

Fundamentals of the KION Group

PROFILE OF THE KION GROUP

Organisational structure

The KION Group is one of the world's leading suppliers of integrated supply chain solutions. Its portfolio encompasses forklift trucks, warehouse technology and supply chain solutions, including the related services. Across more than 100 countries worldwide, the KION Group designs, builds and supports logistics solutions that optimise material and information flow within factories, warehouses and distribution centres. The Group is the largest manufacturer of industrial trucks in Europe, the second-largest producer of industrial trucks globally and based on revenue the leading provider of automation technology.

The Linde and STILL brands serve the premium industrial truck segment. Baoli focuses on industrial trucks at the lower end of the volume segment and in the economy segment. Among KION's regional industrial truck brand companies, Fenwick is the biggest material-handling provider in France and OM Voltas is a leading provider of industrial trucks in India. Dematic is a leading global supplier of integrated automation technology, software and services for optimising supply chains. Around 1.4 million industrial trucks and over 6,000 installed intralogistics systems are deployed by customers in all industries and of all sizes on six continents.

The KION Group comprises the parent company KION GROUP AG, which is a public limited company under German law, and its subsidiaries. The KION Group's strategic management holding company, KION GROUP AG, is listed on the Frankfurt Stock Exchange and is part of the MDAX, the STOXX Europe 600 and the FTSE Euro Mid Cap. Details of treasury shares (pursuant to section 160 (1) no. 2 of the German Stock Corporation Act (AktG)) are provided in note [27] 'Equity' in the notes to the consolidated financial statements.

The parent company of KION GROUP AG is Weichai Power (Luxembourg) Holding S.à r.l., Luxembourg ('Weichai Power'), a subsidiary of Weichai Power Co., Ltd., Weifang, China, which held 45.0 per cent of the shares at the end of 2018 as far as the Company is aware. The free float accounted for 54.9 per cent of the shares, while the remaining 0.1 per cent were treasury shares.

Management and control

Corporate governance

The KION Group follows generally accepted standards of sound, responsible corporate governance. The German Corporate Governance Code (DCGK) provides the framework for management and control. As required by section 289f and section 315d of the German Commercial Code (HGB), the corporate governance standards that the Group applies are set out in the declaration on corporate governance. This declaration also contains the comply-or-explain statement pursuant to section 161 AktG, which was issued by the Executive Board and Supervisory Board of KION GROUP AG on 3/12 December 2018, and the corporate governance report pursuant to section 3.10 of the German Corporate Governance Code, which also provides information about the compliance standards in the Group. The declaration on corporate governance can be viewed and downloaded on the Company's website. It also forms part of this annual report and is a component of the combined management report.

The essential features of the remuneration system are described in the 'Remuneration report' section. The total amounts for Executive Board remuneration and Supervisory Board remuneration are also reported in the notes to the consolidated financial statements (note [46]).

Non-financial declaration

A separately published sustainability report provides detailed information on the sustainable management of the KION Group. It contains the KION Group's non-financial declaration as required under the German law to implement the corporate social responsibility (CSR) directive. The declaration focuses on targets, action steps and due diligence processes relating to the key environmental, social and employee-related aspects of the KION Group's business model, the observation of human rights and the fight against corruption and bribery.

In accordance with the statutory disclosure deadlines defined in section 325 HGB, the KION Group publishes its annual sustainability report (including the non-financial report) by no later than the end of April each year on its website (www.kiongroup.com), where it will remain available for at least ten years.

Executive Board

The Executive Board of KION GROUP AG is responsible for the operational management of the KION Group. In the year under review, the Executive Board was extended from four to five members and the following personnel changes were made:

- Anke Groth was appointed as a member of the Group's Executive Board and as Chief Financial Officer (CFO) for a term of five years beginning 1 June 2018. Ms Groth also assumed the role of Labour Relations Director. She replaced Dr Thomas Toepfer, who had left the Company at his own request on 31 March 2018.
- Susanna Schneeberger was appointed as a member of the Group's Executive Board for a term of five years beginning 1 October 2018. She took on the newly created role of Chief Digital Officer (CDO), assuming strategic responsibility for groupwide activities aimed at digitalisation and networking products and processes as well as operational responsibility for the Supply Chains Solutions segment.
- Dr Eike Böhm was reappointed for a further three years as an Executive Board member and Chief Technology Officer (CTO) of KION GROUP AG. His second term of appointment will commence on 1 August 2019.
- Anke Groth, in her role as Chief Financial Officer (CFO), is in charge of corporate accounting & tax, corporate controlling, corporate finance/M&A, investor relations, financial services, legal affairs and logistics/Urban. As Labour Relations Director, she is further responsible for corporate HR and health, safety & environment.
- Ching Pong Quek, Chief Asia Pacific Officer, heads up the KION APAC Operating Unit and thus the entire Asia business within the Industrial Trucks & Services segment.
- Susanna Schneeberger is responsible for the Dematic Operating Unit in the Supply Chain Solutions segment and – in the role of Chief Digital Officer (CDO) – for the groupwide areas of software development, KION Group IT, data protection, mobile automation and the Digital Campus.

The Group Executive Committee (GEC) advises the Executive Board of KION GROUP AG and provides input from the Operating Units. The committee comprises the Executive Board members as well as the presidents of the five Operating Units.

The Executive Board maintains a relationship of trust with, and is monitored by, the Company's Supervisory Board.

Supervisory Board

The Supervisory Board, which was formed in accordance with the German Codetermination Act (MitbestG), comprises 16 people. It advises the Executive Board in its handling of significant matters and business transactions. To increase the efficiency of its work, the Supervisory Board is supported by four standing committees: the Nomination Committee, the Executive Committee, the Audit Committee and the Mediation Committee.

The shareholder representatives' term of office ends at the Annual General Meeting in 2022. Dr Michael Macht was appointed to the Supervisory Board with effect from 9 October 2018. He succeeds Mr Tan Xuguang, Chairman of the Board of Directors of Weichai Power Co., Ltd., who stepped down on 30 September 2018. Mr Martin Fahrendorf succeeded Mr Denis Heljic as an employee representative with effect from 10 May 2018.

As at 31 December 2018, the responsibilities of the Executive Board members were as follows:

- Gordon Riske, Chief Executive Officer (CEO), is responsible for the LMH EMEA, STILL EMEA and KION Americas Operating Units in the Industrial Trucks & Services segment. He also remains in charge of the following group functions: corporate office, corporate communications, corporate strategy, internal audit, corporate compliance and KION Invest.
- Dr Eike Böhm, in his role as Chief Technology Officer (CTO), has groupwide responsibility for research and development in both the Industrial Trucks & Services and the Supply Chain Solutions segments, including modules & components, and for procurement, quality, the production system and the KION Product Development Optimisation (KPDO) initiative.

Business model and organisational structure

The KION Group's business model is designed so that customers of all sizes and from all kinds of industries can obtain the full spectrum of material handling products and services from a single source. Thanks to its broad technology base, diversified product portfolio and worldwide service network, the KION Group has a comprehensive portfolio of such products and services in the market.

The KION Group's market activities are divided into five Operating Units: LMH EMEA, STILL EMEA, KION APAC, KION Americas and Dematic. LMH EMEA and STILL EMEA each concentrate on Europe, the Middle East and Africa. KION APAC and KION Americas hold cross-brand responsibility for industrial truck business in the Asia-Pacific region and the Americas respectively. Dematic is the global supply chain solutions business. While the Operating Units have full operational and commercial responsibility within their markets, KION GROUP AG is the strategic management holding company and is responsible for the groupwide strategy and groupwide business standards.

For internal management purposes, the KION Group has divided its operating business into two segments that correspond to the segments as required by international financial reporting standards (IFRS 8). The industrial truck business, including the supporting financial services, is shown in the Industrial Trucks & Services segment, while activities focusing on end-to-end solutions make up the Supply Chain Solutions segment. The two operating segments complement each other because they both have a strong market position and regional presence. The Corporate Services segment comprises the other activities and holding functions of the KION Group. These include service companies that provide services such as IT and logistics across all segments.

Industrial Trucks & Services segment

The Industrial Trucks & Services segment encompasses the activities of the international brand companies Linde, STILL and Baoli, the local brand companies Fenwick and OM Voltas plus the financial services business.

Linde is an international premium brand and technology leader that meets customers' most sophisticated requirements regarding

technology, efficiency, functionality and design. In France, Linde products are sold under the Fenwick brand.

