taxes, depreciation and amortization, adjusted for depreciation and amortization of own work capitalized recognized directly in equity, gains/(losses) from fair value changes arising from operating anticipatory hedges still outstanding, and changes in the fair value of operating anticipatory hedges recognized in prior periods. A reconciliation can be found on page 184.

C.7

of which intersegment revenues		EBITDA[4]	
2018	2019	2018	2019
12.7	13.2	443.3	437.0
4.1	–	221.8	230.0
16.8	**13.2**	**665.1**	**667.0**
–16.8	–13.2	–58.8	–26.6
–	**–**	**606.3**	**640.4**

Statement of changes in non-current assets

STATEMENT OF CHANGES IN NON-CURRENT ASSETS 2019[1]

in € million	Note	Balance as of January 1, 2019	Initial application of IFRS 16	Balance as of January 1, 2019 (adjusted)	Change in scope of consolidation	Additions	Disposals	Reclassifications	Exchange differences	Balance as of December 31, 2019
		Gross carrying amounts								
Other acquired concessions, industrial property rights, similar rights and assets, and licenses in such rights and assets		85.1	–	85.1	–	4.8	8.4	1.6	1.3	84.3
Customer relations		238.8	–	238.8	–	–	–	–	6.5	245.3
Brands		123.8	–	123.8	–	–	–	–	2.8	126.6
Port concessions		35.7	–	35.7	–	–	–	–	0.7	36.4
Goodwill from acquisitions of companies		693.2	–	693.2	–	–	–	–	19.2	712.4
Internally generated intangible assets		31.1	–	31.1	–	0.2	–	1.4	–	32.6
Emission rights		15.2	–	15.2	–	4.6	0.1	–	–	19.6
Intangible assets in progress		7.9	–	7.9	–	3.0	0.5	−3.6	–	6.8
Intangible assets	**(12)**	**1,230.8**	**–**	**1,230.8**	**–**	**12.6**	**9.2**	**−0.7**	**30.5**	**1,264.0**
Land, land rights, and buildings, including buildings on third-party land		2,239.8	–	2,239.8	−42.5	151.1	222.6	28.7	72.1	2,226.6
Leases for land, land rights, and buildings, including buildings on third-party land		1.1	98.0	99.1	–	29.3	1.0	–	0.8	128.2
Raw material deposits		704.9	–	704.9	–	–	–	–	30.7	735.6
Technical equipment and machinery[2]		5,968.9	–	5,968.9	–	169.3	80.4	357.2	187.4	6,602.4
Leases for technical equipment and machinery		239.3	57.4	296.7	–	18.5	7.2	–	17.1	325.1
Ships		54.6	–	54.6	–	–	–	–	1.0	55.6
Leases for ships		1.8	38.9	40.7	–	–	1.2	–	2.8	42.4
Other equipment, operating and office equipment		407.0	–	407.0	−0.5	23.8	16.4	13.2	4.3	431.3
Leases for other equipment, operating and office equipment		–	12.0	12.0	–	7.0	0.3	0.1	0.1	18.8
Prepayments and assets under construction		553.4	–	553.4	–	293.4	3.1	−398.5	19.9	465.2
Property, plant and equipment		**10,170.9**	**206.3**	**10,377.2**	**−43.0**	**692.4**	**332.2**	**0.7**	**336.1**	**11,031.1**
– of which leases		242.2	206.3	448.5	–	54.8	9.7	0.1	20.8	514.5
Investment properties	**(13)**	**11.0**	**–**	**11.0**	**–**	**0.1**	**0.2**	**–**	**–**	**10.9**

[1] Rounding differences may arise in percentages and numbers.
[2] Of which property, plant and equipment not legally owned amounting to €42.7 million.

C.8

Depreciation, amortization and impairment losses									Net carrying amounts
Balance as of January 1, 2019	Change in scope of consolidation	Depreciation and amortization	Impairment losses	Reversals of impairment losses	Disposals	Reclassifications	Exchange differences	Balance as of December 31, 2019	Balance as of December 31, 2019
53.6	–	8.0	–	–	8.3	–	0.9	54.2	30.1
153.5	–	8.9	–	–	–	–	4.8	167.2	78.1
12.0	–	0.2	–	–	–	–	–	12.3	114.3
1.6	–	0.1	–	–	–	–	–	1.8	34.6
–	–	–	–	–	–	–	–	–	712.4
27.8	–	2.3	–	–	–	–	–	30.0	2.6
–	–	–	–	–	–	–	–	–	19.6
–	–	–	–	–	–	–	–	–	6.8
248.5	**–**	**19.5**	**–**	**–**	**8.3**	**–**	**5.8**	**265.5**	**998.5**
595.8	−18.7	61.2	1.1	–	5.2	–	5.7	639.9	1,586.7
1.0	–	17.3	–	–	1.0	–	–	17.3	110.9
54.3	–	10.4	–	–	–	–	2.1	66.9	668.8
2,491.0	–	259.5	6.5	–	72.4	–	26.8	2,711.3	3,891.0[2]
22.4	–	24.8	–	–	4.2	–	1.7	44.7	280.4
14.0	–	2.4	–	–	–	–	0.2	16.7	38.9
1.2	–	8.7	–	–	1.2	–	0.2	8.9	33.5
303.1	−0.5	19.7	–	–	15.7	–	2.1	308.7	122.6
–	–	7.0	–	–	0.3	–	–	6.7	12.2
–	–	–	–	–	–	–	–	–	465.2
3,483.0	**−19.2**	**411.0**	**7.6**	**–**	**100.0**	**–**	**38.7**	**3,821.1**	**7,210.0**
24.6	–	57.8	–	–	6.7	–	1.9	77.6	437.0
4.6	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**4.6**	**6.3**

STATEMENT OF CHANGES IN NON-CURRENT ASSETS 2018[1]

		Gross carrying amounts						
in € million	Note	Balance as of January 1, 2018	Change in scope of consolidation	Additions	Disposals	Reclassifications	Exchange differences	Balance as of December 31, 2018
Other acquired concessions, industrial property rights, similar rights and assets, and licenses 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
Intangible assets	**(12)**	**1,197.6**	**–**	**10.0**	**12.2**	**0.6**	**34.8**	**1,230.8**
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
Leases for land, land rights, and buildings, including buildings on third-party land[2]		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
Leases for technical equipment and machinery[2]		248.1	–	0.5	0.9	0.5	–8.9	239.3
Ships		52.6	–	–	0.1	–	2.1	54.6
Leases for ships[2]		1.9	–	–	–	–	–0.1	1.8
Other equipment, operating and office equipment		465.7	–	18.4	85.2	9.6	–1.5	407.0
Leases for other equipment, operating and office equipment[2]		–	–	–	–	–	–	–
Prepayments and assets under construction		557.0	–	286.3	1.3	–281.5	–7.0	553.4
Property, plant and equipment		**9,952.9**	**–**	**543.2**	**210.8**	**–1.8**	**–112.6**	**10,170.9**
– of which leases		251.0	–	0.5	0.9	0.5	–9.0	242.2
Investment properties	**(13)**	**10.2**	**–**	**–**	**0.4**	**1.3**	**–**	**11.0**

[1] Rounding differences may arise in percentages and numbers.
[2] Lease assets in the 2018 financial year result from finance leases within the meaning of IAS 17.

c.9

Balance as of January 1, 2018	Change in scope of consolidation	Depreciation and amortization	Impairment losses	Reversals of impairment losses	Disposals	Reclassifications	Exchange differences	Balance as of December 31, 2018	Balance as of December 31, 2018
Depreciation, amortization and impairment losses									Net carrying amounts
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**
14.6	–	10.7	–	–	–	–	−0.6	24.6	217.7
4.9	**–**	**0.1**	**–**	**–**	**0.4**	**–**	**–**	**4.6**	**6.4**

Statement of changes in provisions

STATEMENT OF CHANGES IN PROVISIONS[1]

in € million	Note	Balance as of January 1, 2019	Exchange differences	Change in scope of consolidation
Backfilling of vacant mines and shafts		373.3	1.8	–
Maintenance of tailings piles		563.8	0.4	–
Risk of mining damage		28.6	–	–
Other mining obligations		49.4	–	–
Provisions for mining obligations	**(21)**	**1,015.1**	**2.2**	**–**
Service anniversaries		31.4	–	–
Other personnel obligations		13.1	0.1	–
Personnel obligations	**(22)**	**44.5**	**0.1**	**–**
Other provisions	**(21)**	**95.6**	**1.1**	**–**
Provisions (non-current liabilities)		**1,155.2**	**3.4**	**–**
Provisions for mining obligations	(21)	7.3	–	–
Personnel obligations	(23)	112.6	1.1	–
Provisions for obligations from sales transactions	(23)	55.0	0.3	–
Provisions for obligations from purchase contracts	(23)	93.0	2.3	–
Other provisions		46.7	0.8	–
Provisions (current liabilities)		**314.6**	**4.5**	**–**
Provisions		**1,469.8**	**7.9**	**–**

[1] 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 of December 31, 2019 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 of 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 March 4, 2020 and presented to the Supervisory Board for approval at its meeting on March 11, 2020.

C.10

Additions	Interest component	Utilization	Reversals	Reclassification	Balance as of December 31, 2019
89.6	32.5	17.3	23.7	–	456.2
0.2	–1.9	3.0	193.9	–	365.6
0.4	0.2	0.7	0.9	–	27.6
19.5	1.1	3.6	5.2	–	61.2
109.7	**31.9**	**24.6**	**223.7**	**–**	**910.6**
2.0	4.8	1.7	–	–	36.5
6.0	–	0.2	0.3	–2.5	16.2
8.0	**4.8**	**1.9**	**0.3**	**–2.5**	**52.7**
33.9	**–0.5**	**3.1**	**13.1**	**–0.2**	**113.7**
151.6	**36.2**	**29.6**	**237.1**	**–2.7**	**1,077.0**
0.1	–	1.1	0.2	–	6.1
100.8	–	96.6	6.2	1.7	113.4
64.3	–	38.0	12.5	–	69.1
77.6	–	86.8	5.0	0.2	81.3
47.4	–0.2	20.9	15.0	0.3	59.1
290.2	**–0.2**	**243.4**	**38.9**	**2.2**	**329.0**
441.8	**36.0**	**273.0**	**276.0**	**–0.5**	**1,406.0**

SCOPE OF CONSOLIDATION

The following company was added to the scope of consolidation in 2019:

+ K+S Holding GmbH

The following companies were removed from the scope of consolidation in 2019 as a result of mergers and rollups:

+ K+S North America Salt Asset Management GmbH & Co. KG
+ K+S Bahamas Salt Asset Management GmbH & Co. KG
+ K+S Transport GmbH
+ K+S Entsorgung GmbH
+ K+S Salz GmbH
+ esco – european salt company GmbH & Co. KG

Through intra-Group restructuring of companies in Germany, K+S Transport GmbH and K+S Entsorgung GmbH were merged into K+S KALI GmbH. Following the exit of esco Verwaltungs GmbH, esco – european salt company GmbH & Co. KG was rolled up into K+S SALZ GmbH as general partner. K+S SALZ GmbH was subsequently merged into K+S KALI GmbH. K+S KALI GmbH now trades as K+S Minerals and Agriculture GmbH.

K+S Holding GmbH holds the shares in K+S Netherlands Holding B.V. and K+S Belgium Holding B.V.B.A. following the demerger from K+S Salz GmbH.

In the 2019 financial year, K+S established K+S Real Estate GmbH & Co. KG as a wholly owned subsidiary. Administrative buildings and the land on which they stand (real estate assets) that are used by K+S itself were transferred to the new company. At the end of 2019, 89.9% of the shares in K+S Real Estate GmbH & Co. KG were sold to K+S Vermögenstreuhänder e.V. at their market value of €44.3 million. The purchase price will be paid in 2020. A lease governing the real estate assets was entered into between K+S AKTIENGESELLSCHAFT and K+S Real Estate GmbH & Co. KG on an arm's length basis. The retained 10.1% of the shares were measured at fair value and are now accounted for as an equity investment in accordance with IFRS 9.

The deconsolidation of K+S Real Estate GmbH & Co. KG resulted in the disposal gain determined below, which is recognized in other operating income: **C.11**

DISPOSAL GAIN **C.11**

in € million	
Selling price of shares (89.9%)	44.3
Fair value of shares retained (10.1%)	5.0
Assets/liabilities derecognized	–25.0
– of which property, plant and equipment (real estate assets)	–23.9
– of which balances with banks	–1.1
Disposal gain	**24.3**

A total of 11 (2018: 16) domestic and 42 (2018: 42) foreign companies were included in the consolidated financial statements. A total of 23 (2018: 24) 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 recognized at fair value in both the 2019 financial year and the previous year as pursuant to IFRS 9.

A complete summary of equity investments of K+S AKTIENGESELLSCHAFT can be found in the list of shareholdings on page 222.

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 of the same balance sheet date as the consolidated financial statements. The assets and liabilities of the consolidated subsidiaries are recognized 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 intercompany 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 recognized as goodwill. Any negative differences from the purchase price allocation are recognized 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 recognized from the sale of goods as of 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 recognized 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 capitalized, but recognized 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 recognized 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 recognized at cost. Internally generated intangible assets are recognized at the development cost attributable to them (production costs). They are subsequently carried at cost less amortization 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 amortization. If they have indefinite useful lives, they are not amortized, but written down for impairment, if necessary. Whenever there is an indication of impairment, including between reporting dates, the corresponding assets are tested for impairment. Intangible assets with indefinite useful lives are tested for impairment at least annually and whenever there is an indication of impairment. Goodwill is always assumed to have an indefinite useful life.

Intangible assets with finite useful lives are amortized using the straight-line method based on normal useful lives. The following useful lives are applied to these assets as standard across the Group: **C.12**

USEFUL LIVES OF INTANGIBLE ASSETS WITH FINITE USEFUL LIVES **C.12**

in years	
Customer relations	5–20
Brands	20
Port concessions	250
Other intangible assets	2–50

The amortization 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 of goods sold
+ Selling, general, and administrative expenses
+ Other operating expenses

Impairment losses are recognized in case of impairment. If the reasons for previously recognized 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 whenever there is an indication of impairment. An impairment loss is recognized if necessary. Any need to recognize 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_2 emission rights are initially measured at cost. Accordingly, rights granted free of charge are recognized at a value of zero, and those acquired for a consideration are recognized 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 realizable value (sale proceeds less cost of disposal) and the net carrying amount is recognized 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 recognized in accordance with IAS 37. They are subsequently carried at cost less depreciation 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.

For property, plant and equipment depreciated using the straight-line method, the following useful lives are applied as standard across the Group: **C.13**

USEFUL LIVES OF PROPERTY, PLANT AND EQUIPMENT **C.13**

Years	
Buildings	15–50
Raw material deposits	17–250
Technical equipment and machinery (excavations)	14–122
Technical equipment and machinery (other)	8–39
Ships	25
Other equipment, operating and office equipment	7–11

The depreciation 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 of goods sold
+ Selling, general, and administrative expenses
+ Other operating expenses

Acquired raw material deposits are recognized 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.

Whenever there is an indication of impairment, including between reporting dates, the corresponding assets are tested for impairment. Impairment losses in excess of depreciation charges already recognized 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 recognized 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 realizable value (sale proceeds less cost of disposal) and the net carrying amount is recognized in other operating income or expenses.

CAPITALIZATION 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 capitalized. 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 recognized. In the statement of cash flows, capitalized borrowing costs are reported under "Interest paid and similar expenses" in "Net cash flow from operating activities."

LEASES

A lease is defined as a contract that conveys the right to use an asset for a period of time in exchange for consideration. All rights and obligations under leases are recognized as right-of-use assets in the underlying assets and as lease liabilities for the payment obligations assumed in the lessee's balance sheet.

The lease liability is recognized at the present value of the future lease payments. Present value is determined by discounting the lease payments at the discount rate implicit in the lease. If this cannot be determined, discounting is performed using the lessee's incremental borrowing rate. K+S uses discounting both at the rate implicit in the lease and at the incremental borrowing rate. In subsequent periods, discounting of the lease liability is unwound and the lease liability reduced by the lease payments made. Unwinding of the discount on the lease liability is presented as interest expense. The lease liabilities are presented as other financial liabilities.

Under certain conditions, K+S remeasures the lease liability and makes a corresponding adjustment to the right-of-use asset. This involves the following cases of remeasurement and modification:

+ The lease term has changed or a significant event or change in circumstances has occurred, and this has led to a reassessment of whether a purchase option will or will not be exercised. In these cases, the lease liability must be remeasured on the basis of the changed lease installments, any change in the lease term, and a newly calculated discount rate.
+ The lease installments may change as a result of changes in an index or because of the dependence on another market price, or because of amounts expected to be paid under the residual value guarantee. In these cases, the lease liability must be remeasured on the basis of the changed lease installments, leaving the discount rate unchanged. As a departure from this, a changed discount rate has to be applied if the change in the lease installments is due to a change in an agreed variable interest rate.
+ A lease is modified and the modification is not treated as a separate lease. In these cases, the lease liability is remeasured as of the effective date of the modification on the basis of the term of the modified lease, the changed lease installments, and a new discount rate.

Right-of-use assets are measured at cost, which consists of the lease liability, lease payments made at or before the commencement date, less any lease incentives received, initial direct costs, and restoration obligations. As a rule, lease assets are depreciated over the term of the respective lease. Impairment losses may have to be recognized if necessary. As a departure from this, lease assets are depreciated over the useful life of the asset, if the asset is transferred to the lessee at the end of the lease, or it can be assumed with reasonable certainty that a purchase option on the underlying asset will be exercised. As a rule, the depreciation policy for right-of-use assets is the same as for comparable assets to which the Company has legal title (straight-line depreciation). Certain right-of-use assets in the "technical equipment and machinery" group are depreciated according to the proportional performance method, because this method more suitably reflects the consumption of economic benefits. Depreciation charges for the right-of-use asset are allocated to function costs. Right-of-use assets are presented under the same item within property, plant and equipment that the underlying asset would have been presented under had it been purchased.

