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CONSOLIDATED MANAGEMENT REPORT

Fundamental information about the group

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Krones at a glance

Business model, business areas and organisational structure

Krones offers machinery and systems for bottling and packaging and for beverage production. Innovative digitalisation and intralogistics solutions round out our portfolio. Krones' customers include breweries, beverage producers, and companies from the food, chemical, pharmaceutical, and cosmetic industries. Services are an important part of Krones' business model. The company maintains service centres and offices around the world.

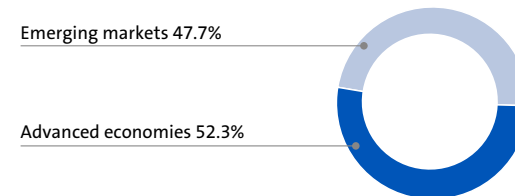
Krones reports on two segments: **Machines and Lines for Product Filling and Decoration** and **Machines and Lines for Beverage Production/Process Technology**. The former Machines and Lines for the Compact Class segment, which was reported on separately until 2017, was made part of Krones' core segment **Machines and Lines for Product Filling and Decoration** with effect from 1 January 2018.

Major markets and competitive position

Customers in the beverage industry account for most of Krones' revenue. The remaining revenue comes from business in non-beverage sectors (food, dairy, chemicals, pharmaceuticals and cosmetics).

Krones is heavily export-oriented, generating 90% of consolidated revenue outside Germany. The regional breakdown of revenue is well balanced overall. In the reporting period, Krones generated 52.3% of its revenue in industrialised countries and 47.7% in the rapidly growing emerging markets.

Krones group share of consolidated revenue 2021



Apart from a few large companies that are part of a corporate group, Krones competes with a number of companies that offer only individual bottling and packaging products. Most of our main competitors are based in the euro area. Chinese manufacturers primarily compete against Krones for orders on their home market.

Backed by our global service portfolio, which enables us to provide fast service to customers on-site, Krones is well positioned in the competitive arena as a full-service provider.

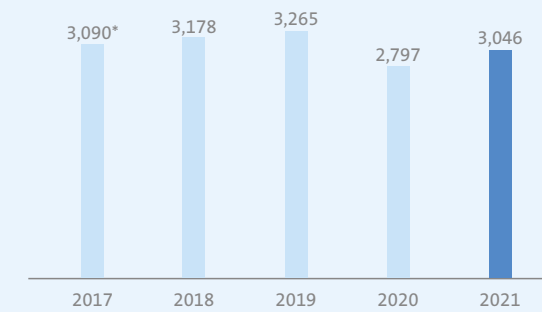


This is by far Krones' largest segment. It offers machines and lines for filling, labelling, packaging, and conveying products. Machines and lines for producing PET containers and converting used plastic bottles into food-grade recycled material (PET recycling systems) are also part of this segment.

- Product treatment technology
- Labelling technology
- Inspection technology
- Filling technology
- Cleaning technology
- Plastics technology
- Packing and palletising technology
- Conveyor technology

See also Segment report, pages 94 and 141.

Revenue (€ million)



* incl. Machines and Lines for the Compact Class

	2021	2020
EBITDA (€ million)	283.2	171.5
EBITDA margin (%)	9.3	6.1

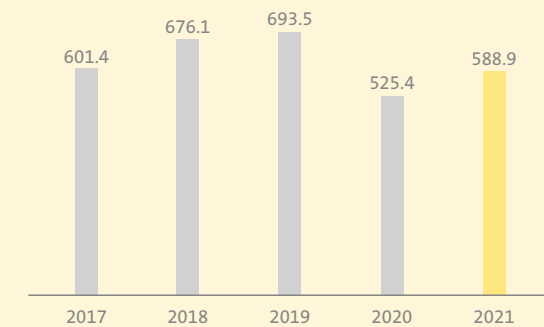


This Krones segment supplies customers with machines and lines for producing and processing beer, soft drinks, fruit juices, milk and dairy drinks. Beverage Production/Process Technology also includes the intralogistics business under subsidiary System Logistics together with Evoguard brand components.

- Brewhouse and filtration technology
- Information technology
- Intralogistics

See also Segment report, pages 96 and 141.

Revenue (€ million)



	2021	2020
EBITDA (€ million)	29.4	-38.3
EBITDA margin (%)	5.0	-7.3



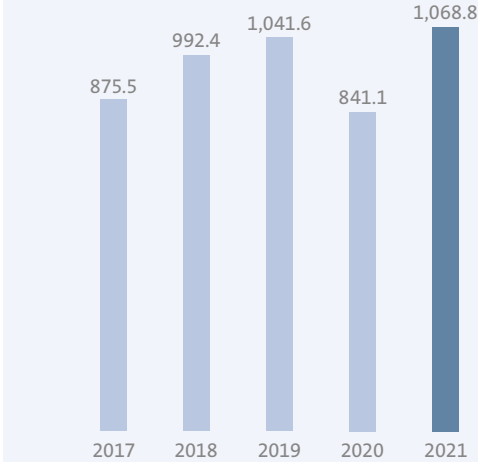
First quarter 2021

Customer orders at Krones were significantly higher in the first quarter than the previous year's figure, which was affected by the pandemic. Order intake rose by 27.1% to €1,068.8 million. Revenue, on the other hand, decreased by 7.2% to €874.6 million. Due to the success of structural measures adopted by Krones, the shortfall in earnings was limited despite the lower revenue. EBITDA went down from €89.5 million in the previous year to €76.5 million.

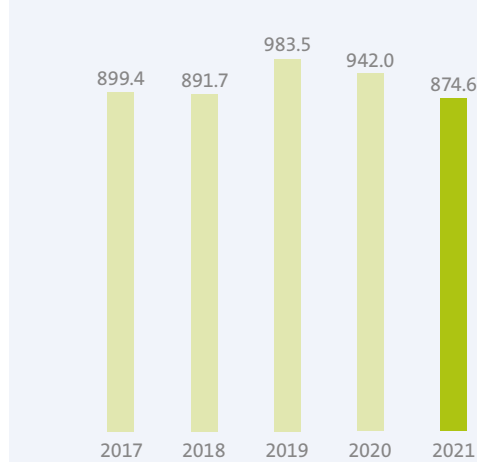
In the Non-financial Report 2020 published in March, Krones presented in detail the new targets for the company's sustainable development through to 2030. Krones has set sustainability targets for the five core areas of ethics, employees, market, environment and society. Particularly notable targets are those for product sustainability and for reducing CO₂ emissions.

The stock markets continued their upward trend. This was mainly driven by the persistently low interest rates and the hope that the coronavirus crisis would soon come to an end. The Krones share price also rose during the quarter, in some cases sharply. It reached its high point at €78.35 on 16 February. Profit taking and a general correction on the stock markets subsequently brought down the share price. At the end of March, Krones shares stood at €69.20, up 4.8% on the beginning of the year.

Order intake **Q1**
(€ million)



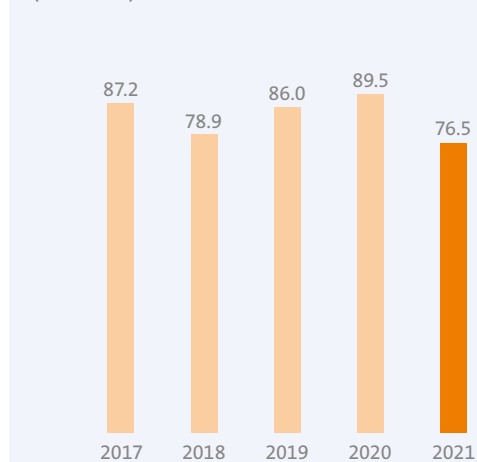
Revenue **Q1**
(€ million)



Share price **31 March**
(€)



EBITDA **Q1**
(€ million)





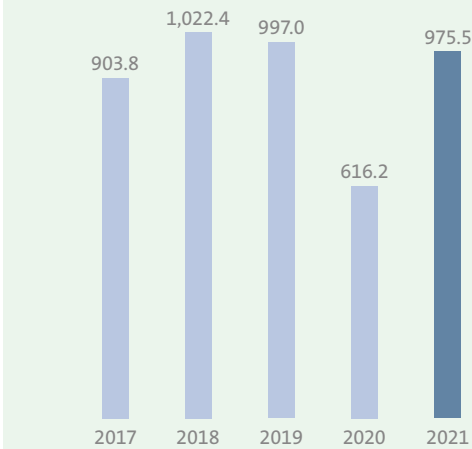
Second quarter 2021

The Krones Annual General Meeting (AGM) was held in Neutraubling on 17 May. As in the previous year, it took place as a virtual meeting due to the Covid-19 pandemic. AGM attendance – the proportion of the company’s share capital represented at the online general meeting – was about 80%. All agenda items submitted for voting were adopted by shareholders with a large majority.

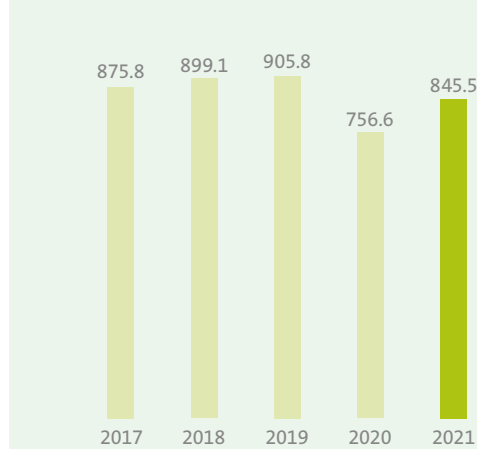
Krones’ business further recovered in the second quarter. Order intake was up 58.3% year on year, to €975.5 million. In terms of revenue, we were able to catch up the shortfall from the first quarter. Revenue from April to June increased by 11.7% year on year to €845.5 million. EBITDA improved from the previous year’s figure of €29.0 million, which was heavily affected by the pandemic, to €61.2 million.

This upward movement in the Krones share price accelerated during the second quarter. Our shares primarily benefited from the business recovery. Many analysts upgraded their price targets for Krones shares due to the good fundamentals. At the end of June, our share price stood at €75.35. This marked a 14.1% increase on the beginning of the year. The SDAX, of which Krones shares are a component, went up by only 8.5% in the same period.

Order intake Q2
(€ million)



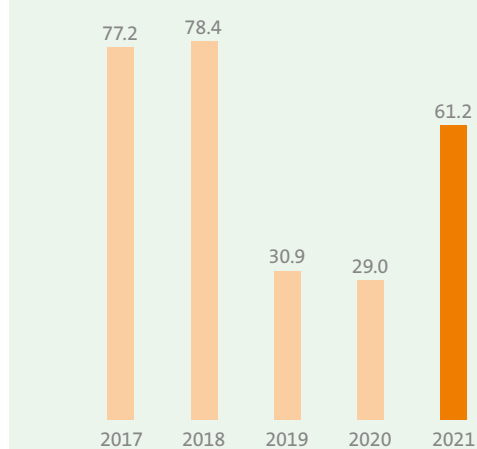
Revenue Q2
(€ million)



Share price 30 June
(€)



EBITDA Q2
(€ million)





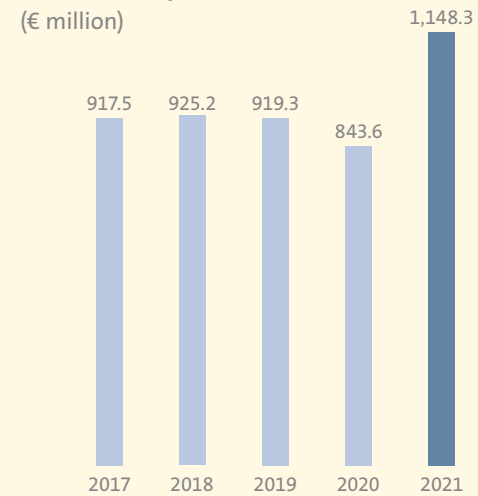
Third quarter 2021

Between July and September, Krones recorded strong year-on-year growth in all financial key performance indicators. Order intake grew 36.1% to €1,148.3 million. Revenue went up by 23.0% to €922.9 million. At €74.9 million, EBITDA was 160.1% higher in the third quarter than in the prior-year period. Over the first three quarters, Krones generated free cash flow of €107.5 million (previous year: –€58.4 million). Based on the positive overall first-half trend, Krones raised its full-year guidance for 2021.

Digitalisation is a key strategic issue for Krones. According to the findings of a study compiled by strategy and management consultancy Infront Consulting in collaboration with Capital, the business magazine, Krones is among the champions of the digital transformation. The study covered a total of 127 major companies from eight industries. Krones took second place in the mechanical engineering category.

The Krones share price peaked in the third quarter at €90.80. In the second half of September, the share price was then affected by the general market weakness triggered by worries about Chinese real estate developers. Overall, however, the Krones share price performed significantly better than the market. With a price of €84.55 as of 30 September, our shares were up 28.0% on the beginning of the year. The SDAX rose by just 11.8%.

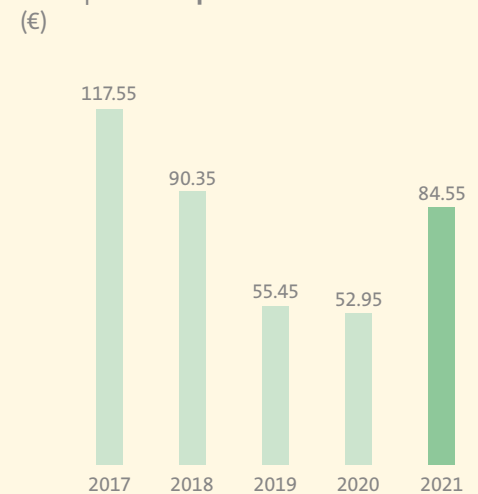
Order intake Q3
(€ million)



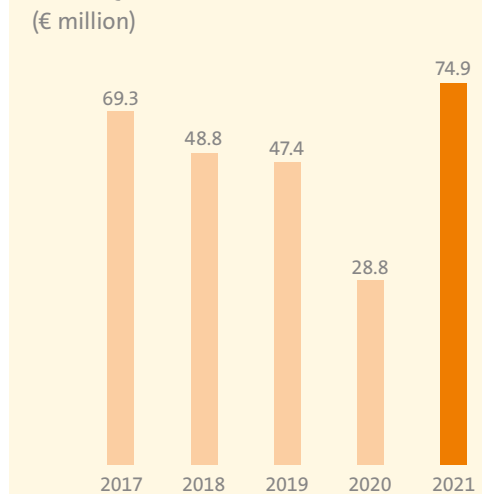
Revenue Q3
(€ million)



Share price 30 September
(€)



EBITDA Q3
(€ million)



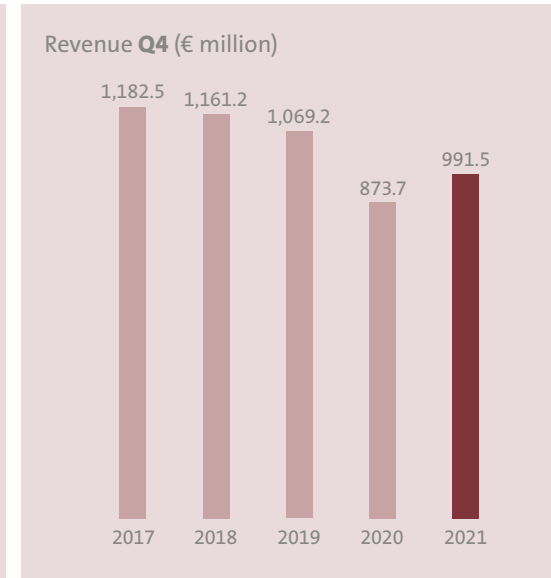
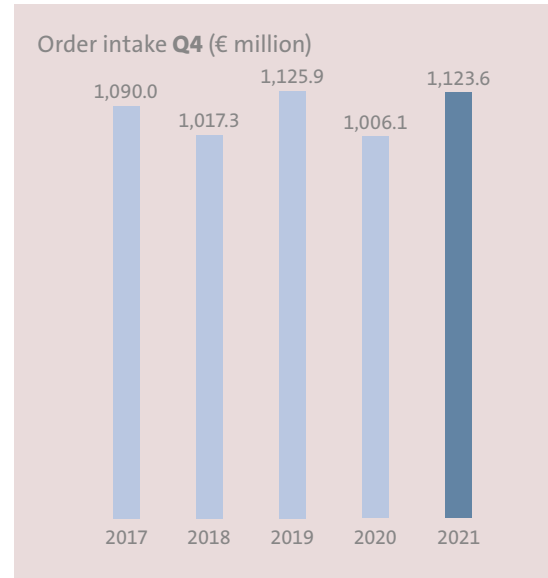


Fourth quarter 2021

Demand continued to increase dynamically in the fourth quarter. Order intake exceeded the previous year's figure by 11.7% and rose to €1,123.6 million. Revenue between October and December increased 13.5% year-on-year to €991.5 million. In addition to the operational improvement in profitability, the fourth-quarter results also reflect positive one-off effects. In total, Krones generated EBITDA of €100.0 million (previous year: €-14.1 million).

Krones held its annual Capital Markets Day on 16 November. This took place in virtual form due to the Covid situation. Executive Board members Christoph Klenk, Norbert Broger and Markus Tischer informed analysts and investors in detail about key strategic topics at Krones, including digitalisation and sustainability. The company also published its new medium-term targets at the Capital Markets Day event.

Following the publication of the nine-month figures on 5 November, the Krones share price reached its high for the year at €99.60. After our Capital Market Day, several banks raised their price targets for our shares to in excess of €100. The positive assessment by analysts and investors ensured that Krones' shares significantly outperformed all major stock indices through to the end of the year, closing at €95.90 for a 45.2% annual gain.





Systems and Lifecycle Service – **performance matters**

Krones delivers turnkey plants to the beverage and liquid food industry. We use our knowhow and our line expertise to keep down customers' investment and operating costs. Just as important, we enable our customers to produce reliably and at high quality.

We deliver all of the machines and lines needed for producing, filling and packaging beverages. Furthermore, we provide complete logistics systems, supply and disposal systems and custom IT and digitalisation solutions that manage and optimise all production processes.

Our lifecycle service (LCS) experts additionally support customers with excellent, 24/7 after-sales service and advice. In this way, we ensure that beverage producers are able to maintain top production performance. The Krones LCS teams work together with customers to find solutions for efficient, secure, reliable and cost-effective production. They also provide expert consulting on maintenance and retrofitting – as Partners for Performance. The digital services provided by Krones that are accessible to customers on the Krones.world portal play an increasingly important role in further improving overall line efficiency.

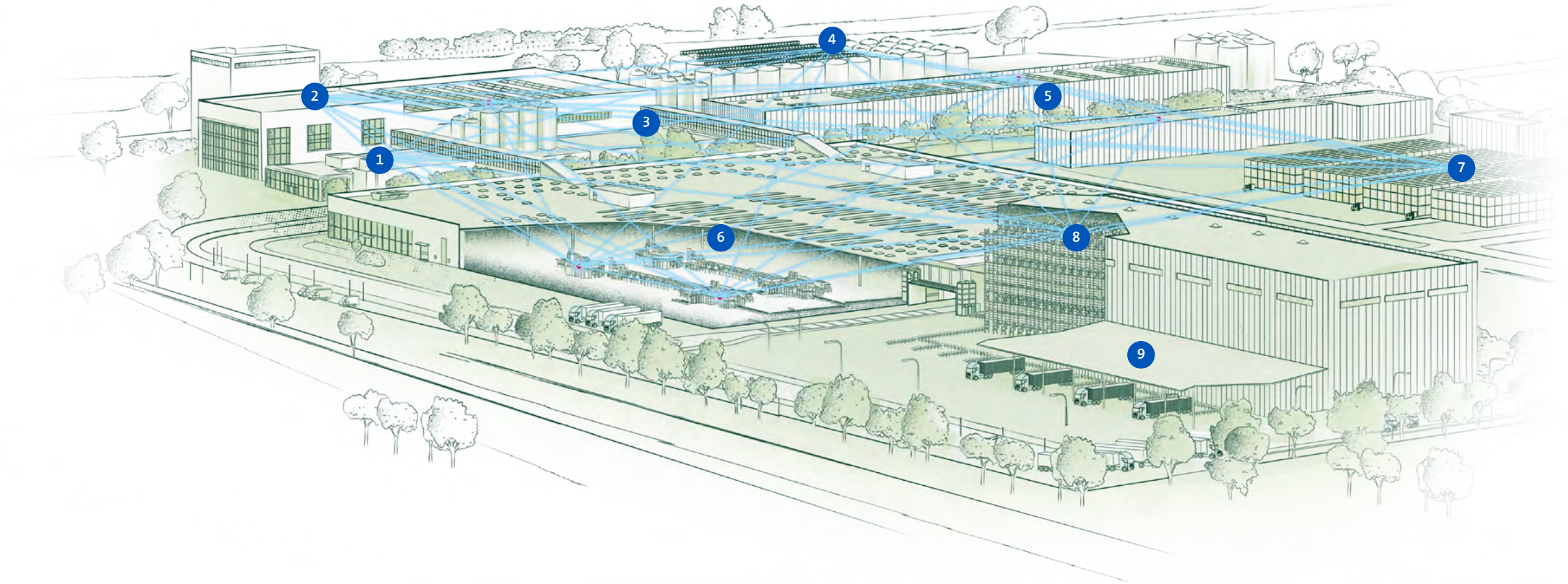
The two illustrations of a complete beverage plant and of a filling and packaging line provide a brief overview of our portfolio.



Partner for
Performance



Brewery: Krones supplies the complete beverage plant



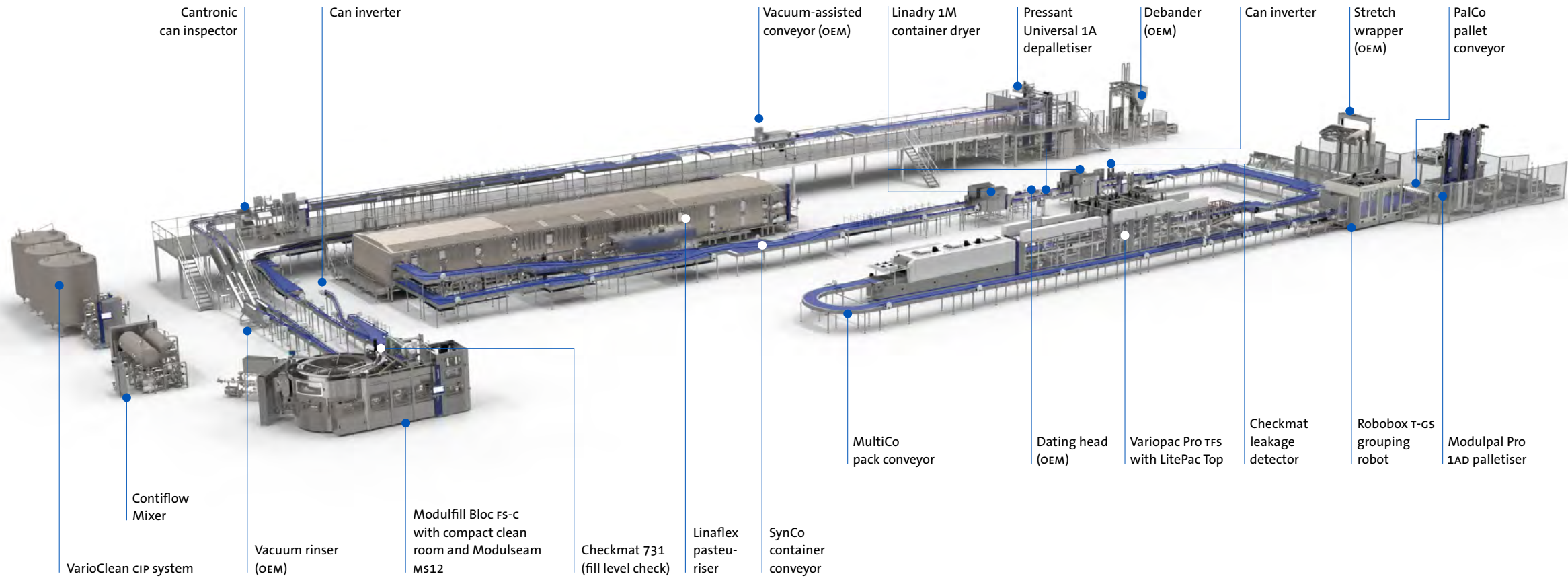
- 1 Administration and visitors
- 2 Brewhouse
- 3 Cellar

- 4 Fermentation and storage cellar, tank farm
- 5 Utilities
- 6 Bottling and packaging area

- 7 Empties warehouse
- 8 High-bay warehouse
- 9 Dispatch



Filling and packaging line for canned beer



Cantronic can inspector

Can inverter

Vacuum-assisted conveyor (oEM)

Linadry 1M container dryer

Pressant Universal 1A depalletiser

Debander (oEM)

Can inverter

Stretch wrapper (oEM)

PalCo pallet conveyor

Contiflow Mixer

VarioClean CIP system

Vacuum rinser (oEM)

Modulfill Bloc FS-C with compact clean room and Modulseam MS12

Checkmat 731 (fill level check)

Linaflex pasteuriser

SynCo container conveyor

MultiCo pack conveyor

Dating head (oEM)

Variopac Pro TFS with LitePac Top

Checkmat leakage detector

Robobox T-GS grouping robot

Modulpal Pro 1AD palletiser



Strategy and management system



“Krones is emerging from the coronavirus crisis even stronger than before. We are making good progress in continuously improving Krones’ competitiveness and future readiness.”

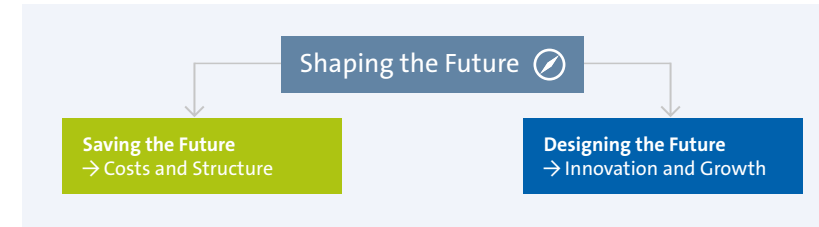
*Christoph Klenk
CEO*

Krones has come through the Covid-19 pandemic comparatively well so far. The company quickly adapted its strategy to the new realities. However, this does not mean at all that Krones is returning to business as usual. Our markets, and the increasingly volatile global economy, present us almost every day with new challenges, and also new opportunities.

One real challenge relates to the difficult situation on procurement markets. Viewed globally, the Covid-19 pandemic is also far from being over. On the other hand, our markets present opportunities with regard to digitalisation and sustainability.

To ensure the most successful possible future for Krones, the company will master two key challenges. First, in order to secure its future, Krones must have the best possible organisational and cost structure.

This is not a once-only change, but an ongoing process that demands great energy and discipline from the whole workforce. Second, we will make use of future growth opportunities in our attractive market to shape a successful future for our company. Innovations are an important part of this.



Improving cost structure is an ongoing task

The cost-reduction measures launched in past years are taking effect. Among other things, the workforce reduction decided in 2019 and 2020 was completed in the reporting year. This necessary capacity adjustment will be reflected in the full-year figures for the first time in 2022. In addition, we will continue to simplify structures and processes throughout the Group and to optimise production costs. We still see further scope for savings in project execution, adapting the product portfolio and optimising the degree of value added in-house. By systematically implementing these changes, Krones will make costs more flexible and be able to respond better to future fluctuations in demand.

A further important focus is expanding our global value chain. This allows us to better use regional resources and makes us less vulnerable to protectionist trade restrictions. We are also gaining significant cost advantages by establishing regional production sites and supply chains in Hungary and China. Producing at our Debrecen site in Hungary will save us around €20 million per year by 2024.



