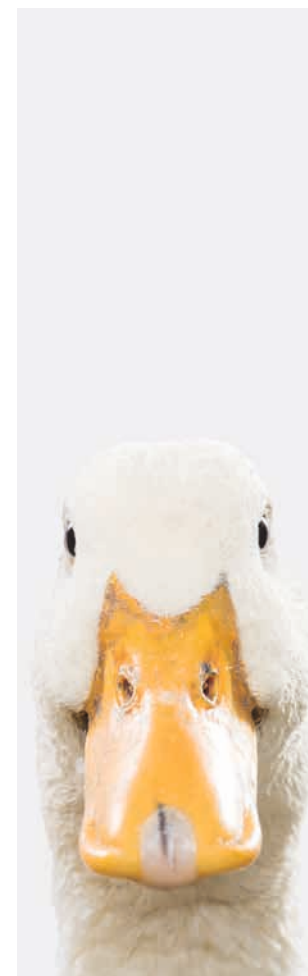
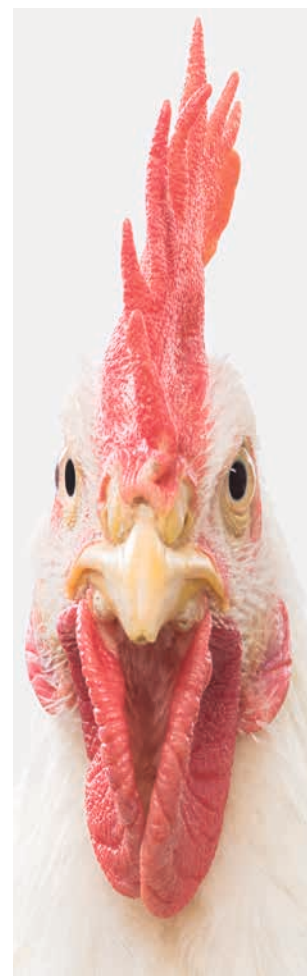
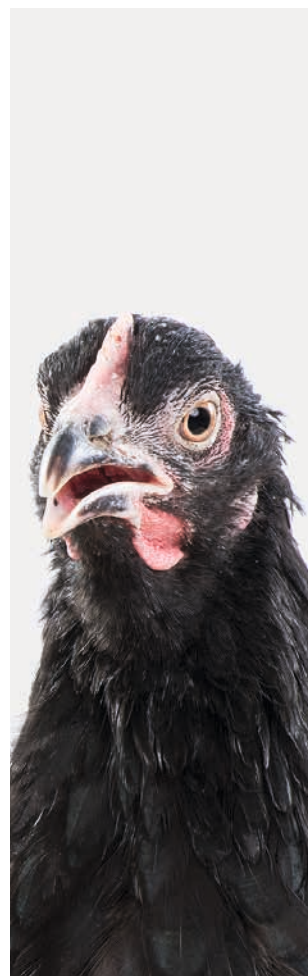
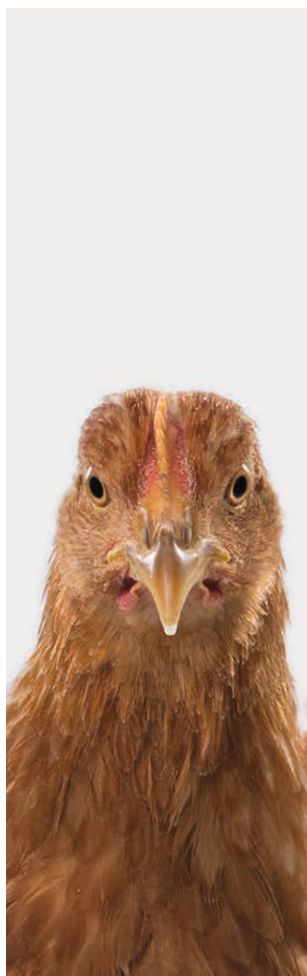


ANNUAL REPORT 2018

July 1 to December 31



ALZCHEM AT A GLANCE

INNOVATIVE SINCE
1908

**~ € 375
mn**

sales generated by AlzChem
in the calendar year 2018

Short fiscal year 2018/II: ~ € 180 mn



1,543

employees support the processes
and products of AlzChem with their
know-how on a daily basis*

* Average over the calendar year 2018
Short fiscal year 2018/II: 1,561 employees

**~ € 49
mn**

EBITDA achieved by AlzChem
in the calendar year 2018

Short fiscal year 2018/II: ~ € 18 mn



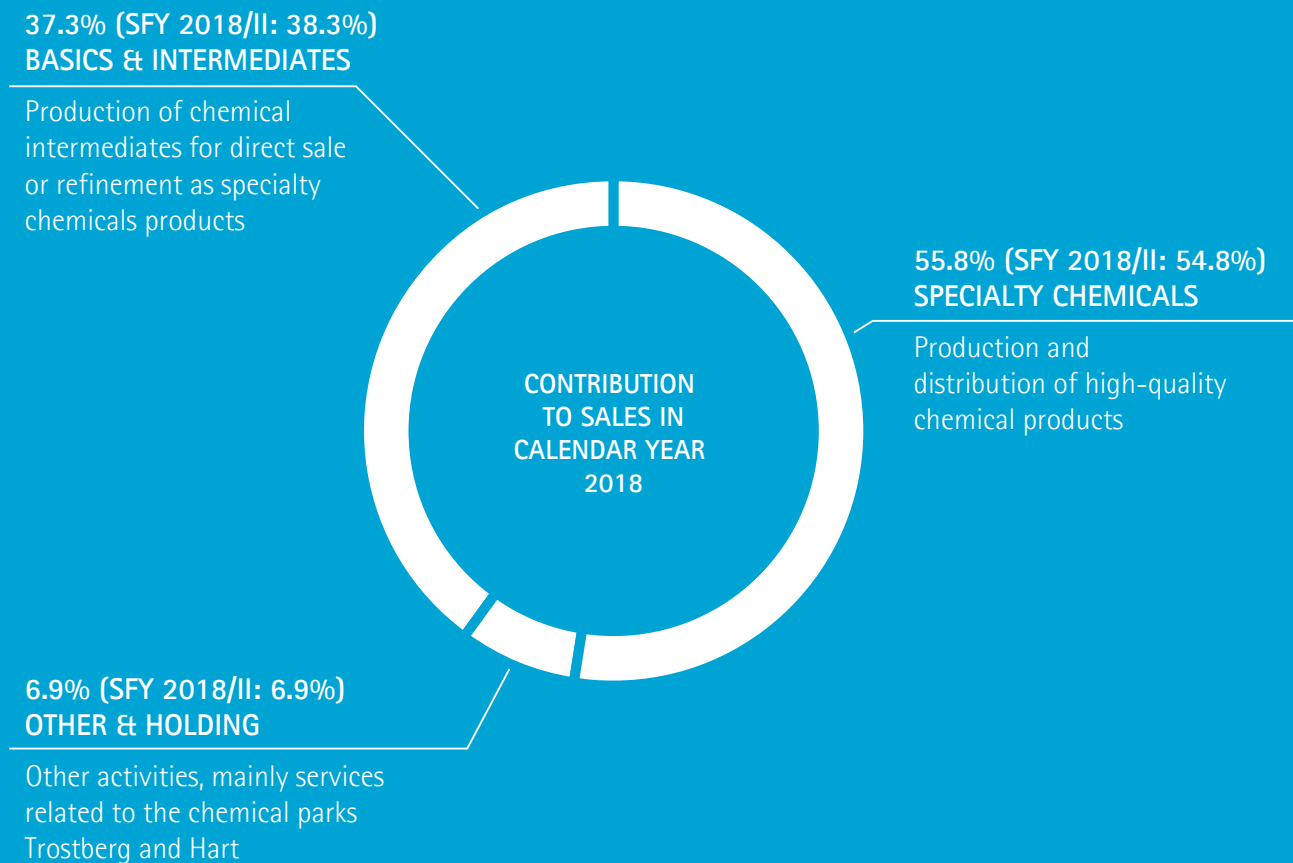
AlzChem products are sold worldwide.

**~ € 35
mn**

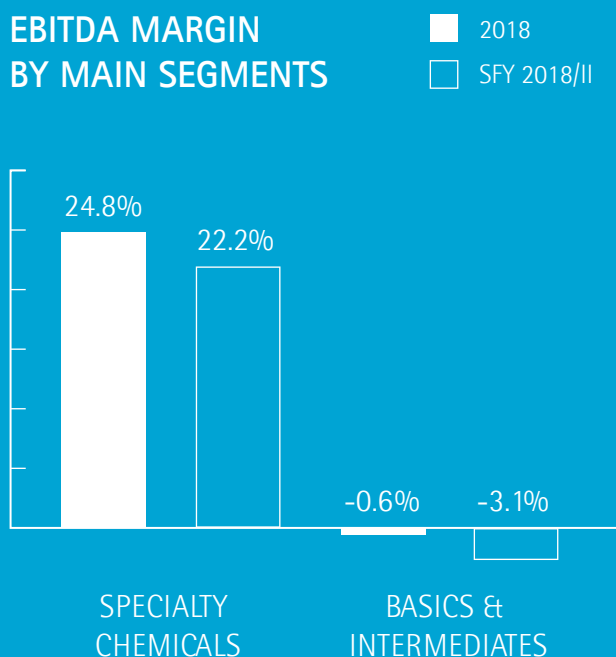
cash flow from
operating activities
in the calendar year 2018

Short fiscal year 2018/II: ~ € 19 mn

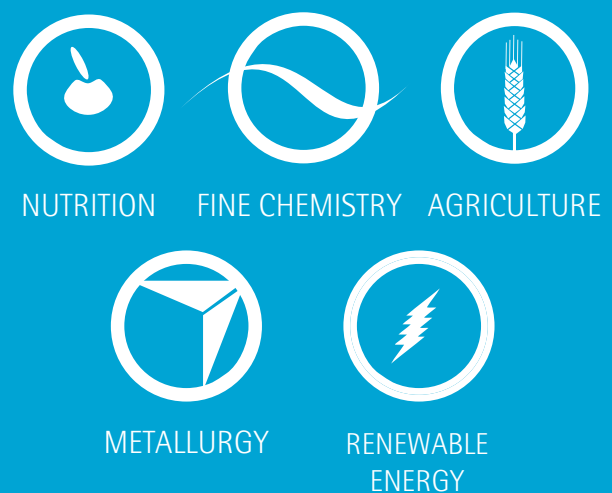
THREE REPORTING SEGMENTS



EBITDA MARGIN BY MAIN SEGMENTS



MARKETS





At 22.7 billion, around three times as many chickens as humans live on earth. Poultry stock has doubled since 1990. With Creamino, we are making an important contribution to enabling our customers in turn to make an important contribution to feeding the world's population. As an additive in poultry feed, Creamino ensures healthy growth – by improving health, performance and feed conversion. Although the global market for poultry feed still offers enormous potential, we are already working to use our natural feed additive for more and more poultry and animal species in more and more countries.

CREAMINO
■■■■ ENERGY FOR HEALTHY GROWTH

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INTERVIEW WITH THE MANAGEMENT BOARD

WHAT WERE YOUR HIGHLIGHTS IN THE PAST SHORT FISCAL YEAR?

Ulli Seibel: The highlight was undoubtedly the development at Creamino – especially the preparation for own distribution, which started in early 2019. Within a very short period of time, we set up a completely new sales department through which we ensure the worldwide distribution of Creamino. What impressed me so much was the consistency and the enthusiasm of the entire team to solve the tasks in the most diverse ways and thus to take our currently most important future product to a new level. This also means that our new Creamino production plant will continue to be built on schedule and within budget, tripling our capacity. At EUR 50 million, this is the largest single investment in the company's history.

Andreas Niedermaier: At the same time, Creamino customers still had to be supplied in the best possible way. To this end, we specifically stocked up in advance and continued production with maximum possible capacity. The growth curve at Creamino is unbroken and the development of demand is not waiting for us. Since January 1, 2019, we have been selling on our own – and the first impressions and experiences are very good. As we have already communicated several times, we will still see a shift in revenues in the first two quarters of 2019 purely due to the processes along the supply chain. In return, however, we expect dynamic growth from the third quarter onwards with an overall higher margin.

Klaus Englmaier: Of course, we do not just want to reduce AlzChem to Creamino, even though this product currently plays a special role. There were many other very positive events in the past short fiscal year. For example, our multi-purpose facilities continued to develop very successfully at a high level, and the sales momentum of DYHARD® was well above our forecasts. As far as nitriles go, another current investment focus, our capacities for 2019 are virtually sold out at present.

WERE THERE THINGS THAT DID NOT GO SO WELL?

Niedermaier: I would put things a little differently: There were no developments that surprised us in a negative way. We expected energy prices and commodity prices to continue rising, in some cases very sharply. Just as we expected stable business in the Basics & Intermediates segment from the outset. We were able to manage all these factors very well – even though we would have preferred a slightly different development, for example in commodity prices or exchange rates.

Englmaier: We are a company that always sets itself ambitious goals. With such a broadly diversified product portfolio benefiting equally from different megatrends like global population growth, the desire for healthy aging and the need for greater energy efficiency, there are always individual areas that are a bit below expectations, and others that are significantly higher. Overall, we met our revenue and earnings forecasts again.

Seibel: In the first half of 2018, our very good operating performance was also gradually reflected in the share price. From mid-May to mid-October, our share price performance was stable above the EUR 3 mark. In my view, the decline in mid-October is solely attributable to the reallocation at that time by our pre-IPO shareholders. After all, a share of around 20% in our company changed hands. In the future, all of our shareholders and we ourselves will benefit from the fact that this has significantly broadened our investor base and the free float has risen sharply. At the moment, however, the capital market needs to first regain some confidence in the stability of our shareholder base. Due to our continued good operating performance, I see considerable potential for this.

WHY DID THE SHARE PRICE
COME UNDER PRESSURE IN
THE MIDDLE OF THE PAST
SHORT FISCAL YEAR?



*From left to right:
Andreas Niedermaier (CFO)
Ulli Seibel (CEO)
Klaus Englmaier (COO)*

AT A FIRST GLANCE ON THE KEY FINANCIAL FIGURES FOR THE PAST SHORT FISCAL YEAR, ONE MIGHT THINK THAT YOU HAVE STRAYED SOMEWHAT FROM GROWTH.

Niedermaier: No, quite the opposite is the case. The figures for the period from July to December 2018 are very satisfactory with sales of EUR 180.0 million and an EBITDA of EUR 18.4 million and show continued intact growth. The comparison with the previous short fiscal year from January to June 2018, which is required by the regulations in the annual financial statements, gives a skewed picture. Due to the seasonality, it's like comparing apples and oranges. Therefore, we have also provided supplementary information for the full year 2018 as often as possible in the annual report. A full-year comparison is the only way to see AlzChem's true performance. For example, with sales growth of 6.0 % to EUR 375.2 million and an increase of 8.1 % to EUR 49.4 million in EBITDA. EBITDA is thus only at the lower end of our forecast. However, this is also due to the fact that we have refrained from eliminating one-time special effects such as the repayment of electricity network fee exemptions for 2012 and 2013 or exchange rate effects.

WITH LIVADUR®, YOU ARE CURRENTLY LAUNCHING A NEW PRODUCT ON THE MARKET. WHAT CAN YOUR SHAREHOLDERS EXPECT HERE?

Seibel: LIVADUR® is strategically a very exciting project for AlzChem. For the first time, we have launched a product aimed directly at the end customer, i.e. healthy people over the age of 50 years who want to prevent the age-related decline in muscle power and thus maintain their high quality of life and fitness. This dietary supplement is based on our already very successful product Creapure®, the only creatine product manufactured in Germany that we supply to the dietary supplement industry specifically for sports nutrition. We are now once again opening up an additional stage in the value chain with LIVADUR® by going to the end customer. Our strategic decision at Creamino to start the own distribution and be even closer to the customer was very similar. We are developing the vertical integration of AlzChem as a chemical producer along the calcium carbide/calcium cyanamide chain one step further at the extremely high level we have already achieved.

Englmaier: LIVADUR® offers attractive margin potential, but is still of subordinate importance in terms of revenues and earnings in our forecasts for 2019. However, we see excellent market opportunities and do not want to miss out on them. In a first step, we are aiming for Germany-wide availability in pharmacies. We also want to further internationalize the product, especially in the US and Chinese markets. There are many different directions for additional growth opportunities here. LIVADUR® has the potential to become an important pillar in the product mix – but we are thinking more medium-term than short-term here.

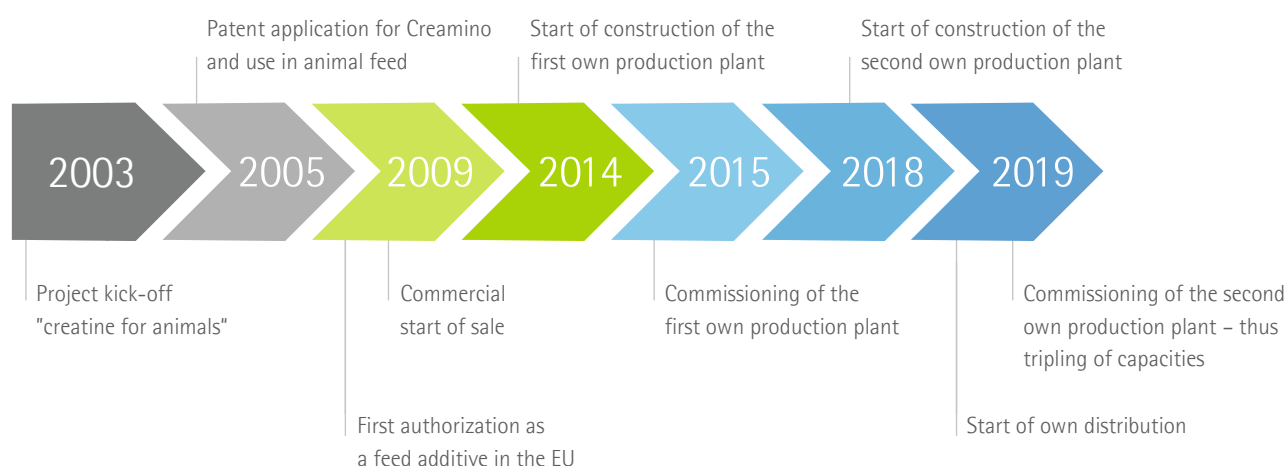
Niedermaier: We have set ourselves a revenue target in the range of EUR 389.9 million to EUR 398.9 million. We want to generate growth again completely organically. This already takes into account the expected revenue shift at Creamino in the first half of the year. The EBITDA benchmark for 2019 is between EUR 46.5 million and EUR 51.9 million. Changes in the product mix towards higher-margin products and partial price effects play an important role in this growth.

WHAT ARE YOUR FORECASTS FOR 2019?

Seibel: We also see commodity price increases gradually reaching their peak. This is perhaps one of the few positive side effects of the expected global economic slowdown. We are already very cautious with our forecasts regarding the macroeconomic environment. Nevertheless, we continue to see excellent opportunities for growth, especially in our Specialty Chemicals segment with revenues in the range of EUR 213.7 million to EUR 216.7 million and an EBITDA margin of 19.8% to 21.5%. In Basics & Intermediates, we should also be able to achieve a slight growth again. Our target is revenues of EUR 150.4 million to EUR 154.4 million for 2019 with an EBITDA margin of 2.1% to 3.2%.

The start into the year 2019 was already very promising. We have some very exciting projects, such as the commissioning of the new plants for Creamino and nitrile or the practical test of our own distribution. Although 2019 is a bit of a year of transition – especially at Creamino –, it is also a year in which we want to and will show our performance clearly to the outside world. I am looking forward to it.

CREAMINO – A SUCCESS STORY



REPORT OF THE SUPERVISORY BOARD

Dear Ladies and Gentlemen,

AlzChem Group AG can look back on a successful short fiscal year from July 1, 2018 to December 31, 2018 (short fiscal year 2018/II). With revenues of EUR 179,976 thousands and EBITDA of EUR 18,421 thousands at Group level, the company continued to develop in line with forecasts. In addition, AlzChem will be able to sustainably strengthen its market position and competitiveness through the scheduled course of expansion investments in the Creamino and nitrile capacities.

In the short fiscal year 2018/II, the Supervisory Board of AlzChem Group AG diligently performed the duties incumbent on it by law, the Articles of Association and the rules of procedure, advised the Management Board in detail on the management of AlzChem Group AG and the Group as a whole, and continuously monitored the management. At no time were there any doubts about the legality and regularity of the Management Board's activities.

The Supervisory Board dealt continuously and in detail with the current business situation and the further development of the AlzChem Group. At all times, the Management Board fully complied with its information duties and informed the Supervisory Board regularly, promptly and comprehensively in both written form and verbally about all material developments of the AlzChem Group. In particular, this included the business development, the position of the Group, the corporate strategy, the intended business policy, the company's profitability, risk management, compliance and corporate planning, including financial, investment and personnel planning. In addition, the Supervisory Board was involved at an early stage in all decisions of fundamental importance to the company.

The Supervisory Board thoroughly examined all reports and documents. Deviations from the plans were explained in detail by the Management Board and were also examined with great

care by the Supervisory Board. Transactions that were subject to approval were duly submitted to the Supervisory Board by the Management Board at an early stage. All transactions that required approval were approved. Outside the meetings, the Chairman of the Supervisory Board regularly exchanged information with the Management Board in order to keep himself informed about the current business situation and significant business transactions.

Special attention was still required to the largest investment in the company's history to date in the expansion of Creamino production. As the Supervisory Board, we have monitored this key future project very closely in an advisory and controlling manner.

WORK OF THE SUPERVISORY BOARD AND COMMITTEES

In the short fiscal year 2018/II, the Supervisory Board held two meetings, on September 4 and November 22, 2018. The plenary was fully present at each meeting.

The topics discussed included the development of revenue and earnings, net assets, financial position, investment projects, the risk situation, the risk management system, compliance, the internal control system, as well as corporate planning and strategy. Another focal point was the development of the sales and procurement markets, as well as the long-term safeguarding of the competitiveness of the AlzChem Group.

The Audit Committee met – with the participation of all members – on September 4, 2018. All members participated in person. Taking into account the auditor's report, and in discussion with them, the committee thoroughly examined the annual financial statements and management report which were prepared in accordance with German commercial law, as well as the consolidated financial statements and the Group management report for the short fiscal year from January 1, 2018 to June 30, 2018 which were prepared in accordance with International Financial Reporting Standards (IFRS). The committee also discussed the proposal for the election of the auditor for the fiscal year beginning July 1, 2018, as well as issues of accounting, the internal control system and risk management. In addition, the management report and Group management report were discussed in detail, the corresponding recommendations for the Supervisory Board were prepared and the Supervisory Board was informed about the results of the audits.

On November 8, 2018, the Audit Committee held a meeting by conference call to discuss the quarterly report for the period from July 1, 2018 to September 30, 2018.

The Nomination Committee did not hold a meeting during the reporting period.

CORPORATE GOVERNANCE

An integral part of the Supervisory Board meetings of the AlzChem Group AG is the implementation of good corporate governance in close accordance with the German Corporate Governance Code. In the short fiscal year 2018/II, the Management Board and Supervisory Board again intensively discussed the recommendations and suggestions of the Code. In accordance with section 5.6 of the Code, the Supervisory Board has continuously reviewed its own work for efficiency. The audit again confirmed very good and constructive cooperation within the Supervisory Board and with the Management Board.

During the reporting period, there were no conflicts of interest among the individual members of the Supervisory and Management Boards, which had to be disclosed to the Supervisory Board.

On September 4, 2018, the Management Board and the Supervisory Board approved and issued a new Declaration of Conformity pursuant to Section 161 AktG. The current Declaration of Conformity and the previous declarations are available on the Internet at any time at www.alzchem.com in the Investor Relations section. In addition, the Management Board reports on corporate governance at the same time for the Supervisory Board in accordance with section 3.10 of the Code in the corporate governance report of the company.

ANNUAL AND CONSOLIDATED FINANCIAL STATEMENTS

The annual financial statements of AlzChem Group AG and the management report were prepared in accordance with the German Commercial Code (HGB) and the consolidated financial statements and the Group management report were prepared in accordance with International Financial Reporting Standards (IFRS). In accordance with the resolution of the Annual General Meeting held on November 22, 2018, the Supervisory Board appointed PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Munich, as auditors for AlzChem Group AG and the AlzChem Group for the short fiscal year 2018/II. The auditor and the Supervisory Board determined the focal points of the audit. In addition, the Supervisory Board resolved the remuneration of the auditor and reviewed his qualifications and independence in accordance with the requirements of the German Corporate Governance Code.

The auditor audited the annual financial statements and the consolidated financial statements prepared by the Management Board, including the corresponding management reports, and reported in writing on the results of his audit, which did not lead to any objections. The annual and consolidated financial statements received an unqualified audit report. In addition, as part of his assessment of the risk management system, the auditor determined that the Management Board has taken the measures required under Section 91 (2) AktG in order to identify, at an early stage, any risks that could jeopardize the continued existence of the company.

The Supervisory Board examined the annual financial statement and the consolidated financial statements, the management report and the Group management report for the short fiscal year 2018/II for completeness and accuracy, taking into account the auditor's report and the results of the preliminary audit by the Audit Committee. All documents and the audit reports prepared by the auditor were available to the committee in due time and were discussed and examined in detail at the balance sheet meeting of the Supervisory

Board on March 19, 2019. The auditor reported on the main findings of his audit and was available to the Supervisory Board for questions and any requests for additional information. In particular, the Supervisory Board examined whether the statements made by the Management Board in the management reports were consistent with the estimates made in the reports to the Supervisory Board and whether the statements in the management reports correspond to the Supervisory Board's own assessment. Following its own thorough review, the Supervisory Board raised no objections, approved the audit reports and the results of the preliminary audits by the Audit Committee, and approved the annual financial statements, management report, consolidated financial statements and Group management report. The annual financial statements of AlzChem Group AG prepared by the Management Board were thus adopted.

With regard to the liquidity of the company and its financial and investment planning, the Supervisory Board discussed in detail the Management Board's proposal for the appropriation of profits for a dividend of EUR 0.09 per dividend bearing share, and to carry forward the remaining amount of EUR 6,444,180.39 thousands to new account. After a thorough examination, we join the Management Board's proposal for the appropriation of profits.

In addition, we reviewed and approved the non-financial consolidated statement on corporate social responsibility.

COMPOSITION OF MANAGEMENT BOARD AND SUPERVISORY BOARD

There were no personnel changes in the Management and Supervisory Boards during the reporting period.

The Supervisory Board of AlzChem Group AG still includes Mr. Markus Zöllner (Chairman), Dr. Ing. Caspar Freiherr von Schnurbein (Deputy Chairman), Prof. Dr. Martina Heigl-Murauer and Mr. Steve Röper.

The Management Board continues to consist of Mr. Ulli Seibel (CEO), Mr. Andreas Niedermaier (CFO) and Mr. Klaus Dieter Englmaier (COO).

The Supervisory Board would like to thank the Management Board, the Works Council and all employees for their dedicated work. Without their tireless efforts, the positive development in the short fiscal year 2018/II would not have been possible.

Trostberg, March 19, 2019



Markus Zöllner
Chairman of the Supervisory Board of AlzChem Group AG

*The Supervisory Board of AlzChem Group AG, from left to right:
Steve Röper, Markus Zöllner (Chairman of the Supervisory Board), Prof. Dr. Martina Heigl-Murauer and
Dr. Caspar Freiherr von Schnurbein*



ALZCHEM SHARE

PERFORMANCE OF THE ALZCHEM SHARE

The AlzChem share started the short fiscal year 2018/II with a Xetra price of EUR 3.08. In the further course of the year, the share price developed positively, reaching a high of EUR 3.41 on September 13 and 14, 2018. In the course of the reallocation, the share price dropped significantly and

reached its lowest price in the reporting period of EUR 2.14 on December 19, 2018. The closing price on December 28, 2018 was EUR 2.22, corresponding to a market capitalization of EUR 225.9 million and a share price performance of -27.9% for the reporting period.

MASTER DATA

ISIN/WKN	DE000A0AHT46/A0AHT4
Ticker symbol	SFP1
Type and number of shares	101,763,355 no-par value bearer shares
Trading segment	Regulated Market (Prime Standard)
Designated Sponsor	Baader Bank AG

KEY FIGURES

Xetra	7/1 – 12/31/2018
Opening price	EUR 3.08
Highest price	EUR 3.41
Lowest price	EUR 2.14
Closing price*	EUR 2.22
Total performance	-27.9%
Earnings per share	EUR 0.07
Market capitalization*	EUR 225.9 Mio.

* Closing price on December 28, 2018

SHAREHOLDER STRUCTURE

SHAREHOLDER	%
LIVIA Corporate Development SE	37.7
HDI Vier CE GmbH	20.4
four two na GmbH	15.8
Free float*	26.1
thereof M&G Investment Management Limited	7.6
thereof Ulli Seibel	4.9

* Information on free float in accordance with Section 2.3 of the Guide to the Stock Indices of Deutsche Börse AG in the currently applicable version



ALZCHEM GROUP AG

TROSTBERG SITE

GROUP MANAGEMENT REPORT FOR THE SHORT FISCAL YEAR FROM JULY 1 TO DECEMBER 31, 2018

GROUP MANAGEMENT REPORT

1. PRINCIPLES OF THE GROUP

1.1. BUSINESS MODEL

The companies of the AlzChem Group develop, produce and market chemical products of all kinds and provide services, also operating as a chemical park. AlzChem's networked production structure creates a powerful value-added chain that can be used for basic products such as metallurgical additives or fertilizers, but also for special products for a variety of markets, for example:

- Creamino as a feed additive
- Creapure® as a dietary supplement
- Dormex® as growth regulator for agricultural applications
- Bioselect® for the pharmaceutical market

With its product portfolio, the AlzChem Group serves a broad range of industries:

- Nutrition: The nutrition segment encompasses the marketing of the high-quality products under the Creapure® and LIVADUR® brands for food and sports foods as a dietary supplement and as an additive in cosmetics manufacturing. Furthermore, the products are used in the pharmaceutical industry. The new feed additive Creamino makes a valuable contribution to livestock farming.
- Pharma and fine chemicals: Based on coal, limestone and nitrogen, the company builds up a broad and comprehensive product portfolio. In multi-purpose facilities, the basic products are refined and a wide range of fine chemicals are manufactured, which, such as Bioselect®, are sometimes used in the pharmaceutical industry.
- Agriculture: The product range of the AlzChem Group includes special fertilizers such as Perlka®, the Dormex® plant growth regulator for table and wine grapes and

other fruits growing as well as plant protection additives.

- Renewable energy: With the DYHARD® product range, AlzChem Trostberg GmbH is involved in the development of ever larger wind turbines. The product Silzot® SQ plays an important role in the competitive production of polycrystalline silicon solar wafers.
- Metallurgy: Here, the company serves two important segments within the steel industry: hot metal desulfurization and secondary metallurgy.
- Service: As the site operator of two chemical parks, AlzChem Trostberg GmbH is tasked with the production and distribution of various infrastructure services.

AlzChem produces at four locations in the Bavarian Chemical Triangle and in Sundsvall, Sweden. Furthermore, the company has sales companies in the strategically important US and Chinese markets.

The operating business of the AlzChem Group can be divided into the three operational business segments Specialty Chemicals, Basics & Intermediates and Other & Holding along the entire value chain and based on the internal reporting structure.

The Specialty Chemicals segment focuses on the production and distribution of high-quality growth products that contain specialty chemicals such as Creamino, Creapure®, Bioselect®, Silzot®, DYHARD® and Dormex®.

The Basics & Intermediates segment covers the production of basic and intermediate products. On the one hand, these serve as raw materials for the production of specialty chemicals; on the other hand, these can be marketed as independent products comprehensive range of applications, for example in farming, steelmaking and in the automotive sector.

The Other & Holding segment comprises all other activities that cannot be assigned to the other segments. Essentially, these are services related to the Trostberg and Hart chemical parks operated by AlzChem (including for third parties). In addition, administrative services are allocated to the segment.

1.2. GROUP STRUCTURE

The group structure was simplified by the liquidation of Dormex Company LLC (Atlanta, USA) on August 31, 2018. The business continues under the roof of AlzChem LLC. There have been no other changes in the Group structure since June 30, 2018. The AlzChem Group AG acts as the parent company

(without own business activities) of the AlzChem Group. As of the balance sheet date of December 31, 2018, the following companies were included in the scope of consolidation of the AlzChem Group:

Company	Seat	Consolidation
AlzChem Group AG	Trostberg, Germany	Parent company
AlzChem Trostberg GmbH	Trostberg, Germany	Fully consolidated
AlzChem International GmbH	Trostberg, Germany	Fully consolidated
AlzChem Stahltechnik GmbH	Trostberg, Germany	Fully consolidated
AlzChem Nutrition GmbH	Trostberg, Germany	Fully consolidated
NIGU Chemie GmbH	Waldkraiburg, Germany	Fully consolidated
AlzChem Shanghai Co. Ltd.	Shanghai, China	Fully consolidated
AlzChem LLC	Atlanta, USA	Fully consolidated
Nordic Carbide AB	Sundsvall, Sweden	Fully consolidated
AlzChem Netz GmbH	Trostberg, Germany	Fully consolidated

Since October 5, 2017, the shares of the AlzChem Group AG (WKN: A0AHT4) have been traded on the Frankfurt stock exchange in the section of the regulated market with further post-admission duties (Prime Standard).

1.3. CHANGE OF THE FISCAL YEAR

On November 22, 2018, the Annual General Meeting of AlzChem Group AG resolved to form a further short fiscal year from July 1, 2018 to December 31, 2018 (SFY 2018/II) so that the fiscal year from January 1, 2019 onwards will again correspond to the calendar year and all annual financial statements of the AlzChem Group companies will again be in unison with the end of the fiscal year on December 31.

The figures for the previous year relate to the short fiscal year from January 1, 2018 to June 30, 2018 (SFY 2018/I). Due to

seasonal fluctuations in demand in the agricultural sector, the period-related comparison in these consolidated financial statements and Group management report for the short fiscal year 2018/II is only of limited informative value. Therefore, AlzChem does not provide a quantitative and partly also an explanatory presentation of the change.

In order to make the development of the AlzChem Group transparent over time and to ensure comparability with the fiscal year 2017, financial key figures for the income statement and cash flow statement for the full year 2018 are also disclosed and explained. These were calculated by adding the respective key financial figures for the short fiscal year 2018/I and the short fiscal year 2018/II.

1.4. CONTROL SYSTEM

Group management is carried out through regular meetings and reports by the respective committees, bodies and specialist departments. This includes, among others:

- Management Board meetings in a 2-week cycle
- Regular meetings of the extended management (monthly)
- Regular coordination of production and technology
- Regular coordination of sales and marketing including innovation management, supply chain management and production

- Regular meetings on the management and resource allocation of the innovation management department
- Regular liquidity management and financing control (daily, monthly)

The control process is accompanied by financial corporate management based on a consistent, value-oriented system of key figures. The partly daily, weekly and monthly reports include a detailed analysis of the results of all business transactions with corresponding catalogs of measures in coordination with the respective process owners. The key figure catalog for financial corporate management is as follows:

Figure	Calculation
Equity ratio in %	$\frac{\text{Equity}}{\text{Total assets}}$
Inventory ratio ¹	$\frac{\text{Inventory assets}}{\text{Sales}}$
Sales	Absolute value
Debt ratio ² of the Group	$\frac{\text{Net debt}}{\text{Total capital}}$

The calculation is based on monthly, quarterly and annual reports. This ensures that plan/actual deviations can be detected early and countermeasures can be taken in good time.

In addition, the following key profitability figures are used at the level of the Management Board of AlzChem Group:

Figure	Calculation
EBIT	Earnings before interest and income taxes
EBITDA	Earnings before interest, income taxes and depreciation
EBITDA margin	$\frac{\text{EBITDA}}{\text{Sales revenues}}$

With the exception of the Group-related equity ratio and the debt ratio, the other key performance indicators are used to assess the economic performance on the basis of the reporting units and segments. The central key performance indicator is EBITDA, which is also broken down on the operating units and segments to measure the achievement of objectives.

The EBITDA and the corresponding relative key figure, the EBITDA margin, show the operating profitability regardless of the capital structure and investment propensity and enable the internal and external comparison of the business with regard to the cost structure. Since depreciation (scheduled and unscheduled) is not taken into account, it is also a quantity close to cash flow, which can therefore also be used as a revenue-related cash flow return.

¹ AlzChem operates in a partly strongly growing market environment and in the past fiscal year has started to monitor and track inventories in relation to sales.

² Debt ratio = ratio of net debt to total capital. Net debt is defined as the sum of all debt less existing cash and cash equivalents.

The internal control and reporting in the AlzChem Group are fundamentally based on the IFRS accounting principles described in the IFRS Consolidated Financial Statements. The Group measures the success of its segments on the basis of segment results, which are referred to in internal control and reporting as EBIT and EBITDA. The segment result EBIT consists of gross profit, sales, general administrative, research and non-capitalized development costs as well as other operating income and expenses. As far as revenue relationships exist between the segments, they are calculated using the rules of Group costing and compliance with transfer pricing requirements and are not shown in the respective segment as sales, but directly consolidated. In addition, the key figure of inventories is reported and monitored at segment level.

1.5. INNOVATION MANAGEMENT, RESEARCH & DEVELOPMENT

AlzChem sees innovation management as a key growth driver and therefore invests heavily in research and development. Main areas of research are product, application and process development. In the field of product and application development, new products are researched and existing products are further developed. In addition, chemical solutions are developed for special customer requirements.

The area of process development focuses on the transfer of new insights into the production process and the continuous development of the efficiency of the own production process. Significant research and development activities relate to the Specialty Chemicals segment, but also have a supporting role in the Basics & Intermediates segment at the Trostberg, Schalchen, Hart and Waldkraiburg sites.

There are no research and development activities in the Other & Holding segment.

The total costs of research and development activities are as follows:

in EUR thousands	2017	SFY 2018/I	SFY 2018/II	2018
Research	6,744	2,771	3,586	6,357
Process development	2,271	1,179	1,142	2,321
Σ Research and development expenses	9,015	3,950	4,728	8,678
% in relation to sales	2.6%	2.0%	2.6%	2.3%

In the Specialty Chemicals segment, expenses as a percentage of sales were 3.12% in the SFY 2018/II (SFY 2018/I: 2.44%) and 1.65% for the full year 2018.

During the reporting period, the conditions for capitalizing research and development costs were not met. The total capitalized services in this area (mainly investments in property, plant and equipment) amounted to EUR 497 thousands (SFY 2018/I: EUR 249 thousands). This mainly related to the regular renewal, for example, of analytical equipment in the various departments of the Innovation Management division.

Research and development expenses in the Basics & Intermediates segment amounted to 1.9% (SFY 2018/I: 1.4%) of sales in the reporting period.

In total, the AlzChem Group employed a total of 98 research and development employees in the short fiscal year 2018/II (SFY 2018/I: 93).

2. BUSINESS REPORT

Unless otherwise stated, all amounts are stated in EUR thousands. For computational reasons, rounding differences of \pm one unit may occur in tables.

2.1. MACROECONOMIC AND INDUSTRY-RELATED FRAMEWORK CONDITIONS

2.1.1. MACROECONOMIC FRAMEWORK CONDITIONS

According to the Kiel Institute for the World Economy (IfW)³, the global economy lost momentum in the course of 2018. The economic mood has deteriorated significantly almost everywhere. In addition to uncertainty caused by increasing trade policy conflicts, the tightening of monetary policy in the United States contributed to this, resulting in a turnaround in international capital flows that slowed economic expansion in the emerging markets. Nevertheless, global production is expected to grow by 3.7% in 2018, as in the previous year.

In the euro zone, the picture in 2018 was similar to that at the global level. There, the economy already lost noticeable momentum in the first half of the year. This trend continued in the third quarter. The slowdown is mainly due to a sharp decline in automobile production, which is related to the introduction of new standards for emissions measurement and is probably of a temporary nature. However, developments on the labor market suggest that the economy has also slowed down in the basic trend. For 2018 as a whole, the IfW expects gross domestic product (GDP) in the euro zone to grow by 1.9% (2017: 2.5%).

According to the IfW⁴, the upturn in Germany is also increasingly coming to a halt. Accordingly, economic output declined in the third quarter of 2018 for the first time in three years. This decline was primarily due to special factors, in particular the problems with the new WLTP approval procedure for vehicle construction. Production was also impaired by the low water level in the Rhine. Even after the elimination of these temporarily burdensome factors, the upswing is likely

to increasingly reach its limits. While companies are finding it more and more difficult to continue expanding their production at high speed in view of the already very high capacity utilization, the noticeable shortages on the labor market are also likely to continue. Overall, production in the German economy is expected to rise by 1.5% in 2018 as a whole (2017: 2.2%).

2.1.2. INDUSTRY-RELATED FRAMEWORK CONDITIONS

Development of the global chemical and pharmaceutical industry

According to the Chemical Industry Association (Verband der Chemischen Industrie e. V. – VCI)⁵, global chemical and pharmaceutical production lost momentum in the third quarter of 2018 due to the slowdown in momentum on the part of key customer industries. The EU and China were particularly affected. Overall, growth was 0.9% compared with the previous quarter. At +4.2%, however, the prior-year period was significantly exceeded. For the year as a whole, global production is expected to increase by 4.0% (2017: 3.9%).

Development of the global steel industry

According to the World Steel Association⁶, global steel production by the 64 countries reporting to the World Steel Association totaled 1.6 billion metric tons from January to November 2018. This represents an increase of 4.7% over the prior-year period. Growth in Asia was 5.8%. China (+6.7%) and India (+4.9%) contributed in particular to this growth. In North America, total steel production increased by 3.7%, while in the EU28, there was a slight decline of 0.5%. Germany (-2.6%) and Austria (-16.2%) contributed significantly to this

3 Kieler Konjunkturberichte – Weltkonjunktur im Winter 2018, No. 49 (2018/Q4), dated December 11, 2018 (in German):

https://www.ifw-kiel.de/fileadmin/Dateiverwaltung/IfW-Publications/-ifw/Konjunktur/Prognosetexte/deutsch/2018/KKB_49_2018-Q4_Welt_DE.pdf

4 Kieler Konjunkturberichte – Deutsche Konjunktur im Winter 2018, No. 50 (2018/Q4), dated December 11, 2018 (in German):

https://www.ifw-kiel.de/fileadmin/Dateiverwaltung/IfW-Publications/-ifw/Konjunktur/Prognosetexte/deutsch/2018/KKB_50_2018-Q4_Deutschland_DE.pdf

5 Verband der Chemischen Industrie e.V., Business Worldwide (December 11, 2018): <https://www.vci.de/ergaenzende-downloads/business-worldwide-wirtschaftliche-lage-globale-chemie.pdf>

6 <https://www.worldsteel.org/en/dam/jcr:fab4cbaf-9d12-460d-b560-ba4cd78f435c/November%20202018%20Crude%20Steel%20Production%20Table.pdf>

Development of German agriculture

According to the economic barometer Agrar of the German Farmers' Association (Deutscher Bauernverband – DBV) of September 2018⁷, the current economic situation is estimated to be significantly more negative than in June 2018, which is partly due to the drought damage in many regions of Germany and the difficult situation on important markets. The liquidity of the companies also deteriorated further. Overall, however, the index of the economic barometer Agrar rose slightly from 21.1 points in June 2018 to 23.4 points, which is due to a certain optimism of purpose.

2.2. BUSINESS DEVELOPMENT

2.2.1. PRELIMINARY NOTE

In accordance with the resolution of the Annual General Meeting on November 22, 2018, AlzChem Group AG changed the fiscal year and formed a short fiscal year for the period from July 1, 2018 to December 31, 2018, about which this Group Management Report provides information. The figures for the previous year relate to the short fiscal year from January 1, 2018 to June 30, 2018 (SFY 2018/I). Due to seasonal fluctuations in demand in the agricultural sector, the period-related comparison in these consolidated financial statements and Group management report for the short fiscal year 2018/II is only of limited informative value. Therefore, AlzChem does not provide a quantitative and partly also an explanatory presentation of the change.

In order to ensure comparability with the fiscal year 2017, the unaudited and non-certified key financial figures for the income statement and cash flow statement for the full year 2018 are also provided. These were calculated by adding the respective key financial figures for the short fiscal year 2018/I and the short fiscal year 2018/II.

2.2.2. SALES AND REVENUE

The order and order situation for the completed short fiscal year and the full calendar year 2018 showed a positive trend. The operative business development in the reporting period was still very positive for the AlzChem Group and basically met expectations. In some cases, these were even exceeded, in others, not all segments or parts of the same were able to completely achieve the forecast targets. For example, the development of inventories is still higher than the target values. Sales in the short fiscal year 2018/II totaled EUR 179,976 thousands, while sales in the short fiscal year 2018/I increased to EUR 195,241 thousands due to the seasonal nature of the business. The pronounced dynamic of the business development can be seen in a 12-month comparison: Sales revenues for the calendar year 2018 increased by 6.0% from EUR 353,920 thousands in 2017 to EUR 375,217 thousands.

The Specialty Chemicals segment, which also stands in a strong strategic focus, developed particularly dynamically, especially the business from the multi-purpose facilities there. The range of the product portfolio once again proved to be a strength of the Group in order to counter fluctuations in sales. This development was mainly supported by the sales growth of the DYHARD®, Creamino, Creapure® and Dormex® brands and by the expansion of the product range from the multi-purpose facilities.

In the Basics & Intermediates segment, performance was particularly sharply impacted by increased raw materials prices. This is especially reflected in the development of earnings. Sales are impacted by the difficult environment for agricultural products, so that the high sales of the previous year 2017 could not quite be achieved despite very pleasing business developments in the basic chemicals businesses.

The demand for services at the Trostberg, Schalchen and Hart sites is at a stable level, comparable to the short fiscal year 2018/I. AlzChem strives here to offer an attractive range of services tailored to customers. In 2017, various investments and structural measures were made here, which had a positive impact in 2018. The business figures in the Other & Holding segment developed correspondingly well.

Overall, were able to expand our good position in the sales markets, increase Group sales in the calendar year 2018 and further improve the market position of our existing and our newer products. Sales and earnings were impacted by the, in part, sharp rise in raw material and energy prices. Changes in the exchange rates of the major Group currencies USD and JPY also had a significant effect on the Group's earnings situation.

In line with sales and volume growth, mainly due to the Specialty Chemicals segment, and the high capacity utilization within the NCN group chain, the number of Group employees⁸ in the reporting period grew from 1,524 in the short fiscal year 2018/I to 1,561. In all sales regions (with the exception of Asia/Pacific), sales increased in the calendar year 2018. The regulatory and fiscal framework conditions did not undergo any significant changes in the year under review. The development of the commercial policy environment worsened further.

2.2.3. ASSETS, FINANCIAL AND EARNINGS POSITION

2.2.3.1. EARNINGS POSITION

in EUR thousands	2017	SFY 2018/I	SFY 2018/II	2018
Sales revenue	353,920	195,241	179,976	375,217
Changes in finished goods and work in progress	1,768	4,790	671	5,461
Other operating earnings	11,594	6,599	6,837	13,436
Costs of materials	-137,870	-80,180	-75,249	-155,428
Operating personnel expenses	-109,248	-58,625	-55,560	-114,185
Other operating expenses	-74,496	-36,867	-38,254	-75,121
EBITDA	45,668	30,958	18,421	49,380
Depreciation	-13,990	-7,498	-7,689	-15,186
EBIT	31,678	23,460	10,732	34,193
Other interest and similar earnings	662	315	227	543
Interest and similar expenses	-3,004	-1,422	-1,393	-2,816
Financial result	-2,342	-1,107	-1,166	-2,273
Result from ordinary business activities	29,336	22,353	9,566	31,920
Taxes on income and profit	-8,764	-6,291	-2,845	-9,136
Consolidated result	20,572	16,062	6,721	22,784
thereof non-controlling shareholdings	179	57	82	138
thereof shareholdings of the shareholders of AlzChem Group AG	20,393	16,005	6,639	22,646
Earnings per share in EUR (undiluted and diluted)	0.20	0.16	0.07	0.22

In the short fiscal year 2018/II, consolidated sales amounted to EUR 179,976 thousands (SFY 2018/I: EUR 195,241 thousands) and in the full year 2018 to EUR 375,217 thousands (2017: EUR 353,920 thousands). This corresponds to sales growth of 6.0 % in the calendar year 2018.

The good sales performance was mainly due to the Specialty Chemicals segment, which more than compensated for the slight sales decline in the Basics & Intermediates segment. In Europe and the NAFTA region in particular, AlzChem participated very successfully in the general market growth. Demand continued to develop at a high to in some cases very high level in line with the previous year's trend.

⁸ Group employees = all employment relationships without inactive employment relationships such as parental leave, partial retirement - passive, long-term illness (over 18 months)

Sales are broken down by region is as follows:

in EUR thousands	2017	SFY 2018/I	SFY 2018/II	2018
Germany	152,643	80,385	79,851	160,236
European Union (without Germany)	100,536	54,450	47,953	102,403
Rest of Europe	12,447	13,343	8,703	22,047
NAFTA	34,626	17,312	21,387	38,700
Asia	36,341	17,319	16,848	34,167
Rest of the world	17,327	12,432	5,234	17,666
Total	353,920	195,241	179,976	375,217

Despite negative deviations, which essentially result from a direct effect of lower deliveries in agricultural fertilizer applications, sales in Germany over the 12-month period under review were significantly higher than in the previous year 2017. Climatic conditions in the form of very high temperatures and very low precipitation, coupled with latent planning uncertainty, had a negative impact on demand in the agricultural sector. However, higher deliveries from the remaining basic chemicals business but also from the Specialty Chemicals segment were able to compensate for or more than compensate for the decline.

In the European Union, the trend of the previous year 2017 could be continued. In the turbulent market environment of the steel industry, the applications of the AlzChem Group were convincing and thus contributed to slight growth in this region. AlzChem was also able to place its water and wastewater treatment products more successfully than its competitors. The strategic pillars of quality, flexibility, reliability and trustful cooperation have once again proven to be superior. However, especially in the SFY 2018/II, deliveries of metallurgical products were below the level of the SFY 2018/I. This was triggered by planned plant shutdowns at our customers.

Deliveries to the rest of Europe rose significantly compared with the fiscal year 2017. In contrast to the increase within the EU, spot volumes were placed extremely successfully in this market segment in the SFY 2018/I.

Business in the NAFTA region picked up significantly in the second half of 2018 or the SFY 2018/II. We noticed a significant increase in demand for our dietary supplements but also for our chemical products.

Although the USD/EUR exchange rate of the first months of the SFY 2018/I had a negative impact on sales, it was offset by slight volume growth.

The Asian business region showed its more difficult side in the first half of 2018 or in the SFY 2018/I. Although AlzChem was able to significantly expand its market position on the one hand, it simultaneously suffered from the short-term changes in the framework conditions for renewable energy. With the help of its sales company, AlzChem Shanghai LLC, AlzChem is working consistently on expanding its product portfolio in the Chinese market so that fluctuations in individual business areas can be better compensated. For 2018 as a whole, it was not possible to fully reach the previous year's level of 2017 despite all the measures taken.

