Consolidated Management Report of BayWa AG for the Financial Year 2019

Note about this report

The consolidated management report of BayWa AG has been revised for the reporting year 2019. The aim is to make it more streamlined in accordance with the principle of materiality. Slight changes were also made to the order of the sections to enhance the logical sequence of events. The “Sustainability” and “Employees” sections have been moved to the “Background to the Group” section between the “Control systems” and “Research and Development” sections. The “Comparison of forecast business development with actual business development” and “General statement on the business situation of the Group” summarising statements have been moved to the end of the Financial Report. Within the reporting on the segments, the Energy Segment was placed at the beginning due to its high economic importance for the BayWa Group. The forecast and the opportunities and risks report have been added to the economic report, and are affiliated with the forward-looking components of the management report. The remuneration report and the contents of the “Takeover-relevant Information” conclude the consolidated management report.

Overview

Development was positive overall for the BayWa Group in 2019. The corporate goals for the reporting year were achieved. However, development was varied among the segments. Overall, the Energy Segment developed considerably better than expected. The Renewable Energies business unit, which achieved new highs in both revenues and operating result, was the main factor behind this development. The Conventional Energy business unit also exceeded the goals set for the financial year 2019. The Building Materials Segment developed better than planned in the reporting year. By contrast, the economic situation in the Agriculture Segment is unsatisfactory. In view of the great importance of these business activities for the BayWa Group, action is required here in order to noticeably increase profitability. In 2019, the BayWa Group once again profited from its heavily diversified business activities and its strategic orientation towards international markets and towards new areas of business and business models.

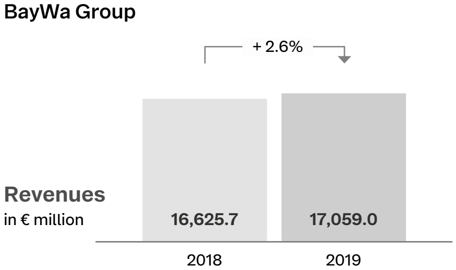
The positive business development in the Energy Segment was driven by both business units in 2019. At €4,474.3 million, the Energy Segment’s total revenues were up year on year by €505.8 million. Earnings before interest and tax (EBIT) increased by 32.7% to €127.4 million, thereby setting a new record. The Renewable Energies business unit significantly exceeded the project developments and sales for the year as a whole. Plant sales, with a total output of 911.6 megawatts (MW), more than doubled in the reporting year (2018: 453.0 MW), setting a new record. Overall, revenues rose by 29.1% to €1,975.3 million. Following €72.5 million in the previous year, earnings before interest and tax (EBIT) reached a new high of €101.0 million in the reporting year. The improvement in both revenues and the operating result is primarily attributable to the sharp rise in project sales and growth in solar trading, and exceeded the positive expectations. The development of the Conventional Energy business unit in 2019 was shaped by a strong rise in demand for heat energy carriers. This business unit’s revenues rose by 2.5% to €2,499.0 million in the reporting year mainly due to the rise in sales volumes in the heating business. EBIT improved by 12.3% to €26.4 million primarily due to excellent margins in the heating oil and fuel business, thereby reaching a new record high.

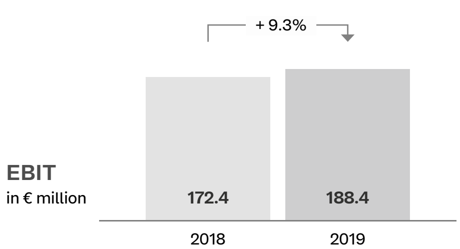
The Agriculture Segment’s revenues fell slightly by 1.4% to €10,857.5 million, and EBIT fell slightly by €3.5 million to €96.6 million. Development in the business units was therefore mixed. The BAST business unit’s grain and oilseed meal handling volume fell by 1.6 million tonnes to just under 25.0 million tonnes in financial year 2019. This was mainly due to the suspension of business with Iran and the trade conflict between the US and China. The revenues of the BAST business unit declined by 7.8% to €4,875.8 million due to both sales volume and price factors. Earnings were particularly affected by defaults on receivables in connection with the suspension of bread grain business with Iran caused by the sanctions and the lower trading volume. The business unit's total earnings before interest and tax (EBIT) declined slightly in 2019 by €12.0 million to €19.1 million. The BayWa Group's fruit sales increased by just over 8% to 380,550 tonnes in 2019. Development of domestic trade was therefore positive. By contrast, the harvest volume of apples harvested by the New Zealand subsidiary T&G Global Limited was just under 23% lower than in the previous year due to bad weather. The Global Produce business unit recorded moderate revenue growth of 4.5% to €843.9 million in 2019. Earnings before interest and tax (EBIT) increased in 2019 by €9.7 million year on year to €36.9 million. However, this figure includes special income from the sale of a property by T&G Global, which more than compensated for the poorer operating performance. The Agri Trade & Service business unit's grain, oilseed and oilseed meal handling volume increased by 12.5% to just under 7.3 million tonnes. Revenues increased mainly due to volume factors by 4.7% to €3,454.4 million. The business unit's earnings before interest and tax (EBIT) improved to €7.8 million. In a persistently difficult market environment, this increase is mainly due to restructuring measures in previous years. BayWa's agricultural equipment business was unable to reach the record-breaking level of the previous year in 2019. Sales of new machinery declined by 4.1% to 4,617 tractors in 2019. On the other hand, sales of machinery and accessories in the fluid fertilizer segment and the service business developed positively. The Agricultural Equipment business unit's revenues rose by 3.8% to €1,683.4 million. By contrast, earnings before interest and tax (EBIT) fell to €32.8 million in the reporting year (minus 10.4%) following the extremely strong increase in the previous year (2018: plus 83.9%).

In Germany, business development in the building materials trade was boosted by the solid development of the construction industry throughout 2019 and the mild weather conditions both in the spring and in late autumn of 2019. In 2019, the Building Materials Segment increased revenues by 5.3% to €1,702.8 million due to pricing and volume factors. Earnings before interest and tax (EBIT) for the segment increased by 3.2% to €32.1 million. In addition to the positive sales development, the successful expansion of the high-margin range of private brands and the linking together of online and stationary sales channels through the Click & Collect function as part of efforts to position the company as an integrated multi-specialist contributed to the improvement in earnings.

In the reporting year, the Innovation & Digitalisation Segment generated revenues on a par with the previous year at €10.6 million (2018: €10.7 million). As predicted, the segment recorded negative earnings before interest and tax (EBIT) of €14.6 million (2018: minus €12.3 million). Among other things, this was due to a rise in marketing expenses in the reporting year in connection with Agritechnica and with the expansion of additional development and distribution capacities.

BayWa Group





The BayWa Group generated total revenues of €17,059.0 million in 2019, a 2.6% increase compared to the previous year. EBIT improved by 9.3% to €188.4 million. The increase in earnings should be seen against the background that the charge of €68.6 million from the termination of the antitrust proceedings regarding crop protection products was processed in the reporting year. This negative effect on earnings was almost offset by income from the sale of investments. At the same time, the result includes total one-off charges of almost €15 million for various projects such as the preparation of a capital increase at BayWa r.e., restructuring measures, portfolio adjustments and the final legal costs in connection with the settlement of the antitrust proceedings. Net income for the period increased by 11.3% to €61.1 million due to improved operating earnings.

The Board of Management and Supervisory Board will recommend to the Annual General Meeting of Shareholders a 5-cent increase in the dividend of 95 cents per share.

Background to the Group

Group structure and business activities

The BayWa Group

2019	Revenues (in € million)	Employees (annual average)
Energy	4,474.3	2,812
Agriculture	10,857.5	10,580
Building Materials	1,702.8	4,371
Innovation & Digitalisation	10.6	198
Other Activities	13.7	870
Total	**17,059.0**	**18,831**

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 a provider of integrated solutions and a project developer in the core segments of Energy, Agriculture and Building Materials. The BayWa Group's business activities encompasses planning, wholesale, retail and logistics, as well as extensive supporting services and consultancy. 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 has registered places of business in 44 countries, either through itself or through Group companies.

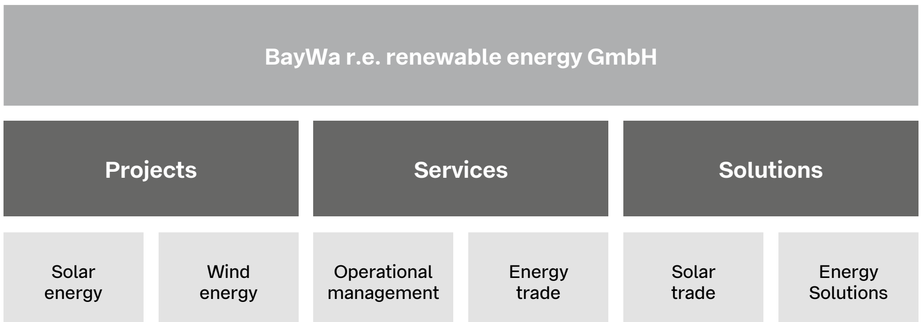
BayWa AG conducts its business in the three operating segments and the Innovation & Digitalisation segment both directly and through its subsidiaries, which are included in the group of consolidated companies. Besides the parent company, BayWa AG, the BayWa Group comprises 342 fully consolidated Group companies. Furthermore, 26 companies were included at equity in the financial statements of BayWa.

Energy Segment

In the financial year 2019, the Energy Segment accounted for just under 26% 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 unit.

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 three areas: Projects, Services and Solutions.



Projects encompasses international project planning, management and the construction of wind farms and solar parks as well as the sale of finished plants. The field of bioenergy was spun off with the sale of BMH Biomethan GmbH. Services comprises planning and technical services, the provision of consumables, technical and commercial operational management, plant maintenance and energy trade. BayWa r.e.'s branches in Europe and South-East Asia enable it to provide a 24-hour service for its international customers. It currently oversees facilities with a total installed output of approximately 8.3 gigawatts (GW) worldwide. In energy trading, BayWa r.e. markets electricity, gas and heat generated from renewable sources. Total direct marketing volume was 3.5 GW in 2019. Solutions involves selling photovoltaic systems and components and tailored energy solutions to supply energy to commercial and industrial customers. 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 Europe, in North America, in the Asia-Pacific region, and in Africa, amounting to a total of 26 countries.

Conventional Energy

In its Conventional Energy business unit, BayWa predominantly sells heating oil, fuels, lubricants and wood pellets mainly 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 125 Group filling stations and partner stations in Germany. In addition, BayWa supplies fuels, as well as AdBlue, to resellers and wholesalers. In Austria, more filling stations are managed by subsidiaries. The Group company GENOL Gesellschaft m.b.H. (formerly: 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. 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 17,000 charging stations in Germany and approximately 55,000 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. The Interlubes digital platform is used for selling lubricants and agricultural inputs from all major manufacturers and brands online to B2B users in the areas of commerce, industry, municipal services, transportation, agriculture and forestry.

Effective as at 1 January 2020, the Conventional Energy business unit's activities have been restructured into the five fields of fuels, heating oil and diesel, wooden pellets, contracting and Mobility Solutions GmbH. The lubricant business comprises trading with the TECTROL brand and extensive applications and service packages for key customers, such as operators of biogas engines, as well as commercial customers. The field of diesel and heating oil supplies farmers and commercial customers – including construction sites and farms – with diesel and heating oil. The field of wooden pellets includes selling to private consumers and commercial customers in addition to production at the subsidiary WUN Pellets GmbH. In contracting, the focus is on energy solutions in the fields of biomass, CHP units and gas for the hotel sector, municipal services and the residential construction segment in southern Germany. Mobility Solutions GmbH is divided into three fields: Light Vehicle, Heavy Vehicle and Digital Mobility. The Light Vehicle field comprises electromobility and drives forward the planning and expansion of the charging infrastructure. The Heavy Vehicle field establishes a network of filling stations for liquefied natural gas (LNG) as a lower greenhouse gas emissions alternative to conventional fuels. Digital Mobility offers the whole system with filling station and charging card, related app and billing for customers and – as a white label system – also for third parties.

Agriculture Segment

The Agriculture Segment accounted for approximately 64% of consolidated revenues in 2019. The segment is divided into four business units: BayWa Agri Supply & Trade (BAST), Global Produce, Agri Trade & Service and Agricultural Equipment, covering the core elements of the value chain from field to marketing of agricultural products.

BAST

The BayWa Agri Supply & Trade (BAST) business acts as a supply chain manager from purchasing and logistics to distribution. It pools the activities not tied to a specific location, particularly international trading with grain, oilseed meal and specialities. The main customer groups are grain and oil mills, producers of starch and feedstuffs, malt houses and breweries, as well as biofuel manufacturers. When it comes to the procurement and marketing of agricultural products, BayWa possesses a global trading network as well as inland and deep water ports.

Global Produce

In Germany, BayWa is one of the leading single sellers of dessert pome fruit to wholesalers and retailers in the food industry and a supplier of organic pome fruit. BayWa also records, sorts, stores, packages and provides services for fruit customers in Germany and abroad as a marketer under contract at its five sites in the Lake Constance and Neckar regions. BayWa is active in the international trading of fresh products through its subsidiary in New Zealand T&G Global Limited (T&G Global). T&G Global maintains international trade relationships in the Americas, Asia, Australia and Europe. Through the marketing of dessert pome fruit between the northern and southern hemispheres, BayWa is in a position to provide trade partners with fresh agricultural products all year round, expand its product range and seize sales opportunities for German fruit on the international growth markets.

The existing sales structures of T&G Global and its affiliates offer the potential to open up additional sales markets, particularly in Asia. BayWa has expanded its portfolio to include exotic speciality fruits, particularly in the fast-growing “ready-to-eat” market, 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 and mango – as well as with the European food retail industry. The BayWa subsidiary Al Dahra BayWa Agriculture LLC also produces vegetable fruits in climate-controlled greenhouses in the United Arab Emirates for the local market. Through acquisitions and investments, the Global Produce business unit is oriented internationally and offers a broad range of pome fruit through to exotic fruits. Due to the increasing concentration in food wholesale and retail, setting the company apart from the competition through an attractive diversified product portfolio featuring specialities plays an increasingly important role.

Agri Trade & Service

The Agriculture business unit covers the stages of the value chain of recording, sales and service in particular for farms. It supplies farmers with agricultural inputs such as seed, fertilizers, crop protection and feedstuffs throughout the entire agricultural year and takes responsibility for recording and marketing the harvest regionally. For its recording activities, BayWa maintains a network of 177 high-performance locations in its core regions, with significant transport, processing and storage capacities. This provides seamless goods delivery, quality inspection, handling, correct storage and care of agricultural products. BayWa sells products to local, regional, national and international companies in the foodstuff, wholesale and retail industries through its in-house trade departments. Alongside its services for conventional agriculture, BayWa is gradually expanding its range of organic products and the marketing structures for organically produced products in the regions. The most recent example is the Heilbronn agricultural site, which has also been authorised to record products from organic farming since summer 2019. In addition, 130 BayWa sites are certified to trade agricultural inputs for ecological agriculture. BayWa is also a member of Biokreis, the fourth-largest organic farming association in Germany, and a licensed user of the Bayerische Bio-Siegel (Bavarian organic seal).