Digitalisation and sustainability established as new megatrends

One lesson learned from the coronavirus crisis is that Krones' markets show stable growth over the medium and long term. They soon recover from temporary setbacks, as in 2020. This is due to long-term megatrends: global population growth continues, the middle class in emerging economies will keep on growing and urbanisation will continue.

Issues around digitalisation and sustainability have gained massively in importance among our customers in recent years. They have become established as new megatrends and will additionally drive the medium and long-term growth of the filling and packaging market.

Pandemic an added boost to digitalisation

Digitalisation was already an important focus for Krones and our customers long before the Covid-19 pandemic. However, travel restrictions during the pandemic made the benefits of digitalisation even more obvious, especially in services and when bringing newly installed machinery into operation. This is why the digitalisation of beverage plants is no longer just a vision, but is already delivering significant added value for plant operators today.

We are only at the early stages of digitalisation in the beverage and packaging industry. But that makes it all the more important for Krones, with the Krones world platform, to take a leading position in this area as elsewhere. In Krones world, we have brought together all digital products services on a single platform. This lets customers access all digital Krones products that are relevant to them with a single login across different devices.

Line expertise the basis for new business models

Filling and packaging lines are made up of many individual machines and systems. Krones has profound expertise regarding interoperation between the individual components. This line expertise also provides the foundation for exploiting the opportunities of digitalisation and for developing new business models.

Line expertise is the basis for the value-added digital beverage plant.

Krones aims no longer to be solely the maker of machines, equipment and spare parts, but to service and manage customers' entire lines on the basis of service agreements. This allows Krones to generate more revenue from recurring business. Other positive effects of the digital service model are that the business has lower volatility and greater scalability.

Krones supports customers in their carbon footprint and sustainability

Reducing carbon emissions and resource consumption is high on the agenda for almost all Krones customers. They also expect their suppliers to contribute in this regard – including Krones. This is why we launched our TÜV-certified environmental sustainability program as long ago as 2008. The resulting improvements in the energy efficiency of our products have already led to significant resource savings for our customers over many years.

Krones will further extend its role with regard to sustainability. To this end, it has set the goal of ensuring that Krones machines and lines reduce resource consumption for customers by a further 25% between 2020 and 2030. Krones aims to reduce its own carbon emissions even more significantly – by 80% – during the same period.



Krones focuses in the core segment on all three major container types: PET, glass and cans

Sales of the various packaging materials vary with consumer trends. Interest in PET bottles has increased again since the coronavirus crisis, for example, after a fall in demand for PET in 2019 due to the plastics debate – most of all in Western Europe. Since the pandemic, more drinks are consumed at home and less in bars and restaurants. That has significantly boosted purchases of canned beer and carbonated beverages. We will further extend our strong market position in can lines. But glass, too, remains the second most widely used packaging material after PET, is versatile and refillable, and continues to be highly popular among consumers.

To absorb fluctuation between the three major packaging materials – PET, glass and cans – Krones provides complete filling and packaging lines for all three. Krones will also continue to invest in the development of innovative products for all three types of packaging in order to maintain its technological edge.

Sensitive products add to growth in process technology

In the Beverage Production/Process Technology segment, Krones focuses not only on beer and soft drinks, but also on sensitive products such as milk and juices. Producing and storing these products requires the highest standards of product safety and product quality. Krones is further expanding the product range in this high-end sector.

An additional, increasing focus in this segment is on the production of alternative proteins. These will contribute significantly to climate change mitigation. Alternative proteins substantially reduce carbon emissions relative to the consumption of conventional meat. With its process technology solutions, Krones intends to play an important role in this still young but rapidly growing field.

Intralogistics making above-average contribution to growth and is a separate segment from 2022

Intralogistics subsidiary System Logistics has become an important pillar in the Krones portfolio. It already generated almost half of segment revenue in the Process Technology/Beverage Production segment in the reporting years and is expected to continue growing at an above-average rate in the coming years. Krones reports Intralogistics as a separate, third segment from 2022 due to its size and for added transparency.

System Logistics benefits from strong market growth in logistics and e-commerce. In addition, Krones plans to further expand its intralogistics operations in the Asia-Pacific region and in India. Efforts to develop the US market will be stepped up through our established sites in the USA and Mexico.

To achieve its growth targets in the USA and further improve profitability, Krones will expand capacity in software and project management and shorten project lead times.



Recycling PET to cut plastic waste

As well as addressing climate change, Krones also helps combat another urgent problem facing humanity: reducing plastic waste. Here, the company is working on a resource-efficient material cycle for PET. This ranges from material-saving packaging design and low-energy container production to the recycling of used plastics. This centres on high-quality recycling of returned PET bottles in order to reuse the material in production.

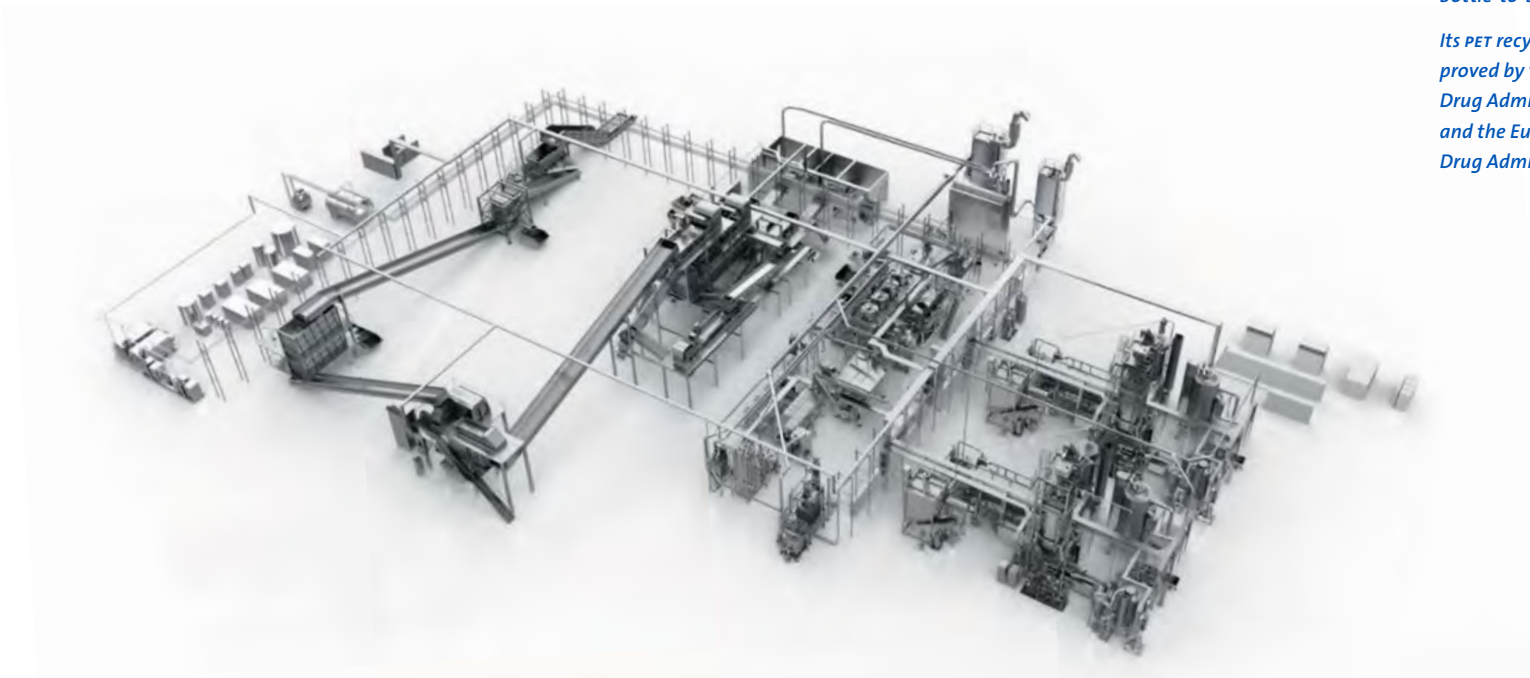
With its various Metapure lines, Krones has already provided high-end recycling solutions for true bottle-to-bottle recycling for many years. Many major customers will significantly increase the proportion of recycled PET (rPET) in their bottles – in some cases by 50% or more – by 2025. Krones has all major

core technologies needed to produce new PET bottles from used PET bottles in what is called bottle-to-bottle recycling.

Although rPET is chemically identical to virgin PET, there are differences in processing. Krones supports customers in refitting their production lines for the circular economy. All new Krones PET filling lines are already able to process up to 100% rPET with the same quality and efficiency.

Due to the rising demand, PET recycling will become increasingly important for Krones in the years ahead. By 2023, some 20% of plastic bottles produced on newly sold Krones lines could be recycled by Krones recycling systems. In the reporting year, this figure stood at around 10%. The long-term target is to get as close as possible to 100%.

Krones one-stop-shop solution for PET recycling lines



Krones provides food-grade PET recycling solutions for bottle-to-bottle recycling.

Its PET recycling lines are approved by the U.S. Food and Drug Administration (FDA) and the European Food and Drug Administration (EFSA).



Growth through further internationalisation

Employees in the emerging markets 2017–2021

Year	South America	Africa	Asia-Pazific	Eastern Europe	China	Total
2017	581	393	734	398	608	2,714
2018	637	452	830	507	716	3,142
2019	782	671	1.009	933	792	4,187
2020	778	639	974	922	742	4,055
2021	803	633	959	1.006	732	4,133

Krones has long sold most machines and lines internationally and some 40% of the workforce are now employed in locations outside of Germany. Further internationalisation nevertheless remains a significant growth driver in both segments. The Covid-19 pandemic and the resulting travel restrictions have highlighted the benefits of Krones' global footprint. Long before that, however, growing protectionism in various parts of the world already provided sufficient reason to develop global production, sales and service locations.

The focus is on the emerging markets, and primarily the Asia-Pacific and Africa regions. These will develop well above average, mainly because of the rapidly growing middle class. Krones will expand its existing operations in these regions. This will make the Krones service network more tightly meshed than ever, and closer than ever to our customers. And that enables us to address customers' needs quickly and directly. The company once again increased the size of its emerging markets workforce during the reporting period following a slight decline in 2020 due to the coronavirus crisis.

Higher selling prices to offset rising material costs

The significant demand growth in the reporting year meant that selling prices recovered from the low level of the 2020 pandemic year. Krones was also able to push through the price rises announced in August 2021. This largely offset the higher purchase prices for materials. Despite continued intensive competition, Krones sees itself in a good position to pass on rising material and labour costs to customers.

Innovation secures the company's future growth

Attractive and innovative products and services are a fundamental requirement for lasting improvements in price quality. They provide clear and measurable added value. The greater the benefit for customers, the more willing they are to accept higher prices. Sustainability and digitalisation especially hold major potential for adding value. We showcase a small selection of our innovations from the reporting period on pages 62 to 70.



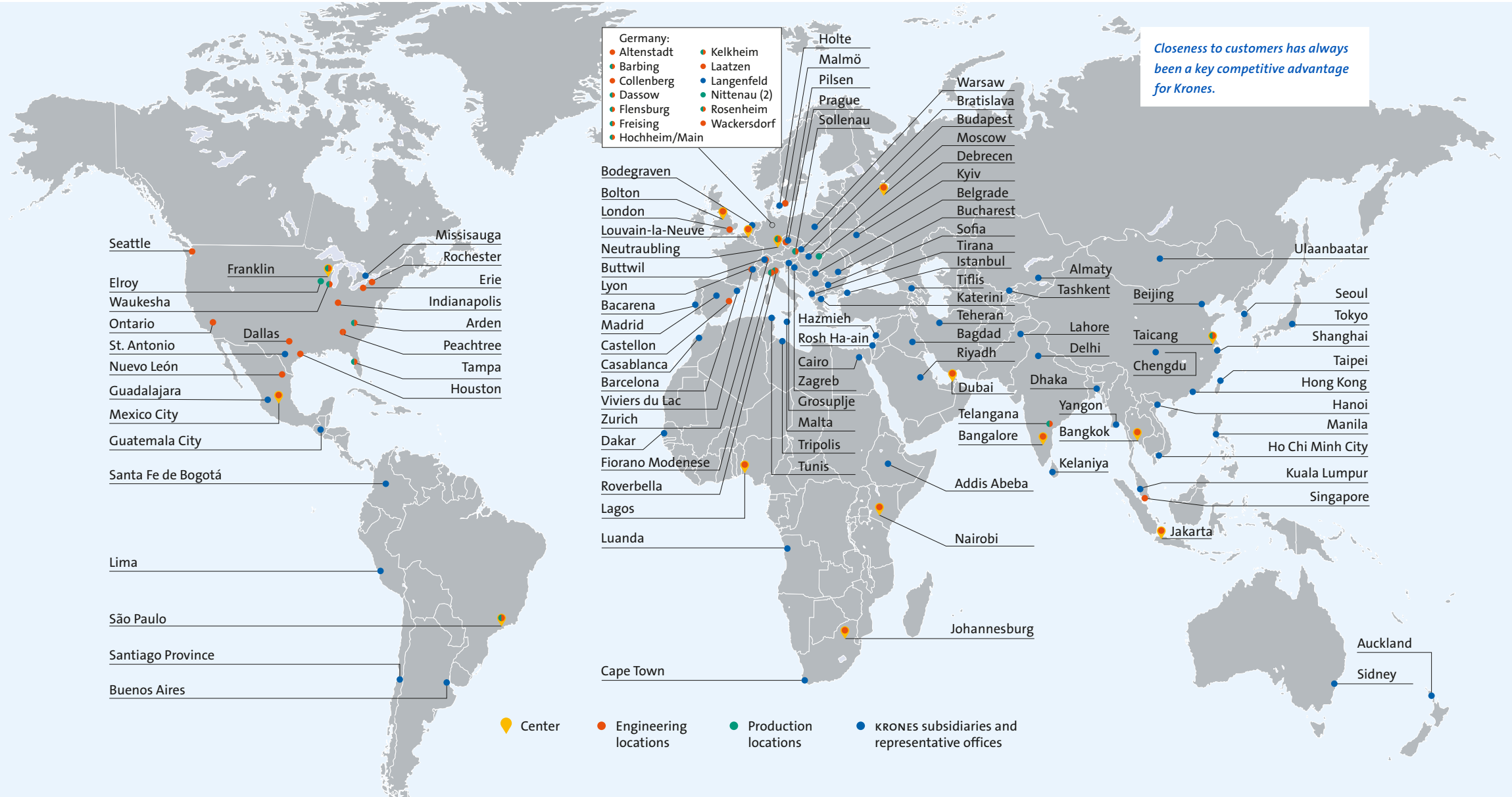
Strong focus on free cash flow

Alongside growth and profitability, the ability to generate cash from the day-to-day business is a further key criterion for the long-term success of any business enterprise. Krones therefore places a strong focus on free cash flow. The company generated a free cash flow of €203.3 million in the reporting period. Krones' goal for the coming years is to increase free cash flow in step with higher profits and with improvements in return on capital employed (ROCE).

Free cash flow is expected to increase in step with profit in the years ahead.



KRONES Global Footprint





A key factor influencing the development of free cash flow is working capital. In 2021, the working capital to revenue ratio stood at 24.8%, which is inside our target corridor of 26–27%. Less working capital tied up in the operating business means more capital for other purposes. Working capital also affects ROCE, as it is part of capital employed. As working capital goes down, ROCE goes up – on the same EBIT.

Optimising working capital therefore remains a core task. Although working capital will always be subject to fluctuations, the company has already taken various steps to reduce working capital in all key areas that influence it – trade receivables, inventories, trade payables and advance payments.

Stable financial and capital structure provides scope for investment

The positive free cash flow performance in the reporting period further strengthened our good capital base. At the end of 2021, Krones had some €378 million in net cash and a very solid 39.8% equity ratio. In addition, the company has around €1 billion in undrawn credit lines. A very solid financial and capital structure is important in today's crisis-prone global economy. It gives us sufficient scope for investment in growth and the future.

Most of that investment will be made within the business. To develop innovative products, Krones will continue to spend some 5% of revenue on research and development. In the years ahead, capital expenditure on property, plant and equipment will settle in a band between 2.5% and 3% of revenue. This will mainly be spent on expanding our international locations and IT systems.

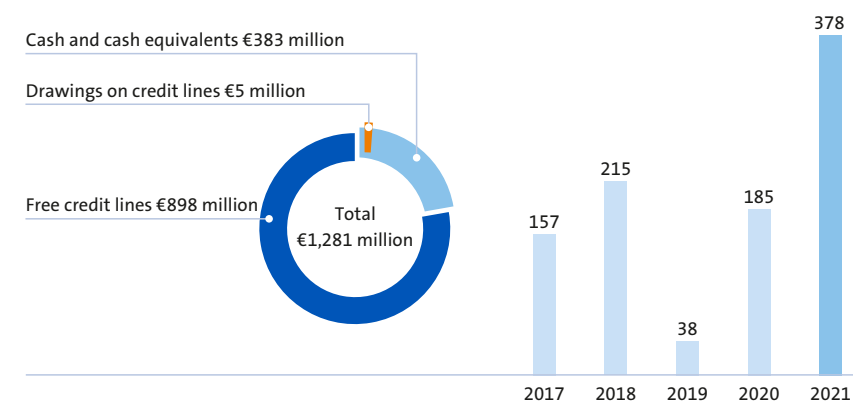
In light of its financial strength, however, the company is also increasingly considering acquisitions. Here, Krones looks for mid-sized companies that strengthen its existing portfolio technologically and regionally, or that expand the range of products and services in filling and packaging. Acquisitions outside of the beverage industry are also a possibility.

Our strong finances enable us to take advantage of attractive acquisition opportunities.

In addition, we will continue to allow the company's owners to share commensurately in our success in the form of dividend distributions. Krones' dividend strategy is to pay out 25% to 30% of consolidated net income to shareholders, although in past years it has aimed for the upper end of this range.

Liquidity reserves 31 Dec 2021

Net cash (€ million) at 31 Dec





A company is only ever as good as its employees

The sadly-needed reduction in the workforce was completed in the reporting period. This measure was undeniably difficult for our workforce. However, it did nothing to change Krones' corporate culture of team spirit and pulling together. We and the entire team are now focused optimistically again on the future. That means responding flexibly to the challenges ahead and making targeted use of market opportunities. To this end, Krones will selectively strengthen its workforce in the coming years, primarily in the areas of IT and software, and also in the emerging markets.

Our motivated and qualified employees secure the company's future. They are the face of the company and it is they who ensure that customers are satisfied with Krones products and services. For this reason, Krones will continue to commit above-average investment to training and employee development.

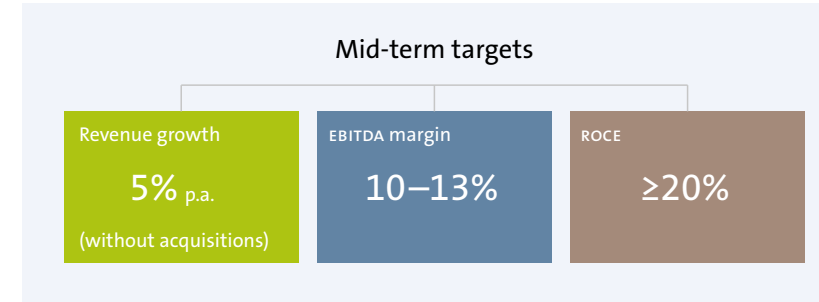
New medium-term targets adopted by Krones to 2025

The company maintained its medium-term financial targets even during the coronavirus crisis:

- 2% to 5% average organic revenue growth per year
- 9% to 12% EBITDA margin (corresponding to an EBT margin of 6% to 8%)
- 24% to 26% working capital to revenue ratio

As reported at this point last year, Krones aimed to achieve these targets by 2023. After the 2021 financial year went significantly better than originally expected, it is now possible that the lower range of the previous medium-term targets will be achieved not in 2023, but already in the current 2022 financial year. However, this depends on the overall economic situation.

Krones has adopted new ambitious medium-term targets to 2025



Revenue is expected to increase from €3.6 billion in 2021 to around €5 billion by 2025. On an organic basis – meaning without acquisitions – the company aims to grow revenue by an average of 5% per year (previously 2–5%), to €4.5 billion. The remainder is to be achieved by further growth outside of the beverage industry and also by means of acquisitions.

Krones plans to continue growing profitably in future years. To this end, it targets an EBITDA margin of 10–13% in the medium term (previously: 9–12%).

Krones is introducing return on capital employed (ROCE) from 2022 as a new target for the efficient use of capital. This replaces the previous third target, working capital as a percentage of revenue. ROCE reflects both working capital and fixed assets. In addition, ROCE gives investors an even more accurate picture of how efficiently the company manages the capital it uses. Krones has already published ROCE as a key performance indicator in past years. Its target for ROCE is a significant increase to at least 20% by 2025 (2021: 10.0%).



Krones' management system

Krones' management primarily uses the following financial performance indicators to steer the group and its two segments:

- Revenue growth
- EBITDA margin (earnings before interest, taxes, depreciation and amortisation as a percentage of revenue)
- Working capital as a percentage of revenue (until 2021)
- ROCE – return on capital employed (from 2022) – the ratio of EBIT to average net capital employed in the past four quarters. Net capital employed is defined as non-current assets (excluding goodwill and financial assets) plus working capital.

In order to strengthen our market position and utilise economies of scale, we aim in the medium-term to achieve **revenue growth** above the market average.

Earnings before interest, taxes, depreciation and amortisation (EBITDA) is a key earnings performance indicator. Profitability, measured as the **EBITDA margin** (EBITDA as a percentage of revenue) is among our key targets and parameters. The EBITDA margin indicates the company's profitability in relation to revenue, irrespective of the tax rate, financial income/expense and depreciation and amortisation. For the group, we set the target margin as the weighted average of the two segments.

Our third major performance indicator is **working capital to revenue**, which is calculated at group level. Working capital is calculated as follows: (inventories + trade receivables + contract assets) – (trade payables + contract liabilities). This figure indicates how much working capital is needed to finance revenue generation. The lower the number, the less capital is tied up in operations and the more financial leeway the company has to use its cash resources for other purposes.

Changes from the 2022 financial year onwards

From the 2022 financial year, we are replacing the **working capital to revenue ratio** with **ROCE** (return on capital employed). The reason for the change in the third target is that ROCE reflects both working capital and fixed assets. ROCE shows investors how efficiently the company makes use of capital. The other two performance indicators (revenue growth and the EBITDA margin) remain unchanged.

In addition, commencing in the 2022 financial year, Krones now manages the group via three segments. The Intralogistics segment is added alongside the two existing segments. This is because the Intralogistics business, which was previously part of the Beverage Production/Process Technology segment, has attained a commensurate size as a result of the previous years' strong growth. The new segmentation also enhances the transparency and depth of Krones' segment reporting.

Development of the key performance indicators in the last five years

	2017	2018	2019	2020	2021
Year-on-year revenue growth	8.8%	4.4%	2.7%	-16.1%	9.4%
EBITDA margin	9.2%	7.9%	5.7%	4.0%	8.6%
Working capital to revenue	27.3%	27.3%	26.9%	28.3%	24.8%
ROCE (from 2022)	14.9%	11.5%	2.2%	-2.2%	10.0%

Other financial key performance figures

In addition to the above, a further important performance indicator for Krones is **free cash flow** (cash flow from operating activities less cash flow from investing activities). We take further guidance from the development of **EBT** (earnings before taxes) and the **working capital to revenue** ratio.



Research and development (R&D)

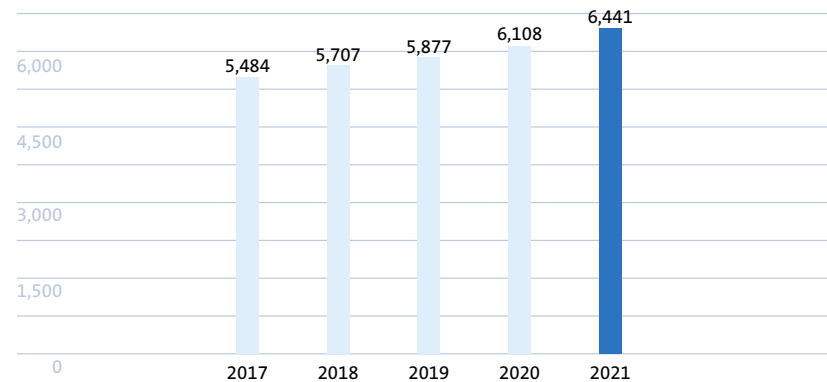
- Krones invests 4.8% of revenue in R&D
- R&D strategy focuses on line expertise, sustainability and digitalisation
- Six clearly defined R&D programmes
- Extending market leadership in aseptics

Innovative products secure our company's future. This is why research and development (R&D) has always been a key strategic pillar in Krones' long-term corporate success.

Krones invests 4.8% of revenue in R&D

Some 2,100 highly qualified people drive the development and improvement of machines, systems and services at Krones worldwide. The innovative strength of the Krones R&D team is reflected in the number of registered patents and utility models. This rose to 6,441 at the end of 2021 (previous year: 6,108).

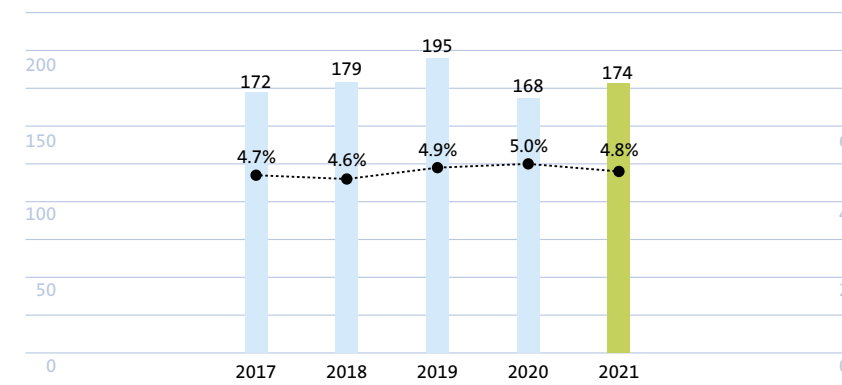
Registered patents and utility models – KRONES Group



To maintain the high pace of innovation, Krones once again spent a significant share of revenue on R&D in 2021. R&D spending amounted to €174 million (previous year: €168 million) or 4.8% of consolidated revenue (previous year: 5.0%). €28.2 million of this was capitalised as development costs in the reporting period (previous year: €23.7 million).

Krones invested 4.8% of consolidated revenue in research and development in 2021.

R&D expense (€ million) and R&D ratio (%)





Collaboration across all product areas

A clearly defined innovation process manages the entire development portfolio for all product areas. Employees from various areas are actively involved in development projects. This ensures that all key aspects of the product development process and product lifecycle are aligned to customer needs. To further increase the pace of innovation, Krones has merged and harmonised the R&D processes for automation and digitalisation under the name Krones.digital. This matrix organization brings together employees who work at different locations and in different Krones companies. All cooperate closely with the R&D team who develop machinery and equipment. In projects that are successful, the innovation process generates products and services that do well in the market. A number of examples can be found on pages 66 to 68.



As well as making use of in-house expertise for innovation, Krones cooperates with universities, research institutions and the R&D departments of several other companies. Examples of collaborations on innovative developments include lossless food production and the use of standardised web services.