STILL is predominantly an international premium provider of trucks with electric and diesel-electric drives. It mainly focuses on the European and Latin American markets.

Baoli is the international brand for the lower end of the volume segment and the economy segment.

OM Voltas is the local brand company for the Indian market, through which the KION India Pvt. Ltd. subsidiary manufactures and sells electric and IC forklift trucks and warehouse trucks.

KION Financial Services (FS) is an internal funding partner for the Industrial Trucks & Services segment, providing finance solutions to support sales. Its activities comprise the financing of long-term leasing business for external customers, the internal financing of the short-term rental business and the related risk management. In the large sales markets with a high volume of financing and leasing, legally independent FS companies handle this business.

So that it can fully cater to the needs of material handling customers worldwide, the business model of the Industrial Trucks & Services segment covers the key steps of the value chain: product development, manufacturing, sales and service, truck rental and used trucks, fleet management and financial services that support the core industrial truck business.

The segment earns just over half of its revenue by selling industrial trucks. The product portfolio includes counterbalance trucks powered by an electric drive or internal combustion engine, warehouse trucks (ride-on and hand-operated) and towing vehicles for industrial applications covering all load ranges. Worldwide research and development activities enable the Industrial Trucks & Services segment to consolidate its technology leadership, which it is extending in the areas of energy-efficient and low-emission drive technologies and automation solutions. In this field, the KION Group operates 16 production facilities for industrial trucks and components in eight countries. So that it can ensure security of supply and the availability of spare parts for important components in order to meet customers' specific requirements, the segment manufactures major components itself – notably lift masts, axles, counterweights and safety equipment. Other components – such as hydraulic components, electronic components, rechargeable batteries, engine components

and industrial tyres – are purchased through the global procurement organisation.

As a rule, industrial trucks are built according to the customer's individual specifications. Networked fleet management solutions and the advantages for customers in terms of total cost of ownership (TCO) support the international Linde and STILL brands' premium positioning. The segment is underpinned by an extensive sales and service network comprising more than 1,600 outlets in over 100 countries and staffed by more than 18,000 service employees. Almost half of them are employed by the KION Group.

The worldwide vehicle fleet, which consisted of around 1.4 million industrial trucks at the end of 2018, provides a stable base for the service business. This business helps to smooth out fluctuations in the segment's revenue, reduces dependency on market cycles and supports new truck sales by maintaining lasting customer relationships. The proportion of service business is continually increasing across all price segments. Extensive services such as software-based fleet management are offered, mainly for premium products. There are also individual orders for repairs and maintenance work as well as for spare parts. The Operating Units also have extensive used truck and rental truck businesses, allowing peaks in capacity requirements to be met and customers to be supported after their leases have expired.

Financial services support new truck business in many markets, forming another pillar of the service business. About half of all new trucks are financed via the KION Group itself or via external banks and financing partners. Offering financial services is therefore part of the truck sales process. A lease contract is generally linked to a service contract throughout the term of the finance agreement.

Supply Chain Solutions segment

Through the Dematic brand, the Supply Chain Solutions segment is a leading global supplier of integrated automation technology, software and services for optimising supply chains.

Manual and automated solutions are provided for all functions along customers' supply chains, from goods inward and multishuttle warehouse systems to picking, automated palletising and automated guided vehicle systems. Picking equipment controlled by radio, voice or light is available for nearly all goods and packaging types, whether it is used for case, individual item, split-case or pallet picking. Automated storage and retrieval systems (ASRS) and compact, powerful split-case and pallet picking stations can be used to achieve very fast throughput times and picking rates. At the same time, cross-docking solutions increase the efficiency of the system as a whole by eliminating the unnecessary handling and storage of goods.

Real-time management of the supply chain solutions is based on the proprietary software platform Dematic iQ, which can be easily integrated into the customer's existing application landscape. By providing real-time material flow data analyses, among other things, Dematic iQ can help with the data-based optimisation of all processes to ensure seamless order processing. It also supports performance management functions for measuring and controlling performance.

The segment is primarily involved in customer-specific, longer-term project business. With global resources, eleven production facilities worldwide and regional teams of experts, Dematic is able to plan and deliver logistics solutions with varying degrees of complexity anywhere in the world.