South America is one of AlzChem's most important sales markets for the remaining countries, and the Group continued to expand its market position in the first half of 2018 based on long-term strategic partnerships. Here too, the attributes of quality and reliability combined with a high level of competence in agricultural application consulting are proving to be effective in the long term. Purely due to seasonal factors, sales fall sharply in the second half of each year – this was also the case in the SFY 2018/II. In the period under review of the calendar year, we were also able to consolidate our market position here despite very active competition and even expand it in some application regions and crops.

Other operating income is mainly characterized by capitalized own work. These result from the obligation to recognize self-created items in the fixed assets. With a volume of EUR 3,544 thousands in the short fiscal year 2018/II, they account for about half of other operating income. Income from exchange rate gains of EUR 1,669 thousands is offset by expenses from exchange rate losses of EUR 1,423 thousands reported under other operating expenses.

The cost of materials amounted to EUR 75,249 thousands in the reporting period and was characterized by a direct correlation with sales on the one hand. The cost of materials also reflects higher sales volumes, higher production and the growth trend in the Specialty Chemicals segment. At the same time, the higher output volume in the short fiscal year 2018/II led to disproportionate growth. On the other hand, almost all raw material purchases including electricity prices were subject to partly significant price increases so that in addition to the volume increases, cost increases were also recorded. The cost increases could not be fully compensated for despite the adjustment of ratios or mixtures. In particular, the (even if partially only temporary) plant closures in China must also be taken into account. Extensive controls in connection with environmental regulations therefore also have an impact on the short-term and medium-term availability of raw materials from AlzChem. Despite the changed situation on the raw materials market, it has always been possible to secure supplies.

Traditional raw material costs were subject to a significant change, mainly due to the increase in black material costs. The resulting electricity costs have fallen specifically in both Germany and Sweden, mainly as a result of low-cost band fuse protection. With the help of stable and continuous furnace operation, further cost increases were successfully compensated and additionally contributed to (local) network stability. In connection with the sustained increase in plant utilization, it became necessary to use fossil fuels in addition to the media produced by the production network.

The described development of the cost of materials in the short fiscal year 2018/II was similarly reflected in the 12-month period 2018. The cost of materials rose disproportionately to sales growth by 12.7% to EUR 155,428 thousands after EUR 137,870 thousands in 2017. Personnel expenses amounted to EUR 55,560 thousands in the short fiscal year 2018/II. A comparison of the calendar years 2017 and 2018 shows that AlzChem has succeeded in optimizing personnel deployment.

Personnel expenses rose disproportionately less by 4.5% from EUR 109,248 thousands to EUR 114,185 thousands. The AlzChem Group recorded an increase in the number of employees both compared to the short fiscal year 2018/I and to the 12-month periods due to continuous growth and the further increase in plant utilization.

Employees ⁹	2015	2016	2017	SFY 2018/I	SFY 2018/II
Commercial workers	748	749	766	781	802
Employees (including executives and holiday employees)	611	595	610	624	635
Trainees	121	125	115	119	125
Σ Employees	1,480	1,469	1,491	1,524	1,561
Change	1.6%	-0.8%	1.5%	2.2%	2.4%

⁹ Average calculation of the number of employees at the end of the last four quarters, including those abroad

The other operating expenses of EUR 38,254 thousands are characterized by selling expenses, which amounted to EUR 8,222 thousands in the short fiscal year 2018/II, accompanied by increased volumes and partially rising freight rates. Other significant items are other external services (EUR 4,886 thousands) and maintenance costs (EUR 5,690 thousands). In addition, environmental and disposal costs in the amount of EUR 4,548 thousands also had an impact on the development of other operating expenses. In connection with increasing production volumes, it became necessary to purchase an increasing proportion of waste disposal services from external sources. These effects had a corresponding impact in the calendar year 2018. At the same time, we succeeded in

maintaining other operating expenses at the previous year's level of EUR 75,121 thousands in the calendar year 2018.

EBITDA in the short fiscal year 2018/II amounted to EUR 18,421 thousands. A one-time repayment of EUR 1,524 thousands (thereof interest of EUR 61 thousands) to be made retroactively for the years 2012 and 2013 also had an effect on the development of the operating result, after the EU Commission classified the exemption of grid fees at that time as a violation of state aid regulations and thus partially reclaimed it. EBITDA for the calendar year 2018 improved from EUR 45,668 thousands to EUR 49,380 thousands.

Depreciation is as follows:

in EUR thousands	2017	SFY 2018/I	SFY 2018/II	2018
Depreciation on intangible assets	451	250	224	474
Depreciation on fixed assets	13,539	7,248	7,465	14,713
Total depreciation	13,990	7,498	7,689	15,186

Scheduled depreciation for intangible assets and property, plant and equipment amounts to EUR 7,689 in the short fiscal year 2018/II and EUR 15,186 thousands in the calendar year 2018. The increased depreciation and amortization volume is attributable to the Group's extensive investment activity in the short fiscal year 2018/II and previous years.

The financial result for the short fiscal year 2018/II of EUR -1,166 thousands was primarily influenced by interest and similar expenses. These mainly include non-cash interest expenses from compounding long-term provisions for pensions and landfills as well as bank and factoring interest, which was incurred in particular for long-term loans. In the calendar year 2018, the financial result improved by 2.9% to EUR 2,273 thousands.

In the short fiscal year 2018/II, the effective Group tax rate was 30% (SFY 2018/I: 28%). The income tax expense of EUR 2,845 thousands reflects the good earnings development. This also applies to the calendar year 2018 with a slightly improved Group tax rate of 28.6% (2017: 30%) and an almost stable income tax expense of EUR 9,136 thousands.

Expenses from changes in deferred taxes amounted to EUR 46 thousands in the short fiscal year 2018/II and EUR 530 thousands in the calendar year 2018.

The Group result for the short fiscal year 2018/II reached EUR 6,721 thousands (SFY 2018/I: EUR 16,062 thousands). This results in earnings per share of EUR 0.07 (SFY 2018/I: EUR 0.16).

In the calendar year 2018, the Group result could be increased by 10.8% from EUR 20,572 thousands to EUR 22,784 thousands. Accordingly, earnings per share increased disproportionately from EUR 0.20 to EUR 0.22.

2.2.3.1.1. DEVELOPMENT OF THE SEGMENTS

2.2.3.1.1.1. SPECIALTY CHEMICALS SEGMENT

Key performance indicators for the segment

in EUR thousands	2017	SFY 2018/I	SFY 2018/II	2018
External sales	185,681	110,734	98,680	209,414
EBITDA	42,709	28,776	21,916	50,692
Depreciation	5,061	2,623	2,490	5,113
EBIT	37,648	26,153	19,426	45,579
Inventories	44,315	47,403	49,672	49,672
Inventory ratio	24%	43%	50%	24%
EBITDA margin	23.0%	26.0%	22.2%	24.2%

The sustained growth in the Specialty Chemicals segment continued in the short fiscal year 2018/II. Sales amounted to EUR 98,680 thousands (SFY 2018/I: EUR 110,734 thousands). The good development becomes clearer when comparing the calendar years, which are not influenced by seasonality. Here, sales revenues increased by 12.8% from EUR 185,681 thousands to EUR 209,414 thousands. By contrast, negative currency effects dampened development.

The main growth engines were the multi-purpose facilities. The successful transfer of products from the chemical laboratory to industrial scale made a significant contribution to growth in the reporting period. Nearly all chemical facilities are operated close to the technical capacity limit. The nutrition sector (feed and nutritional supplements) with the Creamino and Creapure® brands also showed dynamic growth.

2.2.3.1.1.2. BASICS & INTERMEDIATES SEGMENT

Key performance indicators for the segment

in EUR thousands	2017	SFY 2018/I	SFY 2018/II	2018
External sales	140,869	71,081	68,885	139,966
EBITDA	5,592	1,248	-2,137	-889
Depreciation	4,334	2,407	2,575	4,983
EBIT	1,258	-1,159	-4,712	-5,871
Inventories	26,091	26,327	28,125	28,125
Inventory ratio	19%	37%	41%	20%
EBITDA margin	4.0%	1.8%	-3.1%	-0.6%

Sales revenues in the Basics & Intermediates segment totaled EUR 68,885 thousands in the reporting period, compared to EUR 71,081 thousands in the short fiscal year 2018/I. In the calendar year 2018, sales were stable overall with a revenue level of EUR 139,966 thousands (2017: EUR 140,869 thousands). Volume and negative currency effects mainly dampened the development. In selected business segments, sales prices could be adjusted due to the very significant

increase in raw material prices. Nevertheless, cost increases on the purchasing side were still significantly higher than possible adjustments on the sales side, so that a slightly negative EBITDA was recorded in the calendar year 2018. The results of the short fiscal year 2018/II were additionally impacted by planned technical annual revisions. The slight increase in inventories in the segment reflects higher purchase prices and high capacity utilization at chemical plants.

2.2.3.1.1.3. OTHER & HOLDING SEGMENT

Key performance indicators for the segment

in EUR thousands	2017	SFY 2018/I	SFY 2018/II	2018
External sales	27,374	13,421	12,404	25,825
EBITDA	-2,640	497	-305	192
Depreciation	4,516	2,614	2,804	5,418
EBIT	-7,157	-2,117	-3,109	-5,226
Inventories	3,142	3,761	3,766	3,766
Inventory ratio	11%	28%	30%	15%
EBITDA margin	-9.6%	3.7%	-2.5%	0.7%

The business volume at the chemical parks in Trostberg and Hart remained essentially stable. Sales revenues in the short fiscal year 2018/II totaled EUR 12,404 thousands compared to EUR 13,421 thousands in the first six months of 2018. The development in segment inventories with a volume of EUR 3,766 thousands should be seen, among other things, in connection with regular fluctuations in consumables and supplies.

2.2.3.2. FINANCIAL POSITION

2.2.3.2.1. CAPITAL STRUCTURE

The selection of financial instruments focuses on maturity-matched financing, which is achieved through the management of maturities. In 2017, AlzChem Trostberg GmbH was able to contractually arrange the project financing of the new Creamino production plant with an investment loan in the amount of EUR 50,730 thousands.

In addition to the project-related financing measures with a term of more than 1 year and a balance sheet date value of EUR 32,577 thousands (June 30, 2018: EUR 16,403 thousands), the AlzChem Group is stably positioned by short- to medium-term financing agreements (see Liquidity) to be able to support the operative business.

2.2.3.2.2. INVESTMENTS

Investment measures totaling EUR 28,686 thousands (SFY 2018/I: EUR 15,961 thousands) were carried out in the short fiscal year 2018/II and EUR 44,647 thousands (2017: EUR 24,784 thousands) in the calendar year 2018. In the periods, investments were mainly made in the areas of production

and infrastructure. The investment objectives were mainly in the expansion of capacities, the conservation, expansion, modernization and rationalization. The most significant growth investments in terms of amount in the short fiscal year 2018/II were:

- expansion of Creamino capacity, including logistics
- capacity expansion in the nitriles product area

Due to the "Verbund" structure and the related interlinking of the infrastructure and investment structure, segment information on investments is omitted (not meaningful).

2.2.3.2.3. LIQUIDITY

Within the AlzChem Group, AlzChem Trostberg GmbH takes over the intragroup financing function and ensures the short-term liquidity of the subsidiaries through cash pooling. In addition, the company is available to the subsidiaries as a borrower or as additional collateral against the banks for long-term financing.

In addition to the long-term project-related financing for measures already implemented with a term of more than one year (EUR 32,577 thousands), the aforementioned investment loan of EUR 50,730 thousands was concluded in the fiscal year 2017 and already used with EUR 20,560 thousands. These obligations were serviced as scheduled in the year under review.

In addition, short-term financing lines (money market loans or overdraft facilities) totaling EUR 37,500 thousands (SFY 2018/I: EUR 32,500 thousands) were agreed with several banks. In conjunction with the increased volume of business, there has also been a need to adjust the short-term funding

framework during the year. As of December 31, 2018, EUR 18,244¹⁰ thousands (SFY 2018/I: EUR 15,661 thousands) of these lines had been utilized. The remaining difference of EUR 25,353 thousands (SFY 2018/I: EUR 22,122 thousands) to the carrying amount of EUR 7,109 thousands (SFY 2018/I: EUR 6,461 thousands) relates to long-term loans with a term of less than one year.

Furthermore, the company uses factoring as a financing. Here, the available financing amounting to EUR 30,000 thousands on average over the short fiscal year 2018/II has been exhausted by only about 20% (SFY 2018/I: 18%). Loan and loan agreements include the usual covenant agreements in the capital market. An impairment of these requirements is not recognizable in the medium-term planning. Liquidity is guaranteed at all times by the existing financing instruments.

As of December 31, 2018, cash and cash equivalents amounted to EUR 12,857 thousands (June 30, 2018: EUR 9,844 thousands).

The collateral provided to the Government of Upper Bavaria for the operation of its own landfills in the amount of EUR 5,902 thousands (June 30, 2018: EUR 5,902 thousands) is shown as other current assets due to the fixed investment over three months. These are funds that are fully restricted but that may be invested for a maximum period of one year under the terms of the disposal restriction.

The change in cash and cash equivalents is as follows:

in EUR thousands	2017	SFY 2018/I	SFY 2018/II	2018
Cash and cash equivalents as of January 1 or July 1	12,089	12,802	9,844	12,802
Cash inflow from ongoing operations	30,664	15,436	19,220	34,654
Cash outflow from investing activity ¹¹	-24,784	-15,724	-24,162	-39,884
Cash outflow (-)/cash inflow (+) from financing activities	-5,060	-2,742	7,992	5,250
Changes in cash and cash equivalents	820	-3,030	3,050	21
Changes due to changes in exchange rates	-107	72	-36	36
Cash and cash equivalents as of December 31 or June 30	12,802	9,844	12,857	12,857

The cash flow statement is prepared using the indirect method.

As of December 31, 2018, cash and cash equivalents totaled EUR 12,857 thousands (June 30, 2018: EUR 9,844 thousands) and comprise immediately available bank balances, checks and cash in hand.

As a result of the strong operating results, a positive cash inflow from operating activities of EUR 19,220 thousands was generated in the short fiscal year 2018/II. Calculated for the entire calendar year 2018, it amounted to EUR 34,654 thousands.

The cash outflow from investing activities in the short fiscal year 2018/II is composed of EUR 24,167 thousands for investments in property, plant and equipment and proceeds from the sale of fixed assets of EUR 6 thousands. In the calendar year 2018, the cash outflow totaled EUR 39,884 thousands after EUR 24,784 thousands in 2017. The total expenses for investments amounted to EUR 44,647 thousands for 2018 (2017: EUR 24,878 thousands).

The cash inflow from financing activities in the short fiscal year 2018/II results from the receipt of the payment of loan liabilities (EUR 20,560 thousands), the repayment of loan liabilities (EUR -3,885 thousands), the payment of short-term financing lines (EUR 2,585 thousands), the payment of profit claims to non-controlling shareholders (EUR -74 thousands) and a dividend payment (EUR -11,194 thousands).

¹⁰ incl. EUR 80 thousands customs guarantee

¹¹ Payments for investments in calendar year 2018 of EUR 40,127 thousands (2017: EUR 24,878 thousands), proceeds from the sale of fixed assets of EUR 243 thousands (2017: EUR 69 thousands), cash inflow from company acquisition (2017: EUR 25 thousands)

2.2.3.3. ASSET POSITION

	12/31/2017		06/30/2018		12/31/2018	
	EUR thousands	Share	EUR thousands	Share	EUR thousands	Share
Assets						
Intangible assets	1,009	0%	991	0%	870	0%
Fixed assets	115,131	41%	123,161	40%	144,265	46%
Financial assets	20	0%	20	0%	20	0%
Other receivables and assets	1,071	0%	1,067	0%	891	0%
Deferred tax assets	25,433	9%	24,625	8%	24,954	8%
Non-current assets	142,664	51%	149,864	49%	171,000	55%
Inventories	71,382	25%	75,579	25%	78,856	25%
Trade receivables	35,035	13%	52,336	17%	34,351	11%
Other receivables and assets	16,308	6%	14,515	5%	14,510	5%
Income tax claims	1,990	1%	2,321	1%	1,977	1%
Cash and cash equivalents	12,802	5%	9,844	3%	12,857	4%
Current assets	137,517	49%	154,595	51%	142,551	45%
Σ Assets	280,181	100%	304,459	100%	313,551	100%
Capital						
Equity	57,894	21%	74,044	24%	68,392	22%
Non-current liabilities	146,278	52%	145,007	48%	164,001	52%
Current liabilities	76,009	27%	85,408	28%	81,158	26%
Total assets	280,181	100%	304,459	100%	313,551	100%

Since June 30, 2018, assets have increased by EUR 9,092 thousands to EUR 313,551 thousands. In addition to the significantly expanded investment activity in property, plant and equipment, this is mainly due to the increase in inventories.

The increase in inventories by EUR 3,277 thousands to EUR 78,856 thousands mainly reflects the high capacity utilization and the strategic orientation of the AlzChem Group adjusted in the year under review. In connection with planned expansion investments, the stock of Creamino has been or will be successively built up in order to be able to meet the constantly increasing demand parallel to the construction phase. The campaign sizes in the multipurpose facilities were extended to make setup and cleaning time usable as productive plant time at the same time. Accordingly, there has been a shift in inventories away from work in progress towards finished goods. The increase in finished products was driven by the build-up of Creamino inventories, the necessary campaign production in the multi-purpose facilities, the nitrile operations, but also from DYHARD® at the Schalchen site.

At 25%, the inventory intensity¹² is at the same level as at June 30, 2018 due to increased inventories and at the same time a higher balance sheet total. Due to the high capital commitment involved, the absolute level of inventories is a financial performance indicator that is continuously monitored for the Group as a whole and for the individual segments.

Trade receivables decreased by EUR 17,985 thousands to EUR 34,351 thousands. The comparative figure of EUR 52,366 thousands as of June 30, 2018 was affected in certain areas by seasonal and in some cases reporting date effects. As of the balance sheet date, EUR 15,755 thousands (June 30, 2018: EUR 8,846 thousands) had been sold. In addition, factoring services were used to optimize interest rates.

Please refer to point 2.2.3.2.2. Investments for the increase in property, plant and equipment.

¹² Inventories as a percentage of total assets

The increase of EUR 329 thousands in deferred tax assets is mainly due to the higher elimination of intercompany profits from inventories. A value of EUR 19,512 thousands (June 30, 2018: EUR 19,235 thousands) was recognized in deferred tax assets for the pension provisions of the Group companies AlzChem Group AG, AlzChem Trostberg GmbH and NIGU Chemie GmbH.

The Group equity ratio decreased by 2.5 percentage points to 21.8% as of December 31, 2018. The main reasons for this were the dividend payment and the increase in liabilities.

The rise in non-current liabilities is primarily due to increased loan liabilities to banks, which serve the long-term financing of our major investments.

The essentially stable development of pension provisions is based on an actuarial interest rate of 1.9% (June 30, 2018: 1.8%). The change in pension provisions due to changes in actuarial parameters was recognized in other comprehensive income in the amount of EUR +1,650 thousands (June 30, 2018: EUR +1,152 thousands) and not in consolidated net income.

in %	2015	2016	2017	SFY 2018/I	SFY 2018/II
Discount rate	2.50	1.75	1.75	1.80	1.90
Wage and salary trend	2.75	2.75	2.75	2.75	2.75
Pension trend	1.75	1.75	1.75	1.75	2.00
Trend contribution limit social security	2.50	2.50	2.50	2.50	2.50

Current liabilities decreased by EUR 4,250 thousands to EUR 81,158 thousands. The increase in loan liabilities to banks (EUR +3,085 thousands) was offset by lower other liabilities

(EUR -5,163 thousands) and income tax liabilities (EUR -1,482 thousands).

2.2.3.4. FINANCIAL AND NON-FINANCIAL PERFORMANCE INDICATORS

2.2.3.4.1. FINANCIAL PERFORMANCE INDICATORS

Figure	Unit	2017	SFY 2018/I	SFY 2018/II	2018
Group equity ratio	%	20.7	24.3	21.8	21.8
EBIT	EUR thousands	31,678	23,460	10,732	34,193
EBITDA	EUR thousands	45,668	30,958	18,421	49,380
EBITDA margin	%	12.9	15.9	10.2	13.2
Inventories	EUR thousands	71,382	75,579	78,856	78,856
Inventory ratio	%	20.2	38.7	43.8	21.0
Sales	EUR thousands	353,920	195,241	179,976	375,217
Group debt ratio	Ratio	0.75	0.72	0.74	0.74

2.2.3.4.2. NON-FINANCIAL PERFORMANCE INDICATORS

In the sustainability report or corporate social responsibility report (CSR report), the following facts are explained in detail.

The non-financial goals of the AlzChem Group are geared to both the short and the long term and support operational

business management as auxiliary indicators. Accordingly, no quantification has been made - also against the background of materiality for the addressees of the annual financial statements.

Sustainable customer loyalty:

Our business is characterized by a high repeat rate of regular customers. AlzChem endeavors to maintain the customer retention rate at a high level and to expand it in individual business areas.

Training:

Personnel development at AlzChem begins among other things with in-company training. A considerable proportion of the employee demand is recruited from the company's own integrated training. The AlzChem Group's training ratio of 9.3% (SFY 2018/I: 7.0%), which is high compared with the rest of the industry, is indicative of this.

Every year, about 40 apprentices start their training at AlzChem in commercial, metal, electrical engineering and chemical areas.

Management systems:

The course of business is designed sustainably to meet the requirements of the management systems and certificates listed below. The management systems and certificates are not non-financial performance indicators in the narrower sense.

The ISO27001 and DIN27019 certification received by the Group had the following specific reasons:

The Bundesnetzagentur is calling for public distribution system operators to implement the conditions imposed by Article 11 (1a) EnWG with regard to IT security by January 31, 2018. For AlzChem Trostberg GmbH as the network operator, the introduction of ISO27001 was therefore mandatory.

Environment and energy:

Every year, AlzChem publishes a statement on the environmental impact of the German production sites, including relevant environmental performance indicators, for example, consumption of resources, emissions, etc. The resulting transparency shows the importance of responsible use of the environment within the AlzChem Group.

2.2.4. OVERALL STATEMENT ON THE ECONOMIC SITUATION

The Management Board of AlzChem Group AG is very satisfied with the course of business in the short fiscal year 2018/II and the overall economic situation. The company was able to hold its own in a persistently competitive market environment and successfully pursue its growth strategy. We have also achieved what we had set ourselves in operational and strategic terms. Sales and earnings improved in line with the forecasts of the calendar year 2017 for the calendar year 2018 and of the SFY 2018/I for the period 7/2018 to 6/2019.

We continue to view the development of the financial situation in the short fiscal year 2018/II as positive. Despite the very extensive investments, cash and cash equivalents were maintained at a good level thanks to the strong operating cash flow and the utilization of the existing financing framework.

For further details regarding the course of business in 2018/II, the forecast for the period from July 1, 2018 to June 30, 2019 and the fiscal year 2019, please refer to chapter 4 Forecast Report.

2.2.5. COMPARISON OF EXPECTED TO ACTUAL DEVELOPMENT IN THE FISCAL YEAR

The AlzChem Group has issued a forecast for the calendar year 2018 in the consolidated financial statements 2017 and a forecast for the period from July 1, 2018 to June 30, 2019 in the consolidated financial statements 2018/I.

2.2.5.1. COMPARISON OF EXPECTED WITH ACTUAL DEVELOPMENT IN THE CALENDAR YEAR 2018

The full forecast at Group and segment level for the calendar year 2018 was as follows:

Forecast ¹³ for the calendar year 2018	Sales	EBITDA	EBITDA margin	EBIT	Inventories	Equity ratio	Debt ratio
AlzChem Group	rising	rising	stable	slightly rising	sharply rising	stable	stable
Specialty Chemicals	rising	sharply rising	slightly rising	sharply rising	sharply rising	-	-
Basics & Intermediates	slightly rising	sharply declining	sharply declining	sharply declining	stable	-	-
Other & Holding	slightly rising	sharply declining	sharply declining	sharply declining	sharply rising	-	-

The review of the forecast from 2017 shows the following developments in the calendar year 2018:

Actual development calendar year 2018	Sales	EBITDA	EBITDA margin	EBIT	Inventories	Equity ratio	Debt ratio
AlzChem Group	rising	sharply rising	slightly rising	sharply rising	sharply rising	rising	stable
Specialty Chemicals	sharply rising	sharply rising	rising	sharply rising	sharply rising	-	-
Basics & Intermediates	slightly declining	sharply declining	sharply declining	sharply declining	sharply rising	-	-
Other & Holding	declining	sharply rising	sharply rising	sharply rising	sharply rising	-	-

A comparison of the relevant key financial figures shows that the forecasts for the calendar year 2018 were largely met. Sales, EBITDA and EBIT were increased as forecast.

2.2.5.2. COMPARISON OF EXPECTED WITH ACTUAL DEVELOPMENT FOR THE PERIOD FROM JULY 1, 2018 TO JUNE 30, 2019

The following table provides an overview of the projected ranges and values of the financial performance indicators for the period from July 1, 2018 to June 30, 2019:

Forecast as at 06/30/2018 [in EUR thousands]	Sales	EBITDA	EBITDA margin	EBIT	Inventories	Equity ratio	Debt ratio
AlzChem Group	370.6 – 380.6	48.1 – 53.0	12.9% – 13.9%	32.6 – 37.5	75.5 – 80.5	22.5% – 24.5%	0.72 – 0.75
Specialty Chemicals	200.1 – 205.1	45.9 – 48.9	22.9% – 23.8%	38.9 – 43.4	52.5 – 53.5	-	-
Basics & Intermediates	147.1 – 150.1	2.6 – 3.6	1.8% – 2.3%	-2.9 – 1.1	21.5 – 23.0	-	-
Other & Holding	23.4 – 25.4	-0.4 – 0.5	-0.2% – 0.2%	-3.4 – -4.8	1.5 – 4.0	-	-

¹³ sharply rising = > 7%; rising (clearly) = 3% to 7%; slightly rising = 1% to 3%; consistent (stable); slightly declining (sinking) = -1% to -3%; declining (sinking) = -3% to -7%; sharply declining (sinking) = > -7%

The review of the forecast shows the following developments compared with the forecast as of June 30, 2018:

Forecast as at 12/31/2018 [in EUR thousands]	Sales	Adjusted EBITDA	EBITDA margin	Adjusted EBIT	Inventories	Equity ratio	Debt ratio
AlzChem Group	370.6 – 375.6	41.7 – 45.7	11.3% – 11.9%	25.7 – 29.7	78.5 – 84.5	21.5% – 23.5%	0.74 – 0.76
Specialty Chemicals	199.1 – 204.1	43.7 – 44.7	21.2% – 21.9%	36.7 – 37.7	49.5 – 52.5	-	-
Basics & Intermediates	147.1 – 149.8	-1.0 – 1.0	-0.7% – 0.7%	-6.0 – -4.0	27.5 – 29.5	-	-
Other & Holding	25.2 – 26.2	-1.0 – 0.0	-4.0% – 0%	-5.0 – -4.0	1.5 – 2.5	-	-

With regard to the forecast period from July 1, 2018 to June 30, 2019, the results achieved for sales, EBIT, EBITDA and EBITDA margin show that the AlzChem Group developed in line with the issued forecasts both at Group and segment level in the SFY 2018/II.

3. RISK AND OPPORTUNITY REPORT

In order to ensure the legally required monitoring of the material business risks by the Management Board and the Supervisory Board, an internal control system exists to ensure proper and effective accounting (Section 289 (5), 315 (2) No. 5 HGB), a compliance management system as well as a risk early warning system pursuant to Section 91 (2) AktG.

3.1. RISK REPORT

Risk management takes place through regular meetings and reports by the respective committees, bodies and specialist departments. This includes, among other things, regular meetings, reports and related votes.

Furthermore, there is a tight debtor and vendor management with regard to a timely dunning process including an internal credit management for all debtors. Here, maximum volumes were defined per individual customer, which must not be exceeded.

In addition, there is a rolling, short- and long-term earnings and financial planning with a monthly liquidity forecast. Monthly project plans under the REACH¹⁴ regulation ensure the unimpeded flow of goods to the customer. In the energy sector, we work closely with external consultants.

The risk management of the AlzChem Group comprises the entirety of all measures for the systematic and transparent handling of risks and, through its integration with the controlling processes, forms an integral part of corporate management. Every year, a standardized risk inventory is carried out according to the enterprise risk management approach. For the most complete identification of all relevant risks, a catalog with corresponding risk categories is used. In addition, standardized valuation and reporting tools are available for the collection and assessment of risks. Depending on the type of risk, different instruments are used, such as Monte Carlo simulations, sensitivity or scenario analyzes for assessment. The determination of the scaled risk volume takes into account the probability of occurrence and the amount of damage. The aim of this measure is the early identification, assessment and management of those risks that can significantly influence the achievement of the strategic, operational, financial and compliance goals of the company.

For the assessment of the risks, the expected effects of the risk levels in their specific forms (very low, low, medium and high) are weighted with their individual probabilities of occurrence (very low, low, medium and high) and then converted to a point value of a 3-step scale. The height of the point value then determines the classification of the risk significance as low, medium and high for the net assets, financial position and results of operations. Risk reduction measures already taken reduce the classification of risk significance.

¹⁴ REACH = Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals. It has been in force in Europe since 2007 and aims to ensure a high level of protection of human health and the environment. It should at the same time ensure the free movement of chemicals in the internal market and promote competition and innovation.

The valuation is based on the following assumptions:

	very low	low	medium	high
Probability of occurrence	< 10%	10% – < 30%	30% – < 50%	> 50%

The observation period is a period of 3 years. If there are risks in the future, these were also recorded, whereby the time horizon was taken into account in the damage assessment.

The risk dimensions are based on the following assumptions which are used as indicators of the impact on the net assets, financial position and results of operations:

	very low	low	medium	high
Risk exposure of EBITDA	< 2%	2% – < 10%	10% – < 25%	> 25%

The scope of risk consolidation corresponds to the scope of consolidation used for the accounting. The risks do not differ significantly between the segments or do not focus solely on one segment. The risks described below are rather Group-wide and across segments.

Within the framework of this risk management process, the following contents could be identified, which could have material or significant adverse effects on the future development of the company. As a consequence of the AlzChem Group's structure, the risks listed below have a similar impact on the Group's three operating segments.

The risk management system presented focuses primarily on business risks, but at the same time also seizes opportunities. The opportunity management process is also integrated into our internal controlling processes and is implemented on the basis of the corporate strategy in the operating segments.

3.1.1. OPERATIVE RISKS

3.1.1.1. RISK OF INCREASING PROCUREMENT PRICES

AlzChem's product portfolio, based on carbide/calcium cyanamide, is based on lime, coke and electric energy. In addition, a number of chemical raw materials are needed for the production process. The market prices for lime, coke and energy as well as other chemical raw materials are subject to considerable fluctuations.

AlzChem procures energy mainly in the form of electricity, but also in the form of natural gas. Energy costs are influenced by several factors, including the availability of certain energy sources and fluctuations in energy prices. Energy prices, especially electricity prices, may rise in the future. The energy costs of large energy-intensive companies are particularly dependent on the regulatory environment. It also includes taxes and certain regulatory charges on energy consumption or grid usage, which can be a significant part of energy costs for large energy-intensive businesses. In Germany, these taxes and levies could be increased in the future to offset the higher costs of phasing out nuclear power and switching from fossil to renewable energy sources. In addition, AlzChem relies on certain exemptions from duties and taxes on energy (see Section 3.1.3.).

The company has long-term electricity supply contracts in Germany indirectly through Evonik Degussa GmbH with fixed electricity prices for certain electricity volumes for the years 2019 to 2020 and has agreed fixed prices in Sweden for certain electricity volumes for the years 2019 to 2021. On the one hand, this reduces to some extent the risk of rising electricity prices, but on the other hand, in a scenario of falling electricity prices, these agreements place AlzChem at a relative disadvantage compared to its competitors. In addition, AlzChem in Germany depends on Evonik Degussa fulfilling its contractual obligations to AlzChem to supply the agreed quantities of electricity at the agreed price.

The prices that AlzChem has to pay for certain commodities are subject to fluctuations. Since AlzChem's primary raw materials are natural commodities, their price is usually determined on the basis of general mining and production volumes and industry demand. Although AlzChem has defined procurement strategies for the most important raw materials and concludes long-term supply contracts or annual contracts to minimize price and volume risks. However, the company is unable to fully eliminate the risks of commodity price volatility. Moreover, it cannot be ruled out that AlzChem will be bound by higher prices in times of falling commodity prices due to long-term supply contracts, while in times of rising prices AlzChem will not be able to conclude advantageous supply contracts.

An increase in commodity and energy prices, even in times of good general economic conditions, can have a significantly adverse effect on AlzChem's net assets, financial position and results of operations.

With regard to the procurement price risks, the management assumes a medium to high probability of occurrence and a medium impact on the net assets, financial position and results of operations.

3.1.1.2. MARKET RISKS

AlzChem offers a large number of different NCN-based chemical products in diversified markets, some of which are cyclical, highly volatile and sensitive to, among others, consumer spending and preferences, consumer confidence and income, unemployment rates, interest rates and energy prices. Therefore, demand for AlzChem's products may be affected by negative developments in diversified sectors and industries, in particular in the agricultural, feed, pharmaceutical, cosmetics, chemicals, metals, renewable energy and automotive industries, as well as in the food and beverage sectors nutrition market.

In the agricultural sector, the demand for AlzChem products depends on the production level, which is why the company is exposed to seasonal fluctuations as well as meteorological and climatic conditions. As the company usually sells its products through wholesalers or importers, changes in the retail trade in this sector, such as a potential shift to other wholesalers or importers or to direct marketing, may adversely affect the company. In addition, AlzChem's products are designed for certain methods of industrialized agriculture, so that a shift in consumer preferences towards agricultural products from non-industrialized agriculture could indirectly lead to a decline in demand. In addition, technological progress, for example in the field of genetic engineering, may lead to an increased use of other agricultural methods for which AlzChem products are no longer or only to a limited extent required.

In the feed and agrochemical industries, a change in consumer habits and preferences, for example an increasing trend to eat only meat from organic livestock farming, could lead to a decline in demand for AlzChem products. If consumers choose to consume less meat, it is in principle possible that this will also have a negative impact on the demand for AlzChem products.

In the pharmaceutical, cosmetic and chemical industries, the medicinal products for which AlzChem manufactures chemical building blocks usually undergo a product life cycle, at the end of which a new generation of the medicinal product is launched on the market. There is therefore a risk that AlzChem's products will no longer be needed in future generations of the medicinal products concerned or that AlzChem's customers will purchase them from a different supplier. In the cosmetics sector, the company is exposed to cyclical fluctuations in consumer markets, while in the chemical products sector there is a risk of a decline in demand as a result of an economic downturn.

In the metals industry, demand for AlzChem's products is also exposed to the risk of an economic downturn. In addition, technological changes in steel production, such as a possible shift to steel production from scrap that does not require desulphurization, could lead to a decline in demand for AlzChem products. After the European steel industry has lost ground to its Chinese competitors in the past and has seen a trend towards consolidation, it cannot be ruled out that these developments will also have a negative impact on AlzChem.

In the renewable energy sector, AlzChem is exposed to developments in the photovoltaic and wind energy industries, as both are innovative industries with potential for continuous technological change, which could lead to a decline in demand for AlzChem's products or even make them superfluous. In addition, a shift in the political environment in the USA could have a negative impact on the photovoltaic industry and the wind energy industry.¹⁵ In China, government subsidies for the use of renewable energies are to be reduced. In addition, the construction of subsidized solar projects has been suspended until further notice.¹⁶

In the automotive industry, AlzChem is particularly dependent on demand for passenger cars and commercial vehicles, which is directly linked to the state of the world economy. For example, a further economic slowdown in China, which is now the world's largest market for passenger cars and commercial vehicles, would have a negative impact on vehicle demand.

In the food sector, AlzChem's dietary supplements are subject to cyclical fluctuations in consumer markets. In addition, demand depends on the general acceptance of dietary supplements.

In certain segments and industries in which AlzChem operates, customers typically adjust their sourcing activities to the expected growth rates in their respective markets. During an actual or expected economic downturn, these customers seek to reduce their working capital and inventories, which may result in a significant decrease in the sales volume of AlzChem's products. During upswings, customers tend to replenish their inventories, which may result in higher demand for AlzChem's products. This build-up and decrease of inventories affects both actual and projected demand for AlzChem's products and may result in unexpected or unexpectedly strong fluctuations in demand. This in turn can result in unexpected changes in production volumes and capacity utilization at AlzChem that are highly correlated with the company's operating result due to the costs and investments required to operate the production facilities.

A decline in demand in one of AlzChem's markets, which is possible even in times of generally good economic conditions, could have material adverse effects on AlzChem's business, assets, financial and earnings position.

In terms of market risk, management assumes a medium to high probability of occurrence and a low to medium impact on the net assets, financial position and results of operations.

¹⁵ Trump announces withdrawal from Paris climate protection agreement. In: Die Zeit, June 2, 2017, retrieved June 2, 2017

¹⁶ https://www.thepoachtimes.com/chinas-solar-industry-in-trouble-despite-years-of-government-support_2600482.html (08/08/2018)

3.1.1.3. COMPETITION RISK

AlzChem faces different levels of competition with its various products. The company is a regional leader in some areas because international competitors are less active in these regions due to the geographical distance of the region and the chemical specifications of the products concerned. In other areas, on the other hand, there is intense competition. In some key markets, the main competitors are from China and India, where they benefit from cost advantages in the areas of human resources, energy, waste management and the environment. In other markets, AlzChem competes with well-established and strong competitors from leading industrial regions, which are often global and have global distribution networks.

Some competitors – mainly in emerging markets – may deliver certain products below the normal market prices, forcing AlzChem to lower their sales prices, which could have material adverse effects on margins and profitability. Various factors may affect the price at which a competitor is prepared to deliver its products, including access to cheap commodities and government grants to which AlzChem has no access. In addition, state-owned or state-supported competitors could resort to dumping measures such as capacity increases and/or price reductions.

AlzChem's ability to maintain or increase profitability hinges on the ability to offset falling product prices and margins by improving production efficiency and increasing sales volumes, focusing on individualized, higher-margin products, and improving existing products and applications through innovation – all measures that competitors may be able to implement better and more cost-effectively than AlzChem.

For many products, there are other criteria besides price, such as the performance and quality of the product, pricing strategies, product availability and security of supply. It is possible that competitors will be more successful in meeting customer requirements for product features and cost-effectively producing. In the future, price competition for a larger portion of AlzChem's products could increase, forcing AlzChem to lower its prices.

The competition could also be intensified by new entrants or companies consolidating their business activities and achieving economies of scale. Some competitors have or may have higher production capacities than AlzChem and may have more financial resources. These competitors could also have much greater operational and financial flexibility than AlzChem. As a result, these competitors may be better able to withstand volatility in their respective market, commodity or energy price changes or unfavorable economic conditions.

In addition, AlzChem may face increasing competition from companies that offer products based on alternative materials, technologies and processes, and that may be more competitive or superior in price or performance, thus gaining current customers of AlzChem, leading to a decline in sales at AlzChem.

The occurrence of one or more of the risks described above could have material adverse effects on AlzChem's net assets, financial position and results of operations.

In terms of competitive risk, management assumes a medium to high probability of occurrence and a low to medium impact on the net assets, financial position and results of operations.

3.1.1.4. SUBSTITUTION RISKS

A substitution of significant products in the portfolio of the AlzChem Group is currently considered to be less likely. In the chemical sector, there is a latent risk that individual compounds will be replaced by other chemical substances or compounds. However, this is expected to be so small that the impact on the net assets, financial position and results of operations will be very low.

In the market environment of agriculture and metallurgy, there is a latent risk of substituting certain substances, e.g. Magnesium-based hot metal desulphurization instead of calcium carbide-based hot metal desulphurization or at the use of calcium ammonium nitrate 27% N or ammonium nitrate-urea solution 30% N instead of Perlka®. The Group counteracts these risks by developing customer-specific products, intensive technical support and advice to customers, and joint (new) product development geared specifically to the needs of the customer.

Particularly in the agricultural environment, application consulting and intensive customer contact are required, so that AlzChem is able to significantly reduce the net risks through the established structures, and thus the impact on the net worth, financial and earnings position can also be classified as very low to low.

In addition to the substitution risks of the market, the Group is also exposed to the risk of substitutions based on regulations and laws. AlzChem works very closely with a large number of renowned scientists in order to comply with all current and future legal requirements. Nevertheless, it cannot be ruled out that individual substances may no longer be placed on the market in the short, medium or long term.

With regard to the substitution risks, the management assumes a very low to low probability of occurrence and a low to medium impact on the net assets, financial position and results of operations.

3.1.1.5. DISTRIBUTION RISKS

Despite the high product diversification of the Group portfolio, there is a certain concentration on the customer side. AlzChem supplies a large number of global players in the global chemical industry and is thus exposed to an industry-specific risk. This is countered with a wide range of products and contract-based cooperation. In addition to customer-specific product developments, substances for a wide variety of applications are also researched, sampled and manufactured. The change of Creamino distribution to own distribution could result in customers buying less, as AlzChem is less well known and is not perceived as a feed expert. AlzChem is subject to a latent risk in connection with its entry into own distribution of the product Creamino purely due to the fact that the market approach is now carried out directly via or from the AlzChem sales organization. In recent months, a complete sales organization and application technology have been set up. Creamino is very well positioned and established on the market worldwide, and we have a functioning sales organization in agriculture. We are now extending this range sustainably and substantially with the addition of Creamino. New regions and new animal species are also on our agenda at very short notice. We are currently assuming that the growth curve will take a short breather, but will continue to rise steadily in the long term.

With regard to the sales risk, the management assumes a very low to low probability of occurrence and a medium to high impact on the net assets, financial position and results of operations.

3.1.2. FINANCIAL MARKET RISKS

3.1.2.1. CURRENCY RISKS

The reporting currency of AlzChem is the euro (EUR). However, AlzChem owns subsidiaries in the US, Sweden and China, which are accounted for in the local currency, i.e. in US dollars, Swedish krona or Chinese renminbi. In addition, AlzChem operates in a large number of countries around the world. Consequently, the company is exposed to risks due to exchange rate fluctuations, in particular with regard to the exchange rate between the euro and the US dollar (USD), the Chinese renminbi (CNY), the Japanese yen (JPY) and the Swedish krona (SEK).

Assets and liabilities of foreign subsidiaries are translated into euros at the exchange rate prevailing at the end of the reporting period. Income statements of foreign subsidiaries are translated into euros at the average exchange rate during the period. Accordingly, if other currencies fluctuate against the euro, the other result and thus the equity of AlzChem will increase or decrease.

AlzChem Group companies enter into transactions in currencies other than their functional currencies. These transactions are booked in the applicable functional currency of the relevant company using the exchange rate on the day of initial booking. Subsequent changes in this exchange rate will result in gains or losses on currency translation reported in the Consolidated Income Statement under other operating income or other operating expenses. Thus, AlzChem is exposed to the risk that (i) currency translation will result in losses and (ii) that any income from currency translation will be lower than in previous periods.

Additional currency risks arise from exchange rate changes in recorded financial and operating positions (including receivables and payables) and expected operating positions. These items include commodities and/or the sale of products whose prices are denominated in currencies other than

the functional currency of the operating unit. Unfavorable exchange rate changes may result in higher costs or lower sales than expected at the time of the contract, as well as lower margins. The transactions concluded by AlzChem Group companies in foreign currencies relate to the procurement of raw materials and the sale of goods. In particular, the purchase of raw materials is to a large extent in USD. In addition, a significant portion of sales is in USD and JPY. Although AlzChem's US dollar-denominated purchases and sales are to a certain extent a "natural hedge", the cost of US dollar-denominated purchases during the reporting periods was less than half of the value of US dollar-denominated sales in those periods. As a result, changes in the USD and/or JPY exchange rates against the euro may have a significant impact on AlzChem's financial position and results of operations.

In addition to the direct impact of currency fluctuations on AlzChem's Consolidated Income Statement and therefore the company's consolidated equity base, foreign exchange movements may also affect the operating business. Changes in foreign exchange rates (such as an appreciation of the EUR against the JPY and a depreciation of the EUR against the USD) would negatively affect AlzChem's competitiveness in certain markets.

Risks arising from exchange rate fluctuations and insufficient hedging against them could have a material adverse effect on AlzChem's business, assets, financial and earnings position.

Although the probability of occurrence is regarded as medium to high, the effects on the net assets, financial position and results of operations are classified as very low to low.

In addition to the risks described above, AlzChem is also subject to possible negative influences from currency losses in so-called high-inflation countries due to its global market presence. We consider these risks to be very low for the AlzChem Group and counter them by, among other things, avoiding delivery in the affected currencies.

3.1.2.2. INTEREST RATE DEVELOPMENTS AS A RISK FOR PENSION OBLIGATIONS

The AlzChem Group has obligations to current and former employees from pensions and other post-employment benefits. Changes in relevant valuation parameters, such as the discount rate, mortality rates, wage and salary increase rates, and pension growth rates, may result in an increase in the present value of pension obligations. The provision for pensions determined in accordance with IAS 19 was recognized in the amount of EUR 109,960 thousands in the AlzChem Group.

Changes in the discount rate develop significant effects within the balance sheet (equity) and Income Statement (personnel expenses, financial result). The Group takes this fact into account by regularly reassessing the obligations and thus ensuring a high timeliness of the recognized values.

With regard to interest rate risk, management assumes a medium to high probability of occurrence and a low to medium impact on its net assets, financial position and results of operations. The Management Board periodically conducts a scenario review with regard to compliance with the financial covenants figures, thus ensuring that changes can be detected at an early stage and countermeasures can be initiated on this basis.

3.1.2.3. LIQUIDITY RISKS

A central financing department is in place to manage the Group's liquidity risks, which among other things ensures the liquidity of the Group companies via a cash pooling structure. In addition, a diversified financing structure ensures the financial independence of AlzChem. We are of the opinion that the available financing instruments can ensure an adequate supply of liquidity at all times. Existing credit risks arising from financial contracts are systematically reviewed upon conclusion of the contract and monitored on an ongoing basis thereafter.

With regard to the liquidity risk, the management assumes a very low probability of occurrence and a very low to low impact on the net assets, financial position and results of operations.

As of December 31, 2018, AlzChem had not entered into any hedging transactions (Section 315 (2) No. 1 of the German Commercial Code (HGB)), so that no risks for or effects on the net assets, financial position and results of operations are to be expected.

AlzChem addresses market opportunities and risks as well as liquidity and default risks from financing instruments through an active risk management approach. By actively monitoring cash flows, we can minimize latent risks and initiate appropriate countermeasures at an early stage.

3.1.3. REGULATORY RISKS

3.1.3.1. ENERGY LAW

In Germany, AlzChem is currently benefiting from cost and tax reductions and exemption regulations for electricity costs under the Renewable Energy Act (EEG), the Combined Heat and Power Act (KWKG), the Electricity Fee Ordinance (StromNEV), the electricity price remuneration and certain exemption regulations with regard to electricity tax. All of these regulations allow energy-intensive industries to operate at a lower cost of electricity to improve their overall competitiveness. Taken together, these regulations result in significant reductions in AlzChem's energy costs. Without these discounts, AlzChem would not be able to operate competitively and would have reported negative operating results in all reporting periods. In this respect, there is a development-impairing fact for the Group.

The EEG regulates the financial support of energy from renewable sources. Moreover, as a basic principle, utilities have to pay the so-called EEG levy to finance the promotion of renewable energy for every kWh of electricity they supply to end users. Utilities pay the end users the EEG surcharge.

However, under certain conditions, the EEG provides for reductions in the EEG surcharge for energy-intensive companies¹⁷ in select sectors. This reduction can be granted annually at the request of the Federal Office of Economics and Export Control (BAFA). In the past, AlzChem has benefited from reductions¹⁸ in the EEG surcharge at three points of sale and used this reduction scheme in 2018. In December 2018, new requirements were imposed on the application concerning the special compensation arrangements by resolution of the so-called Energy Collection Act. AlzChem still considers itself in a position to meet the application requirements for the year 2019 and will submit the required documents on time by March 31, 2019.

The StromNEV contains regulations on network charges. According to Section 19 (2) StromNEV, energy-intensive companies that consume at least 10 GWh at a collection point and reach a number of hours of use of at least 7,000 hours¹⁹ per year are entitled to an individual network fee for the respective collection point. On this basis, AlzChem is currently benefiting from reduced network charges for the points of sale in Hart and Trostberg.

Under the KWKG, a moderate financing for combined heat and power (CHP) is provided. This financing is based on a surcharge on the network charges (KWKG surcharge) and thus leads to an increase in the general energy prices. This surcharge is always charged in full with an annual consumption of up to 1 GWh. However, energy-intensive companies such as AlzChem benefit from a limitation of the KWKG surcharge. Following discussions between the German Government and the European Commission, the KWKG, and in particular the regime for energy-intensive companies, has been amended to bring it into line with EU state aid rules. Under the new regulations, which came into force on January 1, 2017, companies meeting the requirements for reducing the EEG surcharge are also entitled to a reduction in the CHP levy. In its press release of May 23, 2017²⁰, the EU Commission approved under the EU State aid rules the rebate for levies for energy-intensive businesses.²¹

Under the energy price remuneration scheme, eligible companies can apply for State aid to be financially compensated for the rising electricity prices due to emissions trading. The state aid is limited to companies from certain economic sectors with particularly high-flow production processes – such as AlzChem. The grant will be granted at the discretion of the competent authority, upon application by the beneficiary; there is no legal entitlement to the grant of the aid. For the first time in 2014, companies were able to apply for remuneration for indirect CO₂ costs in 2013. AlzChem has been granted electricity price remuneration in the past. The company also expects to receive such electricity price remuneration for the future. However, the electricity price remuneration is only valid until 2020 and is limited annually to a fixed total amount. In addition, the state aid will gradually be reduced from 2013 to 2020. Furthermore, the price for CO₂ certificates was fixed in the electricity price compensation. Since then, market prices for CO₂ certificates have risen significantly.

Furthermore, AlzChem, as a distribution system operator, is currently benefiting from an agreement with a neighboring distribution system operator that requires both parties to pool two network connections and to calculate a common network charge. In the case of a pooled calculation of network user charges, the network charges generally fall because the cost intensive peak loads are straightened out. Pooling is thus beneficial for AlzChem because it reduces network usage fees. However, according to a recent court decision, it is currently unclear whether the legal basis for this pooling, Section 17 (2a) StromNEV, is valid. Although the Federal Court of Justice recognized the pooling regulations in two decisions this year (EnVR 22/17 and EnVR 32/17), we believe that a latent residual risk cannot be completely ruled out.