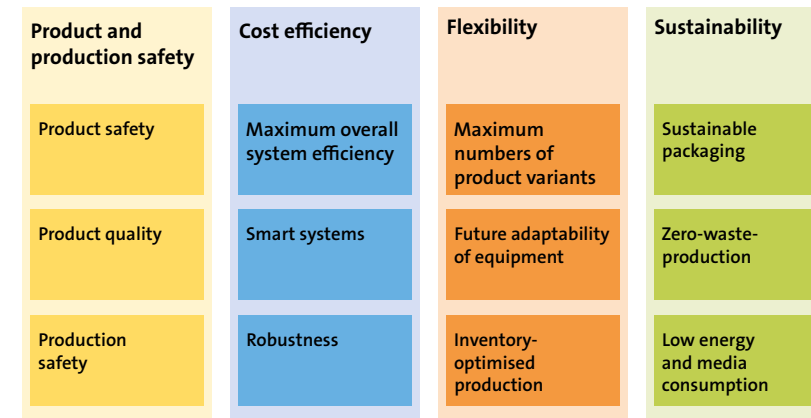
Krones R&D strategy with three focal areas

The Krones R&D strategy is derived from the corporate strategy. All innovations focus on customer benefit. New products and services must create added value for customers. As well as meeting customer needs, our innovation activities are also aligned to cross-cutting megatrends. This results in **three focal areas** for our R&D strategy at Krones:



The four value drivers in the Krones R&D strategy

The Krones strategy is centred on customer satisfaction. From our many discussions with customers and decades of industry experience, we know what is important to customers in the food and beverage industry. In this regard, Krones has identified four areas as the value drivers of its R&D strategy:





R&D strategy programmes

The strategy and value drivers outlined above give rise to six clearly defined R&D programmes, which were further advanced during the reporting period.

Sustainable packaging	Solutions for more sustainable use of plastics; environment-friendly packaging innovations; PET recycling
High-performance and flexible systems	Machines and lines that combine high output with maximum flexibility for operators
Streamlined glass systems	Compact, resource-saving, efficient end-to-end solutions for filling beverages in glass bottles
High-quality aseptics	Systems for microbiologically risk-free filling of sensitive beverages with even lower resource and operating input
Flexible can lines	End-to-end solutions for can filling that stand out for even better hygiene, sustainability and flexibility
Digital ecosystem	Further development of the integrated digital ecosystem for smart, connected production

Sustainable packaging solutions and recycling

Our customers attach great importance to protecting the climate and the environment. Beverage consumers are becoming more demanding in their requirements and this has a direct impact on investment spending at our customers. Krones has consequently been advancing the development of sustainable packaging solutions and PET recycling for many years. Because our customers want to continue benefiting from the advantages of PET packaging (weight, stability, flexibility and cost), bottles are increasingly made from recycled PET (rPET).

This makes it important for all new Krones lines to be able to process up to 100% rPET.

With its various Metapure lines, Krones offers high-quality recycling solutions to produce prime recycled resin from used PET bottles. This recycled resin can be used to produce new food-grade bottles (bottle-to-bottle recycling). The company is also extending its recycling technology to cover other plastics such as polyolefins, packaging films and closures. This makes it possible to recycle a large proportion of plastics in a closed loop. That saves resources and reduces plastic waste.

Supporting customers' climate targets with enviro

Krones has addressed sustainability since as long ago as 2008, pooling all related activities in the enviro program. The objective of enviro is to reduce energy and media consumption on our machines and lines. This results in significant savings for customers, both financially and in terms of carbon emissions.



The digital beverage plant

Krones' prime focus in digitalisation is on filling and packaging lines. Our Connected Line integrates all machinery in a customer's plant into our digital, cloud-based ecosystem. In this way, the customer gains maximum transparency across the entire production plant. The Krones.world portal gives customers access to all Krones digital products and services.

We aim to support plant operators with digital applications so they can leverage the collected data for higher plant availability and output combined with lower operating and labour costs. One example is the Tasks tool, which alerts plant personnel to problems at an early stage and gives clear instructions on what to do. This avoids downtime and potential repair costs.



Krones' goal is to operate a line over its entire life cycle via digital service centres on the basis of precisely specified service-level agreements. This makes digitalising our life cycle service (LCS) business an important part of our R&D activities.

To quickly advance Krones' worldwide digitalisation at a high quality level, we increasingly use international resources to supplement the capabilities of our domestic digitalisation specialists.

Krones products stand out for flexibility and performance

New products from Krones are engineered to give customers the greatest possible flexibility in the production process. They must be able to switch production quickly and easily between beverages and between different types and shapes of packaging. Machines and lines must also be designed for easy future upgrading and expansion, including with third-party products.

Besides flexibility, another key decision criterion for customers is cost-efficiency. This is achieved on the one hand by streamlining lines with a well thought-out layout. We benefit here from the line expertise accumulated over decades throughout the Krones Group. Streamlined filling lines reduce total cost of ownership (TCO).

On the other hand, lines are expected to fill as many cans or bottles as possible per unit time. Higher output can only be achieved with technically mature and stable machines and systems. .

Extending our leading market position in aseptics

The aseptic filling of sensitive products such as milk or fruit juices places the highest demands on system reliability and hygiene. Krones leads the market here with top quality in product and production safety and reliability. The company drives innovation in aseptics both for high-end and for sophisticated full-system solutions, thus extending its position as technology leader in aseptic PET filling.

Glass and cans an important part of R&D programmes

Alongside PET, which remains the dominant packaging material, Krones also continues to focus on glass and cans and to strengthen these segments with innovation. Accordingly, these two forms of packaging are also an important part of the R&D programmes at Krones.

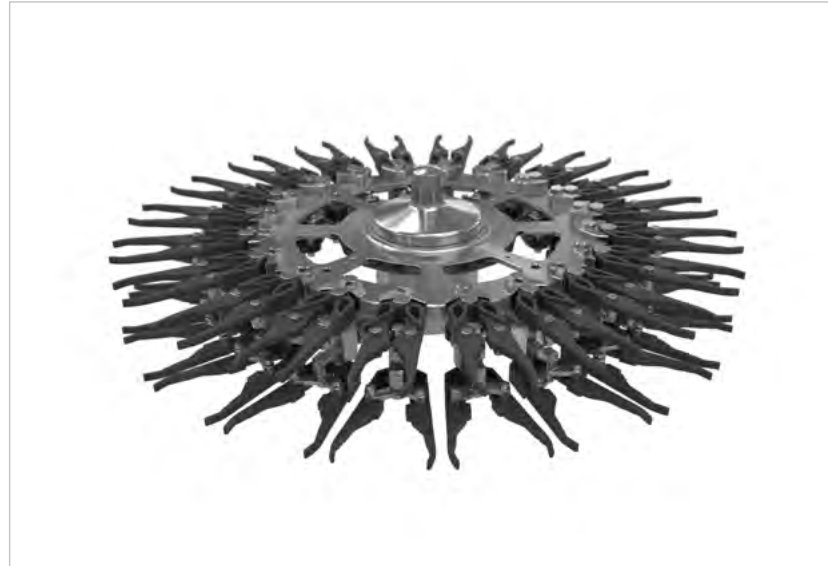
In glass, in addition to the further evolution of individual products such as beer fillers (see page 69), we work above all on developing streamlined, resource-saving, efficient end-to-end solutions for glass bottle filling.



For cans, Krones focuses on flexible, sustainable and hygienic machine and line solutions. An example is the new generation of hygienic can fillers. A smaller clean chamber makes the line easier and faster to clean, thus reducing downtime. With the market launch of our own can seamer, we have added a key component to our can filling portfolio and reduced our dependence on suppliers.

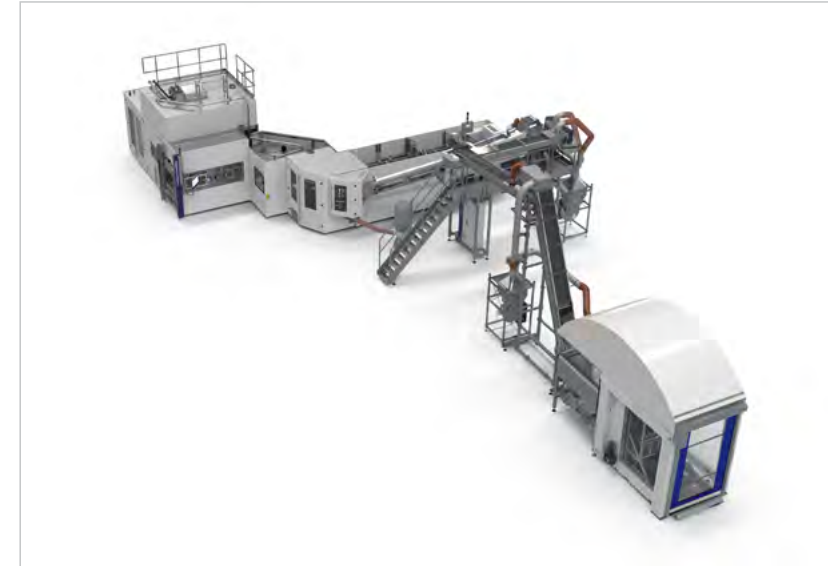


In the following, we present a selection of Krones innovations from the reporting period.



Clamping starwheels

Bottles have to be moved quickly, precisely and safely around a bottling plant. A key part is played here by clamps that grip bottles around the body and pass them on. Multiple clamps are arranged on a clamping starwheel. The newly developed clamping starwheels from Krones can handle a range of bottle shapes and sizes. Customers no longer have to switch them out for a change of bottle format. This improves flexibility and reduces costs. The new clamp geometry also means that more clamps can fit on a starwheel. This means more bottles can be filled on a machine of the same size. The new clamping starwheels are not only available for new machines, but are also capable of being retrofitted.



Prejet preform rinser

Before PET preforms are blown into bottles, they have to be thoroughly cleaned. This task is performed by Prejet, the new preform rinser. It reliably and efficiently removes all macro particles such as PET dust and film. The Prejet inserts a lance into the preforms and cleans them with ionised air. In order to safely remove the particles, they are extracted, filtered out and collected. The system works so effectively that it is also suitable for aseptic applications. Alongside cleaning performance, a major focus was placed when developing Prejet on energy and media consumption. Compared to the previous model, the machine uses up to 50% less compressed air.



The Future Line project



Together with a reference customer, we carried out a demonstration project to show the potential of smart digital assistance systems in beverage plants. The customer has a returnable bottle line implemented as a Connected Line. This means Krones can record and analyse all relevant production data from the line for the customer and make recommendations for rapid troubleshooting. The aim was to run the line without unnecessary downtime and with fewer line operators, despite its exceptional size and complex material flows.

Connected Line brings many benefits and also solves problems frequently faced by beverage producers in day-to-day operations. First, lines come to a standstill due to a lack of operating materials such as labels or glue, because the operator is unable to see early enough that they are running out. Second, jams are caused

by bottles falling over unnoticed at the bottle washer. Krones has been able to eliminate these problems with smart analysis of data from the Connected Line.

The data shows if operating materials are about to run out or if a bottle has tipped over. This information must quickly reach the operator in charge. That is ensured by the Krones digital Task tool, which uses the company's proprietary, cloud-based IIoT platform. The tool sends the operator information and instructions on a mobile device such as a smartphone or smartwatch. The operator can then see to it that materials are replenished before they run out, and that any fallen bottles are quickly removed from the line. Smart data use enables Krones digital assistance systems to prevent unnecessary downtime and helps maximise plant availability.



Adjustment to capper portfolio

In the European Union from 2024, caps on single-use plastic bottles must be designed in such a way that they stay tethered to the bottle after opening. These tethered caps necessitate modifications to filling equipment. The capper has to be adapted accordingly. In close collaboration with cap producers, Krones worked to prepare for the new legal requirement from an early stage and made technical adjustments to the entire capper portfolio. As a result, we already have a matching solution for the most common tethered cap variants today.



The road from product innovation to series production is long and challenging. Krones gains valuable experience by using pilot series that are made available to selected customers. The findings from these field trials can then be used to make permanent adaptations to machines and lines. A new product does not go into series production until we are sure it will meet the demands of practical use in the long term. This process can take several years. Below, we present a number of former innovations that entered series production in 2021 or will do so in the near future.

Dynafill

Krones presented a revolution in beer bottling with the Dynafill beer filler at drinktec in 2017. Rather than filling and crowning beer bottles in two separate

units, Dynafill completes both operations in a single machine. That slashes filling and crowning time by 50%, to just five seconds.

Dynafill offers even more benefits for customers. It cuts the number of filling valves from 100 to 66 while keeping output unaltered at 36,000 bottles per hour. The footprint is downsized by half as it eliminates both a separate crowner and the starwheels needed to transfer bottles from filler to crowner. The enclosed hygienic filling and crowning zone ensures optimal product purity.

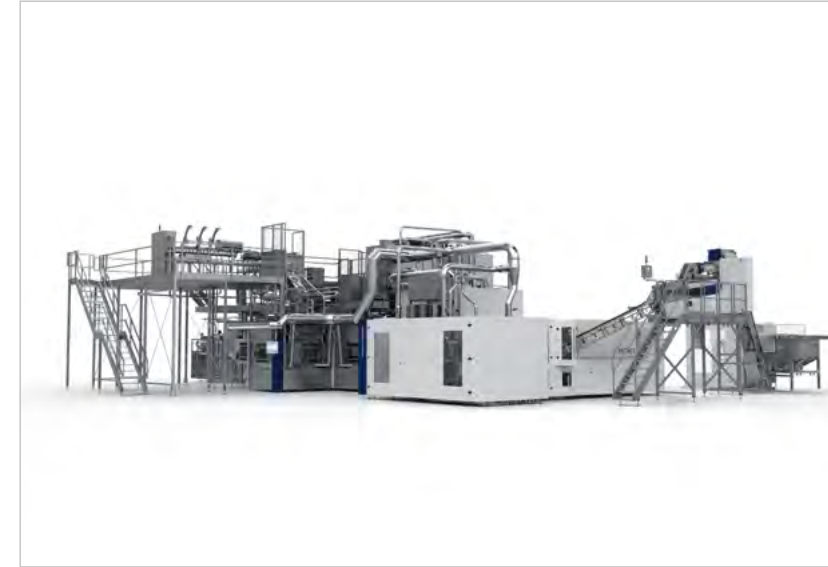
Dynafill also scores in terms of CO₂ consumption. Because it eliminates flushing phases, it uses 20% less CO₂ than conventional systems. As a further, very important positive contribution to customers' carbon footprint, Dynafill can handle beverages both in coldfill and warmfill applications (with temperatures up to 30 °C). That saves valuable cooling energy.





Modulfill vFS-M with PFR valve

The Modulfill vFS-M combines process technology and filling. This is because the 'M' stands for the Contiflow mixer. A key part is played in this Krones block solution by the infinitely adjustable PFR valve. The valve flow speed can be precisely adjusted to the prevailing conditions. Foaming due to excessively fast filling or wasted time due to excessively slow filling are a thing of the past. Combining the filler with the PFR valve increases line performance by up to 25%. As the PFR valves are electrically actuated, Modulfill vFS-M also saves energy. In addition, the block design considerably reduces the system footprint, the consumption of cleaning media and cleaning and changeover times.



Contipure AseptBloc E

Aseptic lines traditionally rely on chemical processes for sterilisation. The Krones Contipure AseptBloc E takes a new approach. The preform sterilisation module sterilises the inner and outer surfaces of PET preforms using electron beams. This innovative method kills even stubborn and chemically resistant germs. Because it works without water or chemicals, the technology is efficient and sustainable.



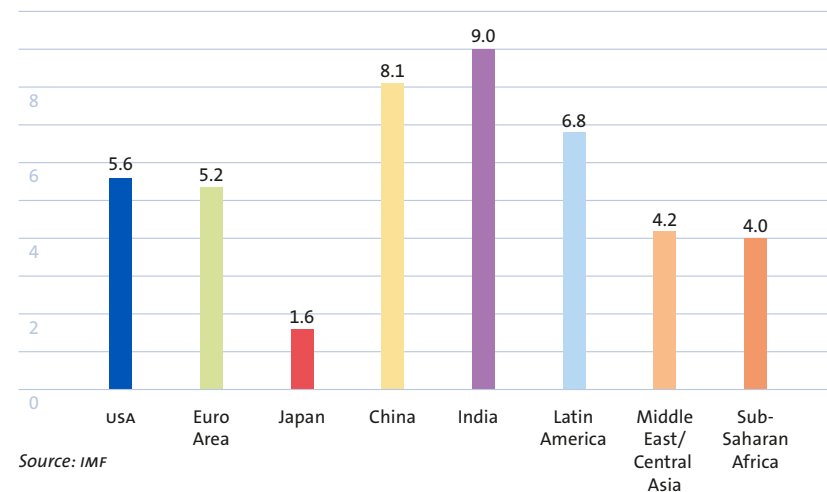
Economic environment

- Global economy grew 5.9% in 2021
- German mechanical engineering benefiting from strong economy
- Global demand for packaged beverages picking up again

Strong 5.9% global economic growth in reporting year

In 2021, the global economy recovered well from the previous year's recession. The main reason for the strong growth in the global economy was the abatement of the Covid-19 pandemic as a result of vaccination. Investment programmes launched in major economies during 2020 additionally supported the upswing. According to January 2022 data from the International Monetary Fund (IMF), global gross domestic product (GDP) rose by 5.9% in 2021 (2020: -3.1%). The IMF forecast had stood at 5.5% at the beginning of the year and 6.0% at mid-year. In the second half-year, international supply and material shortages prevented growth from being even stronger.

GDP growth rate 2021 by region (%)



Economic growth in the mature industrialized economies was stronger in 2021 than the global average. The economy there grew by a total of 5.0% (previous year: -4.5%). Japan was hit particularly hard by the increasing supply and material shortages in the second half of the year. The Japanese economy expanded by just 1.6% (previous year: -4.5%). In the euro area, the economy benefited from the ECB's continued loose monetary policy and stimulus programmes. GDP in the common currency area rose by 5.2% in 2021, compared to a 6.4% decrease in the previous year. Of all industrialised countries, the USA recovered most strongly. The world's largest economy increased GDP by 5.6% in the reporting period (previous year: -3.4%).

Emerging and developing economies grew more dynamically in the reporting period than industrialised economies. GDP in emerging and developing countries increased by 6.5% in 2021 (2020: -2.0%). According to IMF experts, this was mainly due to the positive trend in China and India. As the year progressed, the Chinese economy had the strongest recovery from the coronavirus pandemic. Following 2.3% growth in the previous year, GDP in China grew by 8.1% in 2021. India recorded even stronger growth, with GDP up 9.0%, after a particularly hard hit from the coronavirus crisis in the previous year (-7.3 percent). Latin American economies likewise recovered strongly. Economic output in this region rose by 6.8% (previous year: -6.9%). The GDP increase in the Middle East/Central Asia region was 4.2% in the reporting year (previous year: -2.8%). Economic activity in the Sub-Saharan Africa region increased by 4.0% in 2021 (previous year: -1.7%).

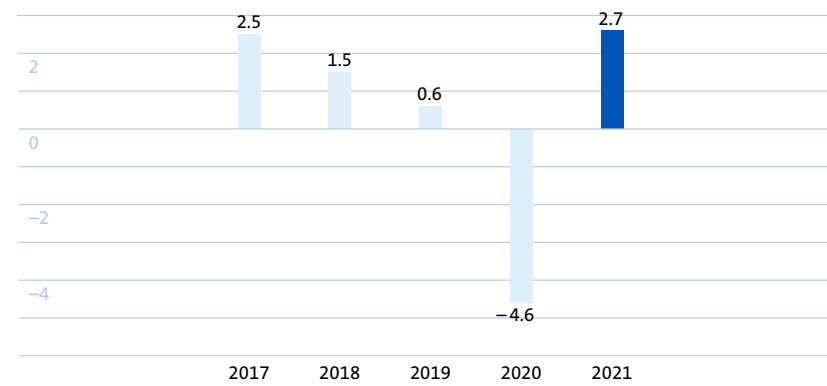


German economy records below-average 2.7% growth

Compared to the rest of Europe (euro area: +5.2%), the German economy grew less strongly in the reporting period. According to preliminary figures from Germany's Federal Statistical Office, German GDP went up by 2.7% relative to the previous year, when the economy contracted by 4.6%. As a result, domestic economic output has not yet returned to pre-crisis levels.

The German economy picked up across almost all sectors in 2021, but economic activity in almost all sectors remained below the level seen before the crisis. Higher government spending, exports and investment were the strongest growth drivers, while private consumption stayed at the previous year's low level.

GDP growth Germany (%)



Source: Germany's Federal Statistical Office

Machinery sector recovered in 2021

Companies in the German machinery sector completed a challenging year in 2021 with substantial growth figures. The industry benefited from a strong economy in China, the USA and Europe, its three most important sales markets. On preliminary data, the German Mechanical Engineering Industry Association (VDMA) expects machinery and industrial equipment output to have increased in value by 7% in 2021 relative to the previous year (2020: -11.8%). In September, this forecast had stood at 10%. The fact that output did not quite match the high expectations despite a good order intake was due to a number of supply shortages in the second half of 2021. Electronic components and metals in particular were in short supply, which hindered companies from processing the large order intake.

Megatrends support stable market growth

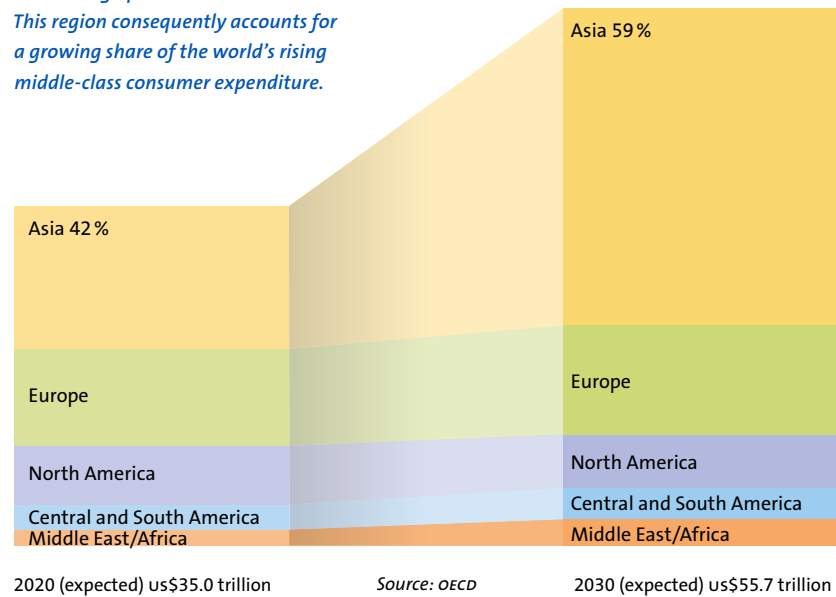
The good long-term growth prospects for Krones' markets remain intact. After a brief setback in 2020, the first year of the pandemic, the markets for packaged beverages and food returned to a stable growth trend in the reporting year. This growth is supported by megatrends driving above-average medium and long-term demand for food and beverage packaging machinery.

The main, overarching megatrend is global population growth. At the end of 2021, some 7.9 billion people inhabited the earth. According to United Nations forecasts, that number is increasing at a rate of some 70 million each year. Population growth is especially strong in Africa and Asia. The world's population is expected to reach about 8.5 billion by 2030. All those people need to eat and drink. And many of them will consume packaged beverages and food. This is supported by two other megatrends, which are the growing middle class and increasing urbanisation.



Asia's share of global middle class consumption is growing rapidly

Increasing numbers of people in Asia are moving up into the middle classes. This region consequently accounts for a growing share of the world's rising middle-class consumer expenditure.

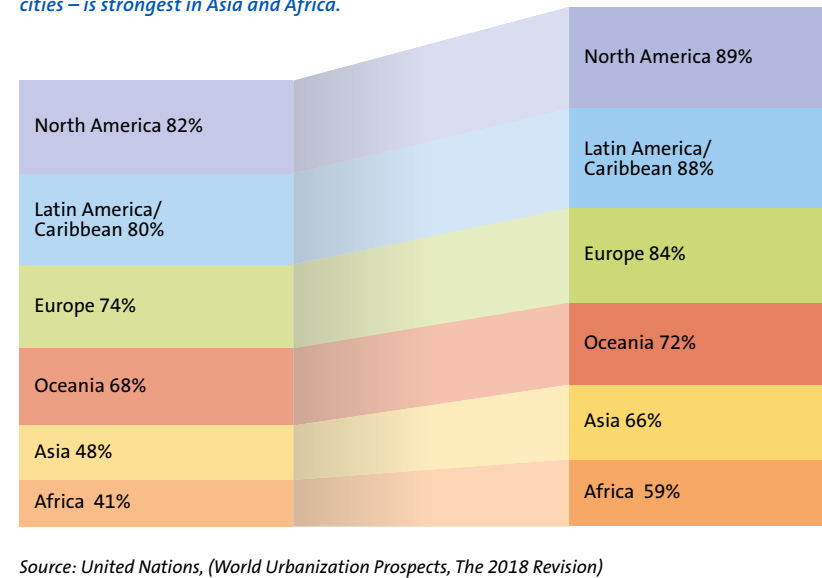


Growing middle class increases consumer spending

The long-term trend of more and more people in emerging and developing economies escaping poverty and rising into the middle class is unbroken. According to forecasts by the OECD, the middle classes worldwide will grow from 3.2 billion people to 4.9 billion between 2020 and 2030. As incomes rise, so too does consumer spending – and that includes spending for packaged beverages

Urban population in 2015 and 2050 (% of total)

The trend towards urbanisation – the migration of people rural areas to cities – is strongest in Asia and Africa.



and foods. Asia accounts for a large share of the growth of the middle class and the corresponding increase in buying power worldwide. The OECD estimates that Asia's share of total middle-class consumer spending worldwide was 42% in 2020. By 2030, that figure is expected to rise to 59%. Total consumer spending by the global middle classes is likely to increase from us\$35 trillion to us\$55.7 trillion in that time.



Urbanisation supporting consumption of packaged food and beverages

Increasing urbanisation – the migration of people from rural areas to cities – also promotes demand for packaged food and beverages. That is because city-dwellers consume more packaged products on average than people who live in the countryside.

The United Nations forecasts that two out of three of the earth's inhabitants will live in cities by 2050. At present, only about half of the world's population lives in cities. The strongest influx of people into cities is in the developing and emerging market countries of Africa and Asia.

Sustainability and digitalisation: additional growth drivers

Climate change and environment protection are among the most important issues facing society. Consumers are increasingly turning to sustainable and environment-friendly products as a result. This in turn drives demand from beverage producers for resource-efficient filling and packaging machines.

A further growth driver is increasing digitalisation. Smart, digital products and services enable beverage manufacturers to produce more flexibly and efficiently and at lower cost. The trend towards the digital beverage plant is in its infancy. It will ensure growing demand in the medium and long term.



The increasing global population, urbanisation, digitalisation, growth of the middle class and sustainability are megatrends that support the growth of Kronen's markets.



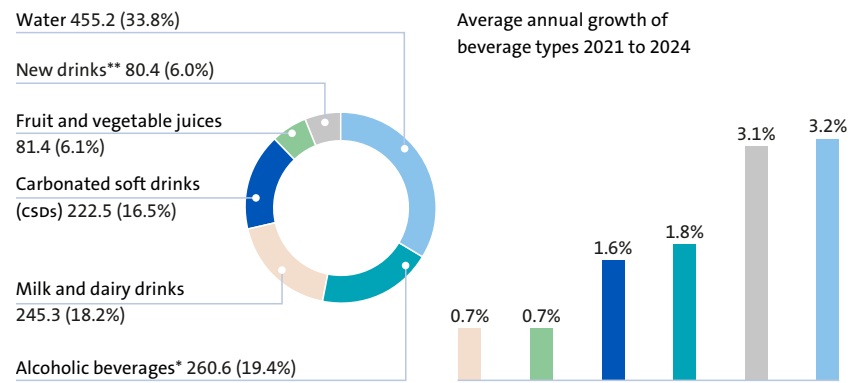


Consumption of packaged beverages continues to rise

Global demand for packaged beverages recovered in 2021 from the previous year's pandemic-related downturn. According to preliminary figures from Global Data, global consumption of packaged beverages, at a total of 1,345 billion litres in 2021, was 4.7% higher than a year earlier. Global beverage consumption is thus almost back to pre-crisis levels (2019: 1,366 billion litres).