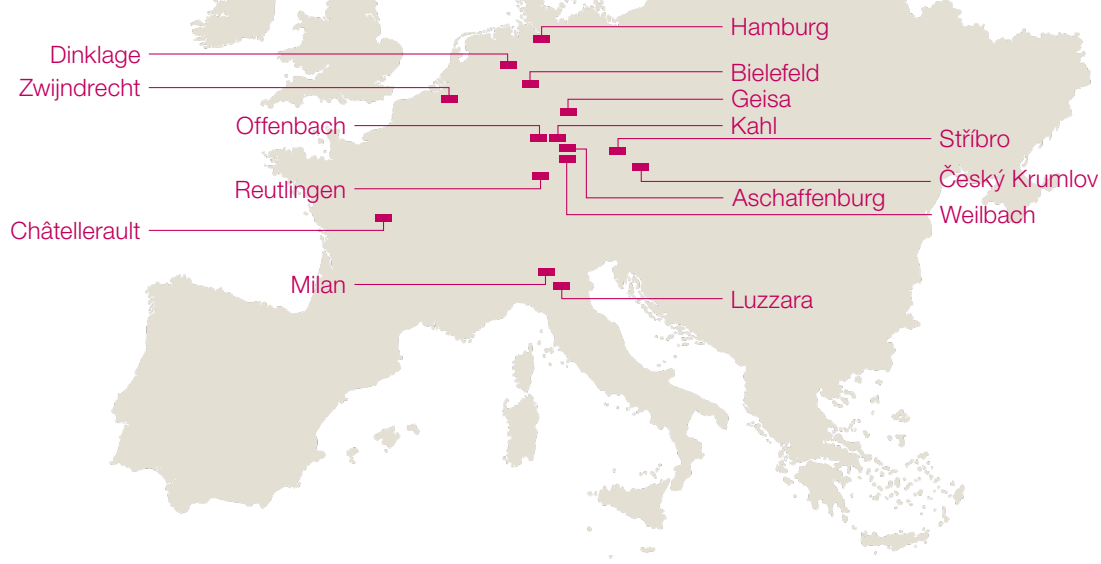
The (new) project business (business solutions) covers every phase of a new installation: analysis of the customer's needs and the general parameters, provision of appropriate advice, computer simulation of bespoke intralogistics solutions in the customer's individual environment, technical planning and design of the system, implementation of the control technology and its integration into the customer's existing IT infrastructure, site and project management, plant monitoring and support for the customer during implementation of the system, including training for the workforce.

The system components, which are specified in detail for each customer project, such as automatic guided vehicles, palletisers, storage and picking equipment including automated storage and retrieval systems, sorters and conveyors, are manufactured inhouse or, in some cases, by quality-assured third parties.

Modernisation work and services (customer services), which usually cover the entire lifetime of an installation, are provided to local customers by approximately 1,400 employees in over 20 countries. The service business benefits from a sizeable installed base of more than 6,000 systems. > **DIAGRAM 003**

Production sites of the KION Group

DIAGRAM 003



Industrial Trucks & Services

Brazil

Indaiatuba / São Paulo: Counterbalance trucks with electric drive or IC engine, warehouse technology

People's Republic of China

Jingjiang: Counterbalance trucks with electric drive or IC engine, warehouse technology

Xiamen: Counterbalance trucks with electric drive or IC engine, heavy trucks, warehouse technology

Germany

Aschaffenburg: Counterbalance trucks with electric drive or IC engine

Dinklage: Component production

Geisa: Component production

Hamburg: Counterbalance trucks with electric drive or IC engine, warehouse technology, components

Kahl: Spare parts center, component production

Reutlingen: Very narrow aisle trucks

Weilbach: Component production

France

Châtellerault: Warehouse technology

India

Pune: Counterbalance trucks with electric drive or IC engine, warehouse technology

Italy

Luzzara: Warehouse technology

Czech Republic

Český Krumlov: Component production

Stříbro: Warehouse technology

United States

Summerville: Counterbalance trucks with electric drive or IC engine, warehouse technology

Supply Chain Solutions

Australia

Sydney: Conveyor and sortation systems, automated guided vehicle systems, system components, and racking