For short-term leases of up to twelve months (and not containing a purchase option) and leases of low-value assets, an entity may elect not to recognize the right-of-use asset and the lease liability. K+S exercises these options and elects not to recognize most classes of assets leased under short-term leases and low-value assets in the balance sheet. Instead, lease payments are recognized as operating expenses. In addition, for some classes of underlying asset, lease and non-lease components are not separated and the total payment is taken as the basis when measuring the lease liability.

A large number of leases contain extension and/or termination options. Such contract terms and conditions offer K+S a maximum of operational flexibility. When determining the term of the respective contracts, all facts and circumstances are taken into account that provide an incentive to exercise extension options or not to exercise termination options. The term options are only taken into consideration in determining the term, if it is reasonably certain that they will or will not be exercised.

The K+S GROUP only acts as lessor to an insignificant extent.

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 depreciation 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 recognized under other operating expenses. Income from the disposal of investment properties is recognized in the financial result.

FINANCIAL INSTRUMENTS

Financial instruments are contracts that give rise to a financial asset for one of the parties to such a 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. As a rule, K+S aims to recognize as income the contractual cash flows from the financial asset. For this reason, the "hold" business model is applied during classification and measurement.

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 amortized 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 recognized in other comprehensive income without reclassifying them to the income statement on disposal.

Derivatives are measured at fair value. Changes in fair value are recognized through profit or loss. Derivatives are derecognized on the settlement date. Hedge accounting is not applied.

Financial liabilities (except derivatives with negative fair values) are measured at amortized cost.

IMPAIRMENT LOSSES

For financial assets not measured at fair value, impairment losses are always recognized on the basis of expected losses.

At initial recognition, an impairment loss in the amount of the expected twelve-month losses must always be recognized. 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 recognized 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 realizable 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 realizable 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 recognized 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 recognized 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 utilization 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 program is a cash-settled share-based payment plan that is part of performance-related pay (LTI II program). 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 recognized are remeasured as of each balance sheet date. Any changes in fair value and the corresponding changes in the amount of the provision are recognized in profit or loss. Fair value is calculated using a recognized 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 recognized in the consolidated balance sheet, as well as for tax loss carryforwards. However, deferred tax assets are only recognized if it is sufficiently probable that they will be realized. 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 recognized 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 recognized at their fair values (with the exceptions specified in IFRS 3). Any resulting positive difference from the cost of the acquiree is recognized as goodwill. Any negative difference is immediately recognized in profit or loss.

CHANGES TO THE STRUCTURE OF THE INCOME STATEMENT

The structure of the K+S GROUP's income statement was changed at the beginning of financial year 2019 as part of the SHAPING 2030 initiative. Revenues are now offset against all cost of sales directly attributable to them, including, e.g., outgoing freight. This structural change brings the internal and external perspective into line, thus increasing the informative value of "gross profit." The remaining distribution expenses (in particular marketing costs) are combined with administrative expenses in the new "selling, general, and administrative expenses" item. The structural changes made to the income statement improve comparability within the industry. Since "research and development costs" are of minor importance to the K+S GROUP, they will in future no longer be reported separately in the income statement and moved to "other operating expenses." The prior-year period has been adjusted to ensure comparability. The adjustments are shown in the table below: **C.14**

CHANGES TO THE STRUCTURE OF THE INCOME STATEMENT **C.14**

<table>
<tr><td colspan="6">in € million</td></tr>
<tr><th>Old income statement structure</th><th>New income statement structure</th><th>2018 before adjustments</th><th>Adjustments to income statements</th><th>Change in the way reversals of provisions are reported</th><th>2018 after adjustments</th></tr>
<tr><td>Revenues</td><td>Revenues</td><td>4,039.1</td><td>–</td><td>–</td><td>4,039.1</td></tr>
<tr><td>Cost of sales</td><td>Cost of goods sold</td><td>2,779.5</td><td>659.7</td><td>−28.8</td><td>3,410.4</td></tr>
<tr><td>Gross profit</td><td>Gross profit</td><td>1,259.6</td><td>−659.7</td><td>28.8</td><td>628.7</td></tr>
<tr><td>Selling expenses</td><td rowspan="2">Selling, general and administrative expenses</td><td>779.8</td><td rowspan="2">−658.6</td><td rowspan="2">–</td><td rowspan="2">349.7</td></tr>
<tr><td>General and administrative expenses</td><td>228.5</td></tr>
<tr><td>Research and development costs</td><td>–</td><td>15.9</td><td>−15.9</td><td>–</td><td>–</td></tr>
<tr><td>Other operating income</td><td>Other operating income</td><td>146.8</td><td>–</td><td>−28.8</td><td>118.0</td></tr>
<tr><td>Other operating expenses</td><td>Other operating expenses</td><td>171.6</td><td>14.8</td><td>–</td><td>186.4</td></tr>
<tr><td>Net income from equity investments</td><td>Net income from equity investments</td><td>4.2</td><td>–</td><td>–</td><td>4.2</td></tr>
<tr><td>Gains/(losses) on operating anticipatory hedges</td><td>Gains/(losses) on operating anticipatory hedges</td><td>−49.5</td><td>–</td><td>–</td><td>−49.5</td></tr>
<tr><td>Earnings after operating hedges</td><td>Earnings after operating hedges</td><td>165.3</td><td>–</td><td>–</td><td>165.3</td></tr>
</table>

Moreover, the reversal of provisions recognized in previous years is no longer reported under "other operating income." Instead, they are reported in the functional areas that originally recognized the expense resulting from recognizing the provision. This enhances the informative value of the individual income statement items. The prior-year period has been adjusted to ensure comparability. The adjustments are shown in table: **C.14**

JUDGMENT AND ESTIMATES

JUDGMENT IN THE APPLICATION OF ACCOUNTING POLICIES

The carrying amounts of assets and liabilities sometimes depend on judgment 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,
+ determination of whether it is reasonably certain that extension or termination options in a lease within the meaning of IFRS 16 will be exercised or not exercised, and
+ determination of whether it is reasonably certain that a purchase option in a lease within the meaning of IFRS 16 will be exercised.

ESTIMATES AND ASSUMPTIONS IN THE APPLICATION OF ACCOUNTING POLICIES

The reasons for and amount of some items recognized 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 capitalized goodwill,
+ determining the net realizable 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 the parameters required for the measurement of lease liabilities (incremental borrowing rate),
+ 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), and
+ 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.

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 organizational 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 recognized directly in equity. When Group companies exit the scope of consolidation, the corresponding currency translation difference is reversed and recognized in profit or loss.

Fourteen 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: COMPANIA MINERA PUNTA DE LOBOS LTDA., EMPRESA DE SERVICIOS LTDA., EMPRESA MARITIMA S.A., INAGUA GENERAL

EXCHANGE RATES **C.15**

	2019				
per €1	Spot rate as of Dec. 31	Q1 average rate	Q2 average rate	Q3 average rate	Q4 average rate
US dollar (USD)	1.123	1.136	1.124	1.112	1.107
Canadian dollar (CAD)	1.460	1.510	1.504	1.468	1.462
Czech koruna (CZK)	25.408	25.683	25.686	25.734	25.577
Brazilian real (BRL)	4.516	4.278	4.407	4.408	4.559
Chilean peso (CLP)	845.774	757.768	768.031	785.082	836.012
Pound sterling (GBP)	0.851	0.873	0.875	0.902	0.861

EXCHANGE RATES **C.16**

	2018				
per €1	Spot rate as of Dec. 31	Q1 average rate	Q2 average rate	Q3 average rate	Q4 average rate
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

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, K+S PERÚ S.A.C., 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: **C.15, C.16**

In the year under review, net translation differences of €–2.2 million (2018: €–25.2 million) were recognized in the income statement (e.g., measurement/realization of receivables and liabilities in a foreign currency); they were mainly reported in other operating income or expenses.

NEW OR AMENDED FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS

IFRS 16 LEASES

IFRS 16 replaces the previous 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 involving the legal form of a lease." The core concept of the new standard is to standardize 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 recognized in the balance sheet as right-of-use assets and lease liabilities. The only exceptions are short-term leases of up to one year (no purchase option) and leases for low-value assets.

The new standard on leases must be applied to financial years beginning on or after January 1, 2019. The K+S GROUP applies the new standard as from January 1, 2019 using the modified retrospective method and has opted not to restate prior-year figures. This did not have any impact on equity. K+S exercises the option not to recognize most classes of assets leased under short-term leases and not to recognize low-value assets in the balance sheet; lease payments are reported as operating expense in these cases. In addition, for some classes of underlying asset, lease, and non-lease components are not separated and the total payment is taken as the basis when measuring the lease liability. K+S applied the practical expedient, which allowed it not to reassess existing leases in accordance with IFRS 16 at the transition date, but to continue to apply the assessments made under IAS 17 and IFRIC 4 as to the existence of a lease. Furthermore, K+S elected at the time of initial application to use the same discount rate for a portfolio of leases with similar characteristics. At the time of initial application, some use was made of the practical expedient that permits leases end-

NEW OR AMENDED FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS **C.17**

Standard/Interpretation			Date of mandatory application in the K+S GROUP[1]
New	IFRS 16	Leases	Jan. 1, 2019
New	IFRIC 23	Uncertainty over Income Tax Treatments	Jan. 1, 2019
Amendment	IFRS 9	Prepayment Features with Negative Compensation	Jan. 1, 2019
Amendment	IAS 19	Plan Amendment, Curtailment, or Settlement	Jan. 1, 2019
Amendment	IAS 28	Long-term Interests in Associates and Joint Ventures	Jan. 1, 2019
Amendment	Collective standard to amend several IFRSs	Annual improvements to IFRS Standards, 2015–2017 cycle	Jan. 1, 2019

[1] 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.

ing in 2019 to be accounted for as short-term leases and without being recognized in the balance sheet. Pursuant to the applicable simplification rules, initial direct costs were not taken into account in measuring the right-of-use assets on initial application.

As of January 1, 2019, obligations under operating leases were discounted in accordance with IFRS 16 requirements, using the appropriate incremental borrowing rate in order to determine the lease liability as of initial application. The weighted average incremental borrowing rate was 4.17%. As a rule, the right-of-use asset to be recognized corresponded to the lease liability. In individual cases, it was adjusted, in particular for accrued lease liabilities.

As a result of the initial application of IFRS 16, additional right-of-use assets in underlying assets were recognized in an amount of €206.3 million and additional lease liabilities in an amount of €216.1 million as of January 1, 2019. The newly recognized right-of-use assets relate mainly to leased property and technical equipment and machinery. 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 of December 31, 2018. Based on operating lease obligations as of December 31, 2018, Table **C.18** shows the reconciliation to the opening balance of lease liabilities as of January 1, 2019.

Because of the balance sheet extension, other financial liabilities increased. For leases previously classified as operating leases, the lessee now recognizes depreciation charges on the right-of-use asset and interest expenses on the carrying amount of the lease liability, instead of the lease expenses recognized before. This change lead to an increase in EBITDA of around €54.0 million in the 2019 financial year. Changes in the way lease expenses from former operating leases were reported also resulted in an improvement in cash flows from operating activities and a deterioration in cash flows from financing activities. Moreover, IFRS 16 requires new qualitative and quantitative disclosures.

Information on changes in right-of-use assets can be found in the "Statement of changes in non-current assets" on pages 164 through 167. Information on the maturity structure of lease liabilities can be found in Note (24). Other disclosures can be found under the corresponding items in the Notes and in Note (28) Leases.

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.

RECONCILIATION OF LEASE LIABILITIES **C.18**

in € million	January 1, 2019
Obligations from operating leases as of December 31, 2018	224.0
Minimum lease payments (nominal amounts) for finance lease liabilities as of December 31, 2018	187.7
Practical expedient for short-term leases	–2.0
Practical expedient for leases of low value assets	–5.7
Lease-related obligations (service components)	43.1
Gross lease liabilities as of January 1, 2019	**447.1**
Discounting	–66.8
Lease liabilities as of January 1, 2019	**380.3**
Present value of finance lease liabilities as of December 31, 2018	164.2
Additional lease liabilities resulting from the initial application of IFRS 16 as of January 1, 2019	**216.1**

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. **C.19**

As things stand, the changes to the financial reporting standards and interpretations will have no material impact on the consolidated financial statements of the K+S GROUP.

NEW OR AMENDED FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS YET TO BE APPLIED **C.19**

Standard/interpretation			Date of mandatory application in the K+S GROUP[1]
Amendment	IAS 1, IAS 8	Definition of "material"	Jan. 1, 2020
Amendment	IFRS 9, IAS 39, IFRS 7	Interest rate Benchmark Reform	Jan. 1, 2020
Amendment	Various	Amendments to References to the Conceptual Framework in IFRS Standards	Jan. 1, 2020
Amendment	IFRS 3	Definition of a Business	open
Amendment	IAS 1	Classification of liabilities as current or non-current	open

[1] 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.

NOTES TO THE INCOME STATEMENT AND STATEMENT OF COMPREHENSIVE INCOME

The income statement and statement of comprehensive income are presented on pages 156–157. 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 (18). 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 recognized 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 recognized 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 recognized in the balance sheet or income statement. "Operating" relates to hedged items that will have an effect on earnings after operating hedges. 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 earnings after operating hedges 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. In addition to being adjusted for depreciation and amortization, it differs from earnings after operating hedges 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 earnings after operating hedges 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 of each balance sheet date. Any difference from the carrying amount is recognized 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 derecognized at the time it is realized. It is realized when the hedging instrument is exercised/settled, expires, or is sold. The difference between the realized amount and carrying amount is the income or expense recognized in the current period. Since EBITDA 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, hedging gains or losses included in EBITDA correspond to the value of the hedging transactions at the time of realization (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. **C.20**

RECONCILIATION TO EARNINGS BEFORE OPERATING HEDGES AND EBITDA[2] C.20

in € million	2018	2019
Earnings after operating hedges	**165.3**	**224.3**
Income (–)/expenses (+) arising from changes in the fair value of outstanding operating anticipatory hedges	25.7	6.1
Elimination of prior-period changes in the fair value of operating anticipatory hedges	36.2	–22.0
Depreciation and amortization (+)/impairment losses (+)/reversals of impairment losses (–) on non-current assets	385.0	438.1
Capitalized depreciation (–)[1]	–5.9	–6.1
EBITDA[2]	**606.3**	**640.4**

[1] This relates to depreciation of assets used for the production of other assets, plant and equipment. Depreciation is capitalized as part of cost and not recognized in profit or loss.

[2] EBITDA is defined as earnings before interest, taxes, depreciation and amortization, adjusted by the depreciation and amortization amount not recognized in profit and loss in the context of own work capitalized, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognized in prior periods. A reconciliation can be found on page 61.

(1) REVENUES

The K+S GROUP's revenues amounted to €4,070.7 million (2018: €4,039.1 million) and can be broken down as follows: **C.21, C.22**

Revenues are broken down on the basis of market-related customer segments (Agriculture, Industry, Consumer, and Communities), which pool joint customer interests, on the one hand, and on the basis of product groups, on the other.

The chosen breakdowns of revenues reflect 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 (35).

BREAKDOWN OF REVENUES BY SEGMENT/CUSTOMER SEGMENT C.21

in € million	2018	2019
Operating unit Europe+	**2,585.2**	**2,535.9**
– Customer segment Agriculture	1,741.3	1,715.6
– Customer segment Industry	649.3	635.9
– Customer segment Consumer	66.2	64.2
– Customer segment Communities	128.4	120.2
Operating unit Americas	**1,451.0**	**1,532.2**
– Customer segment Industry	483.4	512.0
– Customer segment Consumer	387.6	420.5
– Customer segment Communities	580.0	599.7
Reconciliation	**2.9**	**2.6**
Total	**4,039.1**	**4,070.7**

BREAKDOWN OF REVENUES BY SEGMENT/PRODUCT GROUP C.22

in € million	2018	2019
Operating unit Europe+	**2,585.2**	**2,535.9**
– Potassium Chloride	974.9	995.8
– Fertilizer Specialities	766.4	719.7
– Chemical	195.0	159.4
– De-icing	134.3	125.8
– Complementary	101.8	113.0
– Food	73.5	79.5
– Animal Nutrition	53.7	55.2
– Water softening	45.6	46.3
– Water and Pool	30.7	30.4
– Culinary	28.8	27.4
– Pharma	26.8	26.5
– Oil and gas	8.5	15.5
– Other	145.1	141.3
Operating unit Americas	**1,451.0**	**1,532.2**
– De-icing	612.2	637.2
– Water and Pool	204.0	220.9
– Food	154.9	168.2
– Culinary	145.4	157.1
– Chemical	91.9	104.5
– Pharma	27.8	31.1
– Animal Nutrition	35.8	–
– Oil and gas	13.8	–
– Other	165.2	213.2
Reconciliation	**2.9**	**2.6**
Total	**4,039.1**	**4,070.7**

OPENING AND CLOSING CARRYING AMOUNTS C.23

in € million	Opening carrying amount as of Jan. 1, 2019	Closing carrying amount as of Dec. 31, 2019
Trade receivables	836.7	724.7
Receivables from customer-specific construction contracts	3.0	2.1
Contract liabilities	5.5	5.9

The table shows the opening and closing carrying amounts of trade receivables, receivables from customer-specific construction contracts, and contract liabilities. **C.23**

The accumulated transaction price of all performance obligations still to be satisfied was €5.9 million (2018: €5.5 million) as at December 31, 2019. It is expected that the resulting revenues will be realized in full within the next reporting period.

In addition, revenues as of December 31, 2019 include prior-period revenues of €12.5 million (2018: €10.1 million), which result primarily from the reversal of provisions for sales transactions through profit or loss.

