

#### MANAGEMENT REPORT OF NABALTEC AG FOR THE FINANCIAL YEAR 2018

# 1. FOUNDATIONS OF THE COMPANY 1.1 THE COMPANY'S BUSINESS MODEL

# **Business Operations**

Nabaltec AG develops, manufactures and distributes environmentally friendly and simultaneously highly specialized products based on mineral raw materials, in particular on the basis of aluminum hydroxide (ATH) and aluminum oxide. The company belongs to the world's leading suppliers of functional fillers and specialty alumina. The production capacity entails approximately 260,000 tons per annum (t.p.a.) with an export share of over 70%.

The range of applications of Nabaltec products is highly diversified:

- flame-retardant filling material for the plastics industry used e.g. for cabling in tunnels, airports, high-rises and electronic equipment;
- fillers and additives, e.g. as white pigments in paint or as an all-natural barrier layer in foil:
- ceramic raw materials applied in the refractory industry, in technical ceramics and abrasives industry;
- highly specialized ceramic raw materials for ballistics, microelectronics and ceramic filters

Whenever applications require a high degree of quality, safety, environmental friendliness and product duration, Nabaltec products are always preferred. It is the combination of these important characteristics that guarantee Nabaltec products outstanding growth prospects. The main drivers are the globally increased environmental consciousness, comprehensive international and national regulations and the industry's self-imposed obligation. Flame protection within the plastics and cable & wire industry will continue to grow dynamically in the years to come, which is supported by recent market research results. In order to benefit from this trend disproportionately high, production capacity for environmentally friendly, flame-retardant fillers was specifically expanded. Today, Nabaltec is one of the world's leading suppliers in this area.

Nabaltec has production sites in the two most important demand-driven markets in Europe and through its subsidiaries in USA. This permits Nabaltec to produce cost-efficiently in customer proximity and, therefore, to serve the most significant markets directly.

In the "Specialty Alumina" product segment as well, Nabaltec products have excellent growth potential thanks to a wide range of applications and relevant target markets. The market for reactive aluminum oxide is developing over proportionally well due to increasing refractory industry requirements. Markets for technical ceramics and the abrasive industry also continue showing solid growth.

Nabaltec maintains very close contacts with customers through its sales team and its technical support staff. All sales team members have specialized technical and chemical expertise, so that expert advice is guaranteed at all times. This proximity to clients is fundamental for the concerted, client-specific design and development of the products.

## **Corporate Structure**

Nabaltec, based in Schwandorf, was formed in 1994 and, in 1995, acquired the specialty alumina division of VAW aluminum AG. In September 2006, the company was transformed into a stock corporation and has been listed in the Open Market division of the Frankfurt stock exchange since November 2006 and has consistently been traded in high-quality segments of the exchange, including the Scale segment as of March 2017.

Nabaltec AG holds a 100% interest in Nashtec LLC (USA) through Nabaltec USA Corporation, which was formed in 2018. In the past, Nashtec LLC purchased key raw materials, particularly the aluminum hydroxide required for the production of APYRAL®, from Sherwin Alumina LLC, a wholly-owned subsidiary of Allied Alumina LLC and former minority shareholder of Nashtec LLC. On 11 January 2016, Sherwin Alumina LLC filed for bankruptcy under Chapter 11 of the United States Bankruptcy Code ("Chapter 11 procedure") with the United States Federal Bankruptcy Court in Corpus Christi, Texas, USA. Sherwin Alumina has discontinued operations because of the Chapter 11 procedure and Nabaltec AG's US subsidiary Nashtec was forced to halt production at the end of August 2016. Since then, customers which had previously been supplied by Nashtec have been receiving their products from Germany. In March 2017, the remaining 49% of shares in Nashtec were acquired by Nabaltec with the goal of continuing to operate Nashtec based on a stand-alone solution. Nashtec resumed production at the end of 2018.

Land and buildings in Chattanooga, Tennessee were acquired in 2018, paving the way for the construction of a production facility for refined hydroxides with an annual capacity of about 30,000 tons. To this end, Naprotec LLC was formed as a production company and its shares were also contributed to the newly formed subsidiary, Nabaltec USA Corporation. Nabaltec will be significantly expanding its product portfolio in the US for non-halogenated flame-retardant applications. The investment volume for the first stage of the project is expected to be around USD 12 million. Current plans call for the facility to go online in the second half of 2019. Nabaltec expects the project to have a positive impact on earnings one year after the facility goes online.

In addition to administrative functions such as accounting for all US companies, sales activities for Nabaltec Group in North America will also be concentrated in Nabaltec USA Corporation.

In order to strengthen its operations in the Southeast Asian market, Nabaltec established a wholly-owned subsidiary in 2016, Nabaltec Asia Pacific K.K, based in Tokyo, Japan, which will market and distribute Nabaltec AG's entire portfolio of products.

Nabaltec (Shanghai) Trading Co., Ltd., based in Shanghai, China, was formed in October 2018. This company is a wholly-owned subsidiary of Nabaltec AG and maintains an incountry warehouse, allowing it to offer shorter delivery times and invoicing in the national currency.

Nabaltec AG did not have any other participations or subsidiaries as of 31 December 2018.

Reflecting the characteristics of the target and buyers' markets, Nabaltec AG's operations are divided as of 2017 into product segments, each in turn comprised of market segments.

PRODUCT SEGMENTS: "FUNCTIONAL FILLERS" AND "SPECIALTY ALUMINA" Market segments:

- Wire & Cable
- Resin & Dispersion
- Rubber & Elastomers
- Battery
- Adsorbens & Catalysts
- Refractory
- Technical Ceramics
- Polishing
- Others

### 1.2 OBJECTIVES AND STRATEGIES

For the further development of the company, Nabaltec AG has defined the following objectives and core strategic areas:

# 1. Global growth strategy in target markets with a focus on sustained double-digit EBIT margins

Fire safety concerns within the plastics and cable & wire industry will continue growing in the years to come, which is supported by recent market research results by among others Roskill and Freedonia. In order to benefit from this trend disproportionately high, production capacity for aluminum hydroxide both at the Schwandorf site and in the US were specifically expanded. Electric mobility is also gaining importance. With our boehmite and fine-ground reactive alumina, we can make an important contribution towards functional safety in the production of lithium ion batteries. As a result, we are significantly expanding production capacity in this area as well. Today, Nabaltec is already one of the world's leading suppliers in this area.

Stricter quality requirements in the refractory industry have resulted in very strong growth in reactive aluminum oxides. Accordingly, we are continuing to expand our capacity in this product area. Markets for technical ceramics and the abrasives industry also continue showing solid growth. Nabaltec responds to this growth by expanding its marketing activities.

Nabaltec has for many years been a leading independent supplier of its own ready-to-press aluminum oxide-based ceramic bodies for highly specialized applications, due to amongst others the state-of-the-art production facility in Schwandorf.

# 2. Strategic alignment towards growth markets

Environmentally friendly and non-hazardous products and processing solutions are globally advancing forward. This trend is supported in part by voluntary industry initiatives, as well as by the requirements of laws and standards. With an export share of around 70%, we already profit from these worldwide trends. By adopting a deliberate global growth strategy and expanding our capacity, we are pursuing the goal of posting double-digit EBIT margins on a sustained basis.

# 3. Optimizing customer benefits by continuously improving production processes and product quality

Through constant exchange with the customers, the company's product and process development activities are continuously optimized and directed toward specific customer requirements. Product improvements and upscaling take place in close consultation with customers. This results in processing advantages for the customer, such as a simpler and faster fabrication.

Nabaltec continuously invests in internal research and development departments, the analysis center, its own testing facility and a pilot plant. Nabaltec has also been collaborating with various research institutions for years, as well as taking part in research consortia. Optimizing processes include efficient energy consumption as well as comprehensive environmental protection, both aspects of which represent major competitive factors. Nabaltec has taken extensive measures in order to reduce energy consumption, operate with virtually no waste water and minimize emissions.

# 4. Systematic expansion of the product range

Nabaltec develops its own product portfolio along three dimensions:

- through development of new products, often in close collaboration with key customers. Examples include boehmites or reactive alumina for alternative energy storage and electric mobility;
- through focused development of existing products with a view towards improving performance, which is generally designed to meet specific customer requirements. The GRANALOX® product family is an example of this;
- through further development of existing products for entirely new applications, such as thermally conductive plastics.

Thanks to its own testing facility at the Schwandorf site, Nabaltec is optimally equipped to transition newly developed products from its laboratories and testing centers into sample production of up to several hundred tons. As a result, the pilot plant can serve as the basis for industrial product launches in addition to its role in process development.

# 5. Flexible and quick adaption of capacities and cost structures thanks to highresolution controlling processes

Nabaltec pursues a margin-oriented capacity policy. Fluctuations in demand and changes in batch size have to be taken into account as soon as possible if production processes are to remain profitable, since production processes in the specialty chemicals sector cannot be varied without inherent delays. Therefore, Nabaltec has developed a fast-acting and highly differentiated controlling system, so that it has at its disposal the appropriate instruments so as to align costs to a large extent with fluctuations in demand and batch size.

# 6. Securing future investments through a strong financing base

In order to take full advantage of market potential relating to both product segments, further investments are necessary. This investment activity is at the same time a high market entry barrier for potential new suppliers. In order to ensure that the required investment capital will be available, Nabaltec relies on a financing base consisting of a balanced mix of equity and debt.

#### 1.3 CONTROLLING

Nabaltec AG has implemented a companywide incentive scheme, assigning responsibilities and defining specific objectives for even for the smallest units of the company. Comprehensive earnings, cost and performance forecasts facilitate analysis for achievement of the company's objectives. Comparisons of estimates against results are available online, indicating a need for action at an early stage and promoting the process of agreement on targets. Comparisons of estimates against results are conducted on a monthly basis for all cost centers and cost units.

"Navision" ERP software is used in all commercial departments. All cost accounting at Nabaltec, including earnings statements, are presented based on the "macs complete" controlling software. Revenues and EBIT margin are the key control parameters which are used as a basis for business decisions. Performance indicators which are derived from these figures, such as ROCE, ROI, amortization terms, free cash flow and contribution margins, are also used.

#### 1.4 BASICS OF THE REMUNERATION SYSTEM FOR CORPORATE OFFICERS

# **The Management Board**

The Management Board agreements were revised on 19 June 2016 by resolution of the Supervisory Board. The remuneration of Management Board members includes fixed and variable components; the latter are based on annual business performance on a recurring basis and are capped relative to the member's fixed annual salary. This remuneration covers all activities of the individual Management Board members for the company and its subsidiaries and holdings.

The assessment basis for variable compensation is calculated as follows: the Management Board Chairman receives a profit share equal to 4%, and each other member receives 2%, of the amount by which pre-tax consolidated net income in accordance with IFRS, adjusted for non-controlling interests and subtracting losses carried forward from the year before, exceeds EUR 4.2 million. Variable compensation is capped at 100% of the fixed annual salary.

As a part of the fixed compensation component, the company provides Management Board members with ancillary benefits in addition to the fixed salary, such as use of a company car, accident insurance, health and long-term care insurance subsidies which conform to the statutory rules for employees and continued payment of wages for a limited time in case of illness and death. The Management Board Chairman also receives a pension upon retirement amounting to up to 67%, and all other Management Board members receive up to 50%, of their last fixed gross salary, and surviving spouses are entitled to up to 75% of the pension as a widow's pension for the Management Board Chairman and up to 60% for all other Management Board members.

Management Board members are covered by a D&O insurance policy with an insured sum of EUR 20.0 million, with a deductible amounting to 10% of the claim, as required by law, up to one and half times the amount of their fixed annual compensation.

