ANNUAL REPORT 2021

NEXT LEVEL

2021

Innovations for a **better world.**

BÜHLER

BUSINESS REVIEW

A NEXT LEVEL


Dear customers, partners, and colleagues,

We would like to start this letter with an expression of sincere thanks: the trustful collaboration with you has never been more appreciated than during these dynamic times. “Creating tomorrow together” is a deeply rooted credo of Bühler – and together we have achieved reasonable results in 2021 and strengthened our financial stability for the future. For us, 2021 was marked by the clear objective to support and provide service to our customers, at all times, irrespective of the many challenges of the year – be it the ongoing pandemic or its implications such as travel restrictions, raw material shortages in global supply chains, logistic bottlenecks, and shifts in customer buying behavior.

Fulfilling contracts on schedule and keeping your plants running with our services was of utmost importance to us. Our global network of Bühler offices, manufacturing sites, service stations and Application & Training Centers has, yet again, proven to be a key enabler for our reliability. Furthermore, health and safety – not only of Bühler employees, but also of employees of our customers and partners – remained our priority No. 1, and due to the respective measures implemented globally, we were able to keep operations up and running at any point throughout the year. This enabled us to service, install, and commission the plants of our customers globally, despite the ever-changing restrictions our teams faced in the more than 140 countries in which we are active. New digital tools smartly applied throughout our platforms were instrumental to this task.

2021 was also the year where we brought innovations to the next level: in all our businesses, in food- and feed-processing, as well as in technical material processing. The pandemic offered many new opportunities in markets, technologies, and consumer habits and we have seen big shifts in preference and demand. Our creative experts in all business areas and regional organizations were successful in launching a record number of innovative technologies, products, and services, and it is owed to them that Bühler was able to create a competitive edge in all the key markets in which we are active. We are very aware of the fact that this would not have been possible without the unwavering support of our partners and customers around the world.

Bühler solutions not only stand for the next level of performance and value for our customers, but also for a next step in living our purpose of “innovations for a better world”. They all create impact in our endeavor to have solutions ready to multiply by 2025 that will reduce energy, water, and waste by 50% in the value chains of our customers.

Despite the challenging environment, we are happy to report considerable improvements in orders and have a backlog of nearly CHF 1.94 billion, up 27.2% from 2020. Due to the time lag between orders and delivery – which is the nature of our engineering business – we expect our profitability to improve in 2022.

And for all of these reasons, mentioned above, we are looking optimistically into the future. We wish to express our sincere gratitude to our customers, employees, bondholders, business partners, and owners for their ongoing trust and support.

We are excited to continue our journey of successful, trustful, and sustainable collaboration with you for the years to come.

With best personal regards and thanks,
Yours sincerely,

Calvin Grieder
Chairman of the Board

Stefan Scheiber
Chief Executive Officer

A NEXT LEVEL

Continuous innovation, even during challenging times, is a key pillar of our success. On this foundation, we took important steps in 2021 in implementing our commitment to reduce climate change and generate solutions that unlock sustainable businesses. And we brought our innovation to a next level by reinforcing our position as a solution partner to our customers. While the pandemic continued to present challenges, we successfully secured operations, supply chains, deliveries, and services to our customers. With a positive turnaround of orders, stable turnover, and profitability, our financial position in 2021 was improved and we are very satisfied with the outcomes of the year. Despite an ongoing challenging economic environment and strained supply chains, we remain optimistic and expect a continuation of our profitable growth.

BUSINESS REVIEW 2021

The business environment for Bühler in 2021 was characterized by three key topics: the ongoing Covid-19 pandemic; strained supply chains with shortages of parts and components, soaring raw material prices and logistic costs; as well as the recovery and accelerated transition of major markets especially in the northern hemisphere driven by changing consumer behavior, digitalization, and the demand for sustainable value streams.

Our top priority continued to be the health and safety of people, not only of Bühler but also of our customers and partners. In close alignment with the safety requirements and regulations of the different global locations, we worked to bring our employees safely back to our sites wherever possible. During 2020, whenever possible, we switched to digital solutions to ensure continuation of the business and to communicate, and we discovered the benefits of this in many areas. From online commissioning of plants and production lines to product development with our customers in our Application & Training Centers and virtual communication with webinars or the Bühler Virtual World. In 2021, as more and more of our workforce became vaccinated, we resumed in-person meetings and events, internally but also with our customers – with all safety precautions. In our experience, more face-to-face communication with some virtual and hybrid events helped keep the energy level of our organization high after months of lockdowns and isolation.

To ensure the safety of in-person interactions, in addition to our ongoing safety measures, we rolled out vaccination campaigns at the earliest possible point in time at all our global sites. In the majority of our locations, our vaccination drives were open to both employees and their families, for example in Switzerland, India, China, Vietnam, Austria, South Africa, and others. Uptake of the Covid-19 vaccines overall was high, so that we can report an 83% vaccination rate of Bühler's workforce worldwide as of December 2021.

In retrospect, managing the pandemic from the beginning of 2020 could be seen as an opportunity to test and increase the agility of our company. In 2021, our regional set-up and 103 service stations across the globe again proved to be very robust, and we were able to honor all our contracts. As supply chain and logistics issues became more challenging, including dealing with energy shortages in Asia, we managed the situations with the high engagement and flexibility of our colleagues across our organization, including procurement, commissioning, logistics, services, and human resources. Our employees globally ensured that we could always keep our promises to our customers. Even the largest plants, such as green-field complexes in various countries, were completed and started operations within this tense period.

Keeping innovation pace high

Because of our reliability and ability to deliver, we were able to benefit from market recoveries and the growing demand for new solutions in several segments. This demand was driven – among others – by the accelerated transformation of the food, feed, and mobility industries with a view toward decarbonization and new consumer trends. We could meet these market needs with innovative, new solutions which were launched in the markets. These include our extrusion technology for batteries, the launch of large-scale die-casting machines for large body in white parts, systems for plant-based meat alternatives, insect processing, the Mill E3 and SmartMill – our new generation of fully digital mills – along with many digital services and an expanded CO_2 equivalent quantification program.

In addition, we expanded our innovation ecosystem with strong partnerships to complete our offerings along integrated value chains. For example, with Balaguer on roll services, Vyncke on energy recovery solutions, Givaudan and Migros on cultured meat, DIL on plant-based proteins; and the existing joint-venture with Premier Tech on packaging went operational and have proven to be a success.

Back to growth

Based on our position as a technology leader and solution partner, we have been able to turn order intake around after the severe decrease in 2020 caused by the pandemic. On Group level, order intake went up 15.6% to CHF 3.0 billion. Because of the time shift in the investment goods industry from orders to sales, but it improved our orders on hand by 27.2%. This upward trend is not yet fully visible in turnover, which remained stable at CHF 2.7 billion. Due to continued strict cost management and margin protection, EBIT (earn-

BUSINESS REVIEW 2021

ings before interest and taxes) stood at CHF 146 million (prior year: CHF 146 million), reflecting an EBIT margin of 5.4% (prior year: 5.4%).