17 The special remuneration scheme was approved by the EU Commission in July 2014 for ten years under state aid law.

18 Leaflet for energy-intensive companies 2017 Federal Office for Economics and Export Control Page 25 (3.3) Detection period for determining the energy cost intensity

19 Calculated as the quotient of energy work taken or fed in per year, and the highest load this year for taking or feeding in – Section 2 (3) StromNEV

20 European Commission – Press release Brussels, May 23, 2017 "State aid: Commission approves reductions in CHP levies for energy-intensive companies in Germany and Italy" IP / 17 / 1440

21 The Commission's approval is limited to 10 years according to recital 39 of Decision C (2017) 3400 final of May 23, 2017.

Furthermore, it cannot be ruled out that the conditions or the scope of the aforementioned cost and tax reductions and

exemption regulations –

- the reductions in the EEG surcharge,
- the network charges and
- the KWKG surcharge
- the electricity price remuneration
- the exemptions from the electricity tax
- as well as the pooling of network connections and
- the collection of a common network user charge

– be amended by new statutory provisions, that these rights are abolished, that regulators exercise their discretionary powers with respect to these privileges to the detriment of AlzChem, or that jurisprudence substantiates legal requirements to the detriment of AlzChem.

While it is likely that some of the cost and tax reductions and exemption regimes for energy-intensive industries will be largely maintained in the future in order to enhance their international competitiveness, there is also a general legislative tendency – often triggered by EU state aid controls – to dismantle appropriate privileges.

Cost and tax reductions and exemption regulations for energy-intensive companies have been or are being criticized in the political debate on a regular basis and representatives of certain political parties have repeatedly called for the abolition of existing rights. Therefore, it cannot be ruled out that in future, politically driven, the abolition of rights for energy-intensive industries will be demanded. In addition, legislative measures in other areas of energy regulation, such as restrictions on nuclear power generation in Germany and state support for renewable energy, have led to and will continue to increase energy costs in general.

All these aspects carry a high risk that AlzChem will have to pay significantly higher energy prices, which would have material adverse effects on the business, net assets, financial position and results of operations.

In terms of risk assessment related to changes in this complex area of law, management assumes a very low to low probability of occurrence but with a very high impact on its net assets, financial position and results of operations.

Against this background, there is no material uncertainty at the time the financial statements are prepared that could cast significant doubt, individually or collectively, on the company's ability to continue as a going concern.

3.1.3.2. BREXIT

The AlzChem Group also has business relations with companies from the United Kingdom. Due to its rather subordinate scope, the Group now assumes with a medium to high probability of occurrence that there will also be lasting changes or administrative hurdles in the B2B business, but that these will not be of major significance for the net assets, financial position and results of operations.

3.1.4. COMPLIANCE RISKS

The AlzChem Group operates production facilities in Germany and Sweden as well as sales companies in the US and China, so that due to the complex international and national legal situation there is already the latent risk of a breach of the rule. For this reason, the Group has appointed a compliance manager and set up a compliance organization. Our compliance management system aims to ensure the lawful, responsible and sustainable conduct of our employees. Potential violations should be recognized in advance and systematically prevented.

The compliance management system thus makes a significant contribution to the integration of compliance in our operating business units and their processes. Regular training courses for employees in Germany, Sweden, US and China are intended to increase understanding and sensitivity to the issue. With regard to the risk of fundamental compliance violations, the management assumes that the established organization has a high impact, so that a very low probability of occurrence and a very small negative impact on the net assets, financial position and results of operations is seen.

3.1.5. LEGAL, PROCESS AND LAW CHANGE RISKS

The AlzChem Group is exposed to numerous risks arising from legal disputes or proceedings. These include, in particular, risks in the areas of product liability, antitrust law, competition law, patent law, tax law and environmental protection. Currently, the Group is not in any significant court or arbitration proceedings that could have a material impact on the economic position of the Group.

AlzChem's business activities, in particular its sites, facilities, products and operations, must comply with and are influenced by a variety of different regulatory requirements in the countries in which the company operates. The regulatory framework for AlzChem's business is subject to ongoing legislative changes and developments that may require costly compliance measures. In particular, the regulatory framework for environmental protection, health and safety matters in general and for the manufacture and placing on the market of products is subject to frequent changes, which in most cases lead to the imposition of stricter requirements. These stricter requirements usually result from scientific progress or from a change in the social acceptance of risks, which is relevant for AlzChem's product portfolio consisting of health and safety-sensitive products.

Constant legislative change and development are of great importance to AlzChem as the company operates in regulated areas where authorizations, permits, certificates and other permits, such as product permits and water-related permits, are usually granted for a limited period of time only and only be extended if – possibly amended – requirements are met. In principle, there is no certainty that AlzChem will be in a position to extend all permits, certificates and permissions required for its business activities.

In addition, existing permits, authorizations, certificates and permissions may be subject to restrictions or obligations by the competent authority at a later date in order to impose more stringent legal requirements. In particular, AlzChem's existing authorizations, approvals, allowances and registrations, listings or other forms of approval for placing products on the market may be limited in time or revoked due to the evolving scientific knowledge that underlies certain risk assessments. In addition, many legal – especially environmental – regulations refer to undefined legal terms such as "state of the art" or "state of science and technology". For this reason, given technological advances and scientific developments, it may be necessary to adapt equipment, systems and other equipment, processes and products without any explicit legal change.

AlzChem already envisages several changes in relevant environmental law (Technical Instructions for Air Quality Control – TA Air, 43rd Ordinance to the Federal Immission Control Act on medium-sized combustion plants), the most important of which concern pollution and water protection: the Major Accidents Ordinance, which is currently based on Council Directive 96/82/EC of December 9, 1996, (Seveso II) is amended by Directive 2012/18/EU of the European Parliament and of the Council of July 4, 2012 (Seveso III). The implementation process in Germany was completed in mid-January 2017. In particular, AlzChem expected stricter requirements in terms of application procedures and public participation. In addition, the site in Hart and Sundsvall will fall under the Störfallverordnung since it will also be the first to detect calcium carbide. AlzChem has successfully created several technical packages of measures and is thus able to meet the changed legal requirements.

The 43rd Ordinance to the Federal Immission Control Act (43rd BImSchV) has been in force since July 31, 2018. AlzChem has closely monitored the legislative process and has already initiated internal measures to minimize the imminent and significant impairment of business activities and thus also the indirect material and adverse effects on the business, net assets, financial position and results of operations. AlzChem assumes that the measures initiated and planned will also ensure compliance with any requirements of the national air pollution control programme pursuant to Section 4 of the 43rd Federal Immission Control Act (BImSchV).

In the area of water law, the existing ordinances of the federal states on facilities for the handling of substances hazardous to water have been merged into a single federal ordinance (in force since August 1, 2017). Overall, there is a significant increase in the bureaucratic burden on AlzChem's business. The company could also be subject to environmental or other regulations currently or in the future, of which it is not yet aware. With the execution of all new or amended regulations, it cannot be ruled out that risks, requirements or restrictions that cannot yet be fully estimated today still occur.

3.1.6. IT RISKS

AlzChem's partly highly integrated IT systems form an essential backbone and the basis for the functioning of our business models. Problems with IT systems can cause enormous damage. This ranges from loss of production and lost sales to existential threats. Possible risks include hardware failures, software errors, data theft, data loss, data misuse and espionage.

As IT systems become increasingly complex and are prone to errors, there are numerous threat scenarios with major risks. Our IT risk management system is used to counter and manage these risks. It includes all measures to identify, analyze, evaluate, monitor and control potential risks. IT risk management is already applied during the implementation of information systems and accompanies the entire life cycle of all IT components. This ranges from the conception, development and implementation to the operation and decommissioning of the IT systems.

The Internet and possible external threats pose another major potential danger. Data can be stolen, manipulated or misused through hacker attacks. These security risks must also be taken into account in IT risk management. The aim of all measures is to minimize the main risks to IT or to limit their impact if the risks actually occur. AlzChem is prepared for the various risks and has appropriate defensive measures and emergency plans in place.

With regard to risk assessment, management assumes a very low to low probability of occurrence and a very low to low impact on the net assets, financial position and results of operations.

3.1.7. RISK POSITION SUMMARY

The risk situation of the AlzChem Group has not changed significantly compared to the short fiscal year 2018/I. The current valuation shows that today none of the previously reported risks threaten the existence of the company. In addition, we were unable to identify any interdependencies that could threaten the survival of our company. Due to our wide-ranging product portfolio, our expertise and market expertise as well as our sustained innovative strength, we are convinced that we can realize the opportunities arising from our entrepreneurial activities and successfully meet the challenges arising from the aforementioned risks.

3.2. OPPORTUNITY REPORT

As part of our risk management, we also regularly identify and evaluate opportunities that arise in our business areas. However, these represent only a small but for us the most significant part of the possibilities that are offered to us. Moreover, the evaluation of the opportunities is subject to continuous changes. The most significant opportunities listed here are pursued with equal weight. We actively pursue the opportunities and transfer them into our internal control parameters. Please refer to our performance indicators mentioned above.

The scope of opportunity consolidation corresponds to the scope of consolidation used for accounting purposes. The opportunities do not differ significantly between the segments or are not concentrated in just one segment. Rather, the opportunities described in the following are Group-wide and cross-segment.

3.2.1. DIVERSIFICATION

The AlzChem Group operates a stable NCN pedigree with the main products calcium carbide, fertilizers calcium cyanamide/Perlka®, cyanamide, dicyandiamide, nitroguanidine and other high-quality derivatives such as DYHARD®, Creapure® and Creamino. The company strives to leverage the opportunities for growth through a combination of diversification, market penetration and market development. In addition to traditional products, the company continues to invest in new products such as Creamino and LIVADUR®.

The entire product range is sold predominantly in the markets of nutrition, renewable energies, fine chemicals, pharmaceuticals, agriculture and metallurgy. Due to the broad product range and the large number of end markets, the company has so far developed with stable revenue and earnings growth. This high degree of diversification permanently supports a very balanced sales and earnings growth, with its pillars in many different market segments and sectors. To date, the Group has always succeeded in offsetting or more than compensating for economic or regional sales fluctuations in one sector by growth in another segment or country.

3.2.2. GLOBAL PRESENCE

Thanks to its global presence in more than 70 countries, comprehensive market potential is identified and rigorously implemented with in-house developed project tools and implemented in the short, medium and long term.

3.2.3. MARKET ENTRY BARRIERS

AlzChem profits from the barriers to entry to the markets in which the company operates. For potential new competitors, it may be time consuming and costly to (i) introduce an integrated production network similar to that operated by AlzChem, (ii) obtain certifications, registrations and approvals for equipment and products in a highly regulated market environment and (iii) the level of AlzChem to achieve know-how and industrial property rights.

Integrated production network

AlzChem is a vertically integrated manufacturer of specialty chemicals in the NCN chain. Competitors focus on different sectors of the NCN chain, while AlzChem's integrated production network allows it to cover the entire NCN chain. The integrated production network gives the company special flexibility in order to be better able to handle changes in the demand for individual products. AlzChem is able to partially offset lower demand for Specialty Chemicals products by reducing production of these products and increasing sales of related lower-margin Basics & Intermediates products (and vice versa).

In addition, AlzChem is less dependent on specific industries due to its broad product range and focus on different markets. The diversified business model in conjunction with the integrated manufacturing network makes it more likely that negative developments in one industry can be offset by positive developments in other industries, in particular due to the synergies that AlzChem can achieve in the production process and in research and development because all of the company's products are based on the NCN chain.

In addition, the Specialty Chemicals segment is not dependent on external suppliers of calcium carbide-based intermediates. AlzChem is thus less exposed to adverse market trends. In the view of the company, all of these factors require an efficient and resilient business model that has proven to be stable and, due to its cost-competitiveness, financially successful. AlzChem is able to leverage its manufacturing facilities for a variety of products, despite the high degree of specialization of the Specialty Chemicals segment, giving the company, in its view, a competitive edge in resource efficiency as a result of vertical integration.

Regulatory barriers to entry in the markets

Some of the sectors in which AlzChem operates are heavily regulated. This applies in particular to the market for chemical products in general, the market for biocidal products and plant protection products, the market for food supplements and animal feed additives and the pharmaceutical and cosmetics sectors. AlzChem has the necessary approvals, registrations and certifications to produce and distribute its products in these highly regulated markets. The company has obtained certain certifications, registrations and approvals, which may be difficult, expensive or time-consuming for potential competitors to obtain. For example, AlzChem operates facilities that are in line with the principles of good manufacturing practice (GMP). Compliance with this GMP is a regulatory requirement for, among other things, the production of medical and cosmetic products in the EU. AlzChem has also obtained approval for two health claims for its Creapure® product, and may therefore provide specifics when promoting the product.

Know-how, brands and industrial property rights

High product quality, delivery reliability, process know-how and industrial property rights are the result of AlzChem's research and development activities, making it difficult for competitors to enter the markets where the AlzChem brands predominate. Innovations and know-how are of fundamental importance, especially in the Specialty Chemicals segment. In addition, several AlzChem products are protected by patents

that prevent competitors from imitating AlzChem products and selling them at lower prices. As of the current reporting date, the company holds 529 granted patents and another 89 patent applications. In addition, AlzChem has 5 further patents pending until December 31, 2018.

3.2.4. GROWTH POTENTIAL WITH MEGATRENDS

AlzChem sells its products in diversified markets that are expected to evolve in line with global megatrends and have the potential to grow steadily, thus benefiting AlzChem's business development.

Population growth

In 1900, about 1.7 billion people lived worldwide. Only 17 years later, the world population amounted to around 7.6 billion. The United Nations expects a realistic increase to over 8.6 billion people by 2030²². AlzChem considers itself well positioned to benefit from this megatrend. The fertilizers and other agricultural products of its Specialty Chemicals and Basics & Intermediates segments are driving the growth of industrial agricultural production. Creamino, for example, is a patented feed additive in the AlzChem Specialty Chemicals segment, which is used worldwide. It leads to a better supply of the important biomolecule creatine. This improves the energy supply and ultimately promotes healthy growth and efficient feed consumption. In addition to its use for poultry, Creamino is used in pig feed in various countries, as well as in Europe, which enables better feed conversion, increased carcass weight, shorter fattening time and, in the case of poultry, a higher proportion of breast meat. Therefore, AlzChem is convinced that it can benefit from the increasing industrialization and standardization of meat production, which are compounded by the limited availability of land and population growth.

22 UN forecast on the development of the world population (https://esa.un.org/unpd/wpp/Publications/Files/WPP2017_Wallchart.pdf)

Healthy aging

AlzChem expects the pharmaceutical industry, and in particular the segment of active pharmaceutical ingredients (API), to benefit from an aging population, increasing consumer health awareness (especially in emerging markets), the emergence of new carriers in the pharmaceuticals industry, and increased lifestyle and age-related illnesses.

AlzChem estimates that the food industry is impacted by increasing consumer health awareness and innovation in health technologies. The products Creapure®, a dietary supplement previously marketed by AlzChem primarily to the sports nutrition industry to promote muscle growth and physical performance, and Bioselect®, which consists of high purity guanidine hydrochloride and is used in biotechnology, diagnostics and the pharmaceutical industry, should benefit from these megatrends – especially since some of these products may also be used in niche areas of cosmetics and healthcare.

Energy efficiency

On December 12, 2015, 195 countries signed the Paris Agreement to reduce greenhouse gas emissions. Despite the announced withdrawal of the USA, AlzChem expects these and other related policy developments to contribute to the megatrend of replacing fossil fuels with renewables in the medium to long term. Against the background of record greenhouse gas emissions²³, extremely high temperatures and a sharp rise in ice melting in the Arctic, the company expects that there will and must be a worldwide increase in photovoltaic and wind power plants as sources of renewable energy.

The Specialty Chemicals segment of AlzChem includes, amongst others, the DYHARD® product group used in wind turbines, as well as in the automotive and aerospace industries, reducing the weight of automobiles and aircraft and thus improving their energy efficiency. For the full year 2018, more than half of the Specialty Chemicals segment's sales was attributable to the megatrends of population growth, healthy aging and energy efficiency.

3.2.5. STRONG BRANDS

AlzChem has approximately 650 registered trademarks and has filed approximately 60 trademark applications. This broad, established range of trademarks offers the company special market opportunities.



3.2.6. DIRECT SALES

AlzChem successively expanded its direct sales channels for various products in the past short fiscal year. Further steps in this direction will follow in 2019 so that AlzChem can offer a more attractive price and service range based on greater customer proximity. The entry into own distribution of our product Creamino also creates numerous opportunities and possibilities. For us, there is the chance that we will now be able to extend the integration, which is already deeply anchored in our DNA, to the full added value of our currently most promising product. Our proximity to our customers

²³ Emissions of the three most damaging greenhouse gases carbon dioxide (CO₂), methane and nitrous oxide reached a new record level in 2017, as was stated in the annual report for 2017 of the American Meteorological Society (AMS) and the National Oceanic and Atmospheric Administration (NOAA). According to that, the worldwide carbon dioxide concentration in the past year rose to a value of 405 ppm. This is the highest value since the start of this measurement. Since the early 60s, the increase in CO₂ in the atmosphere has almost quadrupled, as stated by the US experts.

enables us to respond more specifically to the requirements and wishes of the customers and thus constantly adapt our Creamino to customer and market requirements.

3.2.7. OPPORTUNITIES SUMMARY

Although the pure number of reported risks described may appear to be higher than the number of the identified concrete opportunities, we consider the distribution of risks and opportunities to be balanced. A balanced overall picture is also reinforced by the fact that sales revenues and economic success are based on a stable mix of new, high-growth products and brands established in the market in various industries. As markets differ in their structure and economic cycles, this diversification contributes to risk mitigation. We invest selectively in promising sectors via our growth product Creamino as well as the product areas of renewable energies and nutrition. The topic of innovation is the focus of our activities in all activities.

The activities listed above provide significant opportunities for the medium to long term beyond the underlying forecast horizon. We track the opportunities that arise and specify the anticipated effects in terms of the forecasted development of sales revenues, EBITDA and consolidated net income. Furthermore, we will actively seek new opportunities, examine their implementation and, if necessary, promote them. If, in addition to the forecasted developments, opportunities arise or occur sooner than expected, this could have a positive impact on our net assets, financial position and results of operations.

4. FORECAST REPORT

4.1. FORECAST REPORT FOR FISCAL YEAR 2019

The following table provides an overview of the projected ranges and values of financial performance indicators for fiscal year 2019:

Forecast ²⁴ for 2019 [in EUR thousands]	Sales	Adjusted EBITDA	Adjusted EBITDA margin	Adjusted EBIT	Inventory ratio	Equity ratio	Debt ratio
AlzChem Group	389.9 – 398.9	46.5 – 51.9	11.6% – 13.0%	27.1 – 32.5	17.4% – 19.6%	22.9% – 23.9%	0.73 – 0.75
Specialty Chemicals	213.7 – 216.7	43.1 – 46.5	19.8% – 21.5%	35.9 – 39.3	19.2% – 21.0%	–	–
Basics & Intermediates	150.4 – 154.4	3.2 – 4.9	2.1% – 3.2%	-3.5 – -1.8	16.7% – 18.7%	–	–
Other & Holding	25.8 – 27.8	0.2 – 0.5	0.8% – 1.8%	-5.3 – -5.0	8.3% – 14.3%	–	–

The planned sales growth is to be achieved organically. Volume effects are the primary growth driver. Price effects will play a role to the extent that the situation on the raw material markets may require. The goal will continue to be to develop the product mix even further towards complex molecules and value-added chain-intensive products, thus generating additional impetus for sales and earnings.

The business development in the segments is steadily growing. In the Specialty Chemicals segment, new products from the research and development pipeline are expected to serve the sustained growth trend in the nutrition market and thus lead to a significant increase in sales.

The Basics & Intermediates segment is expected to benefit from a recovery in the agricultural sector and a significantly rising basic chemicals business. In addition, building on a slightly more stable market environment in the steel industry, solid volume growth and sales growth are expected.

In the Other & Holding segment, stable sales are to be generated at the chemical parks in Trostberg and Hart.

²⁴ sharply rising = > 7%; rising (clearly) = 3% to 7%; slightly rising = 1% to 3%; consistent (stable); slightly declining (sinking) = -1% to -3%; declining (sinking) = -3% to -7%; sharply declining (sinking) = > -7%

The start of the additional capacities in the new Creamino production facility is scheduled for mid-2019. Based on a stable plant infrastructure, production capacities can be successively expanded along with the expected market growth. In line with this, continuous process optimization and bottleneck elimination are being promoted.

On the earnings side, cost increases from the raw materials sector will no longer have the same dynamic as in 2018 as a whole compared with 2017. A certain degree of stabilization at a relatively high level is expected. The picture is different in the energy sector, where electricity prices on the German and Swedish stock exchanges have been following a rising trend for months. In addition, the forwards show a high to sometimes very high level until 2020.

In addition, AlzChem expects personnel cost increases of 8% to 12%, with the increase mainly due to a higher average number of employees. On the basis of the ambitiously planned increase in sales, a high percentage EBITDA growth is expected, the EBITDA margin should be stable to slightly declining.

For the financial performance indicator inventories, a sharply declining to declining development is forecast. An essential factor is that the additional capacities of the new Creamino production plant can be used from mid-2019 and that the temporarily deliberately significantly increased inventories can be reduced and normalized again. At the level of the individual segments, we therefore expect a very sharp decline in the Specialty Chemicals segment, in particular due to the reduction of Creamino and Creapure® inventories and the continued good utilization of our multi-purpose facilities at the Schalchen and Trostberg sites, and a decline in the Basics & Intermediates and Other & Holding segments. Inventories will be significantly affected not only by the sustained increase in the basis of procurement prices but also by the persistently difficult supply situation in Asia. AlzChem strives to supply its customers on time in the agreed specification, so that storage times of more than 6 months have to be accepted. Both effects have an impact of EUR 4 to 8 million on inventories.

AlzChem will continue to drive forward its growth projects during the period under review and is expected to complete them within cost and time frames. These include:

- the capacity expansion of the Creamino plant,
- the capacity expansion of nitrile production,
- the adaptation of the logistics infrastructure to the increased material flows in the chemical parks in Trostberg and Schalchen, and
- the continuous renewal of the distribution network structure of AlzChem Netz GmbH.

Based on the assumption of a very sharp increase in sales and thus also a positive business development, and taking into account the dividend payment of EUR 11.2 million in November 2018 (2017: EUR 11.775 million), the Management Board anticipates a slight increase in the equity ratio as a result of the consolidated net income for the year.

Despite the very strong investment activity in 2018 and also in 2019, the Management Board expects stable to slightly increasing debt and a stable to slightly increasing debt ratio in 2019. The short-, medium- and long-term financing of the AlzChem Group continues to be secured.

For the non-financial performance indicators (see 2.2.3.4.2.)

- sustainable customer loyalty,
- training,
- management systems and
- environment and energy

AlzChem is also motivated to achieve the forecasts.

The company strives to maintain customer loyalty at the level of previous years and, if possible, even to intensify it in selected business areas. One success factor of AlzChem's business model is certainly its proximity to its customers. As a result, we have the opportunity to respond quickly to customer inquiries and problems.

In the area of training, the number of trainees is maintained, but the percentage figure may fall slightly simply due to the increase in the workforce.

All management systems and certificates will continue to be maintained. AlzChem strives to optimize its environmental and energy performance indicators for five main reasons, which generally means reduction:

- reduction of the impact on the environment,
- reduction of expenses for disposal,
- conservation of resources,
- aligning production facilities to future-proof and sustainable processes,
- compliance with national and international regulations.

In this context, a large number of individual measures are being implemented, so that we continue to assume that the targets set will be achieved.

The forecasts are based on unchanged regulatory assumptions, such as the continuation of the Renewable Energy Sources Act (EEG), Section 19 (2) of the StromNEV, electricity price compensation or product approvals. Furthermore, forward-looking statements are included which are based on current assessments by management as well as on currently available information. Such statements are subject to risks and uncertainties that are beyond AlzChem's control or precise assessment, such as the future market environment and economic framework conditions, the behavior of other market participants, the successful integration of potential new acquisitions and the realization of the resulting expected synergy effects and measures of state authorities. Should any of these factors of uncertainty or other imponderables occur, or should the assumptions on which these statements are based prove incorrect, actual results could differ significantly from the results explicitly stated or implicitly contained in these statements.

In summary, it can be stated that the AlzChem Group, with its broad positioning and solid financial foundation, is well equipped for challenging phases. We will continue to attach great importance to this in the future.

5. INTERNAL CONTROL SYSTEM RELATED TO THE ACCOUNTING PROCESS (REPORT ACCORDING TO SECTION 315 (4) HGB)

The management of the AlzChem Group and its consolidated subsidiaries is responsible for the establishment, application and further development of an appropriate internal control system related to the accounting process. Our accounting-related internal control system is supervised by our Chief Financial Officer. It is intended to provide reasonable assurance that the preparation of the consolidated financial statements is in accordance with International Financial Reporting Standards (IFRS) and that external financial reporting is reliable. In addition, it must be ensured that the management report as a whole provides a suitable view of the company's position and is consistent with the annual financial statements in all material respects, complies with German legal requirements and suitably presents the opportunities and risks of future development. Furthermore, precautions and measures must be taken to enable the preparation of a management report in accordance with the applicable German legal provisions and to provide sufficient and suitable evidence for the statements in the management report.

The purpose of the accounting-related internal control system is to ensure that accounting is consistent and in accordance with legal requirements, generally accepted accounting principles and internal guidelines. The accounting process itself includes those operational processes that provide the cash flow for financial reporting, the process of preparing the Consolidated Financial Statements, and the sources of information and processes from which the material disclosures in the Consolidated Financial Statements are derived.

To ensure proper and consistent Group accounting, the basic principles of separation of functions, dual control and IT access restrictions apply to avoid unauthorized access to accounting-related content. Reporting to Group headquarters is based on a standardized reporting tool implemented throughout the Group. Other control measures that cover risks in the main processes and thus ensure reliable accounting and reporting are usually designed decentralized in the specialist departments.

The information flow of all production companies included in the Consolidated Financial Statements are located in an IT technical SAP environment with a uniform system configuration and are therefore subject to uniform chart of accounts, account assignment specifications, processes and process controls. The distribution companies work with ERP solutions adapted to the size of the company.

Control of the Group accounting process is managed within the Controlling/Accounting department of AlzChem Trostberg GmbH. An essential element of the internal control system in relation to the (Group) accounting process is a practiced Group-wide accounting procedure, which is continuously questioned in the course of the monthly reporting by employees in the Financial Controlling and General Ledger Accounting department. Group reporting is based on a monthly Excel consolidation tool, which contains comprehensive checking and validation routines. For special areas of accounting, for example, pension assessments to determine the relevant pension provisions (IAS 19), measurement of financial instruments and disclosures in the notes (IFRS 9, IFRS 7, IFRS 13) and sharebased payment accounting (IFRS 2) rely on external experts.

In addition, there are binding procedural instructions in the German companies which have a concrete effect on the accounting, e.g. procedure in purchasing, disposal of fixed assets, settlement of prepayment. In particular, the "four-eye principle" is ensured via a standardized SAP workflow (XFlow)

and a system-based signature policy. Accounting and controlling data are only accessible to a restricted or defined group of persons with the help of an SAP access concept.

Accounting-related information is continuously exchanged with the Head of Controlling, Accounting and Compliance and communicated to the Chief Financial Officer in regular meetings.

In addition to the annual and consolidated financial statements, the Chairman of the Supervisory Board deals with the members of the Management Board on a regular basis with the financial ratios of the Group. Regarding the foreign companies, reports are handed over to the responsible management on a monthly basis and Board meetings are held.

6. REPORT ACCORDING TO SECTION 315A HGB

Unless otherwise stated, the following information applies to the entire reporting year (SFY 2018/II) and, in particular, to the balance sheet date.

6.1. SUMMARY OF SUBSCRIBED CAPITAL IN ACCORDANCE WITH SECTION 315A (1.1) HGB

Subscribed capital represents the nominal capital of the parent company. The capital reserve shows all amounts of equity capital that are not externally subscribed for the company. Minority interests in the company's equity are reported as non-controlling interests. The subscribed capital of AlzChem Group AG in the amount of EUR 101,763,355 comprises 101,763,355 no-par bearer shares with equal rights as of the balance sheet date. The calculated share in the capital stock per share is EUR 1.00. Different classes of shares do not exist. The company does not hold any treasury shares. The company has not issued any shares with special rights. All shares have the same rights and obligations.

Company	Subscribed capital as of 12/31/2018
AlzChem Group AG, Trostberg, Germany	EUR 101,763 thousands
AlzChem Trostberg GmbH, Trostberg, Germany	EUR 11,000 thousands
NIGU Chemie GmbH, Waldkraiburg, Germany	EUR 1,410 thousands
AlzChem International GmbH, Trostberg, Germany	EUR 1,000 thousands
AlzChem Stahltechnik GmbH, Trostberg, Germany	EUR 25 thousands
AlzChem Nutrition GmbH, Trostberg, Germany	EUR 25 thousands
AlzChem Netz GmbH, Trostberg, Germany	EUR 25 thousands
AlzChem LLC, Atlanta, USA	USD 0 thousands
AlzChem Shanghai Co. Ltd., Shanghai, China	CNY 3,670 thousands
Nordic Carbide AB, Sundsvall, Sweden	SEK 50 thousands

6.2. LIMITATIONS ON VOTING RIGHTS OR TRANSFER OF SHARES UNDER SECTION 315A (1.2) HGB

Each share grants one vote at the Annual General Meeting. Restrictions on the voting rights of the shares may arise in particular from the provisions of the German Stock Corporation Act (AktG). For example, under certain conditions, shareholders are subject to a voting ban pursuant to Section 136 AktG. In addition, violations of the duty to notify pursuant to Section 33 of the German Securities Trading Act (WpHG) may result in at least partially non-existent rights under shares, including voting rights, in accordance with Section 44 WpHG. Contractual restrictions affecting voting rights from the shares are not known to the Management Board.

The Articles of Association do not contain any restrictions on the transfer of shares.

6.3. DIRECT OR INDIRECT PARTICIPATIONS IN CAPITAL EXCEEDING 10% OF VOTING RIGHTS IN ACCORDANCE WITH SECTION 315A (1.3) HGB

The following direct and indirect participations in the capital of AlzChem Group AG, which exceed 10% of the voting rights, have been notified to the company by the shareholders in accordance with Sections 33 and 34 WpHG or otherwise:

The voting rights including mutual attributions of the following shareholder and the following company each exceed 10% and amount to a total of 37.7%:

- Prof. Dr. Dr. Peter Löw
- LIVIA Corporate Development SE

The voting rights including mutual attributions of the following shareholder and the following companies each exceed 10 % and amount to a total of 20.4%:

- Dr. Martin Vorderwühlbecke
- High Definition Industries GmbH
- HDI Vier CE GmbH

The voting rights including mutual attributions of the following shareholder and the following company each exceed 10% and amount to a total of 15.8%:

- Markus Zöllner
- four two na GmbH

6.4. SHARES WITH SPECIAL RIGHTS PURSUANT TO SECTION 315A (1.4) HGB

There are no shares in the company that confer on holders a special right, in particular control over the company, in comparison to the other shareholders.

6.5. TYPE OF VOTING RIGHTS CONTROL IN THE CASE OF EMPLOYEE INTERESTS IN THE CAPITAL PURSUANT TO SECTION 315A (1.5) HGB

The Management Board is not aware of employee interests in the capital of the company.

Employees who hold shares in the company's capital exercise their control rights in the same way as other shareholders, in accordance with statutory provisions and the Articles of Association.

6.6. STATUTORY PROVISIONS AND PROVISIONS OF THE ARTICLES OF ASSOCIATION REGARDING THE APPOINTMENT AND DISMISSAL OF THE MANAGEMENT BOARD AND ON THE AMENDMENT OF THE ARTICLES OF ASSOCIATION PURSUANT TO SECTION 315A (1.6) HGB

The requirements for the appointment and dismissal of the Management Board as well as the amendment of the Articles of Association are governed by the provisions of the Articles of Association and the Stock Corporation Act. According to Section 6.1 of the Articles of Association of AlzChem Group AG, the Management Board consists of one or more persons. The Supervisory Board appoints the members of the Management Board and determines their number. In accordance with Section 6.1 of the Articles of Association and Section 84 AktG, the Supervisory Board may appoint a Chairman of the Management Board and a Deputy Chairman of the Management Board. If a required member of the Management Board is missing, the court must appoint the member pursuant to Section 85 AktG in urgent cases at the request of a participant.

Pursuant to Section 84 AktG, the Supervisory Board may revoke the appointment as a member of the Management Board and the appointment as Chief Executive Officer if there is good cause for doing so. Pursuant to Section 84 AktG, the members of the Management Board are appointed for a maximum of five years. Reappointments are permissible according to Section 84 AktG. The Supervisory Board appoints the members of the Management Board by resolution with a simple majority of the votes cast.

Amendments to the Articles of Association require a resolution of the Annual General Meeting. Insofar as the Articles of Association do not provide for a different majority, resolutions

of the Annual General Meeting on amendments to the Articles of Association require a majority of at least three quarters of the share capital represented at the time of the resolution in accordance with Section 179 (2) AktG. The Articles of Association of the company provide in Section 21 (1) that resolutions are passed by a simple majority of the votes cast and, if a majority of the capital is required, by a simple majority of the share capital represented at the time of the resolution unless mandatory legal regulations or the Articles of Association require a greater majority.

Pursuant to Article 16 of the Articles of Association of AlzChem Group AG, the Supervisory Board is authorized to adopt amendments to the Articles of Association, which only affect their wording. Pursuant to Section 5 (4) of the Rules of Procedure for the Supervisory Board, the resolutions of the Supervisory Board are passed by a majority of the votes cast unless the law requires otherwise. If a vote results in equality of votes, the Chairman of the Supervisory Board shall be entitled to a second vote in the event of a further vote, which may be ordered by the Chairman of the Supervisory Board.

6.7. POWERS OF THE MANAGEMENT BOARD TO ISSUE SHARES AND BUY BACK SHARES IN ACCORDANCE WITH SECTION 315A (1.7) HGB

6.7.1. AUTHORIZED CAPITAL

The Management Board is authorized until July 31, 2022, to increase the capital of AlzChem Group AG with the approval of the Supervisory Board once or several times by a total of up to EUR 10,063,333.00 (written: ten million sixty-three thousand three hundred-thirty-three euros) by issuing up to 10,063,333 new no-par-value bearer shares against cash and/or non-cash contributions (Authorized Capital 2017). In principle, the shareholders must be granted a subscription right. The statutory subscription right may also be granted in such a way that the new shares are taken over by a credit institution appointed by the Management Board or a consortium of credit institutions with the obligation to offer them to the shareholders of the company for subscription.

The Management Board is authorized, with the consent of the Supervisory Board, to exclude the statutory subscription rights of shareholders in the following cases:

- in the case of a capital increase against non-cash contributions, in particular for the acquisition of companies, parts of companies or participations in companies;
- in the case of capital increases against cash contributions, if the issue price of the new shares issued under exclusion of subscription rights in accordance with Section 186 (3.4) AktG is not significantly lower than the stock exchange price of the already listed shares of the same class and equipment and that to the ones under exclusion of the subscription right pursuant to Section 186 (3.4) AktG, no more than 10 percent of the share capital existing at the time this authorization takes effect and the capital stock existing at the time this authorization is exercised. Shares which were issued or sold in the direct or corresponding application of Section 186 (3.4) AktG during the term of this authorization up to the time of their exercise are to be offset against this limit of 10% of the share capital;
- to avoid fractional amounts;
- to issue shares to members of the company's Board of Directors, members of the representative body of a company affiliated with the company or employees of the company or any of its affiliates, in return for cash and/or non-cash contributions under shareholder or other share-based programs; employment relationship or relationship with the company or its affiliated company at the time of the grant of the share issue. If shares are to be granted to members of the Management Board of the company, the Supervisory Board of the company shall decide on this alone.

The Management Board is authorized, with the consent of the Supervisory Board, to determine the further details of the capital increase and its implementation, in particular the content of the share rights and the conditions of the share issue, including a profit sharing deviating from Section 60 (2) AktG. The Supervisory Board is authorized to adjust the Articles of Association of the company accordingly after full or partial utilization or the expiration of the authorized capital, in particular with regard to the amount of the share capital and the number of existing no-par-value shares.

6.7.2. CONDITIONAL CAPITAL

With regard to a contingent capital increase, the Management Board was not granted any rights on the part of the Annual General Meeting.

6.7.2.1. AUTHORIZATION TO PURCHASE TREASURY SHARES

In order to give AlzChem Group AG the opportunity to acquire and re-sell treasury shares, the Annual General Meeting has authorized AlzChem Group AG in accordance with Section 71 (1.8) AktG to treasury shares until the end of July 31, 2022, in a volume of up to 10% of the existing share capital at the time of the resolution. The shares acquired on the basis of this authorization, together with other shares of the company which AlzChem Group AG acquired and still holds at the time of the acquisition or which are attributable to it pursuant to Sections 71d or 71e AktG, may at no time exceed 10% of the share capital. The authorization may not be used by AlzChem Group AG for the purpose of trading in treasury shares. The authorization may be exploited in whole or in part, on one or more occasions by AlzChem Group AG or by dependent or majority-owned companies of AlzChem Group AG or by third parties acting on behalf of AlzChem Group AG or dependent or majority-owned AlzChem Group AG companies act. At the discretion of the Management Board, the purchase can be made via the stock exchange or by means of a public purchase offer addressed to all shareholders.

In the case of acquisition via the stock exchange, the purchase price (excluding incidental acquisition costs) may not be more than 10% higher or lower than the price of the share in Xetra trading (or in a comparable successor system) determined by the opening auction on the trading day.

In the case of acquisition via a public purchase offer, the bid price offered or the limits on the purchase price range per share (excluding incidental acquisition costs) may not exceed the closing price in Xetra trading (or a comparable successor system) on the third exchange trading day prior to the public announcement of the offer by more than 10% above or below. If, after publication of the public offer, significant deviations from the relevant price occur, the offer can be adjusted. In this case, the price on the third exchange trading day before the public announcement of any adjustment will be switched off. The volume of the offer can be limited. If the total subscription of the offer exceeds the fixed volume, the acceptance must take place according to quota. A preferential acceptance of small numbers up to 100 tendered shares per shareholder can be provided for.

The Management Board is authorized to use shares of the company acquired on the basis of this authorization for all legal purposes. In particular, the Management Board is authorized to:

The Management Board is authorized, with the consent of the Supervisory Board, to sell treasury shares acquired on the basis of this authorization via the stock exchange or through offers to all shareholders. When selling via the stock exchange there is no subscription right of the shareholders. In the event of a sale by public offer, the Management Board is authorized, with the approval of the Supervisory Board, to exclude the subscription right of the shareholders for fractional amounts.

The Management Board is further authorized, with the approval of the Supervisory Board, to sell treasury shares acquired on the basis of this authorization in ways other than via the stock exchange or through offers to all shareholders if the acquired treasury shares are sold at a price, which is not materially lower than the stock exchange price of shares of the company with the same equipment at the time of the sale. The subscription right of the shareholders is excluded. This authorization is limited to a total of 10% of the share capital existing at the time of the resolution of the Annual General Meeting or, if this is lower, of the share capital of the company

existing at the time this authorization is exercised. Shares issued or sold by direct or indirect application of Section 186 (3.4) AktG during the term of this authorization are to be counted towards this limit of 10% of the share capital.

The Management Board is further authorized, with the approval of the Supervisory Board, to use treasury shares acquired on the basis of this authorization as (partial) consideration as part of mergers or for the acquisition of companies, interests in companies, parts of companies or other assets.

The Management Board is further authorized, with the approval of the Supervisory Board, to offer or transfer treasury shares of the company acquired on the basis of this authorization to employees of the company or its affiliates. The Supervisory Board is authorized to offer or transfer treasury shares of the company, which were acquired on the basis of this authorization or a previously issued authorization, to members of the Management Board of the company for acquisition.

The Management Board is further authorized, with the approval of the Supervisory Board, to collect treasury shares of the company acquired on the basis of this authorization, without the cancellation or its execution requiring a further resolution by the Annual General Meeting. The authorization to collect may be exercised in whole or in part. The confiscation leads to capital reduction. By way of derogation, the Management Board may determine that the share capital is not reduced, but that the share of the remaining shareholders in the share capital increases in accordance with Section 8 (3) AktG. In this case, the Supervisory Board is authorized to adjust the number of shares in the Articles of Association.

The subscription right of the shareholders is excluded in the execution of the measures under (2) to (5).

All aforementioned authorizations may be exercised once or several times, in whole or in part, individually or jointly.

6.8. AGREEMENTS UNDER THE CONDITION OF A CHANGE OF CONTROL ACCORDING TO SECTION 315A (1.8) HGB

In individual loan agreements, there are customary market regulations that tie legal consequences to a majority acquisition, control or sale of the company's main assets.

6.9. REMUNERATION AGREEMENTS IN THE EVENT OF A TAKEOVER BID PURSUANT TO SECTION 315A (1.9) HGB

No special arrangements have been made with Management Board members or other employees in the event of a change of control, i.e. if a third party obtains control of the company within the meaning of Section 29 (2), Section 30 WpÜG.

6.10. PRINCIPLES OF THE REMUNERATION SYSTEM ACCORDING TO SECTION 315A (2) HGB (REMUNERATION REPORT)

The AlzChem Group's remuneration system is designed to promote sustainable business development. Remuneration structures are based on the principles of adequacy and performance orientation. These basic principles affect both the salary structures of employees and the remuneration of the Management Board and Supervisory Board.

6.10.1. REMUNERATION OF THE MANAGEMENT BOARD

The Management Board of AlzChem Group AG in the short fiscal year 2018/II consisted of Ulli Seibel (CEO), Andreas Niedermaier (CFO) and Klaus Englmaier (COO). The remuneration of the members of the Management Board is based on the size, complexity and economic situation of the company as well as on the performance of the Management Board. As a further benchmark, Management Board remuneration at comparable companies was included. The agreements with members of the Management Board regarding a possible early termination of the Management Board's activities fully complied with the requirements of the German Corporate Governance Code at the balance sheet date.

As of the balance sheet date, there were no agreements with the members of the Management Board in the event of a change of control following a takeover bid.

The remuneration of the Management Board is composed as follows:

- Fixed remuneration
- Annual variable remuneration
- Share-based, long-term oriented remuneration program (Long-term incentive program – LTI program)
- Benefits in kind and other additional benefits
- Occupational pensions

Fixed remuneration is a fixed, full-year remuneration paid in equal installments. It is reviewed by the Supervisory Board at regular intervals and adjusted if necessary.

The annual variable remuneration (annual bonus) is based on the performance of the entire Management Board and the degree of target achievement for previously defined targets. In the service contract, the objectives regarding the financial ratios of the Group have been agreed. In addition, there is a maximum bonus scheme. At the end of the fiscal year, the target attainment levels and thus the bonus amount to be paid out are determined.

As part of the contribution of AlzChem Trostberg GmbH, new service contracts were concluded with the three members of the Management Board in fiscal year 2017, under which so-called "stock appreciation rights" (SAR) are granted as a long-term incentive. SAR entitle the holder to receive a bonus (LTI) if the average closing price of AlzChem Group AG shares during the last 30 trading days prior to January 1, 2020 (DSK exercise) is EUR 0.75 or more above the average closing price of AlzChem Group AG shares during the 60 trading days after October 9, 2017 (inclusive) (DSK contribution), whereby the DSK contribution must be at least EUR 2.50. If the prerequisite is met, the bonus (LTI) must be paid to the respective member of the Management Board by March 31, 2020, at the latest.

Benefits in kind and other supplementary benefits (ancillary benefits) include the provision of company cars in cash or in kind as well as remuneration for lost pension insurance contributions. In the short fiscal year 2018/II, no loans or advances were granted to members of the Management Board.

Expenses for occupational pensions include additions to provisions for direct commitments (service costs in accordance with IAS 19) and current employer contributions to a reinsured provident fund.

Amount of total remuneration

The remuneration for the fiscal year that began on January 1, 2017 and for subsequent fiscal years is disclosed individually. In accordance with the model table of the German Corporate Governance Code²⁵, we report on the expenses recorded in the year under review and the amounts paid out in the following tables.

Granted benefits ²⁶ in EUR thousands	Ulli Seibel CEO since October 2, 2017			Andreas Niedermaier CFO since October 2, 2017			Klaus Englmaier COO since October 2, 2017		
	2017	2017 (Min)	2017 (Max)	2017	2017 (Min)	2017 (Max)	2017	2017 (Min)	2017 (Max)
Fixed compensation	280			220			180		-
Fringe benefits	12			20			15		-
Σ	292			240			195		-
One year variable compensation	356	0	800	285	0	640	160	0	360
Multi-year variable compensation ²⁷	11	0	1,300	8	0	1,000	6	0	650
Plan description (Term of plan)	Long Term Incentive up to 03/31/2020								
Σ	659			533			362		
Benefit expenses	71			42			35		
Total remuneration	730			575			397		

Inflow ²⁸ in EUR thousands	Ulli Seibel CEO since October 2, 2017	Andreas Niedermaier CFO since October 2, 2017	Klaus Englmaier COO since October 2, 2017	Σ
	2017	2017	2017	2017
Fixed compensation	280	220	180	680
Fringe benefits	12	20	16	48
Σ	292	240	196	728
One year variable compensation	407	479	172	1,058
Multi-year variable compensation				
Plan description (term of plan)				
Σ	699	719	368	1,786
Benefit expenses	71	42	35	148
Total proceeds	770	761	402	1,933

²⁵ German Corporate Governance Code Annex Model table 1 to point 4.2.5, paragraph 3 (1st and 2nd indents)

²⁶ Recognized expenses

²⁷ Long-Term Incentive; acquired entitlements for the current fiscal year

²⁸ Amounts paid

Granted benefits in EUR thousands	Ulli Seibel CEO since October 2, 2017				Andreas Niedermaier CFO since October 2, 2017				Klaus Englmaier COO since October 2, 2017			
	2018/I	2018	2018 (Min)	2018 (Max)	2018/I	2018	2018 (Min)	2018 (Max)	2018/I	2018	2018 (Min)	2018 (Max)
Fixed compensation	140	280	-	-	110	220	-	-	90	180	-	-
Fringe benefits	6	12	-	-	10	20	-	-	7	15	-	-
Σ	146	292	-	-	120	240	-	-	97	195	-	-
One year variable compensation	222	395	0	800	178	316	0	640	100	178	0	360
Multi-year variable compensation ²⁹	18	2	0	1,300	15	2	0	1,000	9	1	0	650
Plan description (Term of plan)	Long Term Incentive up to 03/31/2020											
Σ	386	689	-	-	313	558	-	-	206	374	-	-
Benefit expenses	38	56	-	-	30	42	-	-	25	33	-	-
Total remuneration	424	745	-	-	343	600	-	-	231	407	-	-

Inflow in EUR thousands	Ulli Seibel CEO since October 2, 2017		Andreas Niedermaier CFO since October 2, 2017		Klaus Englmaier COO since October 2, 2017	
	2018/I	2018	2018/I	2018	2018/I	2018
Fixed compensation	140	280	110	220	90	180
Fringe benefits	6	12	10	20	7	15
Σ	146	292	120	240	97	195
One year variable compensation ³⁰	365	365	292	292	164	164
Multi-year variable compensation	0	0	0	0	0	0
Plan description (term of plan)	Long Term Incentive up to 03/31/2020					
Σ	511	657	412	532	261	359
Benefit expenses	38	56	30	42	25	33
Total proceeds	549	713	442	574	286	392

Pension commitments

The pension claims from direct commitments as of December 31, 2018 amount to EUR 0 thousands (June 30, 2018: EUR 0 thousands) for Ulli Seibel, to EUR 271 thousands (June 30, 2018: EUR 259 thousands) for Andreas Niedermaier and to EUR 744 thousands (June 30, 2018: EUR 713 thousands) for Klaus Englmaier.

Other

The members of the Management Board receive no loans and advances from the company.

6.10.2. REMUNERATION OF THE SUPERVISORY BOARD

The remuneration of the Supervisory Board is regulated as follows: Each Supervisory Board member receives a fixed remuneration of EUR 20,000 for each full fiscal year of his membership of the Supervisory Board payable after the end of the fiscal year, twice this amount for the Chairman and one and a half times the amount for the Deputy Chairman. These amounts increase by 10% per membership in a committee of the Supervisory Board. This presupposes that the respective committee met at least twice during the fiscal year. The members also receive reimbursement of all expenses as well as reimbursement of any value added tax to be paid on their remuneration and expenses. For Supervisory Board members who are also members of the Supervisory Board of AlzChem Group AG, the remuneration received by the Supervisory

29 Long-Term Incentive; acquired entitlements for the current fiscal year

30 Payment in reporting year (incl. bonus for IPO in 2017)

Board member in his capacity as a Supervisory Board member of AlzChem Group AG is counted towards the remuneration in accordance with the above paragraphs. Until December 31, 2017, the members of the Supervisory Board of AlzChem Group AG held office free of charge. Members of the Supervisory Board who only belonged to the Supervisory Board for part of the fiscal year or who held the office of Chairman or Deputy Chairman of the Supervisory Board for only part of the fiscal

year receive pro rata remuneration rounded up to full months. The members of the Supervisory Board, Markus Zöllner, Steve Röper, Prof. Dr. Martina Heigl-Murauer and Dr. Caspar Freiherr von Schnurbein, were appointed to the Supervisory Boards of AlzChem Trostberg GmbH and AlzChem Group AG in the short fiscal year 2018/II. The remuneration of the members of the Supervisory Boards of the Group companies (AlzChem Group AG) was as follows:

Remuneration of Supervisory Board in EUR thousands	2017	SFY 2018/I	SFY 2018/II	2018
Markus Zöllner, Chairman of the Supervisory Board	40	22	22	44
Steve Röper	20	10	10	20
Dr. Caspar Freiherr von Schnurbein	20	16	6	22
Prof. Dr. Martina Heigl-Murauer	20	10	12	22
Σ Remuneration of the Supervisory Board	100	58	50	108

The members of the Supervisory Board receive no loans and advances from the company.

7. NON-FINANCIAL CONSOLIDATED STATEMENT (SUSTAINABILITY REPORT), SECTIONS 315B (1), 315C IN CONJUNCTION WITH SECTION 289C HGB

The aim of the report is to inform the company's stakeholders, such as customers, employees, business partners, residents and the capital market, about the sustainability performance of the company, as required by Sections 315b, 315c in conjunction with Section 289c HGB.

The annual report of AlzChem Group AG covers the period from July 1, 2018 to December 31, 2018. Due to better comparability, the non-financial consolidated statement (sustainability report) refers to the period from January 1, 2018 to December 31, 2018.

When preparing the report, we followed the guidelines of the Chemie³ Reporting Guide³¹ for SMEs. The contents and structure of the report are based on the dimensions of sustainability defined by us and the statutory requirements: supply chain, environment, employees, social issues, compliance, in particular respect for human rights, combating corruption and bribery, and security.

AlzChem – more than an employer

Our behavioral principles of reliability, trust, fairness, open communication, responsibility and quality are the benchmark for cooperation in the company, but also for contact with customers, suppliers and the public. Working at the AlzChem Group means contributing to the success of a medium-sized company with potential. Working at the AlzChem Group also means being part of a highly motivated workforce that is proud of the company's tradition and eager to take the most forward-looking steps.