# The Supervisory Board

Remuneration of Supervisory Board members was last revised by resolution of the shareholders at the general meeting of 27 June 2017. Remuneration is comprised of a fixed salary in the amount of EUR 10,000.00 a year and a fee of EUR 1,500.00 per meeting of the Supervisory Board, with the Chairman of the Supervisory Board receiving one and a half times the sums mentioned above. If the term of a Supervisory Board member begins or ends over the course of a financial year, the member is entitled to fixed remuneration for that year on a prorated basis.

In the interest of the company, the members of the Supervisory Board are covered by a D&O insurance policy, which has been taken out by the company, with an insured sum of up to EUR 20.0 million, and with no deductible for the insured Supervisory Board members. Insurance premiums are paid by the company.

#### 1.5 RESEARCH AND DEVELOPMENT

Research and development activities play a central role within the context of Nabaltec AG's overall strategy. A key element of the research and development strategy is close collaboration and joint development efforts with customers. In all product segments, the focus is on providing customers with an optimal product and helping them achieve a competitive advantage. As a leading supplier of highly specialized products, Nabaltec considers research and development to be one of its central core competencies. Research and development expenses accounted for 2.1% of revenues in 2018.

Close collaboration with customers is a common thread for all functional areas and processes. Application-oriented sales allows us to identify specific customer requirements at an early stage and incorporate them immediately into development work for application engineering, process development and production. This is true both for the optimization of established products and for the development of new products.

In order to ensure continued success in a global market, the optimization of production processes is also a high priority for R&D work. Efficient use of energy and resources are the key drivers in this regard.

Trend scouting and megatrend calibration methods are used to identify developments extending beyond existing markets at an early date. These methods use the products offered by commercial vendors as well as inter-departmental internal workshops. Relationships are cultivated with many different universities and institutions in order to examine trends which are identified as relevant for Nabaltec. A total of 13 public-funded industrial collective research projects were worked on by Nabaltec employees in 2018, working through project committees. Research partners include RWTH Aachen University (Institute for Textile Technology), the Freiberg University of Technology, the Fraunhofer Institute for Environmental, Safety and Energy Technology (UMSICHT) in Oberhausen, the Fraunhofer Institute for Structural Durability, Plastics Division, in Darmstadt, the Fraunhofer Institute for Ceramic Technologies and Systems in Dresden, the German Institute for Refractories and Ceramics (*Deutsche Institut für Feuerfest und Keramik GmbH*) and *Forschungsgemeinschaft Feuerfest*, a refractory products research association, both in Höhr-Grenzhausen, and the Federal Institute for Materials Research and Testing in Berlin.

An expression of Nabaltec's strong commitment to research and development is its receipt of various national and international awards and distinctions for innovativeness. For example, Nabaltec AG has been recognized as one of the 100 most innovative mid-sized German companies eleven times and has received awards for innovativeness in multiple areas.

Aside from searching for new products, processes and applications, the focus of Nabaltec's research and development activities is above all on improving and refining existing products and processes. The rules are defined by customer and market requirements, which are constantly changing. These requirements must be met at all times, while at the same time supplementing and extending the product range in target markets.

Research and development in the 2018 reporting year was marked in particular by challenges relating to electric mobility. Separator film for lithium ion batteries with ceramic coating had very high growth rates in 2018. Nabaltec's boehmite products have been further optimized in order to meet the growing demand and stricter quality requirements, and key developments have been achieved in the course of production. At the same time, key fundamental developments have been launched in order to meet the requirements of the next generation of separator film. A core project involved product and process development for an aluminum hydroxide type which is optimized for use in lithium ion batteries, and which will enter production in 2019.

Another key aspect of e-mobility is managing the heat generated by battery systems. Due to the constant reduction in charging times and, in particular, to plans for a dense network of rapid charging stations, the issue of thermally conductive materials is becoming increasingly important. Nabaltec has devoted itself to the issue of thermally conductive fillers for some years now, and was able to report substantial progress in 2018 in the development of products and applications. For example, an aluminum hydroxide type which is optimized specifically for the "gap filler" application was successfully placed on the market. The first product of a new aluminum hydroxide product family for thermally conductive plastics is currently in the process of obtaining approval from end customers. We expect to begin commercial deliveries in this area as early as 2020.

Mineral-based flame retardants continue to ensure growth for Nabaltec's innovative and ecofriendly products. Like 2017, 2018 was shaped by the final introduction of the CPR (Construction Products Regulation) within the EU on 1 July 2017. The issues of flue gas development, flue gas corrosiveness and flue gas toxicity have become more important with the adoption of this new Regulation. As a result, a product was launched in 2018 in conjunction with pinfa (the Phosphorous, Inorganic & Nitrogen Flame Retardant Association) in order to generate data on these measures. As expected, the French institution which was commissioned to perform the study has demonstrated that Nabaltec's mineral-based flame retardants have the effect of reducing flue gas density and toxicity. Aluminum hydroxide and boehmite have ideal properties for reducing flue gas and have the potential to significantly reduce the volume of toxic gas which is released.

Nabaltec will intensify these studies in 2019, focusing on showing the positive impact of the new synergists for flame retardants. These studies have been well-received all over the world, as the trend towards standardized products and applications has had the effect of

inducing non-European markets (such as South America) to follow Europe's example and adopt European standards.

The pilot plant which was situated in Kelheim through 2017 has been moved to Schwandorf. The pilot production plant has been significantly expanded and is scheduled to go online in the second quarter of 2019. The application engineering laboratories and testing facilities at the Schwandorf site were expanded once again in 2018. Testing procedures for ceramic bodies and materials in particular have been significantly expanded. This shortens development times, since it means that all key processes can be run at the Schwandorf site. Other highlights in this regard were the relocation and expansion of the fire safety lab and improvements to polishing and analysis processes.

The refractory industry experienced very dynamic growth in 2018. Reactive alumina already play a key role in the creation of high-performance monolithic and shaped products, and a newly developed viscosity-optimized quality was added in 2018. After receiving industrial approval, the patented binders in the NABACAST<sup>®</sup> product family have begun to generate revenues from key customers. Our close application engineering support in the development and modification of customer formulas has been a key factor in this regard.

The field of engineering ceramics is also characterized by a highly dynamic market environment, and development projects in this area have also produced successes. Collaboration with customers in connection with the GRANALOX® product family, which has traditionally been highly individualized, was characterized by a geographical extension of the customer base to Asian users in 2018. The successes in this area include the development of new ultra-pure materials and obtaining the first approvals. The newly developed products have been successfully placed in automotive applications in particular, in addition to applications in the electronics sector.

The improvements in processing properties which were originally requested by our European customers were applied to all key products in 2018. These modified products allow our customers to save on the costs of further automating their production flows.

The newly developed GRANALOX® type, which enables final components with high sintered densities, hardness and break resistance. Both development priorities underscore Nabaltec's unique selling proposition as a highly valued system partner in engineering ceramics.

# 2. FINANCIAL REPORT

#### 2.1 MACROECONOMIC AND INDUSTRY-RELATED CONDITIONS

# 2.1.1 MACROECONOMIC SITUATION

Global economic growth was down slightly in 2018, falling to 3.7% from 3.8% the year before. This was reported by the International Monetary Fund (IMF) in January 2019, confirming its 2018 forecast from October. The slowdown in global economic growth was particularly noticeable in the second half of 2018. In the IMF's estimation, this slowdown was particularly attributable to a downturn in large economies such as Europe and Asia. The conflict between the US and China over market access and intellectual property rights has had a negative impact on global economic growth since the second half of 2018, while at the same time production in the Euro zone has weakened, due above all to negative effects from

the automotive industry, and particularly the introduction of new exhaust standards in Germany. Although the slump in automotive production will presumably be only temporary, the performance of the job market is further indication that the European economy as a whole has cooled down. The IMF expects to see European GDP growth of 1.8% in 2018.

On the other hand, the US economy proved relatively robust in 2018. Private consumer spending increased significantly in the US, although the pace of investment growth decreased noticeably in the second half of the year.

The German economy grew at a rate of just 1.5% in 2018, below the forecast of 1.8% announced by the Federal Statistical Office in autumn of 2018. This significantly weaker performance is attributable to the weakening of the global economy, sales problems in the automotive industry and the extended drought in Germany, with low water levels, resulting in a loss of transport capacity. These problems were exacerbated by extraordinary effects such as the flu outbreak and strikes. As in the year before, growth in 2018 was driven by domestic consumer spending in both the private and government sectors, as well as by construction investments, particularly in public civil engineering projects.

#### 2.1.2 INDUSTRY DEVELOPMENT

2018 was a good year for the German chemical industry. Production in the industry was up 2.5% and sales were up 4.5%, to EUR 204 billion. This was due in part to chemicals prices, which increased by 2%. Employment in the industry reached a record high of 462,000 in 2018.

The long-term trend of growing demand for non-halogenated flame-retardant fillers, and aluminum hydroxide in particular, remains intact. Independent market forecasts call for annual global demand growth of 4.4% through 2023 (ATH-based, source: Freedonia). Market growth is stimulated above all by the growing public awareness as to the need for fire safety as well as the ongoing replacement of potentially hazardous flame retardants with ecofriendly, halogen-free aluminum hydroxide. This trend has had a particularly positive effect on the fine precipitated aluminum hydroxide product segment. The long-term outlook for boehmite is also excellent, in the estimation of Nabaltec AG, with a wide variety of applications, above all in electric vehicles.

In the "Specialty Alumina" product segment, the refractory market is shaped by demand within the steel industry. Nabaltec was able to record significant gains, especially with manufacturers of refractory products in Europe, and particularly for reactive aluminum oxides. In the technical ceramics segment, sales of ceramic bodies have increased significantly. Given the trend towards high-quality refractory products and wear-resistant ceramics, market experts expect solid market growth in the coming years, with an expected annual growth rate of 4% through 2021 in refractory products and technical ceramics (source: Roskill).

#### 2.2 COURSE OF BUSINESS

Nabaltec AG's successful performance in prior years continued in the year 2018, was revenues were up 4.8% from the year before, to EUR 177.4 million (2017: EUR 169.3 million). Revenues in each quarter were up from the year before. This growth was recorded despite the fact that the US subsidiary Nashtec contributed no revenues in 2018.

Both product segments, "Functional Fillers" and "Specialty Alumina," contributed to the positive revenue trend in 2018. Revenues in the "Functional Fillers" product segment amounted to EUR 114.6 million for the year, up 2.1% from the year before (EUR 112.2 million). Revenues in the "Specialty Alumina" product segment grew at a faster pace, climbing 10.1% to EUR 62.1 million (2017: EUR 56.4 million). Revenues which are not attributable to either product segment amounted to EUR 0.6 million in 2018 (2017: EUR 0.7 million).

Operating profit (EBIT) was up 28.1%, to EUR 21.4 million (2017: EUR 16.7 million).

Revenue forecast for 2018 was met. The EBIT margin slightly exceeded the forecast, which called for a margin in the high single digits.

# 2.3 OVERVIEW OF THE COURSE OF BUSINESS 2.3.1 EARNINGS POSITION

Nabaltec AG earned EUR 177.4 million in revenues in Financial Year 2018, for a strong 4.8% gain over the year before (2017: EUR 169.3 million). The key revenue drivers were price increases and improvements in the product mix over both product segments, as well as volume effects in the "Specialty Alumina" product segment. Revenues in the boehmite product area increased at an especially fast pace over the year before, climbing 52.2%. Nabaltec AG's export ratio was 73.6% in 2018, compared to 72.9% in 2017.