Following the vast variety of impacts caused by the pandemic and market recovery patterns, the businesses and regions showed strong variance in performance. Advanced Materials performed at an outstanding level with an order increase of 36.8% to CHF 620 million, and a turnover growth of 14.9% to CHF 509 million. Our Grains & Food business achieved a strong upturn with an order intake growth of 12.2% to CHF 1.8 billion and stable turnover of CHF 1.7 billion. For the Consumer Foods segment including the Chocolate, Wafer, and Biscuit business units, the market recovery started with a time lag, so that the business grew orders by 6.5% to CHF 584 million at a decreased turnover of CHF 509 million (-11.3%) related to the low order intake in 2020.

Net profit increased slightly to CHF 113 million (prior year: CHF 110 million). The expenses for research and development (R&D) increased to CHF 141 million (5.2% of Group turnover) in line with our strategy to be the innovation leader of our industry.

Services as a game changer

Our fast-growing Customer Service business with a 15.1% growth rate in order intake to CHF 746 million and 8.6% in turnover to CHF 693 million, contributed to this outcome. The continuation of new digital methods, for example to commission equipment, lines, and plants remotely, was an essential element in supporting our customers during difficult traveling circumstances resulting from the pandemic. As a side effect, we increased the efficiency and reach of our services for customers.

With this, the share of Customer Service on turnover increased from 24% to 26%, combined with the short cycle Single Machine business that increased to 34% of the total turnover. This growth was driven not least because of three factors: the expansion of our services portfolio, for example comprehensive service contracts (TotalCare) which include the presence of Bühler technicians at customer sites, and remote maintenance service offerings using our digital platform Bühler Insights.

The expansion of our e-commerce service myBühler, bringing more customers and regions onto our platform; and the utilization of our service offerings to improve the performance of the installed base of our customers – not only in terms of efficiency and productivity, but also in terms of sustainability. Increasingly it is realized that the strongest lever to reduce energy, waste, and water lays within the vast number of existing plants and services to enhance their ecological footprint.

Strong global network

2021 again proved Bühler's global network of production sites, Application & Training Centers, and service stations to be a key strength of the company. Locally, even in regions with ongoing travel restrictions we were able to serve customers. It allows our factories and supply chains to breathe and to mitigate risks by a flexible activation of our assets. The background for the robustness of our supply chain and next level agility lays with the real-time management of this network.

Along with the divergent course of our businesses, there was also a shift in regional developments. Regarding orders released, our South Asia region experienced strong growth at 52%, followed by Middle East & Africa at 31%. Share of turnover in the regions was: Asia 33%, Europe 32%, North America 17%, Middle East & Africa 10%, South America 5%, and South Asia 3%.

Financial stability improved

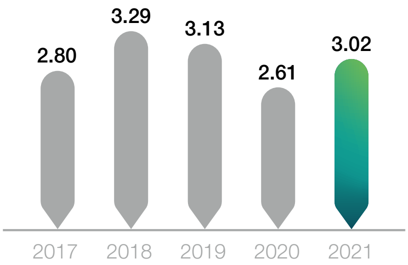
In 2021, we were successful in further strengthening our financial position. This provides us with the financial capability to remain fully independent and to continue investing in new solutions and services for the benefit of our customers. At the same time, our strong balance sheet allows us to repay the first tranche of our bond in 2022 and to be a reliable long-term partner also for the financial markets.

Driven by diligent finance management, operating cash flow was CHF 256 million, and net liquidity went up from CHF 159 million to CHF 329 million (+107.1%). Equity increased with a ratio of 47.2% (reported prior year: 44.2%).

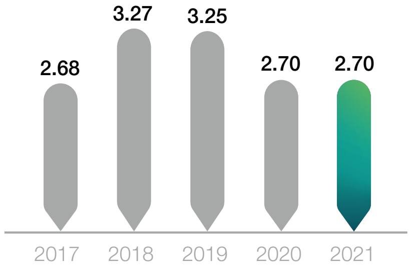
This financial strength enables us to continue executing our strategy including strategic investments into assets and innovation, and provides our customers, suppliers, and partners security in a volatile economic environment.

RESULTS AT A GLANCE

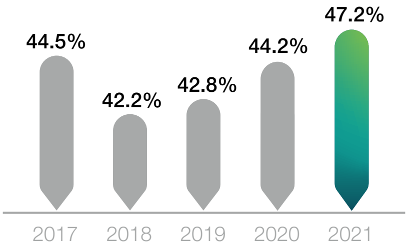
Order intake
(in billion CHF)
+15.6%



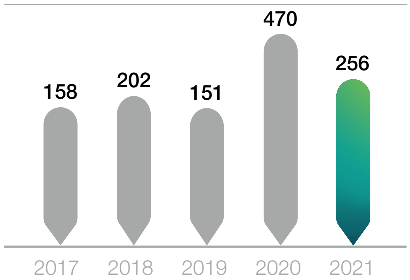
Turnover[1]
(in billion CHF)
+0.1%



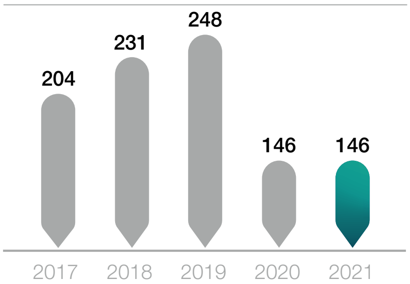
Equity ratio[1]
(in %)
+3.0pp



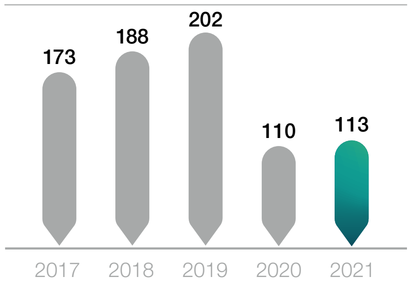
Operating cash flow
(in million CHF)
-45.6%



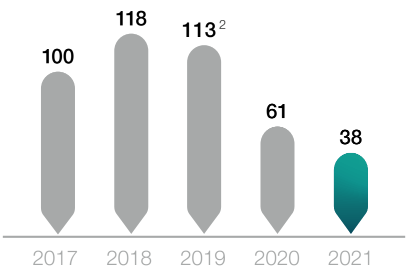
EBIT
(in million CHF)
+0.2%



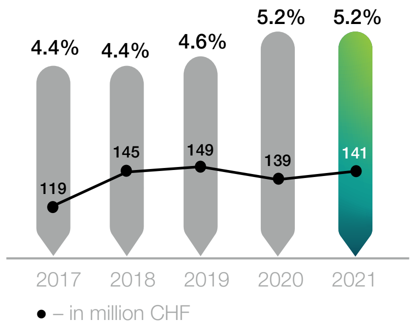
Net profit
(in million CHF)
+3.2%



Investments into asset base
(in million CHF)
-37.6%



R&D expenses
(as % of turnover)
+0.0pp



More about the 2021 business year

[1] Prior years as reported. [2] Excluding changes in accounting standards and others.