Demand for alcoholic beverages, which was hit hard by the Covid-19 pandemic in the previous year, grew disproportionately strongly in 2021 (+6.7%). Consumption of new drinks (sports and energy drinks together with ready-to-drink coffee and tea) rose even more steeply (+12.3%). Demand for carbonated beverages (+5.0%) and milk and dairy drinks (+5.1%) grew at roughly the same rate as overall consumption. Consumption of bottled water rose at a lower rate than the overall market in 2021 (+1.0%). It should be noted, however, that the water market remained relatively stable during the 2020 coronavirus crisis.

Global consumption of packaged beverages in 2021 (billion litres)



2021: 1,345.4 billion litres (e)

*Beer, wine, and spirits

** Energy drinks, sports drinks, and ready-to-drink tea and coffee

Sources: Global Data

Global demand for packaged beverages is expected to show stable growth in the years ahead. According to Global Data, it is projected to grow at average annual rates of 2.0% from 2021 to 2024. The contribution of the various beverage subcategories to the projected overall market growth will vary.

Demand for packaged beverages recovered in 2021 from the pandemic-related downturn. Market researchers also expect stable market growth in the years ahead. Consumption of bottled water is expected to rise significantly more rapidly than the overall market.

The strongest growth according to Global Data is expected to be seen in **bottled water** consumption. This is by far the largest segment of the global beverage market (2021 share: 33.8%) and is benefiting from growing demand for clean bottled drinking water in emerging and developing economies and from the health trend in industrialised countries. Global Data expects demand for bottled water to grow at an average annual rate of 3.2% from 2021 to 2024.

With regard to the packaged **alcoholic beverages** market, market researchers are once again more confident than they were at the height of the Covid-19 pandemic. Nevertheless, the growth rate in the second-largest segment (2021 share: 19.4%) is likely to be slightly below overall market growth. In total, Global Data expects that the consumption of packaged alcoholic beverages will grow at an average annual rate of 1.8% from 2021 to 2024.

Growth estimates are moderate regarding the consumption of **milk and dairy drinks** (share of global beverage consumption in 2021: 18.2%). Global Data forecasts below-average growth rates both for plain milk, which accounts for around 70% of the market segment, and for niche products such as yoghurt smoothies and flavoured milk. For the entire milk and dairy drinks segment, the projected average annual growth rate is 0.7% from 2021 to 2024.



Demand for **carbonated soft drinks (csds)** (2021 share: 16.5%) is expected to grow at a slightly lower rate than the overall market over the next few years. The average growth rate expected by Global Data for 2021 to 2024 is 1.6%. In industrialised countries especially, the trend towards healthy eating is slowing demand for sugary soft drinks.

In the two smaller segments of the beverage market, **fruit and vegetable juices** (share of total beverage consumption in 2021: 6.1%) and **new drinks** (6.0%), the growth prospects are better for new drinks. For this beverage category, which includes sports drinks, energy drinks, and ready-to-drink coffee and tea, Global Data forecasts average annual increases of 3.1% from 2021 to 2024. Demand for fruit and vegetable juices is expected to grow by an average of just 0.7% per year during the same period.

Emerging markets the most important growth driver for beverage demand

Krones is benefiting in emerging and developing economies from population growth, a burgeoning middle class and urbanisation. The growing diversity of beverages and packaging stimulate demand in mature industrial countries.

Over the next few years, consumption of packaged beverages is expected to continue to grow at the highest rate in emerging and developing markets. This is mainly because growth in emerging economies is driven by key megatrends such as global population growth, a burgeoning middle class and urbanisation.

The highest growth rates according to Global Data will be in China. Demand for packaged beverages is anticipated to rise there by an annual average of 3.2% between 2021 and 2024. The experts expect a disproportionately high average growth rate of 2.8% for the Russia/CIS/Eastern Europe region. Demand in Africa/Middle East will also continue to grow. Consumption of packaged beverages is anticipated to rise there by an average of 2.4% a year between 2021 and 2024. Beverage demand in the Asia/Pacific region is expected to grow slightly faster than overall demand, with an average rate of 2.1%.

Demand is expected to develop at a lower rate than the overall market in the major mature markets of Western Europe (forecast average growth rate: 1.5%) and North and Central America (0.9%). Krones' growth opportunities in such markets relate not to rising beverage consumption, but to increasing diversity of beverages and packaging.

Worldwide consumption of packaged beverages*

	2021 (e)		2024 (e)		Average annual growth (%) 2021–2024
	Billion litres	%**	Billion litres	%**	
China	274.8	20.4	302.4	21.2	3.2
Asia-Pacific	271.8	20.2	298.2	20.2	2.1
North America/Central America	218.2	16.2	223.9	15.7	0.9
South America	172.3	12.8	182.0	12.7	1.8
Western Europe	139.6	10.4	145.8	10.2	1.5
Africa/Middle East	118.4	8.8	127.1	8.9	2.4
Russia/CIS/Eastern Europe	98.3	7.3	106.7	7.5	2.8
Central Europe	52.0	3.9	52.6	3.7	0.4
Worldwide	1,345.4	100.0	1,429.6	100.0	2.0

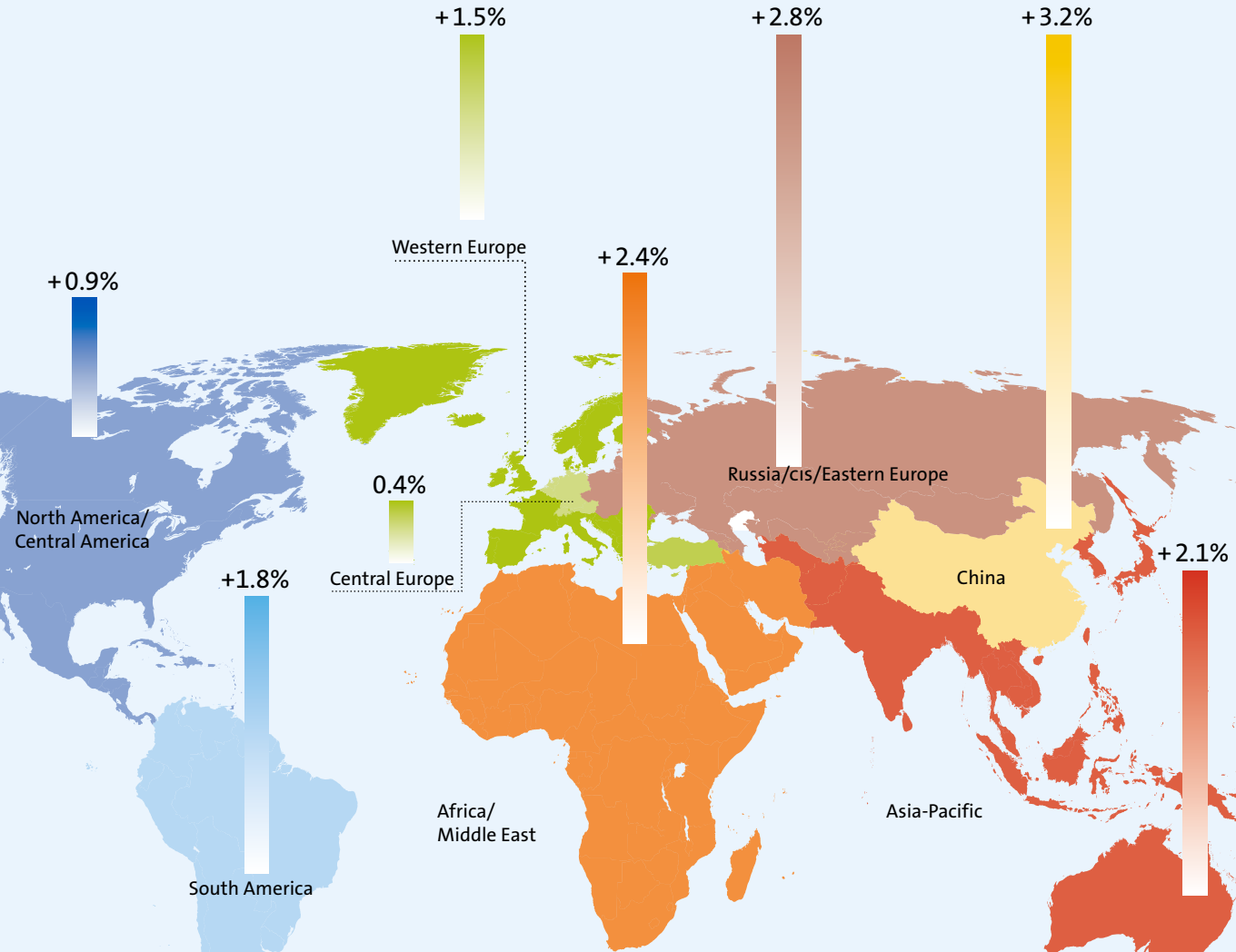
*Rounding differences possible **Share of global consumption | (e) = expected

Sources: Global Data



Global consumption of packaged beverages by region: annual growth 2021–2024

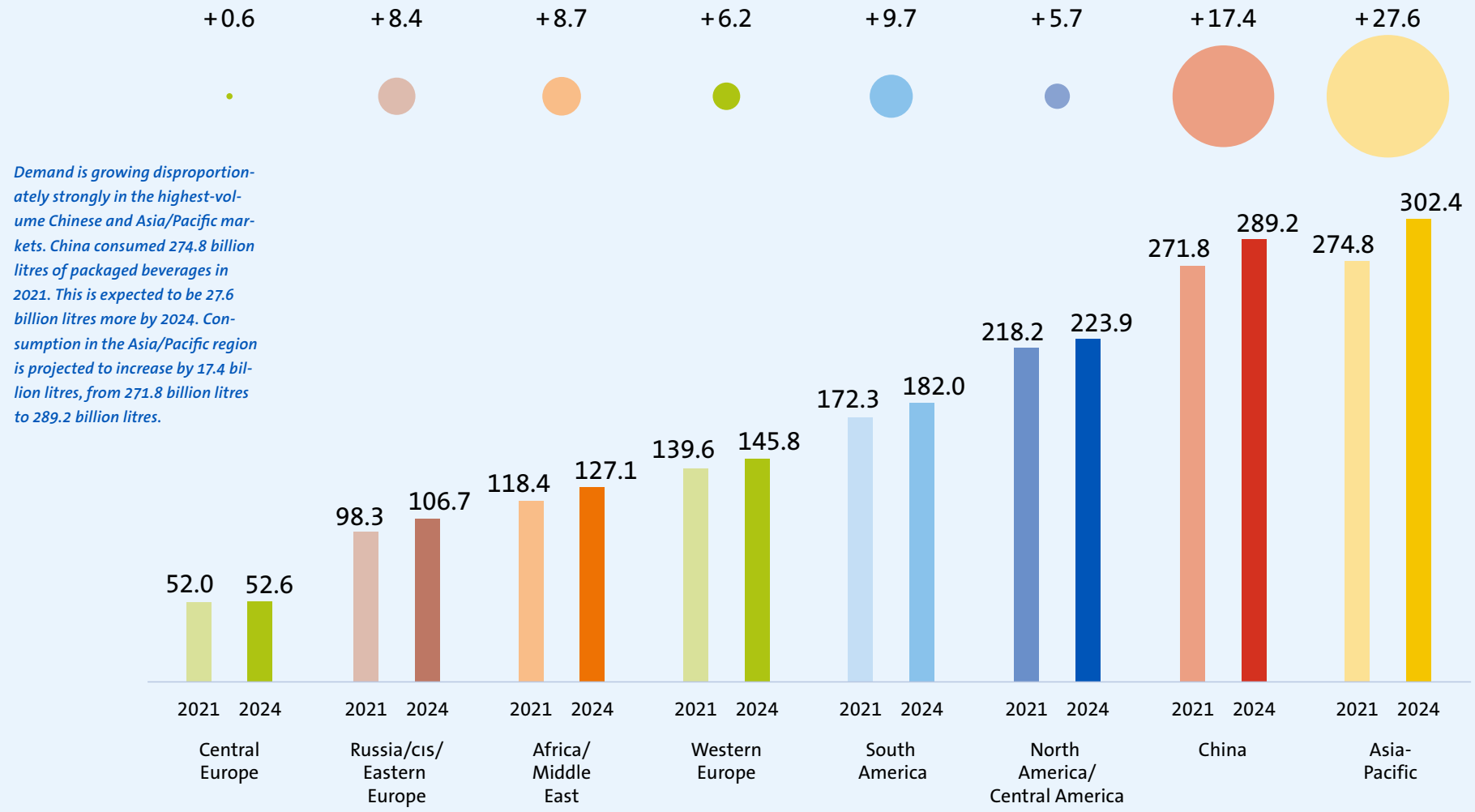
Demand for packaged beverages is growing most rapidly in China. The Russia/cis/Eastern Europe, Africa/Middle East and Asia/Pacific regions show above-average growth rates.



Sources: Global Data



Global consumption of packaged beverages by region: **billion litres***



*Forecast

● = Growth between 2021 and 2024 (billion litres)

Sources: Global Data



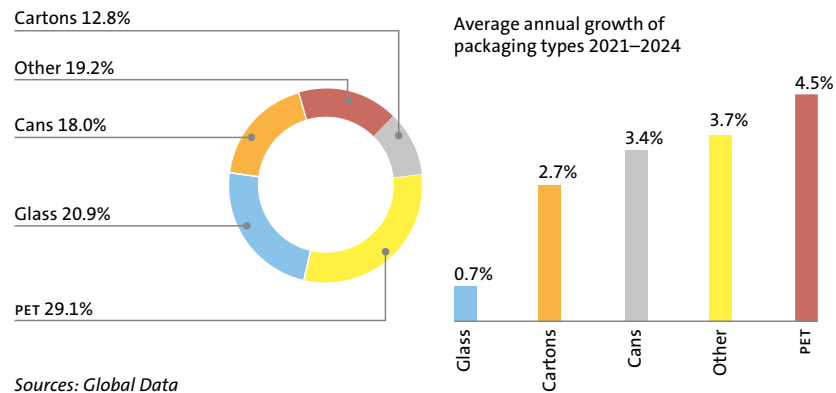
Demand for PET containers continues to grow

The number of beverage container units filled is rising continuously worldwide. The figure was 1,828 billion in 2021. Around 30% of the total was accounted for by PET plastic.

Alongside beverage consumption, a further important statistic for providers of bottling and packaging equipment such as Krones is the number of units filled. This increased by 5.2% year-on-year in 2021 to 1,828 billion. The number of units filled is expected to gain by an average of 3.0% per

year to nearly 2,000 billion in 2024. Most beverages are sold in plastic bottles, glass bottles, metal cans and paper-based cartons.

Global beverage market by packaging material in 2021 (based on units filled)



Beverage containers are most frequently made of the **polyethylene terephthalate (PET) plastic**. According to figures from Global Data, 29.1% of units filled worldwide in 2021 were PET containers. The use of PET bottles is expected to grow disproportionately strongly in the next few years. This is because water – the most widely consumed beverage, and with high growth rates – is mainly sold in PET bottles. Based on Global Data figures, the number of PET containers used in the global beverage industry is expected to increase by an average of 3.7% per year through to 2024.

Glass accounted for 20.9% of all beverage containers in 2021. This makes glass the second most frequent packaging material for beverages. Glass bottles are primarily used for beer and other alcoholic beverages. Partly because demand for alcoholic beverages is growing more slowly than the overall beverage market, the share of glass beverage containers is expected to decline. The expected annual average growth rate of 0.7% is significantly below the growth forecast for the overall market.

A further important beverage packaging material comprises **metal cans** (2021 share: 18.0%). These are frequently used for beer, carbonated soft drinks and new drinks. The number of cans used for beverage packaging is expected to gain by an average of 2.7% per year through to 2024, which is slightly less than overall market growth.

Carton beverage packaging accounted for a 12.8% share in 2021. Cartons are mainly used to package milk, dairy drinks and fruit and vegetable juices. According to figures from Global Data, the number of cartons used for beverage packaging is likely to increase by an average of 3.4% per year through to 2024.

As one of the leading providers of machines and lines for the production, filling and packaging of PET containers, Krones benefits from the above-average growth in PET packaging. The company also has a strong market position in lines for filling and packaging beverages in glass bottles and cans. Krones does not provide solutions for carton packaging.



Krones in figures

- Krones' business recovered in 2021 from the previous year's pandemic-related setback. Revenue rose by 9.4% to €3,634.5 million. Due to strong demand, order intake improved by 30.5% to €4,316.2 million.
- Krones' profitability increased significantly. The EBITDA margin adjusted for one-off effects improved from 6.2% in the previous year to 8.1%.
- Krones plans to pay a dividend of €1.40 per share for the successful 2021 financial year (previous year: €0.06).

	Guidance for 2021* as of March 2021	Updated guidance for 2021 as of July 2021	Actual 2021
Revenue growth	2.5–3.5%	7–9%	9.4%
EBITDA margin	6.5–7.5%	7–8%	8.1%**
Working capital/revenue***	26–27%	26–27%	24.8%

* From the report on expected developments in the 2020 management report

** Excluding positive one-off effects on earnings of €17 million *** Average of last 4 quarters

Krones increased revenue in 2021 by 9.4% to €3,634.5 million

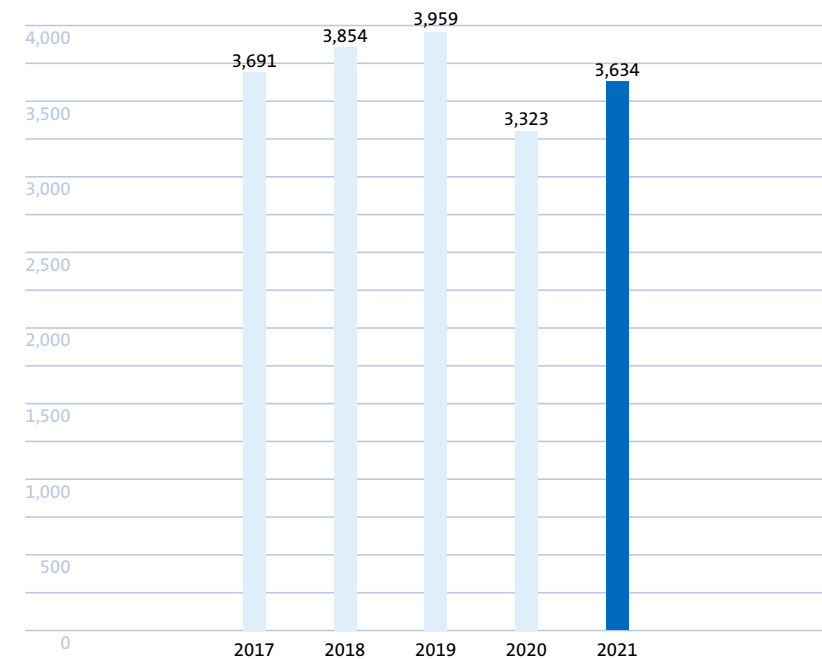
Revenue increased in 2021 by 9.4% to €3,634.5 million. This means Krones reached the upper end of the upgraded growth target of 7% to 9% published in July.

The global economy recovered in 2021 from the previous year's Covid slump. Demand also picked up in Krones' markets. This benefited us as a leading full-service supplier to the international filling and packaging industry. Krones profited particularly in the reporting year from its broad global footprint and proximity to global beverage producers. Despite the pandemic-related travel restrictions, we were able to supply customers with products and services in a timely manner.

Krones' growth accelerated significantly from the second quarter. In total, revenue increased by 9.4% year-on-year in 2021, from €3,322.7 million to €3,634.5 million. This means we reached the upper end of the upgraded growth target published in July for the full year 2021 (7% to 9%).

Both new machinery revenue and service revenue were higher in 2021 than in the previous year. New machinery revenue grew particularly strongly. It should be noted, however, that the Covid slump in 2020 hit the new machinery business harder than service activities.

Krones Group revenue (€ million)





Revenue by segment

Both segments recovered significantly in 2021 from the previous year's pandemic-related setback.

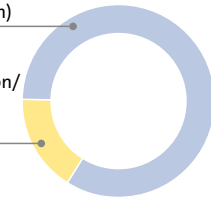
Revenue in the core segment, Machines and Lines for Product Filling and Decoration, rose by 8.9% year-on-year from €2,797.3 million to €3,045.6 million in 2021. The segment's share of consolidated revenue decreased slightly to 83.8% (previous year: 84.2%).

Share of consolidated revenue

Machines and Lines
for Product Filling
and Decoration
83.8% (€3,045.6 million)

Machines and Lines
for Beverage Production/
Process Technology
16.2% (€588.9 million)

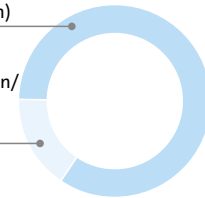
Revenue in 2021: €3,634.5 million



Machines and Lines
for Product Filling
and Decoration
84.2% (€2,797.3 million)

Machines and Lines
for Beverage Production/
Process Technology
15.8% (€525.4 million)

Revenue in 2020: €3,322.7 million



Business picked up even more strongly in the Machines and Lines for Beverage Production/Process Technology segment than in the core segment. Revenue went up by 12.1% from €525.4 million in the previous year to €588.9 million in the reporting period. The segment contributed 16.2% of consolidated revenue (previous year: 15.8%).



Further information can be found under "Report from the segments" beginning on page 94 and under "Segment reporting" in the notes to the consolidated financial statements on page 141.

Revenue by region

In Krones' home market of Germany, revenue recovered in 2021 from the steep fall (of 29.8%) in the previous year. Revenue went up by 14.2% from €328.7 million in 2020 to €375.5 million. The domestic share of total consolidated revenue consequently increased to 10.3% (previous year: 9.9%).

Krones generated some 90% of consolidated revenue internationally in 2021. The company recorded strong growth in China and in North and Central America.

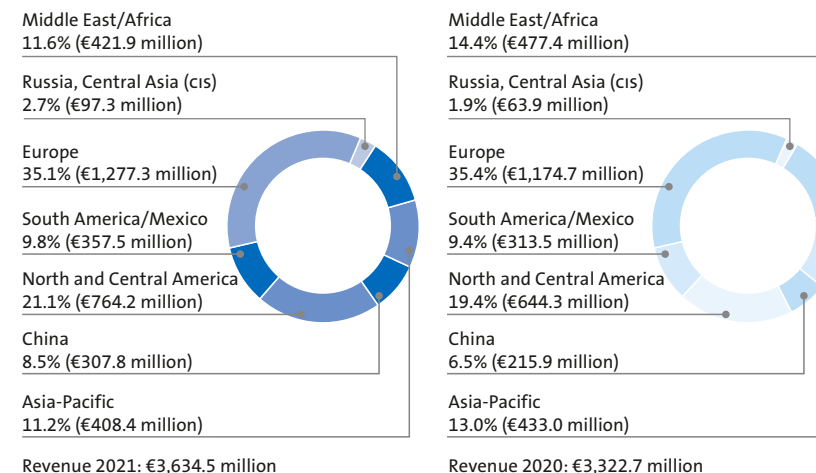
Our business in Europe (excluding Germany) picked up significantly overall in 2021. Revenue in the large Western Europe sales region increased by 10.9% to €517.9 million. Revenue in Central Europe (Austria, Switzerland and the Netherlands) improved to €243.0 million in the reporting period (an increase of 7.9%). In percentage terms, the strongest revenue growth in 2021 was in the Russia/CIS region. From a relatively low base, revenue there climbed 52.3% year-on-year to €97.3 million. Krones revenue in Eastern Europe decreased in 2021. At €140.9 million, it was 8.4% down on the prior-year period. In all, Krones' revenue in Europe (excluding Germany) and Russia/CIS improved 9.8% year-on-year from €909.9 million to €999.1 million in 2021. The share of consolidated revenue increased slightly to 27.5% (previous year: 27.4%).

Share of consolidated revenue	2021		2020		Change
	€ million	%*	€ million	%*	
Germany	375.5	10.3	328.7	9.9	+14.2
Central Europe (excluding Germany)	243.0	6.7	225.2	6.8	+7.9
Western Europe	517.9	14.2	467.0	14.1	+10.9
Eastern Europe	140.9	3.9	153.8	4.6	-8.4
Russia, Central Asia (cis)	97.3	2.7	63.9	1.9	+52.3
Middle East/Africa	421.9	11.6	477.4	14.4	-11.6
Asia-Pacific	408.4	11.2	433.0	13.0	-5.7
China	307.8	8.5	215.9	6.5	+42.6
North and Central America	764.2	21.1	644.3	19.4	+18.6
South America/Mexico	357.5	9.8%	313.5	9.4	+14.0
Total	3,634.5	100.00	3,322.7	100.0	+9.4

* Share of total revenue

Krones' revenue in markets outside of Europe rose less strongly overall in 2021 (by 8.4%) than consolidated revenue. Its share of consolidated revenue consequently fell slightly to 62.2% (previous year: 62.7%). Business developed differently in the individual sales regions. In the Middle East/Africa region, revenue was down 11.6% in 2021 to €421.9 million. However, it should be noted that revenue there increased in 2020 (by 5.7%) despite the coronavirus crisis. Krones recorded strong growth in China in 2021. Revenue there went up by 42.6% to €307.8 million. However, this was after a 32.5% decline in the previous year due to the pandemic. As a result, Krones revenue in China almost regained the level from before the coronavirus crisis (2019: €319.9 million). In the Asia/Pacific

Share of consolidated revenue



region, revenue was down 5.7% year-on-year to €408.4 million in 2021.

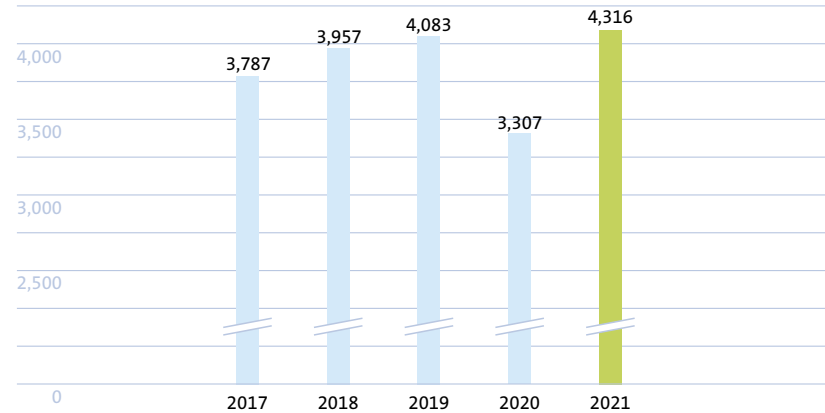
Business in the Americas developed very well for Krones in 2021. In North and Central America, revenue rose by 18.6% to €764.2 million, after a slight decrease in the previous year. Revenue in South America/Mexico likewise increased strongly by 14.0% to €357.5 million and almost made good the decline in the previous year.

Krones continues to have a balanced revenue split between emerging and mature markets. We generated 47.7% of consolidated revenue in emerging markets in 2021 (previous year: 49.0%). The share of revenue generated in mature industrialised countries was 52.3% (previous year: 51.0%).



Order intake and order backlog

Krones Group order intake (€ million)



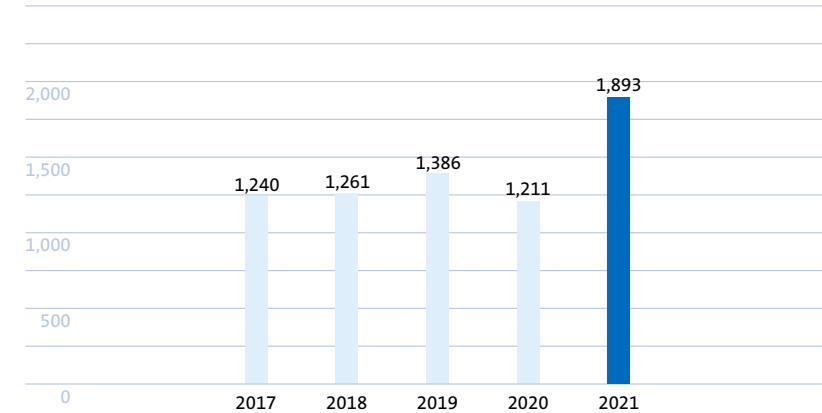
Order intake increased by 30.5% and reached an all-time record of €4,316.2 million

Order intake increased strongly by 30.5% to €4,316.2 million in 2021. This is the highest ever contract value of orders for any financial year in Krones' corporate history.