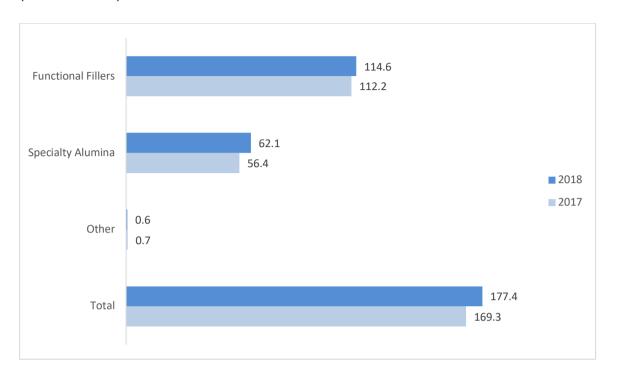
All four quarters contributed equally to the strong revenue growth. Revenues in the first quarter of 2018 amounted to EUR 45.4 million, even higher than the excellent value posted in the same quarter of the previous year, EUR 43.7 million. Revenues in the second quarter were EUR 46.7 million, exceeding both the number posted in the same quarter of the previous year and the number for the previous quarter. In the second half of the year, revenues amounted to EUR 43.7 million in the third quarter and EUR 41.6 million in the fourth quarter, both up from 2017.

Incoming orders amounted to EUR 172.7 million for the year as a whole, compared to EUR 188.1 million in the previous year. Nabaltec ended the year 2018 with EUR 52.6 million in orders on hand, compared to EUR 56.6 million in the year before.

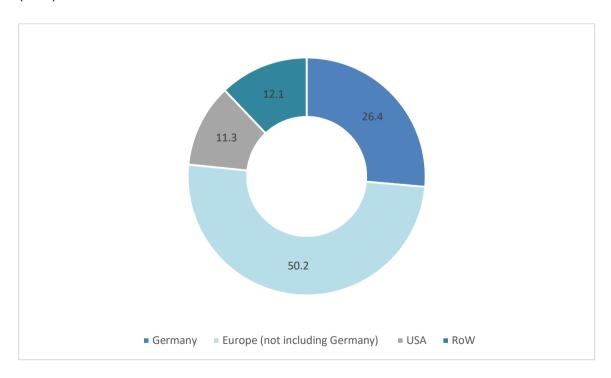
Revenues in the "Functional Fillers" product segment amounted to EUR 114.6 million for the year, up 2.1% from the year before, when revenues were EUR 112.2 million. This gain is attributable in particular to price increases and improvements in the product mix.

With high demand, the "Specialty Alumina" product segment posted strong performance in all product areas in 2018, with revenues climbing to EUR 62.1 million from EUR 56.4 million in the previous year, for a gain of 10.1%.

# Revenues by product segment, 2018 (in EUR million)



# Revenues by region. 2018 (in %)



Nabaltec AG's total performance was up 3.6% in 2018, from EUR 170.7 million to EUR 176.8 million. This growth is primarily attributable to the strong revenue growth.

Other operating income amounted to EUR 2.0 million and consisted primarily of gains from the EUR/USD exchange rate in the amount of EUR 0.8 million.

Operating expense ratios as a percentage of total performance							
2018 2017							
Cost of materials	47.5%	48.9%					
Personnel expenses	19.0%	18.7%					
Other operating expenses	16.6%	17.0%					

The cost of materials ratio (cost of materials as a percentage of total performance) decreased to 47.5% (2017: 48.9%). In absolute terms, gross earnings amounted to EUR 95.0 million, up EUR 6.7 million from last year's value of EUR 88.3 million. The increase in gross earnings is primarily attributable to price increases and an improved product mix.

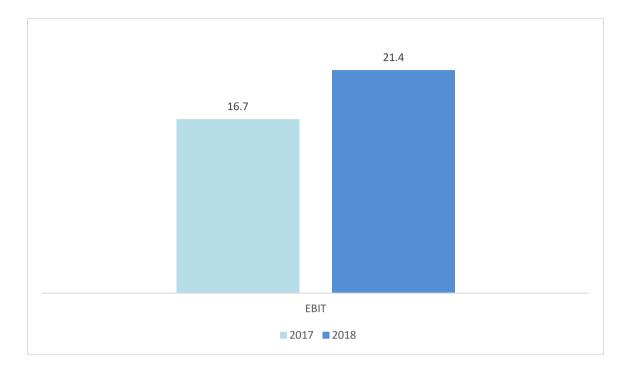
The personnel expense ratio (personnel expenses as a percentage of total performance) increased slightly in 2018, from 18.7% in the previous year to 19.0%. The number of employees increased from 470 on 31 December 2017 to 485 on 31 December 2018.

Other operating expenses increased from EUR 29.1 million to EUR 29.3 million, due primarily to higher freight costs and repair costs. The ratio of other operating expenses to total performance decreased slightly, from 17.0% in the previous year to 16.6%.

Earnings before interest, taxes, depreciation and amortization (EBITDA) were up 17.6%, from EUR 27.3 million to EUR 32.1 million.

Adjusting for EUR 10.7 million in depreciation and amortization in Financial Year 2018, Nabaltec's operating profit (EBIT) came to EUR 21.4 million, compared to EUR 16.7 million in the year before.

# EBIT (in EUR million)



Earnings before taxes (EBT) amounted to EUR 18.9 million in the reporting year (2017: EUR 13.2 million). This includes net interest income of EUR -2.5 million in 2018. In the previous year, net interest income was EUR -3.5 million.

Tax expenses came to EUR 6.1 million in Financial Year 2018 (2017: EUR 4.5 million).

Net income came to EUR 12.7 million last year, compared to EUR 8.6 million the year before.

#### 2.3.2 LIQUIDITY POSITION

Financial management is assigned to the Management Board directly and primarily includes managing the capital structure, managing liquidity, interest rate and currency hedging and obtaining funds. The subsidiaries are integrated into the Group's liquidity management system.

Nabaltec counters fluctuations in the USD/EUR exchange rate by using exchange rate hedging instruments when such a course is indicated due to the volatility of the markets or the scope of the foreign exchange transactions.

Liquid funds in the amount of EUR 42.9 million were made available to the subsidiaries through the reporting date (2017: EUR 22.6 million). The interest rates and contractual terms conform to the standards for mid-sized companies. Nabaltec also uses various interest rate hedging instruments with a mid- to long-term interest rate lock period (e.g. interest rate swaps) on a case-by-case basis in connection with variable-interest outside financing.

Funding to finance growth and investments is secured by means of loans against borrower's notes, the share capital increase in 2017 and through operating cash flow.

#### 2.3.2.1 CAPITAL STRUCTURE

Nabaltec AG's subscribed capital is EUR 8.8 million. Shareholders' equity increased to EUR 88.0 million as of 31 December 2018, up from EUR 76.9 million on 31 December 2017. The equity ratio improved from 39.3% on 31 December 2017 to 42.8% on 31 December 2018. This represents a very strong capital base by industry standards.

Liabilities decreased from EUR 85.5 million on 31 December 2017 to EUR 81.6 million on 31 December 2018

Selected balance sheet items as a percentage of total assets:

	31 Dec. 2018	31 Dec. 2017
Shareholders' equity	42.8%	39.3%
Provisions	17.5%	17.0%
Liabilities	39.7%	43.7%

## Other off-balance sheet financing instruments

Nabaltec has, to a minor extent, concluded lease agreements with terms of up to five years. Nabaltec also make uses of factoring on a continuous basis for trade receivables, in part as a way of minimizing default risks. Nabaltec Group does not use any other instruments which can be categorized as financial engineering.

#### 2.3.2.2 INVESTMENTS

Nabaltec Group made EUR 40.2 million in investments last year, compared to EUR 31.3 million the year before. Investments were made primarily in financial assets to finance investments in the subsidiaries Nashtec and Naprotec. Additional investments were made in infrastructure projects and technical equipment and machinery for capacity expansion, process optimization and replacement investments at the Schwandorf site.

## 2.3.2.3 FINANCIAL POSITION

Total assets increased from EUR 195.7 million on 31 December 2017 to EUR 205.4 million.

Key balance sheet assets as a percentage of total assets:

31	Dec. 2018	31 Dec. 2017
Non-current assets	65.8%	57.3%
thereof: Property, plant and equipment	39.6%	42.2%
Current assets	34.2%	42.6%
thereof: Inventories	14.5%	14.9%

# 2.4 FINANCIAL AND NON-FINANCIAL PERFORMANCE INDICATORS 2.4.1 FINANCIAL PERFORMANCE INDICATORS

The success of Nabaltec AG's operations is based on a long-term growth strategy. The company is managed in such a way as to ensure profitable and capital-efficient growth. Therefore, significant importance is ascribed to revenue growth and EBIT margin as performance indicators. Accordingly, the focus is on continually monitoring and optimizing

these two major financial performance indicators. These major financial performance indicators represent the basis for operational decisions and for forecasting as well.

Nabaltec AG also uses the following return indicators for long-term management purposes. This internal controlling and management system enables management to pursue value-based management.

Key ratios used by Nabaltec AG:

Return on sales and capital	2018	2017
Return on equity	14.4%	11.2%
Return on capital employed (ROCE)	13.7%	13.1%

Return on equity, consisting of the ratio of net income to equity, amounted to 14.4% in the reporting year, up from 11.2% in the year before.

Return on Capital Employed (ROCE) is the ratio of EBIT to capital employed (non-current assets + working capital). In the reporting period, this figure amounted to 13.7%, compared to 13.1% in the previous year.

### 2.4.2 NON-FINANCIAL PERFORMANCE INDICATORS

# **Employees**

At the end of 2018, Nabaltec AG had a total of 485 employees (31 December 2017: 470). All employees work in Germany. This figure also includes 56 trainees (31 December 2017: 54). Nabaltec sets a high value on good training. In 2018 as well, the trainee rate represented a remarkably large share of the workforce, 11.5%. This rate again exceeded the industry average significantly in 2018. Nabaltec's trainees are regularly among the best of their class. Training positions are currently available for industrial clerks, IT clerks, chemical laboratory technicians, chemists, electrical mechanics specialists and industrial mechanics specialists, as well as for chemicals production workers.

Nabaltec AG is regularly among the 100 best employers among German mid-sized companies, according to the "TOP JOB" nationwide multi-sector survey. Distinctions like these, which Nabaltec received for the fourth time in 2015, indicate how seriously the company takes its responsibility towards its employees. A central concern for Nabaltec is to offer its employees prospects and opportunities for advancement within the company in order to promote identification with the company by these means as well, and encourage hard work and commitment. A family-friendly company which has been recognized multiple times, Nabaltec AG supports its employees in all life situations, offering individual arrangements to improve work/life balance. The company also offers numerous programs designed to maintain and improve employee health within the context of health management. Nabaltec AG has received silver-standard "Healthy Company" certification from the health insurance provider AOK Bayern in recognition of its strong commitment to corporate health management.

#### **Customer Relations**

In recent years, Nabaltec has been able to continually strengthen and develop its market standing. With the implementation of a stand-alone solution for Nashtec LLC in the US and the resumption of production, as well as the decision to build a production site in Chattanooga, USA, and the formation of a distribution subsidiary in Shanghai, China, Nabaltec has taken significant steps which set the course towards even closer collaboration with its customers, especially those located outside Europe.

Important arguments in collaboration with customers include Nabaltec's extremely high reliability as a supplier and consistent quality. Nabaltec has demonstrated that it is a very reliable partner for long-term relationships built on trust.

Nabaltec also distinguishes itself as a competent and capable supplier through its consistent development of consulting expertise by investing personnel and resources in R&D.

Nabaltec participates in various European associations in order to ensure full access to key markets and technologies. In addition to the two professional associations within Cefic, the European Chemical Industry Council, Pinfa, (the Phosphorus, Inorganic & Nitrogen Flame Retardants Association) and EPSA (European Producers of Specialty Alumina), Nabaltec is also involved in *Forschungsgesellschaft Kunststoffe e. V.*, a plastics research association, as well as the German Ceramics Society (DKG) and *Verband der Deutschen Feuerfest-Industrie e.V.*, the German Refractory Industry Association.

In the US, Nabaltec is involved in pinfa North America and is a member of the American Ceramics Society (ACerS). Through these activities, Nabaltec is able to identify major trends in the primary markets, "flame retardants" and "ceramics," at a very early stage and on a global scale, allowing Nabaltec to respond early on. Nabaltec is also a founding member of pinfa China, which was formed in 2018, with headquarters in Shanghai.