Grains & Food

Order intake	
CHF 1.8 billion	+12.2%
Turnover	
CHF 1.7 billion	-0.7%

GRAINS & FOOD: STRONG PERFORMANCE

For Grains & Food, 2021 was a very good year with a strong recovery. The segment grew its order intake by 12.2% to CHF 1.8 billion, coming close to pre-corona levels and had a stable turnover of CHF 1.7 billion. All business areas of Grains & Food contributed to this positive development. Regionally, the upturn was strongest in the northern hemisphere. Regarding innovative solutions, all businesses report important milestones, be it with new orders (insect processing), start-of-operations (Mill E3/SmartMill), or market launches (Optical Sorting, Rimomalt). New strong partners add to Grains & Food's innovation ecosystem and the joint venture with Premier Tech has proven to be an enormous success.

In the Grain Quality & Supply business area, all units recorded good business development. The Grain Handling business area benefited from a reshaping of the global grain value chains which lead to huge investments into the build-up of a new infrastructure in China. In this context, Grain Quality & Supply won large orders for ship loaders at the Yangtze River. The Malting & Brewing business unit continued to secure important orders. With our new Belgian technology partner Vyncke we are now able to provide integrated solutions for low carbon food plants by transforming biomass by-products into clean energy. One of the first implementations was for a new malting plant for our customer Malteria Oriental S.A. in Montevideo, Uruguay.

The Grain Quality & Supply rice business was still impacted by lockdowns in Southeast Asia due to the pandemic. However, one highlight was the assignment for a large rice mill in Bangladesh with a production capacity of 40 tons per hour. Regarding innovations, Grain Quality & Supply launched Rimomalt, a new solution for small- to midsize malting plants with a capacity range from 1,000 to 17,000 tons, a modular and expandable layout, small space requirements, short installation times, and high efficiency. The market reaction was positive and the first projects are in progress.

Within Grains & Food, the Milling Solutions business unit saw the strongest growth with a 18% higher order intake. This upward trend was very much driven by oats solutions, which doubled volumes, but also fueled by pulse applications and the traditional milling business for wheat and rye. A highlight of the year was the start-of-operation of the first Mill E3 of our customer Whitworth Bros. Ltd. in the United Kingdom. Mill E3 is a revolutionary concept to build a mill, saving around 30% of building volume, 10% of energy, and 30% of installation time. The background of these achievements is a new, integrated, innovative arrangement concept, and modular design of key components such as the Arrius fully integrated grinding system. Around three years ago the Mill E3 concept was publicly announced; now this vision has become reality. At the heart of the Mill E3 are more than 15,000 data points collecting information on all aspects of the production process. It is the volume of data being analyzed, along with the cutting-edge application of blockchain technology, that enable the most efficient, transparent, and consistent production possible, and therefore the highest quality product. In its first month of operation, Mill E3 confirmed all predictions about the values this new concept will bring for our milling customers. With this, the journey towards a fully digitalized milling future has just begun.

Our Value Nutrition business area continued the protein success story in all aspects. In the past, our feed business was growing mostly in China. Yet we managed to position our leading feed solutions also much stronger in other important regions, for instance in South America and India. Our Human Nutrition business unit launched PolyCool 1000, a high-performance cooling die that, together with an extruder, provides an efficient and flexible solution for food producers creating tasty and sustainable plant-based meat or fish alternatives at highest available capacities. With the PolyCool 1000 it is possible to produce wet-textured proteins based on a wide range of raw materials including soy, pulses, oilseeds, upcycled by-products such as brewers' spent grains, as well as newer ingredients such as microalgae, at high-capacity rates with throughputs of up to 1 ton per hour. With this, Bühler is the clear technology leader in this fast-growing food market. The inauguration of the Technology Center Proteins of the Future to further develop extruded meat substitutes together with the DIL (Deutsches Institut für Lebensmitteltechnik) underpins this position. With this latest addition we are operating 10 such facilities around the world and can ensure maximum proximity to our customers.

For the insect protein business, we achieved a breakthrough with the first order for a large-scale insect plant from the French biotech company Agronutris. The 16,000 square meter insect plant in Rethel, France, will be ready to operate in the first quarter of 2023. When operating at full capacity, the facility will process up to 70,000 tons of organic residues for the aquaculture and pet food markets every year. With this milestone, we are a key solution provider for the insect industry and increase the inclusion of insect proteins in animal feed, thus contributing to more sustainable feed supply chains.

Our Digital Technologies business area experienced challenging market conditions. A key factor to secure competitiveness was the launch of new products from our facilities in China. Now we are offering a full range product portfolio specially optimized for applications in Asia and Africa from China. We are also proud that the product quality and sorting performance of this new generation was very well received.

To strengthen our market position in optical sorting even more, Digital Technologies has developed the next generation of "engines" for sorting technologies. This engine, or "brain" of the machines, is a combination of electronic hardware and software. The first products equipped with this revolutionary "brain" were launched on the market. This new generation marks a breakthrough in flexibility and reliability to sort different raw materials at the highest speed and at the highest sorting quality with a very intuitive and easy user interface. The new Bühler sorters will not only reject conventional defects such as discolored or broken grains, but also mycotoxins, alkaloids, and allergen free material. It encompasses the sorting algorithms for color detection, defect sizing, self-learning, tracking, calibration, and defect removal. At the same time, we now offer full connectivity to our digital cloud platform Bühler Insights with all enabling services, increasing usability. With the new generation, optical sorting is reaching a next level to cater to the increased complexity and requirements from the markets.

Regarding partnerships, the joint venture with Premier Tech for fully-automated packaging solutions turned out to be a remarkable success. The first machines from the joint venture were delivered at the beginning of the year. Together, we are now leading the trend to fully-automated solutions with a cost-efficient and productive portfolio.

More about
Grains & Food

CONSUMER FOODS: STARTING THE RECOVERY

Step by step the recovery of our Consumer Foods segment began, resulting in an increase in order intake of 6.5% to CHF 584 million. The main driver for this upward trend was the baked goods business (Wafer and Biscuit), where customers appreciated our ability to integrate solutions along complete value chains. Due to the time lag between orders and commissioning, turnover went down by 11.3% to CHF 509 million. The integration of the Consumer Foods units itself and the former Haas entities into the Bühler organization progressed further and will be concluded shortly.

Consumer Foods

Order intake		
CHF	584 million	+6.5%
Turnover		
CHF	509 million	-11.3%

The Chocolate & Coffee, and Confectionery business units of Consumer Foods reported stable orders, while Wafer and Biscuit experienced accelerating demand, starting from Europe, and now expanding since the second half of the year to other key regions such as Asia and North America.

An important differentiator in the markets is our capability to test and develop innovative ideas for consumer products together with our customers in our network of Application & Training Centers– and afterwards to engineer and implement the respective integrated solutions. This not only within the Consumer Foods segment, but also in combination with technologies of our Grains & Food business, starting from grain handling and logistics to milling, sorting and protein processing. Our application centers for joint product development have been sold out during 2021. Our extended service offerings with service level agreements and retrofit packages to update lines with energy efficient ovens, and our Bühler Insights cloud applications have been perceived positively in the markets and added to the value creation of our portfolio.