We are a responsible and profitable chemical company in the Bavarian region. The well-being of our employees, the further development of our products and the strengthening of the Upper Bavaria region are the focus of our actions – goals that we also pursue in the areas of the environment, safety, health and quality. We face this important challenge.

As a founding member of the first and second Bavarian Environmental Pact³², we feel committed to the motto "Sustainable Business in the 21st Century". The core idea of the Bavarian Environmental Pact is to bundle the efforts of the state and industry in order to achieve joint progress towards sustainable, environmentally compatible development.

31 Chemie³ is the initiative of the German chemical industry. The practice-oriented guideline for sustainability reporting is aimed at medium-sized companies that want to establish or expand their sustainability reporting. The guide and other tools are available for download in the members' area of the Chemie3 website (www.chemiehoch3.de)

32 The Bavarian Environmental Pact is an agreement between the Bavarian Government and the Bavarian business community. It is formed from the shared conviction of the state and business that natural resources can be better protected with the help of voluntary and reliable cooperation between state and industry than with laws and regulations.mit Gesetzen und Verordnungen.

Significant Group companies have been EMAS³³-registered since 1997 and produce an Environmental Statement every year. The present Environmental Statement 2018 presents the AlzChem Group and its Integrated Management System, publishes the key figures of Trostberg, Schalchen, Hart and Waldkraiburg sites and presents the current environmental, safety and quality program.

For the first time, we have summarized the most important key figures in an overview ("Key Figures AlzChem Group"). In

addition, this report contains more detailed comments than in the previous year in order to further increase the information content and transparency of our sustainability activities.

7.1. BUSINESS MODEL OF ALZCHEM GROUP, SECTION 315C HGB, SECTION 289C (1) HGB

For a detailed overview of the business model of the AlzChem Group, please refer to Section 1.1 of the management report.

7.2. KEY FIGURES OF THE GROUP

Area	Key figure	2017	SFY 2018/I	2018
Strategy and growth	Sales in EUR million	353.9	195.2	375.2
	EBITDA in EUR million	45.7	31.0	49.3
	EBITDA margin	12.9%	15.9%	13.1%
Governance und Compliance	Percentage of women on the Supervisory Board	25%	25%	25%
	Percentage of women on the Management Board	0%	0%	0%
Employees	Fluctuation rate ³⁴	3.2%	1.6%	3.7%
	Average length of service in years	19.4	19.4	19.0
	Number of training days per employee	1.46	0.67	1.21
	Percentage of women in management positions ³⁵	8%	8%	10%
	Training rate ³⁶	8.6%	7.0%	9.3%
Value chain and products	R&D expenses in EUR million	9.0	3.95	8.7
	R&D rate ³⁷	2.5%	2.0%	2.3%
Environment ³⁸	Production quantity/production output in 1,000 tons ³⁹	570	284	594
	Consumption of electrical energy in MWh/a	669,007	353,970	677,618
	Fuel consumption in MWh/a	204,164	101,497	192,843
	Heat recovery in MWh/a ⁴⁰	17,783	8,393	16,841
	CO ₂ emissions in t/a	113,840	58,066	112,105
	CO ₂ not emitted in t/a	44,615	22,526	46,087
	Dust emissions in t/a	50	29	32
	Waste water volume (CSB) in kg/a	93,474	50,887	94,470
	Volume of waste in t/a	43,929	21,314	41,562
	of which dangerous t/a	26,034	10,566	29,101
Safety	1,000 man rate	6.2	2.8	4.9
	KSUND key figure ⁴¹	18.1	14.1	17.2

33 The Eco-Management and Audit Scheme (EMAS) is an instrument developed by the European Communities in 1993 for companies seeking to improve their environmental performance. The current legal basis is Regulation (EC) 1221/2009. This amendment came into effect on January 11, 2010. The structure of an EMS and the processes have also been in accordance with ISO 14001 since 2001.

34 Calculation of fluctuation rate: departures in the reporting period/average number of employees in the reporting period * 100

35 Only above-tariff area

36 Calculation of trainee ratio: number of trainees/number of employees on the reporting date * 100

37 Ratio of R&D expenditure to sales

38 Thanks to its highly diversified product range, AlzChem is able to react flexibly to changes in market demand. Due to the resulting changes in production, the key environmental figures may vary considerably from year to year.

39 The information in the Sustainability Report 2018 may deviate from the key figures in

40 subsequent reporting (e.g. environmental statement) under certain circumstances.

41 Key figure for safety and accidents with external medical treatment (own employees, employees according to AÜG and contractor employees are taken into account). Calculation: number of external physician treatments * 1 million working hours/total working hours in the observation period.

7.3. SUSTAINABILITY IN THE COMPANY

Our vision is: "Based on our integrated production network with innovative chemistry, we deliver customer-oriented applications to selected markets." In order to realize these, we build on the following behavioral principles:

We strengthen mutual trust through reliability, fairness, timely information and open communication as well as a strong feedback culture.

We pursue the objectives of AlzChem with entrepreneurial action. We take responsibility for our decisions.

We strive for the highest quality, while mistakes are an opportunity and obligation for us to learn.

Together, we develop constructive solutions and implement mutual decisions.

We look for responsible and attractive solutions in dialogue with our business partners and the public.

We want our products to let us participate in sustainable future development. We have defined population growth, healthy aging and energy efficiency as sustainable growth drivers to which we want to contribute through our products.

Population growth

In 1900, around 1.7 billion people lived on our planet. By the year 2000, this figure had increased to more than 6.1 billion. Only 17 years later, in 2017, the world population amounted to around 7.6 billion. The United Nations expects a realistic increase by 2030 to over 8.6 billion people.⁴² At the same time, agricultural areas are limited worldwide. Against this background, efficient processes are necessary to provide the growing population with food for the future as well as possible. The AlzChem Group's products meet these requirements and can be used in increasingly optimized agricultural production.

Healthy aging

The world population, especially in western industrial nations, is constantly aging. The average global life expectancy in 2000 was around 66.4 years. Already in 2016, global life expectancy averaged approx. 72.0 years.⁴³ Scientists expect life expectancy to rise significantly in the coming years.⁴⁴ Medical progress is a key factor in the prevention and treatment of diseases. So-called civilization diseases and age-related diseases are no exceptions, however. At the same time, awareness of health and nutrition is gaining in importance, so older people in particular are increasingly active in sports and consciously paying attention to a healthy diet. With its products, the AlzChem Group wants to support these developments in the pharmaceutical, cosmetics and healthcare sectors

Energy efficiency

Energy efficiency and renewable energy are gaining in importance worldwide. This is on the one hand due to legal and regulatory requirements; on the other hand, many technologies are now at a stage where the economic benefit is attractive. Accordingly, the demand for photovoltaic and wind power plants is increasing. Globally installed wind and solar power systems increased from about 130 GW in 2008 to about 905 GW in 2017⁴⁵, which corresponds to average annual growth of about 24%. This growth trend is expected to continue in the future. AlzChem sees itself well positioned to participate in this development.

42 UN forecast on world population development (https://esa.un.org/unpd/wpp/Publications/Files/WPP2017_Wallchart.pdf)

43 WHO homepage: http://www.who.int/gho/mortality_burden_disease/life_tables/situation_trends/en/ (01/23/2019)

44 Lancet Medical Journal-Homepage: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)32381-9/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)32381-9/abstract) (01/23/2019)

45 International Renewable Energy Agency (IRENA): Renewable Capacity Statistics 2018

7.4. SUPPLY CHAIN

Integrated production

A key feature of the AlzChem Group is its vertical integration along the calcium carbide/calcium cyanamide chain (NCN chain). This means that most of the company's products are based on the same starting materials: lime and coal. AlzChem performs many processing steps itself and is increasingly starting with material refinement.

The operation of this integrated production system is only possible due to its four historically grown sites in the Bavarian Chemical Triangle which enjoy such close proximity. Integrated production allows AlzChem to react flexibly to changes in demand as many products from the Basics & Intermediates segment are also raw materials for the Specialty Chemicals segment. Synergies also exist in the production process as well as research and development. As a result of integrated production, the company is also less dependent on external suppliers.

In addition, the integrated manufacturing system allows us to collect the carbon monoxide produced during compound production and to use it as starting material for further chemical reactions. This reduces climate-damaging emissions during composite production to the essentials.

Auditing

Corporate social responsibility (CSR) is increasingly demanded in the global supply chain. For this reason, AlzChem underwent an independent CSR rating in 2017 through the globally active EcoVadis evaluation platform. This evaluation reviewed the company's activities in the areas of environmental protection, working conditions and human rights, fair business practices and sustainable procurement. With 68 out of 100 achievable points, AlzChem is well above the industry average of 42.5 points and is among the top three percent of companies worldwide that have been audited by EcoVadis to date in this industry.

Our customers carry out regular audits of our management system and attest to our high level of expertise and a well functioning system. This was confirmed to us in a multi-day audit of the TfS initiative (Together for Sustainability), in which the priorities Environment, Safety and Health (USG) were reviewed. The TfS Initiative is a merger of the major European chemical and pharmaceutical producers (AkzoNobel, Arkema, BASF, Bayer Clariant, DSM, Evonik, Henkel, Lanxess, Merck, Solvay, Wacker, AlzChem). The documents relevant for the assessment are available on the EcoVadis platform.

Purchasing/Supplier release

In the area of purchasing/supplier approval, we ensure that company-wide standards in the procurement of our raw materials are complied with. The procedure for purchasing and for raw material qualification is defined in a procedural instruction and the responsibilities are clearly defined. Suppliers are audited based on specified criteria; the frequency of audits depends on the importance of the raw material for the supply chain. As a member of the BME⁴⁶ Compliance Initiative, we also have committed ourselves to require compliance by all our suppliers with the Code of Conduct established by this initiative.

⁴⁶ Bundesverband Materialwirtschaft, Einkauf und Logistik e.V. (BME) is the trade association for buyers, supply chain D32 logisticians. By joining the Code of Conduct of the BME, the companies of AlzChem Group AG are committed to preventing bribery and adhering to ethical principles towards customers, competitors and business partners. All business activities and decisions must be in accordance with applicable laws.

Production

AlzChem's German production sites are located in Trostberg, Schalchen, Hart and Waldkraiburg and are therefore regulated by a very detailed body of legislation, the implementation of which we regularly review together with the local monitoring authorities. An analogous procedure also applies to our Swedish production site Sundsvall.

Safety is one of our top corporate goals. Accordingly, a detailed safety assessment is carried out prior to the commissioning of plants or new processes, the result of which in the case of plants subject to mandatory monitoring is evaluated by external experts and followed up with regard to implementation.

Safe plant operation requires an assessment of the risks and continuous training of the personnel. Results of risk assessments are documented and the continuing education of the personnel is tracked and also documented. This is supported by the software LeManSys, in which the review of the learning content takes place.

All production plants are subject to a preventive maintenance program, which also includes the calibration of all relevant measuring points.

The production of various substances in multi-purpose facilities carries the risk of cross-contamination. We have therefore established a systematic approach to preventing cross-contamination.

Product safety

AlzChem aims to comply with all relevant chemical legislation of the EU and the Federal Republic of Germany, so that our products are manufactured and tested in accordance with the provisions of the EU Chemicals Regulation, or REACH for short.

Safety requirements for the use of our products are constantly updated and made available to users in our safety data sheets. We thus take our responsibility seriously and not only assume that all of our suppliers and contractors take the same approach, but also ensure it through checks.

Quality control

AlzChem has its own testing laboratories. The area is independent of the production. The release of our products is carried out by authorized laboratory managers of the Analytical division. The laboratories in Trostberg are also accredited to DIN EN ISO 17025 and GLP certified. We take return samples from all production batches and store them under suitable conditions. The retention period of these patterns is influenced by their stability and is usually two years due to internal regulations. The ISO 9001 certified quality management system ensures that customer requirements are systematically identified, evaluated and implemented in order to fully meet them.

Our German locations are in accordance with the standards ISO 9001, ISO 14001, EMAS, ISO 50001, ISO 27001 and OHRIS certified. The latter complies with the requirements of OHSAS 18001/ISO 45001. Our test laboratory in Trostberg is accredited to ISO 17025.

	Site ⁴⁷				
	Trostberg	Schalchen	Hart	Waldkraiburg	Sundsvall
ISO 9001:2015/ISO 14001:2015 (Quality and Environment Management)	X	X	X	X	X
ISO 17025 (Testing Laboratories)	X				
ISO 50001:2011/Energy Management	X	X	X	X	
ISO/IEC 27001:2013/Information Security Management	X	X	X	X	
ISO/IEC TR 27019 IT-Security Catalog (SiKat)	X	X	X		
EMAS III/Environment Management	X	X	X	X	
Bavarian Environmental Pact	X	X	X	X	
OHRIS/Work safety management	X	X	X	X	
OHSAS 18001:2007/Occupational Health and Safety Assessment Series					X
Quality management of nutrition	X				
BfR XXXVI Regulation: ISEGA Certificate	X				
GLP (Analytical department)	X				
EFB/Waste management	X				
AEO-F (Authorized Economic Operator)	X	X	X	X	
BME Code of Conduct/Certificate	X				
ECM/Maintenance functions certificate			X		
ECM/Entity in charge of maintenance certificate			X		
ECM/Technical Assessment by VPI			X		
ECM/Qualified supplier of Deutsche Bahn for maintenance of wagons, risk class high			X		

7.5. ENVIRONMENTAL CONCERNS, SECTION 315C HGB, SECTION 289C (2.1) HGB

AlzChem Group is committed to constantly improving environmental protection. The current environmental program with its defined goals and associated measures can be found in the annually published Environmental Statement.⁴⁸

Essential objectives in environmental protection are

- reduction of energy use,
- waste reduction and prevention,
- water protection and
- emission and noise prevention.

To achieve these goals, the German production companies of the AlzChem Group have introduced the following management systems:

- EMAS Environment Management
- ISO 14001 Environment Management
- ISO 9001 Quality Management
- ISO 50001 Energy Management

These management systems are part of the Integrated Management System (IMS) described above, the advantage of which is to enable leaner, more efficient management by exploiting synergies compared to several isolated management systems. The Integrated Management System of the AlzChem Group is described in the so-called IMS Manual. It contains relevant procedures and regulations as well as responsibilities and tasks.

⁴⁷ The certificates of the German sites mentioned here can be viewed on the homepage of AlzChem Group AG: <https://www.alzchem.com/de/qualitaet-umwelt>

⁴⁸ AlzChem Group AG homepage: https://www.alzchem.com/sites/default/files/uploads/Downloads_Bro_Fly_Zert/Umwelt_Zertifikate/alzchem_bro_umwelterklaerung_2018.pdf (06/29/2018)

Excerpt IMS program

Subcategory	Location	Description	Target date	Status
Occupational safety	Hart	The commissioning of an automatic broaching tool is intended to reduce hazardous activities in the furnace area.	Q1 2018	completed
Emissions	Schalchen	By integrating two container breathing systems on the flue gas scrubber, diffuse emissions are to be reduced.	Q1 2018	completed
Occupational safety	Schalchen	The ergonomics are to be improved by the commissioning of an automatic pallet magazine.	Q1 2018	completed
Energy	Schalchen	The procurement of a new centrifuge shall reduce electricity consumption by approx. 17 MWh.	Q3 2018	completed
Waste	Trostberg	The recycling of cleaning and rinsing water is intended to reduce the need for fresh water and the amount of waste produced.	Q3 2018	completed
Emissions	Trostberg	Dust emissions are to be reduced by installing a new valve bag filling system.	Q3 2018	completed
Occupational safety	Trostberg	The installation of hydraulic lifting tables is intended to improve ergonomics.	Q1 2018	completed
Energy	Trostberg	Energy consumption is to be reduced by using the energy from the steam condensate produced.	Q3 2018	completed
Energy	Waldkraiburg	The installation of a frequency-controlled screw compressor is intended to reduce power consumption.	Q1 2018	completed

Overall responsibility for the Integrated Management System rests with the Management Board, with Mr. Englmaier, as COO, holding the responsibility within the Management Board. It determines the environmental, safety, health and quality programs in consultation with the departments and releases the necessary funds. Every year, the Management Board evaluates the results achieved and, if necessary, initiates corrective measures. In order to implement the environmental policy and the results of the environmental audit, the sites have defined their new program with concrete technical, organizational and employee objectives and measures.

When creating concepts to improve environmental protection, we engage in dialogue with our employees, business partners, authorities, neighbors and the general public.

We regularly monitor, document and evaluate the impact of our activities on the environment by identifying environmental metrics. By systematically collecting data from the areas of water, energy, waste, emissions or transport, and mapping and evaluating them with indicators, we seek to illustrate changes, environmental pressures and measures to make them more transparent. For what can be measured can also be edited and improved.

By presenting the environmental performance within the framework of the sustainability indicators, a quantitative overview of the most important trends for AlzChem is to be provided. The use of flue gas (CO₂) in various processes reduces the amount of CO₂ emitted by approx. 45,000 tons per year. In addition, the amount of energy from heat recovery has increased in recent years, thus making a positive contribution to climate protection in addition to the amount of CO₂ used. In recent years, overall dust emissions to the air have been kept at a very low level. Similarly, NOX emissions have fallen significantly over the last three years due to various improvements in fuel quality. Wherever possible, production-specific waste is returned to the production process or recycled internally.

Essentially, we base our assessment of environmental performance on the requirements of EMAS and ISO 14001⁴⁹. For further information, please refer to the yearly published Environmental Statement.

AlzChem can react flexibly to changes in demand on the market due to its highly diversified product range. Due to the resulting changes in production, the indicators mentioned in the Environmental Statement and Sustainability Report can vary considerably from year to year. Apart from production-related fluctuations, there were no significant deviations for 2018 as a whole from the previous year.

Every year, the AlzChem Group conducts a large number of internal audits (including environmental tests), checking whether the requirements resulting from the integrated management systems and legal requirements in the various departments and operations are complied with. The auditors are AlzChem employees who have been trained to do so. If deviations or possibilities for improvement are identified by the audits, corrective or preventive measures are defined. Their effectiveness is evaluated in follow-up audits. This results in a control loop that supports a continuous improvement process.

In addition to internal audits, external monitoring audits by an external monitoring company also play an important role in the recertification or revalidation process. The companies of the AlzChem Group also conduct supplier and customer audits. Besides quality issues, environmental aspects are also considered.

Relevant authorities also regularly check compliance with the requirements from approval notices and environmental law in the operation of our facilities. In order to be able to carry out these reviews as efficiently as possible for both the Authority and the AlzChem Group, a project was developed in cooperation with the authorities and with other companies in the Chemical Triangle, the model of cooperative plant monitoring.

The preparatory work of the company enabled the surveillance audit to be processed much more efficiently. AlzChem Trostberg GmbH received an award from the Bavarian Minister of the Environment for this pilot project.

Our subsidiary Nordic Carbide AB, based in Sundsvall, Sweden, is subject to Swedish environmental legislation. The company also publishes an annual Environmental Statement, which has been submitted to local authorities.

Based on current developments, we do not expect to have to purchase any additional CO₂ certificates in Sundsvall for the fiscal year 2019.

Water/Sewage

We are committed to the responsible use of water, we want to use water as sparingly as possible and further reduce our water consumption. A good water supply is one of the most important prerequisites for a smooth production process as water is one of the most important auxiliaries for the chemical industry.⁵⁰

Our Trostberg, Hart, Schalchen and Waldkraiburg sites are located north of the Alps. This area is characterized by thick, very porous gravel layers, which contain significant groundwater resources. This geological feature allows us to extract the total cooling, service and drinking water from our own groundwater wells.

The implemented water management of the German AlzChem sites allows a monitoring of the wastewater, which consists mainly of cooling and rainwater. Only a small fraction of waste-water (about 0.5%) has to be cleaned in a wastewater treatment plant.

49 The international environmental management standard ISO 14001 sets globally recognized requirements for an environmental management system. For certification by TÜV SÜD Management Service GmbH, see the homepage of AlzChem Group AG (https://www.alzchem.com/sites/default/files/uploads/Downloads_Bro_Fly_Zert/Umwelt_Zertifikate/Zertifikate/alzchem_zert_9001_14001_de.pdf)

50 EU-BREF CWW – Best Available Techniques (BAT) reference documents: Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector: <http://eippcb.jrc.ec.europa.eu/reference/cww.html> (01/23/2019)

The use of industrial water in the various production processes necessarily leads to the production of contaminated process wastewater. Contaminated process wastewater is recycled internally instead of fresh water (if possible without harming quality or the environment) or disposed of externally as waste. On the other hand, the wastewater is treated in the company's own central waste water treatment plant (ZABA).

The cooling water supply for Nordic Carbide AB is ensured by the local site operator at the mouth of the Ljungan, with an average water supply of 200 m³/s. For carbide production a maximum of 0.5 m³/s is required, so that the environmental intervention can be described as very low.

Waste

The total amount of waste from our sites varied compared to 2017 within the scope of normal production fluctuations. Production-specific waste accounts for the largest share, while non-production-specific waste concerns all other waste. These are essentially waste generated during construction and demolition work. The ratio is roughly the same as in previous years. As far as possible, production-specific waste is utilized in internal production processes. Waste environmental objectives help prevent waste or reduce waste. For further and location-related information as well as the corresponding goals, we refer here to the yearly published Environmental Statement.

The AlzChem Group AG constantly strives to improve its recycling rate and percentage. As an example, carbide production at the Hart site can be cited as an example. The manufacturing process produces the by-products carbide furnace gas and KOKA granules. The gas is extensively cleaned in several stages, then compressed and transported through a gas pipeline to the Trostberg and Schalchen sites, where it is used as heating and synthesis gas. The KOKA granulate is sold.

Energy Management System

AlzChem Trostberg GmbH as an "energy-intensive" company strives to further optimize its handling of the energy resource. With a successful certification according to DIN EN ISO 50001 in 2014, the introduction of the energy management system

at AlzChem Trostberg GmbH was completed. Continuous development and optimization of the system should provide the basis for continuous improvement in the energy performance of the business units.

Energy management involves systematically carrying out the energetic assessment of the operating areas, the energy performance indicators, the energy targets and the action plans for the continuous improvement of energy-related performance. For further and location-related information as well as the corresponding goals, we refer here to the yearly published Environmental Statement.

7.6. EMPLOYEE MATTERS, SECTION 315C HGB, SECTION 289C (2.2) HGB

We rely on our colleagues and, in addition to an attractive pay system, offer job security, collegial action and the opportunity to shape your career development yourself. Our behavioral principles reliability, fairness, trust, responsibility and quality are the yardstick for cooperation in the company, but also in contact with customers and suppliers.

We pursue the goal of attracting, retaining, motivating and keeping suitable employees dedicated. We want to create a sustainable, stable environment for our employees – without the need for restructuring or redundancy – which allows for and promotes long-term employment.

We pay particular attention to the satisfaction and commitment of our employees, the level of fluctuation and average length of service. The level of fluctuation and the average length of service give us an indication of how satisfied our employees really are. In 2018, these measures were 3.7% (12 months 2017: 3.2%) and 19.0 years (12 months 2017: 19.4 years) for the six-month period under review. With these two parameters, AlzChem clearly stands out from the average values for length of service (11.2 years⁵¹) and fluctuation (13%⁵²) prevailing in Germany.

In order to achieve our goals, we have taken numerous measures, which we will briefly discuss below. The overall responsibility lies with the Management Board, with Mr. Niedermaier being the CFO of the Management Board.

51 IWD - Institute of German Business: <https://www.iwd.de/artikel/lange-im-betrieb-355822/> (01/23/2019)

52 Federal Statistical Office homepage: https://www.destatis.de/DE/Publikationen/Thematisch/Arbeitsmarkt/Erwerbstaetige/BroschuereArbeitsmarktBlick0010022169004.pdf?__blob=publicationFile (01/23/2019)

Flexible working hours

Within a fixed period of time, our employees can define the start of work and the end of work themselves and flexibly organize their working hours.

Attractive remuneration

Through our membership in Verein der Bayerischen Chemischen Industrie e.V. (VBCI – Bavarian Chemical Industry Association), we want to live up to our social and social responsibility on the one hand. As an employers' association, the VBCI supports, among other things, chemical sites and jobs. On the other hand, we want to offer our employees attractive remuneration conditions by applying the collective wage agreement for the chemical industry.

Likewise, we are also a member of an employers' association at our Sundsvall site. The employers' association IKEM⁵³ represents about 1,400 companies for which it negotiates collective bargaining agreements and provides comparable services with VBCI.

In addition to the tariff conditions, we offer remuneration based on personal performance and position or responsibility. In addition, our employees receive a profit sharing that is dependent on the company's success. Company and social benefits are an integral part of our remuneration system. Each employee of our German sites is included in our Group accident insurance, which covers both the company and the private sector in the event of a claim.

Health management⁵⁴

The health of our employees is crucial to our mutual success and the resulting improved competitiveness of our company. In addition to the professional, intellectual and social competence, health is the most valuable asset our employees bring to the company. Therefore, there are a variety of offers that give you the opportunity to individually put together your health program, from nutrition, moderate exercise and health care.

With our "health points" campaign, our employees can stay healthy and are rewarded with non-cash prizes. The whole program of action consists of three components: nutrition, exercise and prevention. Corresponding individual measures (for example, spinning, running, back training courses, etc.) are offered for the respective modules, which in turn are rewarded with health points.

In our company restaurant and at our kiosk outlets, meals and snacks are offered that are prepared according to the recommendations of the German Society for Nutrition (DGE) and incentivized by AlzChem by up to EUR 2 per day.

Medical service (company doctor and paramedic)

We offer our employees comprehensive medical care at our sites in Trostberg and Hart. Occupational and emergency medicine includes all measures to prevent work-related illnesses or occupational diseases, to maintain health at the workplace and to diagnose and treat accidents and acute illnesses.

Qualification	Consultation	Prevention	Therapy
First aid training	General consultation times	Biomonitoring	Care in case of workplace accidents
Electronic health training	Consultation for workplace problems	Recruitment and acquisition examinations	Care in case of illnesses
	Travel medicine	Workplace medical care	Rescue service
		Vaccinations	

⁵³ IKEM – Innovations- och kemiindustrierna i Sverige (Industrial and employer organization for companies in the fields of chemicals, plastics, pharmaceuticals, biotechnology and biochemistry)

⁵⁴ AlzChem Group AG homepage; <https://www.alzchem.com/de/karriere> (07/02/2018)

Operational integration management

Returning to work after illness is often easy. In some cases, however, continuing to work as previously is not immediately possible. In cooperation with the integration team, measures are being developed which continue to make it possible to provide employment that is suitable for handicapped employees. The measures are varied and may include, for example, changes in the content of an activity, personnel support or technical changes in the workplace. In the search for the "right" action, both the interests of the employee concerned and the company are taken into account. However, the integration team not only supports our employees in acute cases, but also works towards disease prevention.

Ideas management

Ideas generated by employees are expressly welcome. We want to motivate our employees to actively participate in continuous improvement with their ideas. Thus, they promote cooperation and help prevent accidents, improve environmental protection, implement technical progress and ultimately increase the profitability of the company.

Depending on the personal remuneration, up to 20% of the estimated annual benefit as a premium can be remunerated in the case of suggestions for improvement for which there is proven annual benefit.

Work pension

Our work pension plan is implemented as part of a modular system. In the various building blocks, monthly amounts are paid in by the employer and the employee. Furthermore, we offer our employees a long-term account, in which both remuneration and holidays or retirement can be introduced.

Demography fund

By concluding the collective agreement "Working life and demography", the Mining, Chemicals, Energy Industrial Union (IG BCE) and chemical employers have formed a new collective bargaining policy. The chemical social partners have become the first industry to develop a collective agreement that meets the challenges of demographic change. A central element of this collective agreement is the demography fund. This is not a classic monetary fund managed by a financial service provider. Rather, the Demography Fund is a pot created by the company. It collects the demographic contributions paid by the employer for the tariff employees. The funds from this pot will be used to finance instruments for shaping demographic change. Unlike collective wage increases, there is no individual entitlement of the employee, but only a collective freedom of action for the operating parties.

AlzChem and the works council have defined by way of a voluntary works agreement how to use the demographic fund. The demographic fund is primarily intended to enable partial retirement for commercial employees in shifts – in addition, the funds can also be used for non-current accounts.

With the 2015 collective wage agreement in the chemical industry, employers made EUR 550 per pay-scale employee and year available in a company demography fund from 2016. From 2017, the demographic amount increased again to EUR 750.

Continuing education

In order to maintain our position in the field of Specialty Chemicals in the future, we need a future-oriented, qualified workforce. We offer our employees subject-specific continuing education and training at the workplace or in specialist institutions in every job. Numerous further training offers in the linguistic area of office communication, personal development, etc. enable a consistent professional development.

Our personnel development is geared towards recognizing and developing potentials and talents in the company at an early stage. A multi-pillar HR development concept, coupled with a variety of continuing education programs and continuing education opportunities, ensures that our employees are well prepared for their specific tasks and are constantly expanding their skills. A wide range of personal and professional building blocks in the areas of management development, qualification, knowledge management, health management and corporate culture rounds off our personnel development concept. We respond to the needs of our employees individually. We are laying the foundation for filling key positions from within our own ranks.

Training

AlzChem is one of the largest trainers in the region. As part of our hands-on training in the relevant specialist departments, we offer our trainees a state-of-the-art training laboratory and ideal training workshops as well as a varied commercial education. The high quality of our training is also recognized by international corporations, who hire our graduates.

In May 2018, the annual training day was held to inspire potential young scientists for chemistry and AlzChem. The many interested visitors were offered technical stations, a colorful test world in the laboratory, an apprentice bar, application training and much more. Trainers and trainees showed the training centers and informed the "young" and "big" visitors about the different professions and about their everyday life during the training.

Every year, about 40 trainees start their training in commercial, metal and electrical engineering as well as chemical fields at AlzChem. At 9.3%, AlzChem's trainee quota for the full year 2018 is significantly higher than the Germany-wide trainee quota of 4.9%. AlzChem is thus responsible for training a total of 143 future specialists at the chemical park.

Participation and site development agreement

In November 2006, the AlzChem companies at the sites in Trostberg, Schalchen and Hart concluded a company agreement with which the parties pursued the common goal of providing NCN Chemistry with a sustainable and competitive perspective in a difficult economic environment at these sites. This claim applied equally to AlzChem and its employees; in partnership, there have been discussions about measures in which each party should make a significant contribution in balance with each other. Goals therefore included actions to reduce costs and increase productivity, as well as measures for the long-term preservation of jobs.

In addition to the necessary corporate and organizational changes, both parties have made significant contributions to the cost reduction and productivity enhancement under the agreement. The joint efforts have increasingly improved the framework conditions for AlzChem.

The operating agreement valid in the current version has a term until December 31, 2020, and essentially contains agreements to adjust working hours, company pension plans, investment commitments at German locations and to exclude redundancies.

7.7. SOCIAL CONCERNS, SECTION 315C HGB, SECTION 289C (2.3) HGB

Political and civic engagement of companies and their employees in a democratic environment is indispensable for the functioning of the economy and society. AlzChem Group AG welcomes the social commitment of its employees in youth work, adult education, sports, in the charitable and in the cultural field and has set itself the goal of actively improving the social life in their locations.

The AlzChem Group is involved, supports children and youth projects, supports school projects and is a member of the non-profit association for the promotion of education and entrepreneurship in Germany, the Wissensfabrik.⁵⁵

The Management Board decides on goals and framework conditions for donations and sponsoring measures of the AlzChem Group, whereby within the Management Board, Mr. Seibel holds the area of responsibility as CEO. As a regionally rooted company, we assume responsibility, above all in the regional environment of our locations. In 2018 as well, the AlzChem Group was involved in numerous donation and sponsorship projects. From the funds provided, numerous projects and measures focusing on social issues, sports, culture and education were funded.

AlzChem is a member of the Trostberger Förderkreis der Wirtschaft, which has made it its business to promote education, art, local history, music and other cultural purposes as well as sports and social facilities in Trostberg. It endeavors to ensure that the city of Trostberg receives donations with the aforementioned purpose. Furthermore, the Trostberger Förderkreis is responsible for coordinating donations and setting priorities. As an active member AlzChem grants the Trostberger Förderkreis der Wirtschaft an annual support of EUR 10,000.

AlzChem promotes education

We value teaching the next generation the fascination of chemistry and the natural sciences at an early stage, and to show them the diverse career prospects of the AlzChem Group. The AlzChem education initiative not only includes financial contributions to schools in the catchment area of our sites, but also cooperation in the field of natural science learning content.

The chemical companies AlzChem and BASF are entering into cooperation agreements with kindergartens and elementary schools in the region through an educational partnership. These receive experimental kits and teacher scripts with instructions and background information.

Our NaWi team members pass on their knowledge to the teachers of the participating school: they become acquainted with the experiments and gain confidence in using the materials. The event is recognized as a teacher training. Teachers handle implementation. NaWi experiments become an integral part of the physical education at primary schools. After about six months, the NaWi team members and teachers meet to exchange results and experiences from the project. In addition, a scientific evaluation is carried out.

NaWi 4 Minis (Kindergarten)⁵⁶

Science is fun and helps us understand the world – that's the message of NaWi 4 Minis. The program was developed especially for kindergartens and appeals to the curiosity and exploratory spirit of youth: with tea lights, spoons or ice cubes – and always under the guidance of a teacher – children are allowed to try, observe and be astonished themselves. Experiments on water and air are harmless, almost always succeed and give children answers to exciting questions from everyday life. All the necessary materials, aids and instructions are provided by a specially developed experiment box for the project, provided by the cooperation partners AlzChem and BASF.

⁵⁵ Wissensfabrik – Unternehmen für Deutschland; <https://www.wissensfabrik.de/portal/fep/de/dt.jsp> (01/23/2019)

⁵⁶ AlzChem Group AG homepage: <http://www.alzchem.com/de/kontakt-unternehmen/unser-engagement-schule-und-kindergarten#kindergarten> (01/23/2019)

NaWi – How does that work? (Elementary school)

NaWi experiments provide elementary students with answers to questions from the world of science in a child-friendly way. The approach is practical and action-oriented. The children may try out, observe and conclude in pairs or in groups. In this way, they develop a natural interest in experimenting. The experiments with familiar objects such as tea light, spoon, ice cube or magnet, scissors and magnifying glass are harmless, succeed almost always and relate to the everyday life of children. All the necessary materials and tools in the class set are provided by an experiment box specially developed for the project.

In "NaWi – How does that work?", the focus is on water, air and food. The great success of this lighthouse project has now led to a continuation: "NaWi plus" focuses on the topics of "materials and their properties", "environmental protection and recycling" and "fire and fire protection".

Both projects, which celebrated their 10th anniversary in 2017, are a successful and already proven campaign and cooperation of AlzChem Group AG, BASF in Trostberg and Wissensfabrik. "Wissensfabrik – Unternehmen für Deutschland" is an open platform for all companies, educational institutions and initiatives that promote and share knowledge as the key to more economic growth. Wissensfabrik and we have an important goal: to make the next generation and thus the location Germany fit for the future. We see it as our responsibility to provide impetus and to support schools, universities and politics in their educational mission.

Dies Academicus

Taking time for young people has a long tradition at AlzChem. The "Dies Academicus" is just one of our many activities as a corporate citizen, the promotion of young talent already begins in our kindergarten. With projects like "NaWi – Science, how does that work?" we arouse curiosity even among the very young. As a chemical company out of passion we are happy to pass on our enthusiasm.

The slightly older students can complete internships, taster lessons or workshops in the training laboratory at AlzChem. With activities such as the "Dies Academicus", AlzChem Group AG is committed to the skilled workers of tomorrow. Out of school and into everyday working life – this special experience allowed students of König-Karlmann-Gymnasium Altötting to do their annual "Dies Academicus" in our company. For the fifth time, the Trostberg site opened its doors to give young people an insight into the world of work for one day. At the "Dies Academicus", AlzChem Group academics, like chemists or product managers, receive their young companions in the morning and guide them through the company. The AlzChem Group AG sees the commitment to the next generation as an investment in their own as well as the regional future. We feel very committed to the region and would like to offer professional perspectives to children and young people in the spirit of good neighborhood.

The AlzChem Group stands for open dialogue, be it in dealing with its own employees and employee representatives or in relation to business partners, neighbors and authorities. In the case of official or internal inspections, all employees are obliged to contribute cooperatively to the clarification and to provide all information required by the third parties.

7.8. COMPLIANCE, RESPECT OF HUMAN RIGHTS AND COMBATING CORRUPTION AND BRIBERY, SECTION 315C HGB IN CONNECTION WITH SECTION 289C PARA. 2 NO. 4, 5 HGB

The term compliance refers to the entirety of all measures to be observed that constitute the compliance of a company and its employees with regard to all legal requirements and prohibitions. In addition, the conformity of the entrepreneurial business is to be ensured with all social guidelines and core values. These include, in particular, the observance of human rights and the fight against corruption and bribery.

The declared goal of the AlzChem Group is to always comply with all applicable laws and core social values, particularly with respect for human rights and the fight against corruption and bribery. No employee, job applicant or business associate may be disadvantaged on grounds of race or ethnicity, gender, religion or belief, disability, age or sexual identity. Any kind of harassment is prohibited.

In order to achieve these goals, the AlzChem Group has established a compliance system that serves to prevent or limit the damage, detect and terminate infringements and fulfill statutory obligations.

AlzChem Group AG has joined the Code of Conduct of the Federal Association for Materials Management, Purchasing and Logistics (BME). The company is committed to stopping bribery and adhering to ethical principles towards customers, competitors and business partners. All business actions and decisions are to be aligned with applicable laws. The ethical guidelines described in the BME Code of Conduct are based in particular on the principles of the UN Global Compact, the ILO Conventions, the Universal Declaration of Human Rights of the United Nations on the Rights of the Child and the Elimination of All Forms of Discrimination against Women as well as the OECD Guidelines for International Companies. The guidelines set out are minimum standards and are intended to prevent situations that may jeopardize the integrity of companies and their employees.

As an extension to the BME Code of Conduct, AlzChem Group AG has implemented its own guidelines, which summarize AlzChem's key corporate policy principles and standards, which all employees must be familiar with. They give orientation to basic legal and ethical duties of AlzChem employees and give them security for their correct behavior in the profession. Corporate policies govern our behavior, internally in our dealings with each other and externally in contact with business partners or the public, as well as with authorities and government agencies.

Committed to governance & compliance, AlzChem set up a whistleblower hotline⁵⁷ in November 2017 with an external reporting center. As an external reporting center for the employees of the AlzChem Group as well as third parties, e.g. business partners and customers, the Heussen Rechtsanwaltsgesellschaft mbH is available as an independent law firm. The Compliance Manager is also still available as a contact. The lawyers of Heussen Rechtsanwaltsgesellschaft mbH are subject to secrecy according to the professional law applicable to lawyers. As far as desired by the employee and legally possible, they will treat confidentially the identity of the employee and the information given also in relation to companies of the AlzChem Group. At company meetings and on the intranet, employees were informed about the whistleblower system and the possibility of contacting them. AlzChem does not tolerate discrimination against employees who report possible or actual violations or support investigations in this context – unless the information has been misused or the employees themselves have violated laws or company guidelines.

Donations are made in the form of financial and material contributions to promote cultural, social, religious, scientific, political and charitable purposes. Donations on behalf of AlzChem require the approval of the Management Board. Settlement is carried out exclusively by the Communications Department.

The Management Board of AlzChem Group AG, the Compliance Manager and all employees are responsible for implementing our corporate guidelines. As a contact, the Compliance Manager ensures independent and objective processing of all requests addressed to him. He is subordinate to the Management Board, but independent of instructions. The Compliance Manager is available to all employees as a point of contact both to answer questions and as a consultant in the context of corporate policies. He takes all the incoming instructions and follows them with the necessary care.

57 Email: alzchem@heussen-law.de, phone: 089 – 29097 – 498

Contacting the Compliance Manager will not be detrimental to employees unless they violate laws or company policies. Supervisors are required to actively support our corporate policies and their behavioral principles through exemplary behavior. They must also ensure that their employees are regularly informed of the contents of the company guidelines and comply with these requirements. Our employees are further familiarized with the AlzChem company guidelines with the training course "Act Right". This is assigned to the employees as mandatory training and its successful completion is documented. In addition, specific training courses are offered on specific topics (such as export and terrorism control, antitrust law and environment, security and health) for defined groups of people, which may require participation. Participation in these trainings is also documented.

The integrity of all actions is an essential prerequisite for sustainably successful economic life. As a global corporation, AlzChem is subject to numerous national and supranational laws (such as EU regulations) as well as other countries' legislation. All business matters and processes must therefore be conducted in such a way that they comply with all applicable laws and other binding regulations in the scope of which AlzChem conducts its business. Our employees are prohibited from issuing any instructions that may violate the conduct in the conduct of business operations as set out in our guidelines.

Accordingly, any active and passive bribery or acceptance of benefits in accordance with the provisions of Sections 299 onward of the Criminal Code and attempting the same is prohibited. Through our actions, we want to avoid creating the impression that our employees want to exert influence through extraneous means. Gifts, favors, entertainment or other benefits may only be granted or accepted in the AlzChem Group if they do not exceed the scope of business practice in the region in question, and if they do not have an inappropriately high value and are within the scope of legal or employment law. The AlzChem Group is committed to fair competition for the benefit of its customers and other stakeholders – and we respect the independence of public officials. Therefore, the AlzChem Group prohibits any form of corruption, including so-called acceleration payments. The basis for the anti-corruption regulations are our corporate guidelines.

We treat all business partners in a legally sound and fair manner. The selection of suppliers and service providers is carried out by the purchasing organization in an orderly process according to objective and comprehensible criteria. Orders are awarded as far as possible and reasonable on the basis of competitive offers. When selecting our suppliers, we make sure that they act in accordance with the principles of our Business Principles. Incentives, such as performance-related commissions, rebates, discounts or free deliveries of goods, require great care in their application in order to ensure compliance with the different legal regulations. Therefore, the business incentives in the AlzChem Group are comprehensive and applicable. In order to prevent fraudulent actions, the payment of deliveries and services is made directly to the respective contracting party. In addition, all or part payment by cash is prohibited, except in minor cases.

AlzChem welcomes and promotes the political and civic commitment of its employees. Likewise, as AlzChem we respect the freedom of choice of our employees for political self-determination. In particular, employees may not in any way be directly or indirectly held to make political donations or to support a political party or a person's candidacy for political office. AlzChem employees should report their political mandates to their supervisor or the Compliance Manager.

The Supervisory Board regularly reviews the efficiency of its activities and reports on this in the Report of the Supervisory Board as part of the Annual Report. In order to meet the increasing demands on the Supervisory Board, the Supervisory Board was reorganized in 2017 and the number of Supervisory Board members increased to four. The proportion of women on the Supervisory Board is 25% and thus almost meets the quota required by law for the equal participation of women and men in management positions.

In addition, reference is made to the joint Corporate Governance Report of the Management Board and Supervisory Board as part of the Annual Report.

7.9. SAFETY

Protecting people from adverse effects on safety and health through products, business and production processes as well as the responsible use of the environment and natural resources are fundamental components of responsible corporate behavior for AlzChem Group AG. Based on the observance of laws and agreements, we work to continuously improve the services and their management system in this area.

We want our Trostberg chemical park company to be not only economically successful, but also a good partner, employer, trainer and neighbor. In light of this self-image, we take responsibility for the safety and protection of our environment. For more than 100 years, we have been operating plants in Trostberg, Schalchen and Hart that are subject to the so-called Störfall Ordinance. This ordinance regulates the protection of people and the environment from the consequences of possible accidents in technical installations, which could possibly lead to the release of hazardous substances. A variety of in-house security initiatives, a highly trained plant fire brigade and the extensive security measures in our operations and facilities, optimized in cooperation with the authorities, help to minimize risks for our employees and the people in our neighborhood. With a current brochure, we as a company of the ChemDelta Bavaria inform about safety measures and the correct behavior in case of incidents. The information contained in the brochure can be viewed at any time on the AlzChem Group AG homepage.

The carbide plant in Sweden also falls within the scope of the European SEVESO III Directive and is thus subject to corresponding Swedish laws, which are comparable to the German Hazardous Incident Ordinance.

The fire brigade exercise 2018 in the Trostberg Chemical Park was the focus of the reporting and communication channels, since the processing of events is only successful if communication between the emergency services also functions. Around 100 fire brigades, police and internal emergency services took part in the exercise. The exercise was coordinated by the Trostberg Chemical Park's fire brigade in close cooperation with the stand-by services of AlzChem and BASF. The emergency is rehearsed once a year with the support of external volunteers. The aim is to practice the reporting and communication channels between the organizations involved, such as the fire brigade, the district administration and the Integrated Control Centre Traunstein (ILS), the police and the companies. In addition, internal event exercises take place throughout the year at various AlzChem sites.

Work and plant safety/Industrial safety measures

AlzChem has introduced occupational health and safety management according to OHRIS (Occupational Health and Risk Management System). The long-standing certification was extended in 2018 by the government of Upper Bavaria for three years.

All companies located at the sites operated by AlzChem participate in a joint safety work in seven working committees: A1 (event analyzes), A2 (safety audits), A3 (rules and instruction), A4 (order), A5 (personal protective equipment), B1 (health) and B2 (actions). The safety control committee is the authoritative body in the safety and health work at the German sites of AlzChem Group AG. The security committee, which generally meets on a monthly basis, is headed by the CEO; this manages and coordinates the activities of the safety and health program.

Injuries and unwanted events are often the result of unsafe actions. Safety audits are an important instrument of our safety management system to avoid unsafe actions. Their aim is to regularly motivate all employees to act safely and to identify and remedy misconduct and safety deficiencies. Since no correlation could be established between the number of security audits and the provision of security, the number of audits at the German sites was reduced in 2018. A significant increase in the KSUND ratio could not be determined over this period.

We also encourage our employees to report near-accidents. A near-accident is an event that had no consequences (personal injury, property damage, interruption of supply, etc.) but could have had serious consequences. The technical term for a near-accident is "Near Miss". There is great potential in near-miss cases because there is a lot to learn before something happens. Near-accidents give us the opportunity to actively deal with mistakes and dangers.

In order to simplify the recording of near misses, a software application was introduced in 2018 to record them. This enables every AlzChem employee to report (near) accidents – even in anonymous form.

Another important pillar in occupational safety and health is the different types of risk assessments. This effort has paid off and is reflected in the corresponding occupational safety indicators: at 4.9, the 1,000 man rate – i.e. the number of reportable accidents at work per 1,000 full-time employees – at the German sites in 2018 as a whole was far below the average of 18.10⁵⁸ stated by the German Social Accident Insurance (Deutsche Gesetzliche Unfallversicherung – DGUV).

In addition to the 1,000 man rate, the AlzChem Group determines its own security on the basis of the KSUND key figure. KSUND is an indicator for safety and accidents with external medical care and takes into account employees according to AÜG as well as contractor employees in addition to own employees. The KSUND rate for the full year 2018 is 17.4 and thus below the previous year's figure, but above the target of 15.3. This shows that further efforts are needed to further raise awareness of the issue of safety.

Although significantly more contractors were active in the Trostberg Chemical Park in 2018 due to the major investment projects – expansion of Creamino capacities including logistics and capacity expansion in the Nitrile product segment – KSUND events with contractors recorded a decline. As a result, the improvement in contractor management was achieved and one of the focal points of the Safety Steering Committee was successfully implemented in 2018.

In 2018, regular inspections by the supervisory authorities, such as the accident inspection at the Trostberg plant, took place. Furthermore, new processes as well as process and plant modifications are examined for their hazard potential. In emergency and event management, a systematic procedure has been developed in the event of an alarm. It is good practice that numerous exercises have been carried out again in recent years in order to be prepared and able to act in the event of an emergency.

Information security

The requirement of the Federal Network Agency for Public Distribution Network Operators to implement the requirements according to § 11 paragraph 1a EnWG⁵⁹ with regard to information security was fulfilled by introducing and setting up an ISMS⁶⁰ according to ISO 27001 taking into account the ISO/IEC 27019 SiKat⁶¹ with certification in 2017. In addition to the TÜV Süd audits for obtaining certification, an external service provider is commissioned annually to carry out independent system audits.

The consistent implementation of information security requirements is carried out using the Plan-Do-Check-Act method. To monitor measures and check their effectiveness, we use the same tools as for quality management according to ISO 9001.

Our asset-based risk management of information security not only considers the technical infrastructure, but also effectively involves the entire organization, also with regard to human behavior and immaterial damage classes.

In order to achieve the optimum level of security for the AlzChem Group, protection zones were defined for physical security, information was classified using a so-called "confidentiality matrix" and procedural instructions were used to achieve an equal understanding of the security process in practice.

Regular, event-related information and obligatory training ensure that the topic of information security remains present in the consciousness of employees.

IT compliance

The responsible department monitors the implementation of the compliance requirements of the legislator and the AlzChem Group. During the reporting period, the internal control system was expanded and corresponding processes automated.

Operational reliability – especially of critical IT systems – is constantly being improved through optimized system management. In view of the continuously growing threat situation, we regularly review our protective measures, implement necessary countermeasures on a risk-based basis and continuously check that they are up to date.

Legal conformity

AlzChem complies with environmental impact legislation. In addition to approval notifications, we also abide by the Federal Immission Control Act with its ordinances (e.g. Störfall Ordinance, 17th BImSchV), the Water Resources Act, the Waste Water Ordinance, the Ordinance on Installations for Handling Substances Hazardous to Water (VAwS) and various laws and ordinances on waste law and nature conservation law. AlzChem uses the so-called "law in operation" dialogue system, which is regularly updated, to implement compliance with legal regulations and monitor regulations.

All regulations were checked for relevance and assigned to the respective departments. Changes are made to the database and made available to the affected areas for information in monthly updates.

59 EnWG – Energiewirtschaftsgesetz (Energy Industry Act)

60 ISMS – Informationssicherheitsmanagementsystem (Information Security Management System)

61 SiKat – Sicherheitskatalog (Safety catalogue)

8. CORPORATE GOVERNANCE REPORT CORPORATE GOVERNANCE STATEMENT ACCORDING TO SECTION 315D HGB, SECTION 289 HGB

8.1. CORPORATE GOVERNANCE AND COMPLIANCE STATEMENT ACCORDING TO SECTION 161 AKTG

Corporate Governance encompasses all principles for the management and supervision of a company. In this sense, corporate governance as an expression of good and responsible corporate governance is an integral part of the AlzChem Group's management philosophy. The principles of corporate governance primarily relate to cooperation within the Management Board, the Supervisory Board, between the two bodies and the relationship with our shareholders, particularly at the Annual General Meeting.

For AlzChem, the starting point for ensuring responsible, sustainable value-based management and control of the company – in addition to complying with the relevant legal standards – is the recognition of the German Corporate Governance Code (GCGC), based on the current version from February 7, 2017.

