Consolidated Management Report of BayWa AG for the Financial Year 2018

Overview

The BayWa Group developed positively in 2018 and fully achieved all of the Group targets set for the reporting year. All three of the Group's core operating segments increased their earnings year on year. The Agriculture Segment improved its earnings primarily as a result of measures introduced in 2017 to improve profitability. The Energy Segment topped the high level of earnings from the previous year and set a new record. Earnings continued to develop favourably in the Building Materials Segment as well. Improvements in operating earnings in the segments were able to more than compensate for the absence of one-off income, including from the sale of the BayWa high-rise building in the previous year.

The Agriculture Segment experienced diverse development in the financial year 2018. All told, revenues increased by 1.7% to €11,015.9 million. Earnings before interest and tax (EBIT) in the segment improved significantly by €18.0 million to €100.1 million due to rises in earnings in the Agricultural Equipment and BayWa Agri Supply & Trade (BAST) business units. The revenues of the BAST business unit declined by 9.1% to €5,286.8 million in the reporting year. This decline was primarily due to the transfer of grain and oilseed marketing activities in Germany and those managed by the Austrian Group company RWA Raiffeisen Ware Austria Aktiengesellschaft (RWA) to the Agri Trade & Services business unit at the start of the year and the resulting decline in handling volume in the BAST business unit. Besides the structural optimisation in the previous year, the increased volatility of agricultural commodity prices also had a positive impact on earnings, since the company seized the resulting trading opportunities. The business unit's EBIT rose significantly by €24.1 million to €31.1 million. Since 1 January 2018, the Agri Trade & Service business unit (formerly: BayWa Agricultural Sales) has encompassed the grain and oilseed marketing activities of the BAST business unit in Germany as well as those managed by RWA, alongside the agricultural input business and the recording of agricultural produce. This increased revenues by 17.3% to €3,298.8 million in the reporting year. However, adjusted for this effect, revenues declined due to the fall in sales volumes in both the agricultural input and produce business on account of extreme weather conditions and extremely low harvest volumes. EBIT in the Agri Trade & Service business unit fell by €20.5 million year on year to €5.2 million. This decline in earnings was due in particular to substantial decreases in volumes and a rise in logistics costs. In the Global Produce business unit (formerly: Fruit), revenues were down marginally by 0.3% to €807.9 million. Growth abroad more than compensated for declines in Germany. EBIT in the Global Produce business unit fell by €2.2 million to €27.2 million in the reporting year. One reason for the decline was the negative impact of the trade conflict between the US and China on T&G Global Limited's international activities. Moreover, the earnings contribution from the German fruit business was lower in 2018 due to a lack of marketing volume in the first half of the year. Agricultural equipment business benefited in particular from significant growth in the sale of new machinery in Germany and Austria in 2018. Compared to the previous year, the Agricultural Equipment business unit saw its revenues rise by 15.9% to €1,622.4 million. EBIT in the business unit improved by a greater margin compared to revenues, rising by 83.9% to a new record of €36.6 million.

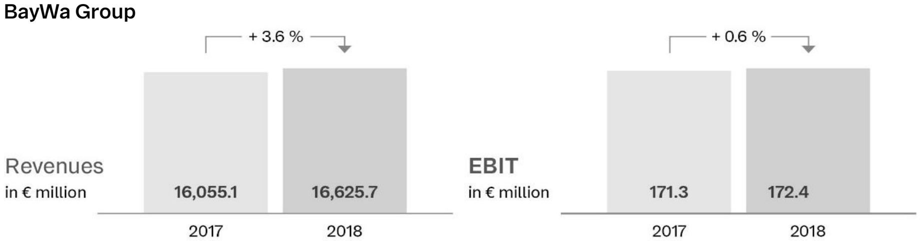
In the Energy Segment, positive business development in 2018 was fuelled by both business units. Overall, revenues increased by €373.7 million year on year to €3,968.4 million. EBIT was up by 12.9% to €96.0 million – its highest level to date. In the Renewable Energies business unit, revenues increased by 12.0% to €1,530.2 million primarily as a result of a significant rise in the volume of energy trade. EBIT reached a new record high at €72.5 million. This increase was primarily due to a rise in project sales and the growth in the service business. In 2018, the conventional energy business was influenced by the almost consistently higher price of oil compared to 2017, which was the primary reason for revenues rising by 9.4% to €2,438.3 million.

EBIT reached a new record high of €23.5 million, up 27.0% on the previous year. This was primarily due to improved margins in the fuel business.

The Building Materials Segment benefited from the ongoing boom in construction activity. Revenues rose by 0.7% to €1,617.5 million in 2018, primarily due to volume factors. The segment's EBIT rose more sharply compared to revenues, by 3.3% to €31.1 million. Above all, this was due to expansion of digital sales channels as well as positive sales development.

The Innovation & Digitalisation Segment increased its revenues in the reporting year to €10.7 million. As planned, the segment recorded negative EBIT of €12.3 million due to significant investment in the development of digital farming solutions and the new BayWa Portal online platform.

BayWa Group



The BayWa Group generated total revenues of €16,625.7 million in 2018, a 3.6% increase compared to the previous year. EBIT improved by 0.6% to €172.4 million. The consolidated net result for the year declined by 18.3% to €54.9 million due to an increase in tax on income and the rise in tax expenses caused by improvements in operating earnings. The Board of Management and the Supervisory Board will propose the same dividend distribution as the previous year, 90 cents per share, to the Annual General Meeting of Shareholders.

BayWa continued to pursue its strategic development in 2018: In the Agriculture Segment, the BAST business unit continued to develop its speciality strategy to expand its range of products with the addition of special types of grain and services by acquiring British company Premium Crops Limited and Dutch company Royal Ingredients Group International B.V. Activities in the Agri Trade & Service business unit centred on consolidating and optimising the location network. In addition, sales were geared towards integrated solutions, and organic produce, among other things, was added to the product range. The focus of the Global Produce business unit was on expanding the range of fruit and vegetable specialities. In addition, the German fruit operations have been carbon-neutral since June 2018. The Agricultural Equipment business unit increased its market share in core regions thanks to targeted expansion of its product range. It also expanded its presence in the Netherlands by taking over three Van Arendonk B.V. sites as at 1 January 2019.

The Energy Segment continued to expand its renewable energies activities globally as one of Europe's largest providers. In Spain, BayWa r.e. constructed Don Rodrigo, its largest solar power plant to date with a total output of 174.4 megawatts (MW) and also the first to be constructed without any government subsidies at all, in 2018. In the Netherlands, BayWa r.e. acquired 70% of the shares in GroenLeven, the leading solar power plant project developer, and became one of the world's ten largest solar project developers in early 2018. Further expansion followed in Latin America in October with the acquisition of DMSolar, the leading provider in the Mexican solar industry. A range of new electromobility services were introduced in the conventional energy business. Electric vehicle customers can now charge their vehicles at over 8,000 charging stations in Germany and approximately 35,000 throughout Europe using the BayWa filling station card. BayWa launched a new digital lubricant platform, Interlubes, in March 2018.

In the Building Materials Segment, BayWa acquired a 90% stake in Saxony Anhalt-based Bölke Tiefbaustoffe für Ver- und Entsorgung GmbH in July 2018, strengthening its civil engineering portfolio. The range of online services was expanded by linking together online and stationary sales channels through the Click & Collect function and the addition of the "Mr+Mrs Homes" property configurator as part of efforts to position the company as an integrated multi-specialist. In addition, BayWa created a seal of approval for low-pollutant building materials in 2018, the BauGesund seal.

In the Innovation & Digitalisation Segment, BayWa created the Agro Innovation Lab (AIL) together with RWA Raiffeisen Ware Austria Aktiengesellschaft (RWA). Start-ups with innovative business ideas for agriculture had the opportunity to apply for the acceleration programme organised by AIL. BayWa Venture GmbH invested in four start-ups in 2018 to help develop ideas into fully fledged products ready to be marketed.

The BayWa Group has a well-balanced, forward-thinking business portfolio to underpin its success in the future.

Background to the Group

BayWa Group Business Model

Group structure and business activities

The BayWa Group

2018	Revenues (in € million)	Employees (annual average)
Agriculture	11,015.9	10,428
Energy	3,968.5	2,407
Building Materials	1,617.5	4,211
Innovation & Digitalisation	10.7	183
Other Activities	13.1	775
Total	**16,625.7**	**18,004**

BayWa AG was established in 1923 and has its principal place of business in Munich. Through consistent growth and the continual expansion of its scope of services, BayWa has grown from its humble beginnings in agricultural cooperative trading into one of Europe's leading trade, services and logistics companies and an integrated solution provider. Its business focus is on Europe, but BayWa has also established an international trade and procurement network by maintaining important activities in the US and New Zealand and business relations from Asia to South America. The BayWa Group's business activities – divided into the three operating segments Agriculture, Energy and Building Materials, as well as the Innovation & Digitalisation Segment focused on development – encompass wholesale, retail and logistics, as well as extensive supporting services and consultancy. The BayWa Group has registered places of business in 41 countries, either through itself or through Group companies.

BayWa AG conducts its business in the three operating segments and the Innovation & Digitalisation development segment both directly and through its subsidiaries, which are included in the group of consolidated companies. Besides the parent company BayWa AG, the BayWa Group comprises 313 fully consolidated Group companies. Furthermore, 28 companies were included at equity in the financial statements of BayWa.

Agriculture Segment
The Agriculture Segment traditionally accounts for the largest share of revenues at the BayWa Group. In 2018, it accounted for approximately 66% of revenues. The segment is divided into four business units: BayWa Agri Supply & Trade (BAST), Agri Trade & Service, Global Produce and Agricultural Equipment, covering the entire value chain from field to produce marketing. Effective 1 January 2018, the domestic marketing activities for the BAST business unit were transferred to the former BayWa Agricultural Sales (BAV) business unit, so that national produce trading can be managed in one place from recording through to marketing. In the course of these efforts, the BAV business unit was renamed the Agri Trade & Service business unit. The BAST business unit continues to include the international grain and oilseed trading activities. These changes resulted in a corresponding shift of revenues and earnings from BAST to the Agri Trade & Service business unit. In addition, the Fruit business unit was renamed Global Produce effective 1 January 2018.

The Agriculture Segment is strongly influenced by natural phenomena, such as the weather, and the effect these phenomena have on harvests. These factors have a direct impact on the offering and pricing in the markets for agricultural commodities and produce. Globalisation means that international developments, such as record or failed harvests in other parts of the world or changes in exchange rates and transport prices, increasingly affect price development in regional markets. The extent to which the prices of individual agricultural commodities influence one another has increased significantly in recent years and prices have become more volatile. The price trend for agricultural produce is expected to remain stable or point slightly upwards over the medium to long term due to the growing global population and rising expectations regarding food, while land under cultivation per capita declines simultaneously. Supply and demand and prices for agricultural inputs such as fertilisers and crop protection products are also increasingly influenced by global and regulatory factors. What is more, changes in the legal conditions can trigger considerable adaptive reactions in the markets trading agricultural products. Finally, regulations – for instance, those issued by the European Union (EU) – exert a major influence on pricing and structures in a number of relevant markets.

BAST

BayWa assumes a leading position in grain and oilseed trade in Europe and has global reach. In the BayWa Agri Supply & Trade (BAST) business unit, BayWa acts as a supply chain manager, coving the entire value chain from procurement and logistics to sales and continuing to expand its international grain trading activities. It pools activities that are not tied to a specific location, particularly international grain trading, and is geared primarily towards grain or oil mills, producers of starch and feedstuffs, malt houses, breweries and biofuel manufacturers as its main customers. When it comes to the procurement and marketing of produce, BayWa possesses a global network comprising both inland and deep water ports. In February 2018, BayWa acquired grain trader Premium Crops Limited through its British subsidiary Cefetra Limited as part of its speciality strategy in trade with agricultural produce (see also Corporate Goals and Strategy section). Premium Crops is a major UK specialist crop contracting and supply business whose focus is on sustainable, traceable, and fully risk-managed supply chains for niche oilseeds and speciality grains. In December 2018, BayWa acquired – subject to approval by antitrust authorities – 60% of the shares in the specialist retailer Royal Ingredients Group International B.V. (Royal Ingredients) through its Dutch subsidiary BayWa Agri Supply & Trade B.V. Royal Ingredients is a leading provider of starch products, plant proteins, grain and seed cultivated using both conventional and organic methods for the global food and animal feed industry. The acquisitions are part of the BAST business unit's speciality strategy of further diversifying its portfolio to include special grains and services.

Agri Trade & Service

The Agri Trade & Service business unit covers all stages of farms’ value chains: recording, sales and service. It supplies farmers with agricultural inputs such as seed, fertilisers, crop protection and feedstuffs throughout the entire agricultural year and takes responsibility for collecting and marketing the harvest regionally. For its recording activities, BayWa maintains a dense network of high-performance locations in its core regions with significant transport, processing and storage capacities This guarantees seamless goods delivery, quality inspection, processing, correct storage and handling of agricultural produce. BayWa sells products to local, regional, national and international companies in the foodstuff, wholesale and retail industries through its in-house trade departments.

BayWa’s agribusiness is embedded in the agricultural cooperatives trading structure. In Germany, this business is focused on specific regions on account of historical structures. BayWa has 201 sites in its traditional core regions, particularly in Bavaria, Baden-Württemberg, Mecklenburg-West Pomerania, Thuringia, Saxony, Saxony-Anhalt and southern Brandenburg, which form part of an extensive and dense network. The focal point when it comes to developing agribusiness in Germany is on site modernisation, process optimisation in the logistics chain, the expansion of e-commerce activities and employee development. Just-in-time deliveries and direct supply to farms is becoming increasingly important, raising the requirements when it comes to sites’ capacity for goods acceptance. The trend is moving towards fewer but larger sites with increased capacities, and preferred locations are gradually moving away from the centres of towns and cities and out towards peripheral locations with better transport infrastructure. Digitalisation is also opening the door to additional opportunities to improve the logistics chain for both sides in close collaboration with customers. Thanks to BayWa’s omni-channel sales concept, customers can decide for themselves whether they prefer to do business in person at a BayWa site or online. By expanding its digital activities, BayWa is also acquiring new customers beyond its traditional regions. Relaying the necessary competences for new challenges in the digital world is at the forefront of BayWa’s employee development activities. Through its Austrian subsidiary RWA Raiffeisen Ware Austria Aktiengesellschaft (RWA), which maintains close business relations across the whole of Austria with 469 cooperative warehouses, BayWa is represented throughout the country. Numerous privately owned medium-sized trading enterprises, mainly operating locally, make up the competitive environment for agricultural produce. In contrast, there are also a number of wholesalers operating nationwide that offer agricultural inputs. All in all, BayWa has established a leading market position for itself in the agricultural trade in Germany and Austria.

Global Produce
The Global Produce business unit is one of the BayWa Group's business units with the greatest international focus. In 2012, BayWa took over New Zealand company T&G Global Limited (T&G), which in turn acquired Apollo Apples Limited in 2014. Together with its subsidiary Apollo Apples, T&G is the leading provider of apples in New Zealand, with international trade links to the Americas, Asia, Australia and Europe. Through the reciprocal marketing of dessert pome fruit between the northern and southern hemispheres, BayWa is in the position to provide trade partners in Europe with fresh produce all year round, expand its product range and seize sales opportunities for German fruit on the international growth markets, which makes BayWa one of the most important pome fruit traders worldwide. The existing sales structures of T&G and its affiliates offer the potential to open up additional sales markets, particularly in Asia. In Germany, BayWa is the leading single seller of dessert pome fruit to wholesalers and retailers in the food industry and the largest supplier of organic pome fruit. BayWa also records, sorts, stores, packages and trades fruit for customers in Germany and abroad as a marketer under contract at its six sites in the Lake Constance, Neckar and Rhineland-Palatinate regions. BayWa expanded its portfolio in the growth market for exotic speciality fruits in the "ready-to-eat" sector in 2016 through the majority interest in the Dutch supplier TFC Holland B.V. (TFC), significantly strengthening its position as a leading international supplier of fruit and pome fruit. TFC has long-standing international trade relations in all procurement markets for tropical fruits – mainly for avocado, mango and citrus fruits – as well as with the European food retail industry. By taking this step, BayWa systematically continued its specialisation in the national and international fruit business. Using an attractive diversified product portfolio featuring specialities to set yourself apart from the competition is also playing an increasingly significant role in the German market, which is marked by a high concentration on the demand side.

As part of its speciality strategy, BayWa and Al Dahra Holding LCC, Abu Dhabi, a leading agricultural company in the Arab world, founded a joint venture in the United Arab Emirates (UAE) in March 2017 to self-sufficiently provide the region with premium vegetable fruits in an efficient manner that conserves resources. Total investment volume for the construction of state-of-the art climate-controlled greenhouses on a 10-hectare property totalled approximately €40 million at the end 2018. The facility has been operating in test mode since the second half of 2018. Once fully operational, up to 6,000 tonnes of premium tomatoes will be able to be produced per year in these greenhouses and marketed to the local food retail industry. The greenhouse's controlled climate makes it possible to harvest produce all year long. Its innovative system cuts water consumption by around 60% compared to conventional greenhouses.

Agricultural Equipment
The Agricultural Equipment business unit offers a full line of machinery, equipment and systems for all areas of agriculture. The most important customer groups include those in agriculture and forestry, local government and industry. Aside from tractors and combine harvesters, the range of machinery also includes versatile municipal vehicles, road-sweeping vehicles, mobile systems for wood shredding and forklift trucks for municipal services and commercial operations. The range on offer for forestry extends from large machinery and equipment such as forestry tractors, wood splitting and chipping machinery, forest milling cutters and mulchers, cable winches, road and path construction machinery right through to small appliances such as chainsaws and brush cutters and the necessary protective clothing. In addition, an extensive network of 284 workshops and 671 mobile service vehicles provide maintenance and repair services for machinery and equipment. In January 2017, the Agricultural Equipment business unit was reorganised by dividing it into the Agricultural Equipment, CLAAS Affiliated Companies and Special Agricultural Equipment business divisions so as to better meet the varying needs of different customer groups and seize growth potential. The Agricultural Equipment business division comprises product management for new machinery, especially AGCO-brand machinery, as well as international activities. CLAAS sales and service through the joint affiliated companies are equally positioned form an organisational perspective. The Special Agricultural Equipment business division is divided into the product categories municipal services, forestry, indoor equipment and irrigation technologies.

BayWa is the world's largest sales partner for products made by AGCO – with its brands Fendt, Massey Ferguson, Challenger and Valtra – and CLAAS. It maintains a closely linked network of in-house workshops in southern and eastern Germany, as well as the Netherlands, that are tailored to manufacturer brands. In Germany, BayWa has also significantly expanded sales structures for Massey Ferguson-branded products in recent years to increase their market share. This range is complemented by the sale of spare parts and the provision of mobile service vehicles for maintenance and repair services. BayWa also sells used machinery via online platforms.

In BayWa's traditional core regions, the market for agricultural equipment is focused primarily on replacement investments and the modernisation of machinery and systems. Against this backdrop, developing international markets with above-average growth potential is becoming increasingly more important. In Canada, for instance, BayWa has entered into a partnership with CLAAS. The partnership focuses on marketing CLAAS products in the province of Alberta. The first location opened in 2016, with another one opening in 2017 and 2018 each. In the Netherlands, BayWa also acquired the remaining 51% of the shares in the Agrimec Group B.V., a joint venture established together with the Royal Agrifirm Group B.V. in 2014, in July 2016. This company operates in agricultural machinery sales and service. Effective as at 1 January 2019, Abemec B.V., a wholly owned subsidiary of BayWa AG, acquired three sites of the Dutch company Van Arendonk B.V. in Dronten, Zeewolde and Ermelo. This company conducts agricultural equipment business with sales and service offerings in Flevoland and western Gelderland. The three agricultural equipment sites complement Abemec B.V.'s existing network of locations in the south of the country. BayWa is expanding its market position in the Netherlands with these acquisitions. In 2015, BayWa partnered with Barloworld Limited, Johannesburg, South Africa, to establish the joint venture BHBW Zambia Limited for distributing agricultural equipment in sub-Saharan Africa. This partnership resulted in a second joint venture, BHBW Holdings (Pty) Ltd, for agricultural equipment and logistics technology in South Africa and other neighbouring markets in January 2017. BayWa and Barloworld each hold a 50% stake in both joint ventures. BHBW Holding holds licences to distribute AGCO brands Fendt, Massey Ferguson and Challenger in the agricultural division and the Hyster and UTILEV brands with regard to lift trucks and materials handling equipment. The business unit is continuing on its path towards internationalisation with the aim of securing long-term growth opportunities.

Energy Segment

In the financial year 2018, the Energy Segment accounted for just under 24% of consolidated revenues. The segment's business activities are divided into the Renewable Energies business unit, which is pooled in BayWa r.e. renewable energy GmbH, and the conventional energy business.

Renewable Energies

The Group pools the lion's share of the renewable energies value chain in BayWa r.e. renewable energy GmbH (BayWa r.e.). BayWa r.e. pursues a three-pronged diversification strategy for its business portfolio: by country, by energy carrier and by business activity. Business activities are divided into four areas: project development/implementation, services, photovoltaic trade and energy trade. Worldwide, project development/implementation encompasses project planning, management and the construction of wind and solar power plants through to the sale of finished plants. In 2018, BayWa r.e. constructed the Don Rodrigo solar park on a 265-hectare site south of Seville, Spain, without the help of any government subsidies. A power purchase agreement was concluded with Norwegian energy group Statkraft for a term of 15 years for the power generated from the new plant. The share of the energy mix attributable to renewable energies is also increasing in the Netherlands. Against this backdrop, BayWa acquired 70% of the shares in the leading solar power plant project developer GroenLeven, with a project pipeline of over 2 gigawatts (GW), in early 2018. This makes BayWa one of the ten largest solar project developers worldwide. Services comprise planning and technical services, the provision of consumables, operational management and maintenance of the turbines and plants. By opening a new control centre for solar and wind power plants in Bangkok, Thailand, BayWa r.e. is in the position to offer its customers in the Asia-Pacific region the best monitoring, security and operations services. BayWa r.e.'s branches in Europe and South East Asia enable it to guarantee a 24-hour service for its international customers. It currently oversees facilities with a total installed output of approximately 5.7 GW worldwide. In addition, BayWa r.e. sells photovoltaic systems and components and is one of the world's leading wholesalers that is independent of a specific manufacturer in this sector. In October 2018, it acquired the leading provider in the Mexican solar industry, DMSolar, in order to further its expansion in Latin America. BayWa r.e.'s partnership with KOS Energie GmbH (KOS), an alliance of Bavarian municipal utilities providers, and its affiliated company Energieallianz Bayern GmbH & Co. KG (EAB) for the joint marketing of photovoltaic and energy storage systems was expanded in October 2018 with the additions of internet of things (IoT) experts ROCKETHOME. Thanks to the partnership, the range of products and services now includes intelligent smart home/energy IoT solutions to control connected devices and decentralised energy supply systems. In energy trading, BayWa r.e. markets electricity, gas and heat generated from renewable sources. By acquiring Clean Energy Sourcing (CLENS), a direct distributor of energy and operator of a virtual power plant, BayWa r.e. further expanded its portfolio in the field of direct marketing, supplying green electricity and flexibility management to 2.1 GW in 2018. The Renewable Energies business unit has had a strong international focus since its founding in order to reduce reliance on individual national markets. BayWa r.e. is now represented in all major European markets, in North America, in South East Asia, and in Australia, amounting to a total of 25 countries.

The market for renewable energies is a largely regulated market where energy is produced and fed into the grid at prices set by the government. Developments in the market are therefore largely determined by changes in the structure and size of state subsidies. In terms of wind and solar energy, BayWa r.e. operates in Australia, Austria, Croatia, Denmark, France, Germany, Greece, Hungary, Indonesia, Italy, Japan, Luxembourg, Malaysia, Mexico, the Netherlands, Poland, the Republic of Singapore, Romania, Spain, Sweden, Switzerland, Thailand, the UK, the US and Zambia. This ensures that BayWa r.e. is highly diversified both in terms of its range of energy carriers and its geographic distribution. By consolidating various Group companies in the umbrella brand BayWa r.e. renewable energy and setting up a clear business structure in the areas of wind energy, solar power and bioenergy, as well as in the Project Development/Realisation, Services, Photovoltaic Trade, and Energy Trading functional sections, the foundations have been laid to avoid overlapping activities, take advantage of synergies and thus participate in the expected market growth. Generally, investment incentives through guaranteed feed-in tariffs or tax breaks affect demand. In Germany, the structuring of subsidies in the German Renewable Energy Sources Act (EEG) is a major factor influencing demand for wind, solar and bioenergy plants, as the profitability of these turbines and plants is determined by the statutory feed-in tariffs. Similar subsidy mechanisms usually exist in foreign markets. Furthermore, regulatory intervention in free trade also influences prices for systems components. Changes to relevant legislation can therefore have significant effects on investments in renewable energies. That being said, investments in renewable energies are becoming increasingly attractive and less reliant on government subsidies as a result of falling component prices.