A highlight of 2021, which showcases the unique broadness of our abilities, was the inauguration of a food park for our Egyptian customer NSPO – one of the largest food parks worldwide. Irrespective of the adverse conditions of the Covid-19 pandemic, we have built this food park in only two years and started operations in July. The huge complex in the desert between Cairo and Alexandria with a size of 567,000 m^2 contains six silos, two mills, plants for bakery, wafers, biscuits, crackers, Halawa, tahina, pasta, and noodles. A TotalCare service level agreement contract with a Bühler services team on site ensures safe operations at high productivity level. The order origins from the ambition of the Egyptian government to improve the nutritional system with healthy and affordable food, especially for schools and universities. Up to 4.5 million meals are delivered to pupils and students on a daily base.

The efforts of our customers to increase the sustainability of their processes have been another important reason to engage with Bühler and to benefit from the technologies we bring to life. One solution is for the packaging industry, and it enjoys growing interest, allowing producers to switch from plastics to compostable materials. We are offering – among others – lines for edible cups which can safely hold hot drinks for around an hour. Based on the same idea, we developed an application for making cutlery sustainable out of a special dough.

The bulk of requests from customers to improve their ecological footprint, however, is about how to reduce the energy consumption of lines with new ovens, retrofits, and energy recovery systems. What we can achieve today with state-of-the-art technologies, can be observed at our customer Joh. Johannson Kaffe in Vestby, Norway. The Norwegian coffee manufacturer Joh. Johannson and Bühler built the world's first 85% CO_2-neutral coffee processing plant, which opened in 2021. Joh. Johannson is the largest coffee manufacturer in Norway with a market share of more than 40%. Bühler supplied all the processing equipment except packaging at the green field plant. Two InfinityRoast-2000 roasters powered by biogas, along with green bean preheating units are at the heart of the factory. Sophisticated energy recovery systems and emission control technologies further reduce energy consumption and cut the emission of detrimental greenhouse gas. The remaining energy consumption and CO_2 emissions of the factory are compensated by hundreds of photovoltaic solar panels. The entire plant is digitally connected with Bühler automation systems, enabling more oversight over the final products. Here too, a Total Care service level agreement contract with a Bühler services team on site ensures high productivity levels.

Inspired by this competence, customers are seeking increasingly close partnerships not only for consumer product development but also for collaborative attempts to improve processes and equipment. An example which illustrates this approach is ChocoX, which we have developed together with an international partner and launched to the market beginning of the year. ChocoX is a new machine concept which enables rapid product changes and unlimited process configurations for new products with the shortest possible changeover times and improved energy consumption.

More about Consumer Foods

Advanced Materials

Order intake	
CHF 620 million	+36.8%

Turnover	
CHF 509 million	+14.9%

ADVANCED MATERIALS: STRONG REBOUND

With an order intake growth of 36.8% to CHF 620 million, Advanced Materials has impressively come back from the trough and is already 26.9% above the pre-corona level of 2019. Turnover grew by 14.9% to CHF 509 million. All businesses contributed to this massive turnaround. Key drivers for the Advanced Materials upswing are our leading solutions which enable us to now ride the transition wave of our industries towards electro-mobility. On top, our extended service portfolio has received a positive market response.

Our Die Casting business unit was by far the fasted growing business of Bühler with more than 50% order-intake increase. It paid off that we have not slowed down or even stopped our product development in the past two difficult years. Instead, we kept the innovation pace high to be ready to offer new solutions when markets start to pick up again, which is now the case. The key driver for the market recovery is not only the high demand for new cars in general, but the accelerated transition to electromobility. To increase production efficiency for the new car types, manufacturers must fundamentally rethink car assembly.

There is a clear trend to minimize car components with the effect that big structural parts with a weight of up to 100 kg per part come into play. These parts for the new car architecture offer immense potential for the die-casting industry – and are causing the demand for a new category of large die-casting machines with a locking force of up to 84,000 kilonewton (kN). Over the past years, we have invested in the development of these new machine types. We have already launched the upgraded Carat family and will continue to expand our portfolio.

In Asia, which is leading the electromobility transition, the market response was positive, resulting in multiple orders. The first two Carat 560 machines were successfully commissioned in Vietnam under incredibly challenging conditions. This was only possible thanks to our strong global presence, in this case by the engagement of our local teams in China. We are assuming that this trend will expand to Europe and the Americas, where many feasibility studies are currently under way. The Carat 840 and Carat 920, were also introduced in 2021, further extending Bühler's portfolio, and meeting the automotive industry's demand for larger and more complex parts. With the Carat 840 and Carat 920 we can offer our customers solutions for large structural parts with complex geometries and new body in white parts.

Our Grinding & Dispersing business unit has not only fully recovered from the pandemic but reports a record order intake. The business is benefiting from two major market trends: the transition towards electromobility and the robust growth of packaging as a result of increased home delivery and traceability requirements. Both the plant and single machine business registered high demand.

Around 10 years ago, Bühler started the development of a new process to produce battery slurry, which is the medium for electrons, and with this, a key component for batteries. The key assumption was that a continuous process using extruders is superior to the existing batch processes in terms of space, quality, and productivity. In 2012 we invested into a new battery lab in China and started the process development in partnership with a key customer. Since then we have worked on market penetration – and 2021 now marks the breakthrough of our solution with the order for 12 continuous mixing lines from car manufacturers and battery producers from China, Europe, and North America. The success in packaging inks was based on the proven performance of our core grinding ma-

More about Advanced Materials

chines, which we improved significantly with our innovative dispersion technologies MicroMedia Invicta and Cenomic. This was confirmed by several orders worldwide with the highlight of a very large turnkey order for a complete plant from a customer in Turkey.

Leybold Optics, which grew its business even in 2020, achieved further growth in 2021. Two trends materialized in additional orders: the shortage of semiconductors as well as the development of autonomous mobility systems with high comfort. The shortage of chips caused manyfold challenges globally – however, this situation and the current race who can produce the smallest and most efficient microchips in the world generate extra demand for Leybold Optics Equipment. EUV lithography plays a key role, as this technology enables structural reduction of semiconductors. EUV stands for extreme ultraviolet and refers to light with extremely short wavelength. This can be used to create structures that are roughly one ten-thousandth of the thickness of a human hair. The Nessy system from Leybold Optics meets extreme physical requirements of deposition in atomic layer scale even on coat large, curved substrates.

With regard to electromobility, it has become a major pillar on the road of significantly reducing CO_2 emissions. The acceleration of these technologies and the increasing demand for electric -and hybrid vehicles has a direct impact on the film capacitors market. Leybold Optics is in this market with the vacuum metalizing CAP machine platform. To be able to keep up with the current speed of the market, Bühler launched the Leybold Optics CAPone, a modular system for capacitor applications which enable capacitor manufacturers to upgrade in the speed of their production volume.

More about
Advanced
Materials

IN THE REGION, FOR THE REGION

Bühler has systematically localized its resources and offers manufacturing sites, service stations, sales offices, R&D facilities, and Application & Training Centers across 140 countries.