Declaration of Conformity according to Section 161 AktG

The Management Board and the Supervisory Board of AlzChem Group AG (the "company") declare according to Section 161 AktG:

The recommendations of the Government Commission "German Corporate Governance Code" published by the Federal Ministry of Justice in the official version of the Federal Gazette dated February 7, 2017, have been complied with since the last Declaration of Conformity was issued in March 2018 with the exceptions outlined below. The company intends to continue to comply with these recommendations with the exceptions set out below.

Deductible in the case of D&O (Directors and Officers) insurance for members of the supervisory board (3.8 of the Code)

D & O insurance taken out by the company does not provide for a deductible for Supervisory Board members, in particular no deductible of at least 10% of the damage up to at least one and a half times the fixed annual remuneration. Such a deductible is not required by law for members of the Supervisory Board; instead, the members of the Supervisory Board are exempt from compulsory deductibles. In view of the role of the Supervisory Board, which is also reflected in the different remuneration structure of the Management Board, this distinction appears appropriate in the treatment of the Management Board and the Supervisory Board. Neither the Management Board nor the Supervisory Board see a deductible as an effective way of increasing the motivation and sense of responsibility of the members of the Supervisory Board.

Defining the desired level of pension benefits for members of the Management Board (4.2.3 of the Code)

The Code recommends that the Supervisory Board should determine the desired pension level for pension commitments for members of the Management Board, including those for the duration of their term of office, taking into account the annual and non-current expenses for the company. The Supervisory Board has not defined such a pension level. Instead, each member of the Management Board is entitled to a contribution-based annual pension scheme, the amount of which is determined as a percentage of the annual basic salary and, if applicable, of a portion of the variable remuneration of the individual Management Board member. This gives the Supervisory Board an idea of the annual and non-current expenses for the company, which also depend on actuarial effects due to the formation of reserves. It is increasingly common not to define an intended pension practice, but to use a contributory and benefit-oriented system.

Composition of the Supervisory Board

(5.4.1 paragraphs 2 and 3 of the Code)

With the exception of setting an age limit, the Supervisory Board has not yet set itself specific targets with regard to its composition, in particular those that take into account the company-specific situation, the international activities of the company, potential conflicts of interest and diversity. An explicit competence profile within the meaning of Section 5.4.1 of the GCGC has also not yet been adopted. The Supervisory Board is of the opinion that the selection of the members of the Supervisory Board should, above all, focus on the knowledge and skills of the future members as well as the technical competence. While the Supervisory Board welcomes the intention of the Code to take greater account of the above criteria in the composition of a Supervisory Board, it considers that the setting of specific objectives would not be appropriate at this stage.

Trostberg, September 4, 2018

AlzChem Group AG

The Management Board The Supervisory Board

8.2. RELEVANT INFORMATION ON CORPORATE PRACTICES

The company complies with all legal requirements and complies with the recommendations of the German Corporate Governance Code (GCGC) with the deviations described above.

This includes the internal corporate guidelines for entrepreneurial behavior ("AlzChem corporate guidelines").

8.2.1. OPERATION OF MANAGEMENT BOARD AND SUPERVISORY BOARD

8.2.1.1. MANAGEMENT BOARD

The members of the Management Board are responsible for managing the affairs of the company in their own responsibility in the interests of the company in accordance with the law, the Articles of Association, the rules of procedure for the Management Board and the business distribution plan. It complies with the recommendations of the German Corporate Governance Code and reports on deviations. The Management Board must define corporate goals, fundamental strategic orientation, business policy and Group organization of the company, coordinates these with the Supervisory Board and ensures their implementation. It must ensure compliance with the statutory provisions and the company's internal guidelines and work towards their compliance within the Group companies (compliance). It is also tasked with ensuring appropriate risk management and controlling in the company.

The Management Board currently has three members. One member is appointed Chairman. By resolution from August 24, 2017, the Supervisory Board adopted new rules of procedure for the Management Board, including a business allocation plan.

The appointed Chief Executive Officer coordinates the cooperation of the Management Board and the information of the Supervisory Board and maintains regular contact with the Chairman of the Supervisory Board. It must work to ensure that the management of the Management Board areas is uniformly aligned with the goals set by the resolutions of the Management Board. The members of the Management Board may at any time request information about individual matters in their areas and may specify that they are informed in advance of certain types of transactions. The Chief Executive Officer represents the Management Board and the company to the public in matters affecting the entire company. It may delegate these duties to certain members of the Management Board for certain types of matters or in individual cases.

The responsibilities of the individual members of the Management Board arise from the business allocation plan, which is proposed by the members of the Management Board,

even in the event of future changes, and requires the approval of the Supervisory Board. The current business allocation plan provides for the following distribution of responsibilities.

	Ulli Seibel CEO	Andreas Niedermaier CFO	Klaus Englmaier COO
Essential functions	Communication	Controlling, Finance, Taxes	Production
	Marketing	Insurance	Technology
	Distribution	Law	Environment, Safety, Health, Quality
	Innovation management	HR	
	Strategy	Supply chain management	
	Investor relations	IT	
		Risk management	

Within each division, each Management Board makes its own decisions, with particular emphasis on the overall responsibility and collegiality of Board members. As far as the divisions of several members of the Management Board are concerned, they decide together. If no agreement is reached, each member of the Board of Management involved is required to bring about a resolution of the Board of Management. In this case, the measure shall be suspended until the decision of the Board, unless the measure is required in due discretion to avoid imminent serious harm to the company. About such a procedure, the Board is to be informed immediately.

The Management Board fulfils its reporting obligations to the Supervisory Board specified in Section 90 AktG and other statutory provisions, the company's Articles of Association and these Rules of Procedure, whereby the Management Board, pursuant to Section 90 AktG, to the Supervisory Board and, for important reasons, pursuant to Section 90 (1.3) AktG to Chairman of the Supervisory Board reported. Reports of the Management Board to the Supervisory Board are generally to be made in text form, unless the law provides otherwise. If necessary in individual cases due to special urgency, the Supervisory Board must report verbally.

As part of its reporting, the Management Board regularly, promptly and comprehensively informs the Supervisory Board, especially during its meetings, in particular about fundamental questions of corporate planning, the net assets, financial position and results of operations as well as profitability and business development of the company and its subsidiaries and joint ventures. The Management Board has to agree on deviations from the previously drawn up plans and objectives, giving reasons. Reporting by the Management Board must also include information on the risk situation, risk management and compliance.

Unless otherwise determined by the Supervisory Board, the Management Board reports to the Supervisory Board on the intended business policy and other fundamental questions of corporate planning at the last meeting of the Supervisory Board of a fiscal year and lays out the budget for the following fiscal year (including financial, investment and personnel planning). In particular, it addresses deviations from the actual course of business from the previously presented plans and targets, stating the reasons. Unless otherwise determined by the Supervisory Board, the Management Board informs the Supervisory Board on the profitability of the company, in particular the return on equity, at the Supervisory Board meeting in which the Annual financial statements are being discussed.

Unless otherwise determined by the Supervisory Board, the Management Board regularly reports to the Supervisory Board at regular Supervisory Board meetings on the course of business, in particular sales, the situation of the company, in particular the risk situation and risk management, as well as all issues of business policy and profitability.

In addition, the Chairman of the Management Board reports to the Chairman of the Supervisory Board in good time about transactions that may be of material importance to the profitability or liquidity of the company. Without prejudice to existing approval requirements of the Supervisory Board and the reporting obligations specified in Section 90 AktG in particular, the Management Board informs the Chairman of the Supervisory Board promptly and comprehensively about all business matters which are of particular significance due to their financial implications and/or their significance for the general corporate policy, particularly risk situation and risk management.

8.2.1.2. SUPERVISORY BOARD

The Supervisory Board advises the Management Board on the management of the company and oversees its management (see also the report of the Supervisory Board in this annual report on the activities of the Supervisory Board). The Supervisory Board ensures that the Management Board fulfils its reporting obligations specified in Section 90 AktG. The Supervisory Board carries out its activities in accordance with the statutory provisions, the Articles of Association of the company and the Rules of Procedure. The recommendations of the German Corporate Governance Code relating to the Supervisory Board are complied with, unless the Declaration

of Conformity issued by the Management Board and the Supervisory Board pursuant to Section 161 of the German Stock Corporation Act (AktG) provides otherwise. Its members have equal rights and obligations and are not bound by instructions. The Supervisory Board works confidently and closely in the performance of its duties for the benefit of the company. The Supervisory Board regularly reviews the efficiency of its activities.

The Supervisory Board of AlzChem Group AG (Group parent company) currently consists of four members. The Supervisory Board shall be composed in such a way that its members as a whole have the knowledge, skills and professional experience necessary for the proper performance of their duties. Taking into account the recommendations of the German Corporate Governance Code, the Supervisory Board specifies concrete objectives for its composition. Each member of the Supervisory Board ensures that he has sufficient time to exercise his mandate. As a rule, the term of office of a Supervisory Board member shall end with the expiry of the Annual General Meeting following the completion of the 75th year of the Supervisory Board member's life.

The Supervisory Board must, from its perspective, have a sufficient number of independent members. A member of the Supervisory Board shall not be considered as independent especially if he has a personal or business relationship with the company, its bodies, a controlling shareholder or an affiliate, which may give rise to a material and not merely temporary conflict of interest. At least one independent member of the Supervisory Board must have expertise in the areas of accounting or auditing (Section 100 (5) AktG).

The Supervisory Board may not consist of more than two former members of the Management Board. Members of the Management Board may not become members of the Supervisory Board within two years after the end of their appointment, unless they are elected on the recommendation of shareholders holding more than 25% of company voting rights. In the latter case, a change to the chairmanship of the Supervisory Board is an exception to be justified at the Annual General Meeting. Members of the Supervisory Board may not exercise any executive functions or advisory functions with significant competitors of the company.

In addition to the Supervisory Board mandate for the company, the members of the Supervisory Board may not exercise more than two further Supervisory Board mandates in listed companies outside the Group or companies with comparable demands, provided that they simultaneously serve as members of the Management Board of a listed company. The above rules must be taken into account in proposals for the election of Supervisory Board members. At the beginning of its term of office, the Supervisory Board elects a Chairman and a Deputy Chairman from among its members in a meeting without special convening. Two additional Vice Chairmen may be elected.

If the election does not specify a shorter term of office, the election takes place for the term of office of the elected Supervisory Board member. If the Chairman or a Deputy Chairman leaves the Supervisory Board during his term of office, a new election for the vacated position must be made immediately. The election is directed by the eldest member of the Supervisory Board present at the meeting.

The Chairman of the Supervisory Board coordinates the work of the Supervisory Board. He and the Deputy Chairman keep each other informed, especially when taking action on the occasion of urgent business requiring approval. Declarations of intent by the Supervisory Board are made on behalf of the Supervisory Board by the Chairman – or by his Deputy in the event that he is unavailable. The Chairman – in the case of his absence, his Deputy – is authorized to accept explanations for the Supervisory Board. The Deputy shall only have the rights and duties of the Chairman if mandatory law or the Articles of Association expressly assign to him those rights and obligations. The Deputy is not entitled to a second vote.

In the reporting period, the Supervisory Board was composed as follows:

Member	from
Markus Zöllner	08/04/2017
Prof. Dr. Martina Heigl-Murauer	08/04/2017
Dr. Caspar Freiherr von Schnurbein	08/04/2017
Steve Röper	10/02/2017

In accordance with (5.4.2). The ownership structure is taken into account in the composition of the Supervisory Board. Prof. Dr. Martina Heigl-Murauer is an independent member of the Supervisory Board (Section 5.4.2 GCGC). The Chairman of the Supervisory Board is Mr. Markus Zöllner.

The Audit Committee consists of Prof. Dr. Heigl-Murauer (Chairman), Dr. Freiherr von Schnurbein and Mr. Markus Zöllner. The Nomination Committee includes Markus Zöllner (Chairman), Dr. Baron von Schnurbein and Mr. Steve Röper.

Furthermore, in order to avoid repetition, please refer to the report of the Supervisory Board for further information on the work of the Supervisory Board and the Committees.

8.2.1.3. AVOIDING CONFLICTS OF INTEREST

The members of the Management Board and the Supervisory Board disclose any conflicts of interest to the Supervisory Board without delay. In the reporting period, no conflicts of interest arose among the members of the Management Board and the Supervisory Board.

8.3. DIVERSITY CONCEPT

The Management Board of AlzChem Group AG is to be composed in a balanced and company-adequate manner so that its members have the knowledge, skills and experience required to manage an internationally active chemical group. Fundamental criteria for a Management Board position are personality, integrity, convincing leadership qualities, the professional qualification for the department to be taken over, previous performance and the ability to adapt business models and processes in a changing world.

For the composition of the Management Board, the interests of the company and the complementary profiles of its members are decisive. The following diversity aspects in particular are also taken into account:

- Members of the Management Board shall have many years of management experience.
- Members of the Management Board shall have different professional experience as well as comprehensive skills and knowledge.
- The Management Board as a whole shall have many years of experience in the chemical industry.
- The Management Board shall have a sufficient age mix.

The personality with which a specific position on the Management Board should possibly be filled must be determined by taking into account all the circumstances of the individual case.

8.4. INFORMATION ABOUT LEGAL MINIMUM QUOTAS IN LEADERSHIP POSITIONS

AlzChem Group AG as a listed parent company and the subsidiaries of AlzChem Group AG which are subject to the One-Third Participation Act, are required to comply with the provisions of Section 76 (4) and Section 111 (5) of the German Stock Corporation Act.

On August 3, 2017, the Supervisory Board of AlzChem Group AG (at that time Softmatic AG) set a target of 0% for the share of women in the Supervisory Board and the Management Board to be achieved by December 31, 2018. As of December 31, 2018, the share of women on the Supervisory Board was 25% and 0% on the Management Board. In addition, the Management Board of AlzChem Group AG has set the target for the share of women in the first and second management levels below the Management Board at 0% until June 30, 2022. It should be noted here that only very few employees work for AlzChem Group AG.

On September 29, 2017, the Supervisory Board set the targets for the share of women to be reached on the Supervisory Board and the Management Board by June 30, 2022, as follows: (i) 16.66% Supervisory Board and (ii) 0% on the Management Board. In addition, the Management confirmed the targets of the previous year by resolution of June 29, 2017 and set the target in the period until June 30, 2022 for the first-tier management at 0% and at 8% for second-tier management below the Management. This corresponds to the status of the resolution and considers the succession planning within the deadline for both management levels. As of December 31, 2018, the targets for the first and second management levels below the Management were achieved with 11.7%. Due to the specific conditions in the chemical industry, we currently consider target figures that correspond to the legal minimum share as unachievable.

9. SUPPLEMENTARY REPORT

After the end of the short fiscal year 2018/II, no circumstances had a material effect on the net assets, financial position and results of operations until the date of preparation of the consolidated financial statements and the Group management report.

10. RESPONSIBILITY STATEMENT

We assure to the best of our knowledge that, in accordance with applicable accounting principles, the Consolidated Financial Statements give a true and fair view of the Group's net assets, financial position and results of operations, while the Consolidated management report accurately presents the course of business including the business results and the situation of the Group in a way that clearly demonstrates the current opportunities and risks of expected Group development.

Trostberg, February 28, 2019

AlzChem Group AG
The Management Board



Ulli Seibel
(CEO)

Klaus Englmaier
(COO)

Andreas Niedermaier
(CFO)

APPENDIX I

DECLARATION ON THE FEE TRANSPARENCY LAW ACCORDING TO SECTION 264 (3), SECTION 289 HGB

The law on the promotion of pay transparency between women and men came into force on July 6, 2017. At the center of the law is a right to information of the individual employee for consideration of the other sex in companies with more than 200 employees. In addition, the law contains an invitation to the employer to carry out an audit on compliance with the equal pay requirement, as well as a reporting obligation of the employer with more than 500 employees on statistical information and the gender equality measures implemented within the company. The right to information can be claimed for the first time from February 2018. The Gender Equality Report is to be prepared for the first time in 2018 for 2016. The report must be attached to the management report and disclosed in the Federal Gazette, Section 22 (4) of the Fee Transparency Act. It is not part of the Annual Financial Statements and management report.

AlzChem guarantees its employees fair remuneration and remuneration transparency. This is achieved in detail as follows:

- AlzChem Trostberg GmbH, NIGU Chemie GmbH and Nordic Carbide AB are members of the employers' association VBCI or IKEM and apply the collective agreements of the chemical industry. Collective agreements and pay tables are available to all employees.
- AlzChem regularly carries out analytical workplace assessments with its operating partners on the basis of a company agreement for the industrial sector. This common, analytical assessment leads to a fair and gender-neutral classification and pay determination.
- AlzChem carries out a summary review of comparable workplaces with its partner companies for employees. The formation of so-called job families leads to fair, transparent and gender-neutral "remuneration corridors."
- AlzChem has agreed a binding set of rules for gender-neutral, competitive salary determination and development with its partners for non-salaried employees and management. There is also a joint evaluation commission which ensures the gender-neutral and uniform assessment and classification of positions.
- AlzChem promotes a women-friendly and family-friendly working world. This succeeds above all through flexible working hours agreed with operating partners as well as a large number of part-time models.
- As of June 30, 2018, the AlzChem Group employed 1,227 full-time men, 146 full-time women as well as 50 part-time men and 111 part-time women.



ALZCHEM GROUP AG

HART SITE

CONSOLIDATED FINANCIAL STATEMENTS FOR THE FISCAL YEAR FROM JULY 1 TO DECEMBER 31, 2018

CONSOLIDATED FINANCIAL STATEMENTS AS OF DECEMBER 31, 2018

CONSOLIDATED INCOME STATEMENT

OF ALZCHEM GROUP AG, TROSTBERG, FOR THE FISCAL YEAR FROM JULY 1 TO DECEMBER 31, 2018

in EUR thousands	Notes No.	01/01 – 12/31/2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited ⁶²	07/01 – 12/31/2018
Revenues	1	353,920	195,241	375,217	179,976
Change in inventories of finished and unfinished products		1,768	4,790	5,461	671
Other operating income	2	11,594	6,599	13,436	6,837
Cost of materials	3	-137,870	-80,180	-155,429	-75,249
Personnel expenses	4	-109,248	-58,625	-114,185	-55,560
Other operating expenses	5	-74,496	-36,867	-75,121	-38,254
EBITDA		45,668	30,958	49,379	18,421
Depreciation	6	-13,990	-7,498	-15,187	-7,689
EBIT		31,678	23,460	34,192	10,732
Other interest and similar income	7	662	315	542	227
Interest and similar expenses	7	-3,004	-1,422	-2,815	-1,393
Financial result	7	-2,342	-1,107	-2,273	-1,166
Result from ordinary business activities		29,336	22,353	31,919	9,566
Taxes on income and earnings	8	-8,764	-6,291	-9,136	-2,845
Consolidated net income		20,572	16,062	22,783	6,721
Non-controlling interests in the consolidated net income	9	179	57	139	82
Shares of the shareholders of AlzChem Group AG in the consolidated net income		20,393	16,005	22,644	6,639
Earnings per share in EUR (undiluted and diluted)	IV	0.20	0.16	0.23	0.07

In order to make the development of the AlzChem Group (AlzChem Group AG) transparent over time and to ensure comparability with the fiscal year 2017, financial key figures for the income statement and cash flow statement for the full year 2018 are also disclosed and explained in addition.

These were calculated by adding the respective key financial figures for the short fiscal year 2018/I and the short fiscal year 2018/II.

62 The full-year figures for the period 01/01 – 12/31/2018 are calculated by adding the audited figures for the two short fiscal years 01/01 – 06/30/2018 and 07/01 – 12/31/2018.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

OF ALZCHEM GROUP AG, TROSTBERG, FOR THE FISCAL YEAR FROM JULY 1 TO DECEMBER 31, 2018

in EUR thousands	Notes No.	01/01 – 12/31/2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Consolidated net income	19	20,572	16,062	22,783	6,721
Other income					
Items that are not reclassified to the income statement					
Result from the revaluation of defined benefit plans		89	1,152	-498	-1,650
Deferred taxes		-26	-321	141	462
Total items that are not reclassified to the income statement		63	831	-357	-1,188
Items that will later be reclassified to the income statement					
Profit from the market valuation of financial assets		0	4	4	0
Difference from currency translation		-1,090	125	208	83
Deferred taxes		0	-1	-1	0
Total items that will later be reclassified to the income statement		-1,090	128	211	83
Other income	19	-1,027	959	-146	-1,105
Non-controlling interests in other income		-17	2	-13	-15
Shares of the shareholders of AlzChem Group AG in other income		-1,010	957	-133	-1,090
Consolidated comprehensive income	19	19,545	17,021	22,637	5,616
Non-controlling interests in other consolidated comprehensive income		162	59	126	67
Shares of the shareholders of AlzChem Group AG in the consolidated comprehensive income		19,383	16,962	22,511	5,549

CONSOLIDATED BALANCE SHEET

OF ALZCHEM GROUP AG, TROSTBERG, AS OF DECEMBER 31, 2018

Assets in EUR thousands	Notes No.	12/31/2017	06/30/2018	12/31/2018
Non-current assets				
Intangible assets	10	1,009	991	870
Property, plant and equipment	11	115,131	123,161	144,265
Financial assets	12	20	20	20
Other receivables and other assets	13	1,071	1,067	891
Deferred tax assets	14	25,433	24,625	24,954
Total non-current assets		142,664	149,864	171,000
Current assets				
Inventories	15	71,382	75,579	78,856
Trade receivables	16	35,035	52,336	34,351
Other receivables and other assets	13	16,308	14,515	14,510
Income tax assets	17	1,990	2,321	1,977
Cash and cash equivalents	18	12,802	9,844	12,857
Total current assets		137,517	154,595	142,551
Total assets		280,181	304,459	313,551

Equity and liabilities in EUR thousands	Notes No.	12/31/2017	06/30/2018	12/31/2018
Equity				
Capital and reserves				
Subscribed capital	19	101,763	101,763	101,763
Capital reserve adjustment item reverse acquisition	19	-88,128	-88,128	-88,128
Capital reserve	19	24,981	24,981	24,981
Other accumulated equity	19	-31,993	-31,033	-32,123
Retained earnings	19	49,047	65,032	60,478
		55,670	72,615	66,971
Non-controlling interests	19	2,224	1,429	1,420
Total equity		57,894	74,044	68,392
Liabilities				
Non-current liabilities				
Provisions for pensions and similar obligations	20	107,234	107,218	109,960
Other provisions	21	17,443	18,295	18,863
Loan liabilities to banks	22	19,203	16,403	32,577
Liabilities from finance leases	23	223	223	0
Other liabilities	25	10	684	513
Deferred tax liabilities	14	2,165	2,184	2,089
Total non-current liabilities		146,278	145,007	164,002
Current liabilities				
Other provisions	21	1,209	3,491	2,554
Loan liabilities to banks	22	22,122	22,268	25,353
Financial liabilities	24	28,199	30,617	30,863
Other liabilities	25	23,421	26,022	20,859
Income tax liabilities	26	1,058	3,010	1,528
Total current liabilities		76,009	85,408	81,157
Total liabilities		222,287	230,415	245,159
Total equity and liabilities		280,181	304,459	313,551

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

OF ALZCHEM GROUP AG, TROSTBERG, FOR THE FISCAL YEAR FROM JULY 1 TO DECEMBER 31, 2018

in EUR thousands	Notes No.	Subscribed capital	Capital reserve–adjustment item reverse acquisition	Capital reserve
As of 01/01/2018		101,763	-88,128	24,981
Effect of change in accounting rules	IV	0	0	0
Compensation claim non-controlling interests	9	0	0	0
Total transactions with shareholders		0	0	0
Consolidated net income	19	0	0	0
Other income	19	0	0	0
Consolidated comprehensive income		0	0	0
As of 06/30/2018		101,763	-88,128	24,981
As of 07/01/2018		101,763	-88,128	24,981
Dividends	IV	0	0	0
Payment of profit shares to non-controlling interests	9	0	0	0
Total transactions with shareholders		0	0	0
Consolidated net income	19	0	0	0
Other income	19	0	0	0
Consolidated comprehensive income		0	0	0
As of 12/31/2018		101,763	-88,128	24,981

Other accumulated equity	Retained earnings	Shares of the shareholders of AlzChem Group AG	Non-controlling interests	Total equity
-31,993	49,047	55,670	2,224	57,894
4	-21	-17	0	-17
0	0	0	-855	-855
0	0	0	-855	-855
0	16,005	16,005	57	16,062
957	0	957	2	959
957	16,005	16,962	59	17,021
-31,033	65,032	72,615	1,429	74,044
-31,033	65,032	72,615	1,429	74,044
0	-11,194	-11,194	0	-11,194
0	0	0	-74	-74
0	-11,194	-11,194	-74	-11,268
0	6,639	6,639	82	6,721
-1,090	0	-1,090	-15	-1,105
-1,090	6,639	5,549	67	5,616
-32,123	60,478	66,971	1,420	68,392

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

OF ALZCHEM GROUP AG, TROSTBERG, FOR THE FISCAL YEAR FROM JULY 1 TO DECEMBER 31, 2018

in EUR thousands	Notes No.	Subscribed capital	Capital reserve–adjustment item reverse acquisition	Capital reserve
As of 01/01/2017		310	10,690	24,981
Cash dividend	19	0	0	0
Non-cash dividend	19	0	0	0
Non-cash capital increase	19	100,323	-100,323	0
Cash capital increase	19	1,130	1,469	0
Effect from consideration reverse acquisition	19	0	775	0
Transaction costs of capital increases	19	0	-740	0
Total transactions with shareholders		101,453	-98,818	0
Consolidated net income	19	0	0	0
Other income	19	0	0	0
Consolidated comprehensive income		0	0	0
As of 12/31/2017		101,763	-88,128	24,981
As of 01/01/2018		101,763	-88,128	24,981
Effect of change in accounting rules	IV	0	0	0
Compensation claim non-controlling interests	9	0	0	0
Dividends		0	0	0
Auszahlung Gewinnanteile an nicht beherrschende Anteile		0	0	0
Summe Transaktionen mit Anteilseignern		0	0	0
Consolidated net income	19	0	0	0
Other income	19	0	0	0
Consolidated comprehensive income		0	0	0
As of 12/31/2018		101,763	-88,128	24,981

Other accumulated equity	Retained earnings	Shares of the shareholders of AlzChem Group AG	Non-controlling interests	Total equity
-30,984	48,353	53,350	137	53,487
0	-17,775	-17,775	0	-17,775
0	-1,925	-1,925	1,925	0
0	0	0	0	0
0	0	2,599	0	2,599
0	0	775	0	775
0	0	-740	0	-740
0	-19,700	-17,065	1,925	-15,140
0	20,393	20,393	179	20,572
-1,010	0	-1,010	-17	-1,027
-1,010	20,393	19,383	162	19,545
-31,993	49,047	55,670	2,224	57,894
Reporting, unaudited				
-31,993	49,047	55,670	2,224	57,894
4	-21	-17	0	-17
0	0	0	-855	-855
0	-11,194	-11,194	0	-11,194
0	0	0	-74	-74
0	-11,194	-11,194	-929	-12,123
0	22,644	22,644	139	22,783
-133	0	-133	-13	-146
-133	22,644	22,511	126	22,637
-32,123	60,478	66,971	1,420	68,392

CONSOLIDATED CASH FLOW STATEMENT

OF ALZCHEM GROUP AG, TROSTBERG, FOR THE FISCAL YEAR FROM JULY 1 TO DECEMBER 31, 2018

in EUR thousands	Notes No.	01/01 – 12/31/2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting	07/01 – 12/31/2018
	27				
Consolidated earnings before taxes		29,336	22,353	31,919	9,566
Depreciation on fixed and intangible assets		13,990	7,498	15,187	7,689
Decrease in pension provisions		-641	-340	-725	-385
Profit from the sale of non-current assets		-62	-3	-9	-6
Other non-cash income and expenses		5,991	4,716	5,341	625
Financial result		2,342	1,107	2,273	1,166
Interest received		395	128	156	28
Interest paid		-702	-332	-476	-144
Income taxes paid		-9,920	-4,186	-8,103	-3,917
Increase in inventories		-8,190	-3,840	-5,306	-1,466
Increase (+)/decrease (-) in trade receivables and other receivables		1,066	-15,921	1,738	17,659
Increase (+)/decrease (-) in trade payables, other liabilities and other provisions		-2,019	4,026	-7,608	-11,634
Increase in other balance sheet items		-922	230	268	38
Cash inflow from operating activities (net cash flow)		30,664	15,436	34,655	19,219
Payments for investments in fixed assets		-24,878	-15,961	-40,128	-24,167
Proceeds from the sale of fixed assets		69	237	243	6
Cash inflow from the company acquisition/reverse acquisition		25	0	0	0
Cash outflow from investing activities		-24,784	-15,724	-39,885	-24,161
Free Cashflow		5,880	-288	-5,230	-4,942
Payments for the repayment of loan liabilities		0	0	20,560	20,560
Proceeds (+)/payments (-) from short-term financing lines		15,700	-119	2,466	2,585
Payments for the repayment of loan liabilities		-4,844	-2,623	-6,508	-3,885
Dividend payments		-17,775	0	-11,194	-11,194
Dividendenzahlungen an nicht beherrschende Anteile		0	0	-74	-74
Proceeds from cash capital increase		2,599	0	0	0
Payment for transaction costs of capital increases		-740	0	0	0
Cash outflow from financing activities		-5,060	-2,742	5,250	7,992
Net decrease (-)/increase (+) in cash and cash equivalents		820	-3,030	20	3,050
Cash and cash equivalents at the beginning of the period (at the closing rate of the previous year)		12,089	12,802	12,802	9,844
Changes due to exchange rate changes		-107	72	35	-36
Cash and cash equivalents at the end of the period		12,802	9,844	12,857	12,857
Net decrease (-)/increase (+) in cash and cash equivalents		820	-3,030	20	3,050

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS OF DECEMBER 31, 2018

I. SEGMENT REPORTING

Segment reporting by operating segments for the period from July 1 to December 31, 2018:

in EUR thousands	Specialty Chemicals	Basics & Intermediates	Other & Holding	Consolidation	Group
External sales	98,680	68,885	12,404	7	179,976
EBITDA	21,916	-2,137	-305	-1,053	18,421
Depreciation	-2,490	-2,575	-2,804	180	-7,689
EBIT	19,426	-4,712	-3,109	-873	10,732
Other interest and similar income					227
Interest and similar expenses					-1,393
Financial result					-1,166
Result from ordinary business activities					9,566
Inventories as of 12/31/2018:	49,672	28,125	3,766	-2,707	78,856

Segment reporting by operating segments for the period from January 1 to June 30, 2018:

in EUR thousands	Specialty Chemicals	Basics & Intermediates	Other & Holding	Consolidation	Group
External sales	110,734	71,081	13,421	5	195,241
EBITDA	28,776	1,248	497	437	30,958
Depreciation	-2,623	-2,407	-2,614	146	-7,498
EBIT	26,153	-1,159	-2,117	583	23,460
Other interest and similar income					315
Interest and similar expenses					-1,422
Financial result					-1,107
Result from ordinary business activities					22,353
Inventories as of 06/30/2018:	47,403	26,327	3,761	-1,912	75,579

Segment reporting by operating segments for the period from January 1 to December 31, 2018 (reporting, unaudited):

in EUR thousands	Specialty Chemicals	Basics & Intermediates	Other & Holding	Consolidation	Group
External sales	209,414	139,966	25,825	12	375,217
EBITDA	50,692	-889	192	-616	49,379
Depreciation	-5,113	-4,982	-5,418	326	-15,187
EBIT	45,579	-5,871	-5,226	-290	34,192
Other interest and similar income					542
Interest and similar expenses					-2,815
Financial result					-2,273
Result from ordinary business activities					31,919
Inventories as of 12/31/2018:	49,672	28,125	3,766	-2,707	78,856

Segment reporting by operating segment for the period from January 1 to December 30 2017:

in EUR thousands	Specialty Chemicals	Basics & Intermediates	Other & Holding	Consolidation	Group
External sales	185,681	140,869	27,374	-4	353,920
EBITDA	42,709	5,592	-2,640	7	45,668
Depreciation	-5,061	-4,334	-4,516	-79	-13,990
EBIT	37,648	1,258	-7,157	-71	31,678
Other interest and similar income					662
Interest and similar expenses					-3,004
Financial result					-2,342
Result from ordinary business activities					29,336
Inventories as of 12/31/2017:	44,315	26,091	3,142	-2,166	71,382

Segment reporting by regions:

in EUR thousands	Domestic	Foreign	Group
External sales 07/01 – 12/31/2018:	79,851	100,125	179,976
External sales 01/01 – 06/30/2018:	80,385	114,856	195,241
External sales 01/01 – 12/31/2018 (reporting, unaudited):	160,236	214,981	375,217
External sales 01/01 – 12/31/2017:	152,643	201,277	353,920
Long-term assets as of 12/31/2018:	142,078	3,057	145,135
Long-term assets as of 06/30/2018:	121,505	2,646	124,151
Long-term assets as of 12/31/2017:	113,637	2,504	116,141

In the reporting periods presented, one customer contributed at least 10 % of total Group sales in the reporting period. The customer's sales amounted to EUR 33,641 thousands (previous year: EUR 31,548 thousands; 2017: EUR 57,927 thousands; 2018 – reported, unaudited: EUR 65,189 thousands) and are included in the segments Specialty Chemicals, Basics & Intermediates and Other & Holding in all reporting periods.

IFRS 8 requires segmentation into operating segments in accordance with the internal organizational and reporting structure. An operating segment is defined as a "company component" that generates income and expenses from its business activities, the earnings situation of which is regularly analyzed by the responsible company entity in the context of resource allocation and performance appraisal and for which independent financial data is available. The responsible corporate body is the Executive Board of AlzChem Group AG.

The reportable segments within the AlzChem Group are the segments

- Specialty Chemicals
- Basics & Intermediates
- Other & Holding

The Specialty Chemicals segment generates sales mainly from the sale of specialty chemicals. The segment is characterized by innovative products that are used in the chemical industry, the food and feed industry and in the field of renewable energies. The products for customers in the food industry are based mainly on compounds of NCN chemistry (nitrogen-carbon-nitrogen) and are used as the dietary supplements Creapure® in pharmacy and in cosmetics. In the field of animal feed industry, guanidinoacetic acid is mainly produced under the product name Creamino for use as a feed additive. The products that AlzChem sells to renewable energy customers are used in the manufacture of composites and adhesives as silicon nitride for high-performance ceramics and for the manufacture of photovoltaic modules in the solar industry. Furthermore, this segment is associated with the production of nitroguanidine for use in agrochemicals and pharmaceuticals and as a gas generator in propellants.

The Basics & Intermediates segment essentially combines the activities of chemicals association based on the primary nitrogen-carbon-nitrogen bond (NCN chain). In this segment, raw materials for specialty chemicals, products for customers in the field of agriculture and metallurgy as well as intermediates for further use in the chemical industry are produced on the basis of lime, coal and electricity. Customers in the agricultural sector use calcium cyanamide products, e.g. as a fertilizer or as a hygiene agent. For customers in metallurgy, lime and carbide based pig iron desulphurization auxiliaries and products for deoxidation, desulphurization and steel nitridation in the field of secondary metallurgy are produced in this segment. In addition, this segment includes the production and sale of guanidine salts as a raw material for agrochemicals and pharmaceuticals, as well as the manufacture of nitriles and guanamines as intermediates for the chemical processing industry.

The Other & Holding segment comprises all other activities of the Group and holding activities not allocated to the other segments. The sales generated here mainly comprise service revenues.

When preparing segment reporting in accordance with the internal management approach, the same accounting principles are used as those used to prepare the IFRS consolidated financial statements.

External sales represent segment sales with external customers. The sales revenues by region refer to the billing address of the customers. EBITDA is the key performance indicator that management regularly uses to assess the profitability of the segments. In addition, depreciation and EBIT are regularly reported to the management. The expenses to be taken into account in the determination of EBITDA and EBIT are offset by calculation in the individual segments according to causation.

Inventories represent the main asset that is regularly reported to management. The long-term assets to be reported according to certain regions according to IFRS 8 consist of intangible assets and property, plant and equipment.

The consolidation column shows Group eliminations and Group postings that are made solely for the purpose of preparing the consolidated financial statements. The sales reported in this column include currency effects that could not be distributed among the other segments.

II. FISCAL YEAR CHANGE AND CONSEQUENT PRESENTATION IN IFRS CONSOLIDATED FINANCIAL STATEMENTS

After the previous year had already been a short fiscal year with the period from January 1 to June 30, 2018 (SFY 2018/I), the Management Board and Supervisory Board of AlzChem Group AG proposed to the Annual General Meeting on November 22, 2018, that a further short fiscal year from July 1, 2018 to December 31, 2018 (SFY 2018/II) be resolved, so that the fiscal year from January 1, 2019 onwards again corresponds to the calendar year and all annual financial statements of the AlzChem Group companies are again in line with the end of the fiscal year on December 31. After the shareholders had approved this proposal, a further short fiscal year was formed for the period from July 1, 2018 to December 31, 2018. The change in the fiscal year only affects the parent company AlzChem Group AG. For all other companies included in these IFRS consolidated financial statements, the fiscal year continues to correspond to the calendar year and has not been changed historically.

In order to change the fiscal year again, AlzChem Group AG formed a further short fiscal year for the period from July 1, 2018 to December 31, 2018 (SFY 2018/II) and prepared full IFRS consolidated financial statements for the short fiscal year 2018/II. The current reporting period stated covers the period from July 1 to December 31, 2018 and the reporting date December 31, 2018, respectively. The audited prior-year figures refer to the previous short fiscal year 2018/I and thus to the period from January 1, 2018 to June 30, 2018 and the reporting date June 30, 2018, respectively. Although both short fiscal years cover a six-month period, a comparison with the prior-year figures in these IFRS consolidated financial statements is of limited informative value. This is mainly due to the different seasonal nature of the two calendar half-years.

In order to make the development of the AlzChem Group (AlzChem Group AG) transparent over time and to ensure comparability with the fiscal year 2017, financial key figures for the income statement, statement of comprehensive income and cash flow statement for the full year 2018 are also disclosed and explained in addition. These were calculated by adding the respective key financial figures for the short fiscal year 2018/I and the short fiscal year 2018/II. For this purpose, the following additional information was therefore voluntarily included in these IFRS consolidated financial statements for information purposes:

- Consolidated income statement and consolidated statement of comprehensive income for the period 01/01/2017 - 12/31/2017
- Consolidated income statement and consolidated statement of comprehensive income for the period 01/01/2018 - 12/31/2018 (calculated by adding the two short fiscal years and unaudited)
- Consolidated balance sheet as of 12/31/2017
- Consolidated statement of changes in equity for the period 01/01/2017 - 12/31/2017
- Consolidated statement of changes in equity for the period 01/01/2018 - 12/31/2018 (calculated by adding the two short fiscal years and unaudited)
- Consolidated cash flow statement for the period 01/01/2017 - 12/31/2017
- Consolidated cash flow statement for the period 01/01/2018 - 12/31/2018 (calculated by adding the two short fiscal years and unaudited)
- Segment reporting for the period 01/01/2017 - 12/31/2017
- Segment reporting for the period 01/01/2018 - 12/31/2018 (calculated by adding the two short fiscal years and unaudited).

The current short fiscal year from July 1 to December 31, 2018 is referred to in the following as the short fiscal year 2018/II. The previous short fiscal year from January 1 to June 30, 2018 is referred to in the following as the previous year and SFY 2018/I respectively. The full fiscal year/calendar year from January 1, 2017 to December 31, 2017 is referred to as fiscal year 2017. The calculated unaudited fiscal year/calendar year from January 1, 2018 to December 31, 2018 is referred to as fiscal year 2018.

III. PRELIMINARY NOTE

The consolidated financial statements include AlzChem Group AG, a corporation under German law domiciled in Dr.-Albert-Frank-Str. 32, Trostberg, Germany, and its subsidiaries. The responsible register court is in Traunstein (HRB 28592). AlzChem Group AG is the parent company of the AlzChem Group and prepares these IFRS consolidated financial statements.

The consolidated financial statements were prepared by the Management Board on February 28, 2019.

The companies of the AlzChem Group develop, produce and trade in chemical products of all kinds and provide services,

including as a chemical park operator. The basic raw materials, coal, lime and electricity, are used in further production steps at the sites in Trostberg, Schalchen, Hart, Waldkraiburg and Sundsvall (Sweden) to produce highly versatile products with typical nitrogen-carbon-nitrogen compounds of a very high quality. Furthermore, smaller sales units are located in Atlanta (USA) and Shanghai (China).

Since October 5, 2017, the shares of the company have been traded in the regulated market segment with additional post-admission obligations (Prime Standard) of the Frankfurt Stock Exchange (WKN A0AHT4). Until then, the shares were admitted to the regulated market (General Standard) of the Frankfurt Stock Exchange. The shareholder structure is composed as follows as at 12/31/2018:

Shareholder	Share of capital in%
LIVIA Corporate Development SE	37.7
HDI Vier CE GmbH	20.4
four two na GmbH	15.8
M&G Investment Management Limited	7.6
Jan Ulli Seibel	4.9
Free Float	17.6
Total	100

By a shareholders' resolution of November 22, 2018, NIGU Chemie GmbH, AlzChem Nutrition GmbH and AlzChem International GmbH were exempted from the obligation to disclose the annual financial statements and management

report for the fiscal year 2018 in accordance with § 264 (3) HGB. The exemption resolutions for the fiscal year 2017 were published by the subsidiaries NIGU Chemie GmbH und AlzChem Nutrition GmbH in the Federal Gazette.

IV. EXPLANATIONS OF THE PRINCIPLES AND METHODS OF THE CONSOLIDATED FINANCIAL STATEMENTS

Accounting principles

The consolidated financial statements of the AlzChem Group AG were prepared in accordance with the rules of the International Accounting Standard Board (IASB), London, in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU. The interpretations of the IFRS Interpretations Committee (former IFRIC and SIC) were applied. The consolidated financial statements are in accordance with the European Union directives on group accounting (Directive 83/349/EEC). In order to achieve equivalence with consolidated financial statements prepared in accordance with the German Commercial Code, all disclosures and explanations that go beyond the requirements of the IASB have been made in accordance with § 315e of the German Commercial Code (HGB). The consolidated financial statements in the present version comply with the provision of § 315e HGB; this provision forms the legal basis for group accounting in accordance with international standards in Germany, together with Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of July 19, 2002 on the application of international accounting standards.

The provisions of the International Financial Reporting Standards (IFRS) as adopted by the EU were applied, which had to be applied until the balance sheet reporting date of 12/31/2018. An early application of standards not yet mandatory as at 12/31/2018 was waived. This procedure leads to the presentation of a true and fair view of the net assets, financial position and results of operations of the AlzChem Group.

The consolidated financial statements are presented in euros (EUR), the functional currency of the parent company AlzChem Group AG. For reasons of clarity, the figures in the consolidated financial statements are stated in thousands of euros (EUR thousands) unless otherwise stated. All values have been rounded up or down to EUR thousands according to commercial rounding, so that individual figures do not add up exactly to the stated sum.

STANDARDS, INTERPRETATIONS AND CHANGES TO PUBLISHED STANDARDS THAT WERE APPLIED FOR THE FIRST TIME IN THE FISCAL YEAR

At the beginning of this short fiscal year on July 1, 2018, no new standards and interpretations revised or newly issued by the IASB were required to be applied. The effects of the IFRS 15 and IFRS 9 standards to be applied for the first time in the previous year as of January 1, 2018 are explained accordingly in the previous year's consolidated financial statements.

STANDARDS, INTERPRETATIONS AND CHANGES TO PUBLISHED STANDARDS THAT ARE NOT YET MANDATORY

The following standards, changes to standards and interpretations have already been adopted, but are only mandatory for reporting periods beginning on or after 01/01/2019. The AlzChem Group will apply these as of 01/01/2019 or any later prescribed date and has estimated the probable effects of the individual standards, changes to standards and interpretations on the net assets, financial position and results of operations if this estimate was already possible.

Standards	Change concerns	Mandatory application from	Adoption by EU Commission
IAS 19	Plan changes, cuts or settlements	01/01/2019	No
Div.	Annual Improvement Cycle of International Financial Reporting Standards (Cycle 2015-2017) (Amendments to IFRS 3, Business Combinations, IFRS 11, Joint Arrangements, IAS 12, Income Taxes, and IAS 23, Borrowing Costs)	01/01/2019	No
IFRS 16	Leasing	01/01/2019	Yes
IFRS 9	Financial instruments relating to early repayment options with a negative prepayment penalty	01/01/2019	Yes
IAS 28	Long-term investments in associates and joint ventures	01/01/2019	Yes
IAS 1/IAS 8	Definition of materiality of financial statement information	01/01/2020	No
IFRS 3	Definition of a business operation	01/01/2020	No
IFRS 17	Insurance contracts	01/01/2021	No
IFRS 10/IAS 28	Sale of an investor's assets or contribution to its associate or joint venture	Undetermined	No
Interpretations			
IFRIC 23	Uncertainty regarding income tax treatment	01/01/2019	Yes

Due to an on-going research project, the standard first-time application of the amendments to IFRS 10 and IAS 28 regarding the disposal of assets of an investor or contribution to its associate or joint venture was postponed indefinitely by the producer of the standards. Therefore, entry into European law was postponed indefinitely.

IFRS 16 replaces the previous IAS 17 standard as of January 1, 2019. As a result, in the future, assets for the acquired rights of use must be capitalised in the lessee's balance sheet for all leases, and liabilities for the payment obligations entered into must be recognized. To date, future payment obligations from operating leases are only disclosed in the notes as part of no. 30, other financial obligations. These relate mainly to rental, leasehold and lease contracts. Short-term leases and low-value contracts have relief requirements.

The AlzChem Group will apply IFRS 16 for the first time as of January 1, 2019. On initial application, we will choose the simplified transition method and not fully apply the new standard retrospectively. Accordingly, the lease payments outstanding as of January 1, 2019 are discounted and recognized as liabilities at the current marginal capital interest rate in order to calculate the corresponding lease liabilities for the first time. The related rights of use are capitalized in the same amount, but less prepaid or deferred lease payments.

In preparation for the first-time application of IFRS 16, the AlzChem Group set up a project in which all leases of the AlzChem Group were examined for future accounting in accordance with IFRS 16. Based on the analyses performed, we expect the following effects from the first-time application as of January 1, 2019:

- As of December 31, 2018, EUR 6,428 thousands of the total of EUR 8,243 thousands in other financial obligations (see Note 30) relate to rental and leasing contracts. Lease relationships as lessee exist mainly for motor vehicles, forklifts, railway wagons and software. Leases of smaller, primarily workstation-bound IT devices such as printers and copiers are classified as lesser-value leases and not recognized in the balance sheet. We will also make use of the exemption option and continue to recognize lease payments under short-term leases (up to 12 months) as an expense in profit or loss. We waive the application of the provisions of IFRS 16 on leases of intangible assets. If the contracts contain not only a lease component but also a non-lease component, these components are considered separately, provided that a separation results directly from the contract. If the contract does not contain a separation of these components, the non-lease components are treated just as the leasing components.
- The lease payments for lower-value leases of approximately EUR 54 thousands and lease payments for short-term leases of approximately EUR 906 thousands will continue to be recognized as expenses in profit or loss on a straight-line basis in the fiscal year 2019.
- We expect the first-time application to result in the capitalization of rights of use as of January 1, 2019 in the amount of EUR 2,931 thousands and the same recognition of leasing liabilities as liabilities. Deferred tax assets and liabilities arise in the same amount, so that there will be no effect on the net assets.
- The first-time application is expected to have a positive effect on EBITDA in the income statement for the fiscal year 2019 by approximately EUR 1,500 thousands, as in the future, depreciation on the rights of use and interest expenses for leasing liabilities will be recorded instead of leasing expenses. Only the latter are included in EBITDA.
- In the cash flow statement, after the first-time application of IFRS 16, we will show the repayment portion of the lease liabilities in the cash outflow from financing activities. Although interest payments continue to be reflected in net cash from operating activities (net cash flow), we expect net cash flow to increase at the expense of cash outflow from financing activities of approximately EUR 1,500 thousands in fiscal year 2019.
- All of the estimated effects for the fiscal year 2019 stated here are based on the leasing agreements concluded as of the balance sheet date and do not include any new leasing agreements that may commence in the fiscal year 2019.

We do not expect any material effects from the first-time application of IFRS 16 to contracts for which AlzChem is the lessor.

In May 2017, IFRIC 23, Uncertainty in Income Tax Treatment, was issued by the IASB. IFRIC 23 clarifies the requirements for the recognition and measurement of uncertain income tax items. When assessing uncertainty, it must be assessed whether it is probable that the tax jurisdiction will accept the income tax treatment. As of the balance sheet date, we assume that the tax authorities will not have a different assessment of the income tax treatment we have chosen. Therefore, we do not expect the first-time application of IFRIC 23 to have any impact.

For the amendments resulting from IAS 19, IAS 28, IFRS 9, IFRS 17 and the amendments to the annual improvement cycle of the International Financial Reporting Standards (Cycle 2015-2017) to be applied from 2019, the company assumes that they will not have a material impact.

The following accounting and valuation methods were applied when preparing the consolidated financial statements.

SCOPE OF CONSOLIDATION/SHAREHOLDINGS

In addition to AlzChem Group AG, the consolidated financial statements include the following six domestic and three

foreign subsidiaries in which AlzChem Group AG directly or indirectly holds the majority of the voting rights:

Name, location	Share of capital in %	Currency	Subscribed capital in national currency
AlzChem Trostberg GmbH, Trostberg, Germany (formerly AlzChem AG)	100	EUR	EUR 11,000 thousands
Nigu Chemie GmbH, Waldkraiburg, Germany	100	EUR	EUR 1,410 thousands
AlzChem International GmbH, Trostberg, Germany	94	EUR	EUR 1,000 thousands
AlzChem Stahltechnik GmbH, Trostberg, Germany	100	EUR	EUR 25 thousands
AlzChem Nutrition GmbH, Trostberg, Germany	100	EUR	EUR 25 thousands
AlzChem Netz GmbH, Trostberg, Germany	100	EUR	EUR 25 thousands
AlzChem LLC, Atlanta, USA	100	USD	USD 0 thousands
AlzChem Shanghai Co. Ltd., Shanghai, China	100	CNY	CNY 3,670 thousands
Nordic Carbide AB, Sundsvall, Sweden	100	SEK	SEK 50 thousands

In May 2017, a non-cash dividend of 6% of the shares in AlzChem International GmbH was distributed to the shareholders of AlzChem Trostberg GmbH. As a result of the non-cash dividend, AlzChem International GmbH's ownership interest in AlzChem International GmbH fell to 94%.

Effective November 28, 2017, AlzChem Netz GmbH was founded, which will take over all activities in connection with the operation of the power grid in the AlzChem Group from January 1, 2018.

Dormex Company LLC, Fresno, USA, which was previously included in the consolidated financial statements with a 51% shareholding, was liquidated in September 2018.