Conventional Energy

In its conventional energy business, BayWa predominantly sells heating oil, fuels, lubricants and wood pellets in Bavaria, Baden-Württemberg, Hesse, Saxony and Austria. In the heating business, heating materials are primarily sold through in-house offices. Diesel and Otto fuels, as well as AdBlue, are sold through a total of 247 Group filling stations and partner stations in Germany. In addition, BayWa supplies fuels to resellers and wholesalers. In Austria, more filling stations are managed by subsidiaries. The Group company GENOL Gesellschaft m.b.H. & Co KG acts as a wholesale fuel supplier to cooperative filling stations. In addition to its filling station operations, BayWa also offers a fleet filling station card that has also been accepted by filling station operator ALLGUTH in and around Munich since October 2018. This means that users of the BayWa filling station card can now take advantage of some 2,500 filling stations all over Germany. Electric vehicle customers can now charge their vehicles at over 8,000 charging stations in Germany and approximately 35,000 throughout Europe using the BayWa filling station card. BayWa sells lubricants to commercial and industrial customers, as well as to farmers and operators of combined heat and power plants. BayWa has also positioned itself as a market leader in lubricants for biogas CHP units and with regard to multifunctional oils. In March 2018, BayWa launched the new Interlubes digital platform. The platform is used for selling lubricants and operating resources online to B2B customers. It also offers B2B users in the areas of commerce, industry, municipal services, transportation, agriculture and forestry a wide range of lubricants encompassing multiple manufacturers and brands. The product range includes products and brands from all key manufacturers and retailers. The subsidiary BayWa Energie Dienstleistungs GmbH offers extensive and individual solutions for energy provision to residential properties, municipal and commercial buildings and the healthcare and industrial sectors.

Besides the large mineral oil trading companies, the competitive environment is shaped mainly by medium-sized fuel traders. Having developed over time, there is now a close connection with agribusiness, as farmers are among the largest customer groups. In the Energy Segment, conventional energy business is mainly shaped by volatile price trends in the crude oil markets. The prices of fossil-based fuels are subject to considerable fluctuations, which affect the demand for these products. From a structural perspective, demand for heating oil has been falling for years due to the increasingly widespread use of renewable energy sources and gas, as well as the improvement in energy efficiency in buildings.

Building Materials Segment

Just under 10% of consolidated revenues are generated in the Building Materials Segment. The segment primarily comprises building materials trading activities in southern and eastern Germany and Austria. In addition, BayWa serves a number of franchise partners in the building materials and retail business in Austria through its Austrian subsidiary AFS Franchise-Systeme GmbH. The BayWa Group is one of Germany's market leaders in the building materials trade with a total of 125 locations and also ranks among the leading suppliers in Austria with 31 sites. The number of franchise locations currently totals 993.

In the building materials trade, BayWa mainly caters to the needs of small and medium-sized construction companies, tradesmen, commercial enterprises and municipalities. Private developers and homeowners are also important customers. The key success factors in this business are physical proximity to the customer, the product mix, advisory services and close relations with commercial customers. BayWa takes these factors into account with a targeted focus on its customer groups when it comes to sales and customer consulting services. One example of this is the BayWa Building Materials Online portal, launched in January 2017, which enables business customers to place orders 24/7. Customers also have the option to schedule delivery dates online as well. If customers choose to collect the goods themselves, they can create their own delivery note after completing their order. This enables them to pick up the materials straightaway without any wait. The online range was also expanded by adding a room designer and the "Mr+Mrs Homes" property configurator. The property configurator allows private developers and construction firms to plan and calculate homes online in various configurations and realise them right through to the turnkey handover of the finished house by drawing on a connected network of partners. Further areas of focus in the Building Materials Segment include healthy construction and energy efficiency. BayWa offers a wide range of emissions-tested building materials plus solutions for energy-efficient construction or renovation. It has also created a quality seal for building materials that are not hazardous to health in the shape of the BauGesund seal. This is based on a database containing around 6,000 certified low-emission products from a variety of different manufacturers covering all trades. Products bearing the BauGesund seal are distinguished by the fact that they undergo a strict multiple-stage control process to prove that they are low in emissions and comply with the reference values for pollutants and compounds as recommended by the German Environment Agency (UBA). The BauGesund partnership programme is aimed at commercial customers and encompasses training courses and consultation on the topic of healthy construction and modernisation as well as support in marketing and sales. Thanks to its private brand lines casafino for construction components and landscaping; Formel Pro for structural and chemical products, as well as insulation materials; Formel Pro Green for healthy-living building materials and cleaning agents; and Valut for roofing accessories, BayWa is increasingly becoming an initiator of new products. In the case of conventional construction materials, being close to the customer is a significant competitive advantage. At the same time, the cost of transporting heavy or bulky construction materials with relatively low added value necessitates excellent location structures and optimum logistics.

The building materials market is strongly fragmented both in Germany and in Austria. In Germany, there are approximately 900 companies in total with around 2,300 locations specialised in the building materials trade. The majority of these are small or medium-sized enterprises, which often join forces in the form of procurement groups and similar organisations.

Changes in the economic and political environment in particular may have a positive or negative effect on the Building Materials Segment, especially in the case of subsidy programmes concerning energy-efficient renovation and residential construction. The development of the building materials trade generally follows overall building activity. Civil engineering and road construction depend greatly on public-sector spending. In the area of private construction, incentives such as government subsidies for renovation or refurbishment measures and favourable interest rates for financing play a major role in investment decisions. In addition, manifold regulations influence general investment propensity levels and the demand for certain products. Construction laws and directives, such as the German Energy Saving Ordinance (EnEV) or the introduction of energy certification for buildings, construction permits, public procurement law, as well as directives on fire and noise insulation are of particular significance. Finally, the building materials business depends on weather conditions. In particular, heavy precipitation and periods of frost can significantly limit construction activities.

Innovation & Digitalisation Segment

Digitalisation is changing agriculture as we know it. Nowadays, potential for increasing income and efficiency at farms is more about optimising whole processes instead of implementing individual measures. The market for digital applications in the farming industry (digital farming) largely comprises the business areas of precision farming and smart farming. Precision farming focuses on the automation of processes and the optimisation of the use of agricultural inputs. Information is processed digitally and made available from farm management systems, weather apps and online platforms to help farmers make decisions. Building on this, smart farming makes it possible to connect all areas of operations, from logistics to getting in contact with the customer via online interfaces for the electronic ordering of spare parts or agricultural inputs. Here, machines and systems process information independently and make decisions with at least some degree of autonomy. Examples of this include autonomous soil cultivation and harvesting machines, real-time soil analysis and site-specific farm management. This process optimisation not only results in cost savings, but also improves efficiency in the use of agricultural inputs. Machinery and system maintenance costs can also be reduced through the rapid collection, transmission and assessment of technical data. The best possible use of agricultural inputs ultimately boosts yields. The digital integration of supply chain partners, customers and suppliers also creates the possibility for new services and data-based business models. Interconnectivity between online stores and applications enables agricultural inputs and spare parts to be provided as and when needed or allows electronic troubleshooting to be carried out in the case of machine failure, with the results sent directly to the responsible service technician.

BayWa has plotted a clear course into the digital future through the independent Innovation & Digitalisation Segment, which is responsible for developing and marketing digital products and services for enhancing productivity in agriculture. It also pools the BayWa Group's e-commerce activities in the BayWa Portal. With its software product NEXT Farming OFFICE, the Group company FarmFacts GmbH offers farmers a future-oriented and interoperable farm management system. A number of modular tools and solutions are also available. The next innovative step is the networking of entire areas of farms and processes with upstream and downstream stages. To this end, FarmFacts offers an overall concept for medium-sized and small farms with the NEXT Farming LIVE product family. In addition, FarmFacts has teamed up with the agricultural equipment manufacturers AGCO, Krone, Kuhn, Lemken, Pöttinger and Rauch as part of the Agriculture Application Group (aag) partnership to develop the web-based, open NEXT Machine Management machine data management software as a new module for NEXT Farming LIVE that makes it possible to process all data generated by machinery and equipment regardless of the manufacturer. This enables farmers to seize the opportunities of smart farming across all types of machinery and agricultural inputs, irrespective of the type of farm or farm size. BayWa is striving to secure a leading market role in this field across Europe.

BayWa is also driving forward the assessment of satellite data in the farming industry in its partnership with the European Space Agency (ESA). The goal is to optimally incorporate satellite data into agriculture processes in order to create positive effects regarding the use of resources and water, as well as for harvest yields. For example, the Sentinel-2 satellite will provide images for monitoring plant growth and is capable of differentiating between various agricultural crops in the process. In addition, the BayWa Group obtained valuable expertise for the further development of digital solutions in 2017 by acquiring 51% of the shares in VISTA GmbH based in Munich. Using satellite data, VISTA develops digital solutions for agriculture, water management and the environment.

To accelerate the development of innovative ideas for agriculture, BayWa and RWA Raiffeisen Ware Austria have created the Agro Innovation Lab (AIL). Start-ups with innovative business ideas for agriculture had the opportunity to apply for the acceleration programme organised by AIL. The third application process took place in 2018, and saw fledgling companies participate in similar numbers to 2017. A total of 252 start-ups from 53 submitted proposals, with the best six being selected to develop their concepts with the support of BayWa and RWA's international network.

Other Activities

Other activities encompass the Group's central management and administrative functions as well as peripheral activities.

Management, Monitoring and Compliance

BayWa is an Aktiengesellschaft (stock corporation) under German law with a dual management structure consisting of a Board of Management and a Supervisory Board.

As at 31 December 2018, the Board of Management consisted of six members: Prof. Klaus Josef Lutz (Chairman, responsible for the BayWa Agri Supply & Trade and Global Produce business units), Andreas Helber (responsible for Finance), Roland Schuler (responsible for the Agricultural Equipment business unit and the Innovation & Digitalisation Segment), Marcus Pöllinger (responsible for the Building Materials Segment and the Agri Trade & Service business unit), Matthias Taft (responsible for the Energy Segment) and Reinhard Wolf (responsible for RWA Raiffeisen Ware Austria Aktiengesellschaft).

Effective 1 January 2018, Marcus Pöllinger took over responsibility for the Building Materials Segment and, effective to the start of the agricultural year 2018/19 on 1 July 2018, for the Agri Trade & Service business unit as Senior Executive Vice President. Marcus Pöllinger joined the BayWa AG Board of Management on 1 November 2018, as Board of Management member Roland Schuler entered retirement at the end of 2018. From 1 January 2019, Marcus Pöllinger also assumed responsibility for the Agricultural Equipment business unit and the Digital Farming business unit, alongside the Building Materials Segment and the Agri Trade & Service business unit. Prof. Klaus Josef Lutz took over responsibility for innovation.

The Board of Management is solely responsible for managing the Aktiengesellschaft with the primary aim of increasing its value over the long term.

The BayWa AG Supervisory Board consists of 16 members. It monitors and consults the Board of Management in its management activities and regularly discusses business development, planning, strategy and risks together with the Board of Management. In accordance with the German Codetermination Act (MitbestG), shareholder and employee representatives also sit on the Supervisory Board of BayWa AG to ensure codetermination on the basis of parity. The Supervisory Board has formed six committees in order to boost its efficiency.

Details on cooperation between the Board of Management and the Supervisory Board and on corporate governance at BayWa AG are presented in the Supervisory Board report and the corporate governance declaration. These are available at: www.baywa.com/en/investor_relations/financial_reports/consolidated_ financial_ statements/.

The main task of the Corporate Compliance organisational section is to perform preventive duties. Corporate Compliance particularly draws on training courses and an extensive range of consultancy and information services to prevent breaches of the law. Its activities are focused on corruption prevention, antitrust law and combating money laundering. Comprehensive frameworks have been developed and implemented across the Group on these issues. Since 2017, Corporate Compliance has also been responsible for issues such as customs/export control, IT security and data protection and has implemented appropriate management systems.

A Group-wide code of conduct was introduced in 2015, creating a uniform set of values which apply to the entire BayWa Group. Employees who wish to report potential breaches of compliance regulations are now able to register their suspicions through an anonymous tip-off system in addition to existing possibilities, such as the ombudsman. Reported information is assessed and followed up in conjunction with Corporate Audit. Corporate Compliance and Corporate Audit work together closely in internal investigations of an antitrust or criminal nature. There is also an extensive range of compliance controls to review and guarantee adherence to compliance principles. Corporate Compliance is managed by the Chief Compliance Officer, who reports directly to the Chief Executive Officer. Compliance Officers and Data Protection Officers are also appointed in BayWa's business units, as well as at all significant affiliated companies. They are available to employees as additional contact partners and act as conduits.

Corporate Goals and Strategy

The environment and the markets in which BayWa operates are subject to constant and increasingly serious changes. New technologies and advancing digitalisation in all areas of business and society are resulting in the appearance of new competitors on the market who are having a disruptive impact on a number of existing business models. At the same time, new data-driven business models are developing, which are prompting companies to transform their activities. Globalisation is increasing competitive pressure, on the one hand, while opening up access to international markets on the other. The independence of both producers and customers is on the rise, due in particular to the opportunities provided by digitalisation. Despite the existing framework of complex business structures, the pace of change in business is constantly accelerating. More and more frequently, young, flexible start-ups are developing new business ideas into fully fledged products ready to be marketed. As a result, company lifespan is dropping, as many new business forms are ousting established companies. Sustainability as regards climate protection and the conservation of natural resources is growing in social importance virtually all across the world. BayWa has set itself the target of taking on a pioneering role when it comes to sustainability and the development of green solutions across all of its business units. Since the start of the financial year 2018, BayWa r.e.'s business operations have been completely carbon-neutral. The carbon footprint of the entire BayWa r.e. Group was analysed, and measures to reduce carbon emissions were then identified and implemented. Certificates from high-quality carbon offset projects were then used to compensate for the remaining emissions. German sites in the Global Produce business unit have also been operating carbon-neutrally since June 2018 and there are plans to ensure that international sites follow suit in future.

BayWa remains true to its roots while continuing to evolve. The fundamental changes in the value chain call for adjustments or even entirely new business models. In keeping with the guiding principle "We meet basic needs through leading solutions for food, energy and shelter", BayWa is becoming a trusted partner to its customers when it comes to integrated solutions. The aim is to ensure the success of BayWa customers by combining products with advisory and other services and to make their work easier. As a strong partner to its customers, BayWa seeks to ensure that the company remains independent and competitive. True to the current motto, "United for success.", BayWa's corporate conduct has always had a long-term focus and been shaped by the company's responsibility towards customers, employees, other stakeholders and society as a whole.

BayWa is taking two market-driven approaches with regard to its further strategic development: ensuring business continuity by enhancing competitive strength and consequently maintaining its leading position in core business endeavours, as well as growth in new business areas by developing innovative, customer-focused business models.

The strategic pursuits at a functional level are fourfold: Within business models and the organisation, the objective is to press ahead with digitalisation. In operating business, the plan is to optimise management and expand the points of customer contact to strengthen Group brands. Particular focus is being placed at Group level on strengthening the BayWa umbrella brand across all segments and business units. Achieving an excellent organisational set-up marked by close collaboration across divisions and high-performing employees and managers will improve corporate performance. Finally, BayWa plans to continuously analyse its business portfolio for future growth and earnings potential with the aim of ensuring and sustainably increasing the profitability of the BayWa Group's business operations.

In the agricultural division, the Group is affirming its aim of becoming Europe's leading agricultural trade, distribution and logistics provider with global reach. BayWa aims to deepen existing customer ties and attract new customers by seizing opportunities to export to international markets, expanding the range through the addition of speciality produce such as malting barley, hops and legumes, and presenting new service offerings. By taking these steps, BayWa will be further developing its core business on a functional and cost-efficient basis. Another cornerstone of the speciality strategy is the expansion of the range of agricultural goods produced organically and regionally. BayWa AG has been a member of Biokreis e.V., the fourth-largest organic agriculture association in Germany, since October 2018. In future, it will record grain from 1,300 Biokreis farmers all over the country and has also been included in the "Bayerische Bio-Siegel" quality scheme. The Bayerische Bio-Siegel is a seal of approval for high-quality organic produce with full documentation of its origin. BayWa is also looking to diversify its portfolio through international partnerships. In the recording and agricultural input business, the location structure is undergoing consolidation and optimisation, and digital services are being added to the business model. Sales are being geared towards integrated solutions and the range of e-commerce activities expanded. Targeted diversification of the product portfolio and the expansion of the private brand business are helping to stabilise profitability.

In the Global Produce business unit, BayWa's objective is to offer retailers in Europe a diverse and attractive range of produce throughout the year by systematically expanding its procurement base in the southern hemisphere. The focus is on expanding the range of fruit and vegetable specialities. In addition, New Zealand Group company T&G Global Limited is being used as a platform for expanding exports to countries in Asia and tapping into new national markets. International marketing of the full range of produce in the Global Produce business unit through centralised, customer-centric responsibilities leverages synergies and attracts new customers. In Germany, activities are focused on expanding the range of organic produce and club apples such as Jazz and Kanzi.

In addition to already implemented measures to strengthen brand-specific sales organisations and the division by agricultural equipment and special equipment for municipalities, industry and forestry, the focus in the Agricultural Equipment business unit is on the development of cross-vendor digital interfaces and the development of a new Water Management business division.

The objective in the Energy Segment is to further advance the expansion of renewable energies as one of Europe's largest providers in the field of renewable energies. The focus for further growth here is also on scale, continued internationalisation and expanding the service business. Providing integrated energy solutions represents another strategic direction. Examples include the combination of installations for generating renewable energy with efficient energy storage systems, as well as the cross-segment development of innovative products and services, for example with regard to agrophotovoltaics. BayWa r.e. Energy Ventures GmbH invests in fledgling start-ups offering innovative solutions in the energy industry as a lead investor or co-investor.

The conventional energy business is driving the expansion of charging infrastructure for electromobility. In 2017, BayWa agreed partnerships with ladenetz.de and Hubject, who offer charging stations for electric vehicles. In addition, BayWa has had a distribution partnership with ubitricity GmbH since 2018 with regard to the SmartCable solution, which provides transparent power consumption data. Furthermore, BayWa also offers e-mobility solutions created on the basis of comprehensive fleet analysis and targeted at fleet operators. The driving profile analysis is used to derive recommendations as to whether a switch to electric vehicles makes sense, to what extent such a switch is worthwhile and what kind of charging infrastructure is required. When it comes to realisation, BayWa covers all the bases: from selecting and procuring the electric vehicles to planning, installing and maintaining the charging infrastructure at customer locations and advising on subsidy programmes. These efforts enhance the appeal of strategic partnerships in the filling station business and with regard to integrated energy solutions. In its lubricant business, BayWa has been marketing lubricants and operating resources to B2B customers online through its new Interlubes digital platform since March 2018. The aim here is to expand the platform to stock almost all lubricants and operating resources available in Germany.

In the Building Materials Segment, development activities are focused on measures to ensure continuous efficiency improvements and the expansion of online offerings. Thanks to the successful integration of bricks-and-mortar retail with the BayWa Building Materials Online portal in 2018, BayWa now offers a comprehensive multi-channel service covering its entire sales region. BayWa sites are digitally integrated with the online portal and can be selected as a location for collection by scanning for product availability. In this click & collect function, the system also takes into account all conditions applying to bricks-and-mortar retail. Another focal point is expansion in the area of attractive, high-margin speciality products and vertical integration in select areas. Effective as at 1 July 2018, BayWa acquired a 90% stake in Saxony Anhalt-based Bölke Tiefbaustoffe für Ver- und Entsorgung GmbH. The company operates three sites in Laucha, Queis and Zorbau, which are located strategically in the region between two existing BayWa building materials sites in Erfurt and Leipzig. The range of civil engineering services is to be expanded for customers in this area, and BayWa AG will also be offering a range of construction and dry construction services at the three sites belonging to the company, now remained Bölke Handel GmbH.

The Innovation & Digitalisation Segment encompasses the fields of digital farming and eBusiness. In terms of digital farming, BayWa's goal is to assume a leading role as a professional partner for agriculture. With its software products NEXT Farming OFFICE and NEXT Farming LIVE, the subsidiary FarmFacts is the market leader in Germany and serves as the driving force behind smart farming at the BayWa Group. In addition, FarmFacts is generating opportunities for growth on the international markets. Smart farming solutions go beyond the bounds of precision agriculture such as site-specific farm management. For example, just in time for the 2018 harvest, BayWa launched a pilot project with its subsidiary VISTA Geowissenschaftliche Fernerkundung GmbH, which used data provided by Sentinel 2 satellites in the ESA's Corpernicus programme to calculate yield potential for crops such as wheat, corn and rapeseed. The accuracy of these forecasts was 95% just two weeks before the harvest. BayWa is planning to expand this project to include other crops in 2019. After the successful conclusion of a two-year pilot phase in Zambia in Africa, BayWa started the worldwide launch of its satellite-assisted VariableRain irrigation solution in 2018. This solution includes the Promet plant growth model, which calculates the water requirements of agricultural crops using satellite and weather data and derives recommendations for irrigation. Furthermore, BayWa's joint innovation platform with RWA, Agro Innovation Lab (AIL), also provides countless ideas and catalysts for innovative agriculture solutions. BayWa supports selected AIL projects through various means. For example, BayWa Venture GmbH invested in four start-ups to help develop AIL's ideas into fully fledged products ready to be marketed. evja develops digital models to forecast plant growth and pest and disease damage, while evologic technologies researches growth- and yield-boosting seed additives. Bartsparts is creating a digital platform for the sale of replacement parts with a low turnover rate and FarmHedge is establishing an online platform for trade between farmers and agricultural retailers.

BayWa's eBusiness includes the BayWa Portal platform for online trade and plays a cross-cutting role when it comes to digitalising interfaces and processes between BayWa and its customers. The focus here is on an omni-channel approach and further development into a smart digital customers platform and the digitalisation of customer-centric processes.

The development of the BayWa Group is accompanied by a solid and proactive financing strategy. It is shaped by the caution traditionally exercised by companies in the cooperative and agricultural sectors, but also takes into account the changing requirements of an established international group. With its corporate financing, BayWa puts its faith in tried-and-tested, reliable partners in the cooperative federation. Furthermore, it makes sure that there is sufficient diversification in terms of financing sources, so as to guarantee its independence and limit risks. Efficient management of working capital is vital at the BayWa Group as it represents a net figure for current assets less current liabilities. BayWa aims to maintain a balanced capital structure.

Control System

Strategic controlling of the corporate divisions is based on value-oriented corporate governance and integrated risk management. Operational management of the corporate divisions is conducted based on targets; the key earnings figures EBITDA, EBIT and EBT are primarily used as the most significant financial performance indicators. The development of financial performance indicators in the financial year 2018 is described in the Financial Report in the section "Financial Performance Indicators". BayWa reports on its non-financial performance indicators in its separate Sustainability Report.

The value-driven management approach supports the medium- and long-term streamlining of the portfolio and the strategic orientation of capital allocation within the Group. This approach shows whether the ratio between the operating profit achieved and the risk-adjusted cost of capital is appropriate, i.e. whether the business units and the segments have earned their cost of capital. Interest on average capital invested in the business units is charged by applying the weighted average cost of capital (WACC) model. The return on invested capital (ROIC) of the business units is then measured against the respective cost of capital. There is economic profit if the return on invested capital is higher than the cost of capital specific to each business unit (see also "Economic profit" section). The further development of an efficient risk management system is particularly important in safeguarding long-term economic success, especially in international business. The risk management system is monitored and managed by a Risk Board established in 2009 and headed up by the Chief Executive Officer. In addition, the Global Book System (GBS) has been in place to coordinate trade management in grain, oilseed and co-product trade since 2014. The GBS reconciles and optimises trade and risk positions of individual product lines across the board for national and international divisions.

Research and development in the Innovation & Digitalisation Segment

	2018	2017
Non-capitalised research and development expenses (in €)	400,000	255,000
Number of employees	72	48
Own work capitalised (in €)	2,006,000	1,855,000

The BayWa Group's research and development activities relate primarily to the formation and further development of the new Innovation & Digitalisation Segment and take place at the subsidiaries FarmFacts GmbH and VISTA Geowissenschaftliche Fernerkundung GmbH.

Research focuses primarily on pilot projects on the topics of site-specific sowing and fertilisation, as well as satellite-based remote sensing services and applications for agriculture, water management and the environment. Development pertains mainly to software and digital applications for digital farming.