(2) COST OF SALES AND SELLING, GENERAL, AND ADMINISTRATIVE EXPENSES

Cost of sales in the year under review amounted to €3,372.6 million (2018: €3,410.4 million) and selling, general, and administrative expenses stood at €362.8 million (2018: €349.7 million). Cost of sales includes freight costs of €888.2 million (2018: €883.6 million). **C.24**

COST OF MATERIALS **C.24**

in € million	2018	2019
Expenses for raw materials and supplies and for purchased goods	532.2	586.4
Cost of purchased services	835.2	840.9
Energy costs	261.7	267.4
Cost of materials	**1,629.1**	**1,694.7**

(3) OTHER OPERATING INCOME

Other operating income includes the following material items: **C.25**

Income from the deconsolidation of subsidiaries is attributable to the sale of K+S Real Estate GmbH & Co. KG to K+S Vermögenstreuhänder e.V. (see section entitled "Scope of consolidation").

Income from the reversal of provisions is reported in the corresponding cost accounts according to the costs-by-cause principle. Prior-year figures were adjusted as shown in the section on "Changes to the structure of the income statement."

OTHER OPERATING INCOME **C.25**

in € million	2018 (adjusted)	2019
Gains on exchange rate differences/currency hedging transactions	50.0	45.4
Income from the disposal of property, plant and equipment and intangible assets	5.9	5.6
Income from the deconsolidation of subsidiaries	–	24.3
Reversals of provisions	8.5	8.5
Compensation and refunds received	17.7	7.7
Rental and leasing income	5.0	4.3
– of which from investment properties	1.3	0.9
Reversals of allowances for receivables	0.5	0.3
Other income	30.4	37.2
Other operating income	**118.0**	**133.3**

(4) OTHER OPERATING EXPENSES

Other operating expenses include the following material items: **C.26**

The structure of the income statement was changed in line with the internal reporting structure to improve the industry comparison from the 2019 financial year onwards. Prior-year figures were adjusted as shown in the section on "Changes to the structure of the income statement." This also has an impact on the presentation of other operating expenses for the previous year.

(5) NET INCOME FROM EQUITY INVESTMENTS

In the financial year under review, investment income of €3.2 million (2018: €4.3 million) was generated, primarily from dividend payments; of this amount, €0.6 million (2018: €0.0 million) was attributable to companies disposed of in the financial year under review. No impairment losses were recognized (2018: €0.1 million).

(6) 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 183. **C.27**

OTHER OPERATING EXPENSES **C.26**

in € million	2018 (adjusted)	2019
Losses on exchange rate differences/currency hedging transactions	56.6	56.5
Prior-period expenses	10.5	29.8
Expenses for consultancy, assessments, and attorney's fees	23.8	29.3
Ancillary capital expenditure costs	23.4	17.9
Losses on the disposal of non-current assets	12.9	11.5
Research and development costs	15.9	16.0
Depreciation and amortization	3.5	13.0
– of which impairment losses	–	7.1
Other expenses	39.8	56.6
Other operating expenses	186.4	230.6

GAINS/(LOSSES) ON OPERATING ANTICIPATORY HEDGES **C.27**

in € million	2018	2019
Gain/loss on the realization of currency hedging transactions	–23.8	–10.8
– of which positive contributions to profit or loss	11.2	17.0
– of which negative contributions to profit or loss	–35.0	–27.8
Changes in the fair value of hedging transactions not yet due	–25.7	–6.1
– of which positive fair value changes	1.5	10.8
– of which negative fair value changes	–27.2	–16.9
Gains/(losses) on operating anticipatory hedges	–49.5	–16.9

(7) NET INTEREST

In determining the borrowing costs to be capitalized, a weighted cost of capital of 2.7% was applied (2018: 2.7 %). **C.28**

The "Interest component from measurement of provisions for mining obligations" consists of the net balance of the following items: **C.29**

NET INTEREST **C.28**

in € million	2018	2019
Bank interest	6.6	5.9
Other interest and similar income	5.0	3.3
Interest income	**11.6**	**9.2**
Interest expense on bonds/promissory note loans	–85.1	–79.8
Interest component from measurement of provisions for mining obligations	–25.1	–31.9
Interest expense on pension provisions	–5.2	–6.6
Capitalization of borrowing costs	17.5	14.3
Interest expense from leasing	–6.6	–15.1
Other interest and similar expenses	–16.2	–25.1
Interest expense	**–120.7**	**–144.2**
Net interest	**–109.1**	**–135.0**

INTEREST COMPONENT OF PROVISIONS FOR MINING OBLIGATIONS **C.29**

in € million	2018	2019
Interest rate effect from the change in the discount rate for provisions for mining obligations	–	–23.2
Increase in provisions for mining obligations due to passage of time (interest cost)	–32.3	–11.4
Interest rate effect from the reversal of provisions for mining obligations	7.2	2.7
Interest component from measurement of provisions for mining obligations	**–25.1**	**–31.9**

(8) OTHER FINANCIAL RESULT

C.30

OTHER FINANCIAL RESULT **C.30**

in € million	2018	2019
Gain/loss on the realization of financial assets/liabilities	28.3	34.6
Income from the measurement of financial assets/liabilities	–31.4	3.1
Other financial result	**–3.1**	**37.7**

(9) INCOME TAX EXPENSE

Deferred taxes in Germany were calculated using a tax rate of 30.0% (2018: 30.0%). 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% (2018: 14.2%) was taken into account. Deferred taxes in other countries are calculated applying the respective national income tax rates for profit retention. **C.31**

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% (2018: 30.0%). **C.32**

INCOME TAX EXPENSE **C.31**

in € million	2018	2019
Current taxes	28.8	67.5
– in Germany	14.5	26.4
– other countries	14.3	41.1
Deferred taxes	–17.9	–29.4
– in Germany	–12.0	4.8
– other countries	–5.9	–34.2
– of which from loss carryforwards and tax credits	21.4	–15.2
– of which attributable to temporary differences	–39.3	–14.2
Income tax expense	**10.9**	**38.1**

RECONCILIATION OF TAXES ON INCOME **C.32**

in € million	2018	2019
Earnings before tax	53.1	127.0
Expected income tax expense (Group tax rate: 30.0%; previous year: 30.0%)	**15.9**	**38.1**
Changes in expected tax expense:		
Reduction in tax resulting from tax-free income and other items	–8.9	–11.1
– of which tax-free income from investments and gains on disposals	–1.1	–3.3
– of which other tax-free income	–7.8	–7.8
Trade tax additions/deductions	5.2	4.9
Increases in tax resulting from non-deductible expenses and other items	6.7	8.7
Permanent differences	–0.1	–0.1
Increases/reductions in tax resulting from the measurement of deferred tax assets	–0.3	1.5
Effects of tax rate differences	–5.1	–2.6
Effects of tax rate changes	1.1	–0.3
Effects of other changes in tax law	–4.2	–
Taxes for prior years	0.5	–0.7
Other effects	0.1	–0.3
Actual tax expense	**10.9**	**38.1**
Tax rate[1]	**20.5%**	**30.0%**

[1] Based on consolidated profit before tax.

(10) PERSONNEL EXPENSES/EMPLOYEES

C.33, C.34

'Employees,' page 80;
'Remuneration report,' page 142

PERSONNEL EXPENSES C.33

in € million	2018	2019
Wages and salaries	870.4	898.7
Social security costs	220.7	225.0
Pension	31.4	38.1
Personnel expenses	**1,122.5**	**1,161.9**

EMPLOYEES INCLUDING TEMPORARY EMPLOYEES C.34

Annual average (FTE)	2018	2019
Germany	10,405	10,097
Other countries	4,499	4,596
Total	**14,904**	**14,693**
– of which trainees	524	557

(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. **C.35**

If the authorized capital is utilized or a conditional capital increase is implemented (see Note (19), page 198), earnings per share could be diluted in the future.

EARNINGS PER SHARE[1] C.35

in € million	2018	2019
Earnings after tax and non-controlling interests	**42.1**	**88.9**
Average number of shares (in millions)	191.4	191.4
Earnings per share in € (basic ≙ diluted)	**0.22**	**0.46**

[1] Adjusted earnings per share as well as its calculation is described on page 62.

NOTES TO THE BALANCE SHEET

The balance sheet is presented on page 158. The balance sheet is classified according to the maturity of the assets and liabilities. The gross carrying amounts and depreciation, amortization, and impairment losses on individual non-current assets are shown separately on pages 164 through 167.

(12) INTANGIBLE ASSETS

In the consolidated balance sheet, goodwill from business combinations is allocated to the following cash-generating units (CGUs): **C.36**

ALLOCATION OF GOODWILL BY CASH-GENERATING UNIT **C.36**

in € million	2018	2019
CGU Salt America	663.8	681.9
CGU Potash and Magnesium Products	15.7	16.8
CGU Salt Europe	13.7	13.7
Total goodwill	**693.2**	**712.4**

The operating unit Europe+ consists primarily of the cash-generating units Potash and Magnesium Products and Salt Europe. The operating unit Americas comprises the cash-generating unit Salt America, in addition to minor holding company activities. The increase in goodwill is due to the effects of currency translation as of 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 operating 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 selling prices and sales volumes, 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 2020 to 2022. For the CGU Potash and Magnesium Products, the detailed forecast period covers the years 2020 to 2030. This forecast period reflects the gradual expansion of production capacity at the new Bethune production facility in Canada. For years beyond the detailed forecast period, a growth rate of 1.5% has been assumed for the nominal cash flows (2018: 2.0%) to compensate for cost and revenue inflation additionally to the further development of the Bethune production site.

Table **C.37** shows the discount rates applied as of the end of the financial year. **C.37**

DISCOUNT RATES USED IN THE IMPAIRMENT TEST **C.37**

	2018		2019	
Interest rates in %	before tax	after tax	before tax	after tax
CGU Salt America	8.4	6.0	8.6	6.0
CGU Potash and Magnesium Products	8.4	6.0	8.6	6.0
CGU Salt Europe	8.4	6.0	8.6	6.0

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 63

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 normalization of winter weather and on our strategy, the expected price trends primarily reflect our participation in the anticipated market performance. 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 impairment tests conducted at the end of the 2019 financial year confirmed that the goodwill items were not impaired. 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 Salt America or Salt Europe CGU exceeding its value in use.

The value in use of the Potash and Magnesium Products CGU exceeds the corresponding carrying amount by around €1.6 billion. A reduction of the planned potash price level by 5.5% would, if the other parameters remain constant, result in the value in use of the Potash and Magnesium Products CGU being equivalent to its carrying amount. A reduction in the growth rate after the detailed forecast period from 1.5% to 0.5% p.a. or an increase in the discount rate (after taxes) from 6.0% to 7.0% would result in the value in use being higher than the carrying amount, if the other parameters stay unchanged.

Brand rights totaling €113.0 million (2018: €110.3 million) are, given their level of awareness in the relevant sales markets and their strategic relevance, classified as assets with indefinite useful lives. These brand rights are allocated to the CGU Salt America and are tested for impairment as part of the goodwill impairment test.

The customer relationships obtained as a result of the acquisition of the MORTON Group are a significant intangible asset. As of December 31, 2019, the carrying amount totaled €77.8 million (2018: €84.9 million), the remaining useful life as of the reporting date was around seven years (2018: eight years).

(13) INVESTMENT PROPERTIES

Investment properties are primarily leased properties. As of December 31, 2019, the fair values of investment properties amounted to €15.4 million (2018: €16.4 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) DEFERRED TAXES

The following deferred tax assets and liabilities recognized in the balance sheet relate to recognition and measurement differences for individual balance sheet line items and to tax loss carryforwards: **C.38**

Deferred taxes totaling €35.4 million (2018: €22.0 million) were not capitalized as utilization of the underlying loss carryforwards or the realization of taxable income is considered unlikely. The underlying loss carryforwards amount to €262.7 million (2018: €216.0 million). Most of them expire in the following periods. To determine deferred tax assets on loss carryforwards, the expected taxable income was derived from the corporate planning while assuming that deferred tax liabilities will reverse. **C.39**

For companies with a tax loss in the current year or in the previous year, there was a surplus of deferred tax assets of €43.8 million (2018: €42.9 million). The basis for the development of these deferred taxes is the assessment that tax profits will be achieved in future financial years.

DEFERRED TAXES C.38

	Deferred tax assets		Deferred tax liabilities	
in € million	2018	2019	2018	2019
Intangible assets	2.8	2.6	62.7	61.4
Property, plant and equipment	51.9	31.0	451.7	360.8
Inventories	7.0	5.7	1.8	0.4
Trade receivables	0.5	0.6	4.6	2.2
Other assets	4.6	4.2	10.4	10.6
– of which derivative financial instruments	–	–	0.4	4.6
Provisions	248.8	244.3	8.1	7.4
Trade payables	–	–	2.9	2.9
Other liabilities	53.8	3.8	19.9	20.0
– of which derivative financial instruments	1.3	2.6	–	–
Gross amount	**369.4**	**292.2**	**562.1**	**465.7**
– of which non-current	336.6	360.9	534.5	536.6
Valuation allowances	–1.0	–0.9	–	–
Tax loss carryforwards	36.5	51.8	–	–
Consolidations	16.6	12.7	–3.1	–3.0
Netting	–328.9	–260.3	–328.9	–260.3
Carrying amount (net)	**92.6**	**95.5**	**230.1**	**202.4**

EXPIRY OF UNRECOGNIZED LOSS CARRYFORWARDS C.39

in € million	2018	2019
Unrecognized loss carryforwards	216.0	262.7
– 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	163.8	207.0
– of which loss carryforwards that do not expire	**51.7**	**55.7**

In the year under review, a deferred tax credit of €8.6 million (2018: €3.8 million) was recognized in other comprehensive income.

The amount of deferred taxes recognized in the balance sheet as of December 31, 2019 declined by €–30.5 million (2018: €–19.9 million); this change is made up of a increase in deferred tax assets of €2.9 million (2018: €–2.6 million) and a decrease in deferred tax liabilities of €–27.6 million (2018: €–22.5 million).

Taking into account a deferred tax credit of €8.6 million (2018: €3.8 million) and currency translation effects of €–7.5 million (2018: €–1.8 million) recognized in other comprehensive income in the year under review, this results in deferred tax income of €29.4 million disclosed in the income statement (2018: €17.9 million).

Temporary differences of €38.5 million (2018: €293.7 million) are related to shares in subsidiaries for which no deferred tax liabilities are recognized in accordance with IAS 12.39.

(16) INVENTORIES

Since inventories are carried at net realizable value, allowances of €27.0 million (2018: €8.0 million) were recognized in the period under review. **C.40**

INVENTORIES **C.40**

in € million	2018	2019
Raw materials, consumables, and supplies	275.4	319.4
Work in progress	46.4	63.1
Finished goods and merchandise	369.7	406.8
Inventories	**691.5**	**789.3**

(17) TRADE RECEIVABLES AND OTHER FINANCIAL ASSETS

Other financial assets include receivables recognized in connection with accounting for customer-specific construction contracts; they have the following components: **C.41**

As in the previous year, there were no customer-specific construction contracts with negative balances as of December 31, 2019.

Current and non-current financial assets do not include any assets pledged as collateral for obligations (2018: €23.0 million).

Allowances on trade receivables are always recognized in the amount of lifetime expected credit losses. However, K+S pursues a strategy of securing trade receivables using suitable instruments. As of the reporting date, €584.1 million, or 93%, (2018: €676.9 million, or 95 %) of the Group's trade receivables that can be secured were protected against default with credit insurance and other debt protection 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 €46.7 million, or 7%, (2018: €39.0 million, or 5%) 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 recognized for cases with objective evidence of impairment. 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 recognized is the possible excess. **C.42**

The maximum risk of default on receivables and other financial assets is reflected in the carrying amount recognized in the balance sheet. As of December 31, 2019, the maximum amount in default in the highly unlikely event of a simultaneous default on all unsecured receivables was €151.9 million (2018: €170.8 million).

TRADE RECEIVABLES AND OTHER FINANCIAL ASSETS **C.41**

in € million	2018	of which remaining maturity of more than 1 year	2019	of which remaining maturity of more than 1 year
Trade receivables	836.7	–	724.7	–
Other financial assets	122.4	36.2	147.6	6.0
– of which derivative financial instruments	13.0	7.6	18.5	3.2
– of which purchase price receivable from K+S Vermögenstreuhänder e.V.	–	–	44.3	–
– of which claim for reimbursement for MORTON Salt bond	20.4	20.2	20.4	–
– of which receivables from affiliated companies	6.5	–	18.6	–
Trade receivables and other financial assets	**959.1**	**36.2**	**872.3**	**6.0**

BREAKDOWN OF CARRYING AMOUNTS OF TRADE RECEIVABLES **C.42**

in € million	2018	2019
Secured	676.9	584.1
Securable but unsecured	39.0	46.7
Total securable receivables	**715.9**	**630.8**
Not securable	131.8	105.2
Total gross carrying amounts	**847.7**	**736.0**
Valuation allowances	11.0	11.3
Net carrying amounts	**836.7**	**724.7**

The table on the right shows the reconciliation of valuation allowances recognized 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 recognized 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. **C.43**

Impairment losses recognized on other financial assets amounted to €0.1 million as of the balance sheet date (2018: €0.2 million). In addition, the other financial assets item includes assets already impaired on acquisition with a carrying amount of €2.9 million (2018: €2.8 million) and a nominal repayment amount of €5.7 million (2018: €5.6 million). As in the previous year, no impairment losses were recognized on receivables from customer-specific construction contracts.

If receivables have a residual term of more than one year, they are discounted applying interest rates as of the balance sheet date.

VALUATION ALLOWANCES ON TRADE RECEIVABLES **C.43**

in € million	2018	2019
As of January 1	11.2	11.0
Additions	0.4	1.2
Reversals	0.5	0.3
Utilization	0.1	0.6
As of December 31	**11.0**	**11.3**

As of December 31, 2019, no non-interest-bearing and low-interest receivables were discounted (2018: €0.0 million).