A basic prerequisite for Nabaltec's market success is products which are specifically developed and optimized to meet customers' requirements, and which are supplied in the needed quantities over long periods of time in stable to consistently optimal quality. Nabaltec's products help make customers' products safer, eco-friendlier, more robust and more competitive while at the same time optimizing their production processes. For this reason, joint development projects result in long-term supply contracts and lasting relationships. Particularly for new products, Nabaltec often undergoes long and intensive approval procedures with its customers. In most cases, the successful conclusion of these procedures results in long-term supply agreements. Megatrends such as electric mobility and lithium ion battery applications present new and even more demanding requirements for Nabaltec with regard to product quality.

# **Management Systems**

In order to promote safety-consciousness among all of the employees and to simplify implementation of statutory and trade association requirements, Nabaltec decided as far back as 2007 to introduce a health and workplace safety management system in accordance with BS OHSAS 18001 (British Standard Occupational Health and Safety Assessment Series) in addition to its existing quality and environmental management systems in accordance with ISO 9001 and ISO 14001. In 2018, surveillance audits of the existing management systems based on ISO 9001 and ISO 14001 were performed at the

Schwandorf site. In addition, the existing certification of the workplace safety and health management system in accordance with BS OHSAS 18001 was renewed in a successful recertification audit.

In order to be able to effectively meet the requirements of a continuously changing energy market, Nabaltec introduced a certified energy management system as early as 2010. In 2018, Nabaltec AG's energy efficiency measures were successfully examined in the course of a surveillance audit in accordance with ISO 50001.

The accreditation of Nabaltec AG's analysis center in accordance with the ISO/IEC 17025 standard was confirmed in 2018 in the course of a reaccreditation audit.

#### **Environmental Protection**

Nabaltec requires its own products to significantly contribute toward environmental protection and toward the improvement of the eco balance of a multitude of products. The increasing significance of environmental protection is one of the most important drivers for the global market success of Nabaltec products. They are used in diesel particulate filters and catalyzers and play an important role in reducing particulate matter and soot. Other product families are used in plastics, where they are replacing bromine, a halogenated component in flame retardants. This makes products safer and easier to recycle, and it is no longer necessary to manufacture the environmentally critical chemical element bromine for this purpose. In this respect, it is of central importance that research and development, production as well as up- and downstream logistics to be as environmentally friendly as possible. The conservation of natural resources is a central concern for Nabaltec and a prerequisite for social acceptance of the company. Nabaltec AG actively accepts responsibility for the environment: a commitment that extends well beyond its own site.

As in prior years, special emphasis was placed on optimizing energy processes in production as a means of cutting costs. In 2018 as well, many projects were executed in this area. Together with external partners, Nabaltec has developed techniques requiring much less process energy, leading to a substantial reduction in CO2 emissions. A very substantial percentage of Nabaltec's energy requirements are met through renewable energy in collaboration with the Schwandorf special-purpose association for waste recycling.

In general, Nabaltec endeavors to develop production processes with a closed loop for all production facilities. Regarding the handling of chemicals, such as lye, which are used for the production of fine hydroxide, Nabaltec consistently seeks to keep them from being released into the environment and instead to ensure that they are reused in a closed-loop production cycle. In addition, new technologies are used in order to substantially reduce the need for washing water due to increased production and higher quality requirements.

The logistics of waste management have been partially reorganized: collecting individual categories of waste in compactors will significantly reduce shipments. This in turn will reduce traffic volume to and from Nabaltec AG and emissions of carbon dioxide, nitrous gases and particulate matter in the immediate vicinity of the company. Nabaltec will continue to pursue this goal. With regard to maintaining air purity, the focus is on future requirements. Nabaltec AG participates in the Sevilla Process, which defines the best available techniques for industrial equipment within the EU.

# **Capital Market**

Since its initial public offering in 2006, Nabaltec has had intact access to the capital market. This is proven by the bond offering in 2010 as well as the loans against borrower's note in 2013 and 2015 and the capital increase in 2017. This market access, maintained by transparent and reliable communications at all times, secures Nabaltec a balanced and largely independent means of financing, which is also perceived positively in the sales markets.

#### 3. REPORT ON SUBSEQUENT EVENTS

No further events of particular importance for the assessment of Nabaltec AG's financial, earnings and liquidity position took place after the reporting date, 31 December 2018.

# 4. REPORT ON OUTLOOK, OPPORTUNITIES AND RISKS 4.1 OUTLOOK

# Overall statement on the prospective development

Nabaltec also foresees intact sales markets and stable demand for its products in 2019, if the market environment does not change fundamentally. The company has taken a leading international position within its markets. Based on the market position in 2018 and the reputation it has built up over many years, Nabaltec sees good future prospects for its key products.

# **Economic and sector conditions**

In its economic outlook, the Kiel Institute for the World Economy (IfW) calls for a slowdown in global economic growth in the next two years, with estimated growth rates of 3.4% in 2019 and 2020. The IMF's estimates of global economic growth over the next two years are similar: 3.5% for 2019 and 3.6% for 2020, although here as well expectations have fallen below earlier assumptions.

The slight decrease in the pace of economic growth is attributed above all to a slower rate of economic expansion in the Euro zone, a slowdown in production growth in China relative to the levels seen in recent years, uncertainty with regard to the Brexit terms and slower economic growth in the US.

The Federal Ministry for Economic Affairs and Energy expects German GDP to grow at a rate of 1.0% in 2019. This figure was published in January 2019 and is 0.3 points lower than the IMF's projection. Although the extraordinary factors which arose in 2018 are of a temporary nature, such as problems with the new WLTP registration procedure in automotive production and the loss of production due to low water levels in the Rhine River, it is nevertheless clear that the upswing in Germany is hitting a wall. This is evident in particular from the very high capacity utilization ratio, making it difficult for companies to continue to expand production at a high pace. As a result, the rate of growth is slowing, and the situation has been exacerbated by the worsening global economic outlook relative to the previous year.

GDP Growth Forecast		
over Prior Year (in %)		
	2019	2020
World	3.4	3.4
USA	2.5	1.9
Euro zone	1.7	1.5
Germany	1.7	1.5
France	1.4	1.5
Italy	0.7	0.8
United Kingdom	1.0	1.1
Japan	1.0	0.8
China	6.1	5.8
India	7.5	7.0

Source: IfW, Kieler Konjunkturberichte No. 49 "Weltkonjunktur im Winter 2018," 11 December 2018

The chemicals industry association VCI (Verband der Chemischen Industrie e.V.) expects industry revenues to grow by 2.5% next year, as prices for chemical products increase by around 1.0%. Aside from the weakening economy in Germany and the slowdown in economic growth, the largest risks and obstacles to growth for the industry are currently posed by political challenges such as the US's trade conflicts with the EU and China, as well as the looming threat of Brexit.

The outlook in key target markets is largely positive, in Nabaltec's view, as regulatory requirements continue to stimulate growth in eco-friendly flame retardants. The German construction sector and the automotive industry remain stable despite the extraordinary effects. Continuing growth in the construction sector has generated positive growth in the electrical industry, and this trend is expected to continue in 2019. The cable industry is benefiting from special conditions such as the expansion of power grids, particularly due to the connection of decentralized installations for the generation of renewable energy, such as wind and solar power. As a result, the cable industry will have higher demand in the future for high-quality non-halogenated flame-retardant formulas. The global trend towards higher-quality refractory products will continue to accelerate at a strong rate, reinforced above all by developments in China with regard to more efficient production plants. Demand for higher-performance ceramic components in mechanical and plant engineering will significantly accelerate demand for specialty alumina, particularly for reactive alumina and ceramic bodies, the core competencies of Nabaltec AG.

#### Outlook on the course of business

Nabaltec expects its revenue growth to continue at an accelerated pace in 2019. The year 2019 is off to a good start. Revenue growth is to be achieved through both volume growth and price increases. The US subsidiary Nashtec LLC resumed production at the end of 2018 and will take over full responsibility for supplying US customers as of the second quarter of 2019. Naprotec LLC is currently expected to begin production of refined hydroxide in the second half of 2019, with an annual capacity of about 30,000 tons.

Orders on hand amounted to EUR 52.6 million as of 31 December 2018.

In 2019 as well, fine hydroxides will continue to be the most important product range by far within the "Functional Fillers" product segment. Boehmite is also continuing to gain importance due to the positive trend in electric mobility. Nabaltec also expects to see additional revenue growth in the "Specialty Alumina" product segment in 2019.

# Expected earnings, net assets and financial position

Assuming stable economic performance, Nabaltec expects revenue growth in a range from EUR 190 million to EUR 195 million in 2019. The company expects an EBIT margin ranging from 10.0% to 12.0% in 2019.

Nabaltec expects investments in 2019 to be down from the year before. In addition to investments in financial assets for the subsidiary Naprotec, the company plans to invest in process optimization and infrastructure at the Schwandorf site, as well as in measures to increase capacity at certain points.

Net financial income is expected to remain largely stable in 2019 relative to the year before.

## Note with respect to uncertainties in the outlook

The statements and information with respect to future developments stated above are based on current expectations as well as certain assumptions. They therefore involve several risks and uncertainties. A large number of factors, a significant part of which are not under Nabaltec Group's control, affect future sales and earnings. As a result, actual results may deviate from the statements and forecasts made in this report.

# **4.2 RISKS AND OPPORTUNITIES REPORT**

# **Risk Management System**

For Nabaltec AG, the relevance of risk management is derived from its business activities and its worldwide operations, involving an international competitive and regulatory environment, as well as the general complexity of the global economy. Nabaltec AG's success depends to a considerable extent on identifying associated risks and opportunities as well as dealing with them consciously and bringing risks under control. Effective risk management is a core element for securing the company long term, for its economic success in international markets and for its successful, sustainable further development.

Nabaltec is constantly working to develop the company's risk management system. The continuous optimization of risk prevention tools in all areas enables the early identification and elimination of business risks. Integral elements include risk management as an ongoing process, risk controlling, extensive communication and documentation processes, as well as an internal monitoring system. All discernable internal and external risks are identified, documented, assessed and included in a risk matrix as efficiently as possible. This risk matrix represents the basic framework for the assessment of potential risks and for the identification of key risks.

The starting point of the actual risk management processes at Nabaltec is the identification and evaluation of various types of risks and risk profiles that are monitored and managed by the controlling department. Reports on business risks as well as continuous status reports are prepared for the Management Board and discussed at the management level. An

important component is also the comprehensive operational budget including targets, regularly supplemented with forecasts.

Nabaltec has implemented a strategic planning system in order to take advantage of medium and long-term opportunities and to identify risks. All relevant units are involved in the strategy development process. Risks arising from competition, anti-trust, tax and environmental laws and regulations are mitigated by Nabaltec in advance by engaging experts. Quality assurance measures limit product and environmental risks. Such measures include e.g. certification of our activities in accordance with international standards, constant improvements to facilities and processes, the development of new and the improvement of existing products as well as participation in international professional committees.

Risk management also includes routinely reviewing the efficiency of applied hedging instruments and the reliability of controlling systems. There is insurance coverage for casualty and liability risks, thus limiting the financial consequences for the company's liquidity, financial position and earnings as well as preventing situations that could jeopardize the continued existence of the company.

#### Sales Market

The 2008/2009 international economic crisis showed that a shock in demand such as was seen then can have far-reaching consequences in Nabaltec AG's target markets as well. In spite of greater flexibility and adjustments in cost structures and capacities, such high fluctuations in demand can implicate noticeable volume and margin risks. Additional sales risks include the potential loss of significant key accounts, loss of market share due to technological innovation and new advances by competitors. Due to Nabaltec's strong position as an innovation leader and reliable supplier, as well as continuous monitoring of target markets, such risks can be confined and the relevant market mechanisms can, at the same time, be used as an opportunity within global competition.