FarmFacts GmbH focuses first and foremost on software modules for controlling agricultural processes, as well as telematic applications and management software for the automated steering of agricultural machinery. In the reporting year, FarmFacts continued to develop the web-based, open NEXT Machine Management machine data management software as a new module for NEXT Farming LIVE in collaboration with agricultural equipment manufacturers AGCO, Krone, Kuhn, Lemken, Pöttinger and Rauch. This software makes it possible to process all data generated by machinery and equipment regardless of the manufacturer. This interface is also open to other agricultural equipment manufacturers to allow farmers to digitally connect their machinery in future despite a growing number of manufacturers. The module is likely to be ready to market in the second quarter of 2019. VISTA Geowissenschaftliche Fernerkundung GmbH implements the latest scientific methods in operational services and applications and develops digital solutions on the basis of satellite data, including hydrology, agriculture and environmental applications such as accurate local forecasts of nutrient and water requirements or harvest forecasts for research and commercial applications. To do so, optical and radar satellite images in various resolutions, as well as additional geodata, are combined.

As at 31 December 2018, 72 employees worked in research and development. The BayWa Group's research and development expenses totalled €400,000 in the financial year 2018. Own work capitalised with regard to new digital farming products amounted to €2.0 million.

Financial Report

Operative Business Development

Agriculture Segment

Market and industry development 2018/19

Development of grain and oilseed

Global balance of grain (excluding rice) in millions of tonnes	Grain year			Change	
	2016/17	2017/18	**2018/19**	2018/19 compared to 2017/18	
Production					
World	2,170.2	2,120.0	**2,106.8**	- 13.2	- 0.6%
thereof: wheat	756.5	763.2	**734.7**	- 28.5	- 3.7%
thereof: coarse grain	1,413.7	1,356.8	**1,372.1**	15.3	1.1%
Consumption					
World	2,118.6	2,115.5	**2,152.4**	36.9	1.7%
thereof: wheat	739.8	744.2	**747.2**	3.0	0.4%
thereof: coarse grain	1,378.7	1,371.3	**1,405.2**	33.9	2.5%
Inventory changes					
World	51.6	4.5	**- 45.6**		
thereof: wheat	16.6	19.0	**- 12.5**		
thereof: coarse grain	35.0	- 14.5	**- 33.1**		

European balance of grain (excluding rice) in millions of tonnes	Grain year			Change	
	2016/17	2017/18	**2018/19**	2018/19 compared to 2017/18	
Production					
EU	298.2	303.8	**284.5**	- 19.3	- 6.4%
thereof: Germany	45.4	45.6	**38.0**	- 7.6	- 16.7%
Consumption					
EU	288.8	293.1	**290.8**	- 2.3	- 0.8%
thereof: Germany	44.2	43.5	**43.5**	0.0	0.0%
Inventory changes					
EU	9.4	10.7	**- 6.3**		
thereof: Germany	1.2	2.1	**- 5.5**		

Sources: USDA, Grain: World Markets and Trade, 2019, pp. 17, 23; BLE, Bericht zur Markt- und Versorgungslage Getreide 2018, p. 35; DBV, Situationsbericht 2018/19, p. 166

Global grain harvest yields were around 2% down on the high levels recorded in the previous year in grain year 2017/18. However, harvest volumes were marginally higher than expected at the start of 2018. The current harvest season was able to cover worldwide consumption in full and inventories increased marginally, with wheat inventories rising while inventories of coarse grain fell. In the European Union, the 2018 grain harvest was some 6% down on the previous year due to the hot and dry summer. The self-sufficiency rate fell below 100% (USDA, Grain: World Markets and Trade, 2019, pp. 17, 23). The grain harvest in Germany declined by 17% year on year and was around 21% down on the average for the years 2012 to 2017, making it the worst harvest for 24 years. The reasons for the extremely poor harvest were poor hectare yields as a result of the extremely short vegetation period and the pronounced dryness in many parts of Europe in the summer months. Grain had to be harvested at an early stage of ripeness, particularly in the north and east of Germany, to the detriment of harvest quality and volume (DBV, Situationsbericht 2017/18, p. 165 et seq.). At 576 million tonnes, the global oilseed harvest in harvest year 2017/18 was marginally up on the previous year and in line with harvest volume expectations (USDA, Oilseeds: World Markets and Trade, 2019, p. 9). However, the trade dispute between the US and China resulted in significant shifts in demand for soya, as China is the world's largest importer and increasingly turned to South American soya to cover its demand. This cut demand for North American soya.

According to the latest forecasts from the U.S. Department of Agriculture (USDA), global grain production in 2018/19 – excluding rice – is likely to be down slightly on the previous year's volume. The wheat harvest volume is expected to be around 4% lower, while the harvest volume of coarse grain is anticipated to rise by around 1%. Worldwide consumption is forecast to climb, meaning that inventories will decline and the coverage of global inventory stocks will decrease marginally. This is particularly due to the fact that the consumption of wheat and corn is expected to exceed production. The supply situation is also set to deteriorate in the EU and in Germany in 2019, particularly in the case of wheat and corn. This will lead to increased demand for imports (USDA, Grain: World Markets and Trade, 2019, pp. 17, 23). In terms of oilseed, global production is expected to grow by roughly 3% to 593 million tonnes in harvest year 2018/19. This should be able to cover the further rise in demand (USDA, Oilseeds: World Markets and Trade, 2019, p. 9; DBV, Situationsbericht 2018/19, p. 171).

International grain prices, measured according to the grain price index of the Food and Agriculture Organization of the United Nations (FAO), rose by as much as 13.3% in 2018 compared to the end of 2017 due to the significant deterioration in the supply situation in certain areas. However, prices remained significantly lower than the record highs seen in the years 2011 to 2013. At an average of 165.2 points during the year, the grain price index saw a 9.0% improvement on the previous year's average (FAO, Monthly Food Price Indices, 2019). The prices for milling wheat on the MATIF commodity futures exchange rose from €159.25 per tonne at the beginning of 2018 to a high for the year of €216.75 per tonne in August due to lower harvests, increased consumption and regional shortages of supply. However, prices fell again by the end of the year to €203.25 per tonne. The price of grain maize developed largely in parallel to the price of wheat; starting at €157.00 per tonne at the beginning of the year, the price on the MATIF exchange rose to €180.25 per tonne by the end of 2018. In the case of feedstuff grain, the drought-related shortage of staple feed resulted in a significant increase in demand, which also resulted in rising prices (DBV, Situationsbericht 2018/19, p. 168). The development of oilseed prices is primarily based on the price of soya. This declined by just under 4% to €281.98 per tonne on the Chicago Board of Trade (CBoT) commodity futures exchange in 2018. This was primarily due to the significant decline in demand for US soya as a result of import duties being imposed in China (DBV, Situationsbericht 2018/19, pp. 172, 175).

Prices of wheat and coarse grain are expected to remain largely stable in 2019, or at least in the first half of the year, due to the low grain volumes in Germany and in the EU. In the case of oilseed, on the other hand, there is only limited potential for price rises due to the ongoing positive global supply situation (DBV, Situationsbericht 2018/19, pp. 168 et seq., 175).

Development of agricultural inputs

Demand for agricultural inputs is highly dependent on the weather, among other factors. At the beginning of 2018, the winter weather and severe frost that extended into March resulted in the fertiliser season being delayed throughout Germany. As the year progressed, spring fertilisation was hampered by the lack of rain in the time periods permitted under the German Fertiliser Application Ordinance (DüV). Fertiliser prices fell at the start of the year, but proceeded to rise again from May onwards primarily as a result of Chinese export duties on urea and higher production costs caused by rising energy prices. However, expectations of further price rises led to demand increasing (DBV, Situationsbericht 2018/2019, p. 211 et seq.). Autumn fertilisation was only possible to a limited extent in many regions due to the extended drought in the summer months. Overall, just under 3% less fertiliser was sold in Germany in 2018 than in the previous year (Destatis, Düngemittelversorgung, 2019). On average, prices for all types of fertiliser climbed by 2.9% in 2018 compared to the previous year (Destatis, Landwirtschaftliche Betriebsmittel, 2019). In 2019, sales of nitrogen and phosphate fertilisers are expected to fall further due to the requirements of the German Fertiliser Application Ordinance and declining demand caused by the poor previous-year harvest. Assuming that weather and vegetation conditions are normal, prices of fertilisers – which are driven by the development of prices on international markets – are expected to rise slightly in 2019 (DBV, Situationsbericht 2018/19, p. 211 et seq.). Sales of crop protection products fell in 2018 by 7.4% year on year, despite being forecast to rise by a small margin (IVA, Der Deutsche Pflanzenschutzmarkt 2018). Crops' susceptibility to disease was low due to the drought, which reduced the use of fungicides. In addition, weed growth remained low, which lowered consumption of herbicides. Prices for crop protection products were stable year on year in 2018 (Destatis, Landwirtschaftliche Betriebsmittel, 2019). Assuming largely unchanged cultivation structure, normal weather conditions and stable prices, the use of crop protection is expected to increase marginally year on year in 2019. The seed market is mainly influenced by the development of land under cultivation for grain, corn and rapeseed. Demand for seed picked up noticeably in the spring of 2018, particularly in the north of Germany, as summer grain was able to be sown on land that had not been used in the previous year due to wet weather. In addition, much more significant resowing was required due to more considerable winter kill compared to the previous year. In autumn 2018, demand for seed was likely to have been up on the previous-year level as land under cultivation for winter grain increased by just under 9% year on year in 2018 (Destatis, Aussaat zur Ernte 2019: Mehr Wintergetreide, 2018). Overall, seed sales in the industry are likely to have increased in 2018 in Germany as forecast. Seed prices increased by an average of 2.6% year on year in 2018 (Destatis, Landwirtschaftliche Betriebsmittel, 2019). In 2019, sales of seed are expected to remain stable year on year assuming there are no changes in land under cultivation and weather conditions remain normal. Due to the prevailing shortage of staple feed in parts of Germany and difficulties in relation to autumn rapeseed sowing in 2018, spring business is expected to be lively in 2019. The feedstuff industry produced 23.9 million tonnes of mixed feed throughout Germany in the harvest year 2017/18, which was on a par with the previous year (BLE, Gesamterzeugung der Mischfutterhersteller, 2018). The tense staple feed supply situation and the scarce supply of feedstuff grain and rapeseed bolstered demand in the second half of 2018 and resulted in significant price rises, particularly when it comes to protein components (DBV, Situationsbericht 2018/19, p. 214). Overall, feed prices in Germany in 2018 rose by an average of 5.5% year on year in Germany (Destatis, Landwirtschaftliche Betriebsmittel, 2019). The market is forecast to decline slightly in 2019 as a whole, as animal stocks are expected to fall. Key influencing factors include the effects of the drought, the spread of African swine fever and the further development of the trade conflict between the US and China (DRV, Erste Raiffeisenbilanz 2018 – Perspektiven 2019, p. 5). Fundamentally, the prices of seed, as well as of staple and mixed feed, follow the grain and oilseed markets, meaning that the price trend over the course of the year will be increasingly influenced by the harvest expectations for the grain year 2018/19.

Development of fruit cultivation

The weather conditions in 2018 were largely favourable to fruit cultivation in Europe and Germany. The fruit harvest in Germany resulted in above-average yields, as had been forecast after the previous year's failed harvest (DRV, Erste Raiffeisenbilanz 2018 – Perspektiven 2019, p. 10 et seq.). Soft and stone fruit yields were significant higher than the previous year. The volume of apples harvested in Germany more than doubled, from 596,666 tonnes in the previous year to a new record volume of 1,198,517 tonnes in 2018 (Destatis, Land- und Forstwirtschaft, Baumobst, 2019, p. 7). The harvest volume in 2018 also hit a new record in the EU, climbing by approximately 42% to €13.2 million year on year. Poland, the largest apple producer in the EU, increased its production by a particularly large margin, by approximately 2 million tonnes to 4.8 million tonnes (WAPA, EU 28 apple production by country, 2018). Apple prices rose significantly over the first half of 2018 due to the scarcity of supply from the previous year's harvest. In July 2018, prices in the EU and in Germany were up by some 53% and 95% respectively on the five-year average. As 2018 produce began to be harvested, the abundant supply levels caused prices to fall dramatically (EU apple dashboard, 2019). Polish apple deliveries in particular applied additional pressure to the European market. Furthermore, the hot summer weather shortened the storage periods of dessert apples, which meant that they had to be marketed more quickly. Due to the high pome fruit harvest in 2018, the supply of domestic apples in the first half of 2019 is expected to be high. We are also likely to see significant supplies of overseas apples. As a result, prices are not expected to recover over the course of the year. Assuming normal weather conditions and largely unchanged land under cultivation, harvest yields for applies – Germany's most important type of pome fruit – are expected to be average in 2019.

In the southern hemisphere, the harvest volume of apples declined by around 3% year on year to just under 5.2 million tonnes in 2018, a level which was slightly below expectations. Brazil and South Africa recorded particularly significant declines. In New Zealand, the 2018 apple harvest rose by just under 14% to 576,000 tonnes, marginally exceeding the forecast of 573,000 tonnes made at the start of 2018 (WAPA, Southern hemisphere apple production, 2019). The unusually warm and wet weather was favourable to fruit growth, and so most types are up to 10% larger. Exports of New Zealand apples increased by just under 9% year on year to 375,000 tonnes; the export ratio came to 66% in 2018. Deliveries to Europe rose by a particularly significant margin due to the attractive prices offered there in the first half of 2018 on account of the poor previous-year harvest (USDA, GAIN Report Number NZ1831, 2018, pp. 4, 8). Based on the current status of fruit development, the World Apple and Pear Association (WAPA) forecasts that the apple harvest in the southern hemisphere will increase by just under 2% to approximately 5.3 million tonnes in 2019 (WAPA, forecast apple production, 2019). In New Zealand, apple production is expected to rise by nearly 3% to reach a new record harvest of 583,000 tonnes due to new plantations entering production and good weather conditions. Exports are anticipated to rise to 390,000 tonnes and therefore grow faster than the volume of production (USDA, GAIN Report, Number NZ1831, 2018, pp. 4, 8). Exports to China are expected to rise in particular in 2019, as the apple harvest there was impacted by severe frost in 2018. This opens up the possibility of the price of New Zealand apples rising (Fruchthandel, China: Rückgang der Apfelproduktion, 2018).

Development of agricultural equipment

The revenue and income situation of German farmers improved further in the harvest year 2017/18. Farming income improved by some 19% on average across all sizes and forms of farms. The development of different types of farms was extremely varied: Dairy cattle and beef farms continued their economic recovery, whereas crop farms and meat processing operations came under pressure (DBV, Situationsbericht 2018/19, p. 145 et seq.). Against this backdrop, sentiment in the agricultural sector remained in moderate territory and trended sideways with few fluctuations in 2018 (DBV, Konjunkturbarometer Agrar, 2018, p. 1 et seq.). According to estimates from the VDMA (German Mechanical Engineering Industry), revenues in the agricultural equipment sector rose by around 10% to €8.6 billion in 2018, as compared to the expectation at the beginning of 2018 that they would increase by only 4%. Growth was recorded across all product categories, from cultivation equipment to harvest machines (VDMA, Landtechnikindustrie erreicht neues Allzeithoch, 2019). Adequate producer prices, particularly for milk and forage crops, resulted in strong demand for harvest machines, especially for herbage and hay (Agrarzeitung, Futtertechnik profitiert von Milchpreis, 2018). New tractor registrations declined by just under 18% year on year to 27,670 machines in Germany in 2018. This fall was primarily due to the fact that a large number of tractors had to be registered in the previous year as stricter regulations governing machines were introduced at a European level and these tractors would not have been able to be registered in 2018 (VDMA, Traktoren-Zulassungen in Deutschland, 2019). At 34%, the propensity of farmers to make investments in the first half of 2019 is up slightly on the previous-year figure of 32%. The planned investment volume has risen significantly from €4.0 billion in the previous year to €4.3 billion. The strongest growth was attributable to farm and animal equipment, followed by machinery and equipment. By contrast, investment in farm buildings and renewable energies are likely to be down on the previous year (DBV, Konjunkturbarometer Agrar, 2018, p. 5 et seq.). Against this backdrop, the VDMA expects further growth in 2019 fuelled primarily by the export business. That being said, high inventories among agricultural equipment dealers may hamper development (VDMA, Landtechnikindustrie erreicht neues Allzeithoch, 2019).

Business performance

BAST business unit

The BAST business unit comprises international grain and oilseed trading activities. Trading volumes with grain and oilseed fell by 6.8 million tonnes to 26.6 million tonnes in the financial year 2018. The anticipated decline in handling volume was attributable to two factors: First, domestic marketing activities, as well as those managed by the Austrian Group company RWA, were reclassified to the Agri Trade & Service business unit with effect from 1 January 2018. Second, the decline was attributable to the adjusted location structure and trading strategy as a result of last year's reorganisation. Adjusted for these influences, the handling volume of grain and oilseed was down 5.4% year on year in total. Trading volume with oilseed and additional products increased. The shortage in staple feed caused by the drought led to a considerable rise in demand in the feed industry, which was increasingly served by the Dutch Group company Cefetra. By contrast, the quantity of grain traded fell significantly due to harvest-related reasons. Overall, the revenues of the BAST business unit decreased by 9.1% to €5,286.8 million in the reporting year due to volume factors and were therefore in line with expectations. The structural optimisation and the increased volatility of agricultural commodity prices had a positive impact on earnings, since the company seized the resulting trading opportunities. Among other things, the shift in the global flow of goods from the US to Brazil as a result of Chinese import duties on US soya benefited the existing trading positions. With regard to wheat, the Group – with its existing trade contracts and stocks – benefited from the strong price rally in July and August due to the expected decline in harvests. All told, the BAST business unit generated a significant increase in earnings before interest and tax (EBIT) of €24.1 million in 2018, bringing EBIT up to €31.1 million and allowing the business unit to confirm the forecast.

Agri Trade & Service business unit

The Agri Trade & Service business unit (formerly: BayWa Agricultural Sales [BAV]) comprises the agricultural input business and the recording of agricultural produce. With effect from 1 January 2018, it was expanded to include the BAST business unit's domestic grain and oilseed trading activities, as well as those managed by the Austrian Group company RWA. Due to this expansion, grain and oilseed trading volume rose in the Agri Trade & Service business unit by 22.7% year on year to just under 6.5 million tonnes, thereby exceeding the volume expected at the start of 2018. This volume effect would have been even stronger had the harvest volumes matched the average values seen in recent years. Adjusted for the activities reclassified from the BAST business unit, recording volumes fell compared to 2017 on account of very low grain harvests due to the drought. Furthermore, rivers' low water levels so severely restricted and increased the expense associated with marketing that the execution of some existing sales contracts was postponed from the final quarter of 2018 to 2019. By contrast, the drought-related scarcity of staple feed led to strong demand for feedstuffs. Including a reclassification effect resulting from a change in product group classification, which led to the reclassification of around 0.8 million tonnes in sales volume from oilseed to feedstuffs, sales here increased by roughly 29% in 2018. A drop in fertiliser sales had been forecast for 2018 in the agricultural input business. At 25%, that decline was sharper than expected, bringing fertiliser sales down to around 1.8 million tonnes. The decline was due to the frost-related significant shortening of the application period in spring. The long period of dryness in the second half of the year also prevented many applications of fertiliser. Crop protection sales were also down year on year and fell short of expectations due to the weather-related lower incidence of disease. Seed sales declined by a good 5% in the reporting year, thereby falling short of the forecast of stable sales volumes. The main reason for this decline was the limited ability to sow winter grains in many regions due to the dry soil. Overall, revenues increased by 17.3% to €3,298.8 million in the reporting year, as expected. The rise was due solely to the newly added marketing business of the BAST business unit. At €5.2 million, earnings before interest and tax (EBIT) for the Agri Trade & Service business unit were €20.5 million lower year on year in 2018 and fell significantly short of expectations. This decline in earnings was due in particular to the substantial drop in volume in agricultural inputs. Adjusted for the activities added from the BAST business unit, lower volume was also seen in the produce business. Furthermore, a significant rise in logistics costs due to low-water surcharges and a lack of drying income weighed down earnings.

Global Produce business unit

The Global Produce business unit (formerly: Fruit) saw inconsistent development in 2018. While sales increased in international fruit trading, domestic dessert pome fruit trading volume fell significantly. Overall, the BayWa Group's fruit sales increased by just under 1% year on year to 351,843 tonnes in 2018. The primary reason for the slight increase was the roughly 15% rise in apple and pear marketing volume attributable to the New Zealand Group company T&G Global. Sales of soft fruit, stone fruit and tropical fruit, which primarily benefited from a rise in volume at the Dutch subsidiary TFC, increased in 2018. By contrast, dessert pome fruit volume was down more than 53% year on year in Germany due to the poor harvest in 2017. Consequently, BayWa's domestic fruit operations were forced to introduce short time from January to July 2018. All told, because international business growth more than compensated for the drop in domestic volume, the Global Produce business unit's revenues increased slightly by 0.3% to €807.9 million in 2018, as forecast. Earnings before interest and tax (EBIT) were down by €2.2 million year on year to €27.2 million in 2018 and were therefore lower than expected. One reason for the decline was the negative impact of the trade conflict between the US and China on the positive development of T&G Global's international activities. As a result of the Chinese import duties on US apples, the fruit earmarked for export remained in the American market, which was correspondingly oversupplied and characterised by low prices. Moreover, the earnings contribution from the German fruit business was lower in 2018 due to a lack of marketing volume in the first half of the year.

Agricultural Equipment business unit

BayWa's agricultural equipment business, with the core Fendt and CLAAS brands, benefited in 2018 from an increased willingness to invest, particularly in the dairy industry (due to adequate milk prices) and among winegrowers and fruit farmers (due to good harvests). A targeted expansion of the product range also contributed to this development. For example, the product portfolio was expanded to include Holder system vehicles, Fendt forage harvesters and Caterpillar skid steer loaders, helping fuel an increase in market share in the domestic sales regions. The introduction of a new John Deere series also resulted in significantly increased demand in Austria. As expected, BayWa saw particularly strong growth in the tractor business. Whereas the used equipment business fell by 6.0% in 2018 to 1,760 tractors, BayWa sold 31.6% more new machines than in the previous year. At 4,815 new tractors, the Group fell just short of the previous record set in 2013. A portion of these sales was due to the very mild weather until the end of 2018, which led many customers to take receipt of the new machinery they had ordered ahead of schedule. The increase in new machinery sales also led to corresponding rises in revenues in the service business and in spare parts sales. In the international business, the Dutch Group company Agrimec in particular recorded very positive development. The Agricultural Equipment business unit generated total revenues of €1,622.4 million in 2018, which equates to a year-on-year increase of 15.9%. Earnings before interest and tax (EBIT) saw disproportionate growth in relation to revenues of 83.9% to €36.6 million, setting a new record high and significantly exceeding expectations.

Overall, the Agriculture Segment's grain and oilseed handling volume was down just under 1% year on year to 33.1 million tonnes in the financial year 2018. The segment's revenues increased slightly by 1.7% to €11,015.9 million. Earnings before interest and tax (EBIT) improved significantly by €18.1 million to €100.1 million. As a result, revenues and earnings developed as forecast on the whole despite some developments to the contrary in the individual business units.

Energy Segment

Market and industry development 2018/19

Development of renewable energies

In 2018, global investments in renewable energies stood at USD332.1 billion, a decline of 8% year on year. Investments in solar energy fell by 24% to USD130.8 billion, primarily due to the decreasing cost of investing in solar systems and the reversal of Chinese solar policy mid-year. By contrast, global investments in wind energy increased by 3% to USD128.6 billion, USD100.8 billion of which was attributable to onshore wind projects (BNEF, Clean Energy Investment Trends 2018).

Given a further increase in installed capacity, global investments in renewable energies are expected to be on par with the previous year or slightly lower in 2019 due to the constant decline in the cost of investment (BNEF, Predictions for 2019).

Approximately 48.5 GW of onshore wind power was installed in 2018, corresponding to an increase of 2.5%. As in the previous year, more than half of these capacities were added in the Asia-Pacific region. North and Central America accounted for 26%, while Europe, the Middle East and Africa (EMEA) together accounted for 23%. By country, China leads the pack, accounting for 20 GW and 40% of total expansion, followed by the US with 8 GW and a share of 17%. As a result, investments were stagnant in the US following a significant decline in the previous year on account of the political situation. With an increase of 3 GW, Germany accounted for roughly 7% of global growth, whereas France accounted for roughly 1 GW, or 3%. Compared to the previous year (5 GW), expansion was therefore significantly lower in Germany (BNEF, Global Wind Market Outlook, Q4 2018).

The decline was primarily due to a large number of slated projects that were postponed due to a lack of building permits. In addition, the waiting times for permits have generally increased, and the supply of approved land and regions has decreased. More importantly, many projects are encountering mounting difficulties in gaining acceptance among the local populace and are subject to litigation-related delays (Windpower Monthly, German installation slump, 2019). With a roughly 700 MW increase in capacity in 2018, the United Kingdom played a significantly less important role than in previous years. By contrast, certain markets in the Asia-Pacific region are seeing strong growth. Those markets include India, which accounted for around 2 GW and 4% of global growth, and Australia, which doubled capacity expansion year on year to 1.4 GW (BNEF, Global Wind Market Outlook, Q4 2018; BNEF, expansion figures for 2018).