Table **C.44** provides information about the extent of the risk of default contained in "Trade receivables." **C.44**

As of the balance sheet date, an amount of €2.6 million (2018: €2.4 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 of 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.

RISK OF DEFAULT **C.44**

	Carrying amount	of which neither overdue nor impaired as of the reporting date	of which not impaired but overdue as of the reporting date for			
in € million			< 30 days	> 31 and < 90 days	> 91 and < 180 days	> 180 days
2019						
Trade receivables	724.7	666.9	19.7	7.7	1.5	2.7
2018						
Trade receivables	836.7	776.0	24.7	7.2	2.1	3.2

(18) 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, pounds 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 favorable market developments is, as a rule, 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 operating unit Europe+ for US dollar positions as well as for Canadian dollar positions for production in Canada. Hedges of invoiced receivables are entered into in the operating unit Europe+.

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.

Future 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.

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 recognized 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 December 31, 2019: **C.45**

DERIVATIVE FINANCIAL INSTRUMENTS **C.45**

in € million	2018 Nominal values[1]	2018 Fair values	2019 Nominal values[1]	2019 Fair values
GBP/EUR forward exchange contracts				
– of which maturing in 2019	7.1	–	–	–
– of which maturing in 2020	–	–	6.4	0.1
CAD/EUR forward exchange contracts				
– of which maturing in 2019	124.2	–1.8	–	–
– of which maturing in 2020	–	–	145.9	4.2
USD/EUR forward exchange contracts				
– of which maturing in 2019	1,104.3	–6.6	–	–
– of which maturing in 2020	–	–	688.0	1.1
– of which maturing in 2021	–	–	35.3	0.6
USD/CAD forward exchange contracts				
– of which maturing in 2019	44.0	–1.1	–	–
– of which maturing in 2020	26.3	–0.4	107.6	2.0
USD/CLP forward exchange contracts				
– of which maturing in 2019	62.0	–1.5	–	–
– of which maturing in 2020	2.9	–0.1	134.9	–5.1
– of which maturing in 2021	–	–	20.5	0.6
Plain vanilla currency options purchased (USD/EUR)				
– of which maturing in 2019	356.0	1.9	–	–
– of which maturing in 2020	200.8	6.1	438.1	1.5
– of which maturing in 2021	–	–	69.0	1.6
Plain vanilla currency options sold (USD/EUR)				
– of which maturing in 2019	383.6	–6.1	–	–
– of which maturing in 2020	212.4	–3.5	464.5	–4.4
– of which maturing in 2021	–	–	72.1	–0.8
Plain vanilla currency options purchased (CAD/USD)				
– of which maturing in 2019	275.0	1.1	–	–
– of which maturing in 2020	80.9	1.3	136.7	2.1
Plain vanilla currency options sold (CAD/USD)				
– of which maturing in 2019	258.6	–6.4	–	–
– of which maturing in 2020	77.1	–2.4	130.9	–0.2
Interest caps purchased				
– of which maturing in 2019	140.0	–	–	–
– of which maturing in 2021	118.0	0.2	118.0	–
Total derivative financial instruments	**3,473.2**	**–19.3**	**2,598.0**	**3.4**

[1] In euros, translated using weighted average exchange rates.

(19) EQUITY

The changes in individual equity items are shown separately on page 161.

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. **C.46**

'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,' page 113

ISSUED CAPITAL **C.46**

in € million	Outstanding shares on issue	Issued capital
Dec. 31, 2017	191.4	191.4
Dec. 31, 2018	191.4	191.4
Dec. 31, 2019	**191.4**	**191.4**

SHARE BUY BACK

According to the resolution adopted by the Annual General Meeting on May 12, 2015, the Board of Executive Directors was authorized to acquire own shares of up to 10% of the share capital until May 11, 2020. K+S AKTIENGESELLSCHAFT did not make use of the authorization in the 2019 financial year.

AUTHORIZED CAPITAL

The Board of Executive Directors was authorized by the Annual General Meeting on May 12, 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 (Authorized Capital) until May 11, 2020. The Board of Executive Directors was further authorized on May 11, 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 (Authorized Capital II) until May 10, 2021. K+S AKTIENGESELLSCHAFT did not make use of the authorizations in the 2019 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 authorized until May 11, 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 authorization in the 2019 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 summarizes 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). **C.47**

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). The intention is to propose to the Annual General Meeting that a dividend of €0.15 per share (2018: €0.25), i.e., €28.7 million in total (2018: €47.9 million), be distributed to the shareholders and the remaining amount of €142.0 million be transferred to retained earnings. As of the balance sheet date, the following net retained profits were reported in the single-entity financial statements of K+S AKTIENGESELLSCHAFT: **C.48**

OTHER COMPREHENSIVE INCOME **C.47**

in € million	2018 Before taxes	2018 Tax effect	2018 Net	2019 Before taxes	2019 Tax effect	2019 Net
Items of other comprehensive income that may be reclassified to profit or loss in subsequent periods	–47.5	–1.5	–49.0	317.8	–0.4	317.4
Exchange differences on translation of foreign operations	–47.5	–1.5	–49.0	317.8	–0.4	317.4
– of which change in unrealized gains/losses	–47.5	–1.5	–49.0	317.8	–0.4	317.4
Items of other comprehensive income not to be reclassified to profit or loss	1.7	3.9	5.5	–15.8	8.4	–7.4
Measurement of equity instruments at fair value	10.7	–	10.7	9.7	–	9.7
Remeasurement gains/(losses) on defined benefit plans	–9.0	3.8	–5.2	–25.5	8.4	–17.1
Other comprehensive income	**–45.8**	**2.3**	**–43.5**	**302.0**	**8.0**	**310.0**

NET RETAINED PROFITS OF K+S AKTIENGESELLSCHAFT (HGB) **C.48**

in € million	2018	2019
Net retained profits of K+S Aktiengesellschaft as of January 1	67.0	74.5
Dividend distributed for previous year	–67.0	–47.9
Earnings for the year of K+S Aktiengesellschaft	74.5	288.2
Appropriation to other revenue reserves from earnings for the year	–	–144.1
Net retained profits of K+S Aktiengesellschaft as of December 31	**74.5**	**170.7**

(20) 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 of service before the introduction of the basic pension and supplementary benefits II. 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 January 1, 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 Regulatory Authority 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 every three years as a minimum. 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.

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.

ACTUARIAL ASSUMPTIONS — MEASUREMENT OF PENSION COMMITMENTS C.49

	2018		2019	
In % (weighted average)	Germany	Other countries	Germany	Other countries
Pension commitments				
Discount rate	2.0	3.8	1.0	3.1
Expected annual rise in income	1.8	3.0	1.8	2.8
Expected annual rise in pensions	1.6	1.0	1.6	1.0
Other pension-related benefit commitments				
Discount rate	–	4.6	–	3.9

ACTUARIAL ASSUMPTIONS — PENSION COMMITMENT EXPENSES C.50

	2018		2019	
In % (weighted average)	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

+ 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 following assumptions have been made in calculating provisions for pensions and similar obligations as of the balance sheet date: **C.49**

To determine the pension expenses for 2019, the actuarial assumptions in table **C.50** – defined at the end of financial year 2018 – were used: **C.50**

As of December 31, 2019, the following mortality tables were applied:

+ Germany: Heubeck mortality tables 2018 G (2018: Heubeck mortality tables 2018 G)
+ Canada: CPM 2014 Private Scale B with adjustment factor (2018: CPM 2014 Private Scale B with adjustment factor)
+ United States/Bahamas: PRI 2012 Scale MP-2019 (2018: RP 2014 Scale MP-2018)

In the case of pension-related commitments for healthcare benefits, the following annual cost increases were assumed:

+ Canada (medicines): 5.9%, declining to 4.0% from 2040 (2018: 6.1%/4.0 % from 2040)
+ Bahamas: 5.5% (2018: 5.5%)

The following tables show the changes in the projected benefit obligation and plan assets: **C.51, C.52**

For reconciliation to the carrying amounts, the projected benefit obligation must be offset against plan assets: **C.53**

The amounts in table **C.54** were recognized in the statement of comprehensive income: **C.54**

CHANGES IN PROJECTED BENEFIT OBLIGATION **C.51**

	2018				2019			
	Total	Germany	Other countries	Other countries	Total	Germany	Other countries	Other countries
in € million		Pensions	Pensions	Pension-related obligations		Pensions	Pensions	Pension-related obligations
Projected benefit obligation on January 1	602.9	276.1	217.4	109.4	582.0	278.3	206.9	96.8
Service costs	11.2	7.5	0.4	3.3	11.3	7.9	0.6	2.8
Past service costs	0.1	0.3	0.1	–0.3	–	–	–	–
Interest expense	17.3	5.4	7.6	4.3	17.9	5.4	7.9	4.6
Remeasurement	–16.1	2.8	–0.3	–18.6	70.5	47.5	20.5	2.5
– of which actuarial gains (–)/losses (+) from changes in demographic assumptions	2.4	2.8	–	–0.4	–5.1	–	–3.7	–1.4
– of which actuarial gains (–)/losses (+) from changes in financial assumptions	–20.2	–1.5	–2.5	–16.2	84.3	51.8	19.3	13.2
– of which actuarial gains (–)/losses (+) based on experience-based adjustments	1.7	1.5	2.2	–2.0	–8.7	–4.3	4.9	–9.3
Pension payments	–26.7	–13.8	–10.5	–2.4	–27.0	–13.6	–11.0	–2.4
Plan amendments/settlements	–0.3	–	–0.3	–	4.4	4.4	–	–
Changes in exchange rates	–6.4	–	–7.5	1.1	18.1	–	13.8	4.3
Projected benefit obligation on December 31	**582.0**	**278.3**	**206.9**	**96.8**	**677.2**	**329.9**	**238.7**	**108.6**

CHANGES IN PLAN ASSETS **C.52**

	2018			2019		
	Total	Germany	Other countries	Total	Germany	Other countries
in € million		Pensions	Pensions		Pensions	Pensions
Plan assets on January 1	441.3	230.5	210.8	399.0	207.3	191.7
Interest income	12.1	4.6	7.5	11.5	4.0	7.5
Employer contributions	2.2	1.9	0.3	3.7	3.6	0.1
Gains (+)/losses (–) from remeasurement of plan assets (excluding amounts recognized in interest income)	–25.3	–15.9	–9.4	45.0	20.0	25.0
Pension payments	–23.8	–13.8	–10.0	–24.2	–13.6	–10.6
Changes in exchange rates	–7.5	–	–7.5	13.1	–	13.1
Plan assets on December 31	**399.0**	**207.3**	**191.7**	**448.1**	**221.3**	**226.8**

RECONCILIATION TO CARRYING AMOUNTS OF PENSIONS AND SIMILAR OBLIGATIONS C.53

	2018				2019			
	Total	Germany	Other countries	Other countries	Total	Germany	Other countries	Other countries
in € million		Pensions	Pensions	Pension-related obligations		Pensions	Pensions	Pension-related obligations
Projected benefit obligation on December 31	582.0	278.3	206.9	96.8	677.2	329.9	238.7	108.6
Plan assets on December 31	399.0	207.3	191.7	–	448.1	221.3	226.8	–
Carrying amounts on December 31	**183.0**	**71.0**	**15.2**	**96.8**	**229.1**	**108.6**	**11.9**	**108.6**
– of which provisions for pensions and similar obligations (+)	187.0	75.0	15.2	96.8	232.2	111.7	11.9	108.6
– of which assets (–)	–4.0	–4.0	–	–	–3.1	–3.1	–	–

EFFECTS ON THE STATEMENT OF COMPREHENSIVE INCOME C.54

	2018				2019			
	Total	Germany	Other countries	Other countries	Total	Germany	Other countries	Other countries
in € million		Pensions	Pensions	Pension-related obligations		Pensions	Pensions	Pension-related obligations
Service costs	11.2	7.5	0.4	3.3	11.3	7.9	0.6	2.8
Past service costs	0.1	0.3	0.1	–0.3	–	–	–	–
Net interest cost (+)/income (–)	5.2	0.8	0.1	4.3	6.4	1.4	0.4	4.6
Expenses (+)/income (–) from plan amendments/settlements	–0.3	–	–0.3	–	4.4	4.4	–	–
Amounts recognized in the income statement	**16.2**	**8.6**	**0.3**	**7.3**	**22.1**	**13.7**	**1.0**	**7.4**
Gains (–)/losses (+) on remeasurement of plan assets (excluding amounts recognized in interest income)	25.3	15.9	9.4	–	–45.0	–20.0	–25.0	–
Actuarial gains (–)/losses (+) from changes in demographic assumptions	2.4	2.8	–	–0.4	–5.1	–	–3.7	–1.4
Actuarial gains (–)/losses (+) from changes in financial assumptions	–20.2	–1.5	–2.5	–16.2	84.3	51.8	19.3	13.2
Actuarial gains (–)/losses (+) based on experience-based adjustments	1.7	1.5	2.2	–2.0	–8.7	–4.3	4.9	–9.3
Amounts recognized in other comprehensive income	**9.2**	**18.7**	**9.1**	**–18.6**	**25.5**	**27.5**	**–4.5**	**2.5**
Total (amounts recognized in statement of comprehensive income)	**25.4**	**27.3**	**9.4**	**–11.3**	**47.6**	**41.2**	**–3.5**	**9.9**

BREAKDOWN OF PLAN ASSETS BY ASSET CLASS **C.55**

in € million	2018 Total	2018 Germany Pensions	2018 Other countries Pensions	2019 Total	2019 Germany Pensions	2019 Other countries Pensions
Bonds	220.4	89.9	130.5	230.2	73.6	156.6
– Government bonds	96.3	2.3	94.0	130.5	0.7	129.8
– Corporate bonds	124.1	87.6	36.5	99.7	72.9	26.8
Shares	127.8	73.6	54.2	146.6	78.3	68.3
Shares in real estate company	–	–	–	44.3	44.3	–
Reinsurance arrangements	31.3	31.3	–	38.9	38.9	–
Cash and cash equivalents	10.6	5.2	5.4	26.2	24.3	1.9
Liabilities	–	–	–	–44.3	–44.3	–
Other	8.9	7.3	1.6	6.2	6.2	–
Plan assets on December 31	**399.0**	**207.3**	**191.7**	**448.1**	**221.3**	**226.8**

The service costs (including past service costs) are reported in earnings before operating hedges according to the allocation of employees to the respective functional area. Net interest expense or income is reported in net interest.

The fair value of plan assets is distributed across the following investment classes: **C.55**

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 securities with a carrying amount of €21.0 million (2018: €17.7 million) that are not traded on an active market. There is no active market for reinsurance arrangements or shares in the real estate company.

K+S Vermögenstreuhänder e. V. acquired the shares in the real estate company from K+S AKTIENGESELLSCHAFT at a price of €44.3 million in the 2019 financial year. The main assets held by the real estate company are administrative buildings in Germany that are used by K+S under a long-term lease on an arm's length basis. The purchase price liability of €44.3 million reduces the value of plan assets accordingly.

In the previous year, own financial instruments were also held in an amount of €3.0 million.

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. **C.57**

The previous year's analysis identified the following values: **C.58**

Table **C.56** shows the maturities of undiscounted payments of pensions and similar obligations that are expected in subsequent years: **C.56**

EXPECTED PAYMENTS OF PENSIONS AND SIMILAR OBLIGATIONS **C.56**

in € million	Dec. 31, 2018	Dec. 31, 2019
Up to 1 year	28.6	29.3
Between 1 and 5 years	114.6	117.7
Between 5 and 10 years	145.0	149.9
More than 10 years	946.2	884.1
Total	**1,234.4**	**1,181.0**

SENSITIVITY ANALYSIS AS OF DEC. 31, 2019 C.57

in € million	Change in assumption	Change in present value of obligations Total	Germany Pensions	Other countries Pensions	Other countries Pension-related obligations
Discount rate	+100 basis points	–94.3	–47.5	–29.2	–17.6
Discount rate	–100 basis points	120.9	62.4	36.4	22.1
Expected annual rise in income	+50 basis points	1.7	0.5	1.2	–
Expected annual rise in income	–50 basis points	–1.8	–0.5	–1.3	–
Expected annual rise in pensions	+50 basis points	33.6	19.9	13.7	–
Expected annual rise in pensions	–50 basis points	–29.7	–18.0	–11.7	–
Medical cost trend	+50 basis points	9.1	–	–	9.1
Medical cost trend	–50 basis points	–8.1	–	–	–8.1
Life expectancy	+1 year	26.6	14.3	7.3	5.0
Life expectancy	–1 year	–26.3	–14.0	–7.3	–5.0

SENSITIVITY ANALYSIS OF DEC. 31, 2018 C.58

in € million	Change in assumption	Change in present value of obligations Total	Germany Pensions	Other countries Pensions	Other countries 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

As of December 31, 2019, the weighted average duration of obligations in Germany was 16 years (2018: 14 years), for pension obligations outside Germany it was 14 years (2018: 13 years), and for pension-related obligations outside Germany it was 19 years (2018: 18 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 account, especially in Germany. The aim is to service the pension payments from current plan asset income.

In the 2020 financial year, a cash outflow of €2.8 million (2019: €2.9 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 recognized, 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.

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.

As a result of the termination of regular memberships, no further contributions are to be paid into the BASF pension fund. In the past, special contributions were made in a small number of cases (e.g., due to a decrease in the discount rate at the BASF pension fund). Further special contributions in the future cannot be ruled out.

Moreover, the secondary liability governed by the German Company Pension Plan Act (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 2020.

In total, pension expenses are as follows for the period under review: **C.59**

In addition, contributions of €86.9 million (2018: €88.2 million) were paid to government pension funds.

(21) PROVISIONS FOR MINING OBLIGATIONS

Provisions for mining obligations are recognized 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. **C.60**

The amount of the provisions to be recognized 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. The expected settlement dates largely depend on the remaining useful lives of the locations. Since some of them 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.