PRINCIPLES OF CONSOLIDATION

Subsidiaries are all companies which AlzChem Group AG controls directly or indirectly. AlzChem Group AG controls a company when it is exposed or entitled to variable returns from its involvement with the company and can influence its returns through its power over the company. Subsidiaries are included in the consolidated financial statements from the date control is transferred to the Group (full consolidation). They are deconsolidated at the point at which control ends.

The financial statements of domestic and foreign subsidiaries included in the consolidation are prepared in accordance with IFRS 10 using uniform accounting and evaluation methods.

Intra-group profits and losses, revenues, expenses and income as well as receivables and liabilities between consolidated subsidiaries are eliminated. If the prerequisites for the consolidation of third-party debt have been met, this will be exercised. Intercompany profits are eliminated. Temporary differences from consolidation measures are recognized in accordance with IAS 12 (Income Taxes).

CAPITAL CONSOLIDATION

Capital consolidation of subsidiaries is carried out in accordance with IFRS 10 (Consolidated Financial Statements) in conjunction with IFRS 3 (Business Combinations) by offsetting the book value of the investment against the revalued equity of the subsidiary at the time of acquisition (acquisition method) or the statutory capital with new companies.

COMPANY ACQUISITIONS/REVERSE ACQUISITION

The AlzChem Group uses the acquisition method to account for business combinations. The consideration transferred corresponds to the fair value of the assets transferred, the liabilities assumed and the equity issued at the time of acquisition. Incidental acquisition costs are recognized as an expense. Assets, liabilities and contingent liabilities identifiable as part of the business consolidation are initially measured at their fair value at the date of acquisition. The excess of the consideration transferred over the balance of the net assets at fair value at the date of acquisition is recognized as goodwill. If the consideration transferred is lower than the fair value of the net assets of the acquired subsidiary, the difference is recognized directly in the income statement after reverification.

The contribution of AlzChem Trostberg GmbH including its subsidiaries to AlzChem Group AG in the previous year was identified in accordance with IFRIC Agenda Decision March 2013 as an equity transaction of AlzChem Trostberg GmbH, which is accounted for as a share-based payment in accordance with IFRS 2. This transaction was then accounted for in accordance with the accounting requirements for an inverse business combination under IFRS 3 B19 - B27, with the sole exception that no goodwill could be generated from the transaction, but such a difference was immediately expensed under IFRS 2.8. As a result, the consolidated financial statements of AlzChem Group AG have been a continuation of the IFRS consolidated financial statements of AlzChem Trostberg GmbH since the date of their contribution in October 2017.

CURRENCY CONVERSION

The currency used for setting up and simultaneously the functional currency of the AlzChem Group is the Euro (EUR).

In the separate financial statements of the subsidiaries, which are managed in euros, business transactions in foreign currencies are valued at the exchange rate at the time of initial recognition. Exchange rate gains and losses resulting from the conversion of monetary assets or liabilities up to the balance sheet date are taken into account; Gains and losses from changes in exchange rates are recognized in profit or loss under other operating income or expenses.

The annual financial statements of foreign Group companies are converted into the reporting currency of the AlzChem Group. The functional currency is the local currency. The functional currency and reporting currency of the parent company and thus of the consolidated financial statements is the euro. Assets and liabilities of foreign Group companies whose functional currency is not the euro are converted by AlzChem at the closing rate (average spot exchange rate) at the end of the period. Expenses, income and earnings are, however, converted at average rates. All resulting conversion differences were recognized as a separate item in equity. The items in the consolidated cash flow statement are converted at average rates, while cash and cash equivalents are converted at the closing rate (average spot exchange rate) at the end of the period.

The exchange rates for major currencies used for currency conversion are shown in the following table:

		Closing rate*			Average rate*		
		12/31/2017	06/30/2018	12/31/2018	2017	01/01 - 06/30/2018	07/01 - 12/31/2018
USA	USD	1.1993	1.1658	1.145	1.1293	1.2108	1.1522
China	CNY	7.8044	7.7170	7.8751	7.6264	7.7100	7.9048
Sweden	SEK	9.8438	10.4530	10.2548	9.6369	10.1519	10.3616

* Equivalent for EUR 1

V. ACCOUNTING AND VALUATION METHODS

The accounting and valuation methods have been applied consistently.

FIXED ASSETS AND DEPRECIATION

Intangible assets

Acquired intangible assets are carried at their acquisition cost.

All acquired intangible assets with a determinable useful life are amortized on a straight-line basis. Scheduled depreciation is based on the following useful life throughout the Group:

- Concessions, rights, licenses: 3 to 5 years or possibly shorter contract period
- Software: 3 to 5 years.

Costs associated with operating or maintaining software are expensed as incurred. However, internally generated intangible assets are not available in the reporting period. Financing costs are capitalized as part of the acquisition or production costs if the conditions for capitalization are met.

If an impairment loss is recognized that exceeds regular depreciation, it is amortized to the recoverable amount.

There were no intangible assets with indefinite useful lives during the reporting period.

Property, plant and equipment

Property, plant and equipment used for more than one year in a business is valued at acquisition or production cost less scheduled depreciation. Significant components of property, plant and equipment are recognized individually and amortized. Subsequent acquisition costs are only recognized as part of the cost of the asset if it is probable that future economic benefits will accrue to the Group and the costs of the asset can be reliably determined. All other repairs and maintenance are recognized as an expense in the income statement in the fiscal year in which they were incurred. Financing costs are capitalized as part of the acquisition or production costs if the conditions for capitalization are met.

Land is not depreciated. Depreciation is calculated on a straight-line basis for all other assets, whereby the acquisition costs are amortized over the expected useful life of the assets as follows:

- Buildings: 25 to 40 years
- Operating equipment, technical equipment and machinery: 5 to 25 years
- Factory and office equipment: 3 to 10 years
- Vehicles: 4 to 6 years.

The residual book values and economic useful lives are reviewed at each balance sheet date and adjusted if necessary. If the book value of an asset exceeds its estimated recoverable amount, it is immediately written down to the latter. Gains and losses from the disposal of property, plant and equipment are determined as the difference between the proceeds from the sale and the book value and recognized in profit or loss.

JOINTLY MANAGED ASSETS

For assets that are jointly managed with a non-Group entity, the AlzChem Group accounts for its share of these assets within property, plant and equipment, even if the AlzChem Group is not the legal owner of the jointly controlled asset.

BORROWING COSTS

Borrowing costs that can be directly allocated to the acquisition, construction or production of a qualifying asset are capitalized as part of the acquisition or production cost of that asset. Other borrowing costs are expensed in the period in which they are incurred. When determining the borrowing costs to be capitalized, any investment income from the temporary investment of these funds is deducted. In the period under review, there was no additional capitalization of borrowing costs as acquisition costs of property, plant and equipment. Other borrowing costs are expensed in the period in which they are incurred.

RESEARCH AND DEVELOPMENT COSTS

The AlzChem Group is involved in various research and development activities with the primary goal of developing new products or processes or improving existing products or processes. Expenses for research activities are recognized as an expense in the period in which they were incurred. A review of the six criteria for the recognition of an obligation to capitalize development costs, as set out in IAS 38, has shown that not all criteria are met as of the balance sheet date. As a result, the development costs in the period are also recognized as an expense in the income statement in which they were incurred. However, the AlzChem Group is constantly reviewing the existence of the criteria for new projects. If it is recognized that the conditions for capitalizing development costs exist for individual projects, the costs incurred will be capitalized.

LEASING

Leases are classified as finance leases if the lease conditions substantially transfer all risks and rewards of ownership to the Group as lessee. All other leases are classified as operating leases.

Fixed assets leased or leased and owned by the respective Group company (finance leases) are capitalized in accordance with the provisions of IAS 17 (Leases) at the present value of the minimum lease payments or the lower fair value and amortized over their useful life. If there is insufficient assurance at the inception of the lease that ownership is transferred to the Group as lessee, the asset is to be depreciated over the shorter of the two periods from the lease term or useful life.

The corresponding liability in the amount of the present value of the minimum lease payments to the lessor is recognized in the balance sheet as a finance lease obligation under finance lease liabilities. The lease payments are split between interest expenses and the repayment of the lease obligation in such a way that a constant interest on the remaining liability is achieved.

Lease payments under an operating lease are recognized as expense in the income statement on a straight-line basis over the term of the lease.

Insofar as the AlzChem Group acts as the lessor, a lease receivable from the lessee is accounted for in the case of a finance lease instead of fixed assets. The amount of the lease receivable corresponds to the net investment value of the leased object at the time of acquisition. Income from finance leases is distributed over the periods so as to show a constant periodic interest on the outstanding net investment in the lease. Rental income from operating leases is recognized in profit or loss on a straight-line basis over the term of the respective lease. In the reporting period, no leases were classified as finance leases in which the AlzChem Group is the lessor.

IMPAIRMENT OF NON-MONETARY ASSETS

Assets that are subject to scheduled amortization are tested for impairment if events or changes in circumstances indicate that the book value may no longer be recoverable. An impairment loss is recognized in the amount of the book value in excess of the recoverable amount. The recoverable amount is the higher of the fair value of the asset less costs to sell and the value in use. The impairment test combines assets at the lowest level for which cash flows can be identified separately (cash-generating units).

Upon subsequent reversal of an impairment, the book value of the asset (of the cash-generating unit) is increased to the newly estimated recoverable amount. The increase in the book value is limited to the amortized value that would have been determined if no impairment loss had been recognized for the asset (of the cash-generating unit) in previous years. A reversal of the impairment loss is recognized immediately in profit or loss.

PUBLIC GRANTS

Public grants are recognized at their fair value if it can be assumed with great certainty that the grant will be granted and the AlzChem Group meets the necessary conditions for receiving the grants. Public grants for costs are recognized over the period in which the corresponding costs for whose compensation they have been granted are incurred.

CURRENT INCOME TAXES/INCOME TAX LIABILITIES

The applicable income tax rate is calculated on the basis of the tax laws applicable on the balance sheet date for the countries in which the subsidiaries of the company operate.

For the determination of current taxes in Germany, distributed corporate income tax rates of 15.0% and a solidarity surcharge of 5.5% are applied to distributed and retained profits. In addition to corporate income tax, trade tax is levied on profits made in Germany, and the trade tax burden ranges between 12.0% and 13.0%.

The profit generated by foreign subsidiaries is determined on the basis of the respective national tax law and taxed at the regionally applicable tax rate. The applicable country-specific income tax rate is between 21% and 25%.

On the basis of these tax regulations, expected tax payments are taken into account through appropriate and proper formation of income tax liabilities. The management of the AlzChem Group regularly reviews tax declarations, in particular with regard to matters that can be interpreted, and, if appropriate, forms income tax liabilities based on the amounts that are expected to be paid to the respective tax authorities.

DEFERRED TAXES

Deferred taxes are recognized in accordance with IAS 12 for all temporary differences between the tax base of the asset/liability (tax base) and its book value in the IFRS consolidated financial statements (so-called liability method). Deferred taxes are measured using the tax rates and tax laws that apply or have been substantially enacted by the balance sheet date and are expected to apply at the time the deferred tax asset is realized or the deferred tax liability is settled. Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the temporary difference can be utilized. If the future tax benefit from losses carried forward can be used with sufficient certainty in future periods, a deferred tax is capitalized for this purpose.

According to IAS 12.39, deferred taxes on temporary differences in connection with shares in subsidiaries ("outside basis differences") are only recognized in the consolidated financial statements if the following criteria are not met:

- the parent company, the shareholder or the partner company is in a position to control the timing of the dissolution of the temporary difference; and
- it is likely that the temporary difference will not resolve in the foreseeable future.

The temporary difference usually only resolves when the company sells. At the present time, the AlzChem Group does not plan to sell any companies, but would also be in a position to control the timing of the sale. The consolidated financial statements of the AlzChem Group do not recognize deferred taxes on temporary differences in connection with investments in subsidiaries.

Deferred taxes relating to items recognized directly in equity are also recognized in equity. The changes in all other deferred tax assets and liabilities are recognized in profit or loss. Deferred tax assets and liabilities are netted if there is a legally enforceable right to set off current tax assets against current tax liabilities and if the deferred taxes exist vis-a-vis the same tax authority.

INVENTORIES

Inventories include raw materials, consumables and supplies, work in progress and goods, finished goods and merchandise, and prepayments on inventories. Inventories are stated at the lower of acquisition or production costs and net realizable value. The net realizable value is the estimated selling price achievable in the ordinary course of business less the necessary variable selling costs. In addition to direct material and direct labor costs, production costs also include all directly attributable costs and appropriate portions of necessary overheads and depreciation. The acquisition or production costs are determined on the basis of the average method. If necessary, devaluations are made for overreach, obsolescence and reduced mobility. Borrowing costs were not included in the acquisition or production costs as there were no qualifying assets.

FINANCIAL INSTRUMENTS

Within the AlzChem Group, the following categories of financial assets have been used:

- Valued at amortized cost (AC)
- Mandatory measured at fair value through other comprehensive income (FVOCI)
- At fair value through profit or loss (FVTPL)

Financial liabilities include the following categories:

- Rated at amortized cost.

FINANCIAL ASSETS

The shares in other participations reported under long-term financial assets exclusively belong to the measurement category "at fair value through profit or loss". No use was made of the option of accounting for equity investments at market value without subsequent recycling. To determine the fair value, the market price of publicly listed financial assets is used. If there is no active market, the fair value is determined using the most recent market transactions or using a valuation method (such as the discounted cash flow method). If the input parameters for such a valuation cannot be reliably determined at a cost that is appropriate to the materiality of the investment, the AlzChem Group assumes that the cost of acquisition is the best estimate of the current fair value.

Derivative financial instruments

There were no derivative financial instruments at both reporting dates.

RECEIVABLES AND OTHER ASSETS

Trade receivables

Trade receivables are recognized at fair value upon receipt. The subsequent evaluation depends on the rating category. In the case of the AlzChem Group, part of the receivables are attributable to a mixed business model due to regular factoring of factoring receivables and are therefore to be classified as "at fair value through other comprehensive income". Trade receivables from companies without factoring activities are classified as "at amortized cost".

In both cases, value adjustments based on the expected loss are recognized in profit or loss over the entire term of the receivable. If there are no objective indications of an actual default of the borrower, this value adjustment is adjusted for other comprehensive income, as it is assumed that these anticipated losses do not have an additional impact on the fair value of the receivables measured at fair value through other comprehensive income at the fair value of the receivables and were already "priced in" when the receivables were received.

The expected losses are calculated on the basis of historical data of the AlzChem Group, which determines the expected default rates and recovery rates depending on the age of the receivables. Insofar as the current economic outlook or other macroeconomic parameters justify this, a corresponding adjustment of the historically determined default rates occurs. As of the reporting date, the AlzChem Group has not identified any factors justifying the adjustment of historical quotas. The corresponding quotas are then applied to receivables not secured by a trade credit insurance without individually identified losses. In accordance with the contractual arrangements under factoring, the Group classifies receivables as defaulted if they were not serviced 120 days after their due date.

Other receivables and other assets

Other receivables and other assets are initially recognized at fair value and subsequently measured at amortized cost using the effective interest method - for long-term receivables - and after deduction of impairments. If there are risks, these are taken into account through appropriate value adjustments. Here, the same processes and specifications are used that are used to determine the value adjustments for trade receivables.

Other receivables and other assets are classified as financial assets in the category "at amortized cost".

For other receivables and other assets, a loan loss allowance amounting to the expected loss within one year is determined on receipt (risk provisioning level 1). If there has been a significant deterioration in the creditworthiness of the debtor since receivables were received, the calculation horizon is extended to the total term of the receivable (risk provisioning level 2). Insofar as an actual default of the debtor is determined, reclassification to the risk provisioning level 3 takes place. Here, too, risk provisions are determined on the basis of the expected losses over the lifetime. However, contrary to the previous levels, any interest income is no longer calculated on the gross book value, but on the basis of the net book value after value adjustment with the effective interest rate.

A significant increase in the credit risk is present at the latest with a late payment of 30 days. An earlier reclassification based on insights from the credit management process is generally possible, but of little practical relevance for the AlzChem Group. A default on other receivables and other assets is assumed to be delayed by 90 days or more, or if due to other events (such as the opening of insolvency proceedings) the payment is no longer considered probable. Due to the small size and lack of historical data for defaults on other financial assets of the AlzChem Group, actual expected losses are calculated based on weighted expert estimates. If the materiality of the items changed, additional external data would be used.

Financial assets are generally recognized on the trade date. During the reporting period, no financial assets were offset against financial liabilities and there were no offsetting net settlement agreements.

FACTORING

Two companies of the AlzChem Group transfer their customer receivables partly to financing companies (buyers of receivables). In accordance with IFRS 9, sold receivables are derecognized in full if substantially all the associated opportunities and risks have been transferred from the selling company to the buyer of the receivables or, if the opportunities and risks have been essentially neither transferred nor retained, have the control over the receivables been transferred. Unless the risks and rewards have essentially neither been transferred nor retained, but the power of disposition over the receivables remains with the selling company, this accounts for a continuing involvement. Contractual agreements transfer the risk of the customer's insolvency (*del credere*) to the buyer of the receivables.

As of the balance sheet date, an analysis is made as to whether the sold receivables portfolio is expected to result in a full or partial disposal and thus the transfer of opportunities and risks from the sold receivables. If the analysis shows that AlzChem still bears part of the late payment risk from these receivables, only part of the receivables sold will be carried at the balance sheet date in accordance with the requirements of IFRS 9, with the portion remaining as a continuing involvement compared to the total of sold claims is low. In these cases, the remaining late payment risk is recognized under trade receivables as "continuing involvement". This remaining exposure is offset by a corresponding liability, which is reported under other current liabilities. At all reporting dates presented, the analysis showed that it was a complete exit and therefore had no continuing involvement.

The purchase price deductions from factoring initially retained as collateral by the financing company are reported separately under other assets. They become due as soon as the customer's payment has been received.

In addition, lock-in deductions for the risk of sales deductions are agreed with the buyer of the receivables, which are also reported under other assets. The retention amounts become fully due after a blocking period, provided that no friction has occurred in the payment flows.

The payment of the remainder of the purchase price by the buyer of the receivables takes place either upon receipt of payment by the buyer of the receivables or against interest at the request of the transferring company. The outstanding portion of the purchase price receivable is reported under current other assets.

Interest expenses resulting from the sale of receivables are recognized in the financial result. Management fees are reported under other operating expenses.

CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash, demand deposits and other short-term highly liquid financial assets with an original term of no more than three months, as well as current account credit balances. Current account overdrafts taken up are shown as liabilities to banks under current financial liabilities.

For cash and cash equivalents, the same principles apply to determining valuation allowances as already described for the other financial receivables. As cash and cash equivalents are by definition only high-quality and short-term investments, the low-credit-risk exception applies, which makes the examination of a transfer of risk prevention level 1 to risk prevention level 2 obsolete. Due to the short original maturity of less than 3 months, this could only result in a changed presentation, but not in a changed amount of the value adjustment. Due to the short maturities and the high credit ratings of the banks concerned, the imputed value adjustment requirement is negligible and of subordinate importance for the AlzChem Group.

FAIR VALUE OF FINANCIAL INSTRUMENTS

The determination of the fair values of financial instruments that were recorded in the balance sheet at their fair value was based on the data or input parameters used for the valuation according to a three-level hierarchy according to the requirements of IFRS 13:

- Step 1: Stock market or market price in an active market for similar financial instruments.
- Step 2: Input parameters other than quoted prices included in Level 1 that are directly or indirectly available to the financial instruments.
- Step 3: Input parameters for the financial instruments are not available on the market.

EQUITY

Equity consists of subscribed capital, capital reserves, other accumulated equity and retained earnings. The subscribed capital represents the nominal capital of the parent company. The capital reserves show all amounts of equity that are not externally contributed to the company and that are not subscribed capital. For an explanation of the capital reserve equalization item Reverse Acquisition, please refer to Note 19. Minority interests in the company's equity are reported as non-controlling interests.

OTHER PROVISIONS

Provisions are recognized if the AlzChem Group has a present legal or constructive obligation resulting from a past event, it is probable that the settlement of the obligation will result in a charge to the assets and the amount of the provision can be reliably determined. If there are a number of similar obligations, the likelihood of asset encumbrance is determined based on the group of those obligations. Provisions are recognized at the present value of the expected expenses, taking into account all identifiable risks, and are not set off against recourse claims.

Long-term provisions are recognized at their discounted expected expenses as of the balance sheet date, insofar as the interest portion is essential. The interest rate used is a pre-tax interest rate that reflects the current economic situation of the market environment and takes into account the risk of the obligation, to the extent that this has not already been reflected in future estimated cash outflows.

EMPLOYEE BENEFITS

Pension obligations

The AlzChem Group has different pension plans. This includes both defined benefit and defined contribution plans. Defined contribution plans are post-employment benefit plans in which the company pays fixed contributions to a stand-alone entity (such as a fund or insurance) and is not legally or

factually obligated to pay any additional contributions, even if the fund or claims from the insurance contract does not have sufficient assets to provide all employee benefits in the reporting period and earlier periods. A defined benefit plan is a plan that is not a defined contribution plan.

The arrangements underlying the defined benefit plans provide for different benefits in the Group, depending on the subsidiary. These essentially include:

- Pension commitments from the respective retirement age,
- One-time payments on termination of employment.

The provision, which is recognized in defined benefit plans in the consolidated balance sheet, results from the present value of the pension obligation as of the balance sheet date less the fair value of any plan assets available.

The actuarial valuation of pension provisions for occupational pensions is carried out in accordance with the projected unit credit method prescribed in IAS 19 (Employee Benefits), whereby an actuarial valuation is carried out by independent actuarial valuers at each balance sheet date. This projected unit credit method takes into account pensions and vested benefits known as of the balance sheet date as well as future increases in salaries and pensions. The valuations are based on the legal, economic and tax conditions of the respective country. The exclusively domestic obligations are determined using the following parameters:

	12/31/2017	06/30/2018	12/31/2018
Discount rate in %	1.75	1.80	1.90
Wage and salary trend in %	2.75	2.75	2.75
Pension trend in %	1.75	1.75	2.00

In the previous year (SFY 2018/I), the AlzChem Group has begun to consider changes in the discount rate already in a change compared to the discount rate of the previous cut-off date in rounded 0.10% percentage points. Previously, these changes were only included in the valuation for changes in rounded 0.25% percentage points compared to the previous year. This change should result in improved accuracy in the valuation of the defined benefit obligation.

The employee turnover is determined on a company-specific basis and taken into account as a function of age or service. As of December 31, 2018, the actuarial valuations are based on the biometric principles of „Richttafeln 2018 G“ (previous year: „Richttafeln 2005 G“) by Klaus Heubeck. The provision consists of the present value of the defined benefit obligation less the fair value of the plan assets.

The actuarial gains and losses arising from non-expected changes in pension obligations and changes in actuarial assumptions arising from the defined benefit plans are recognized in other comprehensive income and in the consolidated statement of comprehensive income in the periods in which they occurred. The past service costs as well as gains or losses from settlements are recognized immediately in the income statement with the plan adjustment, reduction or settlement. The interest component of the addition to provisions (interest costs for pension obligations and expected return on plan assets) included in the pension expenses is shown as interest expense within the financial result. The service cost is reported within the operating personnel expenses.

Payments under a defined contribution plan are recognized in the income statement and reported within operating personnel expenses.

Termination benefits

Termination benefits are granted if an employee is dismissed prior to regular retirement, or if an employee voluntarily leaves the employment relationship in return for a severance payment. The Group recognizes termination benefits immediately if it has a demonstrable and unavoidable obligation to terminate the employment relationship of current employees in accordance with a detailed formal plan that cannot be reversed, or if it can be proven that it has to pay compensation for termination of employment by employees. Benefits payable after more than twelve months after the balance sheet date are discounted to their present value. Entitlements to termination benefits are reported under personnel provisions.

Profit sharing and bonus plans

In the AlzChem Group, a provision is recognized in cases where there is a contractual obligation to profit sharing or other earnings-related employee bonuses or if the Group has an actual obligation based on past business practice.

Stock-based compensation

The Management Board members of AlzChem Group AG were granted Stock Appreciation Rights (SARs) as long-term incentives (LTIs). The granted stock appreciation rights were classified and valued as a cash-settled share-based payment pursuant to IFRS 2.30 et seq. In accordance with IFRS 2, the fair value of the work performed by the Management Board in return for the granting of the options is recognized as an expense over the vesting period and reassessed using a Monte Carlo simulation at each balance sheet date. Further explanations are given in Note 33. The provision is reported under other long-term provisions and the expense within the operating personnel expenses.

LIABILITIES

Loan liabilities to banks

Loan liabilities are initially recognized at fair value and subsequently carried at acquisition cost. Insofar as there are differences between historical costs and the repayment amount for long-term liabilities, these are taken into account using the effective interest method. The initial recognition of financial liabilities measured at acquisition costs is at fair value taking into account transaction costs.

Loan liabilities are classified as current if the repayment is due within the next twelve months.

Loan liabilities are assigned to the category "financial liabilities valued at acquisition cost".

Liabilities from finance leases

Liabilities from leasing contracts are recognized as liabilities if economic ownership of the encumbered or leased assets is attributable to the companies of the AlzChem Group and these are capitalized under property, plant and equipment (finance leases). Upon initial recognition of the lease obligations, the fair value of the leased asset or the lower present value of the sum of the future lease payments is recognized.

The financing costs are distributed over the term of the lease, resulting in a constant interest rate on the remaining finance lease liability over time.

Trade payables and other liabilities

Trade payables and other liabilities are initially recognized at fair value less transaction costs and subsequently at acquisition costs using the effective interest method. Trade payables and other current financial liabilities are classified as "financial liabilities at amortized cost". Trade payables and other liabilities are classified as current if the contractual payment is to be made within the next twelve months.

CONTINGENT LIABILITIES

Contingent liabilities are possible or existing obligations that are based on past events but where an outflow of resources is considered unlikely. Such obligations are not to be recognized in the balance sheet in accordance with IAS 37, but rather in the notes.

REVENUE RECOGNITION

Until December 31, 2017, revenue was recognized as follows:

Revenues comprise the fair value of the consideration received or to be received for the sale of goods and services in the ordinary course of business. Revenues are reported net without VAT less discounts and rebates.

The general requirements for the recognition of revenues are that the amount of the proceeds and the amount of related costs can be reliably determined. Furthermore, the inflow of benefits is to be considered sufficiently probable.

Revenues and other income are only recorded when the services have been provided or when the goods or products have been delivered and the risk has passed to the customer. The time of the transfer of risk is determined on the basis of the agreed incoterms. Agreed annual bonuses are taken into account in revenue recognition.

Since January 1, 2018, revenue is recognized as follows:

AlzChem generates revenue from the sale of chemical products to customers and the provision of site services. Determining the amount of revenue and the time of revenue recognition varies for these revenue categories.

DELIVERY OF PRODUCTS

In the product area, the performance obligation of AlzChem consists in the supply of chemical products at the place of delivery to be determined by the customer. The contracts with customers usually only result in a performance obligation. If AlzChem also takes over and organizes the transport service to the customer, then this is usually one of the costs for fulfilling the service obligation towards the customer (so-called "fulfilment costs"). However, the transport service is a separate performance obligation if the obligation to deliver the chemical products has been fulfilled before the end of the transport service.

The transaction price is determined per unit of the delivered product. Amounts that are collected on behalf of third parties (VAT tax only) are not part of the transaction price. Variable consideration exists in the context of rebate agreements with customers based on contractually agreed volumes and, in part, on discounts granted subject to certain shorter payment periods. In these cases, AlzChem determines the transaction price taking into account the most probable amount and includes the variable price components already in the realization of the sales, if it is probable that the customer will reach the agreed goals or it is assumed based on the payment history of the customer in the past that the customer will deduct the granted cash discount amount. If the final settlement with customers subsequently results in changes in the transaction price, this change is recognized as a decrease or increase in revenue in the period in which the final settlement with the customer takes place. This period may differ from the period in which the performance obligation was fulfilled.

Further discretionary decisions than this assessment of the variable price components are not necessary. Based on its many years of experience with clients with variable pricing, AlzChem considers this approach to be the best estimate of the variable price component and does not expect the final settlement with customers to result in significant revenue changes. This assumption is reviewed annually according to the ratio of retrospectively recognized revenue to revenue realized in the previous year - in the current reporting period, this represented 0.21% (previous year: 0.05%) of the revenue recognized in the previous year. Financing components are not taken into account due to the contractually agreed short-term payment terms. In the product area, AlzChem does not receive non-cash consideration from its customers.

The distribution of the transaction price over several performance obligations is usually not necessary. If the transportation service has been identified as a separate performance obligation, the standalone selling price is determined on the basis of the expected costs plus an appropriate margin.

In the case of product deliveries, the provision of services and thus the realization of revenue takes place at a certain point in time. Revenue recognition over a period does not occur. The following indicators are used in determining the time of provision of the service:

- There is an unconditional payment claim of AlzChem.
- The customer has legally acquired ownership of the delivered products.
- The delivered product has become the physical property of the customer.
- The risks and opportunities in connection with the delivered product have been transferred to the customer.
- The customer has accepted the good or the service.

The overall assessment of these indicators for AlzChem product deliveries leads to revenue recognition at the time of the transfer of risk based on the Incoterms agreed with the customer.

AlzChem sells its products to customers with the assurance that the product meets the exact specifications of the chemical composition. In addition, no further guarantees are given. In the very rare cases in which the product specification was not achieved, a provision for a guarantee obligation in accordance with IAS 37 is recognized on a case-by-case basis and reported under other provisions. A consideration in the transaction price when determining the amount of revenue does not occur based on the experience of the past and the quality control of the products before delivery.

PROVISION OF SERVICES

The services as location operator can be permanent services or variable services, which the customer always has to call up individually. The performance obligation to be met by AlzChem is precisely defined per service via a term sheet. There are no other separate service obligations per term sheet in the service sector.

The transaction price is calculated as the price per unit. Further price components do not exist in the service sector. Financing components are not taken into account due to the contractually agreed short-term payment terms. AlzChem receives no non-cash consideration from its customers in the service sector.

Since there is only one performance obligation per contract, the distribution of the transaction price to more than one performance obligation is not necessary.

The customer receives the benefits during the provision of services by AlzChem and immediately consumes these benefits. Thus, the performance obligation from the individual site services is met over a period of time. The method that best represents the transfer of benefit and thus the fulfilment of the performance obligation to the customer is the output-oriented method for the variable services, which is oriented towards the provision of the services. These variable services are billed to the customer whenever the service has been provided, i.e. used by the customer, and the payment claim has arisen. Revenue is recognized at the same time. For the permanent location services, the performance obligation is provided over a period of 12 months. The settlement is made monthly in the amount of 1/12 of the annual amount. It does not matter whether the customer actually used the service. AlzChem has to provide the service here only for 12 months (e.g. fire brigade and company doctor) and after 1 month 1/12 of the performance obligation is provided. In these cases, there is a so-called "stand-ready performance obligation" because AlzChem only has to provide the permanent location service and the customer already benefits from the provision. Revenue recognition for these location services is on a straight-line basis over the 12-month period of the contract, as this approach is the best estimate for an output-oriented determination of performance progress for these performance obligations.

No significant judgments were made in determining the amount and timing of service revenues.

Revenues from contracts with customers result in receivables that are fully contained in trade receivables. Trade receivables and the associated revenues are generally recognized directly after fulfilment of the performance obligation.

OTHER INCOME AND EXPENSE RECOGNITION

Expenses are recognized as expenses when the service is used or at the time of their causation.

Rental income and rental expenses are recognized as expenses or income on an accruals basis.

FINANCIAL RESULT

Interest income and interest expenses are deferred on an accruals basis, taking into account the outstanding loan amount and the applicable interest rate, using the effective interest method. The applicable interest rate is the interest rate that discounts the estimated future cash flows over the life of the financial asset to the net book value of the asset.

In the case of a finance lease, the payments are allocated using financial mathematical methods at an interest and redemption portion.

Borrowing costs are recognized in profit or loss in the period in which they arise, unless they are capitalized borrowing costs for qualifying assets.

COSTS OF CAPITAL INCREASES

No capital increases were made in both short fiscal years. In the fiscal year 2017, two capital increases were carried out in AlzChem Group AG.

In accordance with IAS 32, the directly attributable costs of issuing equity instruments, taking into account tax benefits at the moment of issue, are to be recognized as a deduction from equity. At the time of the capital increase, the amount is reclassified to equity. If the transaction is not carried out, the deferred costs are reversed as an expense.

The costs directly attributable to the two capital increases of AlzChem Group AG in the previous year were shown as a deduction from equity at the time of the capital increases. Taking tax benefits into account, an amount of EUR 740 thousands was deducted directly from the equity item "Capital reserve adjustment item reverse acquisition".

DIVIDEND DISTRIBUTION

Shareholders' entitlements to dividend distributions are recognized in the period in which the relevant resolution has been passed.

EARNINGS PER SHARE

As at the balance sheet date of December 31, 2018, the equity of AlzChem Group AG consists of 101,763,355 (June 30, 2018 and December 31, 2017: 101,763,355) no-par shares. For the current reporting period and the previous year (SFY 2018/I), the calculation of earnings per share is therefore based on a number of 101,763,355 shares.

In the fiscal year 2017, two capital increases were carried out at AlzChem Group AG. The non-cash capital increase increased the number of shares to 100,633,339. As a result of the subsequent cash capital increase, the number of no-par shares increased to 101,763,355.

IFRS 3 provides for specific rules for determining the number of shares in a reverse business combination. For the purposes of determining the weighted average number of ordinary shares outstanding during the period in which the reverse acquisition occurs, the number of ordinary shares outstanding from the beginning of that period to the date of acquisition is determined on the basis of the weighted average number of ordinary shares outstanding at this period for the legally acquired company (of the acquiring company) multiplied by the exchange ratio specified in the merger agreement. In addition, the number of ordinary shares outstanding from the date of acquisition until the end of this period is equal to the actual number of ordinary shares outstanding of the formal legal acquirer (of the acquired company) during that period. The application of this provision resulted in an average number of shares of 100,700,203 shares for the fiscal year 2017.

Based on these guidelines, earnings per share were as follows:

	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01/ – 12/31/2018
Consolidated net income in EUR thousands (controlling interests)	20,393	16,005	22,644	6,639
Number of shares in units	100,700,203	101,763,355	101,763,355	101,763,355
Earnings per share in EUR	0.20	0.16	0.22	0.07

For better comparability, we also report earnings per share up to the latest level, i.e. based on 101,763,355 shares for each reporting period presented. If the calculation with the

number of no-par shares in all reporting periods presented was made with the number of shares as of December 31, 2018, it would result in the following earnings per share:

	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01/ – 12/31/2018
Consolidated net income in EUR thousands (controlling interests)	20,393	16,005	22,644	6,639
Number of shares in units	101,763,355	101,763,355	101,763,355	101,763,355
Earnings per share in EUR	0.20	0.16	0.22	0.07

Dilution effects do not exist at the current time. The determination is made by dividing the net profit attributable to the shareholders of AlzChem Group AG by the number of outstanding shares.

LITIGATION AND CLAIMS FOR DAMAGES

The companies of the AlzChem Group are involved in various processes and regulatory processes in the context of general business operations or they could be initiated or asserted in the future. Even though the outcome of the individual proceedings cannot be predicted with certainty in view of the uncertainties involved in litigation, there will be no material adverse effect on the earnings of the company according to the current assessment of the risks taken into account as

liabilities or provisions in the statements.

USE OF ASSUMPTIONS AND ESTIMATES

In the preparation of the consolidated financial statements, assumptions have been made and estimates have been used that have affected the presentation and amount of assets, liabilities, income, expenses and contingent liabilities. These assumptions and estimates essentially relate to the uniform determination of economic useful lives throughout the Group, the assessment of the recoverability of inventories, the measurement of provisions, pensions or location-related risks and the realizability of future tax relief, in particular from loss carryforwards. The actual values may differ in individual cases from the assumptions and estimates made. Changes are taken into account at the time better knowledge is gained.

Our estimates are based on experience and other assumptions that are believed to be correct under the circumstances. The actual values may differ from the estimates. The estimates and assumptions are constantly reviewed.

Income taxes

The AlzChem Group is required to pay income taxes in various countries according to different bases of assessment. The global tax provision is formed on the basis of a local profit tax calculation and applicable local tax rates.

The amount of tax provisions and liabilities is based on estimates of whether and to what extent income taxes are due. Any risks arising from differing tax treatment are appropriately set aside, if necessary.

In addition, estimates must be made in order to be able to assess the recoverability of deferred tax assets. Decisive for assessing the recoverability of deferred tax assets is the probability of future taxable profits (taxable income) being available.

There are also uncertainties regarding the interpretation of complex tax rules and the amount and timing of future taxable income. Especially in the context of international interdependencies, differences between actual results and our assumptions or future changes in these assumptions may result in changes in the tax result in future periods.

Provisions

In determining the recognition of provisions, it is necessary to make assumptions about the probability of the occurrence of the outflow of resources. These assumptions represent the best possible estimate of the situation underlying the facts, but are subject to a degree of uncertainty as a result of the necessary use of assumptions. In determining the provisions, assumptions must also be made about the amount of the potential outflow of resources. A change in the assumptions can therefore lead to a different amount of the provision. Accordingly, the use of assumptions also gives rise to certain uncertainties.

The determination of the present value of pension obligations largely depends on the selection of the discount rate and the other actuarial assumptions, which are recalculated at the end of each fiscal year. The underlying discount rate is the interest rate of high-quality corporate bonds denominated in the currency in which the benefits are paid and which are congruent with the pension obligations over the term. Changes in these interest rates may result in material changes in the amount of the pension obligation.

At the time the consolidated financial statements were prepared, all identifiable risks were taken into account within the framework of the assumptions and estimates used.

VI. EXPLANATIONS TO THE INCOME STATEMENT

1. REVENUES

AlzChem generates revenues from the sale of chemical products to customers and the provision of site services. Group revenues break down into these two categories as follows:

in EUR thousands	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Revenue from product sales	333,375	182,997	351,898	168,901
Revenue from services	20,545	12,244	23,319	11,075
	353,920	195,241	375,217	179,976

Revenues are distributed as follows among the segments shown in the segment reporting:

in EUR thousands	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Reporting, unaudited	185,681	110,734	209,414	98,680
Produkt Erlöse im Segment Basics & Intermediates	140,869	71,081	139,966	68,885
Produkt Erlöse im Segment Other & Holding	6,825	1,182	2,518	1,336
Dienstleistungsumsätze im Segment Other & Holding	20,545	12,244	23,319	11,075
	353,920	195,241	375,217	179,976

otal revenues are geographically distributed as follows:

in EUR thousands	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Deutschland	152,643	80,385	160,236	79,851
European Union	100,536	54,450	102,403	47,953
Rest of Europe	12,447	13,343	22,046	8,703
NAFTA	34,626	17,312	38,699	21,387
Asien	36,341	17,319	34,167	16,848
Rest of the world	17,328	12,432	17,666	5,234
	353,920	195,241	375,217	179,976

Revenues from contracts with customers result in receivables that are fully contained in trade receivables. The opening and closing balances of these receivables can be taken from the trade receivables as of the relevant balance sheet date. Trade receivables have a heterogeneous maturity structure at initial recognition, which is between 30 and 60 days on average. The impairment losses on trade receivables recognized in the current reporting period can be found in Note 16. There are neither contractual assets nor contract liabilities on both reporting dates.

In the current reporting period, EUR 413 thousands (previous year: EUR 167 thousands; 2017: EUR 623 thousands; 2018 – reported, unaudited: EUR 580 thousands) in revenue was recognized in which the performance obligation was already fulfilled in the previous period. This results from the final settlement of volume-based pricing with individual customers in the current fiscal year. There were no accruals for transport services in the entire reporting period.

The figure for the total amount of the remaining performance obligations is waived as there are no contracts with customers that run for more than one year.

2. OTHER OPERATING INCOME

in EUR thousands	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Capitalized in-house services	6,158	3,376	6,920	3,544
Income from currency conversion	1,655	1,799	3,468	1,669
Income from services to third parties	907	619	934	315
Income from the reversal of provisions and liabilities	1,048	294	952	658
Income from grants	503	149	270	121
Income from energy tax refunds	260	79	252	173
Income from the valuation of derivatives	142	0	0	0
Remaining other income	921	283	640	357
	11,594	6,599	13,436	6,837

The capitalized in-house services result from the capitalization of internally generated items of property, plant and equipment. Grants essentially contain research grants. Income from services to third parties includes expense allowances in connection with the European Chemicals Regulation (REACH). Income from the valuation of derivatives in the amount

of EUR 142 thousands in the fiscal year 2017 included the positive changes in the value of derivative currency hedges that were not recognized in other comprehensive income as part of hedge accounting. In both short fiscal years, there were no derivative financial instruments in the AlzChem Group.

3. COST OF MATERIALS

in EUR thousands	2017	1/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Cost of raw materials, consumables and supplies, production-related electricity and purchased goods	135,655	78,578	67,797	73,932
Expenses for purchased services	2,215	1,602	1,126	1,317
	137,870	80,180	68,923	75,249

4. PERSONNEL EXPENSES

in EUR thousands	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Wages and salaries	90,044	48,791	93,430	44,639
Social security contributions and pensions	19,204	9,834	20,755	10,921
	109,248	58,625	114,185	55,560

The social security contributions and pensions item contains current contributions for employer contributions to the statutory pension insurance in the amount of EUR 3,599 thousands (previous year: EUR 3,138 thousands; 2017: EUR 6,381 thousands; 2018 – reporting, unaudited: EUR 6,737 thousands) and social security contributions of EUR 2,167

thousands (previous year: EUR 1,913 thousands; 2017: EUR 3,777 thousands; 2018 – reporting, unaudited: EUR 4,080 thousands).

The following table shows the average number of employees in the AlzChem Group during the reporting period:

in EUR thousands	2017	01/01 – 06/30/2018	07/01 – 12/31/2018
Wage earners	766	781	802
Employees (including executive and holiday employees)	610	624	635
Trainees	115	119	125
	1,491	1,524	1,562

5. OTHER OPERATING EXPENSES

in EUR thousands	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Selling expenses	15,213	10,083	18,305	8,222
Maintenance	11,362	4,475	10,165	5,690
Other external services	11,243	4,185	9,071	4,886
Environmental/disposal costs	7,573	4,717	9,265	4,548
Expenses from currency conversion	3,953	1,810	3,233	1,423
Consulting, research and development costs	3,793	1,568	4,632	3,064
Insurance	2,351	1,239	2,291	1,052
IT costs	2,123	1,235	2,656	1,421
Other taxes	2,009	856	1,631	775
Rent, leasehold and leasing	1,960	1,078	2,193	1,115
Other fees and contributions	1,590	920	1,570	650
Expert opinion and auditing costs	1,543	775	1,797	1,022
Marketing	1,284	787	1,249	462
Travel expenses	1,137	553	1,259	706
Expenses from the valuation of derivatives	7,362	2,586	5,804	3,218
Other expenses	74,496	36,867	75,121	38,254

Expenses for operating leases amounted to EUR 1,115 thousands (previous year: EUR 1,078 thousands; 2017: EUR 1,960 thousands; 2018 – reporting, unaudited: EUR 2,193 thousands). There were no conditional lease payments in all reporting periods presented.

The research and development costs listed above include only the external research and development costs. In total, EUR 4,728 thousands (prior year: EUR 3,950 thousands; 2017: EUR 9,015 thousands; 2018 – reporting, unaudited: EUR 8,678 thousands) were recorded as expenses for research and development.

6. DEPRECIATION AND IMPAIRMENTS

The details of scheduled depreciation can be found in the consolidated statement of changes in fixed assets. In the current reporting period, as in the previous year, no impairments were made on property, plant and equipment and intangible assets.

7. FINANCIAL RESULT

The financial result consists of the following items, broken down by origin:

in EUR thousands	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Interest income				
Receivables from banks	377	118	203	85
Other	285	197	339	142
	662	315	542	227
Interest income				
Receivables from banks	1,842	935	1,876	941
Other	652	302	568	266
Zinsaufwand aus Forderungsverkauf	105	51	103	52
Zinsaufwand aus der Zuführung zu sonstigen lfr, Rückstellungen	384	2	110	108
Finanzierungsleasing	12	6	9	3
Übriges	9	126	149	23
	3,004	1,422	2,815	1,393
Financial result	-2,342	-1,107	-2,273	-1,166

Interest income from banks results from current account balances and short-term deposits. Other interest income only includes interest from tax credits in the fiscal year 2017 (EUR 18 thousands). This item also includes EUR 65 thousands (previous year: EUR 142 thousands; 2017: EUR 224 thousands; 2018 – reporting, unaudited: EUR 20 thousands) in interest rate effects of the discount rates to be applied for the valuation of landfill provisions, other long-term provisions and other liabilities. Other interest expenses in the fiscal year 2017 include EUR 6 thousands in interest expenses from subsequent tax payments. No interest expenses or interest income from subsequent tax payments were incurred in subsequent reporting periods.

Total interest income for financial assets measured at amortized cost or financial liabilities that are not measured at fair value through profit or loss in the fiscal year amounted to EUR 87 thousands (previous year: EUR 121 thousands; 2017: EUR 379 thousands; 2018 – reporting, unaudited: EUR 208 thousands). The total interest expense for financial assets measured at amortized cost or financial liabilities that are not measured at fair value through profit or loss in the fiscal year amounted to EUR 318 thousands (previous year: EUR 428 thousands; 2017: EUR 652 thousands; 2018 – reporting, unaudited: EUR 746 thousands). For financial assets that are measured at fair value in other income, no interest income or interest expense was recognized in any reporting period.

All interest income and expenses resulting from financial assets and financial liabilities were calculated using the effective interest method.

8. TAXES ON INCOME AND EARNINGS

The income tax expense breaks down as follows:

in EUR thousands	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Actual tax expense	-5,791	-5,807	-8,605	-2,798
Deferred taxes	-2,973	-484	-531	-47
	-8,764	-6,291	-9,136	-2,845

Income taxes include income taxes paid or owed in the individual countries as well as deferred taxes. EUR 31 thousands (previous year: EUR 0 thousands; 2017: EUR 0 thousands; 2018 – reporting, unaudited: EUR 31 thousands) of current tax income not relating to the period under review and EUR 55 thousands (previous year: EUR 0 thousands; 2017: EUR 251 thousands; 2018 – reporting, unaudited: EUR 55 thousands) of current tax expenses not relating to the period under review were recognized in the fiscal year. The reported deferred taxes mainly relate to changes in temporary differences.

The following reconciliation statement shows the differences between the income tax expense actually booked and the expected income tax expense. The expected income tax expense is the result before income taxes multiplied by the applicable income tax rate. In accordance with IAS 12.85, the applicable income tax rate is that which is most appropriate for the presentation of information. Although the tax rate of AlzChem Group AG is 29%, the tax rate of AlzChem Trostberg GmbH was used for the tax reconciliation, as this tax has the most significant influence on the Group tax rate.

The determination of deferred taxes is based on the tax rates expected in the individual countries at the time of recognition; in principle, these are based on the legal regulations valid or adopted on the balance sheet date.

in EUR thousands	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Consolidated earnings before income taxes	29,336	22,353	31,919	9,566
Applicable income tax rate	28.00%	28.00%	28.00%	28.00%
Expected income tax expense	8,214	6,259	8,937	2,678
Effects from deviating foreign tax rates	-90	-27	-25	2
Effects from deviating domestic tax rates	55	17	95	78
Tax effects				
Tax additions	483	217	368	151
Tax-free income	-80	-60	-64	-4
Off-period tax income	-278	-157	-219	-62
Off-period tax expense	403	16	55	39
Non-recognition of deferred taxes on permanent differences	60	0	0	0
Other deviations	-3	26	-11	-37
Total tax effect	585	42	129	87
Total tax expense	8,764	6,291	9,136	2,845
Effective tax rate	29.88%	28.14%	28.62%	29.74%

VII. EXPLANATIONS ON THE BALANCE SHEET

9. NON-CONTROLLING INTERESTS IN THE CONSOLIDATED NET INCOME

The non-controlling interests in the consolidated net income relate to the 49% minority interests in Dormex Company LLC and the 6% minority interests in AlzChem International GmbH, which are held by the four former major shareholders of AlzChem Group AG. Dormex Company LLC was liquidated in September 2018 and is therefore no longer included in the

balance sheet figures shown below as at December 31, 2018. The period-related figures include Dormex Company LLC until its liquidation in September 2018. The deconsolidation of the company did not result in any material effects on income.

The development of non-controlling interests can be found in the consolidated statement of changes in equity.

The following financial information relate to the non-controlling interests (percentage) in the subsidiaries:

in EUR thousands	12/31/2017 or 2017	06/30/2018 or 01/01 - 06/30/2018	12/31/2018 or 07/01 - 12/31/2018
Non-current assets	4,805	4,907	5,001
Current assets	180	196	71
Non-current liabilities	0	0	0
Current liabilities	2,760	2,786	2,966
Cash flow	85	-9	-100
Withdrawals	0	0	-74
Net income	179	90	35
Other income	-17	2	-15
Overall results	162	93	20

Of the values listed above, the following values relate only to AlzChem International GmbH:

in EUR thousands	12/31/2017 or 2017	06/30/2018 or 01/01 - 06/30/2018	12/31/2018 or 07/01 - 12/31/2018
Non-current assets	4,805	4,907	5,001
Current assets	60	104	71
Non-current liabilities	0	0	0
Current liabilities	2,760	2,786	2,966
Cash flow	0	0	-100
Withdrawals	0	0	0
Net income	180	119	39
Other income	0	0	0
Overall results	180	119	39

Effective January 1, 2018, a profit transfer agreement was concluded between AlzChem Trostberg GmbH and AlzChem International GmbH. As a result, AlzChem International GmbH will transfer all of its future profits to AlzChem Trostberg

GmbH, which will fully assume any losses incurred by AlzChem International GmbH. The contract was concluded for a period of five years and cannot be terminated properly in this period.

As a result of the agreement, since January 1, 2018, the entire net income and overall result of AlzChem International GmbH has been added to the Group. As a result, non-controlling interests will not receive any additional net income for the period of the profit and loss transfer agreement. The minority shareholders of AlzChem International GmbH (6% of the capital of the company) were granted a compensation payment of EUR 2.85 (gross) per share and year for the duration of the profit transfer agreement for the loss of their variable earnings claim.

In the consolidated balance sheet, the present value of future compensation payments has already been recognized in full in the current and non-current other liabilities (EUR 855 thousands). The non-controlling interest in consolidated equity was reduced by the same amount. The compensation payments to be made annually to the non-controlling interests are allocated (pro rata) to the consolidated net income of

non-controlling interests and thus do not correspond to the actual result of the non-controlling interests, since this is zero in the years of the profit transfer agreement. The figure reported above in the overview corresponds to 6% of the actual net income of AlzChem International GmbH. In the balance sheet, however, EUR 85 thousands (previous year: EUR 85 thousands) from AlzChem International GmbH was allocated to the consolidated net income of non-controlling interests. The first cash settlement will take place in January 2019.

10. INTANGIBLE ASSETS

The intangible assets include acquired software, rights and licenses. In the AlzChem Group, there are no internally generated intangible assets at the reporting dates.