Belgium

Zwijndrecht: Automated guided vehicle systems

People's Republic of China

Suzhou: Conveyor, sortation, storage and retrieval systems

Germany

Bielefeld: Sortation systems

Offenbach: Conveyor, sortation, storage and retrieval systems

Italy

Milan: Sortation systems

Czech Republic

Stříbro: Conveyor systems

Mexico

Monterrey: Conveyor, sortation, storage and retrieval systems, system components

United States

Grand Rapids: Conveyor, sortation, storage and retrieval systems, system components

Holland: Automated guided vehicle systems

Salt Lake City: Conveyor, sortation, storage and retrieval systems, automated guided vehicle systems, system components

Pune

Jingjiang

Suzhou

Xiamen

Sydney

Market and influencing factors

According to the KION Group's estimates, the material handling market – comprising forklift trucks, warehouse technology and supply chain solutions – has expanded at a faster rate than global economic growth over the past five years. The value of the market has increased at an average annual rate of around 6 per cent.

Of the relevant market volume, almost 60 per cent is estimated to be attributable to industrial trucks and related services, which are essential elements in the production and logistics processes of many manufacturers as well as in the wholesale and retail sectors. The remaining market volume is accounted for by supply chain solutions, the growth of which is fuelled in no small part by the increasing automation and digitalisation of production and logistics processes in various industries. The main overarching growth drivers are the advancing interconnectivity of the global economy and additional transport services between ever-more fragmented value chains and supply chains, which necessitate decentralised warehouse and logistics capacity. The strong growth of e-commerce and the increasing prevalence of multichannel approaches in all kinds of industries are boosting capital expenditure on the reconfiguration of supply chains.

Economic conditions in the different regions and the rates of growth in global trade have a major influence on customers' willingness to invest. Historically, new business in the Industrial Trucks & Services segment has shown a very strong correlation with the performance of broad economic indicators, such as industrial output. By contrast, the Supply Chain Solutions segment tends to be less cyclical owing to longer projects that often last several years and due to the stable growth of e-commerce. In both segments, the service business is generally more stable than the product or project business as it is linked to the installed base of trucks and systems over their entire lifetime. The economic situation is also affected by competition levels, exchange rates and changes in commodity prices. Economic trends within individual customer sectors are another important factor.

The most significant of these are manufacturing, the food industry, general merchandise and grocery wholesale and retail, logistics services and pure e-commerce, which has the highest growth rates.

Regulatory frameworks have a major impact on the business model, both in the Industrial Trucks & Services segment and in

the Supply Chain Solutions segment. The products and services of companies in the KION Group have to comply with the specific legal requirements in their respective markets. Compliance with the different requirements has to be verified or certified. Many of the legal requirements are enshrined in product-specific standards and other norms (e.g. EN, ISO and DIN).

Legal requirements also apply to the construction and operation of production facilities, including in relation to air pollution avoidance, noise reduction, waste production & disposal and health & safety. The KION Group fulfils all of these requirements as well as all the legal provisions pertaining to exports and financing business.

Influencing factors in the Industrial Trucks & Services segment

In recent years, the value of the global market for industrial trucks has increased by an average of 5 per cent per year. This is due in equal measure to the growth in the volume of new truck business and the rise in the contribution from the service business compared to the past. Measured in terms of units ordered, 37 per cent of the global market was attributable to IC counterbalance trucks in 2018, while electric forklift trucks accounted for 17 per cent and warehouse technology for 46 per cent. It should be noted that the per-unit price for warehouse technology is considerably lower than for forklift trucks, which is why the breakdown by value shows that trucks clearly dominate. IC trucks continue to make up a comparatively high proportion of the total unit volume in growth regions. However, the strongest growth in the new truck business in recent years has been for forklift trucks and warehouse trucks powered by an electric motor. Much of the additional volume is attributable to the electrification of manual hand pallet trucks, which have been replaced by entry-level trucks in the lower weight categories. Better drive technologies, in particular lithium-ion drives, are also contributing to the above-average growth in electric trucks and equipment. Moreover, driverless transport solutions developed by automating standard warehouse trucks are becoming more and more appealing to customers.