The vast majority of mining provisions relate to German sites. The provision amounts are based on the settlement amounts discounted to the balance sheet date. In this process, a future price increase of 1.5% is assumed (2018: 1.5%).

PENSION EXPENSE **C.59**

	2018			2019		
in € million	Total	Germany	Other countries	Total	Germany	Other countries
Defined contribution expenses	20.4	2.1	18.3	22.4	2.0	20.4
Defined benefit expenses	11.0	7.8	3.2	15.7	12.3	3.4
Pension expense (recognized in earnings after operating hedges)	**31.4**	**9.9**	**21.5**	**38.1**	**14.3**	**23.8**

PROVISIONS FOR MINING OBLIGATIONS C.60

in € million	2018 Total	2018 of which current	2019 Total	2019 of which current
Mine and shaft backfilling	373.9	0.6	456.7	0.5
Maintenance of tailings piles	563.8	–	365.6	–
Mining damage	35.0	6.4	32.9	5.3
Renaturation	42.1	–	53.1	–
Other	7.6	0.3	8.4	0.3
Provisions for mining obligations	**1,022.4**	**7.3**	**916.7**	**6.1**

In determining the discount rate for Europe, it must be taken into account that mining obligations are based on very long-term, sometimes perpetual obligations. No euro interest rates for matching maturities are available for these obligations on the capital market. The practice used so far of extrapolating from the interest rates available on the market – which, compared to the obligations in perpetuity, are very short-term euro interest rates – would result in an inappropriate real interest rate (discount rate less inflation rate) of almost zero. For this reason, the method used to determine discount rates was modified as of December 31, 2019.

The yields of German government bonds available on the capital market will now be used for remaining maturities of up to 30 years. The long-term average of the yields of German government bonds are used for the very long-term portion of euro-denominated obligations without available capital market interest rates (remaining maturities of more than 30 years). The standard euro discount rate, which has been calculated retrospectively for all payment dates, is 3.5% (2018: 3.3%) for all remaining maturities of mining obligations in EU countries. The year-on-year increase in the discount factor is due to an increase in the mean duration of the obligations. An increase in the discount rate by 0.1 percentage points would reduce the present value of the provision by around €30 million, while a corresponding decrease would increase it by around €32 million.

(22) NON-CURRENT PERSONNEL OBLIGATIONS

The carrying amount of provisions for anniversary bonuses is €36.4 million (2018: €31.4 million) and therefore represents a significant item under non-current personnel obligations. They are recognized 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 0.8% (2018: 2.0%) with an anticipated annual increase in salaries and wages of 1.8% (2018: 1.8%). In addition, plan assets for obligations from working lifetime accounts amounted to €35.2 million (2018: €20.1 million), which are financed by plan assets amounting to €44.3 million (2018: €19.3 million).

(23) CURRENT PROVISIONS

Obligations arising from sales transactions relate primarily to discounts and price concessions; provisions for outstanding invoices are recognized 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 80;
'Remuneration report,' page 142

(24) FINANCIAL LIABILITIES

The following tables show the liquidity analysis of financial liabilities in the form of contractually agreed, undiscounted cash flows: **C.61, C.62**

The bonds and promissory note loans issued break down as follows: **C.63**

LIQUIDITY ANALYSIS OF NON-DERIVATIVE FINANCIAL LIABILITIES IN 2019 **C.61**

		Cash flows			
in € million	2019 carrying amount	2019 total	Remaining maturity < 1 year	Remaining maturity > 1 year and < 5 years	Remaining maturity > 5 year
Financial liabilities	3,399.0	3,636.4	603.5	3,032.9	–
– of which bonds	2,241.7	2,465.9	92.2	2,373.7	–
– of which promissory note loans	439.2	451.5	5.1	446.4	–
– of which commercial paper	434.9	435.0	435.0	–	–
– of which liabilities to banks	269.7	270.5	57.7	212.8	–
– of which other financial liabilities	13.5	13.5	13.5	–	–
Trade payables	241.4	241.4	239.8	1.0	0.6
Lease liabilities	386.6	446.5	98.6	217.4	130.5
Other non-derivative financial liabilities	70.2	70.2	70.2	–	–
Non-derivative financial liabilities	**4,097.2**	**4,394.5**	**1,012.1**	**3,251.3**	**131.1**

LIQUIDITY ANALYSIS OF NON-DERIVATIVE FINANCIAL LIABILITIES IN 2018 **C.62**

		Cash flows			
in € million	2018 carrying amount	2018 total	Remaining maturity < 1 year	Remaining maturity > 1 year and < 5 years	Remaining maturity > 5 year
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
Lease liabilities[1]	164.2	187.7	16.9	119.7	51.1
Other non-derivative financial liabilities	70.5	70.5	70.5	–	–
Non-derivative financial liabilities	**3,757.7**	**4,101.8**	**949.8**	**2,490.5**	**661.5**

[1] Lease liabilities in the 2018 financial year resulted from finance leases within the meaning of IAS 17.

ISSUED BONDS[1] AND PROMISSORY NOTE LOANS **C.63**

	2018		2019	
	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%
2013/21 bond	500	4.125%	500	4.125%
2017/23 bond	625	2.625%	625	2.625%
2018/24 bond	600	3.250%	600	3.250%
Promissory note loans (fixed, mature 2019–23)	482	Average around 1%	327	Average around 1.2%
Promissory note loans (floating, mature 2019–22)	283	Basis EURIBOR	113	Basis EURIBOR

[1] In addition, there is a USD bond taken assumed 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.

Tables **C.64** and **C.65** show the Group's liquidity analysis for derivative financial liabilities. The table is based on non-discounted gross cashflows which are settled on a gross basis. **C.64, C.65**

The agreements governing liabilities to banks in an amount of €160 million and the syndicated line of credit of €800 million also include, among other obligations, compliance with a financial covenant that is customary in the market, which specifies a certain ratio of net liabilities (incl. all lease liabilities) to EBITDA for the respective quarterly financial statements. If this covenant is exceeded as of any of the agreed reporting dates, the lenders have the right to call the loans for repayment. Under normal circumstances, the other financial liabilities can also be called on the basis of a cross-default clause. The covenant was met throughout the year under review.

LIQUIDITY ANALYSIS OF DERIVATIVE FINANCIAL LIABILITIES IN 2019 **C.64**

		Cash flows			
in € million	2019 carrying amount	2019 total	Remaining maturity < 1 year	Remaining maturity > 1 year and < 5 years	Remaining maturity > 5 year
Currency derivatives	–12.3	–11.1	–10.8	–0.3	–
Payment obligation[1]		–673.9	–668.4	–5.5	–
Payment claim[1]		662.8	657.6	5.3	–

[1] Translation of payment transactions in foreign currency at the spot rate.

LIQUIDITY ANALYSIS OF DERIVATIVE FINANCIAL LIABILITIES IN 2018 **C.65**

		Cash flows			
in € million	2018 carrying amount	2018 total	Remaining maturity < 1 year	Remaining maturity > 1 year and < 5 years	Remaining maturity > 5 year
Currency derivatives	–26.6	–7.8	–7.7	–0.2	–
Payment obligation[1]		–1,623.1	–1,546.0	–77.1	–
Payment claim[1]		–1,615.3	–1,538.4	–76.9	–

[1] Translation of payment transactions in foreign currency at the spot rate.

(25) FURTHER DISCLOSURES ON FINANCIAL INSTRUMENTS

The following table shows the carrying amounts and fair values of the Group's financial instruments: **C.66**

CARRYING AMOUNTS AND FAIR VALUES OF FINANCIAL INSTRUMENTS **C.66**

		Dec. 31, 2018		Dec. 31, 2019	
in € million	Measurement category in accordance with IFRS 9	Carrying amount	Fair value	Carrying amount	Fair value
Shares in affiliated companies and other equity investments	Fair value through other comprehensive income	88.8	88.8	101.0	101.0
Equity investments	Fair value through profit or loss	–	–	5.0	5.0
Loans	Amortized cost	0.3	0.3	0.2	0.2
Financial investments		**89.1**	**89.1**	**106.2**	**106.2**
Trade receivables	**Amortized cost**	**836.7**	**836.7**	**724.7**	**724.7**
Derivatives with positive fair values	Fair value through profit or loss	13.0	13.0	18.5	18.5
Other non-derivative financial assets	Amortized cost	109.4	109.4	147.5	147.5
Other financial assets		**122.4**	**122.4**	**166.0**	**166.0**
Securities and other financial assets	**Amortized cost**	**11.2**	**11.2**	**11.4**	**11.4**
Securities and other financial assets	**Fair value through other comprehensive income**	**7.0**	**7.0**	**7.0**	**7.0**
Cash and cash equivalents	**Amortized cost**	**167.6**	**167.6**	**321.8**	**321.8**
Financial liabilities	**Amortized cost**	**3,283.3**	**3,315.2**	**3,398.9**	**3,535.6**
Trade payables	**Amortized cost**	**239.7**	**239.7**	**241.3**	**241.3**
Derivatives with negative fair values	Fair value through profit or loss	32.3	32.3	15.0	15.0
Other non-derivative financial liabilities	Amortized cost	70.6	70.6	70.2	70.2
Lease liabilities [1]	IFRS 7	164.2	164.2	386.6	386.6
Other financial liabilities		**267.1**	**267.1**	**471.9**	**471.9**

[1] Lease liabilities in the 2018 financial year resulted from finance leases within the meaning of IAS 17.

The carrying amounts of the financial instruments, aggregated according to IFRS 9 measurement categories, are as follows: **C.67**

CARRYING AMOUNTS OF FINANCIAL INSTRUMENTS AGGREGATED BY MEASUREMENT CATEGORY **C.67**

in € million	2018	2019
Measurement category in accordance with IFRS 9		
Fair value through other comprehensive income	95.8	108.0
Amortized cost (financial assets)	1,125.2	1,205.6
Fair value through profit or loss (financial assets)	13.0	23.5
Amortized cost (financial liabilities)	3,593.6	3,710.4
Fair value through profit or loss (financial liabilities)	32.3	15.0

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 calculated on the basis of input factors that cannot be derived from observable market data.

Tables **C.68** and **C.69** show the assets and liabilities measured at fair value.

ASSETS AND LIABILITIES MEASURED AT FAIR VALUE **C.68**

	Measurement category in accordance with IFRS 9				2019
in € million		Level 1	Level 2	Level 3	Total
Assets		**–**	**25.5**	**106.0**	**131.5**
Shares in affiliated companies and other equity investments	Fair value through other comprehensive income	–	–	101.0	101.0
Equity investments	Fair value through profit or loss	–	–	5.0	5.0
Derivative financial instruments	Fair value through profit or loss	–	18.5	–	18.5
Securities and other financial assets	Fair value through other comprehensive income	–	7.0	–	7.0
Equity and Liabilities		**–**	**15.0**	**–**	**15.0**
Derivative financial instruments	Fair value through profit or loss	–	15.0	–	15.0

ASSETS AND LIABILITIES MEASURED AT FAIR VALUE **C.69**

	Measurement category in accordance with IFRS 9				2018
in € million		Level 1	Level 2	Level 3	Total
Assets		**–**	**20.0**	**88.8**	**108.8**
Shares in affiliated companies and other 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 assets	Fair value through other comprehensive income	–	7.0	–	7.0
Equity and Liabilities		**–**	**32.3**	**–**	**32.3**
Derivative financial instruments	Fair value through profit or loss	–	32.3	–	32.3

The shares in affiliated companies and other long-term equity investments shown in the tables have not been consolidated due to immateriality. They are always held for the long term and not for trading. For this reason, when permitted, the OCI option was exercised, which allows changes in fair value to be recognized 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: **C.70**

RECONCILIATION OF SHARES IN NON-CONSOLIDATED AFFILIATED COMPANIES AND OTHER EQUITY INVESTMENTS (LEVEL 3) **C.70**

in € million	2018	2019
As of January 1	72.2	88.8
Additions	6.7	9.9
Disposals	0.8	2.4
Measurement gains/losses (other comprehensive income)	10.7	16.3
Disposal gains/losses (other comprehensive income)	–	–6.6
Exchange differences	–	–
Transfers (from/to Level 3)	–	–
As of December 31	**88.8**	**106.0**

The fair values of shares in affiliated companies and other equity investments break down as follows: **C.71**

BREAKDOWN OF NON-CONSOLIDATED SHARES IN AFFILIATED COMPANIES AND OTHER EQUITY INVESTMENTS **C.71**

in € million	2018	2019
Subsidiaries in Germany	8.1	7.1
Subsidiaries in Europe (excluding Germany)	49.5	29.6
Subsidiaries in rest of world	25.8	53.7
Joint ventures, associates, and other equity investments	5.5	15.6
Total	**88.8**	**106.0**

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. Recognized 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).

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 leases, we assume that carrying amounts correspond to fair values, because differences between market interest rates and discount rates are not material.

Table **C.72** shows the net gains/losses arising from financial instruments: **C.72**

NET GAINS/LOSSES ON FINANCIAL INSTRUMENTS **C.72**

Measurement category in accordance with IFRS 9		
in € million	2018	2019
Fair value through other comprehensive income	14.9	12.9
Amortized cost (financial assets)	4.5	5.1
Fair value through profit or loss	–36.7	2.6
Amortized cost (financial liabilities)	–29.6	–9.4

Net gains/losses on financial assets measured at fair value through other comprehensive income primarily comprise dividend distributions and measurement gains or losses on non-consolidated shares in affiliated companies and other equity investments. Net gains/losses on financial assets measured at amortized cost mainly include the effects of currency translation and changes in allowances. Net gains/losses on financial assets and liabilities measured at fair value through profit or loss consist mainly of effects arising from the fair value measurement and realization of derivative financial instruments. Net gains/losses on financial liabilities measured at amortized 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: **C.73**

LIQUIDITY RISK

NET INTEREST INCOME/EXPENSE FROM FINANCIAL INSTRUMENTS **C.73**

in € million	2018	2019
Interest income	11.4	8.9
Interest expenses before capitalization of borrowing interest	104.3	109.1
Capitalized borrowing costs	17.5	14.3
Interest expenses after capitalization of borrowing interest	86.8	94.8

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. 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 determined in our liquidity planning. Available liquidity amounted to €1,140.2 million as of December 31, 2019 (2018: €1,187.0 million); it consisted of short-term investments and cash and cash equivalents, as well as the undrawn portion of our syndicated credit line, which matures in 2024.

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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.

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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 a sensitivity analysis. This analysis is based on the following assumptions:

+ The effect on earnings or equity identified by way of a sensitivity analysis relates to the total as of the balance sheet date and demonstrates the hypothetical effect over one year.
+ Changes in market interest rates for primary financial instru-

ments 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 amortized 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 of the balance sheet date.

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There were floating-rate liabilities as of the reporting date.

An increase in the reference interest rate by one percentage point would have led to further interest charges of €1.8 million for non-current floating-rate liabilities as of the balance sheet date (2018: €2.2 million). The purchased interest rate caps would have reduced this effect to an interest charge of €1.3 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 the US dollar), the carrying amount of the net position of foreign currency receivables and liabilities would have increased or decreased by €22.3 million (2018: €32.1 million) through profit or loss.

As of 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.

(26) DISCLOSURES 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 optimize financing capability, and reduce financial risk.

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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 financial liabilities/EBITDA ratio, net debt/equity and the equity ratio. **C.74**

KEY INDICATORS OF THE CAPITAL STRUCTURE[1] **C.74**

in € million	2015	2016	2017	2018	2019
Net financial liabilities/EBITDA[2,3] ratio	1.3	4.6	5.2	5.3	4.9
Net debt/equity (%)	55.9	78.7	99.5	107.2	101.6
Equity ratio	51.9	47.2	42.7	41.6	42.4

[1] See "Definition of financial indicators used" on page 246.
[2] EBITDA is derived in the "Notes to the income statement and statement of comprehensive income" on page 184.
[3] EBITDA is defined as earnings before interest, taxes, depreciation, and amortization, adjusted for depreciation and amortization of own work capitalized recognized directly in equity, gains/losses from fair value changes arising from operating anticipatory hedges still outstanding and changes in the fair value of operating anticipatory hedges recognized in prior periods.

The managed capital is as follows as of the reporting date: **C.75**

MANAGED CAPITAL		C.75
in € million	2018	2019
Equity	4,144.1	4,495.1
Non-current liabilities	4,528.4	4,721.1
Current liabilities	**1,293.7**	**1,376.0**

(27) CONTINGENT LIABILITIES AND OTHER FINANCIAL OBLIGATIONS

In the K+S GROUP, general business activities are associated with a number of risks, for which provisions have been recognized, provided that the conditions for recognition according to IAS 37 have been met. In addition, there is an obligation to disclose contingent liabilities. Contingent liabilities are possible obligations, which are not recognized in the balance sheet, because it is less probable that they will be used. In 2019, contingent liabilities amounted to around €17.3 million (2018: around €20.6 million), resulting mainly from legal risks.

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In 2019, liabilities from uncompleted capital expenditure projects totaled €210.3 million (2018: €178.3 million). They related almost exclusively to uncompleted capital expenditure projects in property, plant and equipment. For additional financial liabilities due to leasing, see the disclosures in Note (28).

(28) LEASES

The K+S GROUP acts as lessee in a number of different leases. The material leases relate to technical equipment and machinery – such as supply networks, dedicated railway sidings, railway goods carriages, and combined heat and power units – ships, vehicles, office premises, and storage capacity. Information on changes in right-of-use assets arising from these leases can be found in the "Statement of changes in non-current assets" on pages 164 through 165. New leases recognized in the year under review include €23.3 million for the new lease of administrative buildings entered into with K+S Vermögenstreuhänder e.V. The maturity breakdown of the corresponding lease liabilities is provided in Note (24).