For 2019, Bloomberg New Energy Finance (BNEF) forecasts global onshore wind energy capacity expansion of roughly 63 GW, corresponding to an increase of just under 31%. Expansion within Europe is expected to accelerate to 14 GW, mainly on account of Spain and a few major projects in Sweden and Norway. France and Germany are expected to continue growing at a slow pace. In France, the low level of growth is attributable to delays resulting from the restrictive conditions of the most recent auctions and the correspondingly low level of participation. In Germany, the sluggish growth is due to a variety of factors, including the aforementioned delay effects related to the awarding of contracts for projects without prior official approval in 2017. According to the latest forecasts, the German market will not see stronger growth again until 2020. On the American continent, capacity expansion will increase to around 17 GW in 2019, primarily fuelled by the US (9.5 GW), as well as Mexico (2.8 GW) and Brazil (1.5 GW). The Asia-Pacific region will remain the leader in global growth, with forecast expansion of 30 GW, attributable mainly to China (21.7 GW) and India (4.2 GW). With an expected expansion of 2.5 GW, nearly twice the capacity compared to 2018, Australia is also gaining importance (BNEF, Global Wind Market Outlook, Q4 2018; BNEF, expansion figures for 2018).

Global photovoltaic installation capacities increased by 6%, or 105 GW, in 2018. Accounting for 64% of that growth, or 67 GW, the lion’s share was attributable to the Asia-Pacific region, with 42 GW coming from China alone. However, growth in China was lower than forecast on account of massive changes in the regulatory framework. Other countries with a strong expansion of capacities in the Asia-Pacific region were India (10.7 GW), Japan (6.6 GW) and Australia (3.7 GW). Led by the US (9.4 GW) and Mexico (2.5 GW), the Americas were a distant second, with an expansion of roughly 15 GW. Europe, the Middle East and Africa increased their share of global growth to around 13%. In Europe, Germany (expansion of roughly 3.1 GW), Turkey (roughly 2 GW), France (1.3 GW) and the Netherlands (just under 1 GW) were the main driving forces (BNEF, Global PV Market Outlook, Q4 2018; BNEF, expansion figures for 2018).

Global photovoltaic installation expansion of 125 to 140 GW is expected in 2019. Of that growth, some 60% will be attributable to the Asia-Pacific region, led by China, India, Japan and Australia, followed by South Korea and Vietnam as a new growth market. The Americas, as well as Europe, the Middle East and Africa (EMEA), will each account for roughly half of the remaining global expansion. The US and Mexico, followed by Argentina and Brazil, will continue to lead the charge in the Americas. In the EMEA region, growth will be fuelled by Germany and France. A sharp rise is also expected in the Netherlands and Spain. Egypt, Israel and the United Arab Emirates are expected to exceed the 1 GW mark when it comes to expansion (BNEF, Global PV Market Outlook, Q4 2018; BNEF, expansion figures for 2018).

With regard to capacity expansion, the German biogas sector remains stable at a low level. Following the cuts to subsidies from the German Renewable Energy Sources Act (EEG) in 2014 and the introduction of auctions in 2017, feed-in tariffs have fallen to such an extent that economic operation is no longer possible in many cases (Handelsblatt, Die Biogasbranche kämpft ums Überleben, 2018). Still, the German Biogas Association forecasts the addition of around 160 plants, or 280 MW, for 2018 (Fachverband Biogas, Prognose der Branchenentwicklung 2018). For existing plants, the focus is on continued operation by achieving a subsidy extension through a reorientation towards peak power requirements and the use of heat energy, boosting efficiency, increased flexibility and nutrient management (Fachverband Biogas, Biogasbranche rechnet 2018 mit mehr Geschäft, 2017).

Development of conventional energy

In the field of conventional energy, the price of crude oil plays a key role in the development of demand and the prices of various fossil energy carriers. The extension of production cuts by the Organization of the Petroleum Exporting Countries (OPEC) and certain non-OPEC countries (including Russia), a continued decline in

Venezuela's oil production and the global dynamic increase in demand for oil and oil products pushed global stocks below the five-year average starting in March 2018. Supply tightened further following the reintroduction of US sanctions against Iran's oil sector in the wake of the US exit from the international nuclear agreement. Starting from a level of roughly USD65 per barrel at the start of the year, these factors led to a sharp rise in crude oil prices to just under USD85 per barrel that continued until early October. From October on, however, the market saw a marked change in sentiment that resulted in the price of oil falling to below USD52 per barrel by the end of the year (TECSON, Rohölpreise, 2019). The main causes of this decline were an increase in stocks as a result of higher than expected global oil production and concerns regarding the further development of the global economy against the backdrop of the trade dispute between the US and China (DZ Bank, Rohstoffmärkte, 2018, p. 12). Overall, the price of oil was significantly higher than the forecast average of USD62 per barrel throughout much of the year (EIA, Short-Term Energy Outlook, 2019, pp. 1, 24). The price of heating oil largely followed this trend and exceeded 2017 levels virtually throughout 2018 (TECSON, Heizölpreise, 2019). In the German heating market, heating oil sales fell year on year by 16.2% in 2018 (BAFA, Amtliche Mineralöldaten, 2019). The main reason for this decline in sales was a reluctance to buy among consumers, as the lower prices in the previous year had been used for stockpiling. Generally speaking, demand for fossil fuels in the heating business is subject to fluctuations in consumption determined by weather conditions. Purchasing behaviour is also influenced by the price trend. Forecasts made by the US Energy Information Administration (EIA) about the development of crude oil prices predict that the oil price will hover around USD61 per barrel in 2019. In general, prices will be very volatile in the short term subject to the development of inventories. Based on the current forecasts, oil production can be expected to exceed global consumption for 2019 as a whole (EIA, Short-Term Energy Outlook, 2019, p. 24). Higher oil production in non-OPEC states could lead to price-lowering effects. Structural factors such as the rise of renewable energies, the increased use of gas, and cuts to consumption due to modern technologies and energy-efficient building renovations have resulted in a long-term decline in heating oil consumption in Germany. This trend is also likely to continue going forward. However, catch-up effects due to consumers' reluctance to buy in the previous year could have a positive effect on demand for heating oil in 2019. For years now, wood pellet sales have been benefiting from a continuous increase in the number of wood pellet-based heating systems being installed. In 2018, the consumption of wood pellets in Germany increased by just over 1% to 2.13 million tonnes. With the installation of pellet heating systems likely to continue, increased growth of 12% to 2.38 million tonnes is expected for 2019 (DEPV, Pelletmarkt 2018 und Prognose 2019, p. 3). Total fuel sales in Germany fell by 2.6% in 2018. Sales of Otto fuels decreased by 1.4%, while sales of diesel decreased by 3.1%. Total lubricant sales decreased slightly by 1.5% in 2018. Base oils and hydraulic oils in particular saw double-digit sales percentage decreases (BAFA, Amtliche Mineralöldaten, 2019). As a result, sales volumes of fuels and lubricants fell short of the forecast, which had anticipated a slight increase. Generally speaking, demand for fuels and lubricants is primarily dependent on factors such as vehicle stock, mileage and the development of the economy as a whole. In light of expected overall economic growth of 1.3% in Germany, a moderate increase in demand is expected in 2019 (IMF, World Economic Outlook, 2019).

Business performance

The Renewable Energies business unit once again saw highly positive development in 2018 and fully executed the project developments and sales planned for the year as a whole. Completed systems with an installed capacity of 453.0 MW in total (2017: 414.5 MW) were sold, thereby setting a new record. Eleven free-standing solar power plants with a total output of 324.0 MW were sold. In Spain, Don Rodrigo was built and sold in 2018. With an output of 174.4 MW, the project is BayWa r.e.'s largest solar power plant to date, and the first one that is not dependent on any government subsidies. The other national markets in which plants were sold in the reporting year were the US (48.0 MW), France (41.2 MW), the Netherlands (30.7 MW) and the United Kingdom (29.7 MW). In addition, BayWa r.e. installed a total of 14 roof solar systems on industrial buildings in various European countries. Six wind power plants with a total output of 116.7 MW were sold: of those, 18.5 MW was accounted for by the United Kingdom, 16.2 MW by Germany and 10.3 MW by France. Furthermore, project rights for wind farms with an output of 48.3 MW were sold in Austria, and a wind farm with an output of 23.4 MW was built and handed over to the owner in Sweden. Sales also included a biogas plant with 7.4 MW of electrical output in Germany and a plant with 4.9 MW in the United Kingdom. BayWa r.e. will also assume responsibility for the commercial and technical management and maintenance of most of these plants going forward. The service business was further expanded by opening a new control centre for solar and wind power plants in Bangkok, Thailand. Worldwide, the total plant capacity under the management of BayWa r.e. grew to over 5.7 GW in 2018, thereby nearly doubling compared to the previous year's figure of 3.0 GW. In the photovoltaic module trade, sales in the reporting year increased by just over 28% to 544.1 megawatt peak power output (MWp) due, in particular, to newly added locations in Europe, South America and the Asia-Pacific region. The collaboration agreements with German public utilities companies on the marketing of PV storage systems and components also contributed to the increase in sales. In the reporting year, the increase in the Renewable Energies business unit's revenues resulted largely from the acquisition of Clean Energy Sourcing (CLENS) in December 2017, which pushed green electricity direct marketing volume up to 2,135 MW. All told, revenues increased by 12.0% in 2018 to €1,530.2 million. Following €66.6 million in the previous year, earnings before interest and tax (EBIT) reached a new high of €72.5 million in the reporting year. This increase was primarily due to a rise in project sales and the growth in the service business.

In 2018, the conventional energy business was influenced by the almost consistently higher price of oil compared to 2017. Due primarily to this factor, the business unit's revenues increased by 9.4% to €2,438.3 million in the reporting year. Earnings before interest and tax (EBIT) set a record of €23.5 million in 2018 and were up 27.0% year on year. The main reason behind this rise was improved margins in the fuel business. Rivers' low water levels and the stoppage at the Bayernoil refinery in Vohburg, Germany, in the second half of the year led to a tense supply situation and marked price increases in Germany. In this environment, the BayWa Group was able to benefit from long-term supply contracts and its own logistics fleet. Overall, Group fuel sales increased by 12.8% year on year, remaining within the forecast range. Increased diesel sales played the main role in this growth due to supply activities for construction sites, commercial enterprises and farmers. The acceptance of additional filling station cards at BayWa filling stations also had a positive effect on the fleet business with freight forwarders. Sales of heating oil fell as expected by 8.7% as a result of price-related reluctance to buy among consumers and for structurally related reasons. As forecast, sales volumes of wood pellets increased further and rose by 1.4%; volume growth was already well above the market average in the previous year. BayWa was also able to acquire new properties in the heat contracting business in 2018; as part of a public tender, for example, the Group succeeded in winning a 20-year contract to provide local heating to an industrial estate in Krailling, Germany. Lubricant sales fell by 2.3% due to the initial slowdown in economic growth, thereby disappointing expectations of a slight increase.

At €3,968.4 million, the Energy Segment's total revenues for the financial year 2018 were up year on year by €373.7 million. Earnings before interest and tax (EBIT) increased by 12.9% to €96.0 million, thereby setting a new record.

Building Materials Segment

Market and industry development 2018/19

In 2018, the German construction industry saw stronger growth than forecast at the beginning of the year. Companies in the construction sector recorded revenue growth of 6.0% to €120.8 billion; the forecast had anticipated growth of 4%. Residential construction continued to drive developments, with revenue growth of 6.5% to €44.5 billion exceeding the forecast of 3.5%. Growth was primarily due to strong activity in the construction of new multi-storey residential properties. In 2018, building completions rose by 9.4% year on year (Heinze, Monatspräsentation Februar 2019, p. 26). At roughly 300,000 completed residential units, however, the figure fell short of the politically desired target of 375,000 new units per year (ZDB & HDB, Entwicklung der baugewerblichen Umsätze im Bauhauptgewerbe, 2018). Although the redevelopment, renovation and modernisation business also saw higher growth rates in 2018 than in the previous year (Heinze, Monatspräsentation Februar 2019, p. 15), growth was hampered by high capacity utilisation in the construction industry and bottlenecks in the building trade due to the good employment situation. In the commercial construction sector, revenues increased by 7.0% to around €43.0 billion, thereby experiencing much stronger growth than the growth rate of 4.0% forecast at the beginning of the year. Construction activity benefited for the second year in a row from a sharp rise in industrial building permits. Within the commercial construction sector, service providers – including retailers – have become the most important client group in Germany and are benefiting from stable domestic demand. Revenues in public construction increased by 5.0% to €33.3 billion, also outperforming the 4.0% forecast at the beginning of the year (ZDB & HDB, Entwicklung der baugewerblichen Umsätze im Bauhauptgewerbe, 2018). After years of a reluctance to invest in the public sector, construction activity at the federal, state and local government level saw substantial growth. Roughly €1 billion was earmarked for investments or investment grants in trunk roads, state-owned railways, federal waterways and combined transport in 2018 (ZDB & HDB, Jahresabschluss-Pressekonferenz, 2018).

Revenues in the construction industry are expected to rise by a nominal 6.0% to €127.9 billion in 2019. Residential construction revenues are expected to rise by 5.5% to €47.0 billion. Growth will continue to be supported by the boom in multi-storey residential construction, with the number of completed residential units expected to rise to 320,000. By contrast, conventional owner-occupied home construction will stagnate at the level seen in the previous year. Despite the deterioration in the general economic development outlook, a further 6.0% rise in revenues to €45.6 billion is anticipated in commercial construction, fuelled primarily by solid domestic demand. The conditions for public sector construction will also remain favourable in 2019. Nominal revenue growth of 6.0% to €35.3 billion is forecast for public sector construction in 2019. Along with the German federal government’s infrastructure projects, an expansion in investment at state level, supported by the improved household financial situation, is also expected (ZDB & HDB, Entwicklung der baugewerblichen Umsätze im Bauhauptgewerbe, 2018). The extension of the Local Authority Investment Fund until 2020, and the doubling of its volume to €7 billion, will continue to have a positive effect at the local level (ZDB & HDB, Jahresabschluss-Pressekonferenz, 2018).

In Austria, the positive development of the construction sector continued in 2018. However, the upward trend lost a certain degree of momentum, with construction volume posting a 2.6% rise in real terms following 3.6% in the previous year. The slower growth was primarily due to the fact that the construction of detached houses, which accounts for roughly 30% of total construction volume, increased only slightly year on year. By contrast, the construction of new multi-storey residential properties in particular saw double-digit percentage growth rates due to the continued high demand for housing in major urban areas. In non-residential construction, a rise in investment activity by industrial and commercial enterprises, as well as by the public sector, led to significantly stronger growth. Civil engineering benefited from investments in transport infrastructure and in pipeline and cable network expansion (BDI, Die Österreichische Bauwirtschaft 2018–2019, p. 9 et seq.).

Growth is expected to slow further in the Austrian construction sector in 2019. Construction volume is expected to grow by just 2.0% in real terms. Growth momentum should slow noticeably compared to 2018, especially in multi-storey residential construction (BDI, Die Österreichische Bauwirtschaft 2018–2019, p. 9 et seq.).

Business performance
In Germany, the building materials business reaped the rewards of positive developments in construction activity and mild weather conditions lasting until December 2018. However, the high capacity utilisation at construction companies led to transport capacity bottlenecks and long waiting times for deliveries from building materials manufacturers. In this environment, BayWa succeeded in Germany in growing at a faster pace than the market thanks to its location infrastructure, high availability of goods and high-performance in-house logistics capacities. As expected, sales volumes increased significantly, with a focus on prefabricated elements such as systems basements and construction components, as well as special flat-roof, natural stone and wood ranges. In addition, a focus was also placed on linking digital and bricks-and-mortal retail, as well as on healthy building and modernisation. Click & Collect capabilities were rolled out at all of the business unit's locations. In the B2C business, product range additions made it possible to markedly expand online sales. In the bricks-and-mortar DIY business, competences were pooled in the Zuhause brand. As part of the BauGesund partnership programme, BayWa advises and trains commercial customers on health building and modernisation on the basis of the roughly 6,000 tested low-emission products with the BauGesund seal. The increase in the repairs and modernisations being performed on motorways, bridges and tunnels also buoyed demand for the product ranges for civil engineering and road construction. In 2018, the Building Materials Segment's revenues increased by 0.7% year on year to €1,617.5 million, primarily due to volume factors. Earnings before interest and tax (EBIT) for the segment increased by 3.3% to €31.1 million and therefore to a greater extent than revenues. Alongside the positive sales development, the successful expansion of the high-margin range of private brands and the expansion of digital sales channel contributed to the improvement in earnings.

Innovation & Digitalisation Segment

Market and industry development 2018/19
According to the German Federal Ministry of Food and Agriculture (BMEL), the agricultural sector has been taking advantage of every opportunity to make its processes as efficient and precise as possible (precision farming) and to further optimise them through intelligent control systems (smart farming) for roughly two decades now. Its ratio of investment to annual revenues of roughly 10% puts agriculture in the top one-third of all industries, according to PricewaterhouseCoopers (PwC) (PwC, Quo vadis, agricola, 2016). According to a representative survey carried out by Bitkom and the German Farmers' Association (Deutscher Bauernverband – DBV), around 53% of German farmers were already using digital technologies in 2016, while 6% of the farmers surveyed were planning investments and about 24% were still considering them. The focus was on high-tech agricultural machinery, feeding machines and intelligent control software (Bitkom, Digitalisierung in der Landwirtschaft, 2016). A survey as part of DLG-Agrifuture Insights in early 2017 revealed that improving production efficiency and simplifying operational documentation were particularly important areas of focus for German farmers (DLG, Positionspapier Digitale Landwirtschaft, 2018, p. 7).

There is a wide range of statements being made about the global market volume for digital farming. Differences between these statements mean that market observers have differing opinions about how to define the market. For 2016, figures were somewhere between USD6.6 billion and USD11.3 billion. Similarly, 8 to 10-year forecasts also diverge greatly, ranging from USD23.4 billion to USD40.0 billion (Bharat Book Bureau, Smart Agriculture Market to 2025, 2017; Transparency Market Research, Global Smart Agriculture Market, 2017; Prognostix, Smart Agriculture: 13 trends to watch out for, 2017). In light of this, BayWa expects a global market value to stand at a mean value of around USD11 billion in 2018, with growth of at least 10% a year in the medium to long term. The market volume for precision farming technology stood at around USD1,273 million in Europe in 2018, of which roughly 64% was attributable to hardware, with just over 20% going to services and a good 15% to software. With a volume of around USD442 million and a roughly 35% share of total investments in precision farming, Germany was the largest single market in Europe. Investment volume is expected to rise to around USD695 million by 2022, corresponding to an average annual growth rate of over 12% (Handel & Service Agrartechnik, Ausgabe 9, 2017, p. 3). Alongside potential cost advantages, drivers of growth include further consolidation in the agriculture sector, which is leading to ever-larger farms. At the same time, qualified personnel are in ever-shorter supply, resulting in the need to manage larger farms with fewer staff. The provider structure in this market is highly fragmented. On the one hand, every manufacturer of agricultural equipment already offers a wide range of electronic components to support farmers. On the other hand, new companies – software start-ups – that are making it possible to professionally use the opportunities offered by information technology in agriculture are joining established IT providers in the market. Here, the spectrum ranges from satellite-based soil analysis for precision agriculture to business analysis software. Combining satellite data and physical plant growth models makes it possible to provide farmers with specific field work recommendations. Satellite data can be used to carry out vitality analyses for each field in order to determine a location's potential. This makes it possible to assess the economic advantages of site-specific farming. The challenge is to connect the technological possibilities to create an overall system. Continuing high investment costs, insufficient internet access and some aspects of data security are proving to be obstacles (Bitkom, Digitalisierung in der Landwirtschaft, 2018).

In Germany, market volume in interactive retail (online and mail-order retail) and e-commerce grew by 9.4% in 2018, reaching around €85.5 billion for all goods and services. With an increase of 11.4% to €65.1 billion, e-commerce saw even stronger growth than anticipated at the start of 2018, according to estimates by Bundesverband E-Commerce und Versandhandel Deutschland e.V. (German e-commerce and distance selling trade Association – bevh). Pure players – e-commerce companies that do not own bricks-and-mortar stores and offer their products and services solely on their own websites – saw the highest growth rates. At €9.77 billion, their sales rose roughly 14% year on year. Pure players were followed by multi-channel retailers, whose revenues increased by just under 13% to €22.7 billion. Online marketplaces recorded growth of nearly 10% in 2018; at €30.6 billion in revenues, they remained by far the largest sales channel in the German e-commerce sector. For 2019, bevh expects the e-commerce market to grow by 10.5% to €71.9 billion in Germany (bevh, Auch in 2018 zweistelliges E-Commerce-Wachstum, 2019).

Business performance

The Innovation & Digitalisation Segment pools all of the BayWa Group's activities in the fields of Digital Farming and eBusiness. eBusiness brings together all of the BayWa Group's online activities. However, the revenues and income from the activities are attributed to the business unit or segment responsible for the respective sold product. The offerings in Digital Farming include the NEXT Farming OFFICE and NEXT Farming LIVE software products, digital map material from the Group company VISTA, analyses and advisory services, as well as hardware components. The latter is also offered and sold through the Agricultural Equipment business unit's sales structures. In the reporting year, the German Fertiliser Application Ordinance – which is associated with an optimisation of fertiliser volumes and stricter documentation obligations – led to increased interest in digital farming and farm management products among farmers, as well as a marked increase in sales of the NEXT Farming LIVE software package. Accordingly, the Innovation & Digitalisation Segment's revenues increased by €3.8 million to €10.7 million in 2018. At 49%, the largest share came from software licences and software maintenance contracts, followed by digital map material, including analyses and advice, and soil sampling, with a share of 34%. Sensors, measurement systems and soil analysis programs, such as Greenseeker and other hardware, accounted for 17% of revenues. As predicted, the Innovation & Digitalisation Segment recorded negative earnings before interest and tax (EBIT) of €12.3 million (2017: minus €10.8 million). The main reason for this was, on the one hand, a high level of investment in the development of digital farming solutions such as new software modules and hardware components. On the other hand, the segment also carries out a service role for the operating business units by hosting and further developing the BayWa Portal, which does not generate any direct income. The year-on-year decline in earnings was primarily the result of the costs related to AIL and RWA's smart farming activities, which were incurred for the full year for the first time.

Development of Other Activities in 2018

At €13.1 million, the Other Activities Segment's revenues in the reporting year were essentially on par with 2017 (€10.9 million). Earnings before interest and tax (EBIT) resulting from Other Activities consist of the Group's administration costs, as well as consolidation effects; in 2018, this came to minus €42.5 million following minus €15.2 million in the previous year. Last year, earnings benefited from the sale of shares in BayWa Hochhaus GmbH & Co. KG, Grünwald, among other things.

Assets, Financial Position and Earnings Position of the BayWa Group

Asset position

Composition of assets

in € million	2014	2015	2016	2017	**2018**	Change in % 2018/17
Non-current assets	2,261.7	2,287.2	2,355.8	2,396.9	2,476.9	3.3
thereof: land and buildings	814.4	845.4	850.4	854.6	827.2	- 3.2
thereof: financial assets	181.5	168.2	189.1	232.6	204.5	- 12.1
thereof: investment property	72.8	55.9	41.6	40.9	38.2	- 6.6
Non-current asset ratio (in %)	40.2	37.9	36.4	36.9	33.0	–
Current assets	3,371.8	3,739.7	4,094.2	4,077.4	5,030.4	23.4
thereof: inventories	1,986.3	2,141.5	2,380.3	2,322.7	2,909.5	25.3
Current asset ratio (in %)	59.5	61.9	63.2	62.8	67.0	–
Assets/disposal groups held for sale	18.5	9.8	24.9	13.7	4.2	- 69.3
Total assets	**5,652.0**	**6,036.7**	**6,474.9**	**6,488.0**	**7,511.5**	**15.8**

The rise in non-current assets from €2,396.9 million to €2,476.9 million in the financial year 2018 was primarily due to the addition of intangible assets in the Renewable Energies business unit, which acquired the GroenLeven Group, the leading project developer for solar power plants in the Netherlands, in the first half of 2018. Following preliminary purchase price allocation, this acquisition led to the capitalisation of the acquired companies’ brand name in the amount of €21.3 million and to the addition of goodwill in the amount of €55.7 million.