Demand for Krones products and services increased strongly in the reporting year. Overall, investment confidence among Krones' customers recovered faster and more strongly than expected from the 2020 Covid slump. Mid-sized producers in the international food and beverage industry in particular invested significantly more again in existing and new production capacity in 2021 than in the previous year.

Thanks to its broad and innovative range of products and services, Krones was able to take advantage of the rising investment confidence and recorded strong order growth. The 6% price increase on all bottling and packaging equipment and for process technology with effect from 1 August 2021 did not significantly affect customer orders in the reporting period. Order intake remained very high in the fourth quarter of 2021, at €1,123.6 million. In total, order intake increased

Krones Group backlog at 31 December (€ million)



by 30.5% year-on-year between January and December 2021, from €3,307.0 million to €4,316.2 million. This means that the contract value of orders not only exceeded pre-crisis levels (2019: €4,083.5 million), but also reached a record high.

Order intake in 2021 was higher than in the previous year in all of Krones' sales regions. The contract value of orders grew particularly strongly in Central and Western Europe and in China. Growth was broadly in step with the Group in Eastern Europe and the Russia/CIS region. In the remaining regions, order intake did not increase as strongly as the Group total.

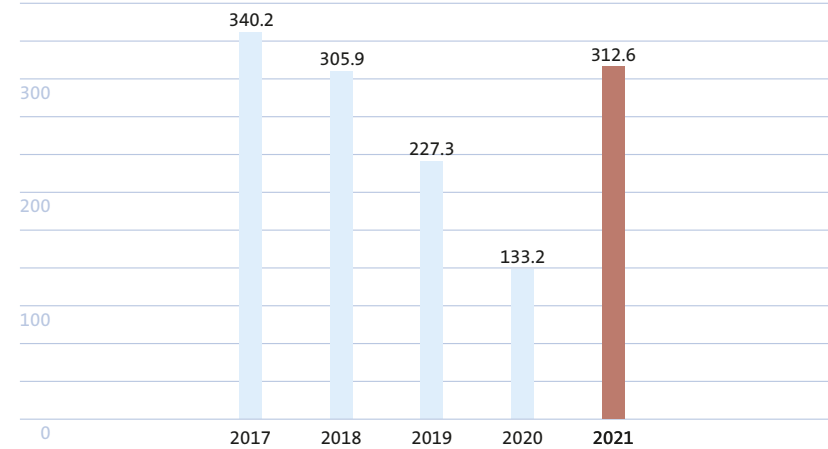
Strong increase in order backlog by 56.3% to €1,893.0 million

Due to very high customer demand for our products and services, the order backlog increased significantly despite the revenue growth in 2021. Krones had orders on hand totalling €1,893.0 million at 31 December 2021. The order backlog was consequently 56.3% up on the previous year (€1,211.3 million). The large forward reach of the order backlog ensures stable production capacity utilisation for the months ahead. It should be noted, however, that processing of some orders will extend into 2023.



Krones Group earnings

Krones Group EBITDA (in € million)



Strategic measures delivering results; Krones improves EBITDA margin to 8.6%

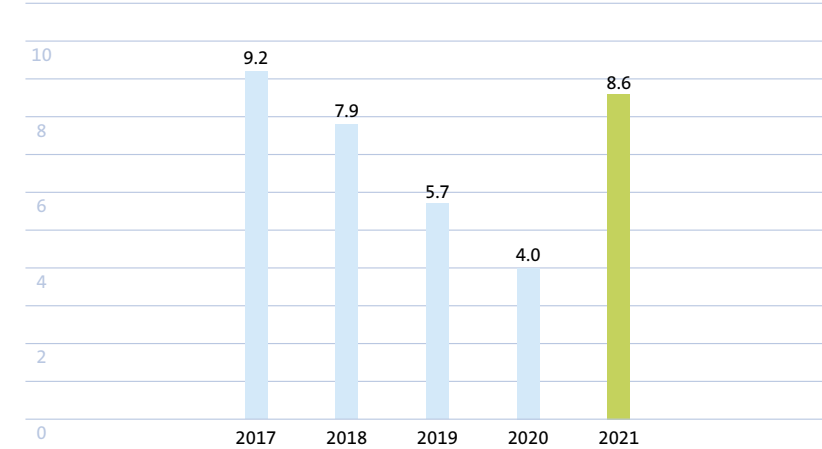
The EBITDA margin adjusted for one-off items in each year rose from 6.2% in the previous year to 8.1%. This means Krones reached the upper end of the upgraded margin target of 7% to 8%.

Krones' profitability improved significantly in 2021. In addition to high production capacity utilisation, this was also a result of strategic measures that we continued to implement in the reporting period. These are reflected, for example, in savings in personnel expenses. Further expansion of our global footprint in production and procurement

also means that Krones is now more flexible overall. The tight situation on procurement markets in 2021 consequently had only a limited impact on Krones' earnings.

Earnings before interest, taxes, depreciation and amortisation (EBITDA) increased significantly from €133.2 million in the previous year to €312.6 million

Krones Group EBITDA margin (%)



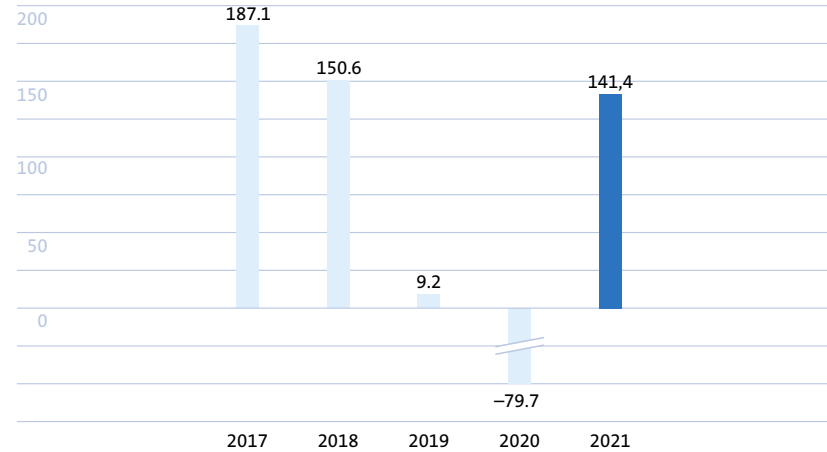
in 2021. EBITDA was affected by one-off effects both in the reporting period and in the previous year. In 2020, restructuring charges negatively impacted earnings by around €72 million. EBITDA in 2021 contained a positive impact from one-off effects in the amount of around €17 million. Following completion of the workforce reduction in Germany, Krones reversed to income the remaining portion of the provisions recognised for this purpose, amounting to around €29 million. This was partly offset by expenses for the corona bonus paid to employees and other pandemic-related expenses (such as Covid tests and vaccinations) totalling around €12 million.

Krones' EBITDA margin increased in 2021 to 8.6% (previous year: 4.0%).

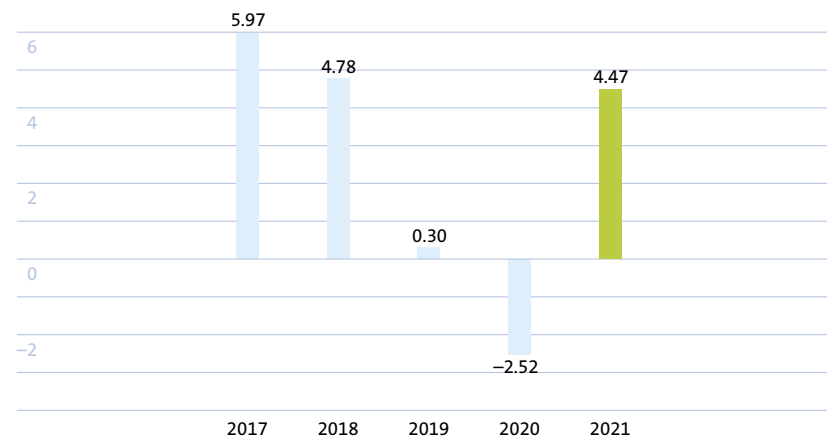
Adjusted for one-off effects, the EBITDA margin was 8.1% in 2021, compared to 6.2% in the previous year. Krones consequently reached the upper end of the upgraded EBITDA margin target for 2021 of 7% to 8% published in July 2021.



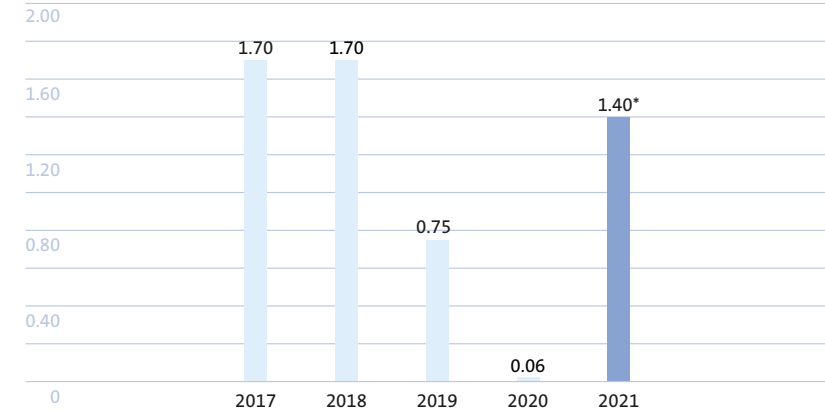
Krones Group net income (€ million)



Krones Group earnings per share (€)



Dividend per share (€)



* As per proposal for the appropriation of earnings available for distribution

Earnings before taxes (EBT) improved from –€36.6 million in the previous year to €177.3 million. Krones generated an EBT margin of 4.9% in 2021 (previous year: –1.1%). Excluding one-off effects, the EBT margin was 4.4% in the reporting year (previous year: 1.3%). In total, Krones generated consolidated net income of €141.4 million in the reporting period (previous year: –€79.7 million). Earnings per share improved as a result to €4.47 (previous year: –€2.52).

Krones increases dividend significantly to €1.40 per share

Due to the pandemic-related negative net income in 2020, Krones paid only the statutory minimum dividend last year. This was €0.06 per share. At the Annual General Meeting on 31 May 2022, the Executive Board and Supervisory Board will be proposing the distribution of a dividend of €1.40 per share for the successful 2021 financial year. In this way, Krones will once again accord shareholders an appropriate share in the company's success.



Krones Group earnings structure

€ million	2021	2020	Change
Revenue	3,634.5	3,322.7	+9.4%
Changes in inventories of finished goods and work in progress	+19.6	+39.1	-49.9%
Total operating performance	3,654.0	3,361.8	+8.7%
Other own work capitalised	+53.6	+36.7	+46.0%
Other operating income	+161.8	+120.5	+33.8%
Goods and services purchased	-1,807.4	-1,694.7	+6.7%
Personnel expenses	-1,176.7	-1,175.2	+0.1%
Other operating expenses	-572.6	-516.0	+11.0%
EBITDA	312.6	133.2	+134.7%
Depreciation and amortisation on fixed assets	-141.7	-174.0	-18.6%
EBIT	170.9	-40.8	-
Financial income/expense	+6.4	+4.2	+52.4%
EBT	177.3	-36.6	-
Income tax	-35.9	-43.1	-16.7%
Consolidated net income	141.4	-79.7	-



For further information, please see the full statement of profit and loss on p. 134.

Krones' revenue and key earnings figures were not materially affected by exchange rates, acquisition or divestments in 2021.

The 2021 financial year saw Krones recover significantly from the Covid-related decline in business in the previous year. Revenue and total operating performance increased almost equally. At €3,634.5 million, revenue was 9.4% higher than in the 2020 financial year. Total operating performance improved by 8.7% to €3,654.0 million. This increase was not quite as strong as the growth in revenue because Krones increased its inventories of finished goods and work in progress by a smaller amount in the reporting period (€19.6 million) than in the previous year (€39.1 million).

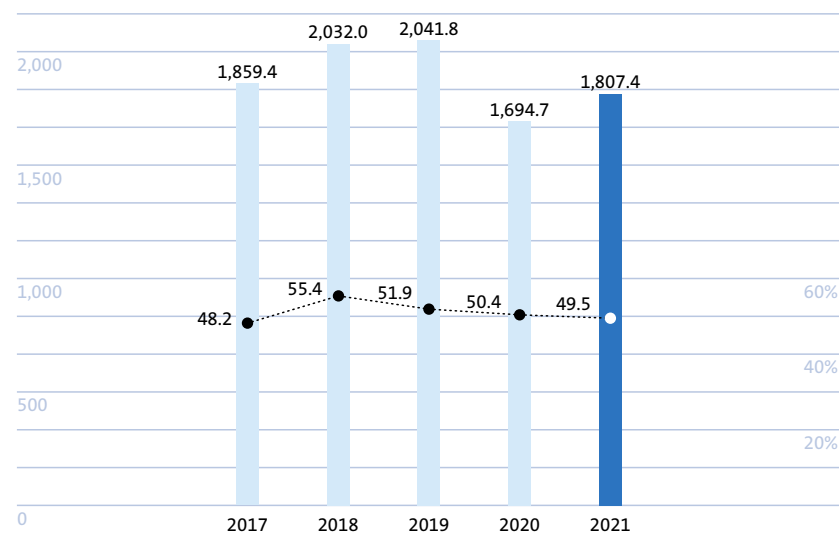
Krones also significantly improved profitability in 2021 – despite in some cases steep rises in material and freight costs. This improvement was primarily attributable to consistent implementation of the structural measures launched in 2020 and Krones' high degree of flexibility. The success of these measures is reflected above all in a disproportionately small rise in labour and material costs.

Krones significantly improved profitability in the reporting period. This was partly due to disproportionately small increases in the two major expense categories labour and material.

Personnel expenses, at €1,176.7 million in the reporting year, were near-constant relative to the previous year (€1,175.2 million) despite the significant expansion in business volume. Without the €8 million corona bonus that Krones paid employees in the reporting period, personnel expenses would have decreased. However, the previous year's figure was affected by around €72 million in restructuring expenses for the reduction in the workforce. The personnel expense ratio – the ratio of personnel expenses to total operating performance – fell to 32.2% in 2021. Adjusted for the corona bonus, the ratio was 32.0%. In the previous year, the personnel expense ratio was still 35.0%, or 32.8% excluding restructuring expenses.

Cost of goods and services purchased likewise increased by less than total operating performance, rising by 6.7% to €1,807.4 million. The material expense ratio – the ratio of goods and services purchased to total operating performance – decreased from 50.4% in the previous year to 49.5% in the reporting period. In the reporting year, Krones successfully countered supply shortages in material procurement, primarily for steel and electrical components, and the increase in purchased services (relating to an increase in the temporary workforce). The main positive effect here came from our structural measures to reduce material costs.

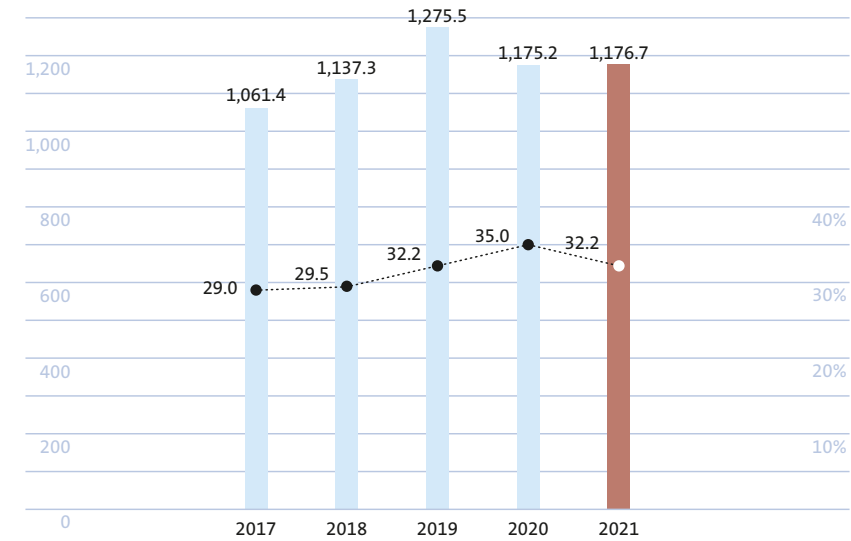
Goods and services purchased (€ million) and material expense ratio (%)



Other operating expenses increased by 11.0% in 2021 to €572.6 million. This was mainly due to higher freight costs, which more than offset cost savings elsewhere. Other operating income also increased significantly, climbing from €120.5 million to €161.8 million. This includes around €29 million from the reversal of restructuring provisions following completion of the workforce reduction program in the reporting year. Own work capitalised rose from €36.7 million to €53.6 million. In total, the net balance of other operating income and expenses and own work capitalised changed slightly from –€358.8 million in the prior-year period to –€357.3 million in the reporting period. As a percentage of total operating performance, this represents a reduction from 10.7% to 9.8%.

Krones improved EBITDA (earnings before interest, taxes, depreciation and amortisation) by €179.4 million in the reporting period, from €133.2 million to

Personnel expenses (€ million) and personnel expense ratio (%)

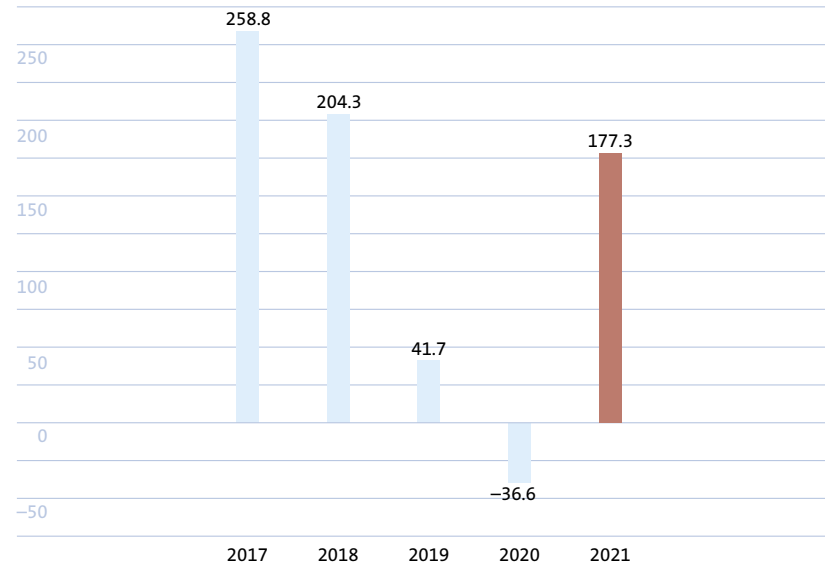


€312.6 million. The EBITDA margin increased from 4.0% to 8.6%. Adjusted for one-off earnings effects of around €17 million resulting from the reversal of restructuring provision of €29 million and direct pandemic expenses (corona bonus, Covid tests and vaccinations, etc.) of €12 million, the EBITDA margin was 8.1%. The previous year's EBITDA margin adjusted for restructuring expenses for the reduction in the workforce was 6.2%.

Depreciation and amortisation of fixed assets decreased in the 2021 financial year. At €141.7 million, this item was down 18.6% on the previous year's figure of €174.0 million, which included around €18 million in impairments of intangible assets. Partly due to the lower depreciation and amortisation, earnings before interest and taxes (EBIT) increased significantly from –€40.8 million in the previous year to €170.9 million in 2021.

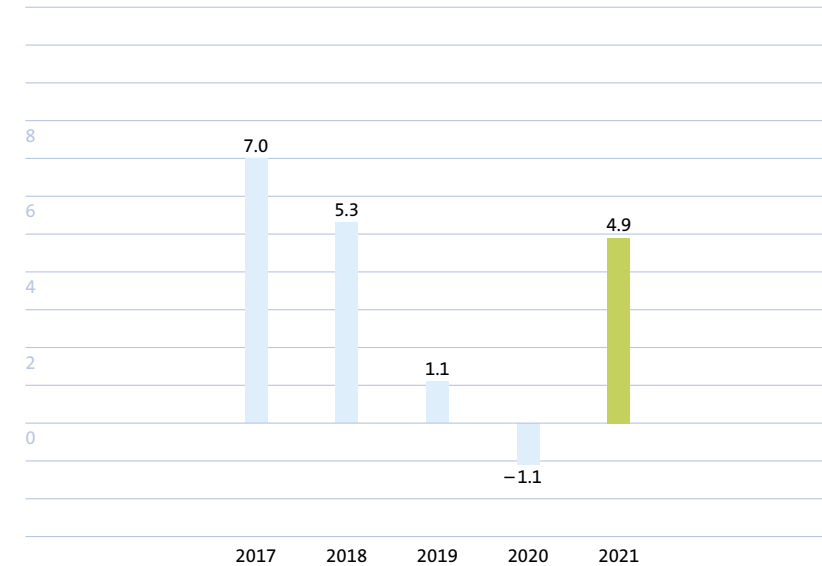


Krones Group EBT (€ million)

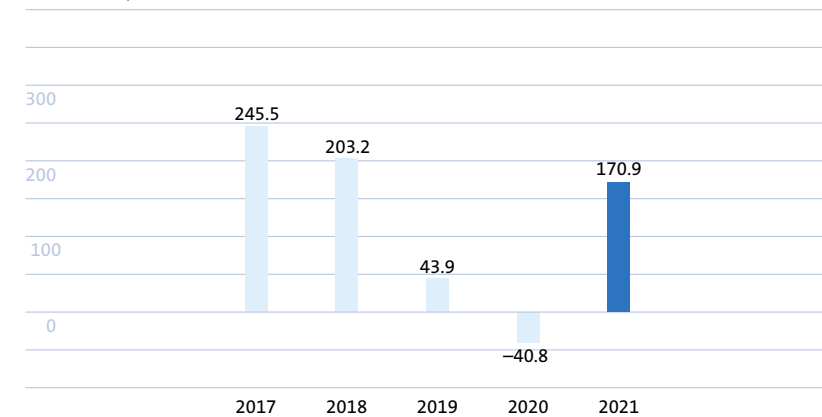


Krones improved net financial income/expense in the reporting year from €4.2 million to €6.4 million. This was attributable to investment income of €2.0 million (previous year: €0.0 million), while net interest income remained virtually unchanged at €4.4 million. Earnings before taxes (EBT) climbed from –€36.6 million in the previous year to €177.3 million in 2021. This results in an EBT margin of 4.9% (previous year: –1.1%). Adjusted for one-off income and expenses, the EBT margin was 4.4% in 2021 (previous year: +1.3%). Income taxes decreased from €43.1 million to €35.9 million. The income taxes item in the previous year was heavily affected by non-taxable expenses resulting from restructuring and remeasurements. In total, Krones generated consolidated net income of €141.4 million in the reporting period (previous year: –€79.7 million).

Krones Group EBT margin (%)



Krones Group EBIT (€ million)





Consolidated cash flow

€ million	2021	2020
Earnings before taxes	177.3	-36.6
Other non-cash changes	+153.7	+186.7
Changes in working capital	+124.5	+166.0
Changes in other assets and liabilities	-149.8	+5.7
Cash flow from operating activities	305.7	321.8
Capital expenditure for intangible assets and property, plant and equipment	-104.9	-93.8
M&A activities	±0.0	±0.0
Other	+2.5	+6.7
Free cash flow	203.3	221.3
Cash flow from financing activities	-60.9	-99.0
Other	+24.0	-15.7
Net change in cash and cash equivalents	166.4	106.6
Cash and cash equivalents at the end of the period	383.4	217.0

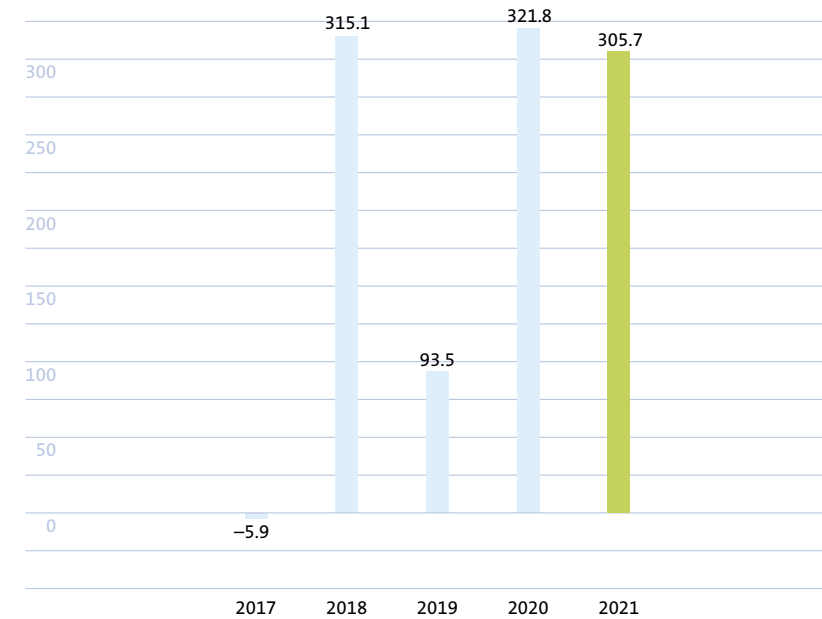


For further information, please see the full statement of cash flows on page 138.

Krones generated cash flow from operating activities of €305.7 million in 2021 (previous year: €321.8 million). The main reason for the once again very high figure was the positive earnings before taxes.

Krones' cash flow once again developed positively in the reporting year, even though it did not quite match the very high prior-year figures. The company generated cash flow from operating activities of €305.7 million in 2021 (previous year: €321.8 million). A positive contributing factor here was the €213.9 million higher earnings before taxes. The increase in other assets and liabilities, on the other

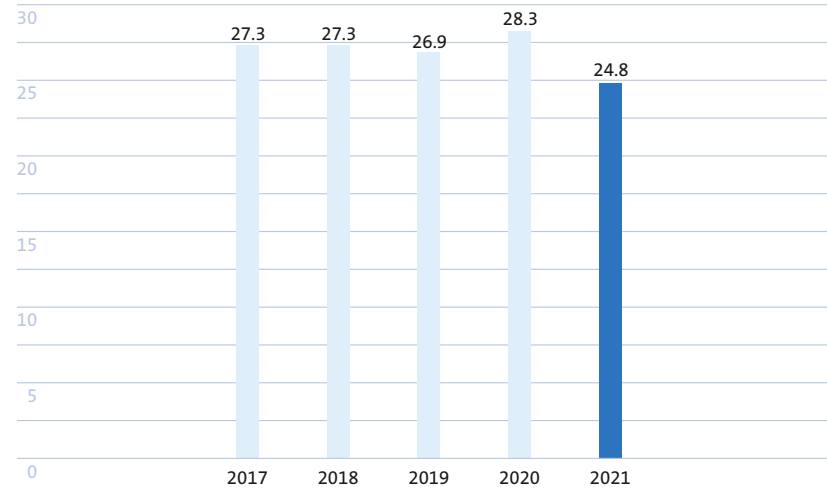
Krones Group cash flow from operating activities (€ million)



hand, had a €149.8 million negative impact on cash flow in 2021, compared with a €5.7 million positive impact in the previous year. The lower figure was mainly due to a decrease in liabilities from employee programmes in the reporting year. Non-cash changes with a reduced positive effect of €153.7 million (previous year: €186.7 million) likewise contributed to the fact that cash flow from operating activities was lower than in 2020. The €124.5 million reduction in working capital increased cash flow, but not as much as in the previous year (€166.0 million).