The impact on the income statement for financial year 2019 is summarized in Table **C.76**

IMPACT OF LEASES ON THE INCOME STATEMENT	C.76
in € million	2019
Depreciation of right-of-use assets	57.8
Interest expense on lease liabilities	15.3
Expenses for short-term leases	12.6
Expenses for low value leases	0.5
Variable lease expenses	3.0

In the 2019 financial year, cash outflows for leases totaled €87.2 million.

Moreover, the K+S GROUP entered into a lease that has not yet commenced, but will in future lead to nominal cash outflows of around €8.3 million over a lease term of 15 years. The maturity breakdown of the cash outflows resulting from this lease is shown in Table **C.77**.

CASH OUTFLOWS ATTRIBUTABLE TO MATERIAL FUTURE LEASES (NOMINAL VALUES)	C.77
in € million	2019
– due in the following year	–
– due within 2-5 years	1.7
– due after 5 years	6.5
Total	**8.3**

In addition, there are future lease obligations for short-term leases.

K+S has leases with variable lease installments, which are recognized in profit or loss. Variable lease payments account for 4.17% of the volume of fixed lease payments. K+S enters into leases with variable lease installments especially for storage capacity and transport arrangements.

Potential cash outflows of €22.7 million were not included in the calculation of lease liabilities within the meaning of IFRS 16, because it is not reasonably certain that the relevant leases will be extended or because it is reasonably certain that the relevant leases will be terminated.

In the 2018 financial year, certain technical equipment and machinery, such as supply networks, dedicated railway sidings, railway goods carriages, and combined heat and power units, were used and capitalized as finance leases pursuant to IAS 17, which was applicable at the time, because beneficial ownership of the leased assets was attributable to the K+S GROUP. Information on the affected items can be found in the "Statement of changes in non-current assets" on pages 166 through 167.

Table **C.78** shows the maturities of the corresponding payment obligations under finance leases within the meaning of IAS 17 as of the end of financial year 2018: **C.78**

LEASING OBLIGATIONS FROM FINANCE LEASES 2018 C.78

in € million	Minimum lease payments	Included interest share	Leasing obligations
– due in the following year	16.9	1.2	15.7
– due within 2–5 years	119.7	12.0	107.7
– due after 5 years	51.1	10.3	40.8
Total	**187.7**	**23.5**	**164.2**

In addition, the K+S GROUP acted as lessee in operating leases within the meaning of IAS 17 in the 2018 financial year. Given the relevant contractual arrangements, the assets underlying these leases were not recognized as non-current assets. Operating lease expenses incurred in 2018 amounted to €53.2 million. At the end of financial year 2018, the nominal amounts of future minimum lease payments from non-cancelable operating leases were allocated to future periods as shown in Table **C.79**.

The main operating leases related to vehicles, office premises, storage capacity, technical equipment and machinery, and railway goods carriages.

OBLIGATIONS FROM OPERATING LEASES (NOMINAL VALUES)[1] C.79

in € million	2018
– due in the following year	42.3
– due within 2–5 years	103.0
– due after 5 years	78.8
Total	**224.0**

[1] The operating lease obligations (nominal values) of financial year 2018 have been adjusted by €4.0 million following the initial application of IFRS 16.

Both finance and operating leases sometimes contained lease extension and/or purchase options and price adjustment clauses. For the operating leases, the price of exercising the purchase option was not significantly lower than the fair value of the assets concerned at the time the option could be exercised.

NOTES TO THE CASH FLOW STATEMENT

The cash flow statement is presented on page 160. No cash transactions from discontinued operations had to be included.

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(29) 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.

Interest paid in the reporting period amounted to €102.2 million (2018: €91.6 million).

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).

RECONCILIATION OF NET CASH FLOWS FROM/(USED IN) FINANCING ACTIVITIES C.80

in € million	Carrying amount Jan. 1, 2019	Initial application of IFRS 16	Carrying amount on Jan. 1, 2019 (adjusted)	Cash flows from financing activities (net)	Changes in the scope of consolidation	Lease additions/ disposals	Changes in exchange rates	Other effects	Carrying amount Dec. 31, 2019
Bonds	2,240.5	–	2,240.5	–	–	–	0.4	0.8	2,241.7
Promissory note loans	764.3	–	764.3	–325.5	–	–	–	0.4	439.2
Commercial paper	179.0	–	179.0	256.0	–	–	–	–0.1	434.9
Liabilities to banks	99.7	–	99.7	170.6	–	–	0.1	–0.6	269.7
Other financial liabilities	–	–	–	13.5	–	–	–	–	13.5
Total financial liabilities (as recognized in balance sheet)	3,283.5	–	3,283.5	114.6	–	–	0.5	0.5	3,399.0
Liabilities from leases	164.2	216.1	380.3	–55.8	–	45.1	11.6	5.4	386.6
Reimbursement claim MORTON Salt bond	–20.2	–	–20.2	–	–	–	–0.4	0.2	–20.4
Total	**3,427.5**	**216.1**	**3,643.6**	**58.8**	**–**	**45.1**	**11.7**	**6.1**	**3,765.2**

RECONCILIATION OF NET CASH FLOWS FROM/(USED IN) FINANCING ACTIVITIES C.81

in € million	Carrying amount Jan. 1, 2018	Cash flows from financing activities (net)	Changes in the scope of consolidation	Lease additions/ disposals[1]	Changes in exchange rates	Other effects	Carrying amount Dec. 31, 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 leases[1]	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
Total	**3,175.1**	**254.4**	**–**	**0.5**	**–6.0**	**3.5**	**3,427.5**

[1] Lease liabilities in the 2018 financial year resulted from finance leases within the meaning of IAS 17.

NET CASH AND CASH EQUIVALENTS C.82

in € million	2018	2019
Cash and cash equivalents (as recognized in balance sheet)	167.6	321.8
Cash invested with affiliated companies	–	–
Overdrafts	–	–0.7
Cash deposits received from affiliated companies	–5.4	–4.8
Net cash and cash equivalents	**162.2**	**316.3**

Dividend payments and profit transfers from non-consolidated companies totaled €3.1 million in the reporting period (2018: €4.4 million).

As of the balance sheet date, there were liabilities from leases as well as trade payables and current provisions totaling €344.4 million (2018: €224.0 million) resulting from noncash additions to property, plant and equipment. This is largely attributable to the initial application of IFRS 16 Leases.

SEGMENT REPORTING DISCLOSURES

Segment reporting is presented on page 162.

(30) DEFINITION OF SEGMENTS

Since financial year 2019, the operating business has been managed in the two operating units, Europe+ and Americas. This means that, as from this financial year, these operating units represent the segments within the meaning of IFRS 8. Prior-year figures have been adjusted.

The Europe+ operating unit comprises the former Potash and Magnesium Products business unit, including Bethune, the former ESCO, and the former Complementary Activities (Waste Management and Recycling, Animal hygiene products, the former K+S TRANSPORT, CHEMISCHE FABRIK KALK). The operating unit combines the production and marketing of potash fertilizers and fertilizer specialities as well as potash and magnesium compounds for technical, industrial, and pharmaceutical applications. In addition, the Salt business unit encompasses the production and marketing of salt for consumer products and the food processing industries, industrial salt and salt for chemical use, de-icing salt, and sodium chloride brine. Other activities performed by the operating unit include recycling and waste disposal in mines, CATSAN and THOMAS granulation, trading in basic chemicals, and the provision of logistics services.

The Americas operating unit comprises primarily MORTON Salt, K+S WINDSOR SALT, and K+S SALT LA. The operating unit produces and markets salt for consumer products, salt for food processing, industrial salt, and salt for chemical use, de-icing salt, and sodium chloride brine.

The accounting policies applied to determine the segment information are the same as those of the K+S GROUP.

(31) 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 is used by the K+S GROUP as the most important internal profitability variable and performance indicator. EBITDA is defined as earnings before interest, taxes, depreciation, and amortization, adjusted for depreciation and amortization of own work capitalized recognized directly in equity, gains/losses from fair value changes arising from operating anticipatory hedges still outstanding, and changes in the fair value of operating anticipatory hedges recognized in prior periods (see "Notes to the income statement and statement of comprehensive income" on page 183).

Segment profit or loss is presented on a consolidated basis. Intra-segment supplies of goods and services are consolidated.

(32) 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.

(33) ADDITIONAL SEGMENT DISCLOSURES

OPERATING UNIT EUROPE+

Provisions amounting to €45.0 million (2018: €37.5 million) were reversed in the reporting period for unused obligations. In the 2019 financial year, impairment losses of €7.6 million were recognized on property, plant and equipment and reported in other operating expenses. No impairment losses had been recognized in the previous year.

OPERATING UNIT AMERICAS

Provisions amounting to €12.5 million (2018: €8.0 million) were reversed in the reporting period for unused obligations.

(34) NOTES TO THE RECONCILIATION OF EBITDA

The reconciliation of segment totals to the figures in the financial statements of the K+S GROUP breaks down as follows: **C.83**

RECONCILIATION OF EBITDA[1] **C.83**

in € million	2018	2019
Segment total	**665.1**	**667.0**
Holding company activities	221.5	102.7
Consolidation effects	–280.3	–129.3
K+S total	**606.3**	**640.4**

[1] EBITDA is defined as earnings before interest, taxes, depreciation, and amortization, adjusted for depreciation and amortization of own work capitalized recognized directly in equity, gains/losses from fair value changes arising from operating anticipatory hedges still outstanding, and changes in the fair value of operating anticipatory hedges recognized in prior periods.

(35) REVENUES BY REGION

The breakdown of the K+S GROUP's revenues by region is as follows: **C.84**

REVENUES BY REGION **C.84**

in € million	2018	2019
Europe	1,655.7	1,635.6
– of which Germany	602.8	586.8
North America	1,398.3	1,453.0
– of which USA	1,031.6	1,118.0
South America	523.4	531.7
Asia	364.6	347.5
Africa, Oceania	97.1	102.9
Total revenues	**4,039.1**	**4,070.7**

The allocation is based on the registered office of customers. No single customer accounted for more than 10% of total revenues in the 2019 and 2018 financial years.

(36) NON-CURRENT ASSETS BY REGION

The non-current assets of the K+S GROUP comprise intangible assets, property, plant and equipment and investment properties. The regional breakdown is as follows: **C.85**

The allocation is based on the location of the relevant assets.

NON-CURRENT ASSETS BY REGION **C.85**

in € million	2018	2019
Europe	1,861.2	1,977.1
– of which Germany	1,803.4	1,903.1
North America	5,284.4	5,685.5
– of which USA	1,078.8	1,160.0
– of which Canada	4,169.7	4,482.4
South America	515.7	535.7
– of which Chile	502.8	518.8
Asia	10.6	10.0
Africa, Oceania	4.7	6.5
Total assets	**7,676.6**	**8,214.8**

OTHER DISCLOSURES

SHARE-BASED PAYMENT PROGRAM (IFRS 2)

The K+S GROUP's share-based payment program is a cash-settled share-based payment plan that forms a component of performance-related pay (LTI II program). The share-based payment program (LTI II) went live on January 1, 2018. A new program begins on January 1, of each year. Eligible to join the program are non-pay-scale managers and specialists who have an active contract of employment as at January 1, of the year concerned, as well as all members of the Board of Executive Directors.

'Remuneration report,' page 142

The program has a three-year observation period. 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 on a linear basis by the same percentage. The 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 program by the degree of target achievement of the respective completed program.

Payment is made in April of the year following the end of the program. 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 €7.0 million (2018: €3.8 million) were recognized as of December 31, 2019. Personnel expenses from additions to provisions in 2019 amounted to €3.4 million (2018: €3.8 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 222.

The following table shows K+S GROUP transactions with non-consolidated subsidiaries in the reporting period. The transactions were conducted at arm's length. **C.86**

TRANSACTIONS WITH NON-CONSOLIDATED SUBSIDIARIES **C.86**

in € million	2018	2019
Trade revenues	24.4	47.1
Goods and services received	25.7	22,1
Income from dividend payments and profit transfers	4.3	3.2
Other income	0.2	0.1
Other expenses	1.4	3.3

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.

As of December 31, 2019, the outstanding balances with non-consolidated subsidiaries were as follows: **C.87**

BALANCES WITH NON-CONSOLIDATED SUBSIDIARIES **C.87**

in € million	2018	2019
Receivables from affiliated companies	6.5	18.6
– of which banking receivables	–	–
Liabilities to affiliated companies	10.6	10.9
– of which banking receivables	5.4	4.8

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 centralized 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 €2.9 million (2018: €2.8 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. **C.88**

RELATED PARTY DISCLOSURES (IAS 24) **C.88**

in € million	2018	2019
Short-term benefits	3.6	3.1
Post-employment benefits	2.3	2.6
Other long-term benefits	–	–
Termination benefits of the employment relationship	–	–
Share-based payment	0.6	0.7
Other transactions with related persons	2.0	2.0

The remuneration system for the Board of Executive Directors has the following elements:

+ Regular monthly payments (fixed salary) to which noncash benefits are added
+ Performance-related one-off payment (STI incl. performance factor)
+ Long-term incentive (LTI) program

The total remuneration of the Board of Executive Directors related to three members in the year under review, all of whom were in office for the whole year. In the previous year, the Board had four members, three of whom were in office for the whole year.

The individual remuneration received by the members of the Board of Executive Directors in the 2019 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.

A member of the family of a Supervisory Board member is employed by the K+S GROUP. Remuneration is paid in accordance with the internal remuneration guidelines of the K+S GROUP and corresponds to the usual remuneration of individuals in comparable positions.

The individual remuneration received by the members of the Supervisory Board in the 2019 financial year is disclosed in the remuneration report section of the combined management report on page 153.

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 105; this list is also part of the Notes to the consolidated financial statements.

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 101; this list is also part of the Notes to the consolidated financial statements.

SHARES HELD IN K+S AKTIENGESELLSCHAFT

On November 11, 2019, 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 3.01% of the Company. On January 2, 2019, DWS Investment GmbH, Frankfurt (Germany), notified us that it now holds 5.69% of the Company. Until the end of February 2020, no other shareholder notified us of shareholdings above the legal reporting threshold of 3%.

DISCLOSURES ON REMUNERATION IN ACCORDANCE WITH SECTION 314 (1) NO. 6 a) HGB **C.89**

in € million	2018	2019
Total remuneration of the Supervisory Board	**2.0**	**2.0**
– of which fixed	2.0	2.0
Total remuneration of the Board of Executive Directors	**5.1**	**7.5**
– of which fixed	2.2	2.2
– of which performance-related	1.4	0.9
– of which share-based payments	1.6	4.4
Total remuneration of former members of the Board of Executive Directors and their surviving dependants	**2.1**	**2.4**

LIST OF SHAREHOLDINGS IN ACCORDANCE WITH SECTION 313 HGB

The figures in Table **C.90** also apply to the previous year. If there are any deviations, these are commented on in a footnote on the company concerned. **C.90**

LIST OF SHAREHOLDINGS IN ACCORDANCE WITH SECTION 313 HGB **C.90**

in %	Company's registered office		Interest held	Share of voting rights
Fully consolidated German companies (11 companies)				
K+S AKTIENGESELLSCHAFT	Kassel	Germany	–	–
Chemische Fabrik Kalk GmbH	Cologne	Germany	100.00	100.00
Deutscher Straßen-Dienst GmbH[2]	Hanover	Germany	100.00	100.00
esco international GmbH[1,2]	Hanover	Germany	100.00	100.00
K+S Baustoffrecycling GmbH[2]	Sehnde	Germany	100.00	100.00
K+S Beteiligungs GmbH[1,2]	Kassel	Germany	100.00	100.00
K+S Holding GmbH[1]	Kassel	Germany	100.00	100.00
K+S Minerals and Agriculture GmbH[1,2]	Kassel	Germany	100.00	100.00
K+S North America Asset Management GmbH	Kassel	Germany	100.00	100.00
K+S Versicherungsvermittlungs GmbH[2]	Kassel	Germany	100.00	100.00
Kali-Union Verwaltungsgesellschaft mbH[1,2]	Kassel	Germany	100.00	100.00
Fully consolidated foreign companies (42 companies)				
Canadian Brine, Ltd.	Pointe-Claire	Canada	100.00	100.00
Compania Minera Punta de Lobos Ltda.	Santiago de Chile	Chile	100.00	100.00
Empresa de Servicios Ltda.	Santiago de Chile	Chile	100.00	100.00
Empresa Maritima S.A.	Santiago de Chile	Chile	99.59	99.59
esco benelux N.V.	Diegem	Belgium	100.00	100.00
esco france S.A.S.	Levallois-Perret	France	100.00	100.00
esco Spain S.L.	Barcelona	Spain	100.00	100.00
Frisia Zout B.V.	Harlingen	Netherlands	100.00	100.00
Glendale Salt Development, LLC	Chicago	USA	100.00	100.00
Inagua General Store, Ltd.	Nassau	Bahamas	100.00	100.00
Inversiones Columbus Ltda.	Santiago de Chile	Chile	100.00	100.00
Inversiones Empremar Ltda.	Santiago de Chile	Chile	100.00	100.00
Inversiones K+S Sal de Chile SpA	Santiago de Chile	Chile	100.00	100.00
K plus S Salt Australia Pty Ltd	Perth	Australia	100.00	100.00
K+S Asia Pacific Pte. Ltd.	Singapore	Singapore	100.00	100.00
K+S Belgium Holding B.V.B.A.	Diegem	Belgium	100.00	100.00
K+S Canada Holdings Ltd.	Vancouver	Canada	100.00	100.00
K+S Chile S.A.	Santiago de Chile	Chile	99.64	99.64
K+S Czech Republic a.s.	Prague	Czech Republic	100.00	100.00
K+S Finance Belgium BVBA	Diegem	Belgium	100.00	100.00
K+S Finance Ltd.	St. Julians	Malta	100.00	100.00

LIST OF SHAREHOLDINGS IN ACCORDANCE WITH SECTION 313 HGB — C.90

in %	Company's registered office		Interest held	Share of voting rights
K+S France S.A.S.	Dombasle-sur-Meurthe	France	100.00	100.00
K+S (Huludao) Magnesium Products Co. Ltd.	Huludao	China	100.00	100.00
K+S Investments Ltd.	St. Julians	Malta	100.00	100.00
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 Maritimos 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
Non-consolidated German companies (7 companies)[3]				
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
Non-consolidated foreign companies (16 companies)[3]				
EzyAgric B.V.	Harlingen	Netherlands	51.00	51.00
Imperial Thermal Products, Inc.	Chicago	USA	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 Fertilizers (India) Private Limited	New Delhi	India	100.00	100.00

LIST OF SHAREHOLDINGS IN ACCORDANCE WITH SECTION 313 HGB C.90

in %	Company's registered office		Interest held	Share of voting rights
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 Minerals and Agriculture (Panama) S.A.	Panama City	Panama	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
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
Associates and joint ventures (5 companies)[4]				
Al Biariq for Fertilizer Plant Co. Ltd.	Riyadh	Saudi Arabia	30.00	30.00
Grainpulse Limited	Kampala	Uganda	44.00	44.00
modal 3 Logistik GmbH	Hamburg	Germany	33.30	33.30
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
Other equity investments (7 companies)				
Fachschule f. Wirtschaft und Technik Gem. GmbH	Clausthal	Germany	9.40	9.40
K+S Real Estate GmbH & Co. KG	Kassel	Germany	10.10	10.10
Lehrter Wohnungsbau GmbH	Lehrte	Germany	6.67	6.67
Nieders. Gesellschaft zur Endablagerung 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

[1] Exemption of section 291 HGB applied.
[2] Exemption of section 264(3) HGB applied.
[3] Not consolidated due to immateriality.
[4] Not equity-accounted due to immateriality.