The modernisation and expansion of the Group’s network of locations led to investments in land and buildings in the amount of €31.9 million, which were offset by the sale of orchards for the cultivation of kiwi fruits in New Zealand and the sale of locations no longer required in the amount of €25.7 million. Taking into account the depreciation of buildings in the amount of €35.0 million, the book value of land and buildings at the Group fell by €27.4 million to €827.2 million. The reduction in technical facilities and machinery was attributable to the sale of production sites in New Zealand for the processing of fruit, among other factors, along with investments for the purpose of repair and maintenance in the amount of €23.3 million and depreciation in the amount of €35.1 million. By contrast, prepayments and assets under construction increased as part of the construction of a greenhouse for tomato cultivation in the United Arab Emirates. Investments in the modernisation of the vehicle fleet additionally led to an increase in fixtures and office equipment. Overall, additions to property, plant and equipment associated with investment activities in the amount of €158.4 million was offset by depreciation in the amount of €100.2 million. Disposals of property, plant and equipment stood at €62.0 million in the financial year. Together with the reclassification of land and buildings to assets held for sale, as well as exchange rate differences, property, plant and equipment fell year on year by €9.0 million, from €1,408.9 million to €1,399.9 million.

The €28.1 million decline in financial assets was attributable in particular to credit balances with cooperatives, which were down €30.8 million year on year due primarily to the lower market value of the shares in Raiffeisen Bank International AG, Vienna, Austria, compared to the financial year 2017. At €214.6 million, shares in companies recognised at equity were on par with the previous year.

Investment property was down €2.7 million year on year due to the reclassification of land and buildings to assets held for sale and stood at €38.2 million. Non-current liabilities and other assets declined by €5.7 million, whereas deferred tax assets were up by €18.1 million.

Current assets fell by €953.0 million year on year, or 23.4%, totalling €5,030.4 million at the end of the reporting period. Along with a significant €586.8 million rise in inventories, the Group also recorded a

€191.0 million increase in trade receivables and a €174.8 million increase in other current assets. The main reason for the increase in unfinished goods lies in the business activities in the Renewable Energies business unit, where projects that had yet to be completed had to be disclosed as inventories at the end of the year. As a result, the value of unfinished goods and services – almost entirely project-driven – stood at €844.9 million, corresponding to a €366.8 million year-on-year increase. By contrast, the €221.4 million rise in finished services and merchandise was attributable to a variety of segments. In particular, the Agri Trade & Service, BAST and Agricultural Equipment business units reported a year-on-year increase of inventories at the end of the year. Barring slight positive and/or negative deviations, finished goods and services in the Global Produce, Conventional Energy, Renewable Energies and Building Materials business units were on par with the prior year. The rise in trade receivables was due to the business performance in the final quarter. In particular, the project sales in the Renewable Energies business unit at the end of the year, as well as the agricultural equipment and conventional energy business, contributed to an increase in said receivables. The increase in other current assets was due to the higher positive market values from derivatives in the BAST group year on year, as well as the year-on-year rise in other assets, especially in the Renewable Energies business unit.

By contrast, receivables from income taxes decreased by €19.9 million to €54.2 million, with non-current assets and disposal groups held for sale also declining by €9.5 million to €4.2 million. As at the reporting date, this item predominantly contained real estate inventories, which are intended to be sold in the subsequent year.

BayWa places an emphasis on ensuring matching maturities in the financing of assets. Current liabilities of €4,047.7 million – consisting of current financial debt, trade payables, financial liabilities, tax, other liabilities along with current provisions and liabilities from disposal groups – were offset by current assets and assets held for sale/disposal groups of €5,030.4 million. By the same token, there is roughly 140% coverage for non-current assets amounting to €2,476.9 million through equity and long-term borrowing of €3,463.8 million. Ensuring matched maturities in financing is an important quality criterion for the financing partners of BayWa in the context of raising short-term funds.

Financial position

Financial management

The aim of financial management within the BayWa Group is to provide the cash and cash equivalents required for the purpose of conducting regular business at all times. This task includes hedging against interest rate risk, currency risk and merchandise-related market risks by using suitable derivative instruments.

Forward exchange transactions and swaps are used selectively to hedge receivables and liabilities denominated in a foreign currency. These forward exchange transactions and swaps serve exclusively to hedge existing and future receivables and liabilities from underlyings in the purchase and sale of merchandise within the scope of customary business operations. Hedging transactions in the BayWa Group are designed to reduce the risks associated with fluctuating exchange rates. The volume of open positions arising from the respective underlyings and the resulting cash flows form the basis for currency hedges. Terms reflect those of the underlyings.

Within the BayWa Group, financial management has been set up as a service centre for the operating units and not as a profit centre in its own right. In accordance with this conservative approach to providing services, the use of fungible financial products to generate original profit contribution in financial operations has been waived. In particular, there are no speculative risk positions in our financial operations.

Day-to-day financial management is focused on liquidity management through cash pooling within the whole Group and the same-day provision of liquidity. Corporate Treasury uses suitable IT systems and appropriate treasury management software for this purpose.

The procurement of funds is organised centrally, with the exception of the activities in New Zealand, the Netherlands and Eastern Europe. Corporate Treasury is responsible for the centralised monitoring of Group-wide financial exposures.

Financial management is subject to the most stringent requirements imposed by an internal control system, which includes the documentation of transactions, a hierarchy of approval and resolution procedures, comprehensive application of the principle of dual control as well as the segregation of Treasury front, middle and back offices.

The most important financing principle of the BayWa Group consists in observing the principle of matching maturities. Short-term debt is used to finance the working capital. Investments in property, plant and equipment, as well as acquisitions, are funded from equity, bonded loans and other long-term loans. This includes issued bonded loans, long-term loans from banks and associated companies as well as the hybrid bond issued in October 2017. Capital market measures replace financing from short-term credit lines, but without clearing or terminating them, and therefore diversify the refinancing portfolio.

In addition, the project companies in the Renewable Energies business unit have access to separate non-recourse financing (without the lenders having access to the BayWa Group's assets and cash flows).

The management of working capital is a focal point at BayWa and comprises the optimisation of working capital as a net figure for current assets less current liabilities. For years, BayWa has placed great importance on the best possible working capital performance. Furthermore, a Group-wide project to further optimise working capital management began in 2013. The aim of the project is to continue to drive forward the ongoing reduction of the current assets deployed within the company and the resulting release of liquidity without jeopardising the company's profitability. Consistent process management along the entire turnover chain is the key to success. To this end, working capital responsibilities have been redefined, the systematic inclusion of relevant parameters has been anchored in internal reporting systems, specific training and coaching programmes have been carried out and existing guidelines and process descriptions have been adapted.

Interest rate risks inherent in short-term debt are covered by BayWa in the context of its risk management through the use of simple derivative instruments. Long-term interest rates were hedged naturally by issuing bonded loans in 2018, 2015 and 2014, as both fixed-interest and variable-interest rate tranches were issued and the interest rate risk was reduced as a result. The fixed coupon of the hybrid bond that was issued led to an increase in the hedge ratio by means of natural hedging.

Around 50% of the total borrowing portfolio is to be secured against interest rate risk through the respective hedging instruments. This partial hedging takes account of the strong, seasonally induced fluctuations in financing requirements.

BayWa evolved from the cooperatives sector, with which it remains closely connected through its shareholder structure, as well as through the congruent regional interests of the cooperative banking sector and commerce. These historical ties form the basis for a special kind of mutual trust. Particularly in the face of the great uncertainty still prevailing in the financial markets, both sides benefit from this partnership. The cooperative banks boast a particularly strong primary customer and deposit portfolio, which is made available for the preferential financing of stable business models.

Along with its integration into the cooperative financial association, the broad transnational diversification of the bank portfolio and the financial instruments, in particular, lower the financing risk within the BayWa Group.

Capital structure

in € million	2014	2015	2016	2017	**2018**	Change in % 2018/17
Equity	1,050.4	1,075.9	1,098.3	1,435.5	1,389.1	- 3.2
Equity ratio (in %)	18.6	17.8	17.0	22.1	18.5	–
Short-term borrowing[1]	2,493.5	2,769.3	3,084.4	2,986.8	4,047.7	35.5
Long-term borrowing	2,108.1	2,191.5	2,292.2	2,065.7	2,074.7	0.4
Debt	4,601.6	4,960.8	5,376.6	5,052.5	6,122.4	21.2
Debt ratio (in %)	81.4	82.2	83.0	77.9	81.5	–
Total capital (equity plus debt)	**5,652.0**	**6,036.7**	**6,474.9**	**6,488.0**	**7,511.5**	**15.8**

1 Including liabilities from non-current assets held for sale

The BayWa Group's total assets stood at €7,511.5 million on 31 December 2018 and were therefore €1,023.5 million, or 15.8%, higher than the previous year's figure. The €46.4 million decrease in equity stood in contrast to a rise in short-term borrowing, whereas long-term borrowing was approximately on par with the previous year.

The rise in current assets also led to an increase in total assets. There was an inverse development for equity and debt compared with the previous year. Despite a rise in current assets, driven by the increase in inventories, equity was down slightly due in particular to the change in valuation reserves and the reduction in minority interests from the valuation of shares in a listed affiliated company in the banking sector.

Capital management

The capital structure of the Group is made up of liabilities and equity. Equity capital came to 18.5% (2017: 22.1%) of total equity at the end of the reporting period. Adjusted for the recognised reserve for actuarial gains and losses from provisions for pensions and severance pay (including minority interests) in the amount of minus €230.4 million (2017: minus €234.0 million), the equity ratio is 21.6% (2017: 25.7%). As this reserve results from a change of parameters not within the company's control when calculating personnel provisions, BayWa's capital management uses an adjusted equity ratio. For trading companies such as BayWa Group, a fixed equity ratio is only of limited relevance as a key business figure. In particular, the change in current assets with the storage of inventories in the form of agricultural commodities, as well as the acquisition of project licences in the fields of renewable energies, has a direct influence on the balance sheet total – and therefore also on the equity ratio – but actually forms the basis for trading activities in the subsequent year. As a result, the BayWa Group uses equity-to-fixed-assets ratio II as a target in its capital management process. Equity and long-term borrowing should cover at least 90% of non-current assets. As at 31 December 2018, the equity-to-fixed-assets ratio II was approximately 140%.

The increase in the debt ratio, despite a reduction in long-term borrowing, resulted primarily from the increase in short-term borrowing. Short-term borrowing is used exclusively to finance short-term funds tied up in working capital. The status of short-term borrowing disclosed at year-end regularly reflects the highest level of utilisation on account of the warehousing of agricultural commodities and/or increasingly on account of unfinished products in the fields of renewable energies. The rise in short-term borrowing related primarily to the increase in current financial liabilities (up €793.3 million to €2,232.2 million) and trade liabilities (up €112.7 million to €1,016.7 million) associated with the rise in inventories.

At €2,074.7 million, long-term borrowing was roughly on par with the previous year-end figure of €2,065.7 million.

Gearing

The BayWa Group's management assesses and manages the capital structure in regular intervals via factors such as the key indicators "adjusted net debt", "adjusted equity" and "adjusted net debt/EBITDA".

Cash and cash equivalents are deducted from current and non-current financial liabilities at banks. Non-recourse financings are also deducted despite them carrying interest. They pertain to loans extended to project companies in the Renewable Energies business unit that are solely based on project cash flow instead of the BayWa Group's credit rating. Lenders have no access whatsoever to the BayWa Group's assets and cash flows outside each project company. EBITDA generated by the project companies during the reporting year came to €39.5 million (2017: €44.6 million). Grain inventories for immediate use are also deducted. These inventories could be converted into cash and cash equivalents as soon as they are recognised due to their highly liquid and current nature as well as their daily prices listed on international markets and stock exchanges. Any price risk is fully eliminated by a physical asset for sale, either through concluding a sales agreement with a highly solvent business partner or through a forward contract on the stock exchange. On account of the highly liquid nature of these inventories, the BayWa Group deems it to be appropriate to deduct them as cash and cash equivalents when calculating net debt and the related financial key figures.

in € million	31/12/2018	31/12/2017
Non-current and current liabilities at banks	3,115.3	2,323.3
./. less cash and cash equivalents	- 120.6	- 105.5
Net debt	**2,994.7**	**2,217.8**
./. less non-recourse financing	- 95.0	- 107.9
./. less inventories for immediate use	- 930.4	- 773.6
Adjusted net debt	**1,969.3**	**1,336.3**
Annualised EBITDA	315.3	318.4
Adjusted equity	1,619.5	1,669.5
Net debt (adjusted)/equity (adjusted) (in %)	**121.6**	**80.0**
Net debt (adjusted)/EBITDA	**6.2**	**4.2**

Given the different business models (trade and project development), gearing is subject to differences in recognition, reporting and review. The use of the borrowed funds for project financing in the Renewable Energies business unit is different from the traditional trade-related business fields. Furthermore, borrowing as part of project development is accrued over a longer period of time before before the corresponding inflows result from the sale of the projects. This is taken into account in the calculation of adjusted net debt for the trading business. The Renewable Energies business unit's financial liabilities, cash and cash equivalents, and EBITDA generated in the financial year are deducted in the process. The value of the key indicator "adjusted net debt/EBITDA" should lie between 3.0 and 4.5 and is determined using the following approach:

in € million	31/12/2018	31/12/2017
Non-current and current liabilities at banks	1,932.6	1,621.2
less cash and cash equivalents	- 73.6	- 71.5
Net debt	**1,859.0**	**1,549.70**
less non-recourse financing	–	–
less inventories for immediate use	- 930.4	- 773.6
Adjusted net debt	**928.6**	**776.1**
Annualised EBITDA	219.5	224.2
Net debt (adjusted)/EBITDA	**4.2**	**3.5**

Cash flow statement and development of cash and cash equivalents

in € million	2014	2015	2016	2017	2018
Cash flow from operating activities	- 90.6	19.0	208.6	- 170.2	- 452.2
Cash flow from investment activities	- 227.6	- 143.5	- 123.6	- 60.5	- 243.0
Cash flow from financing activities	334.4	98.7	- 63.0	235.9	710.8
Cash and cash equivalents at the end of the period	108.4	84.5	104.4	105.5	120.6

The cash flow from operating activities came to minus €452.2 million in the financial year 2018, a year-on-year decline of €282.0 million. With consolidated net income down €12.3 million year on year, this decline was primarily the result of an increase in inventories, trade receivables and other assets not allocable to investing and financing activities. Around one-quarter of this cash outflow was compensated for by the cash inflow from the increase in trade payables and other liabilities not allocable to investing and financing activities.

Cash flow from investing activities decreased year on year by €182.5 million following cash outflow of €243.0 million in the reporting year. Payments for company acquisitions came to €144.8 million (2017: €21.5 million) and can mainly be attributed to the acquisition of the GroenLeven Group in the Renewable Energies business unit. In the financial year 2018, investments of €212.4 million were made in intangible assets, property, plant and equipment, and financial assets (2017: €248.8 million), which were offset by incoming payments from the disposal of intangible assets, property, plant and equipment, and financial assets of €104.3 million (2017: €198.5 million). Furthermore, the dividend received, other income assumed and interest received led to cash inflows of €4.4 million (2017: €9.2 million).

Cash flow from financing activities in the financial year 2018 stood at €710.8 million and was attributable in particular to the issuing of a BayWa bonded loan in the amount of €203.0 million and the assumption of further borrowing to finance project business in the Renewable Energies business unit. This was offset by cash outflows from dividend payments at BayWa AG and its subsidiaries totalling €58.2 million, as well as interest payments of €40.9 million.

In an overall analysis of the cash flow from operating activities, investment and financing activities, and in consideration of changes to the group of consolidated companies and changes in foreign exchange rates, cash outflow from operating activities and investment activities was fully compensated by the incoming cash flow from financing activities. As a result, cash and cash equivalents at the end of the reporting period came to €120.6 million, which was €15.1 million higher than in the previous year.

Financial base and capital requirements

The BayWa Group's financial base is replenished by funds from the short-term debt for working capital and by funds from operating activities. Investment financing and the ongoing financing of operations have a considerable impact on the capital requirements of BayWa AG, as do the repayment of financial liabilities and ongoing interest payments. The overall view of liquidity and debt is determined through the calculation of adjusted net liquidity or net debt and used for internal financial management as well as for external communication with financial investors and analysts. Net liquidity and net debt is calculated from the sum total of cash and cash equivalents less bank debt and outstanding loans, as reported in the balance sheet.

Along with short-term borrowing, the Group finances itself by way of a multi-currency Commercial Paper Programme, which received its most recent top up of €500.0 million in 2017, taking it to a total volume of €1,000.0 million. As at the balance sheet date, securities were issued in various currencies in the amount of €626.0 million (2017: €318.5 million) with an average weighted residual term of 58 days (2017: 45 days). At the end of the reporting period, €154.9 million (2017: €111.8 million) in receivables had been financed at their nominal value from the ongoing Asset-Backed Securitisation Programme.

Investments

In the financial year 2018, the BayWa Group invested a total of €202.0 million in intangible assets (€43.5 million) and property, plant and equipment (€158.5 million) in addition to its acquisitions (2017: €179.5 million). The investments made in the financial year 2018 were primarily for the purpose of repair and maintenance of buildings, facilities (in construction) and office fixtures and fittings, as modern locations and seamlessly operating facilities are a precondition for efficient logistics processes.

BayWa will continue to invest in modern site infrastructure in future. This includes investments in land and buildings, wherever such investments are expedient and prudent. By contrast, real estate no longer used for operations is consistently sold off. The proceeds accruing from these transactions are used to reduce debt or to finance the Group's growth.

Including company acquisitions, roughly 43.3% of total investments in non-current assets at the BayWa Group were accounted for by the Energy Segment, where the lion's share was attributable to the Renewable Energies business unit. The acquisition of the GroenLeven Group had a particular impact in this regard. Aside from the aforementioned segment, 29.3% of investments were attributable to the Agriculture Segment, with 8.3% going to the Building Materials Segment, and 2.3% earmarked for the Innovation & Digitalisation Segment. The remaining 16.8% are accounted for by investments in Other Activities.

Earnings position

in € million	2014	2015	2016	**2017**	**2018**	Change in % 2018/17
Revenues	15,201.8	14,928.1	15,409.9	16,055.1	16,625.7	3.6
EBITDA	279.8	288.3	272.6	318.4	315.3	- 1.0
EBITDA margin (in %)	1.8	1.9	1.8	2.0	1.9	–
EBIT	152.1	158.1	144.7	171.3	172.4	0.6
EBIT margin (in %)	1.0	1.1	0.9	1.1	1.0	–
EBT	80.4	88.1	69.6	102.4	92.6	- 9.6
Net income for the period	80.7	61.6	52.7	67.2	54.9	- 18.3

The revenues of the BayWa Group rose by 3.6%, or €570.6 million, to €16,625.7 million in the financial year 2018. The sharpest rise in revenues was recorded in the Energy Segment, with the Renewable Energies business unit growing by €163.5 million to €1,530.2 million and the Conventional Energies business unit by €210.2 million to €2,438.3 million. The Agriculture Segment also delivered a rise in revenues. This increase was due to two opposing developments: while revenues were up €485.9 million to €3,298.8 million in the Agri Trade & Services business unit and were up €222.1 million to €1,622.4 million in the Agricultural Equipment business unit, revenues in the BAST business unit were down €531.0 million and stood at €5,286.8 million in the financial year 2018. At €807.9 million, revenues in the Global Produce business unit were on par with the previous year. Revenues were up slightly in the Building Materials Segment and stood at €1,617.5 million, equating to a €11.4 million increase year on year. A slight increase in revenues was also achieved in the Innovation & Digitalisation Segment (€3.8 million) and in Other Activities (€2.2 million).

Other operating income increased by a total of €4.4 million in the reporting year to €211.3 million. Along with higher income from the release of provisions in the amount of €25.8 million (2017: €14.2 million), the main drivers of this development were write-ups in the amount of €7.0 million attributable to two wind farms in the Renewable Energies business unit and increased price gains in the amount of €14.2 million (2017: €9.7 million). By contrast, gains from the disposal of assets decreased by €18.7 million to €43.4 million in the financial year 2018. In the previous year, the Group benefited in this regard from one-off income related to the sale of the BayWa high-rise. At €6.6 million, the reversal of value adjustments on receivables and receivables written down was also down year on year (2017: €13.0 million).

The €217.0 million increase in inventories recorded in the financial year can be attributed in particular to the wind and solar energy projects in the fields of renewable energies not yet completed in the financial year 2018.

Along with the increase in revenues, the cost of materials also increased, rising by €791.4 million, or 5.5%. Gross profit recorded an improvement of €104.2 million, or 5.8%, to €1,889.1 million.

Personnel expenses climbed year on year by 5.8%, or €54.4 million, to €990.6 million. This was largely a result of the business activities of the companies acquired the previous year, which were included in full for the first time in the reporting year, but also the company acquisitions in the financial year 2018 itself as well as the further expansion of business activities in the Renewable Energies business unit.

At €599.0 million, other operating expenses were up by €28.9 million, or 5.1%, on the previous year's figure of €570.1 million in the financial year 2018. Other operating expenses primarily consisted of vehicle fleet costs in the amount of €84.5 (2017: €79.5 million); rental and leasing costs of €66.8 million (2017: €56.5 million); maintenance expenses of €55.8 million (2017: €54.6 million); advertising expenses of €51.2 million (2017: €46.2 million); consultancy, auditing and legal fees of €47.4 million (2017: €49.8 million); and other expenses of €68.4 million (2017: €70.3 million).

Earnings before interest, tax, depreciation and amortisation (EBITDA) fell by €3.1 million, or 1.0%, to €315.3 million in the financial year 2018 (2017: €318.4 million).

Scheduled depreciation and amortisation at the BayWa Group decreased by €4.3 million, or 19%, to €142.9 million in the reporting year. This decrease was caused by unscheduled value adjustments that were primarily attributable to intangible assets in the previous year.

All in all, the BayWa Group's earnings before interest and tax (EBIT) rose by €1.1 million, or 0.6%, to €172.4 million in the financial year 2018.

The financial result comprises income from participating interests, which is allocated to EBITDA and EBIT, and-net interest. At €15.8 million, income from participating interests was significantly lower in the reporting year than the €39.9 million seen in the previous year. Whereas the equity result increased by €6.5 million to €9.0 million – due primarily to the positive effect attributable to the development of earnings at AHG-Autohandelsgesellschaft mbH and AUSTRIA JUICE GmbH – other income from participating interests fell by €30.6 million to €6.8 million. In the previous year, other income from participating interests included income from the sale of shares in Raiffeisen Bank International AG, Vienna, Austria. Due to high net interest resulting from an increase in financial liabilities, net interest deteriorated by €10.9 million, totalling a balance of minus €79.8 million (2017: minus €68.9 million).

The BayWa Group's earnings before tax (EBT) decreased by €9.8 million, or 9.6%, to €92.6 million. The increases of €15.4 million in the Agriculture Segment, €6.2 million in the Energy Segment and €1.0 million in the Building Materials Segment stood in contrast to a decline in the Innovation & Digitalisation Segment (minus €1.6 million). The Other Activities Segment, together with the consolidation effects presented in the transition, had a negative impact on the development of earnings before tax (EBT). These came to minus €55.4 million in the reporting year, down by €30.6 million on the previous year's figure of minus €24.8 million.

Income tax expense for the BayWa Group amounted to €37.7 million in the financial year 2018, which corresponds to a year-on-year increase of €2.6 million. The tax rate therefore amounted to 40.7% in the reporting year (2017: 34.3%).

Taking income tax into account, the BayWa Group generated net income of €54.9 million in the financial year 2018, a year-on-year decrease of 18.4% (2017: €67.2 million). The share in profit due to shareholders of the parent company decreased by 17.8% from €39.3 million in the previous year to €32.3 million in the reporting year.

Earnings per share (EPS), which is calculated from the portion of the result attributable to the shareholders of the parent company in relation to the average number of shares outstanding of 35,012,806 (dividend-bearing shares less treasury shares), fell from €1.13 in the previous year to 92 cents for the financial year 2018.

Comparison of forecast business development with actual business development

A noticeable overall rise in revenues and a stable or slightly positive development in earnings in the financial year 2018 were forecast for the BayWa Group in the Outlook section of the 2017 Group Management Report. On account of the outlined developments in the business units, revenues at Group level rose by 3.6% and therefore fell somewhat short of expectations. Earnings before interest and tax (EBIT) increased by 0.6%, therefore developing within the scope of the forecast.

Agriculture Segment

A significant increase in revenues and a substantial improvement in earnings were forecast for the BAST business unit in 2018. The business unit's revenues fell by 9.1%, and earnings before interest and tax (EBIT) improved by €24.1 million to €31.1 million. Both figures therefore confirm the forecast.

The Agri Trade & Service business unit was expected to see a substantial rise in revenues and a significant improvement in earnings in 2018. The business unit's revenues rose by 17.3%, or just under €486 million, therefore living up to the forecast. By contrast, earnings before interest and tax (EBIT) fell sharply, contrary to expectations. At €5.2 million, the business unit's EBIT was down €20.5 million year on year.
A slight, 0.3% increase in revenues to €807.9 million was forecast for the fruit business. On account of a 7.5% decrease to €27.2 million, however, earnings before interest and tax (EBIT) fell short of the significant increase that had been forecast.