Krones Group working capital to revenue (% average over four quarters)



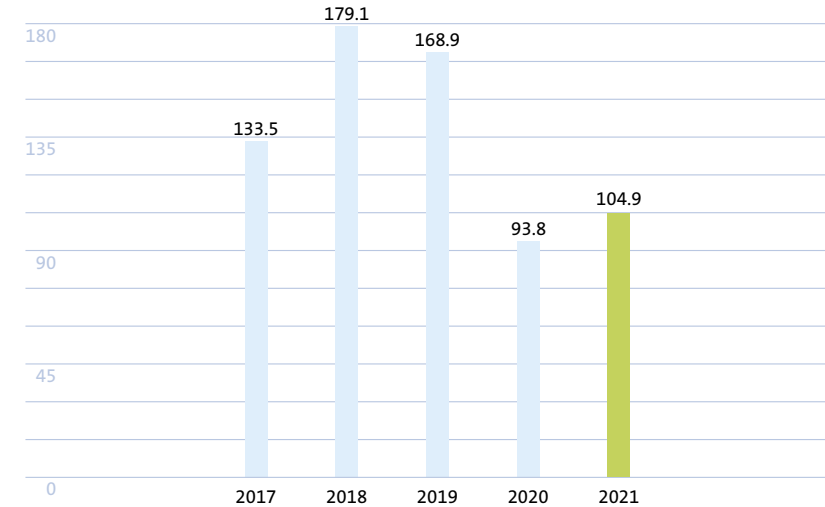
Working capital as a percentage of revenue significantly improved to 24.8%

Krones significantly improved average working capital to revenue over the past four quarters in 2021 from 28.3% to 24.8%. The company thus exceeded its target of 26%–27%.

Krones significantly improved average working capital over the past four quarters as a percentage of revenue to 24.8% in the reporting period, compared with 28.3% in the previous year. Consequently, Krones reduced working capital further in the reporting year than forecast (26% to 27%). The large decrease reflects the higher revenue and rising advance payments due to the greater order intake. The reduction in working capital as a percentage of revenue was even more pronounced as of the reporting date, at 20.1% (previous year: 25.7%). The supplier finance programme used by Krones is accounted for under trade payables as it does not significantly alter the contractual terms of the payables. Correspondingly, the cash outflow is presented in cash flow from operating activities.

Krones significantly improved average working capital over the past four quarters as a percentage of revenue to 24.8% in the reporting period, compared with 28.3% in the previous year. Consequently, Krones reduced working capital further in the reporting year than forecast (26% to 27%). The large decrease reflects

Krones Group capital expenditure for PP&E and intangible assets (€ million)

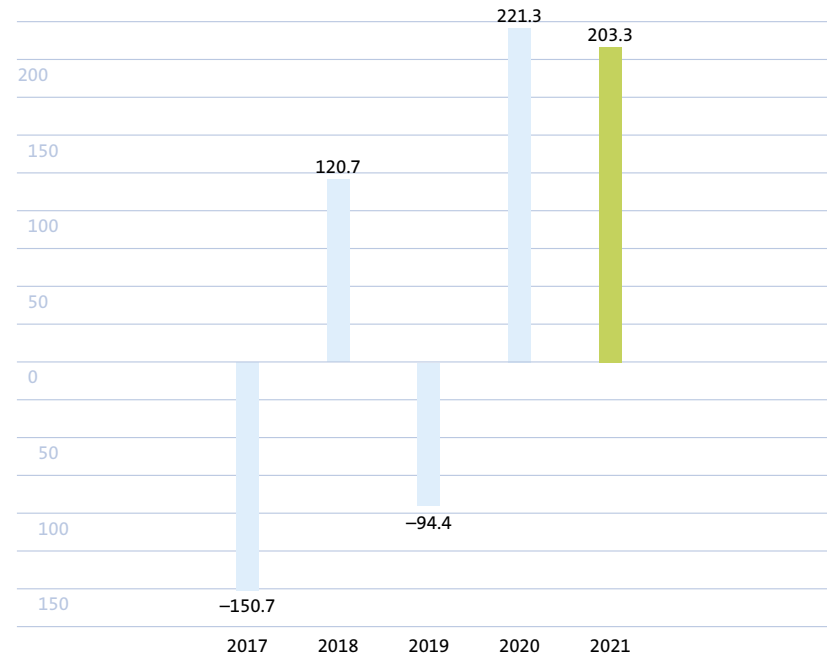


Krones generated free cash flow of €203.3 million

Krones invested a total of €104.9 million in property, plant and equipment and intangible assets in the reporting period. As planned, this is above the prior-year figure of €93.8 million. Relative to revenue, the capital expenditure ratio was stable at 2.9% (previous year: 2.8%) and thus in line with expectations. The ratio of capital expenditure to depreciation and amortisation increased from the very low figure of 0.54 in the previous year to 0.74 in the reporting year. As in the previous year, there were no M&A activities in 2021 with a positive or negative impact on cash flow.

As planned, Krones increased capital expenditure in the 2021 financial year to €104.9 million (previous year: €93.8 million). The ratio of capital expenditure to depreciation and amortisation was 0.74 (previous year: 0.54).

Krones Group free cash flow (€ million)

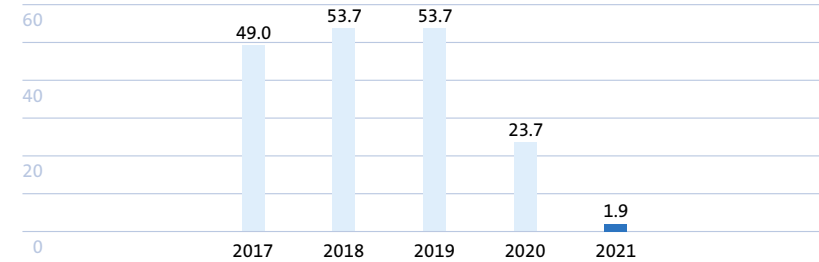


Krones generated free cash flow of €203.3 million in 2021 (previous year: €221.3 million).

Despite the higher capital expenditure, Krones generated a large free cash flow – the net inflow of cash and cash equivalents from operating activities – of €203.3 million in the reporting year (previous year: €221.3 million).

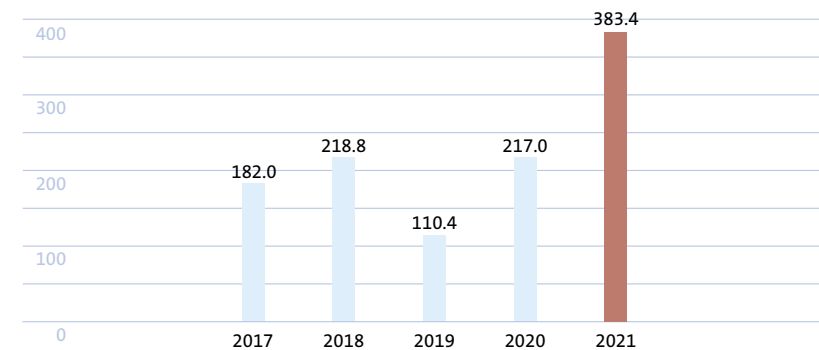
The cash outflow from financing activities between January and December 2021 was €60.9 million (previous year: €99.0 million). In the reporting period, this item includes the cash outflow from the dividend payout of €1.9 million (previous year: €23.7 million), the cash outflow from the repayment of lease liabilities

Krones Group dividend payout (€ million)



in the amount of €32.0 million (previous year: €35.2 million) and repayment of bank debt in the amount of €27.0 million (previous year: €40.2 million). Changes in exchange rates and the consolidated group increased liquidity by €24.0 million (previous year: €15.6 million). As a result, Krones had cash and cash equivalents totalling €383.4 million at 31 December 2021 (previous year: €217.0 million). Net cash (cash and cash equivalents less bank debt) went up from €184.9 million in the previous year to €378.3 million.

Krones Group cash and cash equivalents at 31 December (€ million)





Balance sheet structure

€ million at 31 December	2021	2020	2019
Non-current assets	1,133	1,093	1,154
of which fixed assets	1,001	990	1,070
Current assets	2,362	1,957	2,165
of which cash and equivalents	383	217	110
Equity	1,392	1,200	1,370
Total debt	2,103	1,850	1,949
Non-current liabilities	434	476	452
Current liabilities	1,669	1,374	1,497
Total	3,495	3,050	3,319



For further information, please see the full balance sheet on page 136 and 137.

Due to the substantial rise in business volume, Krones' total assets increased by 14.6% in the reporting year.

Krones' total assets increased by 14.6% in the reporting year and thus by more than the 8.7% rise in total operating performance. Total assets came to €3,494.8 million as of 31 December 2021 (31 December 2020: €3,049.5 million). The main cause of the larger increase was the substantial build-up of current assets and liabilities due to the significant growth in business volume.

There were no material acquisition or divestment effects on any assets side or equity and liabilities side balance sheet items.

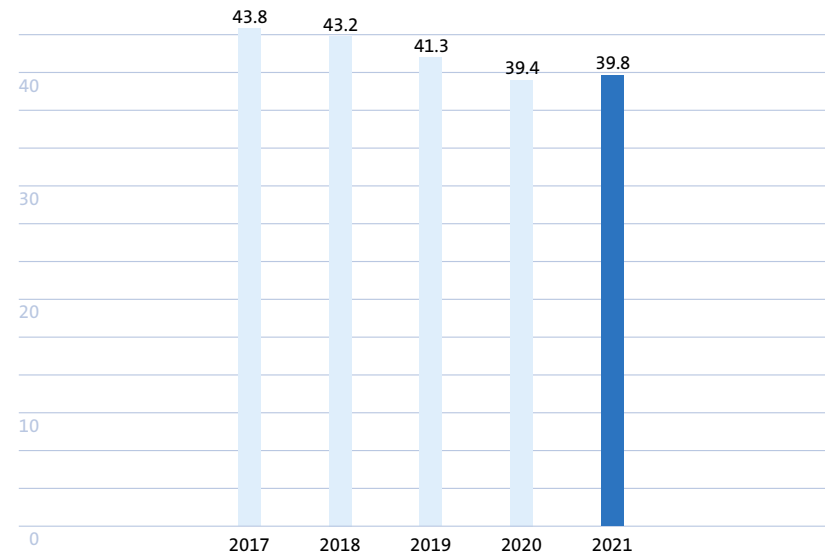
Non-current assets rose slightly in 2021 to €1,132.8 million (31 December 2020: €1,092.5 million). Fixed assets stood at €1,001.4 million as of the year-end (31 December 2020: €990.0 million). The minor increase in fixed assets related to property, plant and equipment and right-of-use assets. These went up slightly from €656.1 million at the end of 2020 to €667.0 million. Intangible assets likewise increased slightly to €303.2 million (31 December 2020: €300.6 million).

Krones' current assets rose significantly overall, mainly due to the growth in business volume. Current assets came to €2,362.0 million at the end of the reporting period, which is 20.7% or €405.0 million higher than the figure as of 31 December 2020. All major balance sheet items contributed to the substantial increase. A significant increase (by €75.2 million) was recorded in contract assets, which stood at €594.0 million at the end of 2021. Trade receivables also went up by €39.2 million to €743.3 million, inventories by €78.5 million to €433.6 million and other assets by €50.6 million to €195.8 million. As Krones generated a high positive free cash flow in the reporting period, there was also a significant increase in cash and cash equivalents. These rose from €217.0 million to €383.4 million.

On the equity and liabilities side of the balance sheet, Krones significantly increased current liabilities. These went up by 21.5% or €294.8 million to €1,668.8 million. This was mainly due to a €195.1 million increase in contract liabilities to €600.2 million, mostly reflecting higher prepayments from customers. Trade payables also went up significantly by €140.2 million to €510.5 million. This includes supplier finance liabilities in the amount of €81.1 million. These outstanding liabilities are settled with suppliers by a bank before they are due. The original supplier liabilities are unaffected in substance because the acknowledgement of the liability is unaltered. Other liabilities and provisions also rose due to the increased business volume, increasing to €319.9 million (31 December 2020: €300.0 million). In contrast, other provisions decreased. These fell by €33.5 million to €164.5 million. This partly reflects the reversal of restructuring provisions for the workforce reduction in the amount of around €29 million. Current bank debt was eliminated in its entirety during the reporting period (31 December 2020: €27.0 million).



Krones Group equity ratio (%)



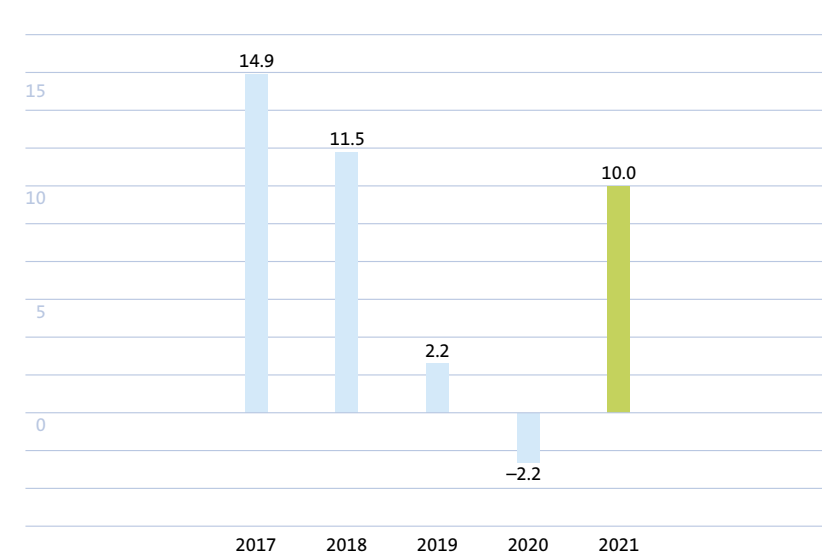
The solid 39.8% equity ratio and €378.3 million in net cash provide a strong basis for further profitable growth at Krones.

Non-current liabilities were down as of the 2021 reporting date. These fell by €41.1 million to €434.4 million (31 December 2020: €475.5 million). This mainly related to provisions for pensions. These decreased, mostly due to an increase in the discount factor, and mostly not accounted for through profit or loss, to €251.2 million (31 December 2020: €281.4 million). At the end of the reporting period, as in the previous year, the company had €5.1 million in non-current bank debt.

Significant increases in equity, net cash and ROCE

Due to the positive consolidated net income, equity increased in 2021 by €191.6 million to €1,391.6 million. The equity ratio improved to 39.8% as of the 2021 reporting date (31 December 2020: 39.4%). With net cash (cash and cash equiva-

Krones Group ROCE (%)



lents less bank debt) of €378.3 million at the end of the reporting period (31 December 2020: €184.9 million), Krones continues to have an extremely stable and solid financial and capital structure. In addition, Krones had available around €1 billion in unused lines of credit as of 31 December 2021.

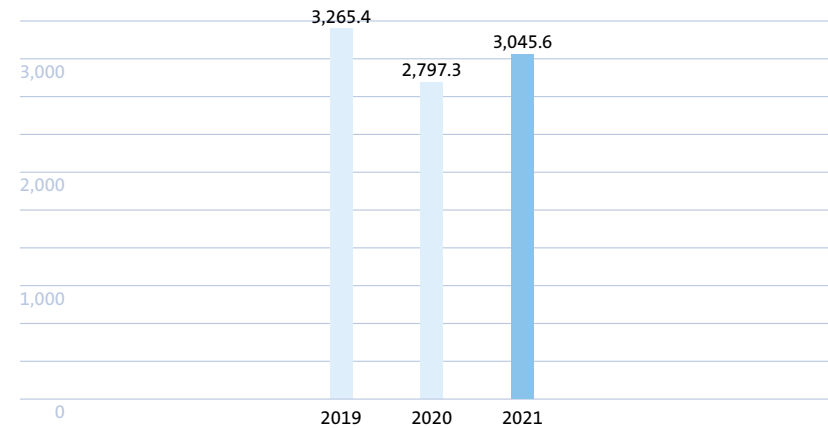
Krones significantly improved return on capital employed (ROCE) from -2.2% in the previous year to +10.0% in the reporting year. ROCE is the ratio of EBIT to average net capital employed in the past four quarters. Net capital employed is defined as non-current assets (excluding goodwill and financial assets) plus working capital. The significant improvement in ROCE was mainly due to the strong increase in EBIT, which was negative in the previous year due to the expenses for the reduction in the workforce. However, part of the increase was also attributable to the decrease in average working capital while average non-current assets remained stable.



Report from the segments

Machines and Lines for Product Filling and Decoration

Segment revenue (€ million)

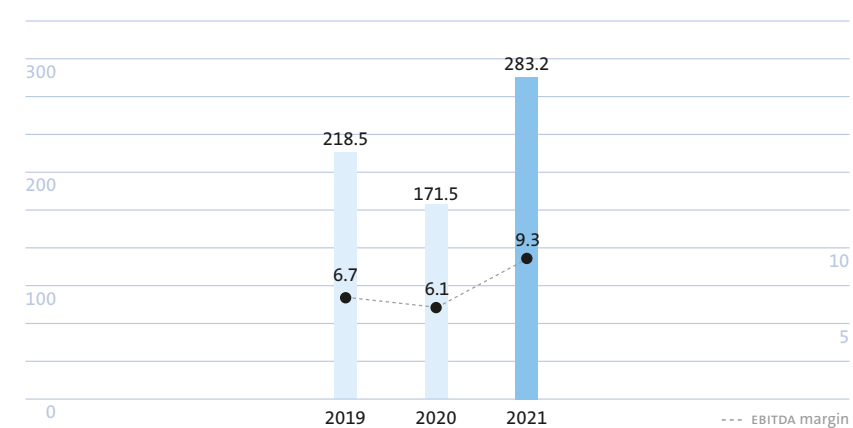


Segment revenue

Krones' core segment significantly exceeded the growth expectations for 2021 with an 8.9% increase in revenue to €3,045.6 million.

After moderate revenue growth in the first half of 2021, revenue in the core segment, Machines and Lines for Product Filling and Decoration, picked up rapidly in the second half year. In total, segment revenue went up in the reporting period by 8.9% year-on-year, from €2,797.3 million to €3,045.6 million. The segment thus significantly exceeded its growth target of 2% to 3% for 2021. Both new machinery revenue and service revenue exceeded the previous year's level, with new machinery business growing particularly strongly. However, this was hit harder by the coronavirus crisis in the previous year than was the case for service activities. The segment's share of consolidated revenue decreased slightly in 2021 to 83.8% (previous year: 84.2%).

Segment EBITDA (€ million) and EBITDA margin (%)



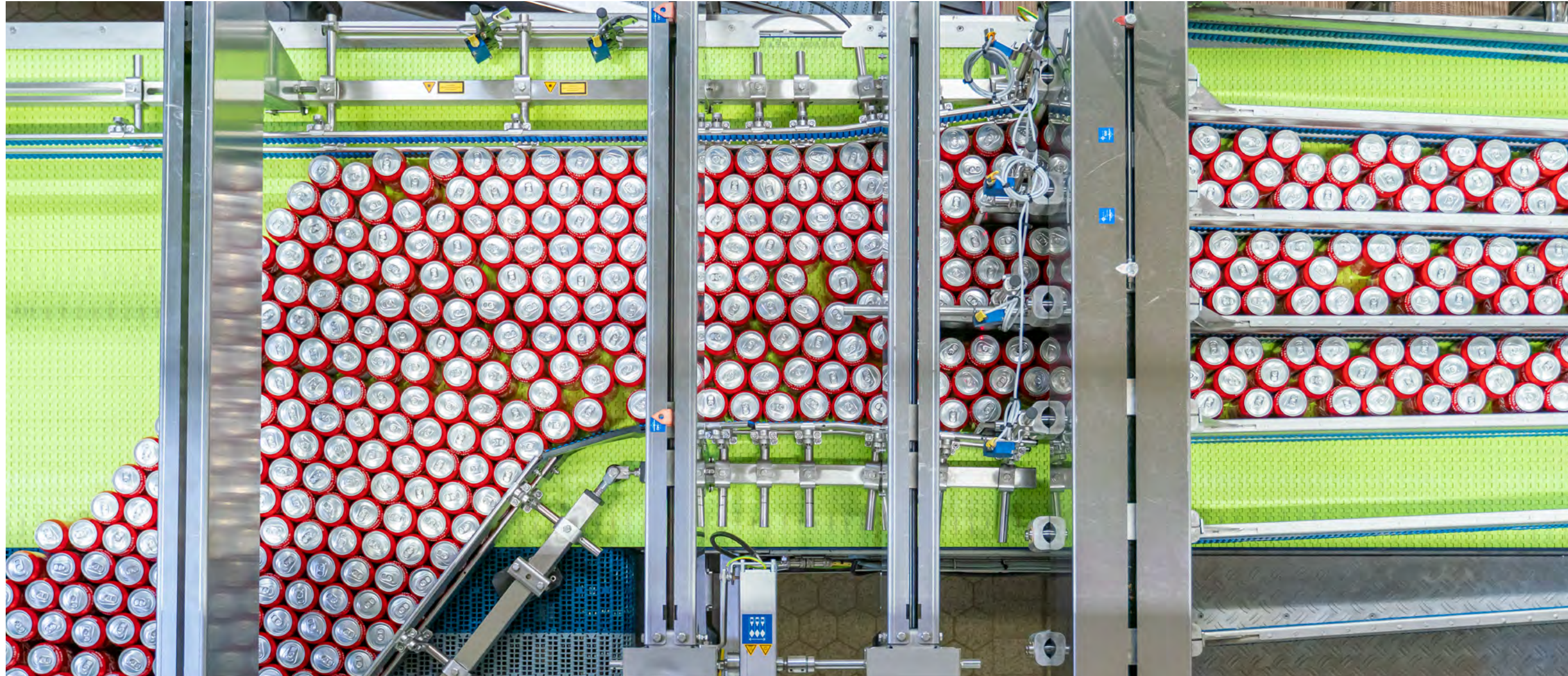
Segment earnings

Core segment profitability improved strongly in 2021. This was partly due to high capacity utilisation and the company's structural measures. One-off effects of around €17 million also had a positive impact on earnings. In the previous year, segment earnings were reduced by restructuring expenses of just under €66 million. In total, earnings before interest, taxes, depreciation and amortisation (EBITDA) went up 65.1% to €283.2 million in 2021. The EBITDA margin increased to 9.3% (previous year: 6.1%). Excluding the positive one-off effects on earnings, the segment margin of 8.7% was at the upper end of the 8.0% to 9.0% target range.

Core segment profitability improved in 2021. The EBITDA margin was 9.3% (previous year: 6.1%).



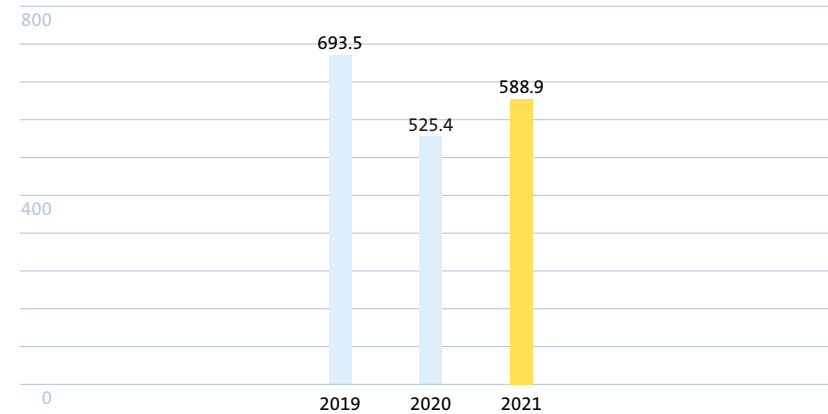
Machines and Lines for Product Filling and Decoration





Machines and Lines for Beverage Production/Process Technology

Segment revenue (€ million)

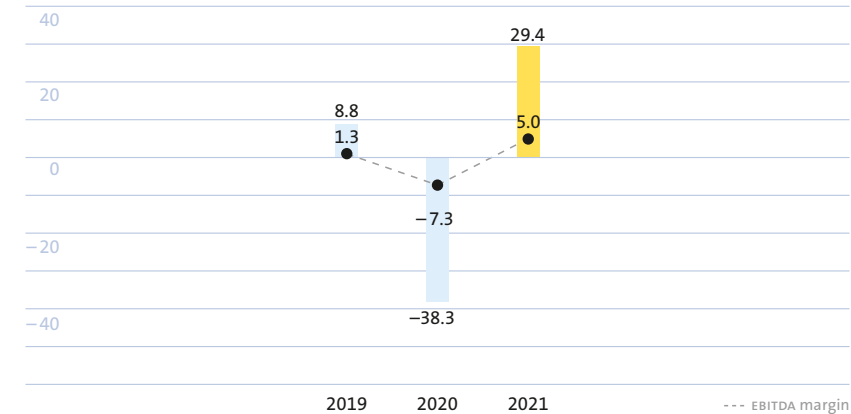


Segment revenue

Revenue grew disproportionately strongly in 2021 in Intralogistics. Total segment revenue increased by 12.1%.

Revenue in the Machines and Lines for Beverage Production/Process Technology segment climbed by 12.1%, from €525.4 million in the previous year to €588.9 million in 2021. The target for revenue growth was 5% to 7%. Intralogistics, which was still part of the segment in the reporting year, recorded disproportionately strong growth, recovering strongly in the reporting period from the pandemic-related decrease in 2020. Beverage Production revenue, the second sub-segment, was slightly down. The entire segment's share of consolidated revenue increased in 2021 to 16.2% (previous year: 15.8%).

Segment EBITDA (€ million) and EBITDA margin (%)



Segment earnings

The higher revenue is also clearly reflected in the profitability performance of the Machines and Lines for Beverage Production/Process Technology segment. Earnings before interest, taxes, depreciation and amortisation (EBITDA) improved by €67.7 million, from –€38.3 million in the previous year to a positive €29.4 million. Intralogistics saw an improvement in earnings, which in 2020 were heavily impacted by the Covid-19 pandemic. Profitability in Process Technology in particular benefited very strongly from structural measures, such as the spin-off of the brewery activities into a separate company, and was likewise higher than in the previous year. In total, the segment's EBITDA margin increased to 5.0% in 2021 (previous year: –7.3%). The segment significantly exceeded the 0% to 1.0% margin target for 2021.

Following the previous year's loss (of €38.3 million), the Machines and Lines for Beverage Production/Process Technology segment generated positive EBITDA of €29.4 million in 2021.



Machines and Lines for Beverage Production/Process Technology





Overall assessment of **economic position**

The global economy recovered in 2021 from the previous year's pandemic-related slump. Demand also picked up significantly in Krones' markets. This benefited the company as a leading full-service supplier to the international filling and packaging industry. Revenue, order intake and earnings increased significantly compared with the previous year. Overall, Krones achieved the upgraded full-year growth and earnings targets for 2021 published in July 2021.

Revenue increased by 9.4% to €3,634.5 million. This means Krones reached the upper end of the upgraded growth target published in July 2021 for the full year 2021 (7% to 9%).

Order intake rose by 30.5% to €4,316.2 million. The contract value of orders not only exceeded pre-crisis levels in 2021, but also reached an all-time high. At €1,893.0 million, the order backlog exceeded the previous year's figure by 56.3%.

Krones' profitability improved significantly in 2021. In addition to higher production capacity utilisation, this was also a result of strategic measures that the company continued to implement in 2021. Earnings before interest, taxes, depreciation and amortisation (EBITDA) increased from €133.2 million in the previous year to €312.6 million. The EBITDA margin rose to 8.6% (previous year: 4.0%). Adjusted for one-off effects on EBITDA in both 2021 and 2020, the EBITDA margin improved from 6.2% in the previous year to 8.1% in the reporting period. Krones consequently reached the upper end of the upgraded EBITDA margin target of 7% to 8% published in July 2021.