Due to historically evolved structures in Germany, the agricultural business is concentrated primarily in the regions of Bavaria, Baden-Württemberg, Mecklenburg-West Pomerania, Thuringia, Saxony, Saxony-Anhalt and southern Brandenburg. The focal point when it comes to developing BayWa's agribusiness in Germany is on site modernisation, process optimisation in the logistics chain, the expansion of e-commerce activities and employee development. By expanding its digital services, such as the BayWa Portal for agriculture, BayWa is also gaining new customers beyond its traditional regions. Through its subsidiary RWA Raiffeisen Ware Austria Aktiengesellschaft (RWA), which maintains close business relations with 450 cooperative warehouses, BayWa is represented throughout Austria. Numerous privately owned medium-sized trading enterprises, mainly operating locally, make up the competitive environment for agricultural products. By contrast, there are also a number of wholesalers operating nationwide that offer agricultural inputs. All told, BayWa is the agricultural company that generates the highest sales in Germany.

Agricultural Equipment

The Agricultural Equipment business unit offers a full line of machinery, equipment and systems for all areas of agriculture. Important customer groups are also those in forestry, municipal services and commercial customers. 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, a workshop network with 281 locations and 711 mobile service vehicles provide maintenance and repair services for machinery and equipment.

The Agricultural Equipment business unit comprises product management for new machinery, especially AGCO-brand machinery (Fendt, Massey Ferguson, Challenger and Valtra), as well as international activities. CLAAS sales and service through the joint affiliated companies are equally positioned form an organisational perspective. The Agricultural Equipment special business division is divided into the product categories municipal services, forestry, indoor equipment and irrigation technologies. For products made by AGCO and CLAAS, BayWa operates a specialised network of in-house workshops in southern and eastern Germany and in the Netherlands that are tailored to manufacturer brands. In Germany, BayWa has also significantly expanded its sales structures for Massey Ferguson-branded products in recent years to increase their market share. The sale of products is complemented by trade in spare parts and the provision of mobile service vehicles for maintenance and repair services. BayWa also sells used machinery via its sites and 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. BayWa is currently represented with subsidiaries or joint ventures in the Netherlands, Canada, Zambia and South Africa.

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 128 sites, and also ranks among the leading suppliers in Austria, with 31 sites. The number of franchise locations currently totals 998.

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, which business customers can use to place orders 24/7. The building services division of BayWa has been a wholly-owned Group company since the start of the year. To this end, the 12 building services locations and their over 300 employees in total, which were previously assigned to BayWa's building materials trade, have been spun off into an independent company. This will enable BayWa Haustechnik GmbH to position itself as a national provider of installation services for heating, plumbing and ventilation and to better adapt to the challenges facing the industry, such as the shortage of skilled workers, the energy transition and digitalisation. In addition, BayWa has been working with developers on the implementation of projects in Germany since 2018. To this end, it enters into joint ventures with construction companies or property developers as a partner and primarily acts as a provider of concepts. For planning and calculation, the online services include the special room designer software and the "Mr+Mrs Homes" property configurator. In addition, BayWa AG provides bathroom modules made from wood through its stake in the start-up Tjiko GmbH. These bathrooms are individually designed using a digitally controlled process and configurator and are manufactured in series with complete interior fittings. The Tjiko bathroom modules are chiefly aimed at property developers and general contractors of large residential construction projects who want to realise an economical and highly individualised bathroom design in the properties.

Further areas of focus in the Building Materials Segment include healthy construction and energy efficiency. BayWa offers a wide range of tested low-emission building materials plus solutions for energy-efficient construction or renovation. Thanks to its private brand lines for construction components and landscaping; for structural and chemical products, as well as insulation materials; for healthy-living building materials and cleaning agents; and 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.

Innovation & Digitalisation Segment

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. With its software product NEXT Farming OFFICE, the Group company FarmFacts GmbH offers farmers a future-oriented and interoperable farm management system. It enables farmers to seize the opportunities of smart farming, irrespective of the type of farm or farm size. With over 18,700 users, who farm more than 25% of the agricultural space, BayWa takes up a leading market position in Germany. In addition, FarmFacts teamed up with six leading manufacturers of agricultural equipment at Agritechnica 2019 to launch the web-based, open "NEXT Machine Management by aag" data management software on the market as a new module for NEXT Farming LIVE that processes all data generated by machinery and equipment regardless of the manufacturer. 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. The distribution and marketing of the resulting data is carried out by the Group subsidiary VISTA GmbH.

To accelerate the development of innovative ideas for agriculture, BayWa and RWA Raiffeisen Ware Austria created the Agro Innovation Lab (AIL), which is to be continued by RWA from January 2020 onwards. Start-ups with innovative business ideas for agriculture have the opportunity to apply for the acceleration programme organised by AIL. In 2019, the AIL set up the "Robotics Challenge" competition and worked with farmers to test six such prototypes in the field. The results of these tests are included in the Robotics Report. The report categorises 100 robotics companies worldwide in terms of their current level of maturity and the functionality and application areas of their agricultural robots, presents the legal and regulatory framework in the EU with a special focus on Germany and Austria and identifies the key challenges for developing companies and farmers. According to estimates, the robotics market is set to grow by 40% between now and 2025 and will have a lasting impact on the agricultural industry. With the requirements for resource-friendly production techniques on the rise and the availability of labour growing ever more critical, mechanical solutions are increasingly gaining importance.

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 2019, the Board of Management consisted of five members: Prof. Klaus Josef Lutz (Chairman, responsible for the BayWa Agri Supply & Trade and Global Produce business units), Andreas Helber (responsible for Finance), Marcus Pöllinger (responsible for the Building Materials Segment and the Agri Trade & Service, Agricultural Equipment and Digital Farming business units) Matthias Taft (responsible for the Energy Segment) and Reinhard Wolf (General Director and Chairman of the Board of Directors of RWA Raiffeisen Ware Austria Aktiengesellschaft).

Effective 1 January 2019, Marcus Pöllinger took over the responsibility for the Agricultural Equipment business unit and the Digital Farming division, in addition to the Building Materials Segment and the Agri Trade & Service business unit.

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 publicly available at www.baywa.com/en/group/corporate-governance/corporate-governance.html.

The main task of the Corporate Compliance organisational unit 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 antitrust law, corruption prevention, data protection, customer/export control and combating money laundering. Comprehensive frameworks have been developed and are to be treated as Group-wide rules on these issues.

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 relating to compliance. 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 multipliers.

Corporate Goals and Strategy

BayWa remains true to its roots while continuing to evolve. The fundamental changes in the corporate environment and 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 for the long term when it comes to integrated and sustainable 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 claim “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, society and the environment.

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 climate neutral. The carbon footprint of the BayWa r.e. Group was analysed, and measures to reduce greenhouse gas 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 climate neutrally since June 2018, and there are plans to ensure that international sites follow suit in future. In July 2019, BayWa joined the international RE100 initiative. In doing so, it has committed itself to covering 100% of its electricity needs from renewable energies throughout the Group, as a self-imposed corporate goal already by the end of 2020.

BayWa is taking two market-driven approaches with regard to its further strategic development: ensuring business continuity by enhancing competitive strength, as well as growth in new business areas by developing innovative, customer-focused business models. The Group’s growth ambitions focus on the Renewable Energies, BAST and Global Produce business units.

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 increasing the profitability of the BayWa Group’s business operations on a sustained basis.

The objective in the Energy Segment is to further advance the global expansion of renewable energies. Another focus is on scale, continued internationalisation and expanding the service business, as well as on the provision of integrated energy solutions. 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 electromobility. 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. In order to be able to exploit the existing growth potential in the markets for renewable energies more quickly, BayWa r.e. intends to take on a partner within the framework of a capital increase. This transaction will reduce BayWa’s share in BayWa r.e. by almost half. The additional capital available will significantly accelerate revenue and earnings growth in the medium term.

The Conventional Energy business unit continuously promotes the expansion of mobility solutions in the fields of charging infrastructure for e-mobility, LNG filling stations and digital mobility. Furthermore, BayWa also offers e-mobility solutions created on the basis of comprehensive fleet analysis and targeted at fleet operators. Due to the increasing orientation of the BayWa Group towards sustainability aspects, BayWa disposed of part of its fossil fuel-based business in 2019 by selling the filling station business of its subsidiary TESSOL.

In the Agriculture Segment, 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 agricultural products range through the addition of specialities such as starch products, 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. In the BAST business unit, the new 2024 "Road to Ingredients" strategy also provides for the expansion of the product range to include prepared products and the expansion of the marketing offer for organically and regionally produced agricultural goods. In addition, BayWa is boosting its position as supply chain manager and diversifying its portfolio through international partnerships.

In the recording and agricultural inputs business, the location structure is undergoing consolidation and optimisation, and digital services are being added to the business model. The number of German agricultural locations is to be significantly reduced in the medium term. Structural optimisation and other measures are aimed at significantly reducing the capital tied up in the Agri Trade & Service business unit during this period. Sales are being geared towards integrated solutions, since the rise in the digitalisation of agriculture is resulting in a change in requirements. The use of digitally controlled machinery and equipment for the application of agricultural inputs often requires specially adapted varieties of seed, fertilizer or crop protection products. BayWa will in future therefore combine the services of the Agricultural Equipment business unit with those of the Agri Trade & Service business unit in order to offer farmers a one-stop service without additional channels. The range of e-commerce activities will also be constantly expanded. In addition, BayWa is driving forward digital processing in logistics in its agricultural trading business. The digitalisation of the value chain supports the successful management of the increasing complexity and dynamics of logistics processes in the "physical Internet", i.e. in the storage, transport and delivery of goods. This increases customer benefit and reduces costs. Targeted diversification of the product portfolio and the expansion of the private brand business are also 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 agricultural products throughout the year by systematically expanding its procurement base. The focus is on expanding the range of fruit and vegetable specialities. In addition, the New Zealand Group company T&G Global is being used as a platform for expanding exports to countries in Asia and tapping into new sales markets. International marketing of the full range of agricultural products in the Global Produce business unit is to use an overarching strategy to enhance synergies and acquire new customers. In Germany, activities are focused on expanding the range of organic products and apple brands such as Jazz and Envy.

In the Agricultural Equipment business unit, BayWa is further strengthening the brand-specific sales organisations. In order to increase efficiency, it has split into agricultural equipment on the one hand and special technology for municipalities, industry and forestry operations on the other. In addition, the focus is on the development of cross-vendor digital interfaces and the development of a new water management business division.

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, BayWa now offers a comprehensive multi-channel service covering its entire sales region. In addition, BayWa aims to expand cooperation with property developers and building contractors in Germany through joint ventures.

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 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.

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 customer platform and the digitalisation of customer-centric processes.

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 2019 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.

Sustainability at BayWa

The consolidated non-financial report is part of the sustainability report 2019, which is published on the website www.baywa.com/en/responsibility/at-a-glance.html.

Employees

The number of employees at BayWa rose once again in the financial year 2019. By the end of the year, the BayWa Group employed 19,193 employees (2018: 17,864). In terms of an annual average, the number of employees rose year on year by 827 to 18,831, equating to an increase of 4.6%. This development primarily results from the Energy Segment, especially from a series of strategic acquisitions in the Renewable Energies business unit, as well as from the Building Materials Segment. A rise in the number of employees was also recorded in BAST and Global Produce, and in the Innovation & Digitalisation Segment. The number of employees fell only slightly or stayed the same in the Agri Trade & Service and Agricultural Equipment business units.

In 2019, 400 new trainees started their career at BayWa. With a total of 1,410 trainees, BayWa is one of the largest companies in Germany to offer trainee programmes, and, with a trainee ratio of approximately 7%, BayWa is providing training to young people that goes beyond the needs of the company.

Development of the average number of employees in the BayWa Group

					Change	
	2016	2017	2018	**2019**	2019/18	in %
Energy	1,911	2,079	2,407	2,812	405	16.8
Agriculture	10,212	10,613	10,428	10,580	152	1.5
Building Materials	4,081	4,113	4,211	4,371	160	3.8
Innovation & Digitalisation	126	158	183	198	15	8.2
Other Activities	630	587	775	870	95	12.3
BayWa Group	**16,960**	**17,550**	**18,004**	**18,831**	**827**	**4.6**

Research and Development in the Innovation & Digitalisation Segment

	2019	2018
Non-capitalised research and development expenses (in €)	400,000	400,000
Employees	73	72
Own work capitalised (in €)	2,638,953	2,006,000

The BayWa Group’s research and development activities relate to the formation and further development of the 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 fertilization, 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 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. “NEXT Machine Management by aag” was launched on the market in the reporting year. The application was developed by the manufacturers of agricultural equipment AGCO, Krone, Kuhn, Lemken, Pöttinger and Rauch. The cloud-based application is integrated into NEXT Farming LIVE as a module. It is a data management software for processing and assessing 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 via a growing number of manufacturers. There are plans to launch “NEXT Machine Management by aag” on international markets in 2020. VISTA is currently implementing scientific methods into operating services and applications and developing digital solutions on the basis of satellite data. These include hydrology, agriculture and environmental applications such as accurate local forecasts of nutrient and water requirements or harvest forecasts for research and commercial applications. Optical and radar satellite images in various resolutions, as well as additional geodata, are combined for this purpose.

As at 31 December 2019, 73 employees worked in research and development. The BayWa Group’s research and development expenses totalled €400,000 in the financial year 2019. Own work capitalised with regard to new digital farming products amounted to some €2.6 million.

Financial Report

Operative Business Development

Energy Segment

Market and industry development 2019/20

Development of renewable energies
In 2019, global investments in renewable energies stood at USD363.3 billion, a slight increase year on year (2018: USD362.5 billion). Investments in solar energy (photovoltaics) fell year on year by 4% to USD136.4 billion. By contrast, global investments in wind energy increased by 7.5% to USD142.7 billion, USD112.8 billion of which was attributable to onshore wind projects (BNEF, Clean Energy Investment Trends 2019). According to Bloomberg New Energy Finance (BNEF), 2019 and 2020 are set to be record years for the development of renewable energies. In addition, wind and solar are now the most cost-efficient form of power generation for two-thirds of the world (BNEF Signposts, 3Q 2019, pp. 4, 5).