Revenues in the agricultural equipment business were expected to rise slightly, with a noticeable decrease in earnings before interest and tax (EBIT). The actual revenue development and EBIT exceeded the forecast: revenues increased markedly by 15.9% to €1,622.4 million, and EBIT improved significantly by 83.9% to €36.6 million.

All told, the Agriculture Segment's revenues increased slightly by 1.7% to €11,015.9 million in the reporting year. Earnings before interest and tax (EBIT) improved substantially, increasing by 21.9% to €100.1 million; a significant increase had been forecast. Both figures therefore confirm the forecast.

Energy Segment

According to the forecast, revenues in the Renewable Energies business unit were set to rise by a substantial margin in 2018. At 12.0%, revenue growth was somewhat weaker than anticipated. Earnings before interest and tax (EBIT), which had been predicted to decrease slightly, outperformed the forecast at the beginning of the year by posting a significant 8.9% rise to €72.5 million.

Revenues from the conventional energy business were forecast to increase slightly year on year in 2018, with a moderate decrease in earnings before interest and tax (EBIT). The actual developments outperformed the forecast thanks to a 9.4% rise in revenues to €2,438.3 million and a significant 27.1% increase in earnings before interest and tax (EBIT) to €23.5 million.

All told, the Energy Segment's revenues were within the forecast range, having increased 10.4% to €3,968.5 million. Earnings before interest and tax (EBIT) exceeded the noticeable decline that had been forecast, increasing by 12.4% to €95.6 million.

Building Materials Segment

A moderate increase in revenues had been expected in the Building Materials Segment in 2018. With revenues increasing by 0.7% to €1,617.5 million, the actual development was within the forecast range. Earnings before interest and tax (EBIT), which had been expected to improve moderately, exceeded expectations with a significant increase of 6.4% to €31.1 million.

Innovation & Digitalisation Segment

A significant increase in revenues had been predicted in the forecast for the Innovation & Digitalisation Segment at the beginning of 2018, which was confirmed by a 55.1% rise to €10.7 million. At minus €12.3 million, earnings before interest and tax (EBIT), for which a negative result in the low eight-digit range had been expected, developed as anticipated.

It is not possible to make a forecast for the Other Activities Segment, as revenue and earnings development in this business area is primarily driven by opportunism in capitalising on market opportunities within the scope of BayWa's portfolio management system.

General statement on the business situation of the Group

Overall, the Board of Management considers the business performance of the BayWa Group in 2018 to have been positive. The corporate goals for the reporting year were achieved in full. All three core segments of the Group further increased their earnings year on year. The Agriculture Segment's earnings improved substantially, primarily due to the measures to enhance profitability taken in 2017. The Energy Segment once again topped the high level of earnings from the previous year and set a new record. Earnings also continued to develop well in the Building Materials Segment. In 2018, the BayWa Group once again profited from its heavily diversified business activities, its strategic orientation towards international markets and the development of new areas of business and business models. The BayWa Group has a well-balanced, forward-thinking business portfolio to underpin its success in the future. The focus will be on continuing to develop the Group into an integrated provider of sustainable solutions in all business areas and optimising the portfolio.

Financial Performance Indicators

BayWa orients the short-term management of its corporate divisions with the development of key earnings indicators EBITDA, EBIT and EBT. Key earnings indicators for the segments of the BayWa Group developed as follows in the financial year 2018:

Key financial earnings figures

	Earnings before interest, tax, depreciation and amortisation (EBITDA)			Earnings before interest and tax (EBIT)			Earnings before tax (EBT)		
in € million 2018		Change (absolute)	Change (in %)		Change (absolute)	Change (in %)		Change (absolute)	Change (in %)
BAST	35.6	25.1	> 100	31.1	24.1	> 100	24.0	25.4	> 100
Agri Trade & Service	34.1	- 19.3	- 36.1	5.2	- 20.5	- 79.8	- 9.9	- 22.5	> - 100
Global Produce	41.6	- 4.1	- 9.0	27.2	- 2.2	- 7.5	21.9	- 2.2	- 9.1
Agricultural Equipment	48.3	16.2	50.5	36.6	16.7	83.9	27.1	14.8	> 100
Agricultural Segment	**159.5**	**17.9**	**12.6**	**100.1**	**18.0**	**21.9**	**63.1**	**15.4**	**32.3**
Conventional Energy	32.6	5.1	18.5	23.5	5.0	27.0	21.7	3.4	18.6
Renewable Energies	95.8	1.9	2.0	72.5	5.9	8.9	53.5	2.8	5.5
Energy Segment	**128.4**	**7.0**	**5.8**	**96.0**	**10.9**	**12.9**	**75.2**	**6.2**	**9.0**
Building Materials Segment	**47.2**	**1.4**	**3.1**	**31.1**	**1.0**	**3.3**	**22.2**	**1.0**	**4.7**
Innovation & Digitalisation Segment	**- 10.3**	**- 1.6**	**- 18.4**	**- 12.3**	**- 1.5**	**- 13.9**	**- 12.4**	**- 1.6**	**- 14.8**

The difference in the contributions from each segment to the total earnings of the BayWa Group in all three key earnings indicators, EBITDA, EBIT and EBT, is calculated from the earnings contribution of the Other Activities Segment as well as on the basis of economic influence factors at Group level. BayWa does not perform any entrepreneurial management in the Other Activities Segment, as this segment encompasses peripheral activities that are of secondary importance in the BayWa Group. Group-wide economic influence factors are circumstances not attributable to the operational management of the segments.

Medium- to long-term portfolio optimisation in the BayWa Group is carried out through value-oriented management. Using economic profit as a basis, this system calculates the surplus return on invested capital (ROIC) of the corporate divisions by means of their risk-weighted costs of capital.

Economic profit

in € million 2018	BAST	Agri Trade & Service	Global Produce	Agricultural Equipment	Energy	Renewable Energies	Building Materials	Innovation & Digitalisation
Net operating profit	31.1	5.2	27.2	36.6	23.5	72.5	31.1	- 12.3
Average invested capital [1]	782.5	1,150.4	375.8	534.2	53.4	1,086.6	432.5	12.8
ROIC (in %)	3.97	0.45	7.24	6.85	43.96	6.67	7.19	- 96.08
Weighted average cost of capital (WACC) (in %)	5.7	5.6	5.0	6.0	5.0	4.6	6.5	6.0
Difference (ROIC less WACC) (in %)	- 1.73	- 5.15	2.24	0.85	38.96	2.07	0.69	- 102.08
Economic profit by business unit	- 13.5	- 59.3	8.4	4.5	20.8	22.5	3.0	- 13.1
				Agriculture		Energy	Building Materials	Innovation & Digitalisation
Economic profit by segment				- 59.9		43.3	3.0	- 13.1

1 Intangible assets + property, plant and equipment + net working capital

In the financial year 2018, the Energy and Building Materials Segments, as well as the Global Produce and Agricultural Equipment business units of the Agriculture Segment, achieved positive economic profit (in other words, positive net income after respective capital costs). In the Energy Segment, the Renewable Energies business unit was able to generate an economic profit of €22.5 million (2017: €19.8 million) thanks mainly to strong international project business, thereby exceeding the already high level from the previous year. In the Conventional Energy business unit, the economic profit was able to be increased in the reporting year primarily through a positive margin trend in the fuel business to €20.8 million (2017: €16.3 million). The Energy Segment's economic profit totalled €43.3 million. The Building Materials Segment was able to expand its economic profit in the financial year 2018 to €3.0 million (2017: €0.1 million). Within the Agriculture Segment, the Global Produce business unit generated an economic profit of €8.4 million following €8.8 million in the previous year. The decline is mainly attributable to the lack of marketing volumes for dessert pome fruit in the first half of 2018 due to the poor harvest in 2017. The Agricultural Equipment business unit's economic profit improved by €18.2 million year on year to €4.5 million (2017: minus €13.7 million). The very good sales figures for new machinery in Germany and Austria in particular contributed to this result. Although the BAST business unit saw significant year-on-year improvement of €26.8 million, economic profit remained negative in 2018 at minus €13.5 million. Economic profit of minus €59.3 million was recorded in the Agri Trade & Service business unit (2017: minus € 34.0 million), which was mainly attributable to lower volumes in the produce and agricultural input business as a result of the drought in Germany. The Agriculture Segment as a whole recorded economic profit of minus €59.9 million in 2018 (2017: minus €79.2 million). The Innovation & Digitalisation Segment posted economic profit of minus €13.1 million, as expected in its planning.

Employees

The number of employees at BayWa rose once again in 2018. By the end of the year, the BayWa Group employed 17,864 employees (2017: 17,323). In terms of an annual average, the number of employees rose year on year by 454 to 18,004, equating to an increase of 2.6%. In addition to the expansion in Building Materials, the increase is due to a number of strategic acquisitions in Renewable Energies, Agricultural Equipment and Agri Trade & Service. The Innovation & Digitalisation development segment, which was established in 2016, was also expanded further. While the number of employees in the Conventional Energy business unit remained stable year on year, the number of employees at BAST and Global Produce fell slightly due to structural adjustments. As regards personnel as a whole, digitalisation was the focus in 2018 and was advanced with a range of different measures.

Development of the average number of employees in the BayWa Group

					Change	
	2015	2016	2017	**2018**	2018/17	in %
Agriculture	9,997	10,212	10,613	10,428	- 185	- 1.7
Energy	1,825	1,911	2,079	2,407	328	15.8
Building Materials	4,093	4,081	4,113	4,211	98	2.4
Innovation & Digitalisation	97	126	158	183	25	15.8
Other Activities	597	630	587	775	188	32.0
BayWa Group	**16,609**	**16,960**	**17,550**	**18,004**	**454**	**2.6**

ONE HR strategy

Building on the Group's strategy, working in close consultation with managers from various corporate divisions and companies, and including current issues such as digitalisation, Human Resources (HR) adopted the first Group-wide "ONE HR 2018+" strategy in the 2018 reporting year. Seven strategic fields of action are based on a joint ONE HR mission: HR 2022 – We are business; Recruiting – Get the best; Employer Branding – BayWa Group makes sense; Talent Management – Our talents create success; Leadership Culture – Leadership is the difference; Inclusion & Diversity – Valuing individuality, living as a community; Connectedness – Forward thinking and collaboration with FeedForward.

ONE HR structure

The new Group-wide ONE HR structure is derived from the ONE HR strategy. Within the scope of this structure, new reporting channels were introduced to connect international HR managers to the head of Corporate HR. In addition, the two core divisions, HR Germany and HR Transformation & International, were established:

HR Germany

Thinking and acting globally is becoming increasingly important for the BayWa Group. This also impacts the requirements in the Group's core and home market of Germany. The HR Germany division was established to ensure these requirements are met in the best possible way in the future, by consolidating those functions with a primary focus on Germany: HR business partners, labour law and basic policies, training and training marketing.

HR Transformation & International

The HR Transformation & International division was established to enable the ONE HR team, together with the business units, to act faster and more efficiently worldwide. The focus here is on bundling HR competencies and establishing HR standards to support the business units around the world, and will cover the fields of Strategic Recruiting, Leadership & Development, Inclusion & Diversity and Group Systems & Policies.
The main emphasis will be on intensifying communication between global HR departments with the aim of promoting global cooperation. For example, monthly conference calls will be held between the HR managers from Germany (BayWa AG and BayWa r.e.), Austria, New Zealand and the Netherlands. The extended HR

teams from these countries will take part in the calls on a quarterly basis. Once a year, a global ONE HR conference will be held with around 90 participants.

Chatbots and time-lapse videos for trainee recruitment

BayWa once again placed great importance on the recruitment of young people for vocational training in the reporting year 2018. With 1,350 trainees at the end of the year, the Group is an important training company. A large-scale online trainee campaign launched in the summer of 2018 placed its main focus on the Instagram and Facebook social networks. Short time-lapse videos were used to mainly advertise industrial and technical apprenticeships. This year saw the addition of a Facebook Messenger Chatbot that offered assistance with career orientation and made it possible to find the right technical apprenticeship through automated, intelligent questioning. Thanks to the many and varied elements of the campaign, BayWa was once again able to attract attention as a training provider in the social media sector. Both the online trainee campaign and regional marketing activities ensured that just under 50% of the 2019 trainee positions in Germany were filled by the end of the year.

Promoting diversity and equal opportunities

Promoting diversity within the Group is one of the key success factors in BayWa's competitiveness. As a result of continued growth and internationalisation, the BayWa Group now employs around 18,000 employees at over 3,000 locations in 41 countries. In the 2018 reporting year, the Leadership College management conference focused on, among other things, the topic of Inclusion & Diversity. The conference featured workshops for some 320 managers designed to help sensitise BayWa's managers to the issues of the future. Corporate HR employees led various workshops, dealing with the topics of corporate culture, team strength through diversity, gender equality, inclusion and generational diversity. Practical approaches to improving decision making and other business processes were presented, highlighting their application and the concrete business benefits offered by diversity. The topic of Inclusion & Diversity also provides an important contribution in the area of compliance, as uncovering subconscious biased perceptions and attitudes is a necessary precondition for avoiding unfair treatment and discrimination against individual groups of people. Inclusion & Diversity was incorporated into the ONE HR structure as a new department. BayWa's diversity concept is part of the Corporate Governance Report / Statement on Corporate Governance as required by Section 315d in conjunction with Section 289f German Commercial Code (HGB).

Progress report on the digital annual employee assessment

The digital annual employee assessment was launched in 2018. The new tool was very well received by management, commercial and industrial employees. As in previous years, the focus is on face-to-face reviews. However, the digital process has simplified and accelerated the preparation and follow-up of the reviews. On the basis of the optimisation proposals from the workforce, the review sheet was adjusted and shortened. Since the beginning of 2019 there have been adapted sheets for both the commercial and industrial employee target groups. These will be systematically integrated and further developed for the digitalisation of succession planning in 2019.

Employee development

The ongoing vocational development of employees remained a key issue for BayWa in 2018: in the reporting year, employees completed 33,284 days of training, the equivalent of 1.8 days per employee. The number of employees participating in e-learning training courses was 28,659, which was a year-on-year increase of 24%.

BayWa Foundation: educational projects to promote healthy eating and renewable energies

The BayWa Foundation was established in 1998 to fulfil and further develop the Group's commitment to society. BayWa AG covers the Foundation's administrative costs and doubles donations so that 200% of the money received goes towards the projects that it funds. The BayWa Foundation celebrated its 20th anniversary in 2018 – since its establishment, it has overseen the successful implementation of 63 projects in 10 countries. Through the realisation of educational projects, the BayWa Foundation makes a significant contribution to five of the sustainability targets adopted by the United Nations: Good Health and Well-Being (#3), Quality Education (#4), Affordable and Clean Energy (#7), Climate Action (#13) and Life on Land (#15).

In 2018, the Foundation funded more than 20 long-term educational projects worldwide, which aim to improve children's nutrition and teach practical knowledge about renewable energy. In Germany, the focus is on education: for example, the BayWa Foundation annually awards 100 scholarships as part of the Germany Scholarship. In addition, the targeted training of individual strengths and practical job application coaching made it easier for many young people to start their careers. The BayWa Foundation also focuses on healthy nutrition to raise awareness for this issue at an early age and to promote children's health. As part of the hands-on nutritional education programme, "Planting vegetables. Harvesting health.", schoolchildren plant their own vegetables, prepare them as healthy snacks and use the text and activity book "Der Ernährungskompass" (the nutrition compass; in German only) to discover what nutrients the foods contain. Over 130 gardens for around 10,000 children have already been planted at schools since the project launched in 2013. Some 40,000 children at 1,400 primary schools in Bavaria received "Der Ernährungskompass" in 2018.

The BayWa Foundation also focuses on a practical approach to sharing knowledge when it comes to renewable energies. Launched in 2018, the "Die Waldschule" (forest school) project promotes environmental awareness and encourages children to learn more about the forest ecosystem. For example, during excursions into the forest the children plant their own tree.
More than 80,000 children and young people in Germany were supported by projects of the BayWa Foundation in 2018.

The international projects are aimed at helping people to help themselves, in order to improve their quality of life in the long term. In 2018, the expansion of the biogas project in Tanzania was a groundbreaking project in this respect. With the establishment of a centre for biogas competence and the corresponding technical support, the foundation was laid for the sustainable creation of clean cooking fuel, jobs and the prevention of deforestation. The next step of the project is the granting of microloans according to the cooperative idea, with the aim of creating a long-term perspective for the residents in association with biogas as an energy source.

In addition, the BayWa Foundation is also active in other parts of Africa. This includes supporting the "Teenage Mother Empowerment Program" in Zambia, where young mothers in need receive training and childcare. The programme thereby gives young women a chance to lead a self-determined life. More information about these projects is available at www.baywastiftung.de/en.

Sustainability at BayWa

The consolidated non-financial report is part of the 2018 Sustainability Report. This report is published on the website at: www.baywa.com/en/sustainability/news_publications/publications/.

Takeover-relevant Information – Reporting pursuant to Section 315a German Commercial Code (HGB)

Composition of subscribed capital

The subscribed capital of BayWa AG amounted to €89,953,658.88 as at the reporting date and is divided up into 35,138,148 registered shares with an arithmetical portion of €2.56 each in the share capital. Of the shares issued, 33,769,555 are registered shares with restricted transferability and 125,342 recently registered shares with restricted transferability (dividend-bearing employee shares from 1 January 2019 onwards). 1,243,251 shares are registered shares not subject to restricted transferability. With regard to the rights and obligations granted by the shares (e.g. the right to a portion of the unappropriated retained earnings or to participate in the Annual General Meeting of Shareholders), reference is made to the provisions laid down under the German Stock Corporation Act (AktG). There are no special rights or preferences.

Restrictions on voting rights and the transfer of shares

Pursuant to Section 68 para. 2 of the German Stock Corporation Act (AktG), in conjunction with Article 6 of BayWa AG's Articles of Association, the purchase of shares with restricted transferability by individuals and legal entities under civil and public law requires the approval of the Board of Management of BayWa AG. BayWa holds a small portfolio of registered shares (19,500 units), which, pursuant to Section 71b of the German Stock Corporation Act (AktG), do not carry voting rights as long as they are in BayWa's possession. There are no other restrictions that relate to the voting rights or the transfer of shares.

Affiliated companies with over 10% of voting rights

On the reporting date, the following shareholders held stakes in the capital that exceeded 10% of the voting rights:

- Bayerische Raiffeisen-Beteiligungs-AG, Beilngries, Germany
- Raiffeisen Agrar Invest AG, Vienna, Austria

Legal requirements and provisions of the Articles of Association on the appointment or dismissal of members of the Board of Management and on amendments to the Articles of Association

Supplemental to Sections 84 et seq. of the German Stock Corporation Act (AktG), Article 9 of the Articles of Association of BayWa AG on the appointment or dismissal of members of the Board of Management also requires members of the Board of Management to be appointed by the Supervisory Board. Members of the Board of Management are appointed for a maximum term of five years, and reappointment is permitted. The Supervisory Board appoints the Chairman of the Board of Management.

Pursuant to Section 179 of the German Stock Corporation Act (AktG) in conjunction with Article 21 of the Articles of Association of BayWa AG, amendments to the Articles of Association are always passed by the Annual General Meeting of Shareholders.

Authorisation of the Board of Management relating in particular to the option of issuing or buying back shares

Subject to the approval by the Supervisory Board, the Board of Management is authorised to raise the share capital one or several times on or before 18 May 2020 by up to a nominal amount of €3,783,221.76 through the issuance of new registered shares with restricted transferability against cash contribution to the employees of BayWa AG and of affiliated companies within the meaning of Sections 15 et seq. of the German Stock Corporation Act (AktG). Shareholders' subscription rights are excluded. Subject to approval by the Supervisory Board, the Board of Management is authorised to specify the further content of the share rights and conditions under which the shares are to be issued.

Subject to approval by the Supervisory Board, the Board of Management is also authorised to raise the share capital one or several times on or before 31 May 2021 by up to a nominal amount of €12,500,000 through the issuance of new registered shares with restricted transferability against contributions in kind. The authorisation can be used in partial amounts. Shareholders' subscription rights are excluded. Subject to approval by the

Supervisory Board, the Board of Management is authorised to specify the further content of the share rights and conditions under which the shares are to be issued.

Furthermore, subject to approval by the Supervisory Board, the Board of Management is authorised to raise the share capital on or before 31 May 2023 by a nominal amount of up to €10,000,000 through the issuance of new registered shares against contributions in kind. The authorisation can be used in partial amounts. Shareholders' subscription rights are excluded. Subject to approval by the Supervisory Board, the Board of Management is authorised to specify the further content of the share rights and conditions under which the shares are to be issued.

Furthermore, the Board of Management is authorised to offer held shares to third parties within the framework of the acquisition of or investment in companies or of mergers and to withdraw part or all of the shares without requiring a further resolution to be passed by the Annual General Meeting of Shareholders.

The Board of Management has not been further authorised by the Annual General Meeting of Shareholders to buy back shares. There are no agreements within the meaning of Section 315a para. 1 items 8 and 9 of the German Commercial Code (HGB).

Remuneration Report

The Remuneration Report is part of the Management Report and explains the system of remuneration for members of the Board of Management and the Supervisory Board.

Remuneration of the Board of Management

The remuneration system, including the main contractual components, is reviewed by the Supervisory Board once a year and adjusted if necessary.

Since 1 January 2010, the remuneration of members of the Board of Management has comprised an annual fixed salary, a short-term variable component (annual bonus) and a long-term variable component (known as the bonus bank). The ratio of fixed to variable short-term remuneration and long-term variable remuneration is roughly 50 to 20 to 30 based on full (100%) achievement of goals. The non-performance-related component comprises an annual fixed salary and benefits, such as the use of a company car and contributions to accident and health insurance. Short-term variable remuneration takes the form of an annual bonus. The amount of this bonus depends on the extent to which objectives, determined by the Supervisory Board and geared to individually agreed goals and to the successful development of the company's business (earnings before tax), are achieved. If the targets are achieved, the agreed bonuses are paid out in full. If the targets are exceeded, the bonus will be increased, but only up to a maximum amount (cap) of 150%. If the targets are not fulfilled, the bonus will be reduced proportionately. Both negative and positive developments are therefore taken into account in calculating short-term variable remuneration.

The long-term variable component takes the form of what is known as a bonus bank. The bonus bank will be supplemented or charged on a yearly basis depending on the extent to which objectives, linked to the success of the company (earnings before tax) and determined by the Supervisory Board for three years in advance, have been achieved, exceeded or undershot. If objectives are exceeded, the amount which can be transferred to the bonus bank is capped at 150% of the target figure. If there is a credit balance on the bonus bank, one third will be provisionally paid out for the financial year 2018 to the members of the Board of Management. The remaining two thirds of the credit balance on the bonus bank remain in the bonus bank. The amount is paid linearly; meaning, the amount carried in the bonus bank will be paid out provisionally to members of the Board of Management in equal instalments across three financial years, in dependence of the length of service on the Board of Management, provided there is a sufficient credit balance in the bonus bank and after calculating negative bonuses. If, owing to payments made in previous years or a charge reducing the bonus bank, there is a negative balance in the bonus bank, the respective Board of Management members are obliged to pay back the provisional payments made in the two preceding years. Both negative and positive developments are therefore also taken into account in calculating long-term variable remuneration. Alongside the agreed cap on both components of remuneration, there is also a cap imposed for extraordinary developments.

In addition, there are pension commitments for the members of the Board of Management. These commitments can either take the form of an agreed fixed amount, or are based partly on the most recent fixed salary (30%) and partly on the number of years of service to the company (with increases limited to 50% of the salary most recently received). Employees do not reach retirement age before they turn 66. Since 1 December 2012, all obligations from pension commitments have been transferred to an external pension fund in the form of an earned entitlement, or to a provident fund. Running payments made to the pension fund or provident fund are included in the overall remuneration disclosed for the Board of Management.

There are no commitments in the employment contracts of the Board of Management members if service to the company is prematurely terminated. There are also no Change of Control clauses.

The total remuneration of the Board of Management for the financial year 2018 came to €7.8 million (2017: €6.6 million); of this amount €2.1 million (2017: €1.4 million) is variable. Contributions amounting to €2.1 million (2017: €1.8 million) were paid in benefits after termination of the employment contract (pensions). An amount of €3.4 million (2017: €4.4 million) has been paid out to former members of the Board of Management of BayWa AG and their dependants.

The remuneration of the Board of Management is not itemised. Instead, it is divided up into fixed and variable/performance-related amounts and disclosed once a year in the Notes to the Consolidated Financial Statements. The relevant resolution was passed by the Annual General Meeting of Shareholders in accordance with Section 286 para. 5 of the German Commercial Code (HGB) on 19 May 2015 (Code Item 4.2.4 sentence 3). More information concerning other remuneration can be found in the Notes to the Financial Statements and Consolidated Financial Statements.