# **Procurement Market**

Nabaltec monitors its suppliers' economic situation very closely and deliberately builds up alternatives for all products. Nabaltec AG uses mid- and long-term supply agreements for its supply of raw materials. Supply of the energy sources which are most important for the production process, such as electricity, gas and steam, is secured by long- term agreements. The certification of the energy management system in accordance with ISO 50001 supports these efforts. In addition, efforts are constantly being made to optimize production processes in order to reduce specific energy usage. An additional risk is an excessive increase in logistics costs. Nabaltec AG can counter this risk by passing on logistics costs to customers and by finding a balanced logistical mix. For example, Nabaltec AG has its own railway siding, which makes transport by rail very attractive.

# **Financial Market**

When necessary, foreign exchange risks are strategically minimized using hedging instruments covering risks arising from US dollar exposure. In case of medium-term financing, interest risks are hedged using swaps or loan agreements are concluded with fixed interest rates. Nabaltec AG has a detailed financial and liquidity forecast which is subjected to routine comparisons of estimates against results. If additional liquidity is deemed necessary, the appropriate financing measures are initiated. The risk of changes in interest

rates is countered in part through hedging. Nabaltec AG's loan agreements are subject to covenants which are tied e.g. to leverage coverage ratios as well as the equity ratio. If the covenants are not observed, the lender has the option to increase the interest margin or exercise its right of extraordinary termination. Covenants valid as of 31 December 2018 were not breached in the reporting year.

Factoring is used to a substantial extent for the financing of accounts receivable.

# **Personnel**

Particularly the fluctuation of employees in key positions gives rise to personnel risks. Nabaltec minimizes these risks through intensive training/education and management trainee programs to enhance the qualification of employees, performance-based remuneration, employee substitution arrangements that govern the temporary replacement of key employees, and early advance plans for successors. The company also offers good career opportunities and advancement possibilities. Nabaltec's market position, the reputation it has earned in the industry, its high reliability and its familiar strong focus on research and development make Nabaltec an attractive employer within its market segments and region.

# **Production, Processes and IT**

Nabaltec has an integrated quality management system with ISO 9001 accreditation that is implemented companywide. Therefore, Nabaltec considers production-specific risks clear and manageable. For IT applications that are critical for the business, Nabaltec AG relies on standard programs and the redundantly designed high-quality hardware. Through regular verification of the access structure, data protection is guaranteed; data security is therefore based on generally established procedures. Compliance with data protection policies based on the legal requirements is ensured at all times within the company and is additionally monitored by an external data protection officer. Risks exist in connection with construction of the refined hydroxide production plant in Chattanooga with regard to investment volume and the date on which the plant will go online.

#### **Environmental Protection**

Environmental risks can arise from exceeding admissible thresholds for noise and dust pollution or through the emission of hazardous substances. Nabaltec counters these risks by means of extensive environmental management based on ISO 14001, which is accredited and is periodically further developed and audited. Nabaltec uses closed-loop production processes, e.g. for water and lye.

# **Technological Development**

Potential technological risks could result from customers replacing Nabaltec products due to a change in technology, from the failure to use new technologies and from not recognizing technological developments. As an innovation leader, Nabaltec tries to minimize these risks by engaging in continuous and intensive research and development efforts and by maintaining pronounced customer proximity. In fact, technological developments offer numerous opportunities for Nabaltec to generate a competitive edge in product quality, by occupying new markets through fast-paced product adjustments and by creating process, processing and quality advantages together with our customers so as to set the stage for economic success.

# **Legal Framework**

Changes within the legal framework could lead to risks for Nabaltec. Currently, regulatory changes are creating additional market opportunities - and this trend is not expected to reverse in the medium and long term. Eco-friendly products such as Nabaltec's are being pushed forward on a global scale in an effort to eliminate materials which are harmful to the environment from the cycle.

As an intensive electricity user in international competition, Nabaltec will benefit from the renewable energy surcharge in 2019 as well. On the other hand, the provisions of the "2017 Renewable Energy Act" will, in the medium term, lead to an increase in renewable energy expenses in the mid-six figures.

# **Overall Assessment**

Based on our continuous surveillance of relevant markets, as described above, as well as the constant efforts to improve our products and adapt to the needs of existing and potential customers, the company's future development is currently not exposed to any significant risks. On the whole, the company's risks are well-managed and their potential impact is therefore limited. Nabaltec AG's future existence is secured.

Schwandorf, 22 March 2019

Nabaltec AG

The Management Board

Johannes Heckmann

Günther Spitzer

. Mr. lilitu

Dr. Michael Klimes

# Income Statement of Nabaltec AG, Schwandorf

for the period from 1 January - 31 December 2018

		1/1/2018	3 - 12/31/2018	1/1/2017 - 12/31/2017	
		TEUR	TEUR	TEUR	TEUR
1.	Revenues		177,366		169,318
2.	Change in finished goods		-958		1,085
3.	Other capitalized own services		437		307
Tota	performance		176,845		170,710
	Other operating income -thereof exchange rate differences: EUR 823 thousand (PY: EUR 545 thousand)		1,979		1,046
			178,824		171,756
5.	Cost of materials:				
	a) Cost of raw materials, supplies and purchased goods	81,312		81,737	
	b) Cost of purchased services	2,555	83,867	1,733	83,470
Gros	s profit		94,957		88,286
6.	Personnel expenses:				
	a) Wages and salaries	26,624		25,248	
	b) Social security and other pension costs - thereof for pension costs: EUR 2,482 thousand (PY: EUR 2,314 thousand)	6,935		6,671	
7.	Amortisation/depreciation of intangible assets and property, plant and equipment	10,672		10,579	
	Other operating expenses - thereof exchange rate differences: EUR 346 thousand (PY: EUR 1,610 thousand)	29,318	73,549	29,109	71,607
			21,408		16,679
	Income from securities and loans (financial assets) - thereof from affiliated companies: EUR 497 thousand (PY: EUR 315 thousand)	497		315	
10.	Interest and similar income	43		49	
	Depreciation of financial assets and of securities held as current assets - thereof from affiliated companies: EUR 6 thousand (PY: EUR 838 thousand)	6		838	
	Interest and similar expenses	3,010		2,987	
	- thereof for compounding interest: EUR 938 thousand (PY: EUR 936 thousand)  ncial result		-2,476		-3,461
			18,932		13,218
13.	Income taxes		6,148		4,528
14.	Net after-tax result		12,784		8,690
15.	Other taxes		78		71
16.	Net result for the year		12,706		8,619
17.	Profit carried forward		18,048		11,013
12	Accumulated profit		30,754		19,632

ASSETS			LIABILITIES		
	12/31/2018	12/31/2017		12/31/2018	12/31/2017
	TEUR	TEUR		TEUR	TEUR
A. Non-current assets			A. SHAREHOLDERS' EQUITY		
I. Intangible assets			Subscribed capital (conditional capital: EUR 4,000 thousand)	8,800	8,800
Concessions, industrial property rights and similar rights and assets as well as					
licenses for such rights and assets	318	291	II. Capital reserve	48,424	48,424
2. Advance payments	109	78	III. Accumulated profits	30,754	19,63
	427	369			
	-		-		
II. Property, plant and equipment				87,978	76,856
1. Land, leasehold rights and buildings, including buildings on non-freehold land	25,294	25,035			
2. Technical equipment and machinery	47,081	51,728			
3. Other fixtures, fittings and equipment	3,437	3,236	B. NON-CURRENT ASSETS INVESTMENTS GRANTS	3	4
4. Advance payments as well as plant and machinery under construction	5,499	2,509			
			C. PROVISIONS		
	04.044	00.500	Retirement benefit obligation and similar provisions	26,716	24,012
III. Financal assets	81,311	82,508	Accrued taxes     Other provisions and accrued liabilities	2,183 6,936	1,995 7,387
Shares in affiliated companies	10,367	6,761	5. Other provisions and accided liabilities	6,936	1,301
Loans to affiliated companies	42,946	22,583			
	,	,		35,835	33,394
	53,313	29,344			
	33,313	29,344	D. ACCOUNTS PAYABLE		
			Payables to banks	71,029	71,924
	135,051	112,221	Trade payables	9,649	11,620
B. CURRENT ASSETS			Payables to affiliated companies	277	131
I. Inventories			4. Other payables	607	1,816
Raw materials and supplies	16,818	15,140	- thereof relating to taxes: EUR 351 thousand (PY: EUR 317 thousand)		
2. Finished goods and purchased products	12,973	13,941	- thereof relating to social securities: EUR 39 thousand (PY: EUR 34 thousand)		
	29,791	29,081		81,562	85,491
II. Accounts receivable and other assets					
1. Trade receivables	4,460	4,089			
2. Receivables from affiliated companies	101	0			
3. Other assets	6,682	5,266			
	11,243	9,355			
III. Cash and cash equivalents	29,124	44,921			
	70,158	83,357			
C. PREPAID EXPENSES	169	167			

205,378

195,745

205,378

195,745

# Statement of Fixed Assets of Nabaltec AG for the Period from 1 January 2018 to 31 December 2018

	COST DEPRECIATION											
	1/1/2018	Additions	Disposals	Adjustments	12/31/2018	1/1/2018	Additions	Write-ups	Disposals	12/31/2018	Book value 12/31/2018	Book value 12/31/2017
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
I. Intangible assets												
Licenses, proprietary rights and similar rights and												
assets, as well as licenses to												
such rights and assets	2,981,732.90	119,154.79	0.00	67,870.32	3,168,758.01	2,691,013.22	159,491.81	0,00	0.00	2,850,505.03	,	290,719.68
Advance payments made	78,166.79	98,855.93	0.00	-67,870.32	109,152.40	0.00	0.00	0.00	0.00	0.00	109,152.40	78,166.79
	3,059,899.69	218,010.72	0.00	0.00	3,277,910.41	2,691,013.22	159,491.81	0.00	0.00	2,850,505.03	427,405.38	368,886.47
II. Property, plant and equipment												
Land, leasehold rights and buildings, including	24 405 720 20	007 544 00	0.00	502.000.44	25 500 040 77	0.450.700.44	4 440 404 00	0.00	0.00	40 000 000 44	05 004 050 00	05 005 004 40
buildings on unowned land	34,185,730.30	897,541.33	0.00	503,669.14	35,586,940.77	9,150,706.14	, ,	0.00	0.00	10,292,890.14	25,294,050.63	25,035,024.16
2. Technical equipment and machinery	134,706,213.15	3,355,299.58	957.14	436,704.09	138,497,259.68	82,978,264.98	8,438,570.28	0.00	956.63	91,415,878.63		51,727,948.17
Fixtures, fittings and equipment	9,830,919.35	820,352.24	45,866.08	323,241.80	10,928,647.31	6,594,729.41	931,344.82	0.00	34,573.67	7,491,500.56		3,236,189.94
Advance payments made and assets in process of construction	2,508,644.42	4,253,674.83	0.00	-1,263,615.03	5,498,704.22	0.00	0.00	0.00	0.00	0.00	.,,	2,508,644.42
	181,231,507.22	9,326,867.98	46,823.22	0.00	190,511,551.98	98,723,700.53	10,512,099.10	0.00	35,530.30	109,200,269.33	81,311,282.65	82,507,806.69
III. Financial assets												
1. Shares in affiliated companies	6,760,769.56	10,289,957.65	6,683,232.15	0.00	10,367,495.06	0.00	0.00	0.00	0.00	0.00	10,367,495.06	6,760,769.56
2. Loans to affiliated companies	23,420,508.20	20,407,743.53	496,988.49	0.00	43,331,263.24	837,403.16	5,891.46	457,611.44	0.00	385,683.18	42,945,580.06	22,583,105.04
	30,181,277.76	30,697,701.18	7,180,220.64	0.00	53,698,758.30	837,403.16	5,891.46	457,611.44	0.00	385,683.18	53,313,075.12	29,343,874.60
	214,472,684.67	40,242,579.88	7,227,043.86	0.00	247,488,220.69	102,252,116.91	10,677,482.37	457,611.44	35,530.30	112,436,457.54	135,051,763.15	112,220,567.76

# Nabaltec AG, Schwandorf

# **Notes for Financial Year 2018**

# **General Disclosures Concerning the Financial Statements**

Nabaltec AG, with registered office in Schwandorf, Germany<sup>1</sup>, was formed by Company Agreement of 14 December 1994 with the corporate name Nabaltec GmbH and registered office in Schwandorf (entered into the Commercial Register of the Local Court of Amberg under Commercial Register No. B 3920). It acquired the specialty oxides business of VAW aluminium AG in 1995 and was transformed into a joint-stock company in 2006. The annual financial statements were prepared in accordance with the accounting rules of the German Commercial Code. The provisions of the German Stock Corporation Act were also observed. The total cost method was applied for the income statement.