In the field of onshore wind energy, approximately 55.3 gigawatts (GW) were added worldwide in 2019, with China accounting for a significant share as in previous years (45%), followed by North America (20%) and Europe (17%) (BNEF, Global Wind Market Outlook, 4Q 2019, pp. 2, 3). Germany accounted for only approximately 0.7 GW of the 9.4 GW in new onshore wind energy installations in Europe. This is due to a lack of approved projects as a result of growing local opposition as well as long-lasting proceedings, which present the German wind energy industry with major challenges. The most important European countries for the construction of new onshore wind turbines in 2019 were the Netherlands and France, with approximately 1.2 GW each, followed by Spain, with approximately 1 GW. In North America, new installations were primarily driven by the US (10.3 GW), followed by Mexico, with 1.5 GW. In the Asia-Pacific region, China (24.7 GW), India (2.3 GW), Australia (1.5 GW) and other markets recorded an increase in the expansion of onshore wind energy. For 2020, the BNEF forecasts a global expansion of 69 GW for onshore wind energy capacity, which would mean a further increase compared to the 55.3 GW generated in 2019 (BNEF, Global Wind Market Outlook, 4Q 2019, pp. 1, 4, 5, 10, 17, 19).

Global photovoltaic installation capacities increased by 121 GW in 2019, with the Asia-Pacific region recording the largest increase of 52% as in the previous year, followed by Europe (17%), North America (9%), Africa and the Middle East (5%) and Central and South America (6%) (BNEF, Global PV Market Outlook, 4Q 2019, pp. 1, 2). Of the 63 GW added in the Asia-Pacific region, China accounted for 28 GW, India for 10.8 GW and other countries in the region for 24.5 GW, in particular Japan (7.8 GW), Vietnam (5.1 GW), Australia (4.7 GW) and South Korea (2.5 GW). In Europe, Spain and Germany were the main driving forces behind the resurgence in the expansion of photovoltaic systems to a total of 21 GW, with 4.5 GW and 4 GW respectively, followed by the Netherlands and Ukraine, with 3 GW each, and France, with 1.4 GW. While the US continued to dominate North America (11.1 GW), Mexico grew strongly, with an increase of 3.3 GW. Africa and the Middle East also became increasingly important, with a total growth of 5.5 GW in 2019. The United Arab Emirates made the largest contribution in this region, with 1.7 GW, followed by Pakistan (1.3 GW) and Israel and Egypt, with 0.9 GW each. In Central and South America, Brazil continued to play a leading role with new installations of 2.7 GW, accounting for around 40% of new installations in the entire region. According to global forecasts, the expansion of photovoltaic systems is expected to continue to grow very strongly in 2020, with between 121 GW and 154 GW expected worldwide (BNEF, Global PV Market Outlook, 4Q 2019, Appendix a, b, c).

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. In the first four months of 2019, crude oil prices rose by up to 40% from their low for the year of just under USD52 per barrel to a high of just under USD73 per barrel at the end of April. This movement was mainly triggered by production cutbacks by the Organization of the Petroleum Exporting Countries (OPEC), a supply shortage due to the US sanctions against Iran and economic problems in Venezuela. As the year progressed, the trade conflict between the US and China, the resulting slowdown in global economic growth and continued high shale oil production in the US led to significant price declines. Even the agreement between OPEC and some non-OPEC member states, including Russia, to extend existing

production quotas by nine months until 31 March 2020 and the drone attack on an oil refinery in Saudi Arabia did not lead to a sustainable price turnaround. Towards the end of 2019, the oil price remained in the range between around USD57 and USD67 per barrel (TECSON, Rohölpreise, 2019). Overall, the oil price in 2019 averaged at USD64 per barrel, above the forecast average of USD61 per barrel. Forecasts made by the US Energy Information Administration (EIA) about the development of crude oil prices in 2020 predict that the oil price will hover around USD61 per barrel in 2020. In general, prices will be very volatile in the short term subject to the development of inventories. Based on the current forecasts, the relationship between production and global consumption is set to be balanced for 2020 as a whole (EIA, Short-Term Energy Outlook, December 2019, pp. 1, 16). In the heating sector, demand for fossil fuels is generally subject on the one hand to fluctuations in consumption determined by weather conditions. On the other hand, purchasing behaviour is influenced by price trends. The price of heating oil largely followed the development of the crude oil price and exceeded the previous year's level until mid-May 2019. As the year progressed, the heating oil prices gave way again and remained below the previous year's values until just before the end of the year (TECSON, Heizölpreise, 2019). Sales of heating oil in Germany increased by 14.1% year on year in 2019 (BAFA, Amtliche Mineralöldaten, 2019). The main reason for this may have been that consumers had used the lower prices in the second half of the year for stockpiling.

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, the upcoming CO_2 price from 2021 onwards could have a positive effect on the demand for heating oil in 2020, as end consumers are expected to fill up their tanks in advance. Total fuel sales in Germany rose slightly by 0.9% in 2019. Sales of Otto fuels increased by 1.0%, and sales of diesel increased by 0.8%. Total lubricant sales were 1.6% higher than in the previous year in 2019. In light of the low level of overall economic growth in Germany, it can be assumed that sales will remain largely stable in 2020.

Business performance

The Renewable Energies business unit once again saw highly positive development in 2019 and significantly exceeded the project developments and sales planned for the year as a whole. Plant sales with a total output of 911.6 megawatts (MW) more than doubled in the reporting year (2018: 453.0 MW), setting a new record. In the field of solar energy, twelve free-standing solar parks with a total output of 620.0 MW and a floating project with an output of 8.4 MW were sold. Of this total, 269.0 MW was attributed to Mexico, 221.0 MW to the US and 138.4 MW to Europe including Germany. After BayWa r.e. built Europe's first subsidy-free solar park in sunny Spain in 2018, the first subsidy-free solar park in Germany, Barth V, was realised in 2019 by BayWa r.e. with a capacity of 8.8 MW using free-standing photovoltaics. This shows that subsidy-free solar power also works and is marketable in Germany. A total of ten wind farms with a combined output of 282.8 MW were sold in the national markets of Sweden (94.6 MW), Italy (94.2 MW), Germany (25.6 MW), the United Kingdom (18.8 MW), France (18.0 MW), Austria (17.3 MW) and Australia (14.4 MW). BayWa r.e. will also assume responsibility for the commercial and technical management and maintenance of most of these plants going forward.
BayWa r.e.'s service business recorded a rise in total plant capacity under its management around the world of just under 46% to more than 8.3 GW in 2019 (2018: 5.7 GW). Contributory factors here included a contract with Siemens Gamesa Germany for the maintenance of 230 wind turbines with a total capacity of approximately 600 MW as well as mandates for the technical and commercial management of nine German and six French wind farms belonging to the Talanx Group with a total output of over 300 MW. In trading with photovoltaic (PV) modules, the total output of PV modules sold rose by just over 70% to 927.0 megawatt peak power output (MWp). Sales of inverters rose accordingly. The growth is primarily due to marked cost decreases in production and the resulting improvement in competitiveness of conventional forms of energy production. The acquisition of the Canadian solar distributor National Solar Distributors – a provider of residential and commercial grid-connected solar solutions as well as industrial and smaller off-grid applications – with effect from August 2019 also contributed to growth. All told, revenues increased by 29.1% to €1,975.3 million in 2019. Following €72.5 million in the previous year, earnings before interest and tax (EBIT) reached a new high of €101.0 million in the reporting year. The improvement in both revenues and the operating result is primarily attributable to the sharp rise in project sales and growth in the solar trading and exceeded the positive expectations.

As expected, the Conventional Energy business unit was shaped by a strong rise in demand for heat energy carriers in the financial year 2019. In terms of fuel oil, the sales volume increased by 7.1% and was clearly above the previous year's level. This was because customers wanted to stockpile at the fuel oil prices that were more favourable in comparison to the previous-year period, particularly in the second half of the year. The climate package passed by legislators in late September may have already led to panic buying, as it calls for an increase in the price of fuels. The marketing volume of wood pellets has also risen, achieving an increase of 24.3%. In this case too, the relatively low prices may have encouraged consumers to stock up in advance. The collaboration with WUN Pellets GmbH also boosted the marketing volume of wood pellets, making BayWa the largest trading company of wood pellets in southern Germany. In the heat contracting business, BayWa Energie Dienstleistungs GmbH (EDL) was able to start running its new wood chip facility for local heating and distant heating supply in Neustadt an der Waldnaab in early 2019. The facility supplies twelve subscribers in the city and surrounding area. Group fuel sales decreased by 9.9% year on year, performing weaker than expected. However, diesel sales recorded a moderate rise 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 lubricants were also lower than expected due to the weakening economy, falling by 3.7%. The Conventional Energy business unit's revenues exceeded expectations and rose by 2.5% to €2,499.0 million in the reporting year mainly due to the rise in sales volumes in the heating business. EBIT improved by 12.3% to €26.4 million in 2019 primarily due to excellent margins in the heating oil and fuel business, thereby defying expectations and reaching a new record high.

At €4,474.3 million, the Energy Segment's total revenues for the financial year 2019 were up year on year by €505.8 million. Earnings before interest and tax (EBIT) increased by 32.7% to €127.4 million, thereby setting a new high.

Agriculture Segment

Market and industry development 2019/20

Development of grain and oilseed

Global balance of grain (excluding rice) in millions of tonnes	Grain year			Change	
	2017/18	2018/19	2019/20	2019/20 compared to 2018/19	
Production					
World	2,124.2	2,127.1	2,166.7	39.6	1.9%
thereof: wheat	762.9	731.5	764.0	32.5	4.4%
thereof: coarse grain	1,361.3	1,395.6	1,402.7	7.1	0.5%
Consumption					
World	2,117.8	2,156.0	2,177.7	21.7	1.0%
thereof: wheat	741.7	737.0	754.2	17.2	2.3%
thereof: coarse grain	1,376.1	1,419.0	1,423.5	4.5	0.3%
Inventory changes					
World	6.4	- 28.9	- 11.0		
thereof: wheat	21.2	- 5.5	9.8		
thereof: coarse grain	- 14.8	- 23.4	- 20.8		

European balance of grain (excluding rice) in millions of tonnes	Grain year			Change	
	2017/18	2018/19	2019/20	2019/20 compared to 2018/19	
Production					
EU	303.2	285.0	313.0	28.0	9.8%
thereof: Germany	45.6	38.0	44.7	6.7	17.6%
Consumption					
EU	292.8	291.8	295.5	3.7	1.3%
thereof: Germany	42.7	41.7	43.0	1.3	3.1%
Inventory changes					
EU	1.2	- 6.8	17.5		
thereof: Germany	2.9	- 3.7	1.7		

Sources: USDA, Grain: World Markets and Trade, February 2020, pp. 21, 27; BLE, Bericht zur Markt- und Versorgungslage Getreide 2019; BMEL, Ernte 2019, Appendix 1 c; DRV, Jahresbericht Agrarwirtschaft 2019, p. 11

Global grain harvest yields were on a par with the levels recorded in the previous year in grain year 2018/19. However, global consumption continued to increase by just under 1%, exceeding production and resulting in a stock reduction of some 28.9 million tonnes. Nevertheless, the coverage of stocks is about four and a half months (DBV, Situationsbericht 2019/20, p. 164). In the European Union, the 2019 grain harvest was approximately 9.8% higher than the drought-related weak harvest of the previous year (USDA, Grain: World Markets and Trade, February 2020, pp. 21. 27). The German grain harvest was almost 18% higher than in the previous year, but is still a good 3% below the average for the years 2013 to 2018 (BMEL, Ernte 2019, Appendix 1 c). In view of the globally relaxed supply situation, grain price – measured according to the grain price index of the Food and Agriculture Organization of the United Nations (FAO) – amounted to 164.3 points in December 2019, which was approximately 2.1% below the value of the previous year of 167.8 points (www.fao.org/worldfoodsituation/foodpricesindex/en). On the MATIF commodity futures exchange, wheat prices for 2019 fell from €204 per tonne at the beginning of the year to €153 per tonne in September as a result of the significantly better harvest yields compared to the previous year. Although prices recovered to around €189 per tonne by the end of the year, they were still well below the highs of 2011 and 2013 (DBV, Situationsbericht 2019/20, p. 168). According to the latest forecasts from the U.S. Department of Agriculture (USDA), global grain production in 2019/20 – excluding rice – is likely to be up slightly on the previous year's volume by just under 1.9%. Worldwide consumption is therefore expected to be almost completely covered by the current harvest season. Against this background, grain prices are expected to remain relatively stable in 2020 (DBV, Situationsbericht 2019/20, p. 167).

Soya meal, which accounts for around 70% of all oilseed meal, was harvested in 2018/19 at just under 234 million tonnes worldwide, up around 0.6% on the previous year (USDA, Oilseeds: World Markets and Trade, 2020, p. 9). The prices for soya meal on the Chicago Board of Trade (CBoT) commodity futures exchange fluctuated within a narrow range between just under €290 and €310 per tonne for much of the year in 2019. In May, the expectation of a large harvest in Argentina and low imports into China at the same time led to a price collapse to around €279 per tonne. Subsequently, prices rose in June to their annual high of just under €325 per tonne due to an expected lower cultivation volume in the US. Overall, however, the fluctuation range of the prices was considerably smaller than in the previous year. At the end of the year, the price of €295 per tonne was back at the level of the end of the previous year. Global production is expected to rise by around 2.0% to 238 million tonnes in marketing year 2019/20 (USDA, Oilseeds: World Markets and Trade, February 2020, p. 9). Despite an anticipated further increase in consumption, demand is expected to be met by global supply. Against this background, soya meal prices are expected to remain stable in 2020.

Development of fruit cultivation

Following the above-average fruit harvest in 2018, Germany's harvest in 2019 was again smaller at 1.28 million tonnes. However, the harvest volume was only slightly below the average of previous years. Plums, German prunes (Zwetschge), cherries and pears suffered major losses due to the hot summer and drought (DRV, Jahresbericht Agrarwirtschaft 2019, p. 30; DBV, Situationsbericht 2019/20, p. 179). In the case of apples, the harvest volume in Germany was, as expected, lower at just under 1.0 million tonnes in 2019 after the record volume of almost 1.2 million tonnes in the previous year (Destatis, Land- und Forstwirtschaft, Baumobst, 2020, p. 7). At around 10.6 million tonnes, the 2019 harvest in the EU was also a good 20% below the previous record from 2018 (WAPA, EU 28 apple production by country, 2019). Apple prices declined significantly over the first half of 2019 due to the abundant supply from the previous year's harvest. In July 2019, prices in the EU and in Germany were down by some 8% and 14% respectively on the five-year average. As 2019 produce began to be harvested, the scarcity of supply caused prices to rise above the five-year average (EU apple dashboard, 2020). For the current marketing year, a positive apple price development is expected throughout Europe, mainly due to the below-average to average yields across all countries and the massive crop failure in Poland in 2019 (minus 44%) caused by late frost, with constant demand and significantly reduced stock quantities (www.ama.at/Marktinformationen/Obst-und-Gemuse/Aktuelle-Informationen/2019/Marktuebersicht-international-Apfel).