Remuneration of the Supervisory Board

The remuneration of the Supervisory Board was changed by the Annual General Meeting of Shareholders on 5 June 2018.

Until 30 June 2018, the remuneration of the Supervisory Board was based on the responsibilities and the scope of tasks of the members of the Supervisory Board, as well on as the Group’s financial position and performance.

Members of the Supervisory Board received fixed remuneration of €10,000, payable after the conclusion of the respective financial year, plus variable remuneration of €250 for each cash dividend portion of €0.01 per share approved by the Annual General Meeting of Shareholders which was distributed to shareholders in excess of a share in profit of €0.10 per share. Variable remuneration was due and payable at the end of that Annual General Meeting of Shareholders which had passed the resolution on the aforementioned cash dividend portion.

The Chairman of the Supervisory Board would receive three times the amount and the Vice Chairman twice the amount of remuneration paid as described in the paragraph above. Additional fixed annual remuneration of €2,500 was paid for committee work. The chairmen would each receive three times the respective amount.

Supervisory Board members who had served on the Supervisory Board and/or its committees for only part of the financial year received remuneration on a proportionate basis.

On 5 June 2018, the Annual General Meeting of Shareholders resolved with the required majority to amend Article 19 of the Articles of Association of BayWa AG and to change the remuneration of the Supervisory Board. As of 1 July 2018, the remuneration of the Supervisory Board is based on the responsibilities and the scope of tasks of the members of the Supervisory Board.

Since the third quarter of 2018, Supervisory Board members have received a fixed annual remuneration of €45,000 payable in four equal amounts after the end of the quarter for the respective quarter. The variable remuneration, as based on the dividend, has not been paid since.

The Chairman of the Supervisory Board receives three times the amount and the Chairmen twice the amount of remuneration paid. The members of the Supervisory Board also receive an additional fixed annual remuneration of €3,000 for committee work. The committee chairmen receive three times this amount.

Supervisory Board members who serve on the Supervisory Board and/or its committees for only part of the financial year will receive remuneration on a proportionate basis.

There was no change in the reimbursement of expenses for activities as a member of the Supervisory Board in 2018: Members of the Supervisory Board are reimbursed for their expenses and value added tax which falls due on account of their activities as member of the Supervisory Board or its committees. In addition, members of the Supervisory Board are also included in the company's group accident insurance policy. The company also maintains an insurance policy against legal proceedings and pecuniary losses and a D&O insurance and legal protection policy on behalf of its Supervisory Board members and in the interests of the company. The company pays the insurance premiums.

The total remuneration of the Supervisory Board comes to €0.9 million (2017: €0.7 million); of which €0.2 million were variable (2017: €0.3 million).

Disclosure of remuneration paid to the members of the Supervisory Board in the Notes to the Consolidated Financial Statements has not been itemised (reason given in the Declaration of Conformity).

Opportunity and Risk Report

Opportunity and risk management

The corporate policy of BayWa Group is geared towards weighing up the opportunities against the risks of entrepreneurship in a responsible way. The management of opportunities and risks is an ongoing area of entrepreneurial activity, which is necessary to ensure the long-term success of the Group. This enables BayWa Group to innovate, secure and improve what is already in place. The management of opportunities and risks is closely aligned to BayWa Group's long-term strategy and medium-term planning. The decentralised regional organisation and management structure of operating business enables the Group to identify trends, requirements, and the opportunities and risk potential of frequently fragmented markets at an early stage, analyse them and take action which is both flexible and market oriented. Internationalisation also allows BayWa to tap into new business opportunities, which in turn reduces its dependence on the individual country markets and their risks. Moreover, the systematically intense screening of the markets and of peer competitors is carried out with a view to identifying opportunities and risks. This is flanked by ongoing communication and the targeted exchange of information between the individual parts of the Group, which leverages additional opportunities and synergy potential.

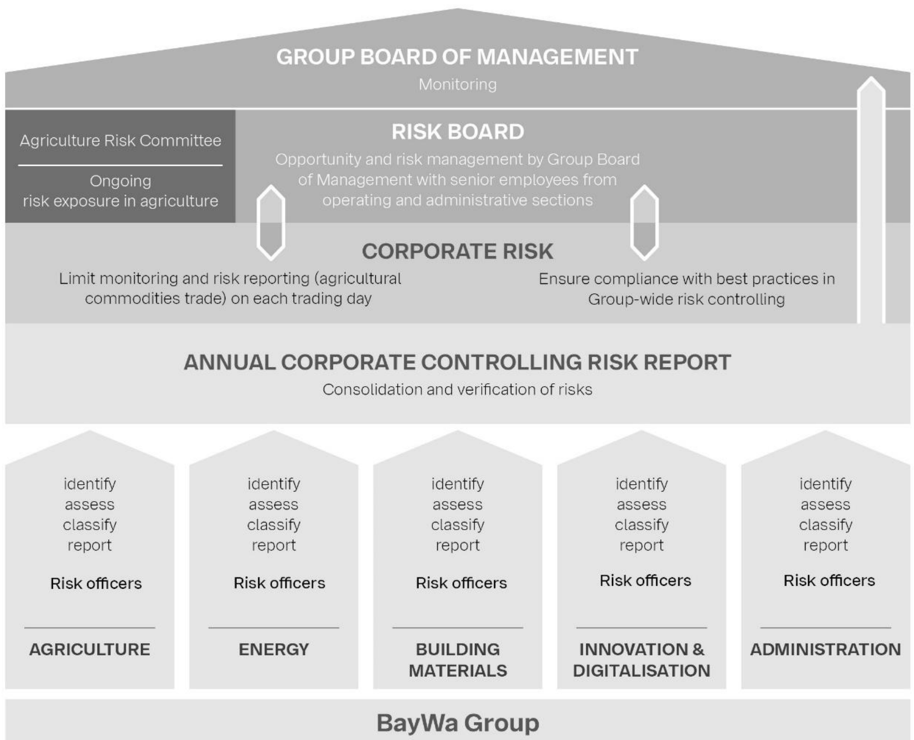
Principles of opportunity and risk management

BayWa makes use of opportunities that arise in the context of its business activities while, at the same time, also entering into entrepreneurial risks. The identification of entrepreneurial opportunities, the safeguarding of the assets and the enhancing of enterprise value therefore necessitate an opportunity and risk management system. The systematic development of existing and new systems with a built-in early warning component makes an indispensable contribution to further strengthening and consistently building up a Group-wide opportunity and risk culture.

The principles underlying the system set in place within BayWa Group to identify and monitor risks specific to the business have been described in a risk management manual approved by the Board of Management. In addition, the Internal Audit Department regularly audits the internal risk management system which supports the processes. ISO certifications for the standardisation of workflows and for risk avoidance, as well as the conclusion of insurance policies, supplement the Group's management of risk.

Moreover, BayWa Group has established binding goals and a code of conduct in its corporate policy and ethical principles as well as the Code of Conduct which have been implemented throughout the Group. They regulate individual employee actions when applying the corporate values as well as their fair and responsible conduct towards suppliers, customers and colleagues.

Structure of opportunity and risk management within BayWa Group



At the BayWa Group, opportunity and risk management is an integral component of the planning and management and control processes. A comprehensive risk management system based on the German Control and Transparency in Business Act (KonTraG) records and monitors both the development of the Group and any existing weak points on an ongoing basis. The risk management system covers all segments and is included as a key component of reporting. A particularly important task of risk management is to guarantee that risks to the Group as a going concern are identified and kept to a minimum. This enables the management of Group companies to react swiftly and effectively. All units have risk officers and risk reporting officers who are responsible for implementing the reporting process.

A key component of the opportunity and risk management set-up is the Risk Board, which has been in place since the financial year 2009. Presided over by the Chief Executive Officer, the Risk Board, which consists of operations managers and support staff, meets regularly to discuss and assess operating opportunities and risks. Minuted meetings are used to develop an understanding of the opportunities and risks and form the basis of the measure of risk applied to operational decisions.

The Agriculture Risk Committee is part of Risk Governance and acts as the highest decision-making body for trading activities concerning agricultural commodities. It is composed of members of the Board of Management and others and meets regularly and when warranted. The Committee decides on risk guidelines and limit systems for the agricultural trade activities and, where necessary, implements risk-controlling and mitigating measures. A form of risk controlling that is independent of trading was established at both the level of the Corporate Risk organisational unit and in the individual agriculture trading companies to ensure that the provisions of the Agriculture Risk Committee are implemented in full, including adherence to limits. The Risk Officer's responsibility in the trading companies covers all risk processes within the company, including limit monitoring and reporting.

The Corporate Risk organisational unit's tasks are to execute risk controlling for the trading activities with agricultural commodities and to operate and develop the risk management system to monitor risks on each trading day. In addition, the unit also serves as a Group-wide competence centre to ensure compliance with best practices in relation to risk controlling methods, processes and systems in commodities trading as well as to guarantee adherence to financial market regulations on commodity derivatives.

Risk management process in the BayWa Group

In the Group-wide risk reporting process, risks are classified into categories, and estimates are made as to their probability of occurrence and potential financial impact. The risk management system is based on individual observations, supported by the relevant management processes, and forms an integral part of the core activities. It starts with strategic planning and proceeds through to procurement, sales and distribution and, finally, to the management of counterparty risk. As an extension of the planning process that takes place in the business units and in procurement, sales organisations and centralised functions, the risk management system serves to detect and assess potential divergences from expected developments. In addition to identifying and assessing key developments influencing business, this system facilitates the prioritisation and implementation of activities. This allows for risks to be avoided or reduced.

The risk reports, which are regularly prepared by the business units, are a cornerstone of the risk management system. These reports are consolidated into the annual risk management report by the Corporate Controlling department and are subject to evaluation by the Board of Management and by the heads of the business units. This includes all individual risks that could have an impact on the business activities of the BayWa Group, assigned to one of the seven risk categories – compliance risks, risks pertaining to organisational structure and workflow, operating risks, market risks, financial risks, legal risks and strategic risks – and their respective sub-categories. The significance of each individual risk results from the potential impact on the assets, financial position and earnings of the BayWa Group in the event that the risk materialises, weighted by the likelihood of that risk materialising. The product of these two values is referred to as the expected value of damages. The expected value of damages per risk category is calculated by adding the expected value of damages of all sub-categories assigned to the risk category. Their expected value of damages are formed by the sum of the expected value of damages of all individual risks contained. The sum of the expected value of damages form the basis for the classification of the risk categories in the BayWa Group.

A further risk management system is in place for the trading activities with agricultural commodities, including the associated hedging transactions, which encompasses the relevant business activities of BayWa AG, BayWa Agrarhandel GmbH and BayWa Agri Supply & Trade B.V. The Minimum Requirements for Risk Management (MaRisk) published by the German Financial Supervisory Authority (BaFin) serve as the benchmark for this risk management system. MaRisk includes arrangements governing the identification, assessment, management and monitoring of all material risk types, including counterparty risks as well as operating risks, such as quality and logistics risks. BayWa adapted the standards established in the financial services sector and leading trading companies for its agricultural trade activities due to the flexible and practical framework of the material regulations. Appropriate and effective risk management pursuant to MaRisk comprises in particular the formulation of strategies and the establishment of internal control procedures in consideration of the risk-bearing capacity. The internal control system consists in particular of:
- Arrangements governing the organisational structure and workflow
- Processes for identifying, evaluating, managing, monitoring and reporting risks (risk management and control processes)
- The establishment of a risk controlling function

In order to manage market risks on each trading day, the positions, including the spreads (underlying risks), are determined and monitored for the associated agricultural trading companies. Value-oriented procedures, in addition to the volume limits, serve to ensure that the positions are managed in a manner that is appropriate for the risks. These procedures include the regular mark-to-market valuation of pending agricultural transactions and the determination of the trading results derived from this, as well as the portfolio-based value-at-risk procedure. In addition, scheduled and ad hoc stress tests are performed to recognise the effect that extra-ordinary market price changes have on earnings and, where necessary, implement measures to reduce risks. The trading positions as well as the risks these pose are reported to the business units and the local risk management officer on a daily basis as well as to the Board of Management in the form of the Risk Board.

These control mechanisms are supported by a standardised IT system solution for risk management, which has been in place for a number of years and has been certified by an external auditor.

The Global Book System (GBS) is used to coordinate trade management activities; it is responsible for the overarching coordination and optimisation of the trading and risk positions of the individual product lines in the trading of grain, oilseed and co-products for the national and international sectors. Fundamental market analyses are performed within the scope of the market research activities to estimate the global supply and demand situation. An additional focus is placed on implementing quantitative portfolio and risk analysis procedures, the results of which are discussed in weekly meetings with the trading departments. Given the volatility in the markets for agricultural produce, BayWa works with specialists in the area of algorithm-controlled trading strategies in order to limit the effects of fluctuations in the market triggered by high-frequency trading on BayWa's positions.

Identification of opportunities in the BayWa Group

A dynamic market environment also gives rise to opportunities. The BayWa Group continuously monitors both macroeconomic trends, and the development of industry-specific and general environments and structures. These include government regulations, suppliers, customers and other stakeholders as well as competitors. The identification of opportunities is integrated into the BayWa Group's strategy and planning processes. The focus of the product and service portfolio is permanently reviewed on the basis of these analyses. The identified opportunities are predominantly implemented on a decentralised basis in the business units.

Classification of risks and opportunities in the BayWa Group

The seven risk categories in the BayWa Group are divided into several sub-categories. The risks in these sub-categories are classified as low, noticeable, considerable, significant or substantial on the basis of the theoretical expected value of damages. The theoretical expected value of damages is the amount that would result in the very unlikely event that all of the individual risks in a subcategory materialise at the same time. Risks are classified by taking into account the risk reduction measures (net view). The significance of the opportunities for the BayWa Group are assessed by way of a qualitative classification into material or immaterial. The following table provides a general overview of all risks and opportunities and depicts their significance for the BayWa Group.

		Risks		Opportunities	
		Risk classification	Y/y change	Opportunity classification	Y/y change
Market risks & opportunities					
	Sales market	significant	reduced	material	increased
	Procurement	significant	increased	immaterial	constant
	Competition	considerable	increased	immaterial	constant
	Image	noticeable	increased	immaterial	constant
	Price	substantial	increased	material	constant
	Loss of customers	low	increased	/	/
Operating risks & opportunities					
	Sales	noticeable	increased	material	increased
	Environmental impact	significant	reduced	immaterial	constant
	Production	noticeable	increased	immaterial	constant
	Inventory	noticeable	reduced	material	constant
	Product quality	considerable	increased	material	increased
	Case of damage	noticeable	reduced	/	/
	Project	considerable	reduced	immaterial	constant
Risks pertaining to organisational structure & workflow					
	IT	significant	increased	immaterial	constant
	Quality	significant	reduced	immaterial	constant
	Personnel	considerable	reduced	immaterial	constant
	Organisation	considerable	reduced	immaterial	constant
Financial risks & opportunities					
	Financial market	considerable	reduced	immaterial	constant
	Group companies	low	reduced	immaterial	constant
	Default on receivables	considerable	reduced	/	/
	Interest	low	constant	immaterial	constant
	Liquidity	noticeable	increased	immaterial	constant
	Currency	noticeable	increased	immaterial	constant
	Taxes	noticeable	increased	/	/
Strategic risks & opportunities					
	Corporate strategy	considerable	reduced	immaterial	constant
	Investments	low	reduced	immaterial	constant
	Acquisitions & disposals	low	increased	immaterial	constant
	Market development	noticeable	reduced	immaterial	constant
	Innovation & technology	noticeable	reduced	material	reduced
Legal risks & opportunities					
	Contracts	noticeable	reduced	/	/
	Changes in legislation	significant	increased	immaterial	constant
	Liability & insurance	low	increased	/	/
	Violations of the law	substantial	increased	/	/
Compliance risks & opportunities					
	Corruption/fraud	noticeable	reduced	/	/
	Product safety/standards	low	reduced	/	/
	Data protection	low	reduced	/	/
	Compliance with laws & guidelines	significant	increased	/	/

Risk classification (potential implications on earnings) according to expected value of damages		Assessment of the opportunities
low =	≤ €1.0 million	Qualitative classification / Categorisation into “material” and “immaterial”
noticeable =	≤ €2.5 million	
considerable =	≤ €5.0 million	
significant =	≤ €10.0 million	
substantial =	> €10.0 million	

Overall, at the time of the risk inventory carried out at the end of 2018 the BayWa Group was not exposed to any risks that could endanger its existence as a going concern.

Composition of the risk and opportunities categories in the BayWa Group

Key individual risks are described below.

Compliance risks

Group companies are and will continue to be faced with legal disputes and proceedings in relation to their operating business activities. For example, these can result from breaches of compliance regulations by individual employees. This can lead to individual Group companies having to pay compensation or financial penalties or being imposed with other civil or criminal sanctions. These risks are continuously monitored by corresponding specialist areas of the Group.

BayWa AG is currently involved in antitrust investigations concerning the area of crop protection wholesale operations. Based on the assessment of our legal advisers and a legal opinion, we assume that no fines will be imposed on BayWa AG in this regard. Therefore, the Board of Management of BayWa AG considers this to be a contingent liability for which no separate balance sheet risk provisioning is required.

BayWa forms provisions for legal and litigation risks if the occurrence of an obligation is probable and the amount can be adequately estimated. In individual cases, actual utilisation may exceed the amount of the provisions. The Board of Management believes that suitable provisions have been accounted for.

BayWa's data protection risk relates to the incorrect handling of personal or customer-related data as well as the unlawful disclosure or use of said data. This risk is increasing due to the digital transformation of many business activities and increased awareness of the issue due to new legal regulations. Advice and awareness programmes, as well as process controls, are in place to ensure compliance with data protection regulations within the Group. Generally speaking, BayWa ensures that customers retain sovereignty over their data.

Operating risks & opportunities

In the Agricultural Segment, changes in the political framework, such as changes to the regulation of markets for individual agricultural products and agricultural inputs or tax-related government subsidies of energy carriers, in addition to volatile markets, create risks. At the same time, however, they open up new prospects. Extreme weather conditions can have a direct impact on offerings, quality, pricing and trading in agricultural products as well as downstream on the agricultural input business. This is offset by the rise in product and geographical presence diversification in the Agriculture Segment, as this has reduced the dependence on individual markets and increased procurement and marketing flexibility. In addition, BayWa also combats quality risks by performing samplings and checks. Risks posed by a deterioration in the quality of inventories are reduced by professional warehousing standards. New opportunities could arise from BayWa's inclusion in the Bayerische Bio-Siegel (Bavarian organic seal) quality scheme. This seal confirms that BayWa meets the highest quality standards with regard to the collection and sale of agricultural products. Logistics risks resulting from a lack of transport capacities due to weather conditions or strikes are identified and managed early on by the early warning systems. Global climate change will also have a long-term effect on agriculture. The global demand for agricultural products, particularly grain, continues to grow. This may give rise to a sustained price uptrend. Price increases can give rise to opportunities through upside revaluation potential for existing trading contracts and inventories. The fruit- and vegetable-growing activities pose a financial risk to the Group, which arises from the delay between cash outflow for buying, growing and maintaining the crops as well as the costs of the harvest and cash inflow from the sale of the fruit. This risk is managed by actively monitoring net working capital. The development of income in the agriculture sector filters through directly to investment capacity and propensity and therefore to the sale of agricultural inputs and high-end agricultural machinery.

In the energy business, the Renewable Energies business unit is particularly affected by changes in incentives and subsidy measures. For example, BayWa r.e.'s business activities in the US could slow down slightly as the funding measures for investments in solar power plants and wind farms lose appeal due to the general reduction in the tax rate as part of the tax reform in December 2017. Against this backdrop, revenue and earnings development is stabilised by means of geographic diversification. Diversification across various energy carriers – especially wind energy, solar energy and biomass – mitigates risk in certain markets that remain strongly dependent on subsidisation. Climatic risks (wind, sunshine) also play a role for BayWa's electricity-generating Group companies in the Renewable Energies business unit. Long-term surveys mean that average wind and sunshine are relatively easy to forecast in the medium term, although both positive and negative deviations can occur at short notice. The availability of turbines and installations also poses a risk, though this is greatly reduced by the assortment of proven components provided by well-known manufacturers. The conclusion of full-service maintenance contracts ensures that maintenance and repair work is performed within defined time periods. The conventional energy business largely comprises trading in crude oil-based products such as fuels and lubricants as well as heating oil. Generally speaking, the development of demand for heat energy carriers such as heating oil also depends on the level of consumption, which is significantly influenced by weather conditions. Apart from the default risk on trade receivables, these business activities are subject to little risk due to the Group's pure distribution function.

Political and economic factors exert the main influence on demand in the construction sector. In addition to a decline in private consumption, an economic impact on demand can be caused in particular by a decline in demand on the part of the public sector. The development of public finances has a direct impact here. Political factors of influence include, for instance, special depreciation for listed buildings, measures to promote improved energy efficiency and the construction of social housing. In general terms, ageing housing stock in Germany will encourage growing demand for modernisation and renovation. In the Building Materials Segment, BayWa Group is the franchiser for DIY and garden centres. After the inclusion of BayWa Bau- und Gartenmärkte in a joint venture with Hellweg, the newly established BayWa Bau- und Gartenmärkte GmbH & Co. KG operational management was transferred to Hellweg. In light of this, there is a risk that the franchise company in BayWa Group will no longer meet its contractual obligations to the franchisees in the previous way and of the previous quality. Among other things, this may lead to claims for damages on the part of franchisees. This risk was counteracted by the Group concluding long-term agreements with Hellweg.

Market risks & opportunities

General economic factors have an influence on consumer behaviour and investment patterns in BayWa's core markets. In the agricultural industry in particular, there is a trend towards ever larger agricultural operations that are conducting their business more professionally, particularly with regard to the customer structure. These environmental factors exert less of an influence on BayWa's business activities than on other companies. BayWa Group's business model is largely geared to satisfying fundamental human requirements, such as the need for food, mobility, the supply of energy and shelter. Accordingly, the impact of cyclical swings in demand are likely to be less strong than in other sectors. As a result, BayWa is even able to turn certain opportunities arising in times of crisis to its advantage through, for instance, the identification and acquisition of suitable companies with a view to building up or expanding existing or new areas of business. However, BayWa is unable to fully decouple itself from severe setbacks to international economic development that result from, for example, slumps in global commodity prices.

BayWa trades in merchandise that displays very high price volatility, such as grain, oilseeds, fertilisers, mineral oil, biomethane, electricity, gas, and solar components, especially in its Agriculture and Energy Segments. The warehousing of the corresponding merchandise and the conclusion of supply contracts governing the acquisition of goods in future means that BayWa is also exposed to the risk of price fluctuations. Whereas the risk inherent in mineral oils and biomethane is relatively low due to BayWa's pure distribution function, fluctuations in the price of grain, oilseeds, fertilisers, electricity, gas or solar components may incur greater risks if there is no matching in the agreements on the buying and selling of merchandise. What is more, activities by financial investors and technical market mechanisms can sometimes exacerbate price volatility considerably. In addition to absolute price risks, business developments may be influenced by various developments in local mark-ups, for example concerning logistics services, in forward rates as well as different quality grades If no hedging transactions exist at the time when agreements are signed, the ensuing risk is monitored on an ongoing basis by the respective executive bodies. Whenever necessary, appropriate measures to limit risk are initiated.

The BayWa Group uses a portfolio-based value-at-risk method to measure and control risks from commodity futures, which are treated as financial instruments as defined under IFRS 9 (International Financial Reporting Standard). The value-at-risk used by BayWa aims to quantify the negative changes in the value of a portfolio, which – with a certain degree of probability (95%) – will not be exceeded during a defined period of time

(5 trading days). The value-at risk calculated as at 31 December 2018 amounted to €2.5 million and indicates that the potential loss from the commodity futures considered will, with a probability of 95%, not exceed €2.5 million within the next five trading days.

On 23 July 2016, UK citizens voted in favour of exiting the EU in a referendum (Brexit). The negotiations between EU member states and the UK on the terms of Brexit are still ongoing. The date of the UK's departure from the EU has been set at 29 March 2019, after which a transitional period of at least two years is to come into force, according to the current state of discussions. Within this transitional period, EU regulations on free movement of people and the trading of goods and services will be replaced by bilateral regulations between the EU and the UK. This transitional period means that Brexit will have no effect on BayWa Group companies based in the UK in the short term. The companies concerned will review the consequences of new regulations on freedom of movement and trade once legally binding decisions on such subjects have been made. However, the departure itself is still uncertain as current debates have seen the increased call for a second referendum. The Group's 2018 business activities in the UK took place in the BAST, Global Produce and Renewable Energies business units. Around 6% of the Group's revenues and EBIT were generated in UK. In the event of a departure from the EU, BayWa does not expect Brexit to have any significant negative effects on the Group as a whole, even in the event that restrictions are imposed on free international trade, due to the volume of business in the UK and the Group structure.