Nabaltec AG, Schwandorf, is a large corporation in terms of § 267(3) of the German Commercial Code.

# **Accounting Policies**

The following recognition and measurement methods were applied to the items of the income statement:

**Intangible assets** are recognized at cost less straight-line depreciation. Depreciation in the year of addition is performed on a prorated basis.

**Property, plant and equipment** are recognized at cost less depreciation.

Depreciation is performed using the straight-line method based on the typical useful life for the asset, which is based on the maximum allowable rates under tax rules. Depreciation is prorated in the year of addition. Cost includes interest on debt.

Independently usable assets with a value of less than EUR 150.00 are written off as business expenses in the year of addition pursuant to § 6 (2a) of the Income Tax Act. A collective item is recognized for assets which exceed this value but whose value does not exceed EUR 1,000.00. These assets are depreciated at a rate of one fifth per year. The limit for immediate write-offs has been raised to EUR 800.00 as of 1 January 2018. Collective depreciation will no longer be used for new assets as of 2018. As of 1 January 2018, low-value assets with a cost of between EUR 250.00 and EUR 800.00 will be immediately written off in the year of addition.

**Financial assets** are recognized at their amortized cost. If necessary, they are written down to fair value (if lower than amortized cost). Such write-downs are performed even in cases

<sup>&</sup>lt;sup>1</sup> Nabaltec AG, Alustraße 50-52, 92421 Schwandorf, Germany

where a permanent impairment is not expected. If the reasons for using this lower measurement no longer apply, they are written up to the higher value.

Raw materials and supplies, as well as merchandise, are recognized at cost observing the strict lowest-value principle. Cost is determined using the average method. Items whose fair value is below cost as of the reporting date are written down to fair value.

**Finished products** are measured at cost, observing the strict lowest-value principle. Production cost includes reasonable percentages of material and production overhead costs in addition to direct material and production costs. Interest on debt and general administrative costs are not included in production costs. Finished products are combined into valuation units for group measurement pursuant to § 240(4) of the German Commercial Code. To this end, the production costs of products of the same type and nearly equivalent products are not assigned to individual items, but are instead measured using the weighted average value for their group.

**Accounts receivable and other assets** are recognized at face value. Individual allowances are performed to account for identified individual risks. A general allowance was not performed, as was the case in the previous year as well.

Liquid funds are recognized at face value.

**Deferred expenses and accrued income** consist of spending prior to the reporting date which relates to periods after the reporting date. This item is reversed in straight-line fashion over the course of time.

**Deferred taxes** are calculated for temporary differences between commercial and tax law in the measurement of assets, liabilities and accrual and deferral items. Deferred taxes are presently calculated based on a combined tax rate of 29.13%. This combined tax rate includes corporate income tax, trade tax and the solidarity mark-up. If the result is a net tax liability, this amount is recognized as a deferred tax liability. If the result is a net tax reduction, the associated capitalization option would not be exercised. There was a net deferred tax asset this year, which was not recognized in the financial statements.

**Subscribed capital** is recognized at nominal value.

The **special item for fixed-asset investment grants** was recognized in the amount of the grant and will be reversed over the useful life of the subsidized investment.

**Pension reserves** are measured using the projected unit credit method, applying actuarial principles, with an actuarial interest rate of 3.20% per annum, based on the 2018 G benchmark tables of Prof. Dr. Klaus Heubeck. The 2005 G benchmark tables were replaced by the new version in 2018. Based on the option pursuant to Article 67(1) Sentence 1 of the Introductory Act to the German Commercial Code, TEUR 267 was transferred to pension reserves in the Financial Year (1/15th of the difference calculated on 1 January 2010), as was done in previous years as well. Pension liability insurance policies exist which are pledged to the pension recipients. Accordingly, the assets and liabilities in connection with the pension

liability insurance policies are netted out in accordance with § 246(2) of the German Commercial Code.

**Other provisions** are formed for all identifiable risks and contingent liabilities in the amount which is necessary based on a reasonable commercial assessment. Measurement of the settlement amount is to take into account cost increases to the extent necessary. Other provisions with a term of more than one year are discounted at rates published by Deutsche Bundesbank commensurate with their term.

Accounts payable are recognized at their settlement amount.

**Accounts payable denominated in foreign currency** whose residual term is no longer than one year are measured using the average exchange rate on the reporting date. All other foreign-currency accounts payable are measured using the exchange rate as of invoicing or the average exchange rate on the reporting date, if the latter is higher.

Accounts receivable denominated in foreign currency whose residual term is no longer than one year are measured using the average exchange rate on the reporting date. All other foreign-currency accounts receivable are measured using the exchange rate as of invoicing or the average exchange rate on the reporting date, if the latter is lower.

**Derivative financial instruments** are measured individually at their market value as of the reporting date. If the requirements for the formation of valuation units pursuant to § 254 of the German Commercial Code are met, the derivatives and the underlying transactions are measured as a single unit. If a comparison of changes in value or cash flows arising from the hedges and the underlying transactions reveals a net loss from the ineffective portion due to changes in market value, this loss is recognized in profit and loss. The unrealized gains and losses from the effective portion of the hedge cancel each other out entirely and are not recognized on the balance sheet or in profit and loss (freezing method).

# **Disclosures Concerning the Balance Sheet**

### **Fixed assets**

The change in individual fixed-asset items is shown in the annex to the Notes.

Debt interest in the amount of TEUR 66 was included in production costs in the reporting year. The average financing cost rate used to determine capitalizable debt interest was 2.60%.

Debt interest was capitalized in the Financial Year for the following fixed-asset items:

Property, plant and equipment:

Land, leasehold rights and buildings, including buildings on unowned land 1,017.79 EUR

Technical equipment and machinery 3,869.57 EUR

Other assets, fixtures, fittings and equipment 934.69 EUR

Advance payments made and assets in process of construction 59,990.04 EUR

#### Accounts receivable and other assets

Other assets largely consist of accounts receivable from a factoring company for withheld purchase prices (TEUR 4,303), value-added tax refund claims (TEUR 1,244), an energy tax refund claim (TEUR 420) and an electricity tax refund claim (TEUR 679). All accounts receivable and other assets have a residual term of less than one year.

Accounts receivable from affiliated companies consist of trade receivables.

# Deferred expenses and accrued income

TEUR 169 of deferred expenses and accrued income relates to prepaid expenses for the next Financial Year.

# Shareholders' equity

a) Subscribed capital

EUR 8,800,000.00

The capital stock is divided into 8,800,000 no-par-value shares, each representing EUR 1.00 of the capital stock.

b) Authorized capital

Following the utilization of TEUR 800, the authorized capital as of 31 December 2018 amounted to (through 31 May 2021) EUR 3,200,000.00

The Management Board, with the Supervisory Board's approval, is authorized by resolution of the shareholders of 30 June 2016 to raise the capital stock through 31 May 2021 once or multiple times by up to EUR 4,000,000.00 by issuing up to 4,000,000 new no-par-value bearer shares in exchange for cash and/or non-cash contributions, with the stipulation that the number of shares is to be increased in the same proportion as the capital stock. The

Management Board may decide to exclude subscription rights with the approval of the Supervisory Board (Authorized Capital 2016/I).

Utilizing the authorized capital made available by resolution of the shareholders of 30 June 2016 (Authorized Capital 2016/I), the Management Board, with the Supervisory Board's approval, raised Nabaltec AG's capital stock by issuing 800,000 new bearer shares, each representing EUR 1.00 of the capital stock, in exchange for cash contributions, with preemption rights excluded. As a result, Nabaltec AG's subscribed capital (capital stock) was raised from TEUR 8,000 to TEUR 8,800. The capital increase was entered into the Commercial Register on 15 September 2017.

# c) Conditional capital

EUR 4,000,000.00

The capital stock was conditionally raised by up to EUR 4,000,000 by resolution of the shareholders of 30 June 2016 (Conditional Capital 2016/I). The conditional capital serves exclusively to provide shares to holders of warrants and convertible bonds issued by the company based on the authorization of the shareholders of 30 June 2016.

d) Capital reserve

EUR 48,424,219.38

As of 31 December 2018, the capital reserve amounted to TEUR 48,424 (previous year: TEUR 48,424).

The Management Board, with the Supervisory Board's approval, is authorized by resolution of the shareholders of 30 June 2016 to issue convertible bonds and/or warrants made out to the bearer with a total value of up to EUR 150,000,000.00 and with a term of no more than 15 years ("Convertible Bonds and/or Warrants") through 31 May 2021 once or multiple times and to provide holders of convertible bonds with conversion rights for up to 4,000,000 bearer shares in the company as specified in the Terms of Warrants and Convertible Bonds (Terms of Bonds) which are to be defined by the Management Board with the approval of the Supervisory Board.

	===========
As of 31 December 2018	EUR 30,753,912.26
Net income in Financial Year 2018	EUR 12,705,836.17
Appropriation of earnings pursuant to shareholder resolution	EUR -1,584,000.00
As of 1 January 2018	EUR 19,632,076.09
e) Hetained carrings	2011 00,700,312.20
e) Retained earnings	EUR 30,753,912.26

# Special item for fixed-asset investment grants

The special item for fixed-asset investment grants is reversed in accordance with the useful life of the subsidized investment.

#### Pension reserves

Pension liabilities were measured in accordance with generally accepted actuarial principles using the projected unit credit (PUC) method. The biometric calculation was based on the 2018 G benchmark tables of Prof. Dr. Klaus Heubeck. The 2005 G benchmark tables were replaced by the new version in 2018. The measurement was performed based on the following additional assumptions: an actuarial interest rate of 3.20% per annum (previous year: 3.68%), a salary trend of 2.75% per annum (previous year: 2.75%) and a pension trend of 2.00% per annum (previous year: 2.00%). Liabilities were discounted at the average market interest rate for the past ten years according to Deutsche Bundesbank assuming a residual term of 15 years.

The remeasurement of pension reserves on 1 January 2010 resulted in a difference in the amount of TEUR 4,009; as in previous years, TEUR 267 of this difference (1/15th of the total, in accordance with Article 67(1) Sentence 1 of the Introductory Act to the German Commercial Code) was transferred to pension reserves in the reporting year, so that the remaining deficit as of 31 December 2018 was TEUR 1,604. This transfer was recognized under other operating expenses in 2018.

Pension liability insurance policies are pledged and therefore protected from attachment by all other creditors so as to secure direct pension commitments. Accordingly, the liabilities are offset by the corresponding assets, and the associated income and expenses must be netted out. The asset value of pension liability insurance as of the reporting date, TEUR 1,807, is netted out with the settlement value, in the amount of TEUR 28,522, for a net disclosure of TEUR 26,716. Net income from pension liability insurance in the amount of TEUR 92 was recognized under interest and similar expenses. The fair value of the pension liability insurance policies is equal to the asset value.

Discounting pension reserves at the average market interest rate for the past ten years results in a difference of TEUR 4,948 relative to discounting pension reserves at the average market interest rate for the past seven years. This difference is not available for distribution pursuant to § 253(6) Sentence 2 of the German Commercial Code.