In the southern hemisphere, the harvest volume of apples declined by around 2.5% year on year to just approximately 5.0 million tonnes in 2019, a level which was below expectations. The harvest volume in New Zealand was 3.8% lower than in the previous year. In addition, the apple harvest was mainly characterised by small fruit sizes and poorer quality due to late frosts during the bloom phase. This has affected exports of some apple varieties. 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 decrease by just under 1% to approximately 5.0 million tonnes in 2020. On the other hand, New Zealand's harvest is expected to be almost 6% higher (WAPA, Southern hemisphere apple production, 2020).

Development of agricultural inputs

Demand for agricultural inputs is highly dependent on the weather, among other factors. At the beginning of 2019, the mild weather and the resulting early start to the season led to increased demand for seed and fertilizer. Overall, however, market conditions for the agricultural inputs trade remained difficult, primarily due to the stricter regulations on the use of fertilizers and crop protection. In 2019, sales of all types of fertilizer fell by just under 6% year on year in Germany, as expected (Destatis, Düngemittelversorgung, 2019). On average, prices for fertilizer climbed by 4.8% year on year up to October 2019 (Destatis, Index of purchase prices of the means of agricultural production: Germany, October 2019). In 2020, sales of nitrogen and phosphate fertilizers are expected to fall further due to the requirements of the German Fertiliser Application Ordinance (DüV). As a result of the low demand, and assuming that weather and vegetation conditions are normal, prices of fertilizers are expected to remain constant or fall slightly in the first half of 2020 and to increase slightly in the second half. The demand for crop protection depends crucially on the weather, which determines the growing conditions for weeds, fungal diseases and animal pests, and is subject to considerable fluctuations. In 2019, sales of crop protection products remained a good 8% below the previous year's level due to dry weather and a low treatment rate – despite being forecast to rise slightly (IVA, Der Deutsche Pflanzenschutzmarkt 2019). Lower demand for crop protection is mainly due to the decline in rapeseed cultivation area as the sowing of winter rapeseed largely ceased due to the drought in autumn 2019. Moreover, rapeseed cultivation is particularly affected by restrictions on the use of crop protection products (DBV: German grain harvest just below average). Prices for crop protection products climbed slightly by 1.3% year on year up to October 2019 (Destatis, Index of purchase prices of the means of agricultural production: Germany, October 2019). Assuming largely unchanged cultivation structure, normal weather conditions and stable prices, the use of crop protection is expected to decrease again in 2020 due to the social and political factors. The seed market is mainly influenced by the development of land under cultivation for grain, corn and rapeseed. Total area under cultivation in Germany declined slightly by almost 1% in 2019 (Destatis, press release 13 May 2019 and 19 December 2019). Seed sales in the industry are therefore likely to have decreased slightly in 2019, despite forecasts of stable development. By contrast, average seed prices as of October 2019 were slightly up 0.8% on the same month last year. Assuming largely constant areas under cultivation and normal weather conditions, seed sales in 2020 should be at the level of the previous year. Production in the feedstuff industry in the marketing year 2018/19 fell slightly by 0.3% to 23.8 million tonnes of mixed feed nationwide. This decrease is mainly due to decreasing livestock numbers as a result of high production costs, low pork prices and increasing legal requirements (DRV, Jahresbericht Agrarwirtschaft 2019, p. 28). Feed prices, which had risen noticeably in the previous year due to the shortage of staple feed and the scarce supply of feedstuff grain and rapeseed, were 8.7% below the previous year's level as at October 2019 (Destatis, Index of purchase prices of the means of agricultural production: Germany, October 2019). The market is forecast to decline slightly in 2020 as a whole, as animal stocks are expected to fall further.

Development of agricultural equipment

The revenue and income situation of German farmers declined in the harvest year 2018/19 compared to the two very good previous years (BMEL, press release no. 212, 23 October 2019). Accordingly, the economic barometer for agriculture, which measures the mood in the agricultural sector, fell to its lowest level in three and a half years. The assessment of the future economic situation has also deteriorated continuously over the course of 2019 (DBV, Economic barometer for agriculture, 1st + 2nd quarter 2020, pp. 1, 2). According to estimates by the VDMA (German Mechanical Engineering Industry Association), the industry's sales of €8.4 billion in 2019 were slightly lower than in 2018 (2018: €8.6 billion). After two years of strong growth, the positive trend did not continue, contrary to expectations. At 33%, the general propensity of farmers to make investments in the first half of 2020 almost remains unchanged from the previous-year figure of 34%. However, the planned investment volume of €3.8 billion for the first six months of 2020 is considerably lower than in the same period of the previous year 2019 (€4.3 billion). While investments in machinery and equipment will probably reach the previous year's level again, a significant decline is expected for farm buildings (DBV, Economic barometer for agriculture, 1st + 2nd quarter 2020, p. 6).

Business performance

BAST business unit

The BAST business unit comprises international grain and oilseed meal trading activities. Trading volumes with grain and oilseed meal fell by 1.6 million tonnes to just under 25.0 million tonnes in the financial year 2019; a slight increase had been anticipated. The decline in handling volume was mainly due to the suspension of bread grain business with Iran. In addition, the trade dispute between the US and China led to a shift in trade flows to Europe, especially for soya meal. China restricted the import of soya beans from the US through import duties and instead imported them from Latin America. This created an oversupply of US soya beans in Europe, which led to increased competition. For this reason, more soya beans were processed into soya meal in Europe, which led to a decline in demand for soya meal from Latin America. Due to increased market uncertainty and in expectation of falling prices, customers have reduced their purchases on the futures market. In addition, demand for agricultural products in the UK was lower than in the previous year due to the mild winter and higher inventories. In addition, continuing uncertainty about the timing and terms of Brexit led to weaker demand. Overall, the oilseed meal and specialities handling volumes fell by around 1.8 million tonnes, primarily due to the lower demand for soya meal. On the other hand, trade in grain recorded a slight increase of 0.2 million tonnes due to the better harvest in Europe compared with the previous year. Overall, however, revenues in the BAST business unit fell by 7.8% to €4,875.8 million in the year under review due to lower volumes and prices; a slight increase had been expected. Earnings were negatively affected by the lower trading volume, as well as defaults on receivables in connection with the suspension of bread grain business with Iran caused by the sanctions. All in all, the BAST business unit generated operating earnings before interest and tax (EBIT) of €19.1 million in 2019, which was €12.0 million lower than in the previous year.

Global Produce business unit

The marketing volume in the Global Produce business unit grew further in the reporting year: Soft and stone fruit recorded growth of just under 64%, tropical fruit recorded growth of almost 47%, and vegetable fruits recorded growth of a good 21%. Marketing volumes for the leading category, dessert pome fruit, were 5% lower than in the previous year. All in all, fruit sales of the BayWa Group in 2019 rose by a good 8% year on year to 380,550 tonnes. Domestic business benefited until the new harvest from the marketing of the record crop of apples in the previous year, albeit at relatively low prices. It was then possible to market the new harvest in 2019, which was in short supply, with better fruit qualities at rising prices. In terms of international business, the harvest volume of apples harvested by the New Zealand subsidiary T&G Global in 2019 was just under 23% lower than in the previous year. This was due to the late frosts during the bloom phase, which on the whole also led to smaller fruit sizes or poorer quality compared to the previous year. As a result, the prices achieved were also below the level of the previous year. The high growth rates for tropical fruit are due to a strong trading performance of T&G Global in the Asia-Pacific market. The growth in vegetable fruits was exclusively attributable to increases in T&G Global. The Global Produce business unit recorded moderate revenue growth of 4.5% to €843.9 million in 2019, which did not meet expectations. In 2019, earnings before interest and tax (EBIT) increased by €9.7 million year on year to €36.9 million, thereby significantly exceeding expectations. This is mainly due to the fact that, in the course of the relocation of T&G Global's headquarters, a special income from the sale of the old administrative building was incurred, which more than compensated for the worse than expected operating performance.

Agri Trade & Service business unit

The Agri Trade & Service business unit comprises the agricultural inputs business, the recording of agricultural products and the grain, oilseed and oilseed meal marketing activities in Germany and those managed by the Group company RWA. In 2019, the volume of grain, oilseed and oilseed meals traded by the Agri Trade & Service business unit increased by 12.5% year on year to just under 7.3 million tonnes and was therefore within the forecast range. The increase is due to a higher volume of grain as a result of better harvests in Germany and Europe. Grain trading in the first quarter still benefited from the marketing of the scarce stocks from the previous year at good conditions. As the year progressed, positive harvest expectations and a good supply situation led to continuously falling prices. In this market environment, there was noticeable reluctance on the part of market participants, which led to a low selling propensity. As a result, only small stocks were available for trading in the second half of the year and significantly poorer margins were achieved. The volume of oilseed and oilseed meal handled decreased, mainly due to lower demand for feedstuffs resulting from good availability of staple feed. Business development of agricultural inputs was mixed in the course of the year. The season began early due to the mild weather. The early procurement of fertilizers was very good in particular. Several factors led to a noticeable decline in demand in the second half of the year. On the one hand, the use of fertilizers was severely restricted by the drought. On the other hand, prices were above the previous year's level and the expectation of fertilizer prices falling again was reflected in the massive scale of purchasing restraint. This was exacerbated by the time frame for fertilization, which was restricted by law. This meant that sales of fertilizers in Germany in 2019 were a good 3% below the previous year's figure. Owing to a positive trend abroad, the sales volume of the BayWa Group rose by a good 2% to 2.3 million tonnes and was thereby in line with expectations. Sales of crop protection products were below the previous year's level due to lower sowing of winter rapeseed in 2018 and therefore fell short of expectations. As the year progressed, the weather-related low incidence of disease led to lower demand for crop protection products. Last but not least, the use of crop protection products is limited by general restrictions imposed by legislators. Seed sales declined by a just under 6% in the reporting year, thereby falling short of the forecast of stable sales volumes. The main reason for this was that the sowing of winter rapeseed largely failed due to the drought in autumn 2019. Overall, revenues in the Agri Trade & Service business unit rose by 4.7% to €3,454.4 million in the reporting year, mainly due to volume factors. The positive development was therefore somewhat weaker than anticipated. Operating earnings before interest and tax (EBIT) improved in 2019 to €7.8 million and was therefore in line with expectations. In a persistently difficult market environment, this earnings increase is mainly due to restructuring measures carried out in previous years.

Agricultural Equipment business unit
BayWa's agricultural equipment business was unable to reach the record-breaking level of the previous year in 2019. Sale of new machinery declined by 4.1% to 4,617 tractors in 2019. This fall was due to the fact that many customers took receipt of new machinery they had ordered ahead of schedule owing to mild weather conditions toward the end of 2018. The 10.0% increase in used equipment business to 1,936 tractors was primarily due to the higher volume of trade-ins in the wake of the previous year's strong new machinery sales. Sales of machinery and accessories in fluid fertilizer and mechanical weed control business performed well. Service business developed positively overall due to high sales of tractors over the past few years, which also led to a rise in the number of employees. In terms of international business, Dutch Group company Agrimec recorded weaker development year on year predominantly as a result of the strong increase in regulation in the Dutch market. All in all, the Agricultural Equipment business unit exceeded expectations by generating total revenues of €1,683.4 million in 2019, which equates to a year-on-year increase of 3.8%. By contrast, operating earnings before interest and tax (EBIT) declined significantly in the reporting year following the strong increase of 83.9% in the previous year: by 10.4% from €36.6 million to €32.8 million. This decline was largely due to cost increases under collective agreements, the expansion of personnel capacity in service business and costs relating to the redesign of the e-commerce platforms. In addition, advertising costs were also up year on year due to the expansion of the product portfolio, the launch of new products and Agritechnica. The fall in earnings was not as significant as expected, however, due to the broad product portfolio and the range expansion implemented in the previous year. What's more, earnings generated in the reporting year were still above the average over the past five strong years.

Overall, the Agriculture Segment's grain, oilseed and oilseed meal handling volume was down just under 3% year on year to 32.2 million tonnes in the financial year 2019. This decline was particularly due to the development of oilseed and oilseed meal. The segment's revenues decreased slightly by 1.4% to €10,857.5 million. Earnings before interest and tax (EBIT) declined slightly by €3.5 million to €96.6 million, meaning that the forecast slight rise in revenue and significant improvement in earnings failed to materialise.

Building Materials Segment

Market and industry development 2019/20

With revenue growth of 8.5% to €137.2 billion, the growth generated by the German construction sector was stronger than forecast at the beginning of the year, when an increase of 6% was anticipated. As in the previous year, all branches of the construction industry contributed to this growth. Residential construction recorded a 8.5% increase to €50.6 billion (Argumentationslinie der Präsidenten des ZDB und des HDB, 18 December 2019, p. 3). Growth was primarily due to construction of new multi-storey residential properties, where building completions rose by 4.1% year on year in 2019 (Heinze, Monatspräsentation Februar 2020, p. 25). Redevelopment, renovation and modernisation business also reported higher growth rates compared to the previous year (Heinze, Monatspräsentation Februar 2020, p. 15). In the commercial construction sector, revenues increased by 7.5% to around €48.6 billion and also exceeded the growth rate forecast at the beginning of the year of 6.0%. High-rise commercial construction benefited from the increase in employment levels and rising consumer spending. This led to an increase in investment in office and administration buildings and in warehouse and trade buildings. In commercial civil engineering, growth was driven in particular by Deutsche Bahn's investment in railway lines, bridges and tunnels. Public-sector construction saw revenues up by 9.0% to €38.6 billion, which also exceeded the growth forecast at the beginning of the year of 6.0%. This growth was fuelled in particular by the German federal government's investment in road infrastructure and waterways as part of the the 2030 Federal Transport Infrastructure Plan (Argumentationslinie der Präsidenten des ZDB und des HDB, 18 December 2019, pp. 3 et seq.).

This growth trend in construction investment is expected to continue in 2020, albeit at a much lower rate. In nominal terms, revenues in the construction sector are expected to rise by 5.5% to €145.0 billion. In residential construction, revenues are forecast to increase by 7.0% to €54.2 billion (Argumentationslinie der Präsidenten des ZDB und des HDB, 18 December 2019, pp. 3 et seq.). Growth will continue to be supported by the boom in multi-storey residential construction, with the number of completed residential units expected to rise by some 12.3% to 173,000. In conventional owner-occupied home construction, on the other hand, year-on-year growth is expected to be low as in the previous year (Heinze, Monatspräsentation Februar 2020, p. 25). In spite of the heightened uncertainty regarding general economic development, a further increase in revenues of 5.5% to €51.3 billion is also expected in commercial construction. This growth is expected to be driven by solid domestic demand and investment in rail infrastructure. In public-sector construction, revenues are expected to climb by 4.0% to €39.5 billion, with investment in municipal construction set to rise alongside investment as part of the Federal Transport Infrastructure Plan (Argumentationslinie der Präsidenten des ZDB und des HDB, 18 December 2019, p. 5).