17% Turnover
915 (+4.5%) Employees[1]

NORTH AMERICA

Sales offices 7
Service stations 6
Manufacturing sites 4
Application centers[2] 3

Highlights
We have continued to drive our unique position in region North America with two open-house events which focused on alternative proteins and pulse processing. We went a step further with our market presence with the acquisition of Design Corrugating in January 2021. This added four service workshops with specialist skills in roll grinding and corrugating. We continue to deepen our expertise in key account management to develop real partnerships with our key accounts. These actions combined result in exceeding 2019 orders released levels in 2021.

5% Turnover
534 (-0.6%) Employees[1]

SOUTH AMERICA

Sales offices 3
Service stations 12
Manufacturing sites 2
Application centers[2] 2

Highlights
In region South America, the consolidation of our facilities in Brazil will continue in 2022 with the move of our project execution team to Curitiba over the next three years. Even considering difficult pandemic and political challenges, we were able to strengthen our relationships with our customers through our local structure and agent network.

32% Turnover
6,180 (-2.9%) Employees[1]

EUROPE

Sales offices 26
Service stations 23
Manufacturing sites 16
Application centers[2] 10

Highlights
In region Europe, customers are again investing at pre-pandemic volumes and requesting digital and sustainable solutions from Bühler. For instance, the revolutionary Mill E3 was built in the United Kingdom, and many electric car makers now rely on Bühler's continuous mixing technology for battery slurry. Bühler was chosen by a French customer to build a large-scale insect plant, which will be operational in 2023.

10% Turnover
445 (-2.2%) Employees[1]

MIDDLE EAST & AFRICA

Sales offices 19
Service stations 18
Manufacturing sites 2
Application centers[2] 2

Highlights
The Middle East & Africa region has shown a great recovery from 2020. We have seen another year with lockdowns and political instability of all kinds. Despite this, we have seen markets grow that have been dormant for some time. Food safety and security has been put into focus by many governments as well as projects that help to extend the local value chain from being only a commodity supplier to a supplier of secondary or even tertiary products. We have been able to extend our network and reach in the region and have increased our service capacities significantly.

3% Turnover
600 (+4.0%) Employees[1]

SOUTH ASIA

Sales offices 7
Service stations 13
Manufacturing sites 1
Application centers[2] 1

Highlights
The South Asia region demonstrated its ability to shift from "survival to growth" mode during the pandemic. The courage shown by our teams during difficult times in the region reflects Bühler's TOP values and the true culture of our organization which was well appreciated by all stakeholders, especially customers.

33% Turnover
3,815 (+4.5%) Employees[1]

ASIA

Sales offices 24
Service stations 31
Manufacturing sites 5
Application centers[2] 6

Highlights
Despite ongoing implications of the pandemic, our Asia region worked with the mindset of "play to win" and achieved overall growth of 7% in new orders driven by a strong business growth in China and recovery in South East Asia. The main challenges in Asia remain the rise of raw material costs in key commodities and electricity shortages.

= 2021 turnover share by region

= Total 12,489 employees[1] in 2021 compared to 12,456 in 2020

Total number of Bühler sites across the world in 2021:

- 86 sales offices
- 103 service stations
- 30 manufacturing sites
- 24 Application & Training Centers[2]

[1] FTE (= full time equivalent)

[2] Bühler has Application & Training Centers in 24 countries, some of which cover multiple industrial applications.

OUR STRATEGY

Our purpose: Driving our business performance with high societal impact

2021 marked the first year of the implementation of our Destination25 strategy, our pathway for creating real impact for a better world. For the years to come, we have set goals for improved profitable growth while balancing humanity, nature, and economy in every decision and thereby delivering impact on the purpose that binds us together – our commitment to reduce climate change and generate solutions that unlock sustainable business opportunities in the global food, feed, and automotive industries for our customers.

We engineer customer success

Our customers are key to our success, and we strive to be a trusted and reliable partner that maximizes business outcomes for them with innovative technologies, processes, services, training, and partnerships. Our strategy of being "in the region, for the region" continues to prove its value for our customers, and thereby for Bühler. With our 103 service stations, 30 manufacturing sites, and Application & Training Centers in 24 locations around the globe, we are close to our customers and support them with new innovations and services to make the most of their asset base. This customer proximity enables Bühler to support its customers and deliver on promises even in highly dynamic markets.

We invest in innovation – nearly 5% of our turnover each year is dedicated to research and development to create value for our customers with innovations that open new business opportunities and contribute to a sustainable future.

- **We make our customers successful:** We strive to create the best technologies to make our customers more successful in very dynamic market environments.
- **We create impact for a better world and a healthy planet:** The demand for sustainable solutions is revolutionizing our markets in the food, feed, and mobility industries, and as a technology provider with a clear aim to reduce climate change, we see ourselves as a driving force for the transition ahead.
- **We want every human being to have access to affordable and healthy food:** With our food and feed business solutions and our focus on safety, we contribute to this human right.
- **We want to protect the environment with energy-efficient cars, buildings, and machinery:** With the solutions of our Advanced Materials business, we lower the energy consumption of various applications, most importantly in the mobility industry.
- **We build safe and attractive workplaces:** Since its founding, people have been the top priority at Bühler – from education and training to career development, health, and safety.
- **We remain independent as a company by achieving sustainable success:** The freedom of being family owned enables us to set a long-term strategy for sustainable company development.

The way forward

After years of building up an industry-wide global ecosystem to address the impacts of climate change and the growing population, we have taken the next steps to focus on the solutions to create impact. We want to evolve our industries and ourselves such that every human being can enjoy a good life, and have access to affordable, healthy food, and clean mobility within the boundaries of our planet. We continue to grow our innovation ecosystem with our customers, academia, industry partners, start-ups, and business accelerators to attain this. The Bühler Networking Days, to which we invite the leaders of this ecosystem every three years, have become a unique platform to jointly drive the industry transformations ahead of us.

We have defined goals and targets to contribute to the betterment of the planet and are acutely aware of the urgency to act now. We believe industry has a key role to play in leading the transition to more sustainable business practices and our targets have been carefully selected according to where we can bring impact as a company and make our customers more successful by doing so.

We remain driven by our vision to create "innovations for a better world" and our mission to "engineer customer success", and we are guided by our values of trust, ownership, and passion (TOP). These form the foundation on which our Destination25 strategy will be achieved. All our businesses and functions have created a specific strategy within this framework, underpinned by our sustainability goals.

We aim to achieve this by continuously developing new innovative technologies, products, and services. This requires highly skilled, engaged, and purpose-driven employees, along with a strong collaboration and innovation ecosystem.

Our 50/50/50 goals

We develop services and solutions for material transformation and processing, which improve the business outcome for our customers with a substantially lower ecological footprint. Within our strategy, it is our goal to have solutions ready to multiply that reduce energy, water, and waste by 50% in the value chains of our customers by 2025.

OUR STRATEGY

For ourselves, we have developed a pathway to achieve net zero in our Manufacturing, Logistics & Supply Chain activities by 2030. The higher the business value we can provide for our customers, the better our financial performance and the investment we can make to deliver on our purpose, and the impact we can generate.