The upper price segment continues to benefit from customers' growing requirements regarding the quality, efficiency and eco-friendliness of industrial trucks and from higher expectations in

terms of service, availability of spare parts and flexible rental solutions. In this segment, customers are much more focused than before on optimising total cost of ownership and, increasingly, on the ability to integrate the trucks into fully automated intralogistics solutions. At the same time, there is mounting competitive pressure worldwide as some manufacturers in the economy segment based in emerging markets are pursuing an international expansion strategy. In mature markets and, increasingly, in growth regions, the large number of trucks in use also provides a strong base for replacement business and rising demand for services.

Influencing factors in the Supply Chain Solutions segment

According to the KION Group's estimates, the market for supply chain solutions has expanded much faster than the market for industrial trucks and services over the past five years owing to growing demand in the main customer industries. Both the project business (business solutions) and downstream services (customer services) contributed to this expansion. The service business benefits from the ever-larger installed base and the trend towards the outsourcing of logistics processes.

The growth of e-commerce has a major influence on demand for supply chain solutions, including warehouse automation and solutions for sorting and for automated goods transport. According to market analysis by the Ecommerce Foundation, global online trading (B2C) expanded at an average rate of around 15 per cent between 2013 and 2017. Increasing complexity, cost pressures and shifting demand patterns require shorter lead times, a more efficient flow of goods, a wider product range and process reliability. This is pushing up demand for decentralised warehouse and logistics capacity that enables faster deliveries and, due to automated processes, keeps down personnel expenses and floor space requirements. The digitalisation and automation of industrial production and supply chains and the multichannel strategies being adopted in traditional industries – e.g. supermarket chains, grocery wholesale and retail, fashion, food and beverage manufacturing, and parcel and courier services – are also contributing to this. At the same time, the focus of technological progress is increasingly shifting towards software and robotics solutions. Interact Analysis forecasts strong growth in the market for automated guided vehicles (AGVs) and autonomous mobile robots (AMRs) over the next five years.

Market position

In 2018, the Industrial Trucks & Services segment achieved a 14.1 per cent share of the global market based on unit sales (2017: 14.4 per cent) and is thus still the second-largest manufacturer of industrial trucks. It remained the market leader in Europe. At the same time, the KION Group is a leading global producer of electric forklift and warehouse trucks. In China, it is still the leading foreign manufacturer and number three overall. The KION Group is also among the leading providers in Brazil and India.

The Supply Chain Solutions segment (Dematic) is the largest manufacturer in the relevant market segment. This is also the case in the fast-growing AGV and AMR segment, where Dematic is the leading vendor, according to Interact Analysis (2017).

STRATEGY OF THE KION GROUP

Objectives of the KION 2027 strategy

In 2018, the KION Group began implementing its updated strategy, KION 2027. It provides guidance on the strategic direction to be taken over the next decade and is aligned with the KION Group's vision: "We are the best company in the world at understanding our customers' material handling needs and providing the right solutions."

Following the integration of Dematic, the KION 2027 strategy's aim is to unlock the potential of the entire Group and place an even greater focus on a shared, customer-centric innovation, sales and brand strategy. The emphasis is on developing and marketing integrated, automated supply chain solutions and mobile automation solutions for customers around the world. In the Industrial Trucks & Services segment, consultancy and project work are increasingly being added to the traditional portfolio of products and services. And in the Supply Chain Solutions segment, the range of solutions for customers is being expanded through partnerships, among other things. The KION 2027 strategy provides the framework for profitable growth in the Group and sets groupwide targets:

- **Growth:** The KION Group aims to grow at a faster rate than the global material handling market by evolving into a solutions provider in both segments.
- **Profitability:** The KION Group wants to retain its position as the most profitable supplier in the industry and improve its EBIT margin so that it is permanently in the double-digit range.
- **Efficient use of capital:** The KION Group is working steadfastly to optimise the return on capital employed (ROCE). Besides increasing earnings, the focus here is on asset management and efficient use of capital.
- **Resilience:** Profitability throughout the various market cycles is to be guaranteed by a robust business model. This will involve greater diversification in terms of regions and customer sectors alongside efforts to expand the service business and further optimise the production network.

Strategic fields of action and measures in 2018

Five fields of action have been defined for the KION 2027 strategy – energy, digital, automation, innovation and performance – for which a wide range of strategic measures were implemented in 2018:

Energy

In the material handling market, the KION Group wants to lead the way in terms of efficient energy use by its products and solutions. Thanks in no small part to the high energy-efficiency of its premium brands' products, the KION Group has become a global market leader for electric forklift trucks and warehouse trucks. A focus of the strategy is to develop and commercialise new energy sources for industrial trucks and related services, such as the provision of advice on energy matters.