The development of intangible assets in the fiscal year 2017

is as follows:

in EUR thousands	Software	Concessions, patents, licenses and similar rights	Total
Acquisition costs 07/01/2017	3,203	1,811	5,014
Inflows	655	0	655
Outflows	-24	0	-24
Reclassification	-114	119	5
Currency conversion	-2	-2	-4
As of 12/31/2017	3,718	1,928	5,646
Depreciation 07/01/2017	2,829	1,378	4,207
Inflows	260	191	451
Outflows	-18	0	-18
Reclassification	0	0	0
Currency conversion	-1	-2	-3
As of 12/31/2017	3,070	1,567	4,637
Net book value 12/31/2016	374	433	807
Net book value 12/31/2017	648	361	1,009

The development of intangible assets in the period from 01/01 until 06/30/2018 is as follows:

in EUR thousands	Software	Concessions, patents, licenses and similar rights	Total
Acquisition costs 01/01/2018	3,718	1,928	5,646
Inflows	231	0	231
Outflows	-92	-6	-98
Reclassification	-78	78	0
Currency conversion	1	-4	-3
As of 06/30/2018	3,780	1,996	5,776
Depreciation 01/01/2018	3,070	1,567	4,637
Inflows	171	79	250
Outflows	-92	-6	-98
Reclassification	0	0	0
Currency conversion	0	-4	-4
As of 06/30/2018	3,149	1,636	4,785
Net book value 12/31/2017	648	361	1,009
Net book value 06/30/2018	631	360	991

The development of intangible assets in the period from 07/01 until 12/31/2018 is as follows:

in EUR thousands	Software	Concessions, patents, licenses and similar rights	Total
Acquisition costs 07/01/2018	3,780	1,996	5,776
Inflows	87	17	104
Outflows	-5	-2	-7
Reclassification	0	0	0
Currency conversion	0	0	0
As of 12/31/2018	3,862	2,011	5,873
Depreciation 07/01/2018	3,149	1,636	4,785
Inflows	155	69	224
Outflows	-5	-2	-7
Reclassification	0	0	0
Currency conversion	0	1	1
As of 12/31/2018	3,299	1,704	5,003
Net book value 06/30/2018	631	360	991
Net book value 12/31/2018	563	307	870

The development of intangible assets in the period from 01/01 until 12/31/2018 is as follows:

in EUR thousands	Software	Concessions, patents, licenses and similar rights	Total
Acquisition costs 01/01/2018	3,718	1,928	5,646
Inflows	318	17	335
Outflows	-97	-8	-105
Reclassification	-78	78	0
Currency conversion	1	-4	-3
As of 12/31/2018	3,862	2,011	5,873
Depreciation 01/01/2018	3,070	1,567	4,637
Inflows	326	148	474
Outflows	-97	-8	-105
Reclassification	0	0	0
Currency conversion	0	-3	-3
As of 12/31/2018	3,299	1,704	5,003
Net book value 12/31/2017	648	361	1,009
Net book value 12/31/2018	563	307	870

Impairment losses on intangible assets were not recognized in any reporting period. There were no intangible assets with indefinite useful lives and no intangible assets that were not yet ready for use in the reporting periods presented.

11. PROPERTY, PLANT AND EQUIPMENT

The development of property, plant and equipment in the fiscal year 2017 is as follows:

in EUR thousands	Land, land rights and buildings	Plants and machinery	Factory and office equipment	Advance payments and facilities under construction	Total
Acquisition costs 07/01/2017	45,453	168,030	15,698	8,455	237,636
Inflows	1,169	5,806	2,207	15,041	24,223
Outflows	-1	-327	-273	-250	-852
Reclassification	1,030	4,600	658	-6,293	-5
Currency conversion	41	237	-11	-382	-115
As of 12/31/2017	47,691	178,345	18,279	16,571	260,886
Depreciation 07/01/2017	18,679	102,731	11,400	0	132,810
Inflows	1,364	9,938	2,237	0	13,539
Outflows	-1	-292	-262	0	-555
Reclassification	0	0	0	0	0
Currency conversion	0	-26	-12	0	-38
As of 12/31/2017	20,041	112,350	13,364	0	145,755
Net book value 12/31/2016	26,774	65,299	4,298	8,455	104,827
Net book value 12/31/2017	27,649	65,995	4,915	16,571	115,131

The development of property, plant and equipment in the period from January 1 until June 30, 2018 is as follows:

in EUR thousands	Land, land rights and buildings	Plants and machinery	Factory and office equipment	Advance payments and facilities under construction	Total
Acquisition costs 01/01/2018	47,691	178,345	18,279	16,571	260,886
Inflows	129	1,801	657	13,143	15,730
Outflows	-29	-163	-2,283	-228	-2,703
Reclassification	269	4,692	716	-5,677	0
Currency conversion	-22	-158	11	-38	-207
As of 06/30/2018	48,038	184,517	17,380	23,771	273,706
Depreciation 01/01/2018	20,041	112,350	13,364	0	145,755
Inflows	685	5,366	1,197	0	7,248
Outflows	-7	-148	-2,246	0	-2,401
Reclassification	0	0	0	0	0
Currency conversion	-1	-57	1	0	-57
As of 06/30/2018	20,718	117,511	12,316	0	150,545
Net book value 12/31/2017	27,649	65,995	4,915	16,571	115,131
Net book value 06/30/2018	27,320	67,006	5,064	23,771	123,161

The development of property, plant and equipment in the period from 07/01 until 12/31/2018 is as follows:

in EUR thousands	Land, land rights and buildings	Plants and machinery	Factory and office equipment	Advance payments and facilities under construction	Total
Acquisition costs 07/01/2018	48,038	184,517	17,380	23,771	273,706
Inflows	556	4,865	1,395	21,767	28,583
Outflows	-24	-3,685	-300	0	-4,009
Reclassification	408	5,069	96	-5,573	0
Currency conversion	6	50	15	4	75
As of 12/31/2018	48,984	190,816	18,586	39,969	298,355
Depreciation 07/01/2018	20,718	117,511	12,316	0	150,545
Inflows	704	5,409	1,352	0	7,465
Outflows	-14	-3,635	-293	0	-3,942
Reclassification	0	0	0	0	0
Currency conversion	0	22	0	0	22
As of 12/31/2018	21,408	119,307	13,375	0	154,090
Net book value 06/30/2018	27,320	67,006	5,064	23,771	123,161
Net book value 12/31/2018	27,576	71,509	5,211	39,969	144,265

he development of property, plant and equipment in the period from 01/01 until 12/31/2018 is as follows:

in EUR thousands	Land, land rights and buildings	Plants and machinery	Factory and office equip- ment	Advance payments and facilities under construc- tion	Total
Acquisition costs 01/01/2018	47,691	178,345	18,279	16,571	260,886
Inflows	685	6,666	2,052	34,910	44,313
Outflows	-53	-3,848	-2,583	-228	-6,712
Reclassification	677	9,761	812	-11,250	0
Currency conversion	-16	-108	26	-34	-132
As of 12/31/2018	48,984	190,816	18,586	39,969	298,355
Depreciation 01/01/2018	20,041	112,350	13,364	0	145,755
Inflows	1,389	10,775	2,549	0	14,713
Outflows	-21	-3,783	-2,539	0	-6,343
Reclassification	0	0	0	0	0
Currency conversion	-1	-35	1	0	-35
As of 12/31/2018	21,408	119,307	13,375	0	154,090
Net book value 12/31/2017	27,649	65,995	4,915	16,571	115,131
Net book value 12/31/2018	27,576	71,509	5,211	39,969	144,265

Impairment losses on property, plant and equipment were not recognized as in any reporting period presented. Property, plant and equipment include EUR 0 thousands (previous year: EUR 223 thousands; 12/31/2017: EUR 223 thousands) in assets held under a finance lease. In the current fiscal year, AlzChem exercised the purchase option and acquired the property from the previous lessor.

The assets and equipment include EUR 310 thousands (previous year: EUR 362 thousands; 12/31/2017: EUR 414 thousands) of jointly controlled assets as of the balance sheet date. This is a steam boiler operated by Nigu Chemie GmbH in Waldkraiburg together with a neighboring company on its property. The AlzChem Group's interest in this joint agreement is 50%. The two companies each account for 50% of the volume produced by the steam boiler for their own production processes. The share of expenses from this jointly controlled asset amounted to EUR 665 thousands (previous year: EUR 643 thousands;

2017: EUR 1,140 thousands; 2018 – reporting, unaudited: EUR 1,380 thousands). As in the previous year, income from this jointly controlled asset was not incurred.

In the current fiscal year, borrowing costs of EUR 80 thousands (previous year: EUR 0 thousands; 2017: EUR 0 thousands; 2018 – reporting, unaudited: EUR 80 thousands) were capitalized as part of the cost of sales of technical equipment and machinery. The underlying financing cost rate corresponds to the loan interest rate of the directly attributable loans.

Property, plant and equipment of EUR 16,135 thousands (previous year: EUR 16,536 thousands; 12/31/2017: EUR 16,804 thousands) serve as collateral for loan liabilities to banks.

12. FINANCIAL ASSETS

Non-current financial assets comprise all shares in other equity investments and are assigned to the measurement category "at fair value through profit or loss". Since there are no observable market values for these investments and, given the overall subordinate importance for the AlzChem Group, no reliable parameters for a model valuation can be determined with reasonable effort, the acquisition costs are used as the best available indication for the fair value. At the present time, the AlzChem Group does not plan to divest the investments.

13. OTHER RECEIVABLES AND OTHER ASSETS

Non-current and current other receivables and other assets consist of the following financial and non-financial assets:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Long-term receivables and other assets			
Therein financial assets			
Reimbursement claims against suppliers	6	0	0
Total long-term financial assets	6	0	0
Therein non-financial assets			
Active deferred items	1,065	1,041	886
Others	0	26	5
Total long-term non-financial assets	1,065	1,067	891
Total long-term receivables and other assets	1,071	1,067	891
Short-term receivables and other assets			
Therein financial assets			
Receivables from purchase price retention, special lock account and billing account	7,480	4,911	5,689
Short-term restricted investments	5,902	5,902	5,902
Others	499	1,032	190
Total short-term current financial assets	13,881	11,845	11,781
Therein non-financial assets			
Tax claims	1,490	270	1,798
Active deferred items	916	2,375	887
Others	21	25	44
Total current non-financial assets	2,427	2,670	2,729
Total short-term receivables and other assets	16,308	14,515	14,510

The receivables from the purchase price retention, the special lock account and the settlement account result from factoring transactions and constitute receivables from the factoring company. The current deposits relate to cash and cash equivalents invested with banks with a maximum term of

12 months. This investment of EUR 5,902 thousands (previous year: EUR 5,902 thousands; 12/31/2017: EUR 5,902 thousands) serves as collateral in accordance with the legal requirements for the aftercare and recultivation of landfill sites.

The deferred items were mainly formed for prepayments of insurance policies and maintenance contracts. In the non-current area, insurance policies are listed in connection with the ongoing stock market listing in the amount of EUR 245 thousands (previous year: EUR 270 thousands; 12/31/2017: EUR 223 thousands).

No impairment charges have been recognized on the non-current and current financial assets shown above nor are any amounts overdue. As of the balance sheet date, there are no indications that the payments will not be made when these items fall due.

The current and non-current financial assets shown here include the following foreign currency receivables:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Total	457	114	161
USD	290	7	3
SEK	51	53	49
CNY	116	54	109

14. DEFERRED TAX ASSETS AND TAX LIABILITIES

Deferred tax assets and liabilities are netted if there is a legally enforceable right to set off current tax assets against current tax liabilities and if the deferred taxes exist vis-a-vis the same tax authority.

Deferred tax assets and deferred tax liabilities relate to the following items:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Deferred tax assets			
Intangible assets	121	106	91
Property, plant and equipment	1,057	916	730
Financial assets	54	56	16
Inventories	644	594	807
Other receivables and other assets	749	947	1,124
Provisions	22,291	21,630	21,823
thereof pension obligations	19,554	19,234	19,512
Liabilities	54	51	3
Tax loss carryforwards	463	325	360
Total deferred tax assets	25,433	24,625	24,954
Short-term	1,502	1,648	1,950
Long-term	23,931	22,977	23,004
Deferred tax liabilities			
Property, plant and equipment	328	345	224
Other receivables and other assets	1,792	1,792	1,793
Liabilities	45	47	72
Total deferred tax liabilities	2,165	2,184	2,089
Short-term	1,792	1,792	1,797
Long-term	373	392	292
Netting of deferred tax assets and liabilities	0	0	0
Balance sheet deferred tax assets	25,433	24,625	24,954
Balance sheet deferred tax liabilities	2,165	2,184	2,089

The changes in deferred taxes compared to the previous year in the amount of EUR -47 thousands (previous year: EUR -484 thousands; 2017: EUR -2,973 thousands; 2018 – reporting, unaudited: EUR -531 thousands) were reported in the income statement. The change in deferred taxes on pension provisions was recognized in other comprehensive income in the amount of EUR 462 thousands (previous year: EUR -321 thousands; 2017: EUR -26 thousands; 2018 – reporting, unaudited: EUR 141 thousands).

The deferred tax assets listed here for income tax loss carryforwards amounting to EUR 7 thousands (previous year: EUR 6 thousands; 12/31/2017: EUR 14 thousands) are attributable to domestic companies. Of this amount, EUR 3 thousands (previous year: EUR 3 thousands; 12/31/2017: EUR 10 thousands) was attributable to trade tax and EUR 4 thousands (previous year: EUR 3 thousands; 12/31/2017: EUR 4 thousands) to corporate income tax. In the reporting

year, deferred tax assets were recognized for all income tax loss carryforwards. The existing tax loss carryforwards are vested.

The determination of deferred taxes resulted in a surplus of deferred tax assets. Based on the adopted corporate planning, it can be assumed that sufficient tax results will be available in the future, which makes it probable that deferred tax assets will be recognized.

No deferred tax liabilities were recognized for temporary differences in connection with investments in subsidiaries in the amount of EUR 80,357 thousands (previous year: EUR 8,979 thousands; 12/31/2017: EUR 8,979 thousands).

For more information, please refer to the explanations in the accounting and valuation principles and the explanatory notes in Section IV.

15. INVENTORIES

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Raw materials, consumables and supplies	23,663	23,347	25,771
Unfinished products	13,753	17,242	15,943
Uncompleted services	196	295	194
Finished goods	33,237	34,439	36,509
Merchandise	456	215	439
Advance payments	77	41	0
	71,382	75,579	78,856

In the current fiscal year, profit-affecting write-downs on inventories of EUR 395 thousands (previous year: EUR 477 thousands; 2017: EUR 1,268 thousands; 2018 – reporting, unaudited: EUR 872 thousands) and reversals of impairment losses of EUR 2,206 thousands (previous year: EUR 834 thousands; 2017: EUR 408 thousands; 2018 – reporting, unaudited: EUR 3,040 thousands) were recognized in the cost of materials. Impairment losses were mainly recognized for overshooting, lack of accessibility and write-downs to net realizable value. The total amount of inventories recognized as an expense in the fiscal year amounts to EUR 75,249 thousands (previous year: EUR 80,180 thousands; 2017: EUR 137,870 thousands; 2018 – reporting, unaudited: EUR 155,429 thousands).

16. TRADE RECEIVABLES

The value adjustments on trade receivables recognized in the allowance account developed as follows:

in EUR thousands	01/01/2017	Supply	Consumption	Liquidation	12/31/2017 (IAS 39)
Impairment on receivables from supplies and services	507	252	0	-148	611

Taking into account the first-time application of IFRS 9, the following changes in the value adjustments resulted in the previous year:

in EUR thousands	01/01/2018	Supply	Consumption	Liquidation	Currency conversion	06/30/2018
Value adjustment on trade receivables (AC)	144	9	-18	0	-3	132
Value adjustments on trade receivables (FVOCI)	497	4	0	0	0	501
Total	641	13	-18	0	-3	633

As part of the first-time application of IFRS 9, value adjustments for trade receivables were increased by EUR 30 thousands as of 01/01/2018. Of this amount, EUR 6 thousands was accounted for at fair value through other comprehensive income (FVOCI), and EUR 24 thousands in other trade receivables measured at acquisition cost

(AC). In the amount of EUR 491 thousands (FVOCI) and EUR 121 thousands (AC), the existing value adjustments were adopted in accordance with IAS 39.

The further development of value adjustments in the current fiscal year is as follows:

in EUR thousands	07/01/2018	Supply	Consumption	Liquidation	Currency conversion	12/31/2018
Value adjustment on trade receivables (AC)	132	0	0	-24	-2	106
Value adjustments on trade receivables (FVOCI)	501	1	0	0	0	502
Total	633	1	0	-24	-2	608

The value adjustments as of the reporting date relate to gross receivables before collateral and value adjustments in the amount of EUR 20,987 thousands (FVOCI) (previous year: EUR 38,183 thousands; 12/31/2017: EUR 21,813 thousands) and EUR 13,971 thousands (AC) (previous year: EUR 14,781 thousands; 12/31/2017: EUR 13,222 thousands).

The expected loss ratio in relation to total receivables stood at 1.77% as at the reporting date, with the individual rates based on historical values varying between 0.05% and 6.56%, depending on the overdue nature of the receivables. For receivables which have reached the status of "defaulted", historically, around 80% of the outstanding amount could be recognized through collateral realization or other recovery measures.

As of the current reporting date, the AlzChem Group had collateral from trade credit insurance policies for the collateralization of trade receivables in the amount of EUR 11,986 thousands (previous year: EUR 28,121 thousands; 12/31/2017: EUR 12,101 thousands). Of these, overdue receivables include collateral totaling EUR 2,888 thousands (previous year: EUR 1,973 thousands; 12/31/2017: EUR 773 thousands).

For receivables that are neither impaired nor overdue, there were no indications as of the balance sheet date that the payments will not be made when they fall due.

Due to the international activities of the Group, the following trade receivables include the following foreign currency receivables converted into the Group currency:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Total	12,538	15,977	16,474
USD	7,772	9,194	9,878
CNY	1,999	894	1,338
JPY	1,421	2,443	2,420
SEK	1,332	3,308	2,838
Other	14	138	0

The receivables sold as part of factoring amount to EUR 15,755 thousands (previous year: EUR 8,846 thousands; 12/31/2017: EUR 12,660 thousands). The analysis of the transition or retention of opportunities and risks from the sold receivables on the current reporting date and on the previous year's reporting dates resulted in a complete transition, so that no remaining commitments are reported within the AlzChem Group. Both in the current year and in the previous years presented, there were no cash inflows to the factoring company from the purchase price withheld as part of factoring.

17. INCOME TAX ASSETS

Tax receivables include income tax receivables of domestic companies in full. These result from overpayments of the current and previous fiscal year.

18. CASH AND CASH EQUIVALENTS

Cash and cash equivalents are made up as follows:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Bank balances	12,796	9,837	12,852
Cash on hand	6	7	5
	12,802	9,844	12,857

19. EQUITY

SUBSCRIBED CAPITAL

The subscribed capital corresponds to that of AlzChem Group AG. As of December 31, 2018, the subscribed capital of AlzChem Group AG amounts to EUR 101,763,355.00 as in the previous year and as on June 30, 2018 and unchanged compared to the previous year and December 31, 2017, it is divided into 101,763,355 no-par owner shares with a notional par value of EUR 1 each. In both short fiscal years of the calendar year presented, there were no changes in the subscribed capital. In the fiscal year 2017, the subscribed capital was increased by EUR 100,323,339.00 from EUR 310,000.00 to EUR 100,633,339.00 by way of a non-cash capital increase against contribution of all shares in AlzChem Trostberg GmbH. Also in the fiscal year 2017, the subscribed capital of AlzChem Group AG was increased by a further EUR 1,130,016.00 to EUR 101,763,355.00 as part of a cash capital increase.

AUTHORIZED CAPITAL 2017

The Management Board is authorized, with the approval of the Supervisory Board, to raise up to EUR 10,063,333.00 (in words: Euro ten million sixty-three thousand three hundred and thirty-three) until July 31, 2022 once or several times by issuing up to 10,063,333 new owner shares against cash and/or non-cash contributions (Authorized Capital 2017). In principle, the shareholders must be granted a subscription right; the statutory subscription right may also be granted in such a way that the new shares are taken over by a credit institution appointed by the Management Board or a consortium of credit institutions with the obligation to offer them to the shareholders of the company for subscription.

The Management Board is authorized, with the consent of the Supervisory Board, to exclude the statutory subscription rights of shareholders in the following cases:

- In the case of a capital increase against contribution in kind, in particular for the acquisition of companies, parts of companies or participations in companies;
- In the case of capital increases against cash contributions, if the issue price of the new shares issued under exclusion of the subscription right pursuant to § 186 (3) sentence 4 AktG is not significantly lower than the stock exchange price of the already listed shares of the same class and composition, and the total pro-rated amount of share capital attributable to the issued new shares under exclusion of the subscription right pursuant to § 186 para 3 sentence 4 AktG does not exceed by 10% the share capital existing at the time this authorization takes effect and at the time of exercise of this authorization. Shares which were issued or sold in the direct or corresponding application of section 186 (3) sentence 4 AktG during the term of this authorization up to the time of their exercise are to be offset against this limit of 10% of the share capital;
- To avoid fractional amounts;
- To issue shares to members of the company's Management Board, members of the representative body of a company affiliated with the company, or employees of the company or its affiliates, in return for cash and/or non-cash contributions under share or other share-based programs, whereby the employment relationship or the relation of the company to the company or its affiliated company must exist at the time of the grant of the share issue; If shares are to be granted to members of the Management Board of the company, the Supervisory Board of the company shall decide on this alone.

The Management Board is authorized, with the consent of the Supervisory Board, to determine the further details of the capital increase and its implementation, in particular the content of the share rights and the terms of the share issue, including a profit sharing deviating from § 60 (2) AktG. The Supervisory Board is authorized to adjust the Articles of Association of the company accordingly after full or partial utilization or the expiration of the authorized capital, in particular with regard to the amount of the share capital and the number of existing no-par shares.

The Annual General Meeting granted the Management Board no rights with regard to a conditional capital increase.

AUTHORIZATION TO PURCHASE OWN SHARES

On both reporting dates, the company holds no own shares.

The Annual General Meeting authorized AlzChem Group AG in accordance with Section 71 (1) no. 8 AktG to purchase own shares in a volume of up to 10% of the share capital existing at the time of the resolution by the end of July 31, 2022. The shares acquired on the basis of this authorization, together with other shares of the company which AlzChem Group AG acquired and still holds at the time of the acquisition or which are attributable to it in accordance with §§ 71d or 71e AktG, may at no time exceed 10% of the share capital. The authorization may not be used by AlzChem Group AG for the purpose of trading in own shares. The authorization may be used in whole or in part, once or several times by AlzChem Group AG or by dependent or majority-owned companies of AlzChem Group AG or by third parties acting on behalf of AlzChem Group AG or dependent or majority-owned AlzChem Group AG companies. At the discretion of the Management Board, the purchase can be made via the stock exchange or by means of a public purchase offer addressed to all shareholders.

In the case of acquisition via the stock exchange, the purchase price (excluding incidental acquisition costs) may not be more than 10% higher or lower than the price of the share in XETRA trading (or a comparable successor system) determined by the opening auction on the trading day.

In the case of acquisition via a public tender offer, the bid price offered or the limits on the purchase price range per share (excluding incidental acquisition costs) may not exceed the closing price in XETRA trading (or a comparable successor system) on the third exchange trading day prior to the public announcement of the offer by more than 10% above or below. If, after publication of the public offer, significant deviations from the relevant price occur, the offer can be adjusted. In this case, the adjustment will be made on the third exchange trading day before the public announcement. The volume of the offer can be limited. If the total subscription of the offer exceeds the fixed volume, the acceptance must take place according to quota. A preferential acceptance of small numbers up to 100 tendered shares per shareholder can be provided for.

CAPITAL RESERVE ADJUSTMENT ITEM REVERSE ACQUISITION

The capital reserve adjustment item reverse acquisition includes the adjustment of the subscribed capital of AlzChem Trostberg GmbH to the subscribed capital of AlzChem Group AG and the transactions resulting from the capital increases in the fiscal year 2017 that do not affect the subscribed capital of AlzChem Group AG. These adjustments were required to reflect the accounting and reporting requirements for a reverse business combination in the fiscal year 2017 (see the explanations in II. Fiscal year change and consequent presentation in IFRS Consolidated Financial Statements). The item has not changed in comparison to the previous year.

The subscribed capital of AlzChem Trostberg GmbH amounted to EUR 11,000 thousands as at the reporting date (previous year: EUR 11,000 thousands).

From the cash capital increase of AlzChem Group AG, EUR 1,469 thousands was transferred to the capital reserve of AlzChem Group AG in the fiscal year 2017.

The amount attributable to consideration for the acquisition of AlzChem Group AG in the fiscal year 2017 in the amount of EUR 775 thousands was also included in this item.

The costs directly attributable to the two capital increases of AlzChem Group AG in the fiscal year 2017 were shown as a deduction from equity at the time of the capital increases. Taking tax benefits into account, an amount of EUR 740 thousands was deducted directly from the equity item "capital reserve adjustment item reverse acquisition".

CAPITAL RESERVE

The capital reserve represents that of AlzChem Trostberg GmbH and remains unchanged at EUR 24,981 thousands throughout the reporting period.

OTHER ACCUMULATED EQUITY

The other accumulated equity includes such gains and losses that are not recognized in the income statement but in other income. In the AlzChem Group, this includes in the reporting period the difference from conversion differences of foreign financial statements in the reporting currency, effects from remeasurement of defined benefit obligations, changes in the fair value of financial assets in other comprehensive income and deferred tax assets thereon. The development of the individual items during the period under review is as follows:

in EUR thousands	Measurement of financial assets measured at fair value through other comprehensive income	Difference from the currency conversion	Valuation of pension provisions	Total
As of 01/01/2017	0	1,691	-32,671	-30,983
Gains (+) or losses (-) recognized in other income	0	0	89	89
Difference from currency conversion	0	-1,090	0	-1,090
Deferred taxes	0	0	-26	-26
As of 12/31/2017	0	600	-32,610	-32,010
As of 01/01/2018	0	600	-32,610	-32,010
Effect of the change in accounting rules	4	0	0	4
Gains (+) or losses (-) recognized in other income	4	0	1,152	1,156
Difference from currency conversion	0	125	0	125
Deferred taxes	-1	0	-321	-322
As of 06/30/2018	7	725	-31,779	-31,047
As of 07/01/2018	7	725	-31,779	-31,047
Gains (+) or losses (-) recognized in other income	0	0	-1,650	-1,650
Difference from currency conversion	0	83	0	83
Deferred taxes	0	0	462	462
Reclassification to income statement	0	29	0	29
As of 12/31/2018	7	837	-32,967	-32,123
As of 01/01/2018	0	600	-32,610	-32,010
Effect of the change in accounting rules	4	0	0	4
Gains (+) or losses (-) recognized in other income	4	0	1,152	1,156
Difference from currency conversion	0	125	0	125
Deferred taxes				
Reclassification to income statement	-1	0	-321	-322
As of 12/31/2018	7	725	-31,779	-31,047

The effects presented here include all other accumulated equity including non-controlling interests. From December 31, 2018, due to the liquidation of Dormex Company LLC in the current fiscal year, the other accumulated equity shown here corresponds to the other accumulated equity shown in the balance sheet.

The item "Measurement of financial assets measured at fair value through profit or loss" has been added as a result of the first-time application of IFRS 9 as of January 1, 2018 (further explanations are given in IV. Explanations of the principles and methods of the consolidated financial statements).

RETAINED EARNINGS

Retained earnings include the results accumulated in current and prior fiscal years less dividend payments to shareholders. In accordance with the requirements for accounting and reporting of a reverse business combination, the balance sheet profit is a continuation of the IFRS consolidated retained earnings of AlzChem Trostberg GmbH at the time of the business combination in the fiscal year 2017. The earnings contribution of AlzChem Group AG was only included in the consolidated net income from the acquisition date in the fiscal year 2017. In the current reporting period, a dividend of EUR 11,194 thousands (previous year: EUR 0 thousands; 2017: EUR 19,122 thousands; 2018 – reporting, unaudited: EUR 11,194 thousands) was distributed to the shareholders of AlzChem Trostberg GmbH. Based on the outstanding shares of AlzChem Group AG amounting to 101,763,355.00 as of the balance sheet date, this resulted in a dividend of EUR 0.11 (previous year: EUR 0; 2017: EUR 0.19; 2018 – reporting, unaudited: EUR 0.11) per share. The dividend for the current fiscal year was distributed as a cash dividend. The dividend in the fiscal year 2017 was distributed in the amount of EUR 17,775 thousands as a cash dividend and the remainder as a non-cash dividend. The non-cash dividend consisted of 6% of the shares in AlzChem International GmbH. As a result of the resulting non-controlling interests, the items of equity of AlzChem International GmbH previously reported under the controlling interests in the consolidated net profit were reclassified pro rata in the amount of EUR 1,925 thousands to non-controlling interests.

The effect from the first-time application of IFRS 9 was recognized in consolidated net profit as of January 1, 2018 (further explanations on this can be found in Note IV. Explanations of the principles and methods of the consolidated financial statements).

NON-CONTROLLING INTERESTS

The non-controlling interests in the amount of EUR 1,420 thousands (previous year: EUR 1,429 thousands; 12/31/2017: EUR 2,224 thousands) includes the shares in the capital of AlzChem International GmbH, which are not attributable to the shareholders of AlzChem Trostberg GmbH. Until June 30, 2018, the non-controlling interests in Dormex Company LLC, which was liquidated in the current fiscal year, were also reported here. The changes are shown in the consolidated statement of changes in equity.

Effective January 1, 2018, a profit transfer agreement was concluded between AlzChem Trostberg GmbH and AlzChem International GmbH. As a result, AlzChem International GmbH will transfer all of its future profits to AlzChem Trostberg GmbH, which will fully assume any losses incurred by AlzChem International GmbH. The contract was concluded for a period of five years and cannot be terminated properly in this period.

As a result of the agreement, since January 1, 2018, the entire net income and overall result of AlzChem International GmbH has been added to the Group. As a result, non-controlling interests will not receive any additional net income of the profit and loss transfer agreement. The minority shareholders of AlzChem International GmbH (6% of the capital of the company) were granted a compensation payment of EUR 2.85 (gross) per share and year for the duration of the profit transfer agreement for the loss of their variable earnings claim. The compensation payment is made by AlzChem Trostberg GmbH.

In the consolidated balance sheet, the present value of future compensation payments has already been recognized in full in the current and non-current other liabilities (EUR 855 thousands). The non-controlling interest in consolidated equity was reduced by the same amount. The compensation payments to be made annually to the non-controlling interests are allocated (pro rata) to the consolidated net profit for the non-controlling interests.

Further financial information on non-controlling interests can be found in Note 9.

CAPITAL MANAGEMENT

The objectives of the AlzChem Group with regard to capital management are, on the one hand, the long-term assurance of the ongoing company and the generation of reasonable returns for the shareholders and, on the other hand, the maintenance of an optimal capital structure in order to reduce the capital costs.

The capital structure is managed so that it takes into account the changes in macroeconomic conditions and risks from the underlying assets. Due to the strong operating cash flow, the company is in the position to be able to use its own funds optimally. Investments, which are made generally only with a strong consideration of cost/benefit potentials, are regularly checked as to whether the available own funds can be replaced by long-term financing in favor of improved raw material procurement prices. Basically, the AlzChem Group is in permanent contact with banks and other finance companies to assess the use of bank credit and other financing options to optimize return on investment.

As part of this, debt capital is managed using a target debt capital structure that is geared to companies in the same sector and with similar size characteristics as the AlzChem Group. The selection of financial instruments focuses on maturity-matched financing, which is achieved through the management of maturities. In the monitoring of the capital structure and other key figures resulting from this, the consideration and compliance with contractually regulated terms in financing agreements (covenants) are in the foreground.

The capital is monitored on the basis of the debt ratio, calculated as the ratio of net debt to total capital. Net debt is defined as the sum of all debt less existing cash and cash equivalents.

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Total capital	280,181	304,459	313,551
Net debt	209,487	220,571	232,302
Debt ratio	0.75	0.72	0.74

In addition, some loan agreements contain certain covenants with regard to the equity ratio, which is why these are regularly monitored at the Group level.

20. PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS

Provisions for pensions are defined benefit plans for former and currently employed employees of the AlzChem Group. Provisions are formed on the basis of benefit, retirement, disability and survivor benefit plans. The amount of the

individual benefits from the commitments is based on the salary level and/or the position in the corporate hierarchy as well as the length of service. The duration of the benefit supplement is not limited during the lifetime of the beneficiary. Thus, the AlzChem Group is exposed to the risks of future salary increases and longevity. The company regularly counters the salary increase risk with collective bargaining and attempts to keep risk low. However, the relatively low proportion of plan assets does not significantly limit the risks. The amount of the provision recognized solely in Germany as of the balance sheet dates is as follows:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Provisions for pensions and similar obligations	107,234	107,218	109,960

The defined benefit obligation of the pension obligations of the companies of the AlzChem Group on the basis of benefit approvals developed as follows:

in EUR thousands	DBO	Plan assets	Provisions
As of 01/01/2017	105,097	191	104,904
Effects from the revaluation	-89	0	-89
- Of which change of demographic assumptions	0		0
- Of which change of financial assumptions	0		0
- Of which experience-based adjustments	-89		-89
Interest expense	1,842		1,842
Current service cost	1,222		1,222
Paid pensions	-674		-674
Expected income from plan assets	0	5	-5
Payments from plan assets	0	-33	33
As of 12/31/2017	107,399	163	107,234
in EUR thousands	DBO	Plan assets	Provisions
As of 01/01/2018	107,399	163	107,234
Effects from the revaluation	-1,152	0	-1,152
- Of which change of demographic assumptions	0	0	0
- Of which change of financial assumptions	-1,162	0	-1,162
- Of which experience-based adjustments	10	0	10
Interest expense	935	0	935
Current service cost	540	0	541
Paid pensions	-340	0	-340
Expected income from plan assets	0	0	0
Payments from plan assets	0	0	0
As of 06/30/2018	107,383	163	107,218
in EUR thousands	DBO	Plan assets	Provisions
As of 07/01/2018	107,383	163	107,218
Effects from the revaluation	1,650	0	1,650
- Of which change of demographic assumptions	582	0	582
- Of which change of financial assumptions	907	0	907
- Of which experience-based adjustments	161	0	161
Interest expense	941	0	941
Current service cost	540	0	540
Paid pensions	-385	0	-385
Expected income from plan assets	0	5	-5
Payments from plan assets	0	0	0
As of 12/31/2018	110,129	168	109,960

Reconciliation of the obligation to the provision value:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Defined benefit obligation, not fund-financed	107,234	107,218	109,960
Defined benefit obligation, fund-financed	164	164	168
Subtotal	107,399	107,382	110,128
Less fair value of plan assets	-164	-164	-168
Provisions for pensions and similar obligations	107,234	107,218	109,960

The effects of the remeasurement of defined benefit obligations recognized in other comprehensive equity in the current fiscal year are made up as follows:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Change of demographic assumptions	0	0	582
Change of financial assumptions	0	-1,162	907
Experience-based adjustments	-89	10	161
	-89	-1,152	1,650

The amounts recognized in the income statement in the reporting period break down as follows:

in EUR thousands	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Interest expense	1,842	935	1,876	941
Service-period costs	1,222	541	1,081	540
Expected return on plan assets	-5	0	-5	-5
	3,059	1,476	2,952	1,476

The expected cash outflows from the pension obligations in the coming year totaled EUR 1,157 thousands (previous year: EUR 1,002 thousands; 12/31/2017: EUR 870 thousands).

The current contributions for employer contributions to the statutory pension insurance are reported as expenses for the

respective year in the operating result and amounted to a total of EUR 3,599 thousands (previous year: EUR 3,138 thousands; 2017: EUR 6,381 thousands; 2018 – reporting, unaudited: EUR 6,737 thousands) in the Group in the fiscal year.

The plan assets developed as follows:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
As of 01/01	191	163	163
Expected return on plan assets	5	0	5
Payments from plan assets	-33	0	0
As of 06/30 / 12/13	163	163	168

The plan assets consist entirely of reinsurance for which there is no quoted market price in an active market.

A change in the three main factors influencing the present value of the pension obligation under otherwise unchanged assumptions would have the following effect on the present value of the pension obligation as of the balance sheet date:

Present value of the pension obligation in EUR thousands

Discount rate	
As of 12/31/2018: 1.90%	110,129
Increase to 2.00%	107,810
Decrease to 1.80%	112,516
Wage and salary trend	
As of 12/31/2018: 2.75%	110,129
Increase to 3.75%	116,859
Decrease to 1.75%	105,500
Pension trend	
As of 12/31/2018: 2.00%	110,129
Increase to 3.00%	124,891
Decrease to 1.00%	98,142

If pensioner mortality fell by 20%, the present value of the pension obligation would be EUR 117,384 thousands.

In calculating the sensitivity of the DBO for the relevant actuarial assumptions, the same method was used (determination of the present value using the method of single recurring premiums) as for the calculation of provisions

for pensions, which are recorded in the consolidated balance sheet. In determining the sensitivities, only one parameter was changed and all other assumptions were retained.

The weighted average term of the defined benefit obligation in relation to the present value of the pension obligation as of the reporting date is as follows:

Present value of the pension obligation in EUR thousands	Average duration in years	Obligated company
109,922	22	AlzChem Trostberg GmbH/AlzChem Group AG
207	36	Nigu Chemie GmbH

EUR 19,512 thousands (previous year: EUR 19,234 thousands; 12/31/2017: EUR 19,554 thousands) deferred tax assets were recognized on the pension provisions recognized in the Group.

21. OTHER PROVISIONS (NON-CURRENT AND CURRENT)

in EUR thousands	Provisions for landfills	Provisions for personnel	Provisions for warranties on product sales	Provisions for subsequent customer compensation/ commissions	Other provisions	Total
As of 01/01/2017	7,387	15,698	202	148	799	24,235
Utilization	0	-7,455	-9	-72	-21	-7,558
Supply	80	2,521	39	47	242	2,929
Liquidation	0	-232	-2	-57	-49	-340
Reclassification	0	-816	0	0	0	-816
Mark-up/interest rate change	-170	386	0	0	-4	212
Currency conversion	0	-4	-2	-2	-1	-10
As of 12/31/2017	7,297	10,098	228	64	965	18,652
Non-current	7,297	9,908	0	0	236	17,443
Current	0	189	228	64	729	1,209
As of 12/31/2017	7,297	10,098	228	64	965	18,652
As of 01/01/2018	7,297	10,098	228	64	965	18,652
Utilization	0	-677	0	-15	-115	-807
Supply	455	1,643	0	2,373	29	4,500
Liquidation	0	0	0	-32	0	-32
Reclassification	0	-405	0	0	0	-405
Mark-up/interest rate change	-44	-77	0	0	2	-119
Currency conversion	0	-5	0	0	2	-4
As of 06/30/2018	7,708	10,577	228	2,390	883	21,786
Non-current	7,708	10,175	0	0	412	18,295
Current	0	402	228	2,390	471	3,491
As of 06/30/2018	7,708	10,577	228	2,390	883	21,786
As of 07/01/2018	7,708	10,577	228	2,390	883	21,786
Utilization	0	-784	0	-809	-215	-1,808
Supply	645	1,312	51	97	263	2,368
Liquidation	0	-107	0	0	-411	-518
Reclassification	0	-523	0	0	0	-523
Mark-up/interest rate change	64	45	0	0	0	109
Currency conversion	0	2	0	0	1	3
As of 12/31/2018	8,417	10,522	279	1,678	521	21,417
Non-current	8,417	10,251	0	0	197	18,863
Current	0	271	279	1,678	324	2,554
As of 12/31/2018	8,417	10,522	279	1,678	521	21,417
Reporting, unaudited						
As of 01/01/2018	7,297	10,098	228	64	965	18,652
Utilization	0	-1,461	0	-824	-330	-2,615
Supply	1,100	2,955	51	2,470	292	6,868
Liquidation	0	-107	0	-32	-411	-550
Reclassification	0	-928	0	0	0	-928
Mark-up/interest rate change	20	-32	0	0	2	-10
Currency conversion	0	-3	0	0	3	0
As of 12/31/2018	8,417	10,522	279	1,678	521	21,417
Non-current	8,417	10,251	0	0	197	18,863
Current	0	271	279	1,678	324	2,554
As of 12/31/2018	8,417	10,522	279	1,678	521	21,417

The provisions for landfills are related to legal requirements for the aftercare and recultivation of landfill sites. Provisions were formed on the basis of internal and partly external (by appraisers) cost estimates and taking into account term-appropriate discounting. The changes in the fiscal year resulted from changes in parameters and compound interest. We expect the cash outflows from these non-current provisions to be within the scope of post-employment benefit obligations over a substantial period of time.

Provisions for personnel relate to provisions for service premiums, provisions for annual leave in the event of retirement and other social benefits to employees. The calculation is based on actuarial assumptions and discounting appropriate to the term.

Provisions for product warranty guarantees are based on experience. The approach is reviewed annually and adapted to current developments.

The provisions for subsequent customer reimbursements and commissions are related to delivery contracts with customers on the balance sheet date, which are granted additional discounts if certain minimum purchase quantities are exceeded.

The other provisions essentially relate to provisions for other fees not yet settled. These relate to contributions to social and accident insurance for temporary employment and IHK contributions.

22. LOAN LIABILITIES TO BANKS

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Remaining term of less than one year on the balance sheet date	22,122	22,268	25,353
Of which short-term portion of the loan liabilities	6,422	6,686	7,187
Remaining term of more than one year on the balance sheet date	19,203	16,403	32,577
	41,325	38,671	57,930

Long-term loan liabilities to banks are fixed interest, bearing an interest rate between 1.15% and 2.65% and were granted in the fiscal year 2013 and 2015 and in the current fiscal year. The loans are repaid quarterly with a final repayment on 09/30/2027. As of the balance sheet date, short-term money market loans totaling EUR 18,167 thousands (previous year: EUR 15,581 thousands; 12/31/2017: EUR 15,700 thousands) were taken on from banks to cover liquidity peaks. The EUR

denominated money market loans are repaid within one month and have a fixed interest rate between 0.52% and 0.75% (previous year: 0.52% and 0.75%; 12/31/2017: 0.53% and 0.70%).

Based on the usual payment arrangements with the banks, the maturities and thus the outflow of funds from short-term loan liabilities to banks are as follows:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Book value	22,122	22,268	25,353
Due in the following time bands:			
< 30 days	16,521	16,667	18,167
30 - 90 days	1,400	1,400	1,400
90 - 180 days	1,400	1,400	1,400
180 days - 1 year	2,801	2,801	4,386

Loans and advances to banks on the reporting date are collateralized with property, plant and equipment with a book value of EUR 16,135 thousands (previous year: EUR 16,536 thousands; 12/31/2017: EUR 16,804 thousands). All liabilities to banks are due in euros.

Loan liabilities developed as follows during the reporting period:

in EUR thousands	Short-term loan liabilities	Long-term loan liabilities
As of 01/01/2017	5,601	24,805
Payment-effective change		
Repayment	-4,844	0
Assumption	15,700	0
Non-cash change		
Accrual of interest	64	0
Reclassification	5,601	-5,601
As of 12/31/2017	22,122	19,203
As of 01/01/2018	22,122	19,203
Payment-effective change		
Repayment	-2,741	0
Assumption	0	0
Non-cash change		
Accrual of interest	87	0
Reclassification	2,800	-2,800
As of 06/30/2018	22,268	16,403
As of 07/01/2018	22,268	16,403
Payment-effective change		
Repayment	-3,885	0
Assumption	2,585	20,560
Non-cash change		
Accrual of interest	0	0
Reclassification	4,386	-4,386
As of 12/31/2018	25,353	32,577
Reporting		
As of 01/01/2018	22,122	19,203
Payment-effective change		
Repayment	-6,539	0
Assumption	2,585	20,560
Non-cash change		
Accrual of interest	0	0
Reclassification	7,186	-7,186
As of 12/31/2018	25,353	32,577

23. LIABILITIES FROM FINANCE LEASES

Until June 30, 2018, the Group's property, plant and equipment included an asset in the property line item that is attributable to the Group as the beneficial owner due to the nature of the

lease agreement on which it is based. The Group's obligations under this finance lease agreement are shown in the following table:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Finance leases			
Future minimum payments			
Up to 1 year	10	10	0
1 to 5 years	245	239	0
Over 5 years	0	0	0
	255	249	0
Discounting			
Up to 1 year	10	10	0
1 to 5 years	22	16	0
Over 5 years	0	0	0
	32	26	0
Present value			
Up to 1 year	0	0	0
1 to 5 years	223	223	0
Over 5 years	0	0	0
	223	223	0

This was a property with a favorable purchase option at the end of the lease. In the current fiscal year, the purchase option was exercised prematurely and the property was acquired.

The maturities and thus the cash outflow for finance lease liabilities "up to 1 year" are as follows:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Total due within one year	10	10	0
Thereof due in the following time bands:			
< 30 days	0	0	0
30 – 90 days	2	2	0
90 – 180 days	3	3	0
180 days – 1 year	5	5	0

24. TRADE PAYABLES

Based on the usual payment agreements with suppliers and other business partners, the due dates and thus the cash outflow for current trade payables are as follows:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Book value	28,199	30,617	30,863
Thereof due in the following time bands:			
< 30 days	24,881	27,749	28,005
30 – 90 days	3,040	2,412	1,471
90 – 180 days	79	57	108
180 days – 1 year	199	399	1,279

Due to the international activities of the Group, the following foreign currency liabilities converted into the Group currency EUR are included in trade payables on the reporting dates:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Total	4,766	2,680	4,386
USD	3,091	1,034	1,766
SEK	1,173	1,166	1,618
CNY	493	444	999
JPY	0	9	2
Other	9	27	1

No collateral has been deposited for the trade accounts payable except for the usual country-specific retention of title. At the balance sheet dates, no trade payables are overdue.

25. OTHER LIABILITIES

Other current liabilities are as follows:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Personnel liabilities	13,122	14,013	12,091
Liabilities from bonus settlements to customers	2,958	1,725	1,254
Liabilities from energy taxes	4,006	6,842	3,632
Other tax liabilities	1,727	1,958	1,749
Liability vis-a-vis professional associations	407	38	975
Other	1,201	1,446	1,158
	23,421	26,022	20,859

Liabilities from energy taxes as of June 30, 2018 include the recovery of network fee exemptions for the fiscal years 2012 and 2013 following the decision of the EU Commission of May 2018 in the amount of EUR 1,463 thousands, which was paid in the current fiscal year. Detailed explanations can be found in the notes on regulatory risks in the Group management report.

Other current liabilities include other financial liabilities in the amount of EUR 6,191 thousands (previous year: EUR 9,035 thousands; 12/31/2017: EUR 7,671 thousands). This includes the following amounts in foreign currency, converted into euros:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Total	186	561	175
USD	147	460	76
CNY	39	34	29
JPY	0	65	70
Other	0	2	0

The maturities and thus the cash outflow for current financial liabilities are as follows:

in EUR thousands	12/31/2017	06/30/2018	12/31/2018
Book value	7,671	9,035	6,191
Thereof due in the following time bands:			
< 30 days	259	955	275
30 – 90 days	1,046	1,949	1,280
90 – 180 days	4,806	2,865	4,007
180 days – 1 year	1,560	3,266	629

As of the balance sheet date, long-term other liabilities amounted to EUR 513 (previous year: EUR 684 thousands; 12/31/2017: EUR 10 thousands). This includes EUR 513

thousands (previous year: EUR 684 thousands; 12/31/2017: EUR 0 thousands) financial liabilities, all repayable in euros.

26. INCOME TAX LIABILITIES

Income tax liabilities include EUR 1,512 thousands (previous year: EUR 2,943 thousands; 12/31/2017: EUR 1,045 thousands) domestic and EUR 16 thousands (previous year: EUR 67 thousands; 12/31/2017: EUR 12 thousands) foreign income tax liabilities.

27. CASH FLOW STATEMENT

The cash flow statement shows how the cash and cash equivalents of the AlzChem Group changed in the year under review and in the previous year. The cash and cash equivalents are defined as cash and cash equivalents less restricted cash.

In accordance with IAS 7, cash flows are broken down into cash inflows/outflows from operating, investing and financing activities.

in EUR thousands	01/01 – 12/31/2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting	07/01 – 12/31/2018
Cash flow from operating activities (net cash flow)	30,664	15,436	34,655	19,219
Cash outflow from investing activities	-24,784	-15,724	-39,885	-24,161
Free cash flow	5,880	-288	-5,230	-4,942
Cash outflow (-)/cash inflow (+) from financing activity	-5,060	-2,742	5,250	7,992
Net decrease (-)/increase (+) in cash and cash equivalents	820	-3,030	20	3,050

The cash flow statement is prepared using the indirect method.

Cash and cash equivalents as at December 31, 2018 amounted to EUR 12,857 thousands (previous year: EUR 9,844 thousands; 12/31/2017: EUR 12,802 thousands) and include credit balances immediately available at banks, checks and cash on hand.

Other non-cash income and expenses in the amount of EUR 625 thousands (previous year: EUR 4,716 thousands; 12/31/2017: EUR 5,991 thousands; 2018 – reporting, unaudited: EUR 5,341 thousands) mainly include value adjustments on inventories and allocations to or reversals of pension provisions and other provisions. In addition, there were no other significant transactions without effect on income.

In the fiscal year 2017, the AlzChem Group received T€ 25 in cash through the acquisition of AlzChem Group AG. Since the consideration consisted of company shares, no liquidity-affecting purchase price flowed. In the other reporting periods, no company acquisition took place.

28. RISK MANAGEMENT AND USE OF DERIVATIVE FINANCIAL INSTRUMENTS

The financial division of AlzChem Trostberg GmbH monitors and manages the financial risks of the entire AlzChem Group. In particular these are:

- Liquidity risk
- Market risks (interest rate and currency risks)
- Credit risks

Due to its activity, AlzChem Group is exposed to a variety of financial risks. By risk, we mean unexpected events and possible developments that negatively impact the achievement of goals and expectations. Relevant risks are those with a material impact on the net assets, financial position and results of operations. The risk management system of the AlzChem Group analyzes various risks and attempts to minimize negative effects on the company's financial position. Risk management is carried out in the area of finance taking into account existing guidelines.

The Group distinguishes between liquidity, credit and market risks when measuring and managing significant individual risks.

LIQUIDITY RISK

By liquidity risk in the narrower sense we understand the risk of being unable to meet present or future payment obligations or doing so only on unfavorable terms. The company generates funds primarily through its operating business.

AlzChem Trostberg GmbH acts for the companies of AlzChem Group as a financial coordinator to ensure the most cost-effective and constantly sufficient coverage of financial needs for operations and investments. The required information is provided via consolidated financial planning with additional weekly rolling 14-day liquidity planning and is analyzed on an ongoing basis.

The long-term corporate financing of the AlzChem Group is ensured by the current cash flow from operating business and sufficient short-term and long-term debt financing.