As a relevant player in the global food, feed, and mobility value chains – around 2 billion people get their daily food processed on Bühler equipment, and the mobility of around 1 billion people is based on parts made with our technologies – we have taken on this responsibility. Being a family-owned company allows us to reinvest most of our profits in innovations for this purpose – and to scale them as fast as possible within our innovative ecosystem and with our customers. In this sense, sustainability is embedded in all functions, responsibilities, and activities of our company.

There are three key elements that contribute to the upcoming transition of our industries: new solutions, services, and people (education & ecosystems).

Solutions

Providing adequate food and nutrition within more sustainable food value chains is more important than ever. Major opportunities lie in reducing the antibiotic use and CO_2 footprint of livestock, developing great-tasting meat and dairy alternatives, and reducing waste, water, and energy use along the value chains. Sustainable protein supply is another core theme which will be addressed through solutions such as side stream upcycling through insect rearing and processing for feed, plant-based proteins valorization opportunities and much more. The biggest opportunities for the mobility industries lie in ultra-large structural aluminum parts, improved battery components as well as optical systems to allow for autonomous, safe, and comfortable transportation.

Services

To create impact for the new balance of nature, humanity, and economy, services are decisive. They allow us to improve the performance and productivity of the existing installed base and with this to minimize energy, water, and waste. With our services, we create a solution where our customers and their efforts towards sustainability benefit. To achieve this, Bühler has developed a comprehensive services portfolio from process optimization and maintenance over hardware and spare parts to knowledge transfer and upgrading packages. A key element of our services are digital platforms (myBühler and Bühler Insights) and the applications running on them, for example, to calculate, monitor and report on impact along complete value chains such as CO_2e (CO_2 equivalent) calculation from planted coffee beans to a cup of coffee. Our monitoring services ensure the optimal operation of process technologies to save energy, water, and reduce waste at any point in time, for example by increasing uptime of equipment. Retrofit services to renovate the installed base allow us to make sustainability step changes – new equipment and plants could never fully compensate for the existing production capacities.

People (collaboration and ecosystems):

Every progress toward the new balance depends on people, their skills, behavior, collaboration, and the ecosystems we build. On the individual level, it is about awareness and the right skills to take necessary decisions and actions. This applies to all levels – from a leader who might decide to deploy a carbon-neutral company strategy to an operator who is keen on saving CO_2 by running a machine as efficiently as possible. On a company level, it is important that sustainability is not seen as an add-on but is fully embedded in all facets of the enterprise. On an industry level, it is all about collaboration and building ecosystems, as no individual or company alone has the intellectual or financial power to create the impact needed to ensure a high standard of living within the boundaries of our planet.

Bühler has a strategy of people development, starting from apprenticeship education, and internal programs, to schools and Application & Training Centers for our customers. People development has always been vital at Bühler. Our company was one of the first starting a systematic vocational training. Since then, we have continued to develop and expand our education and training system. Bühler provides apprenticeships for 542 apprentices globally and has trained over 9,200 since 1915. We run schools for milling, grain, rice, and cocoa processing along with Application & Training Centers at 24 locations around the world.

Our values

To give orientation to our employees and lay the foundation for a corporate culture that supports our endeavors, we renewed our company values in 2019. They are trust, ownership, and passion. Designed to be concise and unambiguous, our values are encompassed in the acronym TOP. Trust relates to integrity, partnership skills, and the credibility required for Bühler to form collaborative networks with customers, start-ups, academia, and NGOs to address global challenges. Ownership is about taking responsibility for decisions taken in the interest of our customers, and passion drives people at Bühler to live their intentions, to learn each day, to support others, and to drive success. (See Our People section for more info)

OUTLOOK: IMPROVING PERFORMANCE, IMPROVING IMPACT

In our view, the economic environment will continue in its main patterns. The Covid-19 pandemic will continue to have impacts on the markets. The high volatility and unpredictability will remain, so too the tensions and shortages in the global supply chains and transportation systems. On the other hand, the recovery and transition of key industries such as food, feed, and mobility will continue creating new demands for solutions and services.

For Bühler, this means keeping the innovation rate high and utilizing the many opportunities arising in this challenging time. We assume that we will improve our performance with good growth at an increased profitability level in 2022.

To improve on the new balance of nature, humanity, and economy, we will conduct our next Bühler Networking Days in June 2022 in Uzwil. We have hosted Networking Days events every three years since 2016. We have invited industry leaders from around the globe and expect around 800 decision makers to come.

We will showcase inspiring, pragmatic, and replicable examples from customers and partners and highlight innovative technologies, solutions, and services. “Accelerating impact together” is the motto – can there be a better purpose to collaborate and drive business?

OUR PEOPLE RISING TO THE CHALLENGE

The Carat-team in front of the true-to-size picture of the Carat 920.

The organizers and volunteers of the vaccination days in Uzwil.

In 2021, Bühler continued to prioritize the safety and well-being of all employees. In the meantime, we maintained our focus on career growth, customer training, and project development – all in alignment with our overall Destination-25 strategy for the company. With over 12,500 staff spread across the globe it has taken flexibility and resilience to react, as countries responded differently to public health challenges. The two main bulwarks against the spread of infection have been varying degrees of societal controls in the form of lockdowns and vaccination programs. Wherever possible, Bühler chose to be at the forefront of the battle against Covid-19, not only organizing vaccination programs for our colleagues, but also for their families and the communities in which we operate.

As the next wave of Covid-19 caused severe disruption across India, the Bühler South Asia management team formed a task force to plan, monitor and implement a response in line with government advice. In April, the team launched its first voluntary vaccination drive for eligible employees and their immediate families. As infection rates rose, Bühler provided essential staff needed on the premises with medical backup from doctors and paramedics who had access to personal protective equipment and oxygen cylinders.

Bühler vaccination days were also organized in other countries such as South Africa, China, Austria, and at our headquarters in Uzwil, Switzerland. With the help of the vaccination team at the Cantonal Hospital of St. Gallen, 500 people received Covid jabs as well as help with their electronic vaccination registration. Bühler employees, along with their families, local businesses, and people from surrounding communities were invited to get vaccinated. Uzwil staff self-test weekly and are tested monthly for Covid-19.

The pandemic took a toll on the mental health and wellbeing of many people globally, prompting governments, organizations as well as employers to take action. Bühler is offering a range of mental health support to our employees with the first priority of keeping our employees safe. Six global health ambassadors were appointed to help drive both physical and mental health strategies across the organization. Pulse surveys were carried out across our regions to assess the wellbeing of colleagues.

Bühler's Women in STEM.

Living up to our corporate values

Our people strategy, which is anchored in our Destination 25 Business strategy, has excellence in leadership and engaged employees who operate in a fully inclusive culture at its core. Our corporate values are the compass that guides us in how we want to interact with each other. The TOP values, which we launched at the end of 2020, were this year incorporated into our Employee Performance Management System. TOP stands for "Trust, Ownership, and Passion". Trust relates to integrity, partnership skills, and the credibility required for Bühler to form collaborative networks with customers, start-ups, academia, and NGOs to address global challenges. Ownership is about taking responsibility for decisions taken in the interest of our customers, and passion drives people at Bühler to live their intentions, to seize each day, to support others, and to drive success.