Several measures enabled the KION Group to move a step closer to its objective in 2018. Energy-efficient lithium-ion batteries, which offer a number of benefits including shorter charging times, lower operating costs and greater range and availability, are now an option for the entire Linde and STILL fleet. The RX 20 electric forklift truck made by STILL won the International Intralogistics and Forklift Truck of the Year award in the Counter Balanced Truck category (see 'Research and development'). Furthermore, Linde's new rental concept is encouraging the use of energy-saving drive technology in intralogistics. The benefits for customers are flexibility and financial security over the entire usage period. Through its strategic partnership with EP Equipment, Co., Ltd., Hangzhou, a leading Chinese manufacturer of warehouse trucks, the KION Group improved its market position in the entry-level segment for lightweight warehouse trucks. It will also drive forward electrification based on lithium-ion technology in this segment. The KION Group is also a leader in fuel-cell technology, as evidenced by a rising number of customer orders.

Digital

The KION Group is aligning its business with an increasingly digital world. The digitalisation of customer solutions, which will even include fully automated warehouses incorporating robotics solutions, will be accompanied by the digitalisation of internal processes. Digital solutions will be developed for customers to improve the efficiency of their intralogistics. The KION Group will digitalise its inhouse processes so that they are more effective. It will not only integrate software into solutions but also increasingly market it to customers as a separate product. New internal organisational structures will enable the KION Group to cater to the high expectations regarding the speed at which solutions are created and adapted. This will pave the way for agile development and embed it across the KION Group.

The important role that digitalisation plays was recognised with the creation of a fifth Executive Board role in 2018. Susanna Schneeberger has operational responsibility for the Supply Chain Solutions segment (Dematic) and, as Chief Digital Officer (CDO), coordinates the further development of the IT systems and manages the groupwide activities aimed at digitalisation and networking products and processes. The new KION Digital Campus, established in early 2018 as an agile innovation laboratory for new digital solutions and business models, is an example of the speed of digital change within the KION Group. The laboratory instructs teams in agile work methods and software developers help them to rapidly create minimum viable products for initial use in test phases. The first solutions developed in the Campus include a chatbot app for service technicians and an application for data-based fleet optimisation.

Automation

The KION Group's solutions will enable customers to use automated technologies effectively and will help them to achieve a 'lights-out' warehouse. Today, the KION Group and its two segments cover the complete spectrum, from customers with just one forklift truck to those with fully automated large-scale warehouses. It will continue to develop different solutions so that it can offer all customers a scalable automation solution that is suited to their particular requirements and to which extra components can be added.

Building on its leading position in the AGV and AMR segment, Dematic improved its range of automated guided vehicle systems significantly last year. Dematic's new robotics centre of excellence, which focuses on developing and implementing robot-based automation, delivered the first market-ready product in July. The new robotic piece picking module completes the automation of order processing and increases throughput.

The Dematic iQ software, which enables real-time management of material flow solutions, was expanded with the cloud-based asset performance management system Dematic iQ InSights. This new module increases warehouse efficiency through end-to-end facilities management. Linde and STILL have also extended their digital offerings, in particular for fleet management.

Innovation

The KION Group is driving innovation in the material handling market with an effective innovation ecosystem and cutting-edge, rapid development processes. It is developing new technologies into innovative products for use in both segments. To this end, it enters into strategic partnerships with research institutes, universities and innovative companies so that it can go to market quickly with new products and solutions.

In addition to the investment in the KION Digital Campus, a further example in 2018 was the integration and refinement of the offering of Comnovo, a start-up acquired in 2017. Comnovo has developed Safety Guard, an assistance system that uses ultra-wideband technology to increase safety in Logistics 4.0. The assistance system now plays an important role in delivering Linde's VISION ZERO, an advisory and training package designed to increase productivity and prevent accidents at work. The KION Group also expanded its collaboration with external research institutes and scientists, for example as part of QBIIK, a joint research and development project between STILL and the Federal Ministry for Economic Affairs and Energy aimed at improving self-learning autonomous truck technology. KION Invest is a newly established unit that works with start-ups to drive forward new technologies and innovative business models that will benefit KION Group customers in the future.