# Other provisions

Other provisions largely consist of personnel obligations (TEUR 4,259) and outstanding invoices (TEUR 2,381).

The anniversary provision is measured in the PUC method using an actuarial interest rate of 2.32% (term: 15 years), a salary trend of 2.75% and a fluctuation rate of 1.00%.

# Accounts payable

The breakdown of accounts payable, with residual terms and securities provided, is evident from the statement below:

(amounts from the previous year are indicated in parentheses)

	Total amount	R	esidual tern	ns	Secured amount	Type of secu- rity
	amount	Less than 1 year	1-5 years	Over 5 years	amount	,
	TEUR	TEUR	TEUR	TEUR	TEUR	
Accounts payable to banks	71,029 (71,924)	529 (1,424)	70,500 (70,500)	0 (0)	0 (0)	
Trade payables	9,649 (11,620)	9,649 (11,620)	0 (0)	0 (0)	0 (0)	
Accounts payable to affiliated companies	277 (131)	277 (131)	0 (0)	0 (0)	0 (0)	
Other accounts payable	607 (1,816)	607 (1,816)	0 (0)	0 (0)	0 (0)	
	81,562 (85,491)	11,062 (14,991)	70,500 (70,500)	0 (0)	0 (0)	

Accounts payable to banks consist of loans against borrower's notes obtained at typical market interest rates.

Accounts payable to affiliated companies consist entirely of trade payables.

# **Disclosures Concerning the Income Statement**

Revenues

Breakdown of revenues by geographical region:

	2018		2017	
	TEUR	%	TEUR	%
Germany	46,854	26.4	45,959	27.1
Rest of Europe	89,060	50.2	81,718	48.3
USA	20,022	11.3	21,371	12.6
Rest of world	21,430	12.1	20,270	12.0
	177,366	100.0	169,318	100.0

Breakdown of revenues by product segments:

	2018		2017	
	TEUR	%	TEUR	%
Functional Fillers	114,615	64.6	112,153	66.2
Specialty Alumina	62,128	35.0	56,448	33.4
Other	623	0.4	717	0.4
	177,366	100.0	169,318	100.0

# Other operating income

Other operating income includes income from currency translation in the amount of TEUR 823.

Other operating income also includes income from insurance indemnities in the amount of TEUR 80, income from costs charged to third parties in the amount of TEUR 298, income from payments in kind in the amount of TEUR 230 and income from EU aid in the amount of TEUR 6, as well as the write-up of the Nashtec financial assets in the amount of TEUR 458.

# Other operating expenses

Other operating expenses include expenses for outgoing freight in the amount of TEUR 12,808, sales commissions in the amount of TEUR 3,452, expenses for third-party repairs in the amount of TEUR 3,049, consulting expenses in the amount of TEUR 850 and non-period expenses in the amount of TEUR 6.

Other operating expenses also include expenses in the amount of TEUR 267 for prorated amortization of the difference arising from the remeasurement of pension reserves in the course of first-time application of the Accounting Law Modernization Act.

#### Other Disclosures

# Disclosures concerning transactions not reported in the balance sheet

In order to improve its liquidity, Nabaltec AG concluded lease agreements with a total expense of TEUR 301 for the year and assigned a total of TEUR 24,738 in accounts receivable to a factor. The transfer of the default risk to the factor as a result of the factoring agreement was offset in 2018 by expenses in the amount of TEUR 308 for execution and advance financing of the factoring arrangement.

#### Guarantees

The following guarantees are to be noted in accordance with § 251 and § 268(7) of the Commercial Code:

		31 Dec.	31 Dec.
		2018	2017
		TEUR	TEUR
Liabi	lities arising from performance bonds	2,088	0
the	reof in favor of affiliated companies:	0	0

This performance bond consists entirely of TEUR 2,088 in amounts owed for separate gas system fees. The amount of the bond will be reduced by EUR 139,200.00 each year until it expires on 31 December 2032.

The Management Board estimates that the risk that this guarantee will be utilized is low.

### Other financial liabilities

The following other financial liabilities exist which are of significance for assessment of the financial position:

		31 Dec. 2018	31 Dec. 2017
		TEUR	TEUR
a)	Liabilities arising from rental, lease, service and consulting agreements	1,131	1,392
	thereof		
	- maturing in less than 1 year	601	615
	- maturing in 1-5 years	530	777
	- maturing in more than 5 years	0	0
b)	Liabilities arising from investment orders	2,354	2,642
	- maturing in less than 1 year	2,354	2,642
			_
	Total	3,485	4,034
	- thereof to affiliated companies	0	0

# **Contingent liabilities and guarantees**

Nabaltec AG has committed to providing Nashtec with necessary financial support through 31 December 2019. To our knowledge, and with due regard for current forecasts, it can be expected with a certain amount of confidence that this commitment will be utilized.

# **Declaration concerning the German Corporate Governance Code**

The company has issued the prescribed declaration in accordance with § 161 of the German Stock Corporation Act on a voluntary basis. The declaration is posted on the company's website, "nabaltec.de," under "Investor Relations/Corporate Governance."

### Auditor's fee

The auditor's fee for the 2018 financial statements (including the 2018 consolidated financial statements) amounts to TEUR 103. The auditor received a fee in the amount of TEUR 10 for other assurance services and a fee of TEUR 29 for tax advisory services.

# Transactions with related companies and persons in terms of § 285 No. 21 of the German Commercial Code

There were no material transactions with related companies and persons which were not executed at typical market conditions.

# Share ownership pursuant to § 285 No. 11 of the German Commercial Code

	Share of capital stock		Shareholders' equity in previous year *)		Earnings in previous year *)		
Direct holdings	in %	in USD	in EUR	in USD	in EUR	in USD	in EUR
Nabaltec USA Corp.	100.0	11,555,362.43	9,930,572.62	13,975,321.48	12,202,323.83	-441,075.43	-373,318.19
Indirect holdings through Nabaltec USA Corp.							
Nashtec LLC, Corpus Christi (USA)	100.0			931,674.23	813,476.13	-6,541,667.40	-5,536,747.70
Naprotec LLC, Chattanooga (USA)	100.0			3,149,409.88	2,749,855.83	-350,690.12	-296,817.71
Direct holdings	in %	in RMB	in EUR	in RMB	in EUR	in RMB	in EUR
Nabaltec Shanghai Trading Co. Ltd., Shanghai (China)	100,0	2,755,685.15	359,385.03	2,556,703.34	325,280.34	-198,981.81	-25,225.57
Direct holdings	in %	in JPY	In EUR	in JPY	in EUR	in JPY	in EUR
Nabaltec Asia Pacific K.K., Tokyo (Japan)	100.0	10,000,000.00	77,537.41	12,702,870.00	100,848.44	1,286,998.00	10,062.33

<sup>\*)</sup> Shareholders' equity in the previous year denominated in foreign currency is translated at the average exchange rate on the reporting date. Earnings for the previous year denominated in foreign currency are translated at the average exchange rate for the year.

An additional TUSD 22,000 in total funding was made available to the subsidiary Nashtec LLC in Financial Year 2018, as well as TUSD 1,500 for the subsidiary Naprotec LLC.

# **Derivative financial instruments**

The following interest rate derivatives have been entered into in connection with the loans against borrower's note obtained in previous years in order to hedge against interest risks in connection with variable interest rates based on the 6-month EURIBOR.

Face value in TEUR	Term	Market value in TEUR
31,000	23 April 2015 – 23 April 2020	-611
39,000	23 April 2015 – 23 April 2022	-1,385

These derivatives form valuation units with the underlying loans in terms of § 254 of the German Commercial Code. Accordingly, provisions for losses are not to be formed.

The market values of derivatives are determined through mark-to-market valuation by the participating credit institutions.

# **Deferred taxes**

Deferred taxes are measured at a tax rate of 29.13%, comprising the corporate income tax rate, the solidarity mark-up and the trade tax rate.

Item	Book value		Deferred tax		ax
	Book value in commercial balance sheet TEUR	Book value in tax bal- ance sheet TEUR	Difference TEUR	Asset TEUR	Liability
Deferred tax assets					
Pension reserve	-28,522*	-15,623	-12,899	3,757	
Other provisions	-6,936	-6,402	-534	156	
Financial assets	42,946	43,331	-385	112	
	7,488	21,306	-13,818	4,025	
Deferred tax liabilities					
Trade receivables and other assets	4,459	4,437	22		6
Trade payables	-9,649	-9,653	4		1
	-5,190	-5,216	26		7
Net total				4,018	

<sup>\*</sup> Before adjusting for pension liability insurance

# **Employees**

The average number of workers employed over the year as a whole was as follows:

	2018
	Number
Industrial workers	247
Employees	173
Minimally employed workers	4
	424

In addition, an average of 51 trainees were employed in the Financial Year.

# **Management Board and Supervisory Board**

In accordance with the company's Articles of Association, the Management Board is to consist of at least one person. The number of Management Board members is determined by the Supervisory Board. The Supervisory Board may appoint a Management Board member to serve as Chairman.

The members of the **Management Board** are:

Mr. Johannes Heckmann

CEO

Mr. Günther Spitzer

CFO

Dr. Michael Klimes

COO

The total remuneration of the Management Board amounted to TEUR 2,153.

# **Supervisory Board**

In accordance with the Articles of Association, the Supervisory Board consists of three members. As of the time the financial statements were prepared, the Supervisory Board had the following members:

Mr. Gerhard Witzany

Chairman

Dr. Dieter J. Braun

Vice Chairman

Prof. Dr.-Ing. Jürgen G. Heinrich

The members of the Supervisory Board received total remuneration in the amount of TEUR 56 for Financial Year 2018.

Major events occurring after the reporting date

There were no major events to report which occurred after the reporting date.

# Proposal for appropriation of retained earnings

The Management Board proposes that the retained earnings for Financial Year 2018 in the amount of EUR 30,753,912.26 be appropriated as follows: a sum in the amount of EUR 1,760,000.00 will be distributed to shareholders by paying a dividend of EUR 0.20 per share on the 8,800,000 shares with dividend rights for Financial Year 2018. The remainder, in the amount of EUR 28,993,912.26, will be carried forward to new account.

Schwandorf, 22 March 2019

Nabaltec AG

The Management Board

Johannes Heckmann

Günther Spitzer

Dr. Michael Klimes

### INDEPENDENT AUDITOR'S REPORT

To the Nabaltec AG, Schwandorf

# **Audit Opinions**

We have audited the annual financial statements of Nabaltec AG, Schwandorf, which comprise the balance sheet as at December 31, 2018, and the statement of profit and loss for the financial year from 1 January to 31 December 2018, and notes to the financial statements, including the presentation of the recognition and measurement policies. In accordance with the German legal requirements, we have not audited the content of the "Voluntary Declaration Pursuant to §161 of the German Stock Corporation Act on the German Corporate Governance Code", which is referenced to in the notes to the consolidated financial statements. In addition, we have audited the management report of Nabaltec AG, Schwandorf for the financial year from 1 January to 31 December 2018.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying annual financial statements comply, in all material respects, with the requirements of German commercial law applicable to business corporations and give a true and fair view of the assets, liabilities and financial position of the Company as at December 31, 2018 and of its financial performance for the financial year from 1 January to 31 December 2018. Our audit opinion does not cover the content of the abovementioned "Voluntary Declaration Pursuant to §161 of the German Stock Corporation Act on the German Corporate Governance Code".
- the accompanying management report as a whole provides an appropriate view of the Company's
  position. In all material respects, this management report is consistent with the annual financial
  statements, complies with German legal requirements and appropriately presents the opportunities
  and risks of future development.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the annual financial statements and of the management report.

# **Basis for the Audit Opinions**

We conducted our audit of the annual financial statements and of the management report in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Annual Financial Statements and of the Management Report" section of our auditor's report. We are independent of the Company in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the annual financial statements and on the management report.