The Austrian construction industry continued its upward trend in 2019 (BDI – Roth, Die österreichische Bauwirtschaft 2019–2020, pp. 16 et seq.). Growth impulses mainly originated in structural engineering from the residential construction segment, which benefited in particularly from a significant housing shortage particularly in urban areas. The ongoing low interest rates and associated favourable terms and conditions boosted demand for owner-occupied housing and particularly for single- and multi-family properties (BDI – Roth, Die österreichische Bauwirtschaft 2019–2020, p. 9). Multi-storey residential construction also recorded high growth in 2019 (BDI – Roth, Die österreichische Bauwirtschaft 2019–2020, p. 10). Bolstered by solid economic development, non-residential construction was also characterised by a widespread willingness for investment in the expansion of business premises in industry and commerce (BDI – Roth, Die österreichische Bauwirtschaft 2019–2020, S. 11). Civil engineering benefited from the implementation of urgently required rail and road infrastructure measures and investment in digital network expansion (BDI – Roth, Die österreichische Bauwirtschaft 2019–2020, p. 13).

The construction industry is also likely to make a noticeable contribution to Austria's economic growth once again in 2020. However, growth momentum is set to slow somewhat (BDI – Roth, Die österreichische Bauwirtschaft 2019–2020, pp. 16 et seq.). The sharp rise in prices on the housing market from midway through 2019 has led to a slight decline in demand for single and multi-family properties, and building permits for new builds have also declined marginally (BDI – Roth, Die österreichische Bauwirtschaft 2019–2020, p. 9). Multi-storey residential construction, on the other hand, should benefit from the increased number of contracts that are set to be awarded for social housing as part of urban planning initiatives (BDI – Roth, Die österreichische Bauwirtschaft 2019–2020, p. 10). Non-residential construction is losing momentum somewhat in 2020, in line with macroeconomic development. Investments, particularly in industrial and office buildings as well as in the construction of much-needed infrastructure in the healthcare sector, may remain at a high level, however the rate of year-on-year growth is falling (BDI – Roth, Die österreichische Bauwirtschaft 2019–2020, p. 10). The achievement of binding climate targets for 2030 and 2050, the commitment to a comprehensive, sustainable overhaul and expansion of existing transport infrastructure and the systematic development of digital network infrastructure are all contributing to persistent growth in civil engineering (BDI – Roth, Die österreichische Bauwirtschaft 2019–2020, p. 13).

Business performance

In Germany, business development in the Building Materials business unit was boosted by the solid development of the construction industry throughout 2019 and the mild weather conditions both in the spring and in late autumn. In the structural engineering sector, industry growth was fuelled by strong activity in the construction of new buildings. This led to demand for buildings materials outstripping demand in development business. However, in view of the high level of capacity utilisation, construction companies struggled to take on new orders and projects. Civil engineering business also developed very positively, benefiting from roadwork material deliveries. There was also a significant year-on-year rise in gardening and landscaping business. BayWa recorded particularly high rates of growth in 2019 in the sale of construction equipment and tools, with BayWa's online trade activities making a significant contribution. Revenues in the Building Materials Segment exceeded expectations by increasing 5.3% to €1,702.8 million in 2019, due to increases in both sales volumes and prices. The segment's earnings before interest and tax (EBIT) climbed 3.2% to €32.1 million, exceeding the forecast stable development. In addition to the positive sales development, the successful expansion of the high-margin range of private brands and the linking together of online and stationary sales channels through the Click & Collect function as part of efforts to position the company as an integrated multi-specialist contributed to the improvement in earnings, as was the case in the previous year.

Innovation & Digitalisation Segment

Market and industry development 2019/20

There is a wide range of statements being made about the global market volume for digital farming. The differences between these statements are due to the fact 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 global market value to stand at a mean value of around USD12 billion in 2019, with growth of at least 10% a year in the medium to long term. Based on a global market volume of around USD3.4 billion in 2017, annual growth of just under 13% to around USD5.5 billion is forecast for the digitalised precision farming market in 2021 (Roland Berger, Focus October 2019: Farming 4.0: How precision agriculture might save the world, p. 10). This growth is being driven by the increases in productivity of up to 30% achievable through smart farming (amp2.handelsblatt.com/technik/digitale-revolution-big-data-auf-dem-acker-wie-die-landwirtschaft-mit-ki-den-welthunger-bekaempft).

In Germany, overall market volume in interactive retail (online and mail-order retail) and e-commerce grew by approximately 9.9% in 2019, reaching around €94 billion for all goods and services. With an increase of 11.6% to €72.6 billion, e-commerce saw even stronger growth than anticipated at the start of 2019, according to estimates by Bundesverband E-Commerce und Versandhandel Deutschland e.V. (German e-commerce and distance selling trade association – bevh). Multi-channel retailers recorded the highest growth rates, boosting their revenues by 13.3% to €25.7 billion. Online marketplaces recorded growth of 10.8% in 2019; at €33.9 billion in revenues, they remained by far the largest sales channel in the German e-commerce sector. Pure players, in other words e-commerce companies that do not own bricks-and-mortar stores and offer their products and services solely on their own websites, recorded growth of 10.7% to €10.8 billion (bevh, Präsentation Jahrespressegespräch 2020, pp. 5, 15). In 2020, bevh expects the German e-commerce sector to record slightly lower growth of around 10% to roughly €80 billion due to the dampened economic outlook. Overall, interactive retail involving goods and services should exceed the €100 billion threshold for the first time in 2020 (bevh, press release 21 January 2020, Vielbesteller treiben E-Commerce-Umsatz in 2019 auf neuen Höchststand, p. 2).

Business performance

The Innovation & Digitalisation Segment pools all activities of the BayWa Group in its Digital Farming and eBusiness areas. The eBusiness area covers 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 Geowissenschaftliche Fernerkundung GmbH, 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. Increasingly stricter requirements under the German Fertiliser Application Ordinance (DüV) – which is associated with an optimisation of fertilizer 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. In the service sector, however, revenues were slightly down year on year. All in all, revenues in the Innovation & Digitalisation Segment were on par with the previous year at €10.6 million (2018: €10.7 million). At 51%, 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 33%. Sensors, measurement systems and soil analysis programmes, such as Greenseeker and other hardware, accounted for 16% of revenues. As predicted, the Innovation & Digitalisation Segment recorded negative earnings before interest and tax (EBIT) of €14.6 million (2018: minus €12.3 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.

Development of Other Activities in 2019

At €13.7 million, the Other Activities Segment's revenues in the reporting year were essentially on par with 2018 (2018: €13.1 million). Earnings before interest and tax (EBIT) resulting from Other Activities consist of the Group's administration costs, as well as consolidation effects; in 2019, this came to minus €53.1 million following minus €42.5 million in the previous year.

Assets, Financial Position and Earnings Position of the BayWa Group

Asset position

Composition of assets

in € million	2015	2016	2017	2018	**2019**	Change in % 2019/18
Non-current assets	2,287.2	2,355.8	2,396.9	2,476.8	3,276.6	32.3
thereof: land and buildings	845.4	850.4	854.6	827.2	1,377.1	66.5
thereof: financial assets	168.2	189.1	232.6	204.5	218.3	6.7
thereof: investment property	55.9	41.6	40.9	38.2	46.7	22.3
Non-current asset ratio (in %)	37.9	36.4	36.9	33.0	37.0	
Current assets	3,739.7	4,094.2	4,077.4	5,030.4	5,585.9	11.0
thereof: inventories	2,141.5	2,380.3	2,322.7	2,909.5	3,286.4	13.0
Current asset ratio (in %)	61.9	63.2	62.8	67.0	63.0	
Assets/disposal groups held for sale	9.8	24.9	13.7	4.2	4.7	11.9
Total assets	**6,036.7**	**6,474.9**	**6,488.0**	**7,511.5**	**8,867.2**	**18.0**

The €799.7 million, or 32.3%, rise in non-current assets from €2,476.8 million to €3,276.6 million was primarily due to the initial application of IFRS 16, according to which leases have been recognised since 1 January 2019. Under the new requirements, rights of use and corresponding lease liabilities must be recognised for a large number of leases. In this context, lease assets attributable to non-current assets were capitalised in the amount of €567.6 million at the point of initial application on 1 January 2019.

The modernisation and expansion of the Group's network of locations resulted in investments in land and buildings of €86.8 million. Of this amount, €60.3 million was attributable to leases. This was offset by the sale of locations no longer required in the amount of €15.4 million. Taking into account the depreciation of buildings in the amount of €74.3 million, the book value of land and buildings at the Group increased by €550.0 million to €1,377.1 million. The increase in technical facilities and machinery was due to repair and maintenance investments of €64.1 million as well as the introduction of IFRS 16. Depreciation of technical facilities and machinery amounted to €45.6 million, while prepayments and assets under construction declined by €12.4 million to €85.6 million. In addition to the initial application of IFRS 16, investments in the modernisation of the vehicle fleet led to an increase in fixtures and office equipment. Overall, additions to property, plant and equipment associated with investment activities in the amount of €292.5 million was offset by depreciation in the amount of €173.7 million. Disposals of property, plant and equipment stood at €121.5 million in the financial year. Property, plant and equipment climbed by €666.5 million year on year from €1,399.9 million to €2,066.3 million.

The €13.9 million increase in financial assets was particularly due to additions to shareholdings in affiliated companies of €5.8 million as well as additions to other loans of €6.1 million. Both non-current marketable securities (€109.8 million), most of which comprise credit balances with cooperatives, and the share of companies recognised at equity (€208.0 million) remained on par with the previous year.

Investment property increased by €8.5 million year on year due to the reclassification of land and buildings to assets held for sale and stood at €46.7 million. Non-current receivables and other assets rose by €6.9 million, while deferred tax assets climbed by €45.1 million.

Current assets fell by €555.5 million year on year, or 11.0%, totalling €5,585.9 million at the end of the reporting period. Along with a significant €377.0 million rise in inventories, the Group also recorded a €113.4 million increase in trade receivables. The main reason for the increase in inventories lies in the rise in unfinished goods 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. The value of unfinished goods and services, almost all of which are project-driven, came to €1,162.0 million, corresponding to a €317.1 million year-on-year increase. By contrast, the €55.7 million rise in finished services and merchandise was attributable to a variety of segments. In particular, the Renewable Energies 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 Agri Trade & Service, BAST, Global Produce and Conventional Energy business units and the Building Materials Segment 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 businesses, contributed to an increase in said receivables. Current receivables and other assets were slightly up on the previous year's figure, standing at €2,054.9 million at year-end. Positive market values declined by €71.3 million, whereas trade receivables increased by €113.4 million year on year to €1,199.4 million.

Furthermore, receivables from income taxes increased by €5.6 million to €59.8 million, with non-current assets and disposal groups held for sale also climbing by €0.5 million to €4.7 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 €4,377.1 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 €5,585.9 million. There was roughly 140% coverage for non-current assets amounting to €3,276.6 million through equity and long-term borrowing of €4,490.1 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 requirements imposed by an internal control system, which includes the documentation of transactions, a hierarchy of approval and resolution procedures, 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.

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. 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	2015	2016	2017	2018	**2019**	Change in % 2019/18
Equity	1,075.9	1,098.3	1,435.5	1,389.1	1,358.6	- 2.2
Equity ratio (in %)	17.8	17.0	22.1	18.5	15.3	–
Short-term borrowing [1]	2,769.3	3,084.4	2,986.8	4,047.7	4,377.1	8.1
Long-term borrowing	2,191.5	2,292.2	2,065.7	2,074.7	3,131.5	50.9
Debt	4,960.8	5,376.6	5,052.5	6,122.4	7,508.6	22.6
Debt ratio (in %)	82.2	83.0	77.9	81.5	84.7	–
Total capital (equity plus debt)	**6,036.7**	**6,474.9**	**6,488.0**	**7,511.5**	**8,867.2**	**18.0**

1 Including liabilities from non-current assets held for sale

The BayWa Group's total assets stood at €8,867.2 million on 31 December 2019 and were therefore €1,355.7 million, or 18.0%, higher than the previous year's figure. The €30.5 million decline in equity stood in contrast to a rise in borrowing, with both short-term (up by €329.4 million) and long-term borrowing (up by €1,056.8 million) increasing year on year.

Capital management

The capital structure of the Group is made up of debt and equity. Equity ratio is 15.3% (2018: 18.5%) of total equity at the end of the reporting period. In order to provide a relevant metric, BayWa's capital management uses an adjusted equity ratio. The adjustments concern the reserve recognised for actuarial gains and losses from provisions for pensions and severance pay (including minority interests) of minus €289.6 million (2018:

minus €230.4 million). The reason for this is that this reserve results from a change of parameters not within the company's control when calculating personnel provisions. Also, the effect of the initial application of IFRS 16, which had a negative impact on the equity ratio of 1.4 percentage points, has been eliminated (see also Note A.3. in the notes to this report). Adjusted for these two components, the adjusted equity ratio stands at 20.0% (2018: 21.6%).

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 2019, the equity-to-fixed-assets ratio was 137%.

The increase in the debt ratio was due to a rise in both short-term and long-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 was primarily related to increases in current financial liabilities (up €81.4 million to €2,313.6 million), lease liabilities as a result of the initial application of IFRS 16 (up €57.0 million to €68.2 million) and trade payables (up €32.0 million to €1,048.7 million) associated with the rise in inventories.

Long-term borrowing rose in the financial year 2019 by €1,056.8 million and amounted to €3,131.5 million as at the reporting date. Besides rising pension provisions (up €78.3 million), this trend was also due to the increase in lease liabilities caused by the introduction of IFRS 16 (up €542.0 million) and the rise in non-current financial liabilities (up €418 million) caused by the green bond issue in June 2019 in the amount of €500 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".