Intercompany financial clearing uses short-term liquidity surpluses of individual Group companies to finance the cash requirements of other Group companies. This contributes to a reduction of the external debt financing volume and an optimization of the cash and capital investments and thus has a positive impact on the Group's interest result.

At the level of the AlzChem Group, consolidated and integrated liquidity planning is prepared on the basis of the latest state of corporate planning/extrapolation together with additional special effects recognizable at short notice.

The financing of the AlzChem Group is essentially provided by the cash and cash equivalents generated in the Group's operating business. In addition, there are credit lines at the house banks amounting to EUR 32,500 thousands (previous

year: EUR 32,500 thousands; 12/31/2017: EUR 27,500 thousands), which have not been utilized in the amount of EUR 19,333 thousands (previous year: EUR 16,919 thousands; 12/31/2017: EUR 11,800 thousands). To finance investments, long-term loans were taken out in the 2011, 2013 and 2015 fiscal years, which were partially repaid prematurely in the fiscal year 2015 in order to utilize a better interest rate structure. In the fiscal year 2017, AlzChem Trostberg GmbH received a further financing commitment totaling EUR 50,730 thousands. The financing is related to the agreed investment in a new production plant and has already been used in the amount of EUR 20,560 thousands (previous years: EUR 0 thousands) as of the balance sheet date. Payment of the remaining loan amount is planned for the first quarter of 2019.

As at the balance sheet date, the open loan portfolio related to these long-term financing transactions amounted to EUR 39,763 thousands (previous year: EUR 23,089 thousands; 12/31/2017: EUR 25,625 thousands). The short-term portion of these loan liabilities amounts to EUR 7,187 thousands (previous year: EUR 6,686 thousands; 12/31/2017: EUR 6,422 thousands) on the balance sheet date. In addition, short-term money market loans with banks were used in the amount of EUR 18,167 thousands (previous year: EUR 15,581 thousands; 12/31/2017: EUR 15,700 thousands). The other short-term financial liabilities from non-derivative financial instruments amounted to EUR 37,054 thousands (previous year: EUR 39,652 thousands; 12/31/2017: EUR 35,870 thousands) as of the balance sheet date.

Another short-term financing instrument is the sale of customer receivables to a factorer. The maximum factoring volume amounted to EUR 30 million for the entire reporting period. As at the balance sheet date, receivables in the amount of EUR 15,755 thousands (previous year: EUR 8,846 thousands; 12/31/2017: EUR 12,660 thousands) were sold to the factorer.

MATURITY ANALYSIS OF FINANCIAL LIABILITIES

The following table shows the maturity structure of contractual, undiscounted cash flows from interest and principal payments on non-derivative financial liabilities:

12/31/2017 in EUR thousands	Up to 1 year	1 to 5 years	Over 5 years	Total
Loan liabilities to banks	22,598	18,773	1,242	42,613
Liabilities from goods and services	28,199	0	0	28,199
Other financial liabilities	7,671	0	0	7,671
Total	58,468	18,773	1,242	78,483

06/30/2018 in EUR thousands	Up to 1 year	1 to 5 years	Over 5 years	Total
Loan liabilities to banks	22,686	16,402	617	39,705
Liabilities from goods and services	30,617	0	0	30,617
Other financial liabilities	9,035	684	0	9,719
Total	62,338	17,086	617	80,041

12/31/2018 in EUR thousands	Up to 1 year	1 to 5 years	Over 5 years	Total
Loan liabilities to banks	26,254	41,280	24,374	91,908
Liabilities from goods and services	30,863	0	0	30,863
Other financial liabilities	6,191	513	0	6,704
Total	63,308	41,793	24,374	129,475

The undiscounted cash flows shown here as of December 31, 2018 are offset by cash inflows of EUR 30,170 thousands from the full disbursement of the new loans granted in the fiscal year 2017 in the first quarter of 2019.

The AlzChem Group has not breached payment agreements with respect to its financial liabilities.

The undiscounted cash outflows are subject to the condition that the repayment of liabilities is based on the earliest due date.

A more detailed presentation of the maturity band "up to one year" is provided for loan liabilities to banks in Note 22, liabilities from financial leases in Note 23, trade payables in Note 24 and other liabilities in Note 25.

Of the amount of primary financial liabilities reported in the Group as at December 31, 2018 in the amount of EUR 95,497 thousands (previous year: EUR 79,007 thousands; 12/31/2017: EUR 77,195 thousands), EUR 16,135 thousands (previous year: EUR 16,536 thousands; 12/31/2017: EUR 16,804 thousands) or 17% (previous year: 21%; 12/31/2017: 22%) is collateralized.

The collateral is composed as follows:

12/31/2017	Loan liabilities to banks in EUR thousands
Land and buildings	11,000
Technical equipment and machinery	5,804
Total	16,804

06/30/2018	Loan liabilities to banks in EUR thousands
Land and buildings	11,000
Technical equipment and machinery	5,536
Total	16,536

12/31/2018	Loan liabilities to banks in EUR thousands
Land and buildings	11,000
Technical equipment and machinery	5,135
Total	16,135

In addition, the majority of the companies are supplied under country-specific retention of title.

If the primary financial liabilities are distributed by region, the following risk concentrations result:

	12/31/2017		06/30/2018	
	in EUR thousands	in %	in EUR thousands	in %
Total	77,195	100	79,007	100
Germany	65,677	85	72,559	92
Europe - EU (without Germany)	5,649	7	4,540	6
Europe - Other	2,332	3	62	0
Rest of the world	3,537	5	1,846	2

CREDIT RISK

Credit risks arise from the complete or partial loss of a customer, for example through insolvency, and within the scope of financial investments. The default risk maximally amounts to the book values of all financial assets. Allowances for trade receivables and other receivables and assets are recognized in accordance with uniform Group rules and cover all identifiable credit risks.

As part of risk management, minimum credit standards and also individual limits on commitments are set for all business partners of AlzChem Group. The amount of the credit limit reflects the creditworthiness of a contracting party and the typical size of the transaction volume with that party. The basis

for this is a limit system defined in the Treasury Guidelines, which is based on the ratings of international rating agencies and on internal credit checks as well as on internally gained experience with the respective contracting parties. In addition, the special limits of trade credit insurance are taken into account for each customer. The AlzChem Group is therefore exposed to credit risks only to a very limited extent.

The following table shows the maximum default risk and collateral held by the AlzChem Group broken down by balance sheet item and valuation category as at the reporting dates 06/30/2018 and 12/31/2018:

06/30/2018	Maximum default risk		Held collateral	Calculated risk
Balance sheet item/valuation category	in EUR thousands	in EUR thousands	in %	in EUR thousands
Financial assets	–	–	–	–
At fair value through profit or loss	20	0	0	20
Other receivables and other assets				
At amortized cost	11,845	0	0	11,845
Trade receivables				
At amortized cost	14,644	71	0	14,573
At fair value through other income	37,692	28,050	74	9,642
Cash and cash equivalents				
At amortized cost	9,844	0	0	9,844
Total financial assets	74,045	28,121	38	45,924

12/31/2018	Maximum default risk		Held collateral	Calculated risk
Balance sheet item/valuation category	in EUR thousands	in EUR thousands	in %	in EUR thousands
Financial assets	–	–	–	–
At fair value through profit or loss	20	0	0	20
Other receivables and other assets				
At amortized cost	11,781	0	0	11,781
Trade receivables				
At amortized cost	13,856	3,430	25	10,426
At fair value through other income	20,495	8,555	42	11,940
Cash and cash equivalents				
At amortized cost	12,857	0	0	12,857
Total financial assets	59,009	11,985	20	47,024

The entire collateral is insured in full by trade credit insurance.

As of December 31, 2017, a total of EUR 12,101 thousands was collateralized in the portfolio of loans and receivables of EUR 61,724 thousands reported in the Group. This corresponds to a collateralized rate of 20%. The entire collateral also existed in full via trade credit insurance. The maximum default risk of the loans and receivables reported thus decreased to EUR 49,632 thousands.

As explained under IV. Explanatory notes on the principles and methods of the consolidated financial statements, identifiable default risks in the receivables portfolio are generally taken into account through the provision of sufficient value adjustments. The development of value adjustments on trade receivables is shown in Note 16.

The following table shows the default risk concentration in the AlzChem-monitored default risk classes of financial assets broken down by balance sheet item and valuation category at the reporting dates 12/31/2018 and 06/30/2018:

06/30/2018	Gross book value	Not due	Overdue in the following time bands		
Balance sheet item/valuation category			1 – 30	31 – 120	>120
Financial assets	–	–	–		
At fair value through profit or loss	20	20	0	0	0
Other receivables and other assets					
At amortized cost	11,845	11,845	0		
Trade receivables					
At amortized cost	14,782	12,267	1,313	1,098	104
At fair value through other income	38,183	35,190	2,069	433	491
Cash and cash equivalents					
At amortized cost	9,844	9,844	0	0	0
Total financial assets	74,674	69,166	3,382	1,531	595

12/31/2018	Gross book value	Not due	Overdue in the following time bands		
Balance sheet item/valuation category			1 – 30	31 – 120	>120
Financial assets	–	–	–		
At fair value through profit or loss	20	20	0	0	0
Other receivables and other assets					
At amortized cost	11,781	11,781	0	0	0
Trade receivables					
At amortized cost	13,971	10,371	916	193	2,491
At fair value through other income	20,987	19,816	413	266	493
Cash and cash equivalents					
At amortized cost	12,857	12,857	0	0	0
Total financial assets	59,616	54,845	1,329	459	2,984

If the total financial assets of the Group are allocated to regions as at the reporting dates 12/31/2018 and 06/30/2018, the following risk concentrations result:

06/30/2018	in EUR thousands	%
Total	74,046	100
Germany	37,912	51
Europe – EU (without Germany)	12,464	17
Europe – Other	1,965	3
Rest of the world	21,705	29

12/31/2018	in EUR thousands	%
Total	59,009	100
Germany	33,978	58
Europe – EU (without Germany)	6,035	10
Europe – Other	805	1
Rest of the world	18,191	31

If the total financial assets of the loans and receivables category of the previous year are distributed by region, the following risk concentrations result:

12/31/2017	in EUR thousands	%
Total	61,724	100
Germany	38,651	63
Europe - EU (without Germany)	5,050	8
Europe - Other	202	0
Rest of the world	17,821	29

MARKET RISKS (INTEREST RATE AND CURRENCY RISKS)

Market risk is the risk of loss that may arise as a result of a change in valuation-relevant market parameters (currency, interest, price).

Currency risks

The Group operates internationally and as a result is exposed to foreign currency risk, which is based on exchange rate changes in various foreign currencies. Foreign currency risks arise from expected future transactions, recognized assets and liabilities and net investments in foreign operations.

The AlzChem Group uses hedges to hedge currency risks arising from future transactions. However, no hedging transactions were used in the two short fiscal years of the calendar year 2018. In the fiscal year 2017, currency futures were used on JPY. At the balance sheet dates shown, however, there were no longer any outstanding obligations from this.

Of the primary financial instruments reported in the Group, EUR 28,412 thousands (previous year: EUR 24,223 thousands; 12/31/2017: EUR 24,763 thousands) relate to financial assets in foreign currency and EUR 4,561 thousands (previous year: EUR 3,240 thousands; 12/31/2017: EUR 4,952 thousands) to financial liabilities denominated in foreign currency. The foreign currency risk concentration is as follows:

Financial assets	12/31/2017		06/30/2018		12/31/2018	
	in EUR thousands	%	in EUR thousands	%	in EUR thousands	%
Total	24,763	100	24,223	100	28,412	100
USD	10,464	42	12,660	52	13,127	46
JPY	8,414	34	2,471	10	2,517	9
SEK	3,560	14	5,109	21	4,967	17
CNY	2,307	10	3,845	16	7,798	27
Other	18	0	138	1	3	0

Financial assets	12/31/2017		06/30/2018		12/31/2018	
	in EUR thousands	%	in EUR thousands	%	in EUR thousands	%
Total	4,952	100	3,240	100	4,561	100
USD	3,238	65	1,494	46	1,842	40
SEK	1,173	24	74	2	1,618	35
JPY	532	11	478	15	71	2
CNY	0	0	1,166	36	1,029	23
Other	9	0	28	1	1	0

To illustrate currency risks, sensitivity analyzes were carried out at the reporting dates, which show the effects of hypothetical changes of relevant risk variables on earnings and equity. The periodic effects are determined by relating the hypothetical changes in the risk variables to the balance sheet of the financial instruments at the balance sheet date. It is assumed that the balance sheet as of the reporting date is representative of the full year. For the analysis of the currency sensitivities, only USD, JPY, CNY and SEK were used for the major currencies of the AlzChem Group.

As of the balance sheet date, the AlzChem Group is exposed to currency risks, which are mainly reflected in the balance sheet items trade receivables, trade payables and cash and cash equivalents.

If the euro had been revalued or depreciated by 10% compared to the major foreign currencies in which the AlzChem Group operates as of December 31, 2018, the reported equity in functional currency would have been EUR -2,167 thousands (previous year: EUR -1,898 thousands; 12/31/2017: EUR -1,800 thousands) and EUR 2,650 thousands (previous year: EUR 2,319 thousands; 12/31/2017: EUR 2,200 thousands).

The hypothetical impact on earnings (before taxes) of EUR -2,167 thousands (previous year: EUR -1,898 thousands; 12/31/2017: EUR -1,800 thousands) and EUR 2,650 thousands (previous year: EUR 2,319 thousands; 12/31/2017: EUR 2,200 thousands) results in detail from the following currency sensitivities:

	12/31/2017		06/30/2018		12/31/2018	
	+10%	-10%	+10%	-10%	+10%	-10%
Total profit and loss	-1,800	2,200	-1,898	2,319	-2,167	2,650
EUR/USD	-657	803	-1,015	1,241	-1,026	1,254
EUR/SEK	-217	265	-244	298	-304	372
EUR/JPY	-716	876	-218	266	-222	272
EUR/CNY	-210	256	-421	514	-615	752
Total other result	0	0	0	0	0	0
Total equity effect	-1,800	2,200	-1,898	2,319	-2,167	2,650

Interest rate risk

Interest rate risks can arise primarily from changes in market interest rates that lead to changes in expected cash flows. In order to minimize interest rate risks, loans are taken out or concluded only long-term and at fixed interest rates, if necessary. Long-term and short-term loan liabilities to banks are concluded with fixed interest rates and are therefore not subject to interest rate risks.

Price risks

Price risks arise mainly in the purchasing area due to changes in the market prices of raw materials, electricity and gas. Price volatilities are counteracted in particular by futures and price escalation clauses. The futures deal with the purchase of electricity exclusively for own needs.

BOOK AND FAIR VALUES OF FINANCIAL INSTRUMENTS

The fair value of a financial instrument is the amount for which an asset is exchanged, or a liability is settled, between knowledgeable, willing parties in an arm's length transaction. The following table presents the book values and fair values of financial assets per measurement category in accordance with IFRS 9 (as of December 31, 2017 according to IAS 39):

12/31/2017 in EUR thousands	At amortized cost		At fair value		Total	
	Available for sale assets	Loans and receivables	Held for trading assets	Derivatives in hedge accounting		
	Book value	Book value	Book value	Book value	Book value	Fair value
Balance sheet items						
Financial assets	20	-	-	-	20	20
Other receivables and other assets	-	13,887	-	-	13,887	13,887
Trade receivables	-	35,035	-	-	35,035	35,035
Cash and cash equivalents	-	12,802	-	-	12,802	12,802
Total financial assets	20	61,724	-	-	61,744	61,744

06/30/2018 in EUR thousands	At amortized cost		At fair value		Total	
	Financial assets measured at acquisition cost	Financial assets measured at fair value through profit or loss with retrospective reclassification in the income statement	Financial assets measured at fair value through profit or loss			
	Book value	Book value	Book value	Book value	Book value	Fair value
Balance sheet items						
Financial assets	-	-	20		20	20
Other receivables and other assets	11,845	-	-		11,845	11,845
Trade receivables	14,644	37,692	-		52,336	52,336
Cash and cash equivalents	9,844	-	-		9,844	9,844
Total financial assets	36,333	37,692	20		74,045	74,045

12/31/2018 in EUR thousands	At amortized cost	At fair value			
	Financial assets measured at acquisition cost	Financial assets measured at fair value through profit or loss with retrospective reclassification in the income statement	Financial assets at fair value through profit or loss	Total	
	Book value	Book value	Book value	Book value	Fair value
Balance sheet items					
Financial assets	-	-	20	20	20
Other receivables and other assets	11,781	-	-	11,781	11,781
Trade receivables	13,856	20,495	-	34,351	34,351
Cash and cash equivalents	12,857	-	-	12,857	12,857
Total financial assets	38,494	20,495	20	59,009	59,009

The following table presents the book values and fair values of financial liabilities per measurement category in accordance with IFRS 9 (as of December 31, 2017 according to IAS 39):

12/31/2017 in EUR thousands	At continued amortized cost	At fair value	Valuation in accordance with IAS 17	Total	
	Other liabilities	Held for trading liabilities			
	Book value	Book value	Book value	Book value	Fair value
Balance sheet items					
Loan liabilities to banks	41,325	-	-	41,325	43,403
Liabilities from finance leases	-	-	223	223	255
Trade payables	28,199	-	-	28,199	28,199
Financial liabilities	-	-	-	-	-
Other liabilities	7,671	-	-	7,671	7,671
Total financial liabilities	77,195	-	223	77,418	79,528

06/30/2018 in EUR thousands	At continued amortized cost	Valuation in accordance with IAS 17	Total	
	Financial liabilities measured at amortized cost		Book value	Fair value
Balance sheet items	Book value	Book value	Book value	Fair value
Loan liabilities to banks	38.671	-	38.671	39.709
Liabilities from finance leases	-	223	223	255
Trade payables	30.617	-	30.617	30.617
Financial liabilities	-	-	-	-
Other liabilities	9.719	-	9.719	9.719
Total financial liabilities	79.007	223	79.230	80.300

12/31/2018 in EUR thousands	At continued amortized cost	Valuation in accordance with IAS 17	Total	
	Financial liabilities measured at amortized cost		Book value	Fair value
Balance sheet items	Book value	Book value	Book value	Fair value
Loan liabilities to banks	57,930	-	57,930	61,233
Liabilities from finance leases	-	-	0	0
Trade payables	30,863	-	30,863	30,863
Financial liabilities	-	-	-	-
Other liabilities	6,704	-	6,704	6,704
Total financial liabilities	95,497	-	95,497	98,800

The fair values of the financial instruments were determined on the basis of the market information available on the balance sheet date and using the methods and premises described below.

Due to the short-term maturity of the financial assets, it is assumed that the fair values approximately correspond to the book values.

The balance sheet items trade accounts payable and other liabilities generally include liabilities with regularly short maturities, so that, as assumed, the fair values approximately correspond to the book values shown.

Loans and advances to banks and finance lease liabilities include short-term and long-term financial liabilities. The fair values of liabilities with residual terms of more than one year are calculated by discounting the cash flows associated with the liabilities, taking into account the current interest rate parameters observable on the market. The individual credit ratings of the Group are taken into account in the form of customary creditworthiness and liquidity spreads in the present value determination. This approach corresponds to level 2 in the hierarchy level of IFRS 13.

As of December 13, 2017, no financial instruments were recognized at fair value in accordance with IAS 39 on a recurring basis.

The first-time application of IFRS 9 as of January 1, 2018 meant that certain financial assets were to be initially measured at fair value for the first time and subsequently allocated to the corresponding categories of IFRS 9. The following table shows these financial assets and their valuation levels according to IFRS 13:

06/30/2018 in EUR thousands

	Level 2	Level 3	Total
Assets			
Trade receivables			
- Valued at fair value through other income	37,692	0	37,692
Financial assets			
- Valued at fair value through profit or loss	0	20	20
Total assets	37,692	20	37,712

12/31/2018 in EUR thousands

	Level 2	Level 3	Total
Assets			
Trade receivables			
- Valued at fair value through other income	20,495	0	20,495
Financial assets			
- Valued at fair value through profit or loss	0	20	20
Total assets	20,495	20	20,515

Financial liabilities were not recognized at fair value during the reporting period.

During the reporting period, there were no reclassifications between the individual hierarchies for determining fair values.

The fair value of trade receivables recognized at fair value is allocated to Level 2. The market values of the trade receivables measured at fair value are derived by reference to transactions in comparable instruments. Specifically, the transaction prices are used in connection with the sale of receivables, where the buyer regularly uses the nominal value. In the case of a default event, these values are corrected by the value adjustment requirement.

The AlzChem Group holds an investment whose fair value is attributable to Level 3 in the category "at fair value through profit or loss". There were no changes due to additions or disposals during the reporting period. Due to the lack of reliable input parameters for a more complex model and the subordinate importance of these investments for the AlzChem Group, the market value was estimated on the basis of the acquisition costs. A deviation of the actual market value from this estimated value within the scope of a realistic range would not have a material impact on the significance of the item for the AlzChem Group or on the net assets, financial position and results of operations of the AlzChem Group. In the reporting period, EUR 41 thousands (previous year: EUR 37 thousands) in income from these financial assets was recognized in the financial result.

NET RESULT FROM FINANCIAL INSTRUMENTS ACCORDING TO VALUATION CATEGORIES

The following table presents the net gains or losses of financial instruments included in the income statement and other comprehensive income by valuation category:

2017 (IAS 39) in EUR thousands	Interest	Currency conversions	Valuation of derivatives	Impairment/ write-ups	Investment income	Net income
Available for sale assets	0	0	0	0	37	37
Loans and receivables	379	1,655	0	-118	0	1,916
Held for trading liabilities	0	0	142	0	0	142
Liabilities at amortized cost	-652	-3,953	0	0	0	-4,605
	-273	-2,298	142	-118	37	-2,510

01/01 – 06/30/2018 in EUR thousands	Interest	Currency conversions	Impairment/ write-ups	Investment income	Net income income statement	Other income
Financial assets measured at acquisition cost	121	-304	-9	0	-192	0
Financial assets at fair value through profit or loss	0	0	0	37	37	0
Financial assets measured at fair value through other income	0	-236	-4	0	-240	4
Financial liabilities measured at amortized cost	-428	551	0	0	123	0
	-307	11	-13	37	-272	4

In the period under review, no interest income was recognized on impaired trade receivables.

DERIVATIVES AND HEDGE ACCOUNTING

No hedging transactions were used in the two short fiscal years of the calendar year 2018. In the fiscal year 2017, currency futures on JPY were used. At the balance sheet dates shown, however, there were no longer any outstanding obligations from this. In fiscal year 2017, the requirements for hedge accounting were not met. Changes in the fair value of open currency futures contracts were recognized in profit or loss through the income statement.

29. ACQUISITIONS

In the two short fiscal years of the calendar year 2018, no company acquisitions had to be shown.

In the fiscal year 2017, the contribution of the shares in AlzChem Trostberg GmbH to AlzChem Group AG was to be reported in accordance with the requirements of IFRS 2 with IFRS 3 as a reverse business combination. This resulted in the presentation in the consolidated financial statements of the fiscal year 2017 as though AlzChem Group AG is the company acquired on the balance sheet.

The first-time inclusion of AlzChem Group AG in these IFRS consolidated financial statements took place on October 2, 2017. AlzChem Group AG did not have its own operating business and has been the parent company of the AlzChem Group since the corporate transaction. The business activities of AlzChem Trostberg GmbH and its subsidiaries thus became the business activities of AlzChem Group AG.

The consideration for the reverse acquisition of AlzChem Group AG was determined in accordance with the provisions of IFRS 2 Share-based Payment and amounted to EUR 775 thousands. It was made in shares in AlzChem Trostberg GmbH and is not subject to any further conditional payments.

The acquired net assets (total assets less total liabilities) of AlzChem Group AG at the acquisition date amounted to EUR -67 thousands.

The difference between the consideration paid for the reverse acquisition of AlzChem Group AG and the net assets (total assets less total liabilities) of AlzChem Group AG received in the context of the reverse acquisition was recognized through profit or loss in the income statement in the amount of EUR 842 thousands. Goodwill under IFRS 3 did not arise.

The acquired assets and liabilities as of the acquisition date are as follows:

in EUR thousands	Fair value
Current assets	
Other receivables and other assets	865
Cash and cash equivalents	25
Liabilities	
Trade payables	-882
Other current liabilities	-75
Net assets	-67

Taking into account the consideration for the acquired assets and liabilities in the amount of EUR 775 thousands, the business combination resulted in a difference of EUR 842 thousands, which was recognized immediately as an expense.

The fair values of the assets and liabilities were always determined on the basis of observable market prices. If market prices could not be determined, income-based approaches or cost-oriented procedures were applied for the valuation of acquired assets and liabilities.

The gross amounts of the acquired receivables correspond to the above-mentioned fair values. At the time of acquisition, there were no findings that receivables could be uncollectible.

It was not possible to disclose information on consolidated sales and consolidated net income until the date of first-time consolidation and from the date of initial consolidation until the balance sheet date of December 31, 2017, since the company had not carried out any operating activities until the date of contribution and only assumed a holding function.

The business combination resulted in a net inflow of cash of EUR 25 thousands. The transaction costs incurred are not included here.

No further company acquisitions have taken place.

VIII. OTHER NOTES

30. OTHER FINANCIAL OBLIGATIONS

As of the balance sheet date of December 31, 2018, there are other financial obligations from rental, lease, leasing and service contracts that cannot be terminated until the end of

the term, which the Group entered into as part of its ordinary business activities. The sum of future payments under the contracts is broken down as follows:

12/31/2017 in EUR thousands	Up to 1 year	1 to 5 years	Over 5 years	Total
Rental and leasing obligations	2,688	3,483	0	6,171
Other obligations	1,315	536	8	1,859
Total	4,003	4,019	8	8,030

06/30/2018 in EUR thousands	Up to 1 year	1 to 5 years	Over 5 years	Total
Rental and leasing obligations	2,691	3,893	0	6,584
Other obligations	812	380	3	1,195
Total	3,503	4,273	3	7,779

12/31/2018 in EUR thousands	Up to 1 year	1 to 5 years	Over 5 years	Total
Rental and leasing obligations	2,891	3,537	0	6,428
Other obligations	1,380	422	13	1,815
Total	4,271	3,959	13	8,243

The total amount of rental and lease obligations from operating leases in the amount of EUR 6,428 thousands (previous year: EUR 6,584 thousands; 12/31/2017: EUR 6,171 thousands) is divided into rental and lease agreements for land, buildings and office space in the amount of EUR 331 thousands (previous year: EUR 397 thousands; 12/31/2017: EUR 20 thousands) and operating lease agreements for technical equipment and machinery in the amount of EUR 5,278 thousands (previous year: EUR 6,187 thousands; 12/31/2017: EUR 6,151 thousands).

Other financial obligations in the amount of EUR 1,815 thousands (previous year: EUR 1,195 thousands; 12/31/2017: EUR 1,859 thousands) include maintenance and service contracts for machinery and equipment, software and other operating and office equipment.

At the balance sheet date of December 31, 2018, there were also order commitments in the amount of EUR 55,312 thousands (previous year: EUR 83,228 thousands; 12/31/2017: EUR 57,868 thousands). These consist primarily of long-term purchase commitments for lime and electricity deliveries and for the new production facility under construction.

The total of future inflows of minimum lease payments from leased objects as at December 31, 2018 amounted to EUR 5,245 thousands (previous year: EUR 5,311 thousands; 12/31/2017: EUR 5,976 thousands).

12/31/2017 in EUR thousands	Up to 1 year	1 to 5 years	Over 5 years	Total
Minimum lease payments from operating lease agreements	1,281	2,297	2,398	5,976
Total	1,281	2,297	2,398	5,976

06/30/2018 in EUR thousands	Up to 1 year	1 to 5 years	Over 5 years	Total
Minimum lease payments from operating lease agreements	1,082	1,881	2,348	5,311
Total	1,082	1,881	2,348	5,311

12/31/2018 in EUR thousands	Up to 1 year	1 to 5 years	Over 5 years	Total
Minimum lease payments from operating lease agreements	1,371	1,577	2,297	5,245
Total	1,371	1,577	2,297	5,245

31. CONTINGENT LIABILITIES

For possible environmental liabilities from the sale of the alloy plant in 2008, there are liabilities of EUR 2.1 million until 2038. However, due to the industrial structure of the site, the company excludes such risk.

The Management Board members Ulli Seibel, Klaus Englmaier and Andreas Niedermaier were also appointed as members of the Management Board of AlzChem Trostberg GmbH in the fiscal year 2017 and were also appointed as members of the Management Board of AlzChem Group AG after the corporate transaction in October 2017.

32. CORPORATE BODIES

The members of the Management Board of AlzChem Group AG in the reporting period were:

- Ulli Seibel, Dipl. Wirtsch.-Ing. (CEO),
- Klaus Englmaier, Dipl. Wirtsch.-Ing. (COO),
- Andreas Niedermaier, Dipl. Wirtsch.-Ing. (FH) (CFO).

The Management Board members are the persons in key positions of the AlzChem Group pursuant to IAS 24. The remuneration of the Management Board members in the reporting period from 07/01 until 12/31/2018 amounted to a total of EUR 792 thousands (previous year: EUR 997 thousands; 2018 – reporting, unaudited: EUR 1,701 thousands). In order to determine the remuneration of the members of the Management Board in the fiscal year 2017, a full-year period was used. Here, the remuneration of the Management Board members Ulli Seibel, Klaus Englmaier and Andreas Niedermaier from the remuneration of AlzChem Trostberg GmbH (until September 2017) and from AlzChem Group AG (since appointment to the Management Board) were included in the fiscal year 2017. The remuneration can be broken down as follows:

	01/01 – 12/31/2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting	07/01 – 12/31/2018
Fixed remuneration	680	340	680	340
Royalties	801	499	889	390
Benefits in kind	47	23	47	24
Post-employment benefits	148	93	131	38
Share-based remuneration (long-term incentive)	25	42	0	0
	1,701	997	1,747	792

The outstanding balances as at 12/31/2018 amount to EUR 390 thousands (previous year: EUR 499 thousands; 12/31/2017: EUR 801 thousands) and are reported under other short-term liabilities. The provisions for post-employment benefits amount to EUR 1,015 thousands (previous year: EUR 972 thousands; 12/31/2017: EUR 995 thousands) for the members of the Board of Executive Board and are shown under provisions for pensions and similar obligations. The provisions for the share-based remuneration in the amount of EUR 5 thousands (previous year: EUR 67 thousands; 12/31/2017: EUR 25 thousands) is reported under long-term other provisions. The individual remuneration is included in the remuneration report in the management report.

The Supervisory Board of the parent company AlzChem Group AG, consisting of four members, convenes at least once every six months in accordance with the Articles of Association.

In the year under review, the following persons belonged to the Supervisory Board:

- Markus Zöllner (Chairman),
- Steve Röper,
- Prof. Dr. Martina Heigl-Murauer,
- Dr. Caspar Freiherr von Schnurbein.

The members of the Supervisory Board Markus Zöllner, Steve Röper, Prof. Dr. Martina Heigl-Murauer and Dr. Caspar Freiherr von Schnurbein were also members of the Supervisory Board of AlzChem Trostberg GmbH throughout the reporting period. In addition, the employee representatives Karl Held and Otto Wolf were appointed as members of the Supervisory Board of AlzChem Trostberg GmbH throughout the reporting period. The aforementioned Supervisory Board members are also persons in key positions of the AlzChem Group pursuant to IAS 24. The members of the Supervisory Board received in the reporting period from 07/01 until 12/31/2018 remuneration in the amount of EUR 75 thousands (previous year: EUR 83 thousands; 2017: EUR 150 thousands; 2018 – reporting, unaudited: EUR 158 thousands), which resulted in outstanding balances at the balance sheet date in the amount of EUR 158 thousands (previous year: EUR 83 thousands; 12/31/2017: EUR 150 thousands). The employee representatives on the Supervisory Board of AlzChem Trostberg GmbH received a standard market remuneration for their activities.

33. SHARE-BASED REMUNERATION

STOCK APPRECIATION RIGHTS 2017

The Management Board members Ulli Seibel, Klaus Englmaier and Andreas Niedermaier have concluded Management Board contracts in which so-called "Stock Appreciation Rights" (SARs) are granted as long-term incentives. The granting of the SAR depended on the contribution of the shares in AlzChem Trostberg GmbH to AlzChem Group AG. A SAR grants a cash payment based on the development of the stock market price of AlzChem Group AG. In total, the Management Board was granted 2,250,000 SARs in the fiscal year 2017. Further SARs have not been granted since then.

The exercise of the SAR can only be carried out if the following conditions apply:

As of January 1, 2020, the SARs may only be exercised if the average of the closing prices of the company's share in the last 30 trading days prior to January 1, 2020 is EUR 0.75 or more above the average closing price of the AlzChem Group AG share in the 60 trading days following the day of transfer, whereby this average price must be at least EUR 2.50. For the beneficiaries, a maximum payout limit in relation to the total LTI of the Management Board of EUR 2,950 thousands was defined.

The cash amount on exercise of the SAR is calculated as the product between the number of SARs exercised and the average closing price of the company's shares during the last 30 trading days prior to January 1, 2020 minus the average closing price of the AlzChem Group AG share during the 60 trading days from 10/09/2017 (inclusive).

At both reporting dates, the number of SARs granted is 2,250,000. The fair value was determined on the basis of a Monte Carlo model, and the expense reported under personnel expenses is distributed on a straight-line basis from the date of grant until the start of the exercise period. In the short fiscal year 2018/II, this plan resulted in personnel expenses of EUR 0 thousands (previous year: EUR 42 thousands; 2017: EUR 25 thousands; 2018 – reporting, unaudited: EUR 0 thousands), which resulted in a provision in the amount of EUR 5 thousands (previous year: EUR 67 thousands; 12/31/2017: EUR 25 thousands). The evaluation was based on the following parameters:

	12/31/2017	06/30/2018	12/31/2018
Remaining term (in years)	2.13	1.63	1.13
Expected volatility	21.61%	20.01%	25.18%
Risk-free interest rate	-0.62%	-0.71%	-0.72%
Dividend yield	2.00%	2.00%	2%
Exercise price	EUR 4.17	EUR 3.39	EUR 3.39
Share price at the valuation point	EUR 2.89	EUR 3.10	EUR 2.22

The expected volatility of the AlzChem share was determined on the basis of the maturity-appropriate historical volatility of comparable companies. As the subscription rights in question (SAR) are not options and the subscription rights represent a payment equal to the share price in effect on exercise, the exercise price for the SAR is EUR 0.00.

34. RELATIONSHIPS WITH RELATED COMPANIES AND PERSONS

Related persons include the key people in AlzChem Group. These are listed by name and relation in Note 32.

The companies controlled by the shareholders LIVIA Corporate Development SE, HDI Vier CE GmbH (both based in Munich) and four two na GmbH, Bichl, and controlled by their shareholders or legal representatives are considered to be related companies of the AlzChem Group.

At the time of the non-cash capital increase in October 2017, AlzChem Group AG had a liability to Livia Corporate Development SE in the amount of EUR 74 thousands, which was paid in the fiscal year 2017 after completion of the corporate transaction.

There were no other transactions with related companies during the reporting period.

35. LITIGATION AND CLAIMS FOR DAMAGES

The AlzChem Group is not involved in legal or arbitration proceedings with a significant influence on the situation of the Group. The existing, generally insignificant procedures are not yet completed or the management does not expect any material obligations from this. In general, the exact amount of a possible obligation or claims cannot be reliably determined due to the high level of uncertainty associated with such procedures.

36. FEES FOR THE AUDITORS

In the current fiscal year, fees totaling EUR 256 thousands (previous year: EUR 232 thousands; 2017: EUR 769 thousands; 2018 – reporting, unaudited: EUR 488 thousands) were incurred for services of the Group auditors as defined in Section 318 HGB. This includes EUR 3 thousands (previous year: EUR 1 thousands; 2017: EUR 178 thousands; 2018 – reporting, unaudited: EUR 1 thousands), which is attributable to the previous year.

in EUR thousands	2017	01/01 – 06/30/2018	01/01 – 12/31/2018 Reporting, unaudited	07/01 – 12/31/2018
Other audit and certification services	481	8	16	8
Audit services	288	206	448	242
Tax advisory services	0	7	7	0
Other services	0	11	17	6
Total	769	232	488	256

The fees for other audit and certification services have been incurred in the current period and in the previous year for regulatory certification services in the energy sector. In the fiscal year 2017, this item mainly comprised certification services in connection with the capital increases, such as the comfort letter and reviews of the interim reports and other financial information published in the securities prospectus. The tax consultancy services in the previous year were incurred for the tax assessment of the tax group formed for the first time. Other services include regulatory advisory services in the energy sector.

37. EVENTS AFTER THE BALANCE SHEET DATE

After the end of the fiscal year, there were no circumstances with a material effect on the net assets, financial position and results of operations until the date of preparation of the consolidated financial statements.

Trostberg, February 28, 2019

AlzChem Group AG

The Management Board



Ulli Seibel
(CEO)



Klaus Englmaier
(COO)



Andreas Niedermaier
(CFO)

AUDIT REPORT OF THE INDEPENDENT AUDITOR

TO THE ALZCHEM GROUP AG, TROSTBERG

AUDIT REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT

Audit opinions

We have audited the Consolidated Financial Statements of AlzChem Group AG, Trostberg, and its subsidiaries (the Group); these were comprised of the Consolidated Balance Sheet as of December 31, 2018, the Consolidated Income Statement, the Consolidated Statement of Comprehensive Income, the Consolidated Statement of Changes in Equity and the Consolidated Cash Flow Statement for the short fiscal year from July 1 to December 31, 2018, and the Notes to the Consolidated Financial Statements, including a summary of significant accounting policies. In addition, we have audited the Group Management Report of AlzChem Group AG for the short fiscal year from July 1 to December 31, 2018. In accordance with German law, we have not examined the content of the components of the Group Management Report referred to in the "Other information" section of our Audit Report.

In our opinion based on the findings of our audit,

- the accompanying Consolidated Financial Statements comply in all material respects with IFRS as adopted by the EU and the additional requirements of German law pursuant to Section 315e (1) HGB and give a true and fair view of the Group's net assets and financial position as of December 31, 2018, and of its results of operations for the short fiscal year from July 1 to December 31, 2018, in accordance with these requirements; and
- the accompanying Group Management Report provides a suitable understanding of the Group's position. In all material respects, the Group Management Report is consistent with the Consolidated Financial Statements, complies with German law and accurately presents the opportunities and risks of future development. Our Audit

Report on the Group Management Report does not extend to the content of the components of the Group Management Report referred to in the section "Other information".

In accordance with Section 322 (3.1) HGB, we declare that our audit has not led to any objections to the correctness of the Consolidated Financial Statements and the Group Management Report.

Basis for audit opinions

We conducted our audit of the Consolidated Financial Statements and the Group Management Report in accordance with Section 317 HGB and the EU Auditor Regulation (537/2014; hereinafter "EU APrVO") and generally accepted German standards for auditing financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). Our responsibility in accordance with these regulations and principles is further described in the section of our Audit Report entitled "Responsibility of the auditor for the audit of the Consolidated Financial Statements and the Group Management Report." We are independent of the Group in accordance with European and German commercial law and professional regulations and have fulfilled our other German professional obligations in accordance with these requirements. In addition, we declare in accordance with Section 10 (2f) EU APrVO that we have not provided any prohibited non-audit services pursuant to Section 5 (1) EU APrVO. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our Audit Report on the Consolidated Financial Statements and the Group Management Report.

Particularly important audit issues in the audit of the Consolidated Financial Statements

Particularly important audit issues are those which, in our opinion, were most significant in our audit of the Consolidated Financial Statements for the short fiscal year from July 1 to December 31, 2018. These matters have been considered in connection with our audit of the Consolidated Financial Statements as a whole and in forming our opinion thereon; we do not express a separate opinion on these matters.

In our opinion, the following matter was most significant in our audit:

① Pension provisions

We have structured our presentation of this particularly important audit issue as follows:

- ① Facts and problems
- ② Audit approach and findings
- ③ Reference to further information

The most important audit issue is as follows:

① Pension provisions

- ① In the Consolidated Financial Statements of AlzChem Group AG, provisions for pensions and similar obligations total EUR 109.9 million (35.1% of the Consolidated Balance Sheet total). Pension provisions comprise obligations from defined benefit plans for retirement, disability and surviving dependents' benefits in the amount of EUR 110.1 million less plan assets in the amount of EUR 0.2 million. Obligations from defined benefit plans are measured using the projected unit credit method. In particular, assumptions must be made about long-term salary and pension trends, average life expectancy and fluctuation. The discount rate on the balance sheet date is derived from the yield on high-quality, currency-congruent corporate bonds with maturities comparable to the expected maturities of the obligations. Extrapolations must be carried out regularly as there are insufficient long-term corporate bonds.

Plan assets are measured at fair value, which in turn is associated with estimation uncertainties. In our opinion, these matters were of particular importance in the context of our audit, as the recognition and measurement of this significant item are based to a significant extent on estimates and assumptions made by the Company's legal representatives.

- ② In the course of our audit, we acknowledged the actuarial reports obtained from the respective Group companies and the professional qualifications of external experts. In view of the specific characteristics of actuarial calculations, our internal specialists for pension valuations supported us in this. Our audit included the valuation method on which valuations are based, the quantity structure and the actuarial valuation parameters applied for standard conformity and appropriateness. In addition, obligation development and expense components were analyzed and plausibility checked in accordance with the actuarial reports in light of the changes that have occurred in the valuation parameters and the quantity structure. For the audit of the fair value of the plan assets, we have assessed evidence from an insurance institution. Based on our audit procedures, we were able to satisfy ourselves that the assessments and assumptions made by the legal representatives are well-founded and adequately documented.
- ③ The Company's disclosures on provisions for pensions and similar obligations are contained in Sections V and VII (No. 20) of the Notes to the Consolidated Financial Statements.

Other information

The legal representatives are responsible for "Other information". "Other information" includes the following components of the Group Management Report that have not been audited for their content:

- the Corporate Governance Statement contained in Section 9 of the Group Management Report in accordance with Section 289f HGB and Section 315d HGB
- the Corporate Governance Report in accordance with Section 3.10 of the German Corporate Governance Code

- the Non-Financial Statement in accordance with Section 289b (1) HGB and Section 315b (1) HGB contained in Section 8 of the Group Management Report.

"Other information" also includes the remaining parts of the Annual Report – without further cross-references to external information – with the exception of the audited Consolidated Financial Statements, the audited Group Management Report and our Audit Report.

Our opinion on the Consolidated Financial Statements and the Group Management Report does not extend to "Other information", and accordingly we do not express an audit opinion or any other form of conclusion on it.

In the context of our audit, we have the responsibility to read "Other information" and to assess whether it includes

- material inconsistencies with the Consolidated Financial Statements, with the Group Management Report or with our understanding gained during the audit, or
- is otherwise materially misrepresented.

Responsibility of the legal representatives and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The legal representatives are responsible for the preparation and fair presentation of the Consolidated Financial Statements in accordance with IFRS as adopted by the EU and the additional requirements of German law pursuant to Section 315e (1) HGB and for the presentation of 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 determined necessary to enable the preparation of the Consolidated Financial Statements that are free from material misstatements, whether intentional or not.

In preparing the Consolidated Financial Statements, the legal representatives are responsible for assessing the Group's ability to continue as a going concern. They are also responsible for disclosing, where relevant, matters relating to the continuation of the Company's activities. In addition, they are responsible for accounting on the basis of the going concern principle, unless there is the intention to liquidate the

Group or to discontinue operations, or if there is no realistic alternative.

The legal representatives are also responsible for the preparation of the Group Management Report, which as a whole provides a suitable view of the Group's position and appropriately presents the opportunities and risks of future development in accordance with German law. Furthermore, the legal representatives are responsible for the precautions and measures (systems) which they have deemed necessary to enable the preparation of a Group Management Report in accordance with the applicable German legal provisions and to provide sufficient suitable evidence for the statements in the Group Management Report.

The Supervisory Board is responsible for monitoring the Group's accounting process for the preparation of the Consolidated Financial Statements and the Group Management Report.

Responsibility of the auditor for the audit of the Consolidated Financial Statements and the Group Management Report

Our objective is to obtain reasonable assurance as to whether the Consolidated Financial Statements as a whole are free from material misstatements, whether intended or not, whether the Group Management Report as a whole provides a suitable view of the Group's position and appropriately presents the opportunities and risks of future development in all material respects in accordance with German law and with the findings of our audit, as well as to issue an Audit Report.

Sufficient certainty is a high degree of certainty, but no guarantee that an audit conducted pursuant to Section 317 HGB and the EU APvVO in accordance with the generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW) will always reveal a material misstatement. Misstatements may result from infringements or inaccuracies and are considered material if they could reasonably be expected to influence the economic decisions of addressees made individually or collectively on the basis of the Consolidated Financial Statements and the Group Management Report.

During the audit, we exercised due discretion and maintained a critical attitude. In addition,

- we identified and assessed the risks of material misstatements, whether intended or not, in the Consolidated Financial Statements and the Group Management Report, planned and performed audit procedures in response to these risks, and obtained audit evidence sufficient and appropriate to form the basis for our Audit Report. The risk that material misrepresentations are not detected is higher in the case of violations than in the case of inaccuracies, since violations may involve fraudulent interaction, forgery, intentional incompleteness, misleading representations or the repeal of internal controls;
- we obtained an understanding of the internal control system relevant to the audit of the Consolidated Financial Statements and of the precautions and measures relevant to the audit of the Group Management Report in order to plan audit procedures that are appropriate under the given circumstances, but not with the aim of expressing an opinion on the effectiveness of these systems;
- we assessed the appropriateness of the accounting policies used by the legal representatives and the reasonableness of the estimated values and related disclosures presented by the legal representatives;
- we drew conclusions about the appropriateness of the going concern principle applied by the legal representatives and, on the basis of the audit evidence obtained, whether there was material uncertainty in connection with events or circumstances that could raise significant doubts about the Group's ability to continue as a going concern. If we came to the conclusion that there was material uncertainty, we were obliged to draw attention to the relevant information in the Consolidated Financial Statements and the Group Management Report in our Audit Report, or if this information is inappropriate, to modify our respective Audit Report. We drew our conclusions based on evidence obtained by the date of our Audit Report. However, future events or circumstances may prevent the Group from continuing its business activities;
- we expressed an opinion on the overall presentation, structure and content of the Consolidated Financial Statements, including the disclosures, and whether the Consolidated Financial Statements present the underlying transactions and events such 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 IFRS as adopted by the EU and the additional requirements of German law pursuant to Section 315e (1) HGB;
- we obtained sufficient suitable audit evidence for the accounting information of the companies or business activities within the Group to enable us to express an opinion on the Consolidated Financial Statements and the Group Management Report. We are responsible for the management, supervision and execution of the audit of the Consolidated Financial Statements. We are solely responsible for our audit opinions;
- we expressed an opinion on the conformity of the Group Management Report with the Consolidated Financial Statements, its discussion of the law and the Group's position as presented by it;
- we performed audit procedures on the forward-looking statements presented by the legal representatives in the Group Management Report. On the basis of sufficient suitable audit evidence, we followed in particular the significant assumptions underlying the forward-looking statements made by the legal representatives and assessed the appropriate derivation of the forward-looking statements from these assumptions. We did not express an independent opinion on these forward-looking statements or on the underlying assumptions. There is a significant unavoidable risk that future events could differ materially from the forward-looking statements.

We discussed with those responsible for monitoring on topics including the planned scope and timing of the audit and significant audit findings, including any deficiencies in the internal control system that we identified during our audit.

We made a statement to supervisors that we complied with the relevant independence requirements and discussed with them all relationships and other matters that can reasonably be expected to affect our independence and the safeguards taken to that end.

From the matters that we have discussed with those responsible for supervision, we determined those matters that were most significant in the audit of the Consolidated

Financial Statements for the current reporting period and are therefore particularly important audit matters. We described these matters in the Auditor's Report, unless laws or other legal provisions exclude public disclosure of the facts.

FURTHER STATUTORY AND LEGAL REQUIREMENTS

Other information referred to in Section 10 EU APrVO

We were elected as Group auditors by the Annual General Meeting on November 22, 2018. We were appointed by the Supervisory Board on December 11, 2018. We have been the Group auditors of AlzChem Group AG, Trostberg, since fiscal year 2017.

We declare that the audit opinions contained in this Audit Report are consistent with the additional report to the Audit Committee under Section 11 EU APrVO (Audit Report).

RESPONSIBLE AUDITOR

The auditor responsible for the audit is Anita Botzenhardt.

Munich, Februar 29, 2019

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Anita Botzenhardt	ppa. Sylvia Eichler
Certified Public Accountant	Certified Public Accountant

LIST OF ABBREVIATIONS

AB	Aktiebolag
€/EUR	Euro
AG	Aktiengesellschaft (stock corporation)
CEO	Chief Executive Officer
CFO	Chief Financial Officer
COO	Chief Operating Officer
CNY	Renminbi Yuan
DBO	Defined Benefit Obligation
EBIT	Earnings before interest and taxes
EBITDA	Earnings before interest, taxes, depreciation and amortization
EFRAG	European Financial Reporting Advisory Group
EU	European Union
GmbH	Gesellschaft mit beschränkter Haftung (Limited Liability Company)
HGB	Handelsgesetzbuch (German Commercial Code)
IAS	International Accounting Standard
IASB	International Accounting Standards Board
IFRIC	International Financial Reporting Interpretations Committee
IFRS	International Financial Reporting Standards
JPY	Yen
LLC	Limited Liability Company
Ltd.	Limited
LTI	Long Term Incentive
mn	million
No.	Number
OCI	Other Comprehensive Income
p.a.	per annum
SAR	Stock Appreciation Rights
S.à.r.l.	Société à responsabilité limitée (Limited Liability Company)
SEK	Swedish Krona
SIC	Standing Interpretations Committee
USA	United States of America
USD	United States Dollar

IMPRINT

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FINANCIAL CALENDAR 2019

FINANCIAL CALENDAR

March 29, 2019	Annual Report 2018 (July 1 - December 31, 2018) Conference Call - Annual Report 2018 (July 1 - December 31, 2018)
May 10, 2019	Quarterly Statement 1st Quarter 2019 Conference Call - Quarterly Statement 1st Quarter
May 14, 2019	General Meeting 2019
May 15, 2019	Frühjahrskonferenz 2019, Frankfurt
August 14, 2019	Half-Year Financial Report 2019 Conference Call - Half-Year Financial Report 2019
November 14, 2019	Quarterly Statement 3rd Quarter 2019 Conference Call - Quarterly Statement 3rd Quarter 2019
November 25 - 27, 2019	Deutsches Eigenkapitalforum

REMARKS

This report may contain forward-looking statements based on current assumptions and forecasts made by the management of AlzChem Group AG. Such statements are subject to risks and uncertainties. These and other factors may cause actual results, financial position, development or performance of the company to differ materially from the estimates made here. The company assumes no liability whatsoever to update such forward-looking statements or to conform them to future events or developments.

Only the German version of this Annual Report is legally binding.

AlzChem Group AG

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