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 energy law compliance audits and the EMIR audits. The auditor provided tax advisory services amounting to €5 thousand (2018: tax advisory services of €20 thousand and other consultancy services amounting to €10 thousand). **C.91**

AUDITOR'S FEES **C.91**

in € million	2018	2019
Audit services	0.8	0.8
Other assurance services	0.4	0.4
Auditor's fees	**1.2**	**1.2**

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 2019/2020. It is available to shareholders on the K+S GROUP website (www.kpluss.com) and also published in the declaration on corporate governance on page 99.

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, March 4, 2020

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 have audited the consolidated financial statements of K+S AKTIENGESELLSCHAFT, Kassel, and its subsidiaries (the Group), which comprise the consolidated balance sheet as of December 31, 2019, 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 fiscal year from January 1, 2019 to December 31, 2019 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 fiscal year from January 1, 2019 to December 31, 2019. In accordance with German legal requirements, we have not audited the content of the parts of the combined management report detailed in the Annex to the independent auditor's report.

In our opinion, based on the knowledge obtained in the audit,

+ the accompanying consolidated financial statements comply with IFRSs as endorsed by the EU and the supplementary German legal requirements 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 December 31, 2019 as well as its results of operations for the fiscal year from January 1, 2019 to December 31, 2019 in accordance with these requirements and
+ the accompanying combined management report as a whole provides a true and fair 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 declare that our audit has not led to any reservations relating to the compliance 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 the German Generally Accepted Standards on Auditing 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 professional responsibilities applicable in Germany in accordance with these requirements. In addition, pursuant to Article 10(2) lit. f of the 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 fiscal year from January 1 to December 31, 2019. 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.

Below, we present what we consider to be the key audit matters:

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) Audit approach
c) Important findings, if applicable

1. PROVISIONS FOR MINING OBLIGATIONS

a) In the consolidated financial statements of K+S AKTIENGESELLSCHAFT as of December 31, 2019, mining provisions of €910.6 million (equivalent to 8.6% of total Group assets) are reported under non-current provisions (€6.1 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 the estimates and assumptions of the legal representatives with regard to future cost developments and technological innovations. Since estimated values involve an increased risk of incorrect information in financial reporting and the legal representatives' measurement decisions have a direct and significant impact on the consolidated financial statements, we rated this matter as particularly significant.

The disclosures on mining provisions can be found in Section 21 of the Notes to the consolidated financial statements

b) As part of our audit, we critically assessed the changes in provisions recognized in the previous year and analyzed the measures taken by the legal representatives to assess the completeness and valuation of the mining obligations. In this connection, we reviewed the structure and organization of the process for establishing mining provisions with regard to their appropriateness, as well as the effectiveness of the controls relevant to our audit. We prepared our analysis based on our knowledge of the legal, contractual and regulatory requirements, the currentness of the respective mine stabilization concepts and cost rates, and our audit findings from the previous year, and examined the current level of the financial obligations resulting from regulatory requirements and mine sealing concepts based on evidence in the form of correspondence with the mining authorities and individual audit reports. Our review of the discount rate substantiated the parameters applied.

2. IMPAIRMENT OF GOODWILL FOR "SALT AMERICA"

a) In the consolidated financial statements of K+S AKTIENGESELLSCHAFT as of December 31, 2019, goodwill of €681.9 million (equivalent to 6.4% of total Group assets) from the cash-generating unit (CGU) "Salt America" is recognized under the balance sheet item "Goodwill from acquisitions of companies." The Company tests this material item of goodwill for impairment at the level of the CGU on the balance sheet date of the fiscal year. The value in use to be compared to the respective carrying amount is determined using a measurement model based on the discounted cash flow method. The expected future cash flows are discounted using the weighted cost of capital of the respective CGU.

The result of this valuation depends heavily on the estimates and assessments of the legal representatives with regard to future cash flows, the long-term growth rate and the discount rate applied. It was therefore a special focus of our audit.

The disclosures on goodwill can be found in Section 12 of the Notes to the consolidated financial statements.

b) As part of our audit, we examined the structure and organization of the process for measuring goodwill with regard to their appropriateness and the effectiveness of the controls relevant to our audit with the help of valuation specialists. To examine the appropriateness of the future cash flows used in the calculation, we compared, among other things, 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.

Since even relatively small changes in the discount rate applied can have a material impact on the amount of the calculated value in use, we also checked the parameters applied to determine the discount rate – particularly the risk-free interest rate, the market risk premium and the beta factor, including the weighted average cost of capital (WACC) – as well as the assumptions on which the model is based, and reconstructed the calculation method for value in use with regard to consistency and the calculation system.

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 general price trends 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) According to the sensitivity analysis, a 1 percentage point increase in the discount rate to 7.0% would not cause the carrying amount of the goodwill allocated to "Salt America" to exceed its value in use.

3. IMPAIRMENT OF GOODWILL FOR "POTASH AND MAGNESIUM PRODUCTS"

a) In the consolidated financial statements of K+S AKTIENGESELLSCHAFT as of December 31, 2019, goodwill of €16.8 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." This goodwill – and thus the net assets of the CGU as a whole – which largely relates to the capital expenditure in the potash plant in Bethune, Canada, was tested for impairment by the Company as of the balance sheet date. The value in use of the CGU to be compared with the respective carrying amount is determined using a measurement model based on the discounted cash flow method.

The result of this valuation depends heavily on uncertainties with regard to the future cash flows and the discount rate applied. The uncertainties with regard to the cash flows result from the current state of the potash market and price developments, the legal uncertainties with regard to the disposal of saline wastewater from the Werra plant and the risks pertaining to the quality and capacity development at the Bethune site. This matter was therefore a special focus of our audit.

The disclosures on goodwill can be found 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 compared, among other things, 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 price developments. 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 development of production capacities, with market expectations. Since even relatively small changes in the discount rate applied can have a material impact on the amount of the calculated value in use, we also checked the parameters applied to determine the discount rate – particularly the risk-free interest rate, the market risk premium and the beta factor, including the weighted average cost of capital (WACC) – as well as the assumptions on which the model is based, and reconstructed the calculation method 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 general price developments and economic conditions, which cannot be influenced by the Group, we used sensitivity analyses to determine whether the goodwill – and thus the CGU as a whole – 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) A 5.5% reduction in the planned potash price, with otherwise constant parameters, would result in the value in use of the "Potash and Magnesium" CGU corresponding to its carrying amount. A slowdown in the growth rate following the detailed planning phase from 1.5% to 0.5% p.a., or an increase in the discount rate (after tax) from 6.0% to 7.0%, with otherwise constant parameters, would still result in a surplus over the carrying amount.

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,
+ the combined responsibility statement of the legal representatives regarding the consolidated financial statements, the consolidated financial statements and the combined management report in accordance with Sections 264(2) Sentence 3 and 297(2) Sentence 4 of the HGB and Sections 289(1) Sentence 5 and 315(1) Sentence 5 of the HGB.
+ 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 the other information. Consequently, 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 so doing, to consider whether the other information

+ is materially inconsistent with the consolidated financial statements, the combined management report or the knowledge obtained in the audit,
+ or otherwise appears to be materially 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 IFRSs as adopted by the EU and the supplementary German legal requirements 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 a responsibility to disclose matters relating to the Company'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 requirements 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 requirements 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 objective is to obtain reasonable assurance that the consolidated financial statements as a whole are free from material misstatements, whether due to fraud or error, and that 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, complies with German legal requirements, and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and 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 the German Generally Accepted Standards on Auditing promulgated by the Institute of Public Auditors in Germany (IDW) will always detect a material misstatement where such 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 judgment and maintain professional skepticism. 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. In particular, on the basis of sufficient appropriate audit evidence, we evaluate the significant assumptions underlying the forward-looking information provided 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 controls that 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 affect our independence and, where applicable, the related safeguards.

From the matters communicated with those charged with governance we determine those matters that were of most significance in the audit of the consolidated financial statements of the current reporting period and are therefore the key audit matters. We describe these matters in our auditor's report, unless the law or other legal requirements preclude the public disclosure of the matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

OTHER INFORMATION PURSUANT TO ARTICLE 10 EU AUDIT REGULATION

We were appointed by the Annual General Meeting May 15, 2019 to audit the consolidated financial statements. We were engaged by the Supervisory Board on August 22, 2019. We have been engaged continuously as the auditors of K+S AKTIENGESELLSCHAFT, Kassel, since the fiscal 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/Germany, March 4, 2020

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

(Prof. Dr. Frank Beine)	(Dr. Christian H. Meyer)
German Public Auditor	German Public 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 combined non-financial statement contained in the chapter "Non-financial statement" as well as in the chapter "Corporate strategy" in the sections "Sustainability program" and "Stakeholder dialog" 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 combined 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, and
+ the other unaudited parts of the combined management report.

FURTHER INFORMATION

D

INDEPENDENT AUDITOR'S REPORT ON A LIMITED ASSURANCE ENGAGEMENT

To the K+S AKTIENGESELLSCHAFT, Kassel/Germany

OUR ENGAGEMENT

According to our engagement, we have performed a limited assurance engagement on the non-financial declaration of K+S AKTIENGESELLSCHAFT, Kassel/Germany, (hereinafter: "the Company"), which has been combined with the non-financial declaration of the parent company according to Section 289b German Commercial Code (HGB) (hereinafter "combined non-financial declaration"), in accordance with Section 315b German Commercial Code (HGB), for the period from January 1 to December 31, 2019.

It was not part of our engagement to audit references on websites.

RESPONSIBILITY OF THE EXECUTIVE DIRECTORS

The executive directors of K+S AKTIENGESELLSCHAFT, Kassel/Germany are responsible for the preparation of the combined non-financial declaration in accordance with Sections 315b, 315c German Commercial Code (HGB) in connection with Sections 289c to 289e German Commercial Code (HGB).

In preparing the combined non-financial declaration, 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 combined non-financial declaration.

The responsibility of the Company's executive directors includes the selection and application of appropriate methods for preparing the combined non-financial declaration 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 combined non-financial declaration that is free from material misstatements, whether intentional or unintentional.

The accuracy and completeness of the environmental data in the combined non-financial declaration are inherently subject to limits that result from the manner in which data is collected and calculated and assumptions made.

PRACTIONIER'S RESPONSIBILITY

Our responsibility is to express a limited assurance conclusion on the combined non-financial declaration, 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 bylaws 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 combined non-financial declaration 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 November 2019 to March 2020, we conducted, amongst others, the following audit procedures and other activities:

+ Obtaining an understanding of the structure of the sustainability organization and of the stakeholder engagement
+ Interview of the executive directors and relevant employees that participated in the preparation of the combined non-financial declaration about the process of preparation, the measures on hand and precautionary measures (system) for the preparation of the combined non-financial declaration as well as about the information within the combined non-financial declaration
+ Identification of the possible risks of material misstatement within the combined non-financial declaration
+ Analytical assessment of disclosures within the combined non-financial declaration
+ Reconciliation of the disclosures within the combined non-financial declaration 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 combined non-financial declaration of the Company, for the period from January 1 to December 31, 2019 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).

It was not part of our engagement to audit references on websites.

PURPOSE OF THE ASSURANCE STATEMENT

We issue this report on the basis of the engagement agreed with the K+S AKTIENGESELLSCHAFT, Kassel/Germany. The limited assurance engagement has been performed for purposes of the Company and the report is solely intended to inform the supervisory board of the Company 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 K+S AKTIENGESELLSCHAFT, Kassel/Germany and is also restricted under the engagement agreed with the K+S AKTIENGESELLSCHAFT, Kassel/Germany on December 12, 2019 as well as in accordance with the "General engagement terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (German public auditors and German public audit firms)" from January 1, 2017 of the Institut der Wirtschaftsprüfer in Deutschland e.V. We do not assume any responsibility to third parties.

Hanover/Germany, March 4, 2020

DELOITTE GMBH
Wirtschaftsprüfungsgesellschaft

Signed: Prof. Dr. Frank Beine
German Public Auditor

Signed: Dr. Christian H. Meyer
German Public Auditor

ABOUT THIS REPORT

The K+S Annual Report combines the financial and sustainability reporting. The information relates to the reporting period from January 1, 2019 to December 31, 2019 and is currently reported on a yearly basis.

Combined non-financial Statement

Statements on relevant sustainability issues are contained in the combined 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 combined non-financial statement.

AUDIT

Deloitte GmbH Wirtschaftsprüfungsgesellschaft has performed a limited assurance engagement on the non-financial declaration of K+S AKTIENGESELLSCHAFT, Kassel, which has been combined with the non-financial declaration of the parent company according to Section 289b of the German Commercial Code (HGB) (hereinafter "combined non-financial declaration"), in accordance with Section 315b of the German Commercial Code (HGB) and according to ISAE 3000 rev., for the period from January 1 to December 31, 2019.

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 combined non-financial statement.

Reporting standards

At the same time, the 2019 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 prepared in accordance with the internationally recognized guidelines of the Global Reporting Initiative (GRI) in the GRI Standards version, "Core" option. In addition, K+S takes into account the GRI G4 Sector Disclosures: Mining and metals.

'GRI INDEX' and 'UN GLOBAL COMPACT PRINCIPLES,' pages 239–245

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 recognizes 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)

		Boundaries						
K+S Action area	GRI Standards	Exploration	Mining	Production	Logistics	Sales/ marketing	Application	SDGs targets
Health & Safety	GRI 403: Occupational Health and Safety 2018; GRI 416: Customer Health Safety 2016	X	X	X	X		X	8 DECENT WORK AND ECONOMIC GROWTH 8.8
Diversity & Inclusion	GRI 405: Diversity and Equal Opportunity 2016; GRI 406: Non-discrimination 2016		X	X	X	X	X	5 GENDER EQUALITY 5.1 5.5; 8 DECENT WORK AND ECONOMIC GROWTH 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 DECENT WORK AND ECONOMIC GROWTH 8.7
Water	GRI 303: Water and Effluents 2018		X	X			X	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 12.2; 15 LIFE ON LAND 15.1
Waste Management	GRI 306: Effluents and Waste 2016			X				12 RESPONSIBLE CONSUMPTION AND PRODUCTION 12.5
Energy & Climate	GRI 302: Energy 2016; GRI 305: Emissions 2016		X	X	X		X	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 12.2; 13 CLIMATE ACTION 13.1
Sustainable Supply Chains	GRI 308: Supplier Environmental Assessment 2016; GRI 414: Supplier Social Assessment 2016	X	X	X	X	X		8 DECENT WORK AND ECONOMIC GROWTH 8.7
Compliance & Anti-Corruption	GRI 102: General Disclosures 2016; GRI 205: Anti-corruption 2016; GRI 206: Anti-competitive Behavior 2016; GRI 307: Environmental Compliance 2016; GRI 415: Public Policy 2016; GRI 419: Socioeconomic Compliance 2016	X	X	X	X	X	X	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 16.5
Stakeholder Dialogue	GRI 102: General Disclosures 2016 (40-44)	X	X	X	X	X	X	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 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 key figure recording of the indicator for the positive perception of an inclusive work environment by employees is shown in the section on diversity and inclusion. Key figures on human rights due diligence are currently recorded centrally via individual data sheets for all fully consolidated and non-consolidated companies of the K+S GROUP.