Calculating adjusted net debt involves deducting cash and cash equivalents from current and non-current financial liabilities at banks. Nonrecourse 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 €20.5 million (2018: €39.5 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	**31/12/2019**	31/12/2018
Non-current and current liabilities at banks	3,614.7	3,115.3
less cash and cash equivalents	- 229.7	- 120.6
Net debt	**3,385.0**	**2,994.7**
less non-recourse financing	- 71.4	- 95.0
less inventories for immediate use	- 900.2	- 930.4
Adjusted net debt	**2,413.4**	**1,969.3**
EBITDA	403.0	315.3
Adjusted equity	1,648.2	1,619.5
Net debt (adjusted)/equity (adjusted) (in %)	**146.4**	**121.6**
Net debt (adjusted)/EBITDA	**6.0**	**6.2**

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	**31/12/2019**	31/12/2018
Non-current and current liabilities at banks	1,936.6	1,932.6
less Cash and cash equivalents	- 177.4	- 73.6
Net debt	**1,759.2**	**1,859.0**
less non-recourse financing	–	–
less inventories for immediate use	- 900.2	- 930.4
Adjusted net debt	**859.1**	**928.6**
EBITDA	265.1	219.5
Net debt (adjusted)/EBITDA	**3.2**	**4.2**

Cash flow statement and development of cash and cash equivalents

in € million	2015	2016	2017	2018	**2019**
Cash flow from operating activities	19.0	208.6	- 170.2	- 452.2	- 212.0
Cash flow from investment activities	- 143.5	- 123.6	- 60.5	- 243.0	- 149.4
Cash flow from financing activities	98.7	- 63.0	235.9	710.8	469.6
Cash and cash equivalents at the end of the period [1]	84.5	104.4	105.5	120.6	229.7

1 Including inflow/outflow of funds due to changes in the group of consolidated companies and in exchange rates in the amount of €0.9 million

The cash flow from operating activities came to minus €240.2 million in the financial year 2019, a year-on-year increase of €212.0 million. With consolidated net income up €6.2 million year on year, this increase was primarily the result of a year-on-year decline in inventories, trade receivables and other assets not allocable to investing and financing activities, and a rise in short- and medium-term provisions. By contrast, cash inflow declined as a result of 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 €149.4 million following cash outflow of €93.6 million in the reporting year. Payments for company acquisitions came to €53.4 million (2018: €144.8 million) and were primarily attributable to the acquisition of the Royal Ingredients Group International B.V. and BayWa r.e. UK (Development) Limited. In the financial year 2019, investments of €317.2 million were made in intangible assets, property, plant and equipment, and financial assets (2018: €212.4 million), which were offset by incoming payments from the disposal of intangible assets, property, plant and equipment, and financial assets of €157.3 million (2018: €104.3 million).

Cash flow from financing activities in the financial year 2019 stood at €469.6 million and was attributable in particular to the issuing of a green bond in June 2019 in the amount of €500 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 €61.6 million, as well as interest payments of €59.3 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 €229.7 million, which was €109.1 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 company also 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 €849.0 million (2018: €626.0 million) with an average weighted residual term of 59 days (2018: 58 days). At the end of the reporting period, €126.6 million (2018: €154.9 million) in receivables had been financed at their nominal value from the ongoing Asset-Backed Securitisation Programme.

Investments

In the financial year 2019, the BayWa Group invested a total of €321.5 million in intangible assets (€29.0 million) and property, plant and equipment (€292.5 million) in addition to its acquisitions (2018: €202.0 million). The investments made in the financial year 2019 were primarily for the purpose of repair and maintenance of technical facilities and machinery, buildings, facilities (in construction) and office fixtures and fittings, as modern locations and seamlessly operating facilities are a precondition for efficient logistics processes.

Real estate no longer used for operations was sold off wherever appropriate in the financial year 2019. The proceeds accruing from these transactions are used to reduce debt or to finance the Group's growth.

Including company acquisitions, roughly 39.3% 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. Aside from the aforementioned segment, 31.0% of investments were attributable to the Agriculture Segment, with 10.0% going to the Building Materials Segment, and 2.1% earmarked for the Innovation & Digitalisation Segment. The remaining 17.6% are accounted for by investments in Other Activities.

Earnings position

in € million	2015	2016	2017	2018	**2019**	Change in % 2019/18
Revenues	14,928.1	15,409.9	16,055.1	16,625.7	17,059.0	2.6
EBITDA	288.3	272.6	318.4	315.3	403.0	30.7
EBITDA margin (in %)	1.9	1.8	2.0	1.9	2.3	–
EBIT	158.1	144.7	171.3	172.4	188.4	9.3
EBIT margin (in %)	1.1	0.9	1.1	1.0	1.1	–
EBT	88.1	69.6	102.4	92.6	79.2	- 14.5
Consolidated net result for the year	**61.6**	**52.7**	**67.2**	**54.9**	**61.1**	**11.3**

The revenues of the BayWa Group rose by 2.6%, or €433.3 million, to €17,059.0 million in the financial year 2019. The sharpest rise in revenues was recorded in the Energy Segment, with the Renewable Energies business unit growing by €445.2 million to €1,975.3 million and the Conventional Energies business unit by €60.7 million to €2,499.0 million. In the Building Materials Segment, revenues rose by €85.3 million year on year to €1,702.8 million. A slight increase in revenues was also recorded in Other Activities (€0.6 million). By contrast, revenues in the Agriculture Segment decreased by €158.4 million to €10,857.5 million, due to two opposing developments: Revenues increased in the Agri Trade & Service (up €155.6 million), Global Produce (up €36.0 million) and Agricultural Equipment (up €61.0 million) business units, but this was offset by a €411.0 million decline in revenues in the BAST business unit. There was also a slight decline in revenues of €0.1 million in the Innovation & Digitalisation Segment.

Other operating income increased by a total of €14.3 million in the reporting year to €225.6 million. Key drivers of this development included higher income from price gains of €46.3 million (2018: €14.2 million) and income from the disposal of assets of €46.8 million (2018: €43.4 million). By contrast, income from the release of provisions fell by €11.5 million to €14.3 million in the financial year 2019. At €52.5 million, other income was short of the previous year's figure (2018: €60.0 million).

In the financial year 2019, the BayWa Group reported an increase in inventories of €223.2 million, which was primarily attributable to incomplete wind farms and solar parks in the fields of renewable energy.

Along with the increase in revenues, the cost of materials also increased, rising by €337.3 million, or 2.2%, to €15,513.0 million. Gross profit recorded an improvement of €119.4 million, or 6.3%, to €2,008.5 million.

Personnel expenses climbed year on year by 9.2%, or €91.3 million, to €1,081.9 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 2019 itself as well as the further expansion of business activities in the Renewable Energies business unit.

At €629.4 million, other operating expenses were up by €30.4 million, or 5.1%, on the previous year's figure of €599.0 million in the financial year 2019. Other operating expenses primarily consisted of advertising costs of €55.9 million (2018: €51.2 million), maintenance expenses of €62.7 million (2018: €55.8 million), expenses due to currency-induced losses of €47.6 million (2018: €11.5 million), consultancy, auditing and legal fees of €66.7 million (2018: €47.4 million) and other expenses of €82.8 million (2018: €68.4 million). The lion's share of other expenses is attributable to the payment of €68.6 million to end the proceedings initiated by the Bundeskartellamt (German federal antitrust authority) in 2015 against BayWa AG in connection with alleged price agreements relating to trade in crop protection products. The initial application of IFRS 16 saw rental expenses decline to €16.3 million in the reporting year (2018: €66.8 million).

Earnings before interest, tax, depreciation and amortisation (EBITDA) rose by €87.7 million, or 27.8%, to €403.0 million in the financial year 2019 (2018: €315.3 million).

Depreciation and amortisation at the BayWa Group rose by €71.7 million, or 50.2%, to €214.6 million in the reporting year. This increase was predominantly the result of the increase in depreciation and amortisation of non-current assets within the scope of the initial application of the new lease standards (IFRS 16) at the BayWa Group.

All in all, the BayWa Group's earnings before interest and tax (EBIT) rose by €16.0 million, or 9.3%, to €188.4 million in the financial year 2019.

The financial result comprises income from participating interests, which is allocated to EBITDA and EBIT, and net interest. At €105.8 million, income from participating interests was significantly higher in the reporting year than the €15.8 million seen in the previous year. This development was due to the increase in the equity result by €2.2 million to €11.2 million, but also to the rise in other income from shareholdings by €87.8 million to €94.6 million. The primary cause of the latter was the sale of shares in TESSOL Kraftstoffe, Mineralöle und Tankanlagen Gesellschaft mit beschränkter Haftung, Stuttgart, Germany. Due to high net interest resulting from an increase in financial liabilities, net interest deteriorated by €29.4 million, totalling a balance of minus €109.2 million (2018: minus €79.8 million). This increase was due to the initial application of IFRS 16, among other factors. Interest expense from lease liabilities climbed by €14.3 million to €28.6 million.

The BayWa Group's earnings before tax (EBT) decreased by €13.4 million, or 14.5%, to €79.2 million. The primary reason for this was the rise in one-off expenses of just under €15.0 million, which included defence costs in relation to the antitrust proceedings concluded in the financial year 2019, legal and consulting fees for the search for a potential investor for BayWa r.e. renewable energy GmbH, Munich, Germany, and transactions relating to the portfolio consolidation. These one-off effects are reflected in Other Activities, which, coupled with the reconciliation of the presented consolidation effects, were down €17.6 million on the previous year. In operating business, growth in the Energy Segment of €12.3 million and in the Building Materials Segment of €1.2 million was offset by declines in the Agriculture Segment of €7.0 million and in the Innovation & Digitalisation Segment of €2.4 million.

Income tax expense for the BayWa Group amounted to €18.1 million in the financial year 2019, which corresponds to a year-on-year decrease of €19.6 million. The tax rate therefore amounted to 22.8% in the reporting year (2018: 40.7%).

Taking income tax into account, the BayWa Group generated net income of €61.1 million in the financial year 2019 (2018: €54.9 million), which corresponds to an increase of 11.3%. The share in profit due to shareholders of the parent company increased by 13.6% from €32.3 million in the previous year to €36.7 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 35,138,148 (dividend-bearing shares less treasury shares), rose from 56 cents in the previous year to 68 cents for the financial year 2019.

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 2019:

Key financial earnings figures

	Earnings before interest, tax, depreciation and amortisation (EBITDA)			Earnings before interest and tax (EBIT)			Earnings before tax (EBT)		
in € million **2019**		Change (absolute)	Change (in %)		Change (absolute)	Change (in %)		Change (absolute)	Change (in %)
Renewable Energies	137.9	42.1	43.9	101.0	28.5	39.3	61.2	7.7	14.4
Conventional Energy	38.8	6.2	19.0	26.4	2.9	12.3	26.3	4.6	21.2
Energy Segment	**176.7**	**48.3**	**37.6**	**127.4**	**31.4**	**32.7**	**87.5**	**12.3**	**16.4**
BAST	28.4	- 7.2	- 20.2	19.1	- 12.0	- 38.6	9.2	- 14.8	- 61.7
Global Produce	61.5	19.9	47.8	36.9	9.7	35.7	30.2	8.3	37.9
Agri Trade & Service	44.9	10.8	31.7	7.8	2.6	50.0	- 6.6	3.3	33.3
Agricultural Equipment	53.4	5.1	10.6	32.8	- 3.8	- 10.4	23.3	- 3.8	- 14.0
Agriculture Segment	**188.2**	**28.7**	**18.0**	**96.6**	**- 3.5**	**- 3.5**	**56.1**	**- 7.0**	**- 11.1**
Building Materials Segment	**57.0**	**9.8**	**20.8**	**32.1**	**1.0**	**3.2**	**23.4**	**1.2**	**5.4**
Innovation & Digitalisation Segment	**9.1**	**19.4**	**> 100.0**	**- 14.6**	**- 2.3**	**- 18.7**	**- 14.8**	**- 2.4**	**- 19.4**

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 **2019**	Renewable Energies	Conventional Energy	BAST	Global Produce	Agri Trade & Service	Agricultural Equipment	Building Materials	Innovation & Digitalisation
Net operating profit	101.0	26.4	19.1	36.9	7.8	32.8	32.1	- 14.6
Average invested capital [1]	1,522.2	- 3.9	581.3	345.9	1,088.6	579.2	429.4	22.2
ROIC (in %)	6.63	> - 100.00	3.29	10.68	0.71	5.66	7.48	- 66.02
Weighted average cost of capital (WACC) (in %)	4.50	5.50	4.90	5.90	4.60	5.50	5.40	5.50
Difference (ROIC less WACC) (in %)	2.13	> - 100.00	- 1.61	4.78	- 3.89	0.16	2.08	- 71.52
Economic profit by business unit	32.5	26.6	- 9.4	16.5	- 42.3	0.9	8.9	- 15.9
		Energy				Agriculture	Building Materials	Innovation & Digitalisation
Economic profit by segment		**59.1**				**- 34.2**	**8.9**	**- 15.9**

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

In the financial year 2019, 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 €32.5 million, which was significantly higher than the previous year's figure (2018: €22.5 million). 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 €26.6 million (2018: €20.8 million). The Energy Segment's economic profit totalled €59.1 million (2018: €43.3 million). The Building Materials Segment was able to significantly expand its economic profit significantly once again in the financial year 2019 to €8.9 million (2018: €3.0 million). Within the Agriculture Segment, the Global Produce business unit generated an economic profit of €16.5 million following €8.4 million in the previous year. By contrast, a decline was reported in the Agricultural Equipment business unit to €0.9 million, down from €4.5 million in the previous year. Although the BAST business unit saw significant year-on-year improvement of €4.1 million, economic profit remained negative in 2019 at minus €9.4 million. The Agri Trade & Service business unit reported economic profit of minus €42.3 million, which was €17.0 million higher than the previous year's figure. The Agriculture Segment as a whole recorded economic profit of €34.2 million in the financial year 2019 (2018: minus €59.9 million). The Innovation & Digitalisation Segment posted economic profit of minus €15.9 million, as expected in its planning.

Comparison of forecast business development with actual business development

A moderate rise in revenues and a significant increase in earnings before interest and tax (EBIT) in the financial year 2019 were forecast for the BayWa Group in the Outlook section of the 2018 Group Management Report. Revenues at Group level climbed by 2.6%, which was within the forecast range. Consolidated earnings before interest and tax (EBIT) performed in line with expectations with a 9.3% increase. The Energy Segment performed significantly better than originally forecast both in terms of revenues and earnings. The Building Materials Segment also exceeded expectations when it comes to revenue and earnings development. By contrast, the Agriculture Segment fell significantly short of the targets set in the forecast. The Innovation & Digitalisation Segment performed a little worse than expected in the reporting year.

General statement on the business situation of the Group

Overall, the Board of Management considers the business performance of the BayWa Group in 2019 to have been positive. The corporate goals for the reporting year were achieved, however business performance varied among the individual segments. The Energy Segment performed better than originally expected. The Renewable Energies business unit was a primary contributor here, after it achieved new records in both revenues and earnings. The Conventional Energy business unit also exceeded the goals set for the financial year 2019. The Building Materials Segment also exceeded expectations in the reporting year. By contrast, the situation in the Agriculture Segment is unsatisfactory. Given the significance of these business activities for the BayWa Group, action is required here to noticeably boost profitability. In 2019, the BayWa Group once again profited from its heavily diversified business activities, its strategic orientation towards international markets and new areas of business and business models.