### Other Information

The executive directors are responsible for the other information. The other information comprises

 the Annual Report, with the exception of the audited annual financial statements and management report and our auditor's report, as well as the "Voluntary Declaration Pursuant to §161 of the German Stock Corporation Act on the German Corporate Governance Code", which is referenced to in the notes to the consolidated financial statements.

Our audit opinions on the annual financial statements and on the management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the annual financial statements, with the management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

# Responsibilities of the Executive Directors and the Supervisory Board for the Annual Financial Statements and the Management Report

The executive directors are responsible for the preparation of the annual financial statements that comply, in all material respects, with the requirements of German commercial law applicable to business corporations, and that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German Legally Required Accounting Principles. In addition, the executive directors are responsible for such internal control as they, in accordance with German Legally Required Accounting Principles, have determined necessary to enable the preparation of annual financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the annual financial statements, the executive directors are responsible for assessing the Company's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting, provided no actual or legal circumstances conflict therewith.

Furthermore, the executive directors are responsible for the preparation of the management report that as a whole provides an appropriate view of the Company's position and is, in all material respects, consistent with the annual financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the management report.

The supervisory board is responsible for overseeing the Company's financial reporting process for the preparation of the annual financial statements and of the management report.

# Auditor's Responsibilities for the Audit of the Annual Financial Statements and of the Management Report

Our objectives are to obtain reasonable assurance about whether the annual financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the management report as a whole provides an appropriate view of the Company's position and, in all material respects, is consistent with the annual financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the annual financial statements and on the management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual financial statements and this management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

Identify and assess the risks of material misstatement of the annual financial statements and of the
management report, whether due to fraud or error, design and perform audit procedures responsive
to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our
audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than
for one resulting from error, as fraud may involve collusion, forgery, intentional omissions,
misrepresentations, or the override of internal controls.

- Obtain an understanding of internal control relevant to the audit of the annual financial statements and of arrangements and measures (systems) relevant to the audit of the management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems of the Company.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the annual financial statements and in the management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the annual financial statements, including
  the disclosures, and whether the annual financial statements present the underlying transactions
  and events in a manner that the annual financial statements give a true and fair view of the assets,
  liabilities, financial position and financial performance of the Company in compliance with German
  Legally Required Accounting Principles.
- Evaluate the consistency of the management report with the annual financial statements, its conformity with German law, and the view of the Company's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Nuremberg, 27 March 2019

# **Deloitte GmbH**

Wirtschaftsprüfungsgesellschaft

(Andreas Kiefer)
Wirtschaftsprüfer
[German Public Auditor]

(Christian Fischer)
Wirtschaftsprüfer
[German Public Auditor]

# Appropriation of distributable profit

The Management Board proposes that the distributable profit of the 2018 financial year, amounting to EUR 30,753,912.26, will be used as follows:

An amount of EUR 1,760,000.00 will be distributed to the shareholders by payment of a dividend of EUR 0.20 per share on the 8,800,000 non par value shares entitled to dividend payments for the 2018 financial year. The remainder in the amount of EUR 28,993,912.26 will be carried forward.

Schwandorf, April 2019

The Management Board

Johannes Heckmann

Günther Spitzer

Dr. Michael Klimes

# Report of the Supervisory Board

Ladies and Gentlemen, Dear Shareholders,

Nabaltec AG can once again look back on a successful year, one which was largely shaped by Nashtec's implementation of a stand-alone solution in the US and the creation of new structures, particularly as the company has expanded operations in the US, with Nabaltec USA Corporation and Naprotec LLC. In light of this situation, factors arose during the year which had the effect of weighing down earnings, although Nabaltec was able to partially compensate for these effects at the Group level. It is evident, however, that long-term demand in Nabaltec AG's target markets is intact and that the company was able to implement price changes in some cases alongside improvements to its product mix. In addition, the formation last year of Nabaltec (Shanghai) Trading Co., Ltd. as a wholly-owned subsidiary of Nabaltec has laid the groundwork for increasing the supply of lithium ion batteries to the Chinese market in the future.

The Supervisory Board duly performed its assigned tasks in Financial Year 2018 in accordance with the law, the Articles of Association and the Rules of Procedure and was routinely informed by the Management Board in detail as to the performance and position of the company. The Supervisory Board advised the Management Board in accordance with the underlying information and exercised utmost care in monitoring and supervising the Management Board. The Supervisory Board was involved at an early stage in all decisions of fundamental importance for the company, and was kept fully and directly informed by the Management Board.

Major events, as well as questions relating to strategy, planning, business development, the risk position, risk management and compliance, were considered by the Supervisory Board both internally and in conjunction with the Management Board. The Supervisory Board voted on the reports and draft resolutions submitted by the Management Board after careful deliberation and review. All transactions requiring approval in Financial Year 2018 were decided positively.

The Supervisory Board of Nabaltec AG last revised the objectives for composition of the Supervisory Board in December 2018, adapting them to conform to the company's international development.

In the Supervisory Board's estimation, all three of its current members should be considered independent. However, the Supervisory Board reserves the right to approve consulting and employment agreements between individual members of the body and the company if the Management Board and Supervisory Board concur that the conclusion of such an agreement is in the company's interest in that particular case.

In accordance with the German Corporate Governance Code, the Supervisory Board has reviewed the efficiency of its activities and has reached a positive conclusion. The focuses of its review were above all on procedures and the timely and adequate provision of information.

# Financial Year 2018

The Supervisory Board once again opted not to form committees in the past financial year. The Supervisory Board of Nabaltec AG consists of three members, and is therefore of

suitable size for all matters to be considered and decided by the full Supervisory Board. No conflicts of interest for individual Supervisory Board members arose in the course of deliberations or voting by the Supervisory Board, or in the Board's exercise of its supervisory mandate in the 2018 reporting year.

Four regular ordinary meetings of the Supervisory Board were held in the reporting year, on 9 April 2018, on 26 June 2018, following the Annual General Meeting, on 11 September 2018 and on 11 December 2018. All members were present at all meetings in 2018. No additional meetings took place in 2019 prior to the Supervisory Board meeting on 9 April 2019, in which the Board votes on adoption of the financial statements. The members of the Supervisory Board also deliberated in writing and by telephone. On seven occasions in 2018, resolutions were adopted by the Supervisory Board outside of Supervisory Board meetings. Each of these resolutions was duly recorded in writing by the Supervisory Board Chairman and approved.

### Focus of deliberations

The following issues were the subject of particularly intensive consideration by the full Supervisory Board in Financial Year 2018:

- the 2017 annual financial statements and consolidated financial statements including the proposal for the appropriation of distributable profit;
- the formation of Nabaltec USA Corporation and Naprotec LLC and the integration of Naprotec LLC and Nashtec LLC into Nabaltec USA Corporation;
- the resumption of operations by Nashtec LLC;
- the formation of Nabaltec (Shanghai) Trading Co., Ltd.;
- planning for 2019 and mid-term planning through 2021;
- investment and financing planning for the period from 2019 through 2021.

The goals and realization status of innovative projects, the effectiveness of the risk management system, the accounting process in Nabaltec AG and Nabaltec Group, as well as the monitoring of the internal controlling system were also focuses of the Supervisory Board's work in Financial Year 2018.

Even outside the Supervisory Board meetings, the Supervisory Board was routinely notified of important events of essential importance for assessing the position, performance and management of the company. The company's current situation, the development of the business position, important transactions and key decisions by the Management Board were also the subject of discussions between the Management Board and the Supervisory Board and were addressed in written reports as well. In particular, the Supervisory Board was notified of market trends, the risk and competitive situation, the development of sales, revenues and earnings and the degree to which projections were met in monthly and quarterly reports. To this end, the Chairman of the Supervisory Board maintained a close and routine exchange of information and thoughts with the Management Board.

On 2 March 2018, the joint 2018 Declaration of Conformity with the German Corporate Governance Code was issued by the Supervisory Board and Management Board and has been permanently made available for shareholders on the company's website, www.nabaltec.de. Further information about corporate governance at Nabaltec AG can be found in the Corporate Governance Report on the company's website, www.nabaltec.de, in the Investor Relations/Corporate Governance section.

## 2018 Annual Financial Statements and Consolidated Financial Statements

Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Nuremberg, has audited the annual financial statements and management report of Nabaltec AG, which were prepared in accordance with the German Commercial Code, as well as the consolidated financial statements, which were prepared based on the IFRS (International Financial Reporting Standards) pursuant to § 315e of the German Commercial Code, and the consolidated management report, each for 31 December 2018, and has issued an unqualified auditor's opinion.

The Supervisory Board engaged the auditor in accordance with the resolution of the Annual General Meeting of 26 June 2018. The auditor's independence declaration was obtained by the Supervisory Board in advance pursuant to Section 7.2.1 of the German Corporate Governance Code. No circumstances were evident which would have established doubts as to the auditor's independence. Moreover, the auditor was obligated to immediately notify the Supervisory Board of circumstances which could establish a bias on its part and to report any services it performed in addition to the audit. The focus of the audit for Financial Year 2018 was set on accounting questions arising in connection with realization of the stand-alone solution for Nashtec LLC and with its further development.

All documents relating to the financial statements, as well as the auditor's audit reports, were made available to the Supervisory Board in a timely manner for independent review. These documents and the auditor's report were the subject of intensive consideration at the session of 9 April 2019. The auditor was present at this meeting, reported on the key findings of the audit and was available for further questions. Based on its independent review of the annual financial statements, the consolidated financial statements, the management report and the consolidated management report, the Supervisory Board has raised no objections and adopts the findings of the auditor Deloitte GmbH. The Supervisory Board therefore approved the annual financial statements prepared by the Management Board for Nabaltec AG and Nabaltec Group for 31 December 2018. The annual financial statements of Nabaltec AG for 2018 are therefore adopted.

The Supervisory Board would like to thank the Management Board and all the employees for their commitment and for their successful work last year, and looks forward with confidence to the company's development in the future.

Schwandorf, 9 April 2019

Gerhard Witzany Chairman of the Supervisory Board

FINANCIAL CALENDAR 2019	
German Spring Conference, Frankfurt	13 – 14 May
Hauck & Aufhäuser Stockpicker Summit, Madrid	15 – 17 May
Interim Report 1/2019	23 May
Annual General Meeting	27 June
Interim Report 2/2019	22 August
Interim Report 3/2019	21 November

### CONTACT

### Heidi Wiendl-Schneller

Nabaltec AG

Alustraße 50 – 52 Phone: +49 9431 53-202 92421 Schwandorf Fax: +49 9431 53-260

Germany E-mail: InvestorRelations@nabaltec.de

Frank Ostermair

Better Orange IR & HV AG

Haidelweg 48 Phone: +49 89 8896906-14 81241 Munich Fax: +49 89 8896906-66

Germany E-mail: nabaltec@better-orange.de

# **IMPRINT**

# **Publisher**

Nabaltec AG

Alustraße 50 – 52 Phone: +49 9431 53-202 92421 Schwandorf Fax: +49 9431 53-260 Germany E-mail: info@nabaltec.de Internet: www.nabaltec.de

### Text

Nabaltec, Schwandorf Better Orange, Munich

# **Concept & Design**

Silvester Group, www.silvestergroup.com

### **Photos**

Strandperle

### Statements relating to the future

These annual financial statements contain statements relating to the future which are based on the Management Board's current estimations and prognosis as well as on information currently available. These statements relating to the future are not to be understood as guarantees of the predicted future developments and results. The future developments and results are rather dependent on a number of risks and uncertainties and are based on assumptions which possibly may prove to be false. We do not accept any obligation to update these statements relating to the future.

### Rounding

Due to computational reasons, rounding differences may appear in the percentages and figures in the tables, graphics and text of this report.





# Nabaltec AG

Alustraße 50 – 52, 92421 Schwandorf, Germany Phone: +49 9431 53-0, Fax: +49 9431 53-260 E-mail: info@nabaltec.de, www.nabaltec.de