The majority of HSE key figures are recorded using a 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 potash and salt 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 222–224

GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES

GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES

GRI Standard		Page	Comment and online addition	UN Global Compact
GRI 101: Foundation 2016				
GRI 102: General Disclosures 2016				
Organizational Profile				
102-1	Name of the organization	Cover back		
102-2	Activities, brands, products, and services	37–48		
102-3	Location of headquarter	Cover back		
102-4	Location of operations	Cover front		
102-5	Ownership and legal form	33–34, 42–43, 222–224		
102-6	Markets served	38–43		
102-7	Scale of the organization	Cover front		
102-8	Information on employees and other workers	80–81	For legal reasons we are not allowed to report on the not published information required by GRI.	6
102-9	Supply chain	46		
102-10	Significant changes to the organization and its supply chain	42–43, 222–224		
102-11	Precautionary principle or approach	119–133		
102-12	External initiatives	55, 236		
102-13	Membership of associations		Available at: www.kpluss.com/stakeholder	
Strategy				
102-14	Statement from senior decision-maker	2–5		
102-15	Key impacts, risks, and opportunities	51–53, 119–133		
Ethics and Integrity				
102-16	Values, principles, standards, and norms of behavior	107		10
102-17	Mechanisms for advice and concerns about ethics	97–98, 107–108		10

GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES

GRI Standard		Page	Comment and online addition	UN Global Compact
Governance				
102-18	Governance structure	99–105		
102-19	Delegating authority	99–118		
102-20	Executive-level responsibility for economic, environmental, and social topics	108–109		
102-21	Consulting stakeholders on economic, environmental, and social topics	53–55		
102-22	Composition of the highest governance body and its committees	99–105		
102-23	Chair of the highest governance body	24–31, 101		
102-24	Nominating and selecting the highest governance body	99–105		
102-25	Conflicts of interest	99–105		
102-26	Role of highest governance body in setting purpose, values, and strategy	24–31, 49–55		
102-27	Collective knowledge of highest governance body	99–105		
102-28	Evaluating the highest governance body's performance	99–105		
102-29	Identifying and managing economic, environmental, and social impacts	51–55, 108–109		
102-30	Effectiveness of risk management processes	108, 119–133		
102-31	Review of economic, environmental, and social topics	83–98		
102-32	Highest governance body's role in sustainability reporting	24–31, 234–235, 236		
102-33	Communicating critical concerns	107–108		
102-34	Nature and total number of critical concerns	107–108		
102-35	Remuneration policies	142–154		
102-36	Process for determining remuneration	142–154		
102-37	Stakeholders' involvement in remuneration	142–154		
102-38	Annual total compensation ratio	81, 147		
102-39	Percentage increase in annual total compensation ratio	142–154		
Stakeholder Engagement				
102-40	List of stakeholder groups	54		
102-41	Collective bargaining agreements	80–81		3
102-42	Identifying and selecting stakeholders	53–55		
102-43	Approach to stakeholder engagement	53–55		
102-44	Key topics and concerns raised	53–55		

GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES

GRI Standard		Page	Comment and online addition	UN Global Compact
Identified Material Aspects and Boundaries				
102-45	Entities included in the consolidated financial statements	169–170, 222–224		
102-46	Defining report content and topic boundaries	51–55, 236–238		
102-47	List of material topics	51–55		
102-48	Restatements of information	236–238		
102-49	Changes in reporting	236–238		
102-50	Reporting period	236		
102-51	Date of most recent report		March 14, 2018	
102-52	Reporting cycle	236		
102-53	Contact point for questions regarding the report	Cover back		
102-54	Claims of reporting in accordance with the GRI Standards	83, 236		
102-55	GRI content index	239–245		
102-56	External assurance	83, 234–235		
GRI 200: Economic Standards				
GRI 103: Management Approach 2016				
103-1	Explanation of the material topic and its boundary	37–48, 51–55, 83–98, 108–109, 236–238		
103-2	The management approach and its components	51–55, 83–98, 108–109		
103-3	Evaluation of the management approach	51–55, 108–109		
GRI 201: Economic Performance 2016				
201-1	Direct economic value generated and distributed	48		
201-2	Financial implications and other risks and opportunities due to climate change		We provide additional information via our participation in CDP https://www.cdp.net/en/saml/new	7
201-3	Defined benefit plan obligations and other retirement plans	176		

GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES

GRI Standard		Page	Comment and online addition	UN Global Compact
GRI 205: Anti-corruption 2016				
205-1	Operations assessed for risks related to corruption	52, 97–98, 107–108		10
205-2	Communication and training about anti-corruption policies and procedures	52, 97–98,		10
GRI 206: Anti-competitive Behavior 2016				
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	107–108		10
GRI 207: Tax 2019				
207-1	Approach to tax	107–108		
207-2	Tax governance, control, and risk management	119–133		
207-3	Stakeholder engagement and management of concerns related to tax	53–55		
207-4	Country-by-country reporting		www.kpluss.com/grouppaymentreport	
GRI 300: Environmental Standards				
GRI 103: Management Approach 2016				
103-1	Explanation of the material topic and its Boundary	51–55, 83–98, 108–109, 236–238		
103-2	The management approach and its components	51–55, 83–98, 108–109		
103-3	Evaluation of the management approach	51–55, 108–109		
GRI 302: Energy 2016				
302-1	Energy consumption within the organization	94–96		7, 8
302-2	Energy consumption outside of the organization	96		7, 8
GRI 303: Water and Effluents 2018				
303-1	Interactions with water as a shared resource	90–92	The determination of waste- and process-water-related effects takes place in the context of the water permit procedure.	7, 8
303-2	Management of water discharge related impacts	90–92	We comply with the applicable laws and operating permits. Information on water protection can be found here: www.kpluss.com/waterprotection	7, 8
303-3	Water withdrawal	90–92		7, 8
303-4	Water discharge	90–92		7, 8

GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES

GRI Standard		Page	Comment and online addition	UN Global Compact
GRI 305: Emissions 2016				
305-1	Direct (Scope 1) GHG emissions	94–96		7, 8
305-2	Energy indirect (Scope 2) GHG emissions	94–96		7, 8
305-3	Other indirect (Scope 3) GHG emissions	94–96	We record our Scope 3 emissions for upstream transport and distribution.	7, 8
305-4	GHG emissions intensity	94		7,8
GRI 306: Effluents and Waste 2016				
MM3	Total amounts of overburden, rock, tailings, and sludges an their associated risks	92–94		
GRI 307: Environmental Compliance 2016				
307-1	Non-compliance with environmental laws and regulations	107–108		7, 8
GRI 308: Supplier Environmental Assessment 2016				
308-1	New suppliers that were screened using environmental criteria	97	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
GRI 400: Social Standards				
GRI 103: Management Approach 2016				
103-1	Explanation of the material topic and its Boundary	51–55, 83–98, 108–109, 236–238		
103-2	The management approach and its components	51–55, 83–98, 108–109		
103-3	Evaluation of the management approach	51–55, 108–109		
GRI 401: Employment 2016				
401-1	New employee hires and employee turnover	80–81	For legal reasons we are not allowed to report on the not published information required by GRI.	6
GRI 402: Labor/Management Relations 2016				
402-1	Minimum notice periods regarding operational changes	80–81		3
MM4	Number of strikes and lock-outs exceeding one week's duration, by country		In 2019, there were no strikes and lock-outs at the K+S GROUP facilities.	3

GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES

GRI Standard		Page	Comment and online addition	UN Global Compact
GRI 403: Occupational Health and Safety 2018				
403-1	Occupational health and safety management system	84–85		
403-2	Hazard identification, risk assessment, and incident investigation	84–85		
403-3	Occupational health services	84–85		
403-4	Worker participation, consultation, and communication on occupational health and safety	84–85		
403-5	Worker training on occupational health and safety	84–85		
403-6	Promotion of worker health	84–85		
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	84–85		
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	84–85		
GRI 404: Training and Education 2016				
404-1	Average hours of training per year per employee	81		6
404-2	Programs for upgrading employee skills and transition assistance programs	81		
404-3	Percentage of employees receiving regular performance and career development reviews	81		6
GRI 405: Diversity and Equal Opportunity 2016				
405-1	Diversity of governance bodies and employees	85–87, 107–108	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	81		6
GRI 406: Non-discrimination 2016				
406-1	Incidents of discrimination and corrective actions taken	85–87, 97–98, 107–108		1, 2, 6
GRI 407: Freedom of Association and Collective Bargaining 2016				
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	107–108, 236	As part of our compliance management, no violation of trade union freedom of association was reported.	3

GRI CONTENT INDEX AND UN GLOBAL COMPACT PRINCIPLES

GRI Standard		Page	Comment and online addition	UN Global Compact
GRI 408: Child Labor 2016				
408-1	Operations and suppliers at significant risk for incidents of child labor	107–108, 236	No case of child labour was reported as part of our compliance management.	1,2,5
GRI 409: Forced or Compulsory Labor 2016				
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	107–108, 236	No case of forced or compulsory labor was reported as part of our compliance management.	1,2,4
GRI 412: Human Rights Assessment 2016				
412-1	Operations that have been subject to human rights reviews or impact assessments	52, 87–88		1,2
412-2	Employee training on human rights policies or procedures	87–88, 97–98		1,2
GRI 414: Supplier Social Assessment 2016				
414-1	New suppliers that were screened using social criteria	97	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
GRI 415: Public Policy 2016				
415-1	Political contributions	55		10
GRI 416: Customer Health and Safety 2016				
416-1	Assessment of the health and safety impacts of product and service categories	47		
GRI 417: Marketing and Labeling 2016				
417-1	Requirements for product and service information and labeling	47		
GRI 418: Customer Privacy 2016				
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).	
GRI 419: Socioeconomic Compliance 2016				
419-1	Non-compliance with laws and regulations in the social and economic area	107–108		
GRI MM: Closure Planning				
MM10	Closure Planning	44–45		

DEFINITIONS OF KEY FINANCIAL INDICATORS

BOOK VALUE PER SHARE =	$\frac{\text{Equity}}{\text{Total number of shares as of Dec. 31}}$
EBITDA MARGIN =	$\frac{\text{EBITDA}}{\text{Revenues}}$
ENTERPRISE VALUE =	Market capitalization + net debt
DEBT I =	$\frac{\text{Bank loans and overdrafts}}{\text{Equity}}$
DEBT II =	$\frac{\text{Net debt}}{\text{Equity}}$
GROSS CASH FLOW =	Earnings before operating hedges + 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 realization of financial assets/liabilities – interest paid - income taxes paid + other non cash expenses – other non cash income
NET FINANCIAL LIABILITIES =	Financial liabilities – cash on hand and balances with banks – securities and other financial investments
NET DEBT =	Financial liabilities + provisions for pension and similar obligations + non-current provisions for mining obligations – cash on hand, and balances with banks – securities and other financial investments
OPERATING ASSETS =	Intangible assets[4] + property, plant and equipment + shares in affiliated companies + participating interests
RETURN ON CAPITAL EMPLOYED (ROCE) =	$\frac{\text{Earnings before operating hedges}}{\text{Operating assets + working capital}^{2,4}}$

RETURN ON EQUITY =	Adjusted Group earnings after tax[1] / Adjusted equity[1,2]
RETURN ON REVENUES =	Adjusted Group earnings after tax[1] / Revenues
RETURN ON TOTAL INVESTMENT =	Adjusted earnings before tax[1] + interest expenses / Adjusted balance sheet total[1,2,3]
VALUE ADDED =	(ROCE – weighted average cost of capital before taxes) × (operating assets[2] + working capital[2,4])
WORKING CAPITAL =	Inventories + accounts receivable trade + other assets[5] – current provisions – accounts payable trade – other payables[5]

[1] 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.
[2] Annual average.
[3] Adjusted for reimbursement claims and corresponding obligations.
[4] Adjusted by deferred tax influencing goodwill from initial consolidation.
[5] 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 (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, sulfur, 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 recognized 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 materialization 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.

CRYSTALLIZED SALT

In contrast to liquid brine, crystallized salt exists in solid form, such as food-grade salt and de-icing salt.

EARNINGS BEFORE OPERATING HEDGES

Earnings before operating hedging transactions comprise the operating result, including the result from realized operating hedges, adjusted for market value fluctuations of hedges that have not yet matured. Market value fluctuations of hedging transactions that have not yet matured are thus eliminated.

EARNINGS AFTER OPERATING HEDGES (EBIT – EARNINGS BEFORE INTEREST AND TAXES)

Earnings after operating hedging transactions include all results from operating hedging transactions, i.e. both valuation effects as of the balance sheet date and results from realized operating hedging derivatives.

EBITDA (EARNINGS BEFORE INTEREST, TAXES, DEPRECIATION AND AMORTIZATION)

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 amortization of property, plant and equipment and intangible assets; EBITDA is adjusted by the depreciation and amortization amount not recognized in profit and loss in the context of own work capitalized, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognized 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 crystallizes.

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 organizations. 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_2 equivalents. A CO_2 equivalent has the same global warming potential as one unit of CO_2.

GRI – GLOBAL REPORTING INITIATIVE

The Global Reporting Initiative is an independent international multi-stakeholder organization that develops cooperatively a framework for global sustainability reporting. The GRI reporting guideline specifies principles and indicators for organizations 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 CRYSTALLIZATION AND FLOTATION FACILITY (KCF)

The KCF (kainite crystallization 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. This crystallizes 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 sulfur. From a chemical perspective, it is aqueous magnesium sulfate. 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 that 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 well field and a processing facility. The well field thereby is organized into so called pads. Each pad is a relatively flat surface location with a surface of approximately 100 x 100m, that is used for drilling wells and 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 other Permissions. The process of the procedure is formalized 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 meters and is covered by clay layers on both sides. It is approximately 10 meters thick and consists of limestone and dolomite rock, which already contains naturally mineralized 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 SULFATE (SOP)
Potassium sulfate 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 sulfuric acid.

RATING
Rating agencies award ratings on 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.

SALINE PROCESS WATER
Saline process water is the saline water arising in the mining treatment processes used in potash production that can no longer be used in the production processes, used in other ways or sold as a product and for which there is thus a need for disposal.

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
Seawater flows through large, open evaporation ponds for the production of solar salt. After several months of sunshine, the salt crystallizes 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 organization 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 SULFATE (SMS)
Synthetic magnesium sulfate is soluble in water and, among other things, 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.

INDEX

UNITS AT A GLANCE [1]

K+S GROUP	2018	Q1/19	Q2/19	Q3/19	Q4/19	2019
Revenues	4,039.1	1,263.5	878.5	904.9	1,023.8	4,070.7
EBITDA[2]	606.3	269.9	130.1	80.6	159.8	640.4
Capital expenditure[3]	443.2	72.6	93.1	144.3	183.3	493.3
Employees (FTE)[4]	14,931	14,655	14,535	14,780	14,868	14,868

Operating units (Segments according to IFRS 8)

EUROPE+	2018	Q1/19	Q2/19	Q3/19	Q4/19	2019
Revenues	2,585.2	691.8	626.8	621.1	596.2	2,535.9
EBITDA[2]	443.3	177.1	128.4	67.3	64.2	437.0
Capital expenditure[3]	351.5	57.8	74.0	125.2	147.2	404.2
Employees (FTE)[4]	10,572	10,222	10,013	10,269	10,318	10,318

AMERICAS	2018	Q1/19	Q2/19	Q3/19	Q4/19	2019
Revenues	1,451.0	571.2	251.2	282.6	427.2	1,532.2
EBITDA[2]	221.8	107.6	13.6	25.3	83.9	230.0
Capital expenditure[3]	83.1	14.2	17.3	16.7	33.5	81.7
Employees (FTE)[4]	3,520	3,602	3,575	3,665	3,715	3,715

Customer segments (No segments according to IFRS 8)

AGRICULTURE	2018	Q1/19	Q2/19	Q3/19	Q4/19	2019
Revenues	1,741.3	461.0	440.1	425.0	389.5	1,715.6
Sales volumes (in t million)	6.85	1.64	1.61	1.52	1.53	6.30
EBITDA[2]	274.5	124.2	95.3	46.1	29.3	294.9

INDUSTRY	2018	Q1/19	Q2/19	Q3/19	Q4/19	2019
Revenues	1,132.8	281.8	282.5	292.9	290.8	1,148.0
Sales volumes (in t million)	10.30	2.44	2.47	2.66	2.52	10.09
EBITDA[2]	225.5	58.5	55.8	44.8	58.7	218.0

CONSUMERS	2018	Q1/19	Q2/19	Q3/19	Q4/19	2019
Revenues	453.7	119.6	108.5	117.7	138.9	484.7
Sales volumes (in t million)	1.81	0.48	0.40	0.42	0.49	1.79
EBITDA[2]	43.3	16.4	9.0	13.9	20.4	59.7

COMMUNITIES	2018	Q1/19	Q2/19	Q3/19	Q4/19	2019
Revenues	708.4	400.6	47.0	68.2	204.1	719.9
Sales volumes (in t million)	13.32	7.11	0.86	1.27	3.46	12.70
EBITDA[2]	121.8	85.6	–18.1	–12.2	39.1	94.4

[1] In € million, rounding differences may arise, the quarterly figures are unaudited and based on voluntary disclosures; they were not covered by the audit of the financial statements.
[2] EBITDA is defined as earnings before interest, taxes, depreciation and amortization, adjusted by the depreciation and amortization amount not recognized in profit and loss in the context of own work capitalized, earnings arising from changes in the fair market value of outstanding operating anticipatory hedges, changes in the fair value of operating anticipatory hedges recognized in prior periods. A reconciliation can be found on page 61.
[3] Relates to cash payments for investments in property, plant and equipment and intangible assets, taking claims for reimbursement from claim management into account excluding additions to leases in accordance with IFRS 16. The standard was applied for the first time as at January 1, 2019.
[4] FTE: Full-time equivalents; part-time positions are weighted in accordance with their respective share of working hours.

FINANCIAL CALENDAR,

ONLINE SERVICE,

IMPRINT

FINANCIAL CALENDAR

Quarterly Report, March 31, 2020	May 11, 2020
Annual General Meeting, Kassel	Date will be announced separately
Dividend payment (subject to the resolution of the Annual General Meeting)	Date will be announced separately
Half–Yearly Financial Report, June 30, 2020	August 13, 2020
Quarterly Report, September 30, 2020	November 12, 2020
2020 Annual Report	March 11, 2021

ONLINE SERVICE

Annual report (PDF)	www.kpluss.com/ar2019
Annual General Meeting	www.kpluss.com/agm
Other publications	www.kpluss.com/publications

IMPRINT

Publisher

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Company's registered office: Kassel
Companies' Register: Kassel HRB 2669

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Concept and design

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Printing

Beisner Druck GmbH & Co. KG, Buchholz, Germany

MIX
Paper from responsible sources
FSC® C004867

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

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