Outlook

Outlook for the BayWa Group

Prospects for the BayWa Group are positive overall for 2020 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. Earnings before interest and tax (EBIT) are likely to improve moderately in 2020,[1] with substantial revenue expansion and a significant improvement in earnings expected in the Agriculture Segment. The Building Materials Segment is likely to see its revenues and earnings (EBIT) increase moderately. In the Energy Segment, the positive development of the Renewable Energies business unit is set to continue, however the sale of the TESSOL filling station business in the Conventional Energy business unit in 2019 will lead to a significant structural decline in revenues and earnings. All in all, revenues and EBIT in the Energy Segment will be considerably lower in the financial year 2020 than in the previous year. The Innovation & Digitalisation Segment is expected to increase its revenues by a moderate margin. The segment's earnings before interest and tax (EBIT), which was in the negative double-digit million range in 2019, is set to improve considerably year on year in 2020.

Outlook for the Energy Segment

The Renewable Energies business unit will continue on its growth course on international markets in 2020. Overall, the project pipeline for wind farms and solar parks sales in 2020 totals just under 1.2 gigawatts (GW), with solar parks accounting for roughly 690 megawatts (MW) and approximately 480 MW attributable to wind energy projects. The focus of solar activities is on new projects the US, which account for over half of the overall project pipeline, followed by the Netherlands and Mexico. In the Netherlands, growth will primarily be driven by GroenLeven, the project development company for solar plants in which a majority share was acquired in 2018, with a project pipeline for solar parks of more than 2 GW. In 2020, BayWa r.e. is set to realise Europe's largest floating solar park in partnership with GroenLeven. The Bomhofsplas floating photovoltaics project with an output of 27.4 megawatt-peak (MWp) is scheduled for construction in just eight weeks as a fully climate-neutral project.

This marks the fourth floating solar park constructed by BayWa r.e. in the past eighteen months. At the beginning of 2020, BayWa r.e. concluded an agreement with AB InBev regarding the purchase of 100% renewable energy for AB InBev's European breweries. The Virtual Power Purchase Agreement (VPPA) governs the supply of electricity from two solar parks for a period of ten years, with over 130 MW going to AB InBev. This is the

1 This forecast is based on the assumption that the spread of the coronavirus does not lead to an uncontrolled increase in the number of cases. The international and intercontinental spread of the disease, with a significant rise in the number of infections, could, however, have a noticeable negative impact on business development over a sustained period of time, particularly in the Renewable Energies, Global Produce, Building Materials and Agricultural Equipment business units. This is due to the international network of logistics chains and the resulting limited availability of primary materials and products. For further information on this issue, please refer to the section on market risks and opportunities in the Opportunity and Risk Report and in the Notes to the Financial Statements under (E.11) Significant events after the reporting date.

largest Europe-wide solar power agreement ever reached in the private sector. In order to supply the electricity, BayWa r.e. is financing and developing two new solar parks in Spain with a total installed capacity of almost 200 MW, which will provide AB InBev breweries with around 250 gigawatt-hours (GWh) of green power per year. Activities relating to wind turbines are focused on the United States, Europe and Australia. In terms of services, the Canadian software developer PowerHub acquired in autumn 2019 will make a full-year contribution to revenues and earnings and also help expand business. The aim of the acquisition is to expand the range of services offered by BayWa r.e. in the use of digital technology in operating renewable energy plants and to strengthen successful service business around the world. Direct marketing agreements with a total capacity of just under 4.0 GW were already in place at the beginning of 2020, representing an increase of just under 20% compared with 2019. In solutions business, trading in photovoltaic components should continue to benefit from rising demand for new system solutions and attractive prices for photovoltaic modules. In addition, the full-year inclusion of the Canadian solar company National Solar Distributors, which was acquired in the second half of 2019, should make a positive contribution to revenues and earnings. All in all, the revenues in the Renewable Energies business unit are expected to remain on par with the previous year primarily due to the expansion of trading activities involving photovoltaic components and the solid project pipeline. Earnings before interest and tax (EBIT) are likely to be on par with the level recorded in the previous year. This is due to the fact that a larger share of revenues will be attributable to the sale of project rights in 2020, which offer a slimmer margin compared to the completion of construction projects. The realisation and completion of these projects is scheduled for 2021. BayWa AG will look to find further partners by means of a capital increase through third-party allocation at the level of BayWa r.e. renewable energy GmbH in order to leverage growth potential more quickly in renewable energy markets. BayWa AG intends to maintain its majority share in BayWa r.e. renewable energy GmbH.

In the Conventional Energy business unit, the sale of TESSOL's filling station business at the end of 2019 and start of 2020 will lead to a significant decline in revenues and earnings. The expansion of the activities of BayWa Mobility Solutions, on the other hand, is expected to have a positive effect. The development of charging infrastructure for electric vehicles is being driven forward in light vehicles business. A service portfolio ranging from fleet analysis to the design and realisation of integrated mobility concepts for fleet operators will open up new business potential. In the heavy vehicles sector, new business opportunities are opening up through the establishment of a network of liquid natural gas (LNG) filling stations for heavy goods vehicles. Several LNG filling stations are set to be commissioned in 2020. Partnerships are becoming increasingly important in the area of digital mobility. Through partnership agreements, BayWa customers have access to almost all charging stations throughout Germany, while the BayWa filling station card is accepted at one in five filling stations nationwide. With its filling station card and billing systems, BayWa also offers an all-in-one solution with filling station and charging card, related app and billing for customers and – as a white label system – also for third parties. The sales volume of fuels is expected to continue to grow moderately as a result of the increasing acceptance of the BayWa filling station card and the expansion of diesel delivery logistics for construction companies, freight forwarders and agricultural companies. Lubricant business is expected to see a decline in sales in 2020 due to the downturn in mechanical and plant engineering. However, the fall in sales volume should be counteracted in earnings terms with an expansion of the service portfolio with the addition of services to monitor fluid usage in machinery and to arrange preventative maintenance. In fluid management, the OilFox system automatically records heating oil tank levels at industrial and commercial companies, enabling direct delivery to raise supply reliability. Biologische Fachberatung Biogas, a specialist advice service for operators of biogas plants and municipalities, analyses the substrates in fermenters used in biogas or wastewater treatment plants in order to improve the quality of the biogas produced by adding trace elements and enzymes as and when needed. Further sales growth is expected in the AdBlue market as a result of the rising number of registrations for Euro VI diesel vehicles. In terms of heating business, it is assumed that customers will increasingly stock up on heating oil in anticipation of the upcoming introduction of the carbon pricing system. Sales of wood pellets are likely to rise as a result of the increased number of installed pellet heaters through the increase in production capacities at WUN Pellets GmbH. In heat contracting business, work continues to modernise the biomass heating plant to provide local heating for the industrial estate in Krailling, Upper Bavaria, Germany. In Neustadt an der Waldnaab, Germany, the newly constructed local heating system and associated biomass heating plant were commissioned in November 2019. In addition, the range of services in heat contracting has been expanded with the addition of landlord-to-tenant electricity. The first project of this nature is currently under construction. Sales are expected to increase in the area of heat contracting. Due to the predicted decline in oil prices, revenues in the trade of heating fuels, fuels and lubricants in

2020 are expected to be significantly below the level of 2019 despite the expected sales increase. Earnings before interest and tax (EBIT) in the Conventional Energy business unit are expected to decline significantly.

In total, revenues in the Energy Segment are set to be significantly down on the previous year based on the current forecast, with declines in the Conventional Energy business unit not able to be offset by growth in the Renewable Energies business unit. The Energy Segment's earnings before interest and tax (EBIT) are also likely to fall some way short of the previous year's figure.

Outlook for the Agriculture Segment

In the BayWa Agri Supply & Trade (BAST) business unit, the handling volume of grain and oilseed meal is expected to remain on par with the previous year's figure in 2020. The cool-down in the trade dispute between the US and China could result in deliveries of US soy beans to China rising again. In the previous year, the dispute led to a surplus in the supply of US soy beans and a low price level in Europe. In view of the high level of uncertainty on the overall market, customers have therefore been reticent when it comes to stocking up. The easing of tension in the trade dispute is expected to result in customers turning to the futures markets once again. In addition, the full-year inclusion of the Dutch speciality trading company Royal Ingredients Group B.V., which was acquired in the first quarter of 2019, is also likely to contribute to growth. Furthermore, the expansion of the customer portfolio is also expected to lead to rising demand for other speciality traders acquired in previous years, such as Tracomex B.V. Last but not least, initial positive effects are expected from the new Road to Ingredients strategy. This is offset by the reclassification of the speciality trader for malting barley, Evergrain Germany GmbH & Co. KG (Evergrain), from the BAST business unit to the Agri Trade & Service business unit. Based on the assumption of largely stable prices, revenues in the BAST business unit are likely to remain on par with the previous year. Earnings before interest and tax (EBIT) are expected to increase significantly in 2020. The absence of one-off expenses from the previous year linked to the trade embargo on Iran will contribute in particular to the improvement in earnings here. Higher earnings contributions are also expected in Hungarian trading business following the successful restructuring measures.

In the Global Produce business unit, the entire marketing volume of the BayWa Group is likely to increase noticeably in 2020. This expectation is due primarily to the further increase in apple production in New Zealand on the back of a 4% rise in land available for cultivation. This expansion of production in 2020 is the result of plantations established over the past three to four years. In addition, the acquisition of fruit trader Freshmax will also have a positive impact on marketing volumes, revenues and earnings. An increase of around 4% is expected in export business. In Germany, marketing volumes are likely to be lower than in 2019 as apple harvest volume was some 17% down on the record-breaking harvest of 2018. The fall in supply of domestic and imported agricultural products is likely to result in a moderate rise in the price of apples in Germany. Higher prices are also expected in New Zealand due to improved fruit quality. Overall, the Global Produce business unit will be able to increase revenues slightly in 2020 compared to 2019, due to both volume and price effects. 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. Fruit business in Germany is likely to generate a moderate increase in earnings in 2020, whereas a marked rise in earnings contributions is expected from international fruit trading business.

In the Agri Trade & Service business unit, recording and marketing volumes of grain, oilseed and oilseed meals are expected to increase marginally year on year in Germany assuming normal weather conditions. The expansion of trade in organic products should also see sales increase in the financial year 2020. It is assumed that the specialist retailer for malting barley, Evergrain, which was included in the Agri Trade & Service business unit effective as at 1 January 2020, will make a positive contribution to revenues and earnings. Furthermore, sales should also benefit from the newly introduced sales organisation and the establishment of the Unamera platform aimed at grain and oilseed trading between agricultural companies and farmers and processors. In the agricultural input business, sales of crop protection products should rise slightly on the previous year's level, given normal weather conditions. However, limitations as a result of the stricter requirements defined in the German Fertiliser Application Ordinance (DüV) and restrictions in the use of crop protection may have an opposing effect. BayWa is mitigating this effect by expanding its range of products with the addition of agricultural inputs for organic cultivation. Sales of seed are expected to remain stable. Due to the solid availability of staple feed and the slight decline in animal stocks, demand for feed is expected to dip slightly. All in all, revenues in the Agri Trade & Service business unit should increase moderately in 2020. The increases in sales volumes and revenues will also have a positive impact on the earnings of the Agri Trade & Service business unit. In addition, structural optimisation measures implemented in previous years should lead to significant cost savings. As a result, earnings before interest and tax (EBIT) in the Agri Trade & Service business unit are expected to rise significantly year on year in 2020.

In the Agricultural Equipment business unit, new machinery business in Germany is expected to remain stable at a high level in 2020 following two extremely strong previous years. The positive effects originate from Agritechnica in autumn 2019, as farmers gain economic advantages in particular from the more intensive use of digital components in partnership with their existing machinery. In Austria, the exclusive agreement with John Deere and the expansion of the range of accessories and spare parts is expected to lead to a continuation of the positive previous-year trend. In international business, further growth is also anticipated primarily as a result of the expansion of the market share of CLAAS products at existing branches and the addition of a new location to the existing sales region. In the Netherlands, stricter legal requirements concerning phosphate, nitrate and particulates and general reticence when it comes to investment after two dry years in succession is expected to cause new tractor business to stabilise at a low level in 2020 after a major decline in the previous year. All in all, revenues in the Agricultural Equipment business unit should remain on par with the previous year in 2020. Earnings before interest and tax (EBIT) in the Agricultural Equipment business unit are expected to fall significantly in 2020.

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 2020 on the basis of anticipated developments in the individual business units.

Outlook for the Building Materials Segment

The BayWa building materials trade is well positioned to benefit from the continued positive development of the construction sector in 2020 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 primarily be achieved through increases in efficiency. Digitalisation is a key driving force here. It is expected that BayWa will benefit from the growing trend towards increased industrial pre-fabrication through the further expansion of specialisation in distribution activities. The pre-fabricated bathroom modules made by start-up Tjiko, in which BayWa has held a stake since May 2019, are one example of this. Initial revenue and earnings contributions are expected in project business on account of approved projects and the commencement of marketing in 2020. The arrival of digitalisation in the construction industry is also a driving force here. BayWa is a project partner in Germany's first community of single-family properties built using building information modeling (BIM). Since mid-2019, work has been underway to construct the "Wohnen am Lerchenberg" (Lerchenberg residences) project in Borna, near Leipzig, entirely with BIM. All aspects of the project are fully digital, from sale and planning through to construction. The "Mr+Mrs Homes" property configurator provides the basis for the project. Another growth area is the realisation of projects with integrated energy systems in partnership with the Conventional Energy and Renewable Energies business units. Further growth is also expected through the BayWa Building Materials Online portal and in e-commerce. Other positive effects are also expected from the expansion of subsidies for building renovation as part of the German government's Climate Action Programme 2030. Revenues in the Building Materials Segment are therefore expected to see a slight increase in 2020. 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 improve slightly in 2020, despite increases in standard wages.

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 is set to be driven by the international expansion of sales of the NEXT Farming OFFICE and NEXT Farming LIVE software packages. Another example is the GPS-controlled Leitspurmanager software which, coupled with digitalised field databases, enables seed to be sown and fertilizer 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. The new “NEXT Machine Management by aag” module, which is integrated into the NEXT Farming LIVE farm management software, was launched in time for Agritechnica in November 2019. An increase in marketing figures is expected from the full-year availability in 2020. In addition, the increasing importance of site-specific fertilization should also play a role due to stricter fertilization requirements. Here, fertilization based on sensor data and satellite information ensures that farms are managed effectively and efficiently. At the same time, the integrated digital nutrient requirement calculation in the NEXT Düngung (fertilization) software module ensures that fertilization use is optimises and strict documentation obligations are met. 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 2020. A significant improvement is expected in earnings before interest and tax (EBIT) from its current negative double-digit million range as the previous year’s EBIT was negative impacted by marketing expenses linked to Agritechnica that were not incurred in 2020.