Corporate culture needs to be driven from the top of any organization. Bühler has in 2021 kicked off the TOP leadership program, which targets our hundred plus top leaders and provides them with the tools to develop as individuals and enables them to live our TOP values and build a high-performance culture across the organization.

Driving Diversity and Inclusion

Bühler is continuing to focus on fostering gender balance with the launch of the Women@Bühler network and the further development and growth of the Women in STEM (Science, Technology, Engineering and Mathematics) initiative in 2021. The Women@Bühler network currently has 200 members who meet monthly. It provides a global support network designed to empower women throughout the organization by helping them share knowledge, learning opportunities, and experiences across borders.

The aim of the Women in STEM initiative at Bühler is to defeat gender stereotypes by helping employees, leaders, parents, and students to empower women towards STEM careers and into future leadership roles within the company. The initiative has grown significantly this year with the support of 25 passionate ambassadors from Bühler who organized 20 events attracting a thousand internal and external participants. These include school visits, leadership workshops, a mentoring program with a children's home in Kenya, and two global events, including a panel discussion around "women's empowerment across continents" and a collaborative event with Microsoft for the "International LGBTQ+ (Lesbian, Gay, Bisexual, Transgender, Transsexual, Queer/Questioning+) in STEM Day" on November 18.

Bühler published its second Diversity & Inclusion Annual Report in 2021 outlining our key achievements and plans. In 2020 we launched our online diversity dashboard, enabling employees to access specific diversity metrics to support key performance indicators. This year, the program has been further developed through the quarterly publication of diversity metrics relating to specific regions and businesses so that local leaders can take appropriate actions. Bühler also marked various diversity and inclusion events throughout the year such as International Women's Day on March 8 and Pride Month in June, to celebrate the company's diverse workforce and raise awareness around the challenges often faced by under-represented groups.

The Bühler Beyond Bias workshops continued throughout 2021 with the aim of addressing unconscious bias in the workplace and to help foster an inclusive environment. Workshops were carried out across global locations, with every region able to tailor the training sessions to address local cultural circumstances. Over 300 participants attended 30 workshops in 2021. Five new internal facilitators were certified in Bühler's Beyond Bias "Train the Facilitator" program, adding to a total of 21 passionate facilitators who support running these workshops.

Generation B at One Young World Caucus 2021 in Arosa, Switzerland.

Shaping the Bühler of the future

Bühler's Generation B (Gen B) is an employee driven movement that empowers employees to create the company they want to work for. The global movement aims to inspire employees to be engaged and motivated through initiatives that will shape the future of the company. Gen B is an opportunity to look at global challenges and take ownership of how Bühler can address them. The topics addressed this year included discrimination, the climate crisis, Women in STEM, and sustainable food choices.

Throughout 2021 the Gen B team organized over 50 events with more than 2,000 participants as the membership grew to 900 employees around the world. A team of 90 active ambassadors from different countries led projects that they have a passion for and that benefit the company. Gen B has further developed long-term change initiatives such as the SWAP (Seeing With Another Perspective) collaborative mentoring program where staff are connected across the company to share insights and knowledge and help foster inter-company dialogue. This year the SWAP program included 150 global mentoring pairings.

Ismail Mohammad Haji and Stefan Schroff, ITP.

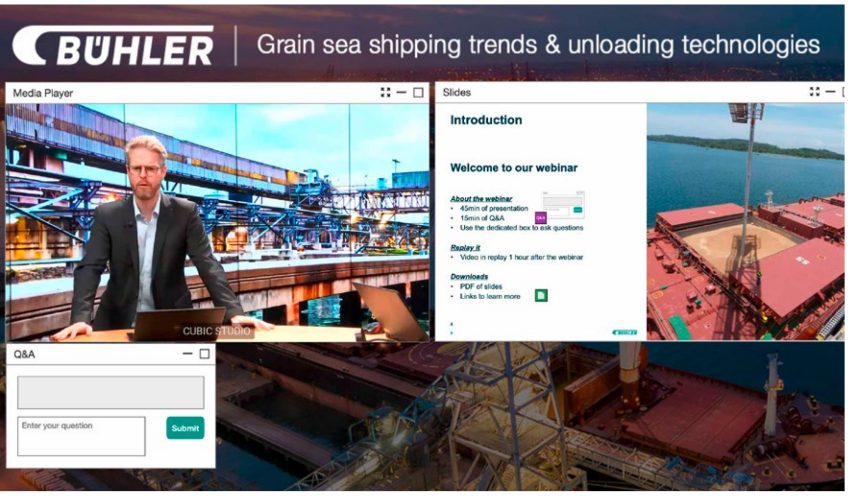
In June, the One Young World Switzerland Caucus, which was supported and hosted by Bühler, brought together 400 passionate people from different industries and backgrounds to connect and exchange ideas, discussing how we can live within the boundaries of our one planet. The two-day event allowed participants to collaborate on building sustainable start-ups, fostering sustainable tourism and pushing grassroots change in corporations. This enabled the development of business ideas to build both a more sustainable planet and ecosystems with the creativity and passion to make real change.

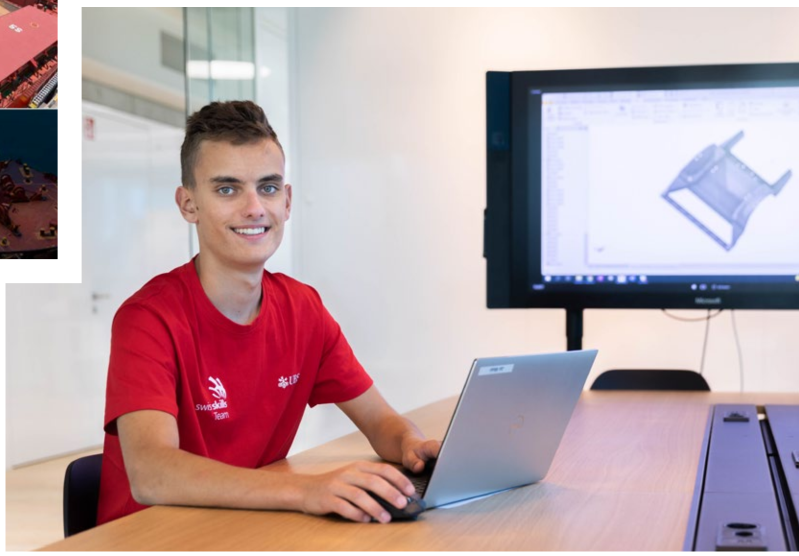
Encouraging lifelong learning

As public health interventions help combat the increase of infection rates, it has allowed the cautious loosening of pandemic controls and a reintroduction of face-to-face elements in our learning and development program. Bühler is adopting a hybrid approach while maintaining safety as our primary objective. The pandemic has shown that learning, collaboration, exchange of ideas, and networking can be effective using virtual technology. However, in some circumstances face-to-face contact is needed to fully leverage creativity and team collaboration and best achieve our goals.