On 22 December 2017, the US enacted a new tax law in the form of the Tax Cuts and Jobs Act. The changes contained in this act, such as the lowering of the corporate tax rate to 21%, were applied to the affected Group companies, most of which are part of the Renewable Energies business unit, during the preparation of the financial statements as at 31 December 2018. This did not result in any material changes The new tax law is not expected to have any considerable impact on the BayWa Group in future financial years either.

Financial risks and opportunities

Within the BayWa Group, financial risks and opportunities are divided into a number of different risk types that are described separately in the following.

Opportunities and risks from financial instruments

In addition to fixed- and variable-rate financial instruments, which are subject to varying degrees of interest rate risks, BayWa Group also uses derivative hedging instruments such as options and futures contracts to hedge its commodity futures. In addition to interest rate risk, these derivative hedging instruments are also subject to risks posed by changes to the prices of underlying transactions as well as, depending on the base currency in which the derivative instrument is denominated, currency risks. Transactions that were not conducted via a stock exchange are also subject to counterparty risk. However, due to the measures taken by BayWa described below, there is only a slight chance that these risks will materialise. By the same token, changes to interest rates, currency exchange rates or forward market prices can lead to unplanned opportunities.

Foreign currency opportunities and risks

BayWa's business activities are largely located in the euro zone. If foreign currency positions arise from goods and services transactions or projects, they are always hedged without delay. Other payment obligations or receivables denominated in a foreign currency are hedged at the time when they arise. Speculative borrowing or investing of financial resources denominated in foreign currencies is prohibited.

Interest rate opportunities and risks

Interest rate risk positions arise from the Group's floating-rate financing activities, especially from the issuing of short-term commercial papers, short-term loans as well as variable-interest bonded loans. Short-term debt is used mainly to finance working capital. To reduce the interest rate risk, which is not hedged using a natural hedge, BayWa uses derivatives instruments in the form of futures, interest rate caps and swaps. In the financial year 2018, the average interest rate for variable-interest financial liabilities stood at 1.185% (2017: 1.133%).

Credit and counterparty risks or risks of default on receivables

As part of its entrepreneurial activities, BayWa Group has an important function as a source of finance for its agricultural trading partners. In the context of what are known as cultivation contracts, the Group is exposed to a financing risk arising from the upfront financing of agricultural inputs, the repayment of which is made through acquiring and selling the harvest. In addition, BayWa grants financing to commercial customers particularly in the construction sector in the form of payment terms of a considerable scope. Beyond this, there are the customary default risks inherent in trade receivables. Risks are kept to a minimum by way of an extensive debtor monitoring system that spans all business units. To this end, credit limits are defined through a documented process of approval and monitored on an ongoing basis.

In addition to credit risks, counterparty risks are also regularly monitored in agricultural trade; consequently, market value changes to open selling and buying contracts are measured so as to monitor the risk of the non-fulfilment of contract obligations. There is currently no discernible concentration of default risk from business relationships with individual debtors or groups of debtors.

Liquidity risks
The liquidity risk is the risk that the BayWa Group may not – or only to a limited extent – be able to fulfil its financial obligations. In BayWa Group, funds are generated by operations and by borrowing from external financial institutions. In addition, financing instruments such as multi-currency commercial paper programmes or asset-backed securitisation are used as well as bonded loans. Existing credit lines are therefore measured to an extent deemed sufficient to guarantee business performance at all times, even in the event of growing volume. The financing structure therefore accounts for the pronounced seasonality of business activities. Owing to the diversification of the sources of financing, BayWa Group does not currently have any risk clusters in liquidity. BayWa Group's financing structure with its mostly matching maturities ensures that interest-related opportunities are reflected within the Group.

Rating
BayWa AG enjoys a positive rating among banks. This achievement is due to the solidity as well as to the long and successful history of the company and its high enterprise value, underpinned by assets such as real estate. In 2018, the BayWa Group was once again able to raise the total amount of its credit facilities. For reasons of cost effectiveness, BayWa AG deliberately dispenses with the use of external ratings.

Legal risks

Group companies are and will continue to be faced with legal disputes and proceedings in relation to their operating business activities. These can, for example, relate to the assertion of claims based on services and deliveries that are not up to standard or to payment disputes. This may lead to individual Group companies having to pay compensation or financial penalties or being imposed with other civil or criminal sanctions. The Group's business activities in more than 40 countries means that its companies can also be exposed to political and legal risks to a small extent. Accordingly, legally existing claims of the Group could ultimately not be enforceable due to weak state structures or underdeveloped legal systems. These risks are continuously monitored by corresponding specialist areas of the Group.

BayWa forms provisions for legal and litigation risks if the occurrence of an obligation is probable and the amount can be adequately estimated. In individual cases, actual utilisation may exceed the amount of the provisions. The Board of Management believes that suitable provisions have been accounted for.

Changes to the regulatory environment can influence Group development. In particular, this includes government intervention in the general framework conditions for the agricultural industry and the renewable energies business. Negative impacts emanate from the adjustment, reduction or abolition of funding measures. Conversely, new regulatory and legislative developments influencing bioenergy can also result in opportunities. In the construction sector, changes to building or fiscal regulations may also have an impact on the development of business.

Plant efficiency in terms of energy generation using renewable energy carriers is strongly reliant on regulatory frameworks and government subsidies. Politically motivated changes to subsidy parameters, in particular the retroactive cuts to or abolition of feed-in tariffs, can significantly impact the value of such facilities: either in the form of lower future disposal prices or lower cash inflows from the operation of the facilities. BayWa combats the potential implications of such risks on earnings by pursuing a threefold diversification strategy in its Renewable Energies business unit. The portfolio is diversified in terms of countries, energy carriers and business units (projects and service on the one hand, and trading on the other).

As a result of the financial crisis in 2008, a whole series of new laws were introduced to increase regulation of the financial market. Derivative markets were a particular focal point of these measures. In addition, efforts were taken at a European level to limit speculative trading in the raw materials and, in particular, agricultural sectors. Of this significant number of new regulations, the European Market Infrastructure Regulation (EMIR) and the revision of the Markets in Financial Instruments Directive (MiFID II) are particularly relevant to BayWa's business activities. Trading on the Chicago Board of Trade (CBoT) is subject to the US regulations of the Commodity Exchange Act (CEA), which are monitored by the Commodity Futures Trading Commission (CFTC). Besides additional costs, these new regulations also increase the risk of violating new rules. Compliance with all financial regulatory measures is guaranteed in a cost-efficient manner by the operation of a Group-wide risk management software program on every trading day.

Strategic risks and opportunities

Through its strategical development into a provider of integrated solutions, the BayWa Group is expanding its role in the value chain and entering the project business more strongly. The resources necessary for the design and development of such solutions vary significantly in type and scope depending on the segment. In the Global Produce business unit, for example, there is a risk that the investments required within the context of vegetable cultivation in climate-controlled greenhouses could exceed their planned investment volume. BayWa also operates as a project developer within the scope of the Renewable Energies business unit. This business activity also harbours certain risks, for instance, that the planning and building of solar power plants, wind farms and biogas plants are delayed and that they may be connected to the grid later than originally planned. In such cases, if the deadline for the further reduction in feed-in tariffs is not adhered to, there is a risk that the low feed-in and electricity income could result in the profitability of the projects being lower than planned.

Risks and opportunities of the organisational structure and workflow

In the area of organisational structure and workflow, the BayWa Group differentiates between a number of different risk types that are described separately in the following.

Opportunities and risks associated with personnel: As regards personnel, BayWa Group competes with other companies for highly qualified managers as well as for skilled and motivated staff. The Group companies continue to require qualified personnel in order to secure future success. Excessively high employee fluctuation, brain drain and failure to win junior staff loyalty may have a detrimental effect on the Group's business performance. BayWa counteracts these risks by offering its employees extensive training and continuous professional development in order to secure expertise. Management based on trust, the tasking of employees in line with their natural talents and abilities, as well as the definition and adherence to our ethical principles create a positive working environment. At the same time, BayWa AG promotes the ongoing vocational training and development of its employees. With 1,350 trainees at the end of 2018, the Group ranks among the largest companies offering training specifically in rural areas. BayWa recruits a large majority of its future specialist and managerial employees from the ranks of these trainees. Long years of service to the company are a testament to the high-level of loyalty that employees display towards BayWa. This helps create an environment of stability and continuity and also secures the transfer of expertise down the generations.

IT opportunities and risks: The use of cutting-edge information technology characterises the entire business activity of the BayWa Group. All key business processes are supported by IT and mapped using state-of-the-art software solutions. In a trading company with high numbers of employees, having work processes supported electronically is imperative. The continuous monitoring and reviewing of processes mapped electronically, however, involves more than the mere implementation of new IT components. It is always accompanied by an optimisation of process workflows, as a result of which opportunities in the form of synergy and cost-savings potential can be identified and implemented. At the same time, the risk inherent in the system rises in tandem with the growing complexity and dependency on the availability and reliability of the IT systems. The implementation of new IT systems inherently entails the risk of additional time and personnel costs as well as initially limited functionalities, which may make it necessary to operate legacy systems longer than planned. To realise the opportunities and minimise the risks, the IT skills and expertise of the BayWa Group are always kept up to date. The resources are pooled in RI-Solution GmbH Gesellschaft für Retail-Informationssysteme, Services und Lösungen mbH, a company belonging to the Group that provides the Group companies with IT services at the highest standard. Extensive precautionary measures, such as firewalls, virus protection updated on a daily basis, disaster recovery plans and training in data protection, serve to safeguard data processing. Segregated in organisational terms, a data protection officer monitors compliance with security and data protection standards.

Quality risks: The BayWa Group, as an agricultural supplier, a global purveyor and marketer of grain, oilseed and fruit as well as a trader of energy carriers and building materials, is confronted with a wide range of national quality and safety standards. Compliance with the quality and safety requirements is guaranteed through the quality management teams of the respective business units. In addition, various certifications document the fulfilment of the relevant legal requirements, for example, the quality management standard ISO 9001:2015 in the Conventional Energy business unit.

Overall assessment of the opportunity and risk situation by Group management

An overall assessment of the current opportunity and risk situation shows that there are no risks which could endanger the Group as a going concern. There are currently no such risks discernible for the future either. All in all, the risks to the BayWa Group are limited and manageable.

Along with potentially non-influenceable or only indirectly influenceable geopolitical risks and macroeconomic risks, operational risks are also the focus of monitoring. As far as the latter are concerned, the BayWa Group has taken appropriate measures to manage and control these risks.

Internal Control System and Risk Management System in Relation to the Group Accounting Process

The Internal Control System (ICS), which monitors accounting processes, is a key component of opportunity and risk management. BayWa Group has set in place a professional control system, which has been certified in many areas, comprising measures and processes to safeguard its assets and to guarantee the presentation of a true and fair view of the result of operations.

The consolidated financial statements are drawn up through a centralised process. Compliance with legal provisions and regulations pertaining to the Articles of Association during this process is guaranteed by the prescribed accounting standards. Corporate Accounting acts as a direct point of contact for the managers of the subsidiaries in matters pertaining to reporting and the annual and interim financial statements. Corporate Accounting prepares the consolidated financial statements pursuant to IFRS.

A control system which monitors the accounting process ensures the complete and timely capturing of all business transactions in accordance with the statutory provisions and the regulations laid down under the Articles of Association. Moreover, it serves to guarantee that stocktaking is duly and properly performed and that assets and liabilities are recognised, valued and disclosed appropriately. The control system uses both automatic and manual control mechanisms to fully ensure the regularity and reliability of accounting. Beyond this, suitable control mechanisms, such as strict compliance with the principle of dual control and analytical reviews, have been implemented in all processes relevant for accounting. In addition, accounting-relevant processes are also monitored regularly by Internal Audit.

All subsidiaries included in this process are obliged to submit their figures on an IFRS basis in a standardised reporting form to BayWa. This allows for the prompt identification of deviations from planned targets with the opportunity to respond quickly.

As part of quarterly reporting, Corporate Accounting monitors all processes relating to the consolidated financial statements in coordination with the Group companies – this includes capital, liabilities, expenses and income consolidation, and the elimination of inter-company results, among others.

The departments and units of the Group involved in the accounting process are suitably equipped in terms of quantity and quality, and training courses are regularly conducted.

The integrity and responsibility of all employees in respect of finance and financial reporting is ensured through taking each employee under obligation to observe the BayWa Code of Conduct.

The employment of highly qualified personnel, targeted and regular training and continuous professional development, along with the stringent separation of duties in financial accounting in the preparation, booking and controlling of vouchers is guaranteed through compliance with local and international accounting principles in preparing the annual financial statements and the consolidated financial statements.

Outlook

Outlook for the BayWa Group

Prospects for the BayWa Group are positive overall for 2019 on the basis of the expected underlying conditions in the operational segments. Group revenues are likely to increase moderately in consideration of anticipated price developments and volatilities. Earnings before interest and tax (EBIT) are likely to rise considerably in 2019. A significant improvement in earnings is expected for the Agriculture Segment, stable earnings development is expected in the Building Materials Segment and the Energy Segment is expected to see a slight drop in earnings. The research and development investments in the Innovation & Digitalisation Segment in 2019 will be slightly higher than the previous year as planned.

Outlook for the Agriculture Segment

In the BAST business unit, the handling volume of grain and oilseed is expected to increase slightly in 2019. On the one hand, this will be due to the acquisition of Dutch specialist retailer Royal Ingredients at the beginning of 2019 and the first full-year inclusion of British grain trader Premium Crops, which was acquired in February 2018. On the other hand, an increase in import trade volumes for grain and oilseed is expected in 2019 due to the poor grain harvest in Europe and the staple feed shortage in the previous year. In view of the as yet unknown consequences of the UK's departure from the EU, the diversified location structure is unlikely to have any significant impact on Group activities as a whole. Based on the assumption of largely stable prices, revenues in the BAST business unit are likely to grow moderately in line with the increased turnover. Earnings before interest and tax (EBIT) are expected to remain stable in 2019 as the supply situation in the German and European grain and oilseed markets normalise, making price volatility and trading opportunities comparable to last year unlikely. In addition, income from transactions with Iran are not included, as these will probably no longer be possible due to uncertain underlying conditions. A resulting decline in earnings should be offset by the additional earnings contributions from the acquisitions described above.

Following the negative impact of the extreme weather conditions on the development of the Agri Trade & Service business unit in 2018, volume increases are expected in both the agricultural input business and trade in produce for 2019. Assuming a normal harvest with average yields per hectare in Germany, the collection and marketing volumes of grain and oilseed are expected to increase compared to 2018. The marketing of the produce not delivered in 2018 due to the low water level of the rivers as well as the expansion of trading with organic produce should also contribute to an increase in sales in the financial year 2019. Due to the shortage of staple feed, strong demand for animal feed is expected for at least the first half of 2019. Furthermore, sales in this area are likely to benefit from the newly introduced sales organisation. In the agricultural input business, sales of fertilisers and crop protection should at least reach the previous year's level, given normal weather conditions. The expansion of the product range to include agricultural inputs for organic cultivation should also have a positive effect here. Sales of seed are expected to remain stable. Overall, revenues in the Agri Trade & Service business unit should increase significantly in 2019 as a result of volume factors. The increases in sales volumes and revenues will also have a positive impact on the earnings of the Agri Trade & Service business unit. Additionally, cost savings can be expected from the structural optimisation measures implemented in previous years, which will also contribute to improved earnings. On the whole, operating earnings before interest and tax (EBIT) in the Agri Trade & Service business unit are expected to rise significantly year-on-year in 2019.

In the fruit business, the entire marketing volume of the BayWa Group is likely to increase considerably in 2019. This expectation is based partly on the record apple harvest in Germany in 2018 and a forecast higher apple harvest in New Zealand, and partly on the first-time contribution to sales of the marketing of premium tomatoes grown in greenhouses by BayWa's joint venture with Al Dahra Holding in the United Arab Emirates. In Germany, however, prices for apples are expected to fall further due to the high supply of domestic and imported goods. In New Zealand, on the other hand, prices are expected to rise due to an anticipated higher export demand – especially from China due to the poor harvest there in 2018. Due to the management of international activities by the New Zealand subsidiary T&G Global, which is represented in Europe by branches in Belgium and the UK, no significant effects on Group activities as a whole are to be expected from UK in view of the as yet unknown consequences of their departure from the EU. Overall, the Global Produce business unit will be able to significantly increase revenues in 2019 compared to 2018, primarily due to volume factors. Earnings before interest and tax (EBIT) are likely to significantly outperform the level recorded in the previous year. Both national and international activities are contributing to the expected increase in earnings. The German fruit business is forecast to achieve significant growth in 2019 after the previous year's result was severely impacted by a lack of marketing volumes. Significantly higher earnings contributions are expected from the international fruit trade, resulting not only from the improved earnings of T&G Global but also from the development of additional collection and distribution channels for tropical fruit by TFC.

In the Agricultural Equipment business unit, orders in sales of new machinery at the end of 2018 were below the previous year's level, as many customers ordered their tractors ahead of schedule due to mild weather conditions lasting until the end of December. Accordingly, sales of new machinery in Germany are expected to decline in 2019. This decline will probably not be offset by growth in Austria due to John Deere's expanded model range as well as the portfolio expansion in speciality areas such as equipment for local authorities and forestry. Stable sales development can be expected for international activities. As a result, sales in the

Agricultural Equipment business unit are expected to decline significantly in 2019. The decline in sales will likely have a negative impact on earnings. In addition, considerable cost increases are to be expected, in particular as a result of higher standard wages. International activities and the service business are also unlikely to fully reach the exceptionally high earnings level of 2018. Considering these conditions, the Agricultural Equipment business unit's earnings before interest and tax (EBIT) in 2019 are expected to fall significantly short of the record level set in 2018.

On the whole, BayWa anticipates a slight revenue growth and a significant rise in the earnings before interest and tax (EBIT) in the Agriculture Segment in financial year 2019 on the basis of anticipated developments in the individual business units.

Outlook for the Energy Segment

The Renewable Energies business unit will continue on its growth in 2019. Overall, the commissioning and turbine/plant sales project pipeline in the areas of wind energy, solar energy and bioenergy currently totals approximately 660 MW for 2019. Of this amount, approximately 409 MW is attributable to solar plants, approximately 250 MW to wind turbines and approximately 1 MW to bioenergy projects. The focus of solar activities will be on new projects in the US, Malaysia, the Netherlands and Germany. In the Netherlands, growth will primarily be driven by GroenLeven, the project development company for solar plants acquired in March 2018, with a project pipeline for solar parks of more than 2 GW. Activities relating to wind turbines are mainly centred on the US, Italy, the UK, France, Austria, Australia, Croatia and Germany. In terms of bioenergy, three plants in Germany are up for sale in 2019. The focus here is on the repowering of existing plants, consultancy and services as well as the management of raw materials. In service, the opening of a new control centre for the operation of solar and wind plants in autumn 2018 in Bangkok, Thailand, will contribute to sales and earnings throughout 2019 and to the further expansion of business in the Asia-Pacific region. Trading in photovoltaic components should benefit from rising demand for new system solutions and falling prices for photovoltaic modules. In addition, the market entry in Mexico in September 2018 and the expansion of activities in Spain with a new location in Madrid are having a positive effect. In energy trading, strong growth is expected in the direct marketing of green electricity. Direct marketing agreements with a total capacity of 3,270 MW had already been signed at the beginning of 2019, representing an increase of more than 50% compared with 2018. In view of the as yet unknown consequences of the UK's departure from the EU, the insignificant volume of business in this unit means that no significant effects on this business unit are to be expected. The Renewable Energies business unit's revenues are expected to significantly increase, primarily due to growth in the direct marketing of green electricity, the expansion in trading with photovoltaic components and the solid project pipeline. Earnings before interest and tax (EBIT) in 2019 are likely to be significantly higher than the level recorded in 2018. The sale of BayWa r.e.'s biomethane trading business in February 2019 will also contribute to this.

In the Conventional Energy business unit, the low level of inventories in heating oil in the previous year could animate a renewal in demand. In addition, BayWa's own vehicle fleet offers new opportunities in terms of delivery logistics for third parties due to the increase in bottlenecks in the forwarding industry. Sales of wood pellets are likely to rise due to the increased number of installed pellet heaters and the year-round availability of the marketing quantities of the new WUN Energie GmbH pellet plant. The sales volume of fuels is expected to continue to grow as a result of the increasing acceptance of the BayWa fuel card and the expansion of diesel delivery logistics. The most important target groups for BayWa in this regard are the agricultural and construction industries, meaning that any potential driving bans on older diesel vehicles in German city centres are likely to only have a minor impact on sales. Sales of lubricants are forecast to increase slightly in 2019 through the Interlubes online portal as well as an expected increase in AdBlue volume due to the discussion surrounding particulate matter. However, due to the predicted decline in oil prices, revenues in the trade of heating fuels, fuels and lubricants in 2019 are expected to be slightly below the level of 2018 despite the expected sales increase. Earnings before interest and tax (EBIT) in the Conventional Energy business are expected to decline significantly as the exceptionally positive margin development in the fuel business in 2018 is not reflected in the budget.

Overall, revenue in the Energy Segment for 2019 as based on the forecast developments is likely to remain at the previous year's level. The Energy Segment's earnings before interest and tax (EBIT) are likely to be slightly below the value of the previous year.

Outlook for the Building Materials Segment

The BayWa building materials trade is likely to benefit from the continued positive development of the construction sector in 2019 thanks to its broad range of products. However, given the high capacity utilisation in the industry, the scope for expanding sales is limited and further growth can only be achieved through increases in efficiency. In can be expected that BayWa will benefit from the growing trend towards increased industrial pre-fabrication through the further expansion of specialisation in distribution activities. Against the background of a scarcity in transport capacities within the industry, BayWa also has a competitive advantage thanks to its own logistics resources. Additional opportunities are opening up beyond the existing sales region through the expansion of e-commerce. Moreover, BayWa has become the B2B market leader among the building materials suppliers offering Click & Collect through the BayWa Building Materials Online portal. A further innovative solution is offered in the "Mr+Mrs Homes" property configurator. In 2019, this platform will be used to implement the "Wohnen am Lerchenberg" project in a joint venture with a construction firm. Revenues in the Building Materials Segment are expected to see a slight increase in 2019. The increase is expected to result primarily from higher prices and only to a minor extent from rising sales volumes. Earnings before interest and tax (EBIT) should reach the levels achieved in 2018, despite increases in standard wages. Bölke, the wholesaler of building materials for civil engineering purposes, which the Group acquired a majority stake in on 1 July 2018, is also contributing factor to this.

Outlook for the Innovation & Digitalisation Segment

In the Innovation & Digitalisation Segment, the revenues are minor in size. The segment's activities are mainly based around investments and development costs for future digital product and service offerings. Growth will be supported by the international expansion of the distribution of the NEXT Farming OFFICE and NEXT Farming LIVE software packages and by newly developed applications such as the satellite-based VariableRain irrigation solution. Another example is the GPS-controlled Leitspurmanager software which, coupled with digitalised field databases, enables seed to be sown and fertiliser and crop protection to be applied automatically and without any overlap. In addition, FarmFacts has developed a manufacturer-independent machine data management system for the Agrar Application Group (aag), in which six respected agricultural equipment companies have joined forces to create open software solutions. Known as "NEXT Machine Management by aag", the software solution will be integrated as a module into the NEXT Farming LIVE farm management software and launched on the market in the first half of 2019. This will allow machines from different manufacturers to be networked and information to be digitally processed. In addition, the online service offering was expanded to include new functions for precise field measurement and monitoring. The new German Fertiliser Application Ordinance (DüV) is also likely to have a positive impact on demand for farm management software and digital farming solutions, as the increased documentation requirements and the optimisation of nutrient quantities in fertiliser can be met with the "NEXT Fertilisation" software module. Revenues from BayWa's eBusiness activities are set to increase through the further development of the BayWa Portal. However, revenues and income from these activities are attributed to the respective business unit or segment responsible for the individual product sold. Revenues reported in the Innovation & Digitalisation Segment are expected to increase moderately and at a low level in 2019. Due to administrative costs and start-up costs for investments in new developments, the segment's earnings before interest and tax (EBIT) are likely to post a negative result in the low two-digit million euro range in 2019 and thereby finish slightly below the previous year's figure.

Other Activities

No revenue forecast was made for Other Activities as the size of such activities is insignificant in terms of the business development of the Group. As compared to 2018, the development of earnings before interest and tax (EBIT) in 2019 is likely to be characterised, among other things, by rising expenses for IT infrastructure, equipment and security. This could be offset by higher non-operating income from holdings. Overall, EBIT for Other Activities in 2019 is expected to be slightly below that of 2018.