Krones once again generated a large free cash flow in 2021. At €203.3 million, this was only slightly down on the very high figure from the previous year (€221.3 million). The company significantly improved the working capital to revenue ratio to 24.8% (previous year: 28.3%). This was below the target corridor of 26% to 27%. At €378.3 million, Krones' net cash (cash and cash equivalents less bank debt) was significantly higher at the end of 2021 than a year earlier (€184.9 million). The equity ratio was 39.8% (previous year: 39.4%). Overall, the company continues to possess a very robust financial and capital structure.

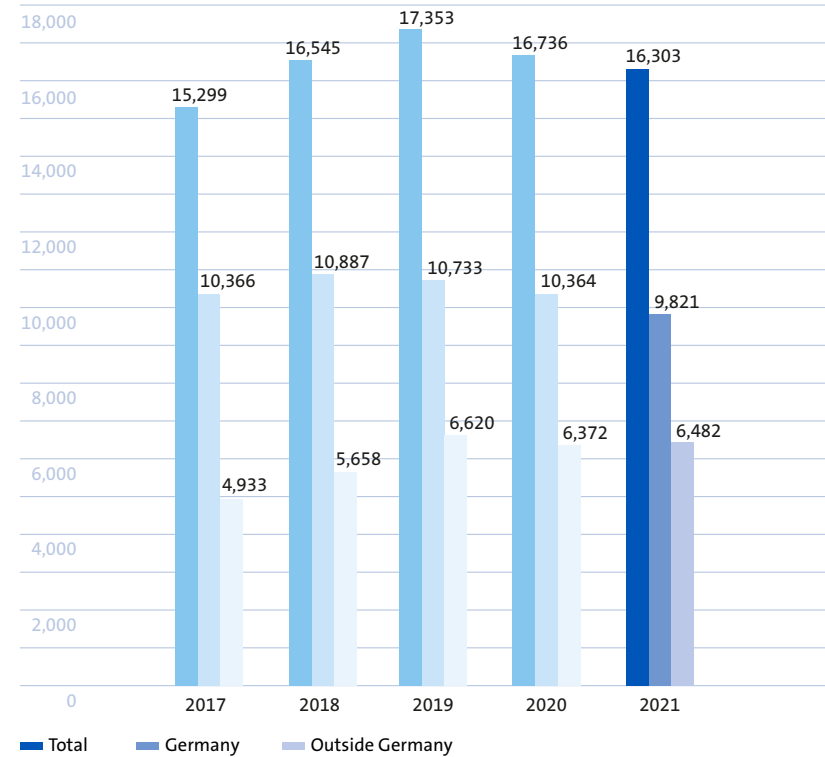
Krones has a large order backlog and is fundamentally optimistic at the beginning of the 2022 financial year. At the same time, various uncertainties mean that the business environment remains challenging for Krones. These include material shortages and problems in global supply chains, political risks in Europe and other parts of the world, and also strong inflation in many countries. It is also uncertain how the Covid-19 pandemic will continue to play out around the world and how the impacts of the war in Ukraine will affect the growth of the global economy in 2022.

For the full year 2022, based on the prevailing macroeconomic outlook and the current expected development of the markets relevant to Krones, the Executive Board forecasts revenue growth of 5% to 8% with an improved EBITDA margin of 8% to 9%. The target for return on capital employed (ROCE) is 10% to 12%.



Krones Employees

Employees by region



Krones employs 16,303 people worldwide – 2.6% fewer than a year earlier

As in the previous year, the number of employees at Krones decreased in 2021, falling by 433 employees or 2.6% to 16,303. Krones continued to implement structural adjustments at its German sites in the reporting period. The number employed in Germany went down as a result by 543 to 9,821. Krones completed the reduction in the workforce during the second half of 2021. As a result, the number of employees has decreased by 1,050 or 6.1% since 31 December 2019. Following a decline in the previous year, the number of employees outside Germany once again slightly increased by 110 to 6,482. The share of employees outside Germany went up in the reporting period to 39.8% (previous year: 38.1%).

Krones reduced the workforce by 433 positions worldwide in 2021. The workforce at German sites decreased by 543 employees. Internationally, the number of employees increased by 110. The international workforce thus made up 39.8% of the total (previous year: 38.1%).

Slight increase in emerging markets workforce

Most of the increase in the international workforce was in emerging economies, primarily at our plant in Hungary (Eastern Europe) and on the service side. Following the pandemic-driven decline in 2020 (by 3.2%), the number of employees in such regions increased in the 2021 financial year by 78 to 4,133. This meant that over a quarter (25.4%) of the Krones team was employed in emerging markets at the end of the reporting period (previous year: 24.2%).



Employees in the emerging markets 2017–2021

Year	South America	Africa	Asia-Pacific	Eastern Europe	China	Total
2017	581	393	734	398	608	2.714
2018	637	452	830	507	716	3.142
2019	782	671	1.009	933	792	4.187
2020	778	639	974	922	742	4.055
2021	803	633	959	1.006	732	4.133

After a slight decrease in the previous year (by 3.2%), Krones increased its emerging markets workforce slightly in 2021 by 1.9% to 4,133. That represents 25.4% of the total workforce.

workforce in emerging markets. Attracting more employees for our international locations means that we are closer to customers and can serve them faster – a key competitive advantage.

To ensure a highly qualified and motivated team for the long term, Krones continues to invest heavily in training and employee development. Employees are the face of the company and the basis for Krones' long-term success.



More information on the subject can be found in our Non-financial report. This is available online at <https://www.krones.com/en/company/responsibility/downloads.php>.

The company plans to continue its above-average growth in emerging markets, where Krones has for years generated about 50% of consolidated revenue. Emerging markets are an important element in achieving the medium-term growth targets. In the medium term, given stable market growth, Krones will therefore further increase the proportion of the

Sustainability at Krones

In the context of its sustainability management activities, the Krones Group contributes to sustainable development. In order to identify potential risks at an early stage, reduce our environmental footprint and continuously enhance our positive impact on the community, sustainability is incorporated in all major decisions. We are aware of our responsibility in the Krones Group, not only for our business performance, but also for the effects of our business activities on the environment, employees, society and future generations.

Non-financial report for 2021

Under the CSR Directive Implementation Act, which entered into force in Germany in 2017, we disclose the policies we pursued in the last financial year with respect to the non-financial aspects that are material to our company.

The non-financial report for 2021, which is not part of the group management report, is simultaneously the combined separate consolidated non-financial report for the Krones Group and Krones AG for the 2021 financial year, within the meaning of Sections 315b and 315c read in conjunction with Sections 289c to 289e of the German Commercial Code (HGB). It is published concurrently with this Annual Report.



Risk and opportunity report

- Risks identified on an ongoing basis
- Efficient control and management tools limit risks

Krones' risk management system

Krones actively addresses potential risks. All key business processes are constantly subject to an internal control and management system.

Krones is exposed to a variety of risks that are inextricably linked with doing business globally. We continuously monitor all significant business processes to identify risks early and to actively manage and limit them. Within our corporate strategy, we also identify, analyse and unlock opportunities. Unlike

risks, business opportunities are not documented within our risk management system.

In essence, risks are defined as potential negative deviations from our earnings forecast for the 2022 financial year. Opportunities are potential positive deviations from our earnings forecast for the 2022 financial year. Because they share the same sales and procurement markets, the same risks and opportunities essentially also apply to both of the Krones Group's operating segments.

Krones' risk management system consists of an internal control system with which we record, analyse and assess all relevant risks. We monitor all material risks and any countermeasures already taken in a detailed, ongoing process that includes planning, information and control.

We assess risks on the basis of the likelihood of an event and its potential financial impact. Earnings before interest and taxes (EBIT) serve as the measure for potential financial impact. Starting with gross risk, we determine the net risk, which takes into account any mitigating actions taken.

Krones presents risks on page 105 using a three-column approach, which covers the maximum loss associated with a risk, the likelihood of an event and the financial impact – the latter being the product of the first two factors. Each factor is categorised as either low, medium, or high.



The categories are defined as follows:

Maximum loss* (€ million)		Likelihood of an event (%)		Potential financial impact* (€ million)	
low	1.0 to 10.0	low	0 to 20	low	1.0 to 10.0
medium	10.1 to 50.0	medium	21 to 49	medium	10.1 to 50.0
high	> 50.0	high	50 to 100	high	> 50.0

*Based on EBIT



Multi-stage risk management system

We are continually improving our risk management system on the basis of practical experience. The system consists of the following modules: risk analysis, risk monitoring, and risk planning and control.

Risk analysis

In order to identify risks early, we continuously monitor all business activities. Material project-related risks are reduced or avoided before an order is accepted. We conduct a profitability analysis of all quotes prior to order acceptance. For orders that exceed a specified volume, we also conduct a multidimensional risk analysis. Apart from profitability, we also individually record and evaluate financing risks, technological risks, regional risks and tax risks as well as scheduling and other contractual risks before accepting an order.

To manage risks that arise from changes in the market and competitive situation, we create detailed market and competition analyses for all segments and business areas on a regular basis.

In addition, we conduct a comprehensive risk inventory annually for Krones AG and all significant group companies. The results of the risk inventory and mitigating actions are used in our annual planning and forecasting. The basic principles and the process are documented in a risk manual. The risk management system serves not only the purpose mandated by law – early detection of going concern risks – but also covers all risks that may have a significant negative impact on earnings.

Risk monitoring

We use a variety of interlinked controlling processes to monitor risks within the Krones Group. Regular comprehensive reports from the individual business units keep the Executive Board and other decision-makers apprised in a timely manner of all possible risks and deviations from company planning and of the status of mitigating actions. For projects with a high contract value, potential risks are examined and evaluated in regular meetings. Employees who identify risks pass their information on without delay through the company's internal reporting system.

Risk planning and control

We primarily use the following tools to plan our business activities and control risk within our internal control system:

- Annual planning
- Medium-term planning
- Strategic planning
- Rolling forecasts
- Monthly and quarterly reports
- Capital expenditure planning
- Production planning
- Capacity planning
- Project controlling
- Accounts receivable management
- Exchange rate hedges
- Insurance policies



Risk management organisation

Krones' risk management system is continuously monitored and reviewed. This is governed by clear areas of responsibility and accountability.

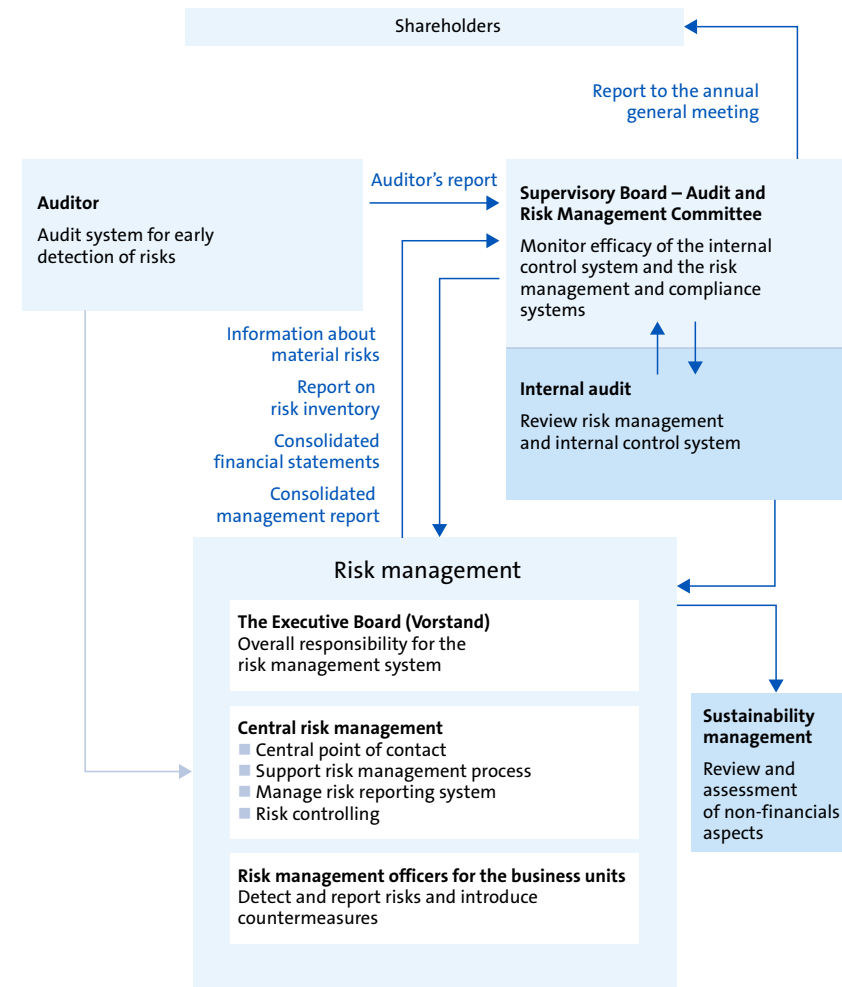
Risk management at Krones is part of Controlling. The risk management system is reviewed by Internal Audit.

All relevant information is collated in Controlling, where it is processed and made available in a management tool for the Executive Board. In addition, the various segments and business units also have risk management officers who are responsible for risk management. This includes identifying and reporting risks as well as introducing and implementing measures to actively control them.

Krones revised the organisation of risk management during the reporting year in accordance with the Financial Market Integrity Strengthening Act (FISG). The Audit Committee now has the right to obtain information directly from the managers responsible for control and monitoring tasks at Krones.

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Risk management organisation at Krones





Key features of the internal control system and the risk management system as relates to accounting and financial reporting

The aim of the internal control and risk management system is to ensure that all business transactions are correctly recorded, processed, recognised and included in financial reporting.

principles, methods and measures to ensure that the company's accounting and financial reporting are effective, efficient and proper and in compliance with all relevant regulations and standards.

Krones has an internal control and risk management system for accounting and financial reporting processes to ensure that all business transactions are always correctly recorded, processed, recognised and included in financial reporting. Krones' internal control and risk management system comprises all

The Krones Group has a clear management and corporate structure. Cross-cutting key functions are centrally managed.

- The duties of the units that are materially involved in accounting and financial reporting processes are explicitly segregated and responsibilities clearly assigned.
- Regular reviews and audits are conducted within the various units, primarily by Controlling.
- Commercial off-the-shelf software is used for accounting and financial reporting as far as possible.
- Special security precautions protect the software and IT systems used for accounting and financial reporting against unauthorised access.
- Sufficient binding policies (e.g. for payments and travel expenses) are in place and updated on an ongoing basis.
- All of the departments involved in the accounting and financial reporting process work constantly to assure the quality of their work.
- Regular spot checks are used to continuously verify the completeness and accuracy of our accounting data.
- The software used in accounting performs programmed plausibility checks.
- We use dual verification for all accounting-related processes.



Overview and description of material risks

Risk categories	Maximum loss	Likelihood of event	Potential financial impact
General business environment and industry-specific risks			
■ General economic risks	high	medium	high
■ Industry-specific risks	low	low	low
Financial risks			
■ Default risks	high	low	medium
■ Liquidity risk	low	low	low
■ Interest rate risk	low	low	low
■ Currency risk	high	low	low
Operational risks			
■ Price risk	high	medium	medium
■ Procurement risks	high	high	high
■ Cost risk	high	low	medium
■ Personnel risk	low	low	low
Legal risks	high	medium	medium
Environmental and safety risks	medium	low	low
IT risks	high	medium	medium



Krones classifies the maximum loss, the likelihood of an event and the potential financial impact of material risks into the three risk categories low, medium and high. Definitions are provided below on page 101.

General business environment and industry-specific risks

General economic risks

As a provider of products and services for the food and beverage industries, Krones is less dependent on economic cycles than other machinery manufacturers. However, the company cannot escape the influence of the general economic situation entirely.

There are a number of macroeconomic uncertainties that could cause the global economy to perform worse than forecast in 2022. The most prominent of these is the Covid-19 pandemic. It is difficult to predict how the Covid situation will continue to develop in individual regions. If the pandemic continues to worsen overall, it could slow down the general economic recovery or in the worst case even cause a recession. One potential danger, for example, is if the existing vaccines prove not to provide sufficient protection against new variants of the virus. There would then be the possibility of extensive contact restrictions or lockdowns. This would negatively impact the whole economy and also our customers' willingness to invest. An unfavourable path of the Covid-19 pandemic in general could have a negative impact on Krones' revenue and earnings.

Risk factors for the global economy also include geopolitical tensions. First and foremost among these is the war in Ukraine. It is not currently possible to predict how this will develop and how its consequences will affect the global economy. There is a risk that the impacts on the global economy will be significant. This would also negatively impact Krones' business.



The threat of international trade conflicts also creates overall economic uncertainty. There is a risk, for example, of the conflict intensifying between China and the USA, both of which are major economic regions. This could have a significant impact on the global economy. If global economic growth were to be considerably weaker than expected due to sustained trade conflicts, that would negatively impact Kronos' revenue and earnings.

The overall economy could be volatile if the Chinese real estate market develops unfavourably. A number of property developers in China have already run into payment difficulties. If payment and credit defaults were to spread, there is a risk that the resulting negative effects could unsettle the entire financial market and lead to a global financial crisis. This would have a significant impact on overall economic development and therefore also have a negative impact on Kronos' earnings situation.

Impact of general economic risks: We rate the maximum loss as medium, the likelihood of an event as low and the financial impact as high.

Industry-specific risks

Kronos is exposed to industry-specific risks primarily through the development of the global packaging market and the actions of competitors. The competitive environment could intensify if Kronos' competitors step up the fight for orders to improve their capacity utilisation. We address the risk of loss of market share by further expanding our technology leadership. Kronos' strong focus on service also sets the company apart from competitors.

Plastic and PET packaging is a subject of increasing debate in recent years, primarily in Europe. Kronos generates a large proportion of revenue with products and services connected with this type of packaging. It cannot be ruled out that

the PET debate will intensify and spread to other regions in the long term. This could reduce our customers' willingness to invest in plastics technology and hence have a negative impact on revenue and earnings.

Impact of industry-specific risks: We rate the maximum loss as low, the likelihood of an event as low and the financial impact as low.

Financial risks

The financial risks to which Kronos is exposed are default risks, liquidity risks, interest rate risks and currency risks. Our description of these risks and suitable actions below is in keeping with the disclosure requirements under IFRS 7 on the reporting of risks relating to financial instruments. Because of regional and customer-related diversification, there is no material concentration of risk.

1. Default risk

Default risk is the maximum potential risk arising from each individual exposure at the reporting date. Any counter-exposures are not taken into account.

1.1 Trade receivables

Credit risk in trade receivables is the risk of economic loss arising from a customer's failure to fulfil contractual payment obligations.

Kronos manages credit risk on trade receivables on the basis of internal policies. Most trade receivables are backed by various, sometimes country-specific, forms of security. These include retentions of title, guarantees and documentary credits. In order to prevent credit risk, we also run external credit checks on customers. In addition, there are processes in place for continually



monitoring receivables that may be at risk of default. Write-downs on bad debt (non-recoverable trade receivables) are taken on an individual basis. The very low volume of actual defaults, as measured against the total volume of receivables, attests to the effectiveness of the measures taken.

The theoretical maximum credit risk from trade receivables corresponds to the carrying amount.

€ thousand	Carrying amount	of which not overdue at the reporting date	of which overdue by the following number of days at the reporting date			
			up to 90 days	between 90 and 180 days	between 180 and 360 days	more than 360 days
31 Dec 2021 Trade receivables and contract assets	1,380,271	1,239,730	99,696	23,400	14,298	3,147
31 Dec 2020 Trade receivables and contract assets	1,259,108	1,130,227	82,798	26,194	17,698	2,191

1.2 Derivative financial instruments

Krones uses derivative financial instruments on the basis of individual contracts solely for risk management purposes. Not using derivative financial instruments would expose the company to greater financial risks.

These instruments essentially cover the risks arising from exchange rate movements between the euro and the US dollar, the Canadian dollar, the Norwegian krone and the Japanese yen. The material contractual details (amount and term) of underlying and hedge transactions are largely identical. Default risk relating to derivative financial instruments in the event of

counterparty default is limited to the balance of the positive fair values. More information on this topic is provided in the notes to the consolidated financial statements.

1.3 Other financial assets

The maximum credit risk position arising from other financial assets corresponds to the carrying amount of the instruments. Krones is not exposed to any material default risk arising from its other assets, all of which are current assets.

Impact of default risks: We rate the maximum loss as high, the likelihood of an event as low and the financial impact as medium.

2. Liquidity risk

Liquidity risk is the risk of a company being unable to sufficiently fulfil its financial obligations.

Krones generates most funding through operating activities. These funds primarily serve to finance working capital and capital expenditures. Krones manages its liquidity by reserving sufficient cash and credit lines with banks in addition to the regular inflow of payments from operating activities. The company's liquidity management for operations consists of a cash management system that is based on rolling monthly liquidity planning with a planning horizon of one year. This enables Krones to be proactive about any possible liquidity bottlenecks. Apart from cash on hand, Krones' cash and cash equivalents consist primarily of demand deposits. The following overview of maturities shows how the undiscounted cash flows relating to liabilities as of 31 December 2021 influence the company's liquidity situation.

€ thousand	Carrying amount at 31 Dec 2021	Cash flow for 2022		Cash flow for 2023–2026		Cash flow for 2026 or later	
		Interest	Repayment	Interest	Repayment	Interest	Repayment
Derivative financial instruments	7,397	0	7,397	0	0	0	0
Liabilities to banks	5,098	42	0	82	5,098	0	0
Trade payables	515,141	0	515,141	0	0	0	0
Liabilities from leases	97,424	262	29,626	1,736	51,242	1,202	16,556
Other financial liabilities	96,090	0	83,181	0	12,909	0	0
Total	721,150	304	635,345	1,818	69,249	1,202	16,556

€ thousand	Carrying amount at 31 Dec 2020	Cash flow for 2021		Cash flow for 2022–2025		Cash flow for 2025 or later	
		Interest	Repayment	Interest	Repayment	Interest	Repayment
Derivative financial instruments	784	0	735	0	49	0	0
Liabilities to banks	32,064	43	27,005	158	3,809	7	1,250
Trade payables	370,359	0	370,315	0	44	0	0
Liabilities from leases	95,217	713	28,058	2,494	50,851	1,315	16,308
Other financial liabilities	107,556	0	95,369	0	12,187	0	0
Total	605,980	756	521,482	2,652	66,940	1,322	17,558

Impact of liquidity risk: We rate the maximum loss as low, the likelihood of an event as low and the financial impact as low.

3. Interest rate risk

Krones is exposed to risk arising from possible fluctuations in market interest rates. As of the 2021 reporting date, Krones made comparatively minor use of bank borrowings relative to its business volume.

Impact of interest rate risk: We rate the maximum loss as low, the likelihood of an event as low and the financial impact as low.

4. Currency risk

Because exports to countries outside the eurozone make up a significant portion of total revenue, we are exposed in principle to currency risk. We use exchange rate hedges to counter such risk as far as possible. In addition, we make most purchasing and sales transactions in euros or the relevant functional currency.

Currency sensitivity analysis

31 Dec 2021 € thousand	Currency USD	Currency CAD	Currency CNY	Currency GBP
Consolidated statement of profit and loss	4,955	304	–309	244
Consolidated equity	10,941	787	2,067	206

31 Dec 2020 € thousand	Currency USD	Currency CAD	Currency CNY	Currency GBP
Consolidated statement of profit and loss	–4,321	621	1,847	–138
Consolidated equity	12,762	251	0	–111

A change in reporting date closing rate by +10% in relation to the foreign currency against the euro (indirect quotation) would have the following effect on consolidated net income and other equity components:

Impact of currency risk: We rate the maximum loss as high, the likelihood of an event as low and the financial impact as low.



Operational risks

1. Price risk

Krones operates in a highly competitive market in which some orders are generated by way of prices that do not cover costs. Fixed-price contracts with customers also entail price risks.

Krones must generally bear any additional costs that arise. In order to minimise this risk, Krones has introduced a multidimensional order analysis process. Any enquiry or order equal to or greater than a specific amount is assessed on the basis of financial, technical/technological, tax, legal and regional risks.

Impact of price risk: We rate the maximum loss as high, the likelihood of an event as medium and the financial impact as medium.

2. Procurement risks

The situation on procurement markets and global supply chains was very difficult in the 2021 financial year. This was also reflected in rising material prices. We expect that ensuring a sufficient supply of material and bought-in parts at all times will continue to be a major challenge in 2022.

Krones is generally exposed to market price risk relating to its procurement of parts and raw materials for operations. Geopolitical and macroeconomic developments are the primary factors influencing raw material prices. There is a risk that raw material prices will develop to our disadvantage. The company mitigates this risk through targeted procurement management and supply contracts to reduce material commodity price risks. We have factored further price increases into our earnings forecast for 2022. If material procurement costs rise by more than expected, then earnings could be lower than forecast.

We also face risks relating to products, deadlines and quality with regard to suppliers. A specially designed process for supplier selection, monitoring and management helps minimise these risks. Should there nevertheless be temporary supply problems, there would be a risk of production stoppages, which could have a negative impact on Krones' revenue and earnings.

Impact of procurement risks: We rate the maximum loss as high, the likelihood of an event as high and the financial impact as high.

3. Cost risk

Our earnings forecast is based on the assumption that we will achieve cost reductions as a result of structural measures. An example of such measures is the workforce adjustment at our German sites, which will be reflected in the figures for a full year for the first time in 2022. We also expect to obtain cost savings by producing at our plant in Hungary and by procuring greater volumes of materials in best-cost countries. We seek to optimise cost structures along the entire value chain. Krones is exposed to the risk that these cost savings will be smaller than expected. We mitigate this risk by continually monitoring the projects underway across the company.

In addition, potential risks to projects in progress due to internal or external factors are tracked during project execution and countermeasures taken without delay.

Impact of cost risk: We rate the maximum loss as medium, the likelihood of an event as low and the financial impact as high.



4. Personnel risk

As well as in its established businesses, Kronos intends to grow more rapidly in particular on the services and digital side. For that purpose, we need highly qualified employees in Germany and abroad. There is a risk that the company will not find enough suitable employees. We will ensure early access to qualified employees through ongoing cooperation with colleges and universities. We regularly employ students pursuing their bachelor's and master's degrees. We also use professional HR consultants.

Impact of personnel risk: We rate the maximum loss as low, the likelihood of an event as low, and the financial impact as low.

Legal risks

Kronos is exposed to risks arising from operating activities in connection with possible legal disputes. Kronos addresses legal risks with its rules of conduct, codes and an internal compliance structure. In addition, the company has taken out insurance policies that are customary for our sector.

Impact of legal risks: We rate the maximum loss as high, the likelihood of an event as medium, and the financial impact as medium.

Environmental and safety risks

As a manufacturing company, Kronos is exposed to risks relating to the environment and safety that could lead to possible harm to individuals, goods or the company's reputation. Any harm caused by technical or human error in production can have a direct impact on our financial position. Such an event and any resulting fines, claims for damages or harm to our reputation can also have an indirect financial impact. Kronos mitigates environmental and safety risks with high technical standards in production, training, rules of conduct and insurance policies customary in our industry.

Impact of environmental and safety risks: We rate the maximum loss as medium, the likelihood of an event as low and the financial impact as low.

IT risks

All of Kronos' material business processes are based on functioning IT systems. The risks here are failure or malfunction of or unauthorised access to critical systems. Such events could result in production stoppages and the loss or misuse of important confidential data.

In general, more and more companies are becoming victims of computer crime, and there are serious cyber security risks. Computer crime is frequently based on professional international structures, which makes averting and combating it a major challenge. Kronos uses internationally recognised IT security measures to protect against risks relating to cyber-crime and other IT risks. We have redundant IT systems in place for critical business processes.

Impact of IT risks: We rate the maximum loss as high, the likelihood of an event as medium and the financial impact as medium.



Overview and description of material opportunities

Material opportunities

Krones does not record business opportunities within the risk management system. For this reason, we do not report on the likelihood of an event or the possible financial impact in relation to opportunities. We describe opportunities in general below.