Performance

The KION Group is continually improving internal efficiency, optimising the performance of its products from a customer perspective and fully leveraging synergies.

In 2018, the KION Group continued its efficiency drive at European production sites in the Industrial Trucks & Services segment. The new and largely automated powder painting plant came online at the Linde site in Aschaffenburg during the first quarter of 2018. A new logistics centre at the STILL site in Hamburg serves as the hub for internal logistics, including the storage and dispatch of large truck parts. Dematic is now able to serve customers in the European market even better thanks to its new factory in Stříbro in the Czech Republic, which commenced operations in the first quarter of 2018. It produces modules for multishuttles and modular conveyor systems.

Efforts were also focused on even more efficient product development based on a global, modular platform strategy that allows for localisation with minimal effort. The diesel trucks developed in the Chinese research and development centre, for example, are also available on the North American market through local supply chains. The offering for the US market comprises three warehouse trucks and a new diesel truck with a load capacity of four to five tonnes.

MANAGEMENT SYSTEM

Core key performance indicators

The KION Group's strategy, which centres on value and growth, is reflected in how the Company is managed. It uses five core key performance indicators (KPIs), which remained unchanged in the reporting year, to continuously monitor market success, profitability, financial strength and liquidity. The performance targets of the Group and the segments are based on selected financial KPIs, as is the performance-based remuneration paid to managers. The KPIs used to manage the segments are order intake, revenue and adjusted EBIT. As a rule, the KPIs are measured and made available to the Executive Board in a comprehensive report each month. This enables the management team to take prompt corrective action in the event of variances compared with target figures. > TABLE 004

Key performance indicators

TABLE 004

in € million	2018	2017*
Order intake	8,656.7	7,979.1
Revenue	7,995.7	7,598.1
Adjusted EBIT**	789.9	777.3
Free cash flow	519.9	474.3
ROCE	9.3%	9.3%

* Key figures for 2017 were restated due to the initial application of IFRS 15 and IFRS 16

** Adjusted for PPA items and non-recurring items

KPIs related to business volume

Order intake and revenue

Order intake and revenue are broken down by segment, region and product category in the KION Group's management reporting so that growth drivers and pertinent trends can be identified and analysed at an early stage. Order intake is a leading indicator for revenue. The length of time between receipt and invoicing of an order varies between business units and product categories.

Earnings-related KPI

Adjusted EBIT

The key figure used for operational management and analysis of the KION Group's financial performance is adjusted earnings before interest and tax (EBIT). It is calculated in the same way as EBIT, except that it does not take account of purchase price allocation effects or any non-recurring items.

Liquidity-related KPI

Free cash flow

Free cash flow is the main KPI for managing liquidity and financing activities. It is determined by the KION Group's operating activities and investing activities. Carefully targeted management of working capital and the controlling of capital expenditure are important tools in generating free cash flow. Free cash flow does not include interest arising from financing activities.

Profitability-related KPI

ROCE

Return on capital employed (ROCE) is another core KPI. It is the ratio of adjusted EBIT to capital employed. ROCE is measured annually. > TABLE 005

Return on capital employed (ROCE)

TABLE 005

in € million	2018	2017*
Total assets	12,968.8	12,337.7
- less selected assets ¹	-1,730.4	-1,547.9
- less selected liabilities ²	-2,708.0	-2,413.3
Capital employed	8,530.3	8,376.5
Adjusted EBIT	789.9	777.3
ROCE	9.3%	9.3%

¹ Lease receivables, income tax receivables, cash and cash equivalents, PPA items and several items of other financial assets respectively other assets

² Sundry other provisions, trade payables, a major part of other liabilities as well as several items of other financial liabilities

* Key figures for 2017 were restated due to the initial application of IFRS 15 and IFRS 16

Other key performance indicators

Besides the aforementioned core KPIs, the KION Group uses a wealth of additional financial KPIs. The main one is the adjusted EBIT margin, which is besides ROCE a relevant component of remuneration and is also a target in the KION 2027 strategy. There are also non-financial KPIs, which primarily relate to customers, employees, sustainability and technology. Some of them are used operationally as leading indicators for the financial KPIs.