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 2020 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, the negative EBIT from Other Activities in 2020 should improve significantly in 2020 due to the absence of the one-off expenses from the previous year.

Opportunity and Risk Report

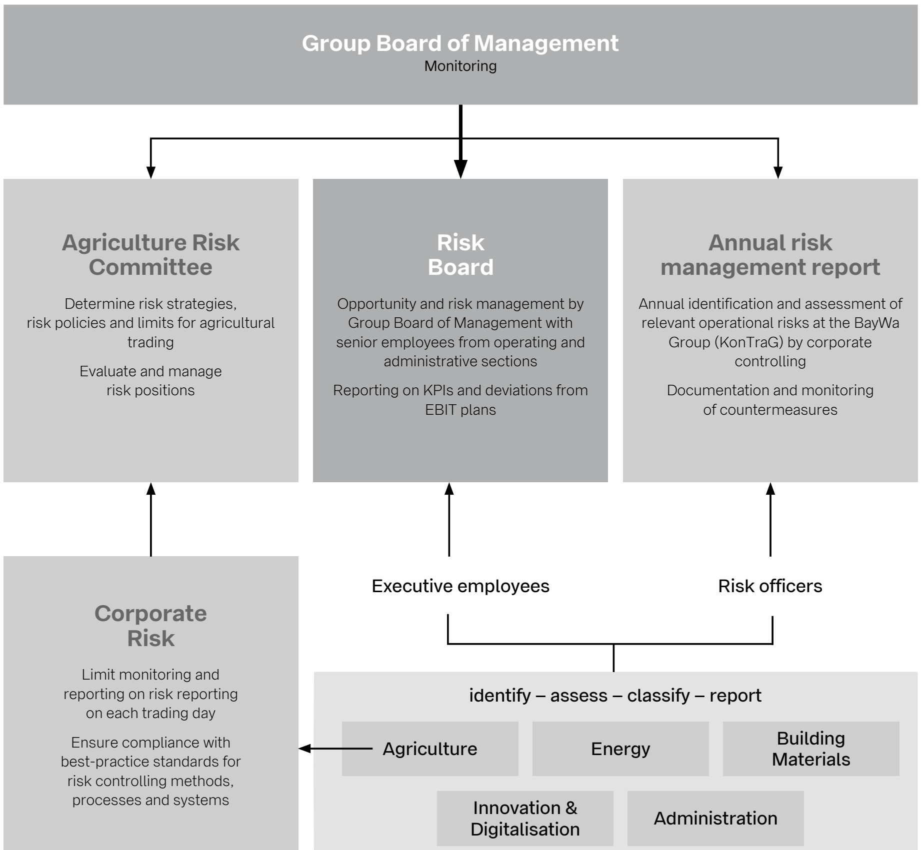
Principles of opportunity and risk management

The management of opportunities and risks is an ongoing area of entrepreneurial activity, which is necessary to ensure the long-term success of the company and is closely aligned with the long-term strategy and medium-term planning of the BayWa Group. BayWa makes use of opportunities that arise in the context of its business activities. Internationalisation also allows BayWa to tap into new business opportunities, which in turn reduces its dependence on the individual country markets and their 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 defined 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.

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 subcategories. 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 subcategories 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 (on at least a monthly basis) of pending agricultural transactions of German agricultural units and the determination of the trading results derived from this, as well as the portfolio-based value-at-risk procedure for the liquid products of all agricultural trading units. In addition, scheduled and ad hoc stress tests are performed to recognise the effect that extraordinary 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 products, 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 sub-category 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 and opportunities					
	Sales market	significant	increased [1]	material	constant
	Procurement	considerable	reduced	material	increased
	Competition	considerable	reduced [1]	immaterial	constant
	Image	noticeable	increased [1]	immaterial	constant
	Price	substantial	reduced [1]	material	constant
	Loss of customers	low	reduced [1]	/	/
Operating risks and opportunities					
	Sales	noticeable	reduced [1]	material	increased
	Environmental impact	significant	increased [1]	immaterial	constant
	Production	low	reduced	immaterial	constant
	Inventory	noticeable	reduced [1]	material	constant
	Product quality	considerable	increased [1]	immaterial	constant
	Case of damage	noticeable	increased [1]	/	/
	Project	significant	increased	material	increased
Risks and opportunities of the organisational structure and workflow					
	IT	considerable	reduced	immaterial	constant
	Quality	significant	reduced [1]	immaterial	constant
	Personnel	significant	increased	immaterial	constant
	Organisation	considerable	increased [1]	immaterial	constant
Financial risks and opportunities					
	Financial market	considerable	reduced [1]	immaterial	constant
	Group companies	noticeable	increased	immaterial	constant
	Default on receivables	considerable	reduced [1]	/	/
	Interest	low	reduced [1]	immaterial	constant
	Liquidity	noticeable	reduced [1]	immaterial	constant
	Currency	noticeable	reduced [1]	immaterial	constant
	Taxes	noticeable	reduced [1]	/	/
Strategic risks and opportunities					
	Corporate strategy	significant	increased	immaterial	constant
	Investments	low	reduced [1]	immaterial	constant
	Acquisitions & disposals	low	reduced [1]	material	increased
	Market development	noticeable	reduced [1]	immaterial	constant
	Innovation and technology	considerable	increased	material	constant
Legal risks and opportunities					
	Contracts	considerable	increased	/	/
	Changes in legislation	significant	reduced [1]	immaterial	constant
	Liability and insurance	low	increased [1]	/	/
	Violations of the law	substantial	reduced [1]	/	/
Compliance risks and opportunities					
	Corruption/fraud	noticeable	reduced [1]	/	/
	Product safety/standards	low	constant	/	/
	Data protection	low	increased [1]	/	/
	Compliance with laws & guidelines	significant	reduced [1]	/	/

1 No year-on-year change in risk classification

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 2019 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 may 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 and the Bundeskartellamt (German federal antitrust authority) reached an agreement to end the administrative offence proceedings that had been ongoing since March 2015 relating to BayWa AG and other crop protection wholesalers. BayWa AG opted to bring the complex as well as time- and resource-intensive legal proceedings to a conclusion by means of a settlement. The settlement includes a payment of €68.6 million. A corresponding penalty notice was submitted to BayWa AG on 8 January 2020. BayWa AG fully cooperated with the Bundeskartellamt in investigating the allegations.

Generally speaking there is a risk that customers will assert claims for compensation for damages against BayWa AG. At the time of writing, only a handful of isolated claims have been asserted against BayWa, all of which have been refuted by BayWa. No further claims have been asserted or announced so far. It is BayWa's belief that the alleged misconduct did not result in any buyers suffering any financial damages whatsoever.

We assume, supported by the assessment of our legal advisers, that it is extremely unlikely in this context that third parties will successfully assert any material claims against BayWa AG. Therefore, no risk provisions for this matter have been formed on the balance sheet.

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. In general, BayWa ensures that customers retain sovereignty over their data.

Operating risks and opportunities

In energy business, the Renewable Energies business unit is particularly affected by changes in subsidy measures and political frameworks. In this context, positive signals such as ambitious targets as part of the European Commission's "green deal" generally have a positive impact on business prospects. Downturns in business, in contrast, come as a result of decisions such as the US's withdrawl from the Paris climate agreement. These two effects are long-term in nature and do not influence business to a material extent at the current time. The extension to national tax incentives for wind farms in the US are helpful in the short term. The trade conflict between the US and China may also have a negative impact on the availability of system components and price trends. Against the backdrop of mainly country-specific risks, revenue and earnings development is stabilised by means of geographic diversification. Diversification across multiple energy carriers – particularly wind energy and solar energy – reduces risk such as the loss of individual technology providers. Climatic risks (wind, sunshine) also play a role for BayWa's electricity-generating Group companies in the Renewable Energies business unit and in energy trading. Long-term surveys mean that average wind and sunshine are relatively easy to forecast in the medium term on the basis of expert opinions, although both positive and negative deviations can occur at short notice that result in corresponding increases or decreases in revenue. The issue of grid connection is becoming increasingly important in countries such as Spain and Australia and may lead to unscheduled delays to project realisation. These kinds of problems can be avoided if they are taken into account at an early stage during planning.

The Conventional Energy business unit 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, weather conditions and the price trend. In the medium to long term there is a risk that sales will decline as a result of the energy and mobility transition toward carbon-free renewable drive and heating concepts. However, new growth opportunities are also arising as a result of the trend toward e-mobility. Apart from the default risk on trade receivables, these business activities are subject to little risk.

In the Agriculture Segment, changes in the political framework, such as changes to the regulation of markets for individual agricultural products and agricultural inputs, new regulations relating to protecting the environment or tax-related government subsidies of energy carriers, in addition to volatile markets, create risks. At the same time, however, they also open up new prospects and opportunities such as those in the areas of organic product ranges and digital farming. 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. In addition, trade conflicts can also restrict the availability of and sales opportunities for agricultural products. 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 corresponding 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 recording 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 effects 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.

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.

Market risks and 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, fertilizers, 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, fertilizers, electricity, gas or solar components may incur greater risks if there is no matching in the agreements on the buying and selling of merchandise. Furthermore, 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, such as the Risk Board.

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 (five trading days). The value-at-risk calculated as at 31 December 2019 amounted to €3.2 million and indicates that the potential loss from the commodity futures considered will, with a probability of 95%, not exceed €3.2 million within the next five trading days.

On 23 June 2016, UK citizens voted in favour of exiting the EU in a referendum (Brexit). The UK's departure from the EU was resolved effective as at 31 January 2020. The UK and the EU are now set to agree a free trade agreement to take effect after 31 December 2020 in an eleven-month transitional period. 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. The Group's 2019 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 the UK. In the event of a "hard" Brexit without a trade deal, BayWa does not expect there to be any significant negative effects on the Group as a whole, even if restrictions are imposed on free international trade, due to the volume of business in the UK and the Group structure.

At the end of 2019, the first infections with a new type of the coronavirus began to be reported in China. The number of infections in China rose sharply initially since the start of 2020. Despite countermeasures implemented by the Chinese government, the virus has since spread to a large number of countries. If there is a significant rise in the number of new cases over a sustained period of time, this could have significant effects on business development, particularly in the Renewable Energies, Global Produce, Building Materials and Agricultural Equipment business units, on account of the international network of logistic chains and the resulting limited availability of primary materials and products. There is no way of estimating the scale of the negative impacts on the BayWa Group's business activities at the current time. If the spread of the virus cannot be restricted in the first half of 2020, increasing restrictions on supplies are expected in the second half of the year.

Financial risks and opportunities

Within the BayWa Group, financial risks and opportunities are divided into multiple 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 derivative instruments in the form of futures, interest rate caps and swaps. In the financial year 2019, the average interest rate for variable-interest financial liabilities stood at 1.388% (2018: 1.185%).

Credit and counterparty risks and default risks

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 so-called 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. Moreover, 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 managed and monitoring using the SAP Credit Management system, which allocates customers into different risk classes depending on their creditworthiness. The minimum requirements for credit management at the BayWa Group are defined in the Group guidelines on credit management.

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. At the BayWa Group, funds are generated through operations and by borrowing from financial institutions. In addition, financing instruments, such as multicurrency commercial paper programmes or asset-backed securitisation, are used, as are bonded loans. BayWa also issued a green bond for the first time in June 2019. 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, the BayWa Group does not currently have any risk clusters concerning liquidity. The BayWa Group's financing structure, with its mostly matching maturities, ensures that interest-related opportunities are reflected within the Group.

Rating

Thanks to its good credit rating among banks, BayWa was again able to take corresponding financing measures in the reporting year. 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. 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. Such disputes and proceedings can relate to the assertion of claims based on goods and services that are not up to standard, payment disputes or breaches of regulatory or fiscal requirements. 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, stricter 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 divisions (projects and service on the one hand, and trading on the other).

As a result of the financial crisis, the financial market is regulated by a wide range of laws. Derivative markets were a particular focal point of these measures, mainly to limit speculative trading involving commodities, especially in the agricultural sector. 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 also 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 prosecution resulting from violations. Compliance with applicable financial regulatory measures is guaranteed by the use of a Group-wide risk management software program.

Strategic risks and opportunities

Through its strategic 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. BayWa operates primarily 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 parks and wind farms 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. The Group's strategic development also encompasses acquiring companies and financing start-ups. Here there is a risk that the investments made prove to be irrecoverable or only partially recoverable in the medium term compared to original expectations.

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, the 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 further expanding its recruiting activities and by offering its employees extensive training and continuous professional development opportunities. 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, are geared towards creating a positive working environment. At the same time, BayWa AG promotes the ongoing vocational training and development of its employees. With 1,410 trainees at the end of 2019, 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. At 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 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. 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. The IT resources are pooled at a separate subsidiary, BayWa IT GmbH. 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, such as 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. The BayWa Group has set up an internal control system in accordance with the legal standards, the functionality of which is monitored by Internal Audit. External specialists are regularly consulted to perform benchmark analyses and certifications and to introduce optimisation measures. 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 is designed to ensure 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 ensure the regularity and reliability of accounting.

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.

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 four members of the Board of Management with an employment contract with BayWa AG 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 approximately 135% 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 2019 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 that the amount carried in the bonus bank will be paid out provisionally to members of the Board of Management in contractually agreed instalments across three financial years, 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%). 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 all five Board of Management members for the financial year 2019 came to €9.4 million (2018: €7.8 million); of this amount, €3.5 million (2018: €2.1 million) was variable. Contributions amounting to €2.2 million (2018: €2.1 million) were paid in benefits after termination of the employment contract (pensions). An amount of €3.6 million (2018: €3.4 million) was 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 old version of the German Commercial Code (HGB) on 19 May 2015 (Code Item 4.2.4 sentence 3 German Corporate Governance Code 2017). More information concerning other remuneration can be found in the Notes to the Financial Statements and Consolidated Financial Statements.

Remuneration of the Supervisory Board

Since 1 July 2018, the remuneration of the Supervisory Board has been based on the responsibilities and the scope of tasks of the members of the Supervisory Board.

Supervisory Board members receive a fixed annual remuneration of €45,000 payable in four equal amounts after the end of the quarter for the respective quarter. Variable remuneration, as based on dividends or other factors, is not paid.

The Chairman of the Supervisory Board receives three times the amount and the Vice 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.

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 €1.1 million (2018: €0.9 million), of which €0.2 million is variable.

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).

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

Composition of subscribed capital

The subscribed capital of BayWa AG amounted to €90,314,398.72 as at the reporting date and is divided up into 35,279,062 registered shares with an arithmetical portion of €2.56 each in the share capital. Of the shares issued, 33,894,897 are registered shares with restricted transferability and 140,914 recently registered shares with restricted transferability (dividend-bearing employee shares from 1 January 2020 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 €3,422,481.92 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.

The Board of Management has not been further authorised by the Annual General Meeting 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).