General economic opportunities

General economic opportunities arise for Krones as a result of the company's good international positioning. We stand to benefit if the economy in individual world regions develops better than experts have predicted. In particular, Krones has considerably strengthened its market position in recent years in the emerging markets in the Asia-Pacific region and in Africa and the Middle East. Additional opportunities would therefore arise for us if the emerging market economies were to grow faster than expected. International Monetary Fund experts expect growth in economic activity for 2022 in the euro area and the USA. If the growth momentum is stronger than expected in these regions, that could result in revenue and earnings above our guidance.

Industry-specific opportunities

Beverage and food producers increasingly focus on conserving energy and other resources. There is a chance of this trend intensifying and customers being more willing to accept higher prices. That would open additional selling and revenue opportunities for Krones due to the company's competitive advantages in this area. With enviro, our certified management system, we have established the basis for ensuring that Krones machines and lines have especially low energy and media consumption. The company has also developed a competitive advantage here.

Digitalisation also presents considerable additional sales and revenue opportunities for Krones. Customers expect Krones' smart machines and lines to reduce their operating and labour costs. Krones already has a number of products and services in the "digital beverage plant" portfolio and intends to further extend its position in the growth field of digitalisation.

Opportunities arising from acquisitions

Krones continued the process of integrating past acquisitions during the reporting period. No new acquisitions were made. Acquisitions are now beginning to be a stronger strategic focus again. We are primarily interested in mid-sized companies that strengthen our existing portfolio technologically and regionally, or that expand the range of products and services. A solid financial position and capital structure enable Krones to seize opportunities for external growth. Acquisitions are not included in our earnings forecasts. External growth could open up opportunities for Krones.

Operational opportunities

1. Selling prices

Krones has optimised its cost structure by adopting a range of strategic measures. This is an important part of the basis for the targeted improvements in earnings. Alongside cost reductions, however, Krones is also focusing strategically on raising selling prices. In the reporting period year, with effect from 1 August 2021, we increased the prices of all bottling and packaging equipment and for process technology by 6%. We aim to implement further price increases in 2022.

2. Procurement prices

The company increasingly buys standardised parts and complete assemblies from suppliers. In addition, Krones procures more and more materials locally at the company's locations worldwide and in best-cost countries. The



opportunity exists that, overall, we might save more in this way than forecast and thus offset the expected price increases to a greater extent than expected. Additional opportunities will also arise if raw material and other material prices develop more favourably than forecast.

3. Costs

Krones has adjusted capacity in line with a short-term fall in demand. A major part of this comprised the reduction in the workforce in Germany. This was completed in 2021 and will have an effect on the full-year figures for the first time in 2022. We have also launched and in some cases already implemented further short-term and structural measures to optimise the company's cost structure. Opportunities arise for Krones if cost savings have a more rapid or a greater effect than planned.

Risks from the Ukraine-Russia conflict

The current situation concerning the war in Ukraine may give rise to risks for Krones.

Disruption of supply chains and at suppliers from the affected regions could result in procurement risk. As Krones procures virtually no materials or products from suppliers in those regions, the direct impact on procurement risk is considered to be very low.

The current conflict in the two countries could lead to risk for sales of Krones products if customers in those countries are restricted in their ability to continue their business activities or Krones is unable to supply products there due to sanctions. As Krones transacts only 1% to 1.5% of its business with the countries concerned, the risk to Krones' order intake and revenue is considered to be low. Furthermore, Krones has a large order backlog with long current lead times with customers in other regions, thus enabling the effects of such risk to be further mitigated.

Settlement and payment default risk has been assessed for outstanding orders with customers in the two countries. This risk was calculated on the assumption of a general risk of default by a number of customers due to the imposed economic sanctions. The resulting risk is calculated at an amount in the mid single-digit millions of euros.

Krones AG is the shareholder of Krones Ukraine LLC, Kyiv, and Krones o.o.o., Moscow. Krones does not see any material risk in the assessment of the recoverability of the assets in these companies, which account for approximately 0.6% of total consolidated assets.

Summary of risks and opportunities

Viewed from today's perspective, Krones is not exposed to any risks that threaten the company's continued existence.

The main change in our assessment of the risks and opportunities relative to the previous year is an increase in procurement risks due to the general market situation. Aside from this, the main risks continue to be found in the general business environment and in industry-specific and financial risks.

In addition, there is risk arising from the current war situation between Russia and Ukraine. Krones has assessed the potential impact on the Group. Based on this assessment, Krones has not identified any uncertainties that would cast doubt on its ability to continue as a going concern.



Events after the reporting period

On 24 February 2022, Russia started the war in Ukraine. As Russia and Ukraine account for a relatively small share of Krones' business activities, the conflict has no significant impact on Krones. Based on this, Krones has not identified any uncertainties that would cast doubt on its ability to continue as a going concern.

There were no other material events after the reporting period.



Report on **expected developments**

- Positive economic outlook for 2022
- Kronos expects good growth in the current year
- Profitability once again to increase in 2022

Global economy expected to grow by 4.4% in 2022, with decreasing momentum

The International Monetary Fund forecasts that the global economy will grow by 4.4% in 2022.

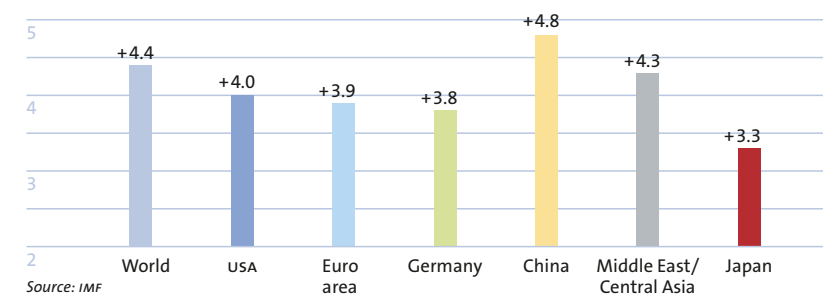
In January 2022, the International Monetary Fund (IMF) forecast global economic growth of 4.4% for 2022. This means that the upswing is losing momentum compared with 2021 (growth of 5.9%). In October 2021, the experts' forecast had been 0.5% higher at 4.9%. The IMF expects that the rapid spread of the omicron coronavirus variant will slow economic growth. Further reasons for the experts' more guarded assessment include rising energy prices and supply shortages, which are driving a significant rise in inflation, particularly in the USA and many emerging economies.

The IMF economists see risks for downward revisions of the growth forecast among other things in the further course of the coronavirus pandemic. Further supply and material shortages could also slow growth and lead to prolonged inflation. The interest rate hikes that would then be necessary would trigger financial market upheaval and negatively impact the global economy.

On IMF estimates, growth in emerging and developing economies, at 4.8% in 2022, will slow significantly relative to the strong previous year (6.5%). This is mainly due to China. The IMF forecasts that Chinese GDP growth will fall to just 4.8% in 2022 (2021: 8.1%). Key factors behind the weaker growth are lockdowns in entire cities and regions under the zero-Covid strategy and financing problems at real estate developers.

The IMF published the forecasts for global economic growth in 2022 before the Russian attack on Ukraine. On 25 February, the IMF issued a statement that the crisis in Ukraine comes at a delicate time, when the global economy is recovering from the ravages of the Covid-19 pandemic, and threatens to undo some of that progress.

Percentage GDP growth in 2022 (forecast)



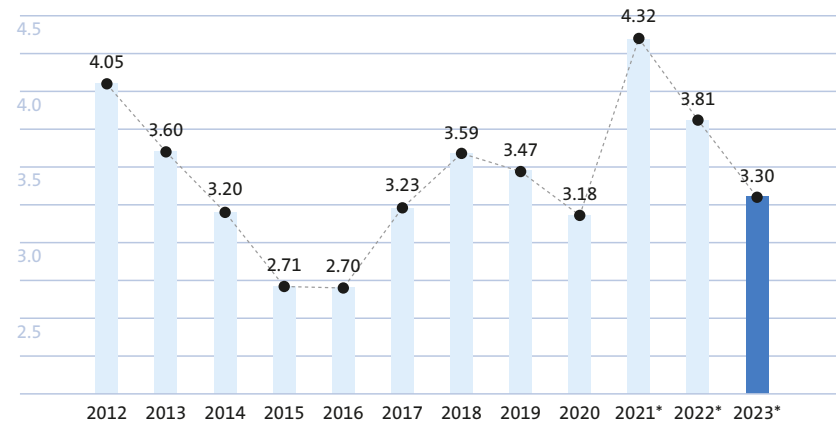
As in the previous year, the strongest growth among emerging markets is expected to be recorded by India, with a repeated strong 9.0% increase. The IMF expects less dynamic growth for the Middle East/Central Asia region. There, the experts forecast GDP growth of 4.3%. In Latin America, the economy is expected to grow by just 2.4% in 2022. This region is being held back by rising interest rates due to high inflation.

For industrialised economies, the IMF forecasts 3.9% GDP growth in 2022. In Germany, the experts expect a slightly smaller GDP increase of 3.8%. For the euro area, the IMF anticipates GDP growth of 3.9%. Due to the interest rate hikes announced by the US Federal Reserve and the supply and material shortages, the IMF experts have downgraded the economic growth forecast for the USA in 2022 to 4.0%. The October 2021 forecast had still been for an increase of 5.2%. As in the previous year, Japan is likely to be one of the slowest-growing industrialised economies. The IMF's forecast is for growth of 3.3%.



Good overall conditions for consumption

Global inflation rate 2012 to 2020 and forecast to 2023, in %



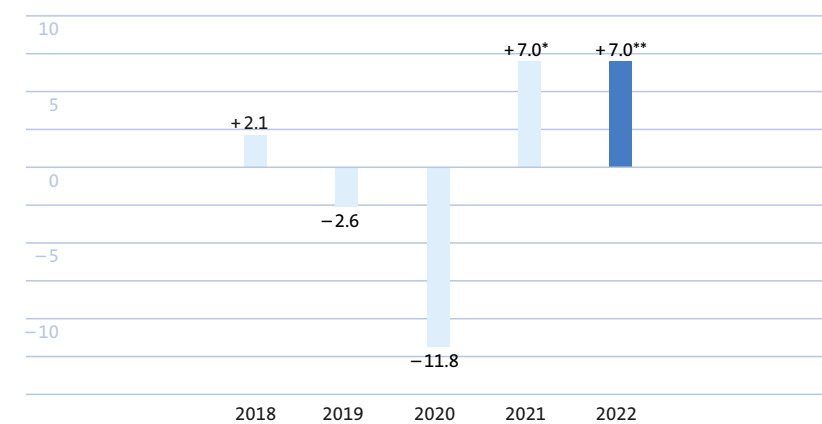
* Forecast

Source: Statista 2022

Consumer spending is a key factor determining the propensity of Krones' customers to commit to capital expenditure and, consequently, the level of demand for beverage filling and packaging equipment. Low unemployment and inflation rates have a positive effect on consumer's buying power. They therefore support demand for packaged food and beverages and indirectly influence demand for our company's products and services. With a continued low unemployment rate and slightly increased inflation, we do not expect any overall negative impacts on Krones' business.

Positive outlook for the machinery sector

Year-on-year change in German mechanical engineering output, in %



* Estimate **Forecast

Source: Germany's Federal Statistical Office, vDMA

Germany's Mechanical Engineering Industry Association (VDMA) expects that the strong order intake in 2021 will continue to have a positive impact on the industry in 2022. The VDMA expects machinery and industrial equipment output to rise this year by 7% year-on-year. Demand is primarily being driven by Europe and the USA. The Chinese sales market already lost some momentum in 2021. Prolonged material shortages could retard growth in the sector. These are not expected to ease until the second half of 2022 at the earliest.

The German Mechanical Engineering Industry Association (VDMA) expects 7% year-on-year output growth in 2022.



Good overall economic outlook for 2022

After a positive financial year overall in 2021, Krones is fundamentally optimistic at the beginning of the 2022 financial year. The reason for this, in addition to the good overall economic forecasts, is sustained high demand for Krones' products and services – despite price increases in the second half of 2021. There are also risks for the global economy, however, and hence also for Krones' business performance. 2022 will be marked by rising US interest rates and by economic and political uncertainties. For example, it is not currently possible to predict how the war in Ukraine will develop and how its consequences will impact the global economy. The ongoing path of the coronavirus pandemic is also hard to predict. If the risks do not affect the economy more than currently expected, there is not likely to be a negative impact on Krones' order intake from customers and investment confidence in the beverage industry will remain at a good level.

Overall, we therefore expect the global market for bottling and packaging equipment, along with selling prices, to continue increasing in 2022. However, competition in our markets and cost pressure will again remain strong this year.

The medium and long-term outlooks remain positive. Consumer demand for packaged beverages and liquid foods is steadily growing due to a number of megatrends such as the growing world population. The focus on sustainability

and digitalisation is likewise supporting demand for innovative beverage filling and packaging machinery.

Because they share the same sales and procurement markets, the economic, sectoral and company-specific outlook essentially applies to all three segments of the Krones Group.

All segments to grow and improve profitability in 2022, including the new Intralogistics segment

Commencing in the 2022 financial year, the Krones Group reports on three segments. The Intralogistics segment is added alongside the two existing segments. This is because the Intralogistics business, which was previously part of the Beverage Production/Process Technology segment, has reached a commensurate size as a result of the previous years' strong growth. The new segmentation also enhances the transparency and depth of Krones' reporting.

Krones will continue to implement the structural measures already launched and to expand its global footprint in the current year. This permits cost structures to be further optimised and made more flexible. In addition, we aim to exploit growth opportunities in our market throughout the Group with innovations and future-ready products and services. Acquisitions are an option in all segments for additional inorganic growth. The goal is to increase profitability in all segments with the support of higher revenue.

Machines and Lines for Product Filling and Decoration segment

	Guidance for 2022	2021 actual	Guidance for 2021**
Revenue growth	5–7%	8.9%	2–3%
EBITDA margin	9–10%	8.7%*	8.0–9.0%

* Excluding positive one-off earnings effects of approximately €17 million

** From the report on expected developments in the 2020 management report.

In the core segment, **Machines and Lines for Product Filling and Decoration**, Krones will continue to further streamline structures and processes while also expanding its global footprint. To this end, it will expand production in Hungary and China together with the related supply chains and strengthen the regional service network. In addition, Krones will make use of its extensive line expertise to consolidate and expand its market position with regard to efficient, reliable, high-performance filling and packaging lines.

The strong trend among our customers towards sustainable production with lower carbon emissions is likewise expected to support growth. Krones is ideally positioned here with its resource-saving enviro products and sustainable PET solutions, including PET recycling.

The services business, supported by digital solutions, is also anticipated to contribute to growth in the core segment this year, despite travel restrictions.

For the core segment in 2022, Krones expects 5% to 7% revenue growth. The EBITDA margin is expected to be around 9% to 10%.

Machines and Lines for Beverage Production/Process Technology segment

	Guidance for 2022*	2021 actual**	Guidance for 2021***
Revenue growth	10–15%	12.1%	5–7%
EBITDA margin	5–7%	5.0%	0–1.0%

* Excluding Intralogistics ** Including Intralogistics *** From the report on expected developments in the 2020 management report

As well as continuing to implement cost-cutting measures, the focus in the **Machines and Lines for Beverage Production/Process Technology** segment is on closer coordination between global units. Growth is expected from new markets such as cosmetics and alternative proteins. The after-sales business is also being expanded.

In 2022, the Process Technology segment is expected to increase revenue by between 10% and 15% year-on-year and earn an EBITDA margin of 5% to 7%.

Overall, Krones forecasts revenue growth of 10% to 15% in 2022 for the Process Technology segment – which included intralogistics until 2021 – with an EBITDA margin of around 5% to 7%.

Intralogistics segment

	Guidance for 2022	2021 actual
Revenue growth	8–13%	40%
EBITDA margin	4–6%	3.7%

In the new **Intralogistics** segment added in 2022, we expect ongoing strong demand for our products and services. This segment is benefiting from increasing automation and digitalisation as well as booming e-commerce. In 2022, Krones will continue to deliver above-average growth in intralogistics and further improve profitability. Revenue is expected to grow by 8% to 13% and the EBITDA margin to be between 4% and 6%.



Krones targets improvements in revenue, the EBITDA margin and ROCE for the Group in 2022

Krones made a strong start to the 2022 financial year with a very large order backlog. At the same time, various uncertainties mean that the business environment remains challenging for Krones. These include material shortages and problems in global supply chains, political risks in Europe and other parts of the world, and also strong inflation in many countries. It is also uncertain how the Covid-19 pandemic will continue to play out around the world and how the impacts of the war in Ukraine will affect the growth of the global economy in 2022.

Krones aims to increase the three key performance indicators revenue, EBITDA margin and ROCE in 2022.

Based on the prevailing macroeconomic outlook and the current expected development of the markets relevant to Krones, the company expects consolidated revenue growth of 5% to 8% in 2022.

Thanks to increasing revenue and the continued implementation of the cost optimisation measures, Krones aims to improve its profitability this year compared with 2021. At group level for 2022, the company forecasts an EBITDA margin of 8% to 9%.

For the third performance target, return on capital employed (ROCE), Krones expects an increase this year to between 10% and 12%. Beginning in 2022, ROCE replaces the previous third key performance indicator, working capital as a percentage of revenue. ROCE reflects both working capital and fixed assets. In addition, ROCE gives investors an even more accurate picture of how efficiently the company manages the capital it uses.

	Guidance for 2022	2021 actual	Guidance for 2021**
Revenue growth	5–8%	9.4%	2.5–3.5%
EBITDA margin	8–9%	8.1%*	6.5–7.5%
ROCE	10–12%	9.0%*	–

* Excluding positive one-off earnings effects of approximately €17 million

** From the report on expected developments in the 2020 management report.



Takeover-related disclosures (report pursuant to Sections 315a and 289a of the German Commercial Code (HGB))

Pursuant to Section 4 (1) of the articles of association, the subscribed capital (share capital) of Kronen Aktiengesellschaft as of 31 December 2021 amounted to €40,000,000.00 and was divided into 31,593,072 ordinary bearer shares each representing a notional €1.27 of share capital. With the exception of treasury shares, from which the Company has no rights, all shares carry the same rights and obligations. Kronen held no treasury shares as of 31 December 2021. Shareholders' rights and obligations arising from shares follow from statutory provisions of the Stock Corporation Act (AktG), primarily Sections 12, 53a et seq., 118 et seq., 133 et seq. and 186 AktG.

Under Section 20 (1) of the articles of association, each share entitles its holder to one vote in the annual general meeting. The Company has no voting rights from treasury shares.

Pursuant to Section 18 (1) of the articles of association, only those shareholders who register with the company in writing in German or English and provide proof of their shareholding prior to the annual general meeting are entitled to participate and vote in the annual general meeting. Under Section 67c (3) AktG, proof of the shareholder's shareholding in text form provided by the last intermediary is sufficient as proof and may also be communicated to the company directly by the last intermediary. The proof of shareholding must relate to the start of the twenty-first calendar day prior to the annual general meeting.

Restrictions on the voting rights attached to shares may also result from provisions of the Stock Corporation Act, such as under Section 136 AktG. Infringements of notification obligations within the meaning of sections 33 (1), 38 (1) and 39 (1) of the German Securities Trading Act (WpHG) may lead to a situation where, under section 44 WpHG, rights attached to shares, including voting rights, are at least temporarily suspended.

To the knowledge of the Executive Board, the following agreement exists, or existed in the 2021 financial year, that may be considered a restriction within the meaning of Section 289a sentence 1 no. 2 and Section 315a sentence 1 no. 2 HGB: Mr. Harald Kronseder, Mr. Gunther Kronseder, Harald Kronseder Holding GmbH, Neutraubling, Beteiligungsgesellschaft Kronseder mbH, Neutraubling, VMAX Familienstiftung, Neutraubling, Ms. Nora Diepold (née Kronseder) and Mr. Leopold Kronseder are parties to a pool agreement. The members of the pool agreement have established a civil-law partnership ("Familie Kronseder Konsortium"), the purpose of which is to ensure, by means of uniform decision-making by the shareholders and uniform exercise of voting rights in general meetings of Kronen Aktiengesellschaft and by restricting the ability for the shares in Kronen Aktiengesellschaft bound in the pool agreement to be sold at will, (a) the influence of the shareholders (and in particular the influence of the Kronseder family) and their legal successors, (b) the continuation of Kronen Aktiengesellschaft in a scope comparable to the overall business situation at the time of signing the pool agreement (comparable revenue, comparable order volume, comparable operating assets, comparable size of workforce) and (c) that the company retains the character of a family-owned company.

The Executive Board of the company is not aware of any other restrictions relating to voting rights or the transfer of shares.

The company is aware of the following direct and indirect shareholdings in the company's capital that exceed 10% of the voting rights: Leopold Kronseder (indirect), Nora Diepold (née Kronseder) (indirect), Gunther Kronseder (indirect), VMAX Familienstiftung, Neutraubling (direct and indirect), Harald Kronseder (direct and indirect), Harald Kronseder Holding GmbH, Neutraubling (direct and indirect), Beteiligungsgesellschaft Kronseder mbH, Neutraubling (indirect), Dr. Volker Kronseder (indirect).



To the company's knowledge, the members of Familie Kronseder Konsortium jointly hold the following interest in the share capital:

	Total share of voting rights
Familie Kronseder Konsortium	52.1 %

Changes to the shareholdings listed above that are not required to be reported to the company may have occurred since the specified date (24 January 2022). Because the company's shares are bearer shares, the company is generally only aware of changes in shareholdings if the changes are subject to reporting requirements.

The company has not issued any shares with special rights conferring powers of control. There is no employee share scheme where the control rights are not exercised directly by the employees.

The appointment and dismissal of Executive Board members is governed by Sections 84 and 85 AktG and by Section 31 of the Codetermination Act (MitbestG). Pursuant to Section 6 (1) of the articles of association, the Executive Board consists of at least two members. Pursuant to Section 6 (2) of the articles of association, determination of the number of Executive Board members, the appointment of regular and deputy members of the Executive Board, the execution of their employment contracts and revocation of appointments are the responsibility of the Supervisory Board.

Such amendments are to be adopted by resolution of the annual general meeting (Section 119 (1) No. 5 and Section 179 (1) of the German Stock Corporation Act). Unless mandatory provisions of law stipulate otherwise, resolutions of the annual general meeting are made with a simple majority of votes cast or, in cases in which the law prescribes a majority of shares in addition to a majority of votes, with a simple majority of the share capital represented in the vote.

Accordingly, in derogation from Section 179 (2) sentence 1 AktG, resolutions of the annual general meeting amending the articles of association also require, in addition to a simple majority of votes, a majority of the share capital represented in the vote, unless a larger majority is prescribed by law. The Supervisory Board is authorised to make amendments that affect only the wording of the articles of association (Section 179 (1) sentence 2 AktG in conjunction with Section 13 of the articles of association). In addition, the Supervisory Board is authorised by resolution of the annual general meeting of 17 June 2021 to amend the articles of association in accordance with any utilisation of Authorised Capital 2021 and upon expiry of the term of the authorisation for the utilisation of Authorised Capital 2021.

By resolution of the annual general meeting of 17 May 2021, the Executive Board is authorised to increase the company's share capital, with the approval of the Supervisory Board, by up to €10 million (Authorised Capital 2021) through the issuance on one or more occasions of new ordinary bearer shares against cash contributions up to and including 16 May 2026. Shareholders must normally be granted subscription rights to these shares. The Executive Board is authorised to exclude shareholders' subscription rights, with the approval of the Supervisory Board, for any fractional amounts that may arise. Moreover, the Executive Board is authorised to determine the further details of the capital increase and its implementation, in both cases with the approval of the Supervisory Board.

The Executive Board is authorised to repurchase treasury shares and to sell repurchased shares in the cases stipulated on by law in Section 71 of the German Stock Corporation Act (AktG). By resolution of the annual general meeting of 13 June 2018, the Executive Board is authorised, with the approval of the Supervisory Board, up to and including 12 June 2023, subject to compliance with the principle of equal treatment (Section 53a AktG), to buy treasury shares totalling up to 10% of the company's share capital at the time that the resolution was



adopted or, if smaller, at the time that the authorisation is exercised. The amount of shares purchased under this authorisation, together with other treasury shares that the company has already acquired or still holds or shares that are attributable to the company under Sections 71d and 71e of the German Stock Corporation Act, may at no time exceed 10% of the company's share capital at the time. The authorisation may be exercised once or multiple times, either in whole or in part, in pursuit of one or multiple purposes, by the company, by Group companies or by a third party acting on the company's behalf or on behalf of Group companies. The authorisation may not be used for the purpose of trading in the company's shares.

The purchase of treasury shares may be carried out, at the discretion of the Executive Board, through a stock exchange or through a public tender offer addressed to all of the company's shareholders or through a public request to the shareholders to tender shares for sale.

By resolution of the annual general meeting of 13 June 2018, the Executive Board is authorised to use any treasury shares bought pursuant to the aforementioned authorisation in accordance with Section 71 (1) No. 8 of the Stock Corporation Act, besides for sale on the stock exchange or by offer to all shareholders, for any permissible purpose, and in particular as follows:

- 1) The shares may be cancelled and the share capital reduced by the proportion of the share capital accounted for by the cancelled shares, without the cancellation or its execution requiring a further resolution by the annual general meeting.
- 2) They may be offered and transferred to third parties in return for non-cash contributions.
- 3) The shares may be sold to third parties against cash payment if the price at which the shares in the company are sold is not significantly lower, within

the meaning of sections 71 (1) no. 8 sentence 5 and 186 (3) sentence 4 of the Stock Corporation Act, than the stock exchange price of a company share at the time of sale.

- 4) The shares may be used to service obligations or rights to purchase shares in the company arising from and in connection with convertible bonds or bonds with warrants, or profit-sharing rights with conversion rights or warrants, issued by the company or any of its group companies.

The authorisations for the Executive Board to sell and otherwise use purchased shares may be exercised once or multiple times, individually or in combination, on the whole volume or on partial volumes of the acquired shares. The above authorisations may also be exercised by dependent companies or companies that are majority-owned by the company or by third parties on behalf of the company or its dependent or majority-owned companies.

Shareholders' statutory subscription rights to such shares are excluded to the extent that the shares are used in exercise of the authorisations set out above under ii) to iv) inclusive or, in the case of sales of treasury shares to all shareholders, to the extent necessary to avoid fractional amounts.

Further details may be found in the authorising resolution, the full wording of which is reproduced in agenda item 9 in the notice convening the annual general meeting of Kronen Aktiengesellschaft on 13 June 2018 published in the Federal Gazette on 19 April 2018.

Kronen Aktiengesellschaft has not made any material agreements containing special provisions relating to a change or acquisition of control following a takeover offer.

The company has not made any agreements with members of the Executive Board or company employees relating to compensation in the event of a takeover offer.



Dependency report

Pursuant to Section 17 of the German Stock Corporation Act (AktG), Familie Kronseder Konsortium GbR, Neutraubling, has a controlling influence over Krones AG. Thus, in keeping with Section 312 AktG, the Executive Board has prepared a report which contains the following final declaration:

Krones AG did not carry out any legal transactions with third parties at the instigation or in the interests of the shareholders of Familie Kronseder Konsortium GbR or their affiliates. Measures requiring reporting within the meaning of Section 312 AktG were neither taken nor omitted.

For every transaction made between KRONES AG and the owners of Familie Kronseder Konsortium GbR and affiliated companies in the reporting period, Krones AG made arrangements for appropriate consideration within the meaning of Section 312 AktG and – to the extent that it was to be fulfilled in the reporting period – also received appropriate consideration.



*The statement on corporate governance is also available online
at <https://www.krones.com/en/company/investor-relations/corporate-governance-statement.php>*



Neutraubling, 16 March 2022
Krones AG

The Executive Board

Christoph Klenk
CEO

Norbert Broger
CFO

Thomas Ricker
CSO

Markus Tischer

Ralf Goldbrunner