Lifelong learning for all employees is a core principle for Bühler regardless of age, location, or career stage. The pandemic has taught us that employee versatility is integral to business resilience. Today's employees need the skills and knowledge to quickly adapt to new technologies and economic drivers. To help achieve this, Bühler has continued to develop its Next Generation Learning Program designed to explore how innovation can shape employee learning. Flexible learning programs help employees choose the most appropriate learning medium at different life stages. Bühler continues to develop the B-Learning platform delivering a broad spectrum of learning opportunities through videos, e-learnings, classroom trainings, webinars, and a mobile app. This year Bühler launched a new learning commitment, accompanied by a series of skill-building webinars available to all employees on topics such as cultural awareness, collaborative mentoring, and the power of self-belief.

An example of one of the many webinars held in 2021.





Bühler apprentice Jan Meier won the SwissSkills competition in 2020 and came fourth this year in the EuroSkills in Graz.

Customer training and sales staff development

Our customers attend high-end training programs at our Application & Training Centers in 24 locations around the world – from our Die Casting Technology Center in Switzerland to our Rice Milling Academy in India, to our Cocoa Training Center in Ivory Coast to name but a few.

Subject experts running the training programs help customers develop and improve their knowledge of Bühler technologies and services. At Bühler's African Milling School in Nairobi, Kenya, dozens of apprentices finished their apprenticeships in 2021, 17 participants graduated from the third Head Miller Class, and 106 employees from 24 different customers took part in trainings such as Mechanical Maintenance, Baking Technology, or Milling for Executives.

This year has involved a major redesign of the internal Bühler salesforce training program. Bühler recognizes that frontline staff need to be highly adaptable to quickly react to dynamic market changes. Sales employees are often the first contact customers have with the company, which is why Bühler is dedicating resources and time to developing the sales training skills matrix, building the skills required by the individual salesperson. Rather than having a fixed sales license, Bühler is developing a "dynamic license in sales" where tailored training provides individuals not just with additional technical skills but also with soft skills in areas like communication. Test pilots for the new training concept were run throughout 2021 for 80 colleagues in South America, Middle East, Africa, and Europe who underwent one-week virtual training courses.

By adopting a blend of virtual and face-to-face learning, Bühler is leveraging the best out of the new hybrid training world we now find ourselves in. To support this, a dedicated sales training room has been created to accommodate the new hybrid training format.

Fostering vocational training

In 2021, Bühler provided 542 apprenticeships globally, of which 275 were in Uzwil. These apprenticeships are based on the Swiss dual-vocational model, a global benchmark that has been adapted by other countries, where students receive a mix of practical and academic training. These three or four-year education programs cover eight different professional fields. The programs continually evolve to meet the changing skill sets required by companies. This year 65% of the apprentices finishing their apprenticeship chose to pursue careers within Bühler.

We are proud to announce that the Bühler apprentice Jan Meier not only won the SwissSkills competition in 2020 but came fourth this year in the EuroSkills in Graz, Austria. These events are part of the global WorldSkills movement to raise the ambitions and opportunities of vocational education and training for young people, employers, and societies. Jan Meier will also be competing in the WorldSkills competition in Shanghai in 2022.

In 2021 we made substantial investments in practice equipment and machinery to drive forward apprenticeship training within the topic of Industry 4.0, developing the future skills of our apprentices. We are among the first private sector companies to have introduced practice equipment and machinery to deepen Industry 4.0 knowledge and skills in Switzerland and we plan to make this training program available to a wider range of employees in the future.

Bühler continues to affirm its commitment to train apprentices across the globe and value them as vital contributors to our success. Our approach has long been recognized by other countries including the Unites States. In 2014, Professor – and now First Lady – Jill Biden visited Bühler in Uzwil to see first-hand how we train and promote apprentices. In November 2021, Bühler broke ground for the new Energy & Manufacturing Technology Center. The state-of-the-art building in Uzwil will become the central hub for vocational training and offer space for prototyping and innovation in manufacturing.

Bühler Management trainees 2021. Each trainee is given the opportunity to work closely with regional heads and top management on the Executive Board.

Securing a strong talent pipeline

To help develop future leadership, the Bühler International Management Trainee Program is designed to attract the best talents leaving universities and business schools and fast-track them through the Bühler corporate experience.

This year saw the first trainee from our Middle East and Africa region join the three-year internal training program. Each trainee is given the opportunity to work closely with regional heads and top management on the Executive Board. This year, Bühler collaborated with Ashesi University in Accra, Ghana, and the Swiss Federal Institute of Technology in Zurich (ETH) to select Master's Degree students in engineering and provide them with internships to ensure African talent is being developed for employment opportunities in Africa. Bühler is also working with ETH to send Swiss ETH interns to gain work experience in Africa. The project aims to encourage the sharing of ideas and experiences across cultural borders and increase understanding of the African food industry.

The Excelerator Program, now in its fifth year, continues to develop the specific needs of individuals so that talented employees are first recognized from within the company and then enabled to mature and develop into leadership roles.

Expanding employer branding

For the third year in a row, Bühler is pleased to announce winning the prestigious 2021 Swiss Leading Employer Award ranking us among the top 1% of nominated Swiss employers. Over 2021, Bühler has been adapting its approach to our company branding in the light of pandemic restrictions. We continue to leverage our social media presence in the absence of face-to-face opportunities to build our employer brand amongst potential recruits to the business.

We have also revamped our career website to provide more tailored and targeted information on job opportunities at Bühler. A global talent ambassador community with 25 members was created, where experiences and best practices stemming from local employees branding activities are shared. We continue to clearly articulate our corporate ambitions to encourage the best talent who want to work for Bühler and join us in our ambition to make meaningful changes to planetary and human wellbeing.

In 2021, Bühler was again awarded the Swiss Leading Employer Award.

SUSTAINABILITY REPORT

REPORTING OF TRACKED INDICATORS.

Reporting according to the guidelines of the Global Reporting Initiative (GRI).

2021 is the first year of our second 5-year reporting cycle and it is the baseline for the period 2021-2025. In the new reporting cycle, Bühler intends to expand the transparency of its operations by disclosing a greater amount of key performance indicators (KPI's) in accordance with the Global Reporting Initiative (GRI) standards. In total, 56 KPI's have been disclosed this year, with the intention to increase it over the course of the reporting cycle. Following the inclusion of the former Haas company, we have now expanded the scope of environmental tracked indicators to include all 30 manufacturing sites and the accompanying offices.

Additional focus has been placed on two key improvement areas during 2021. The first is building and implementing a more rigorous tracking and action plan to reduce the CO_2 footprint of our 30 manufacturing locations. The second has been to quantify the impact of our technologies and services and the CO_2e (CO_2 equivalent) footprint of our customers.

The following reporting is based on full calendar year data, providing a basis for more reliable absolute figures. Throughout the year, we have overcome the constraints of the Covid-19 pandemic to achieve several notable improvements apparent in the tracked indicators.

Bühler's focus on employee health and safety

Bühler's dedicated Health & Safety team followed a two-pronged focus in 2021. The first focus was to inform and protect all employees from the Covid-19 pandemic. The second was to maintain the high health and safety standards established at sites and all areas of the business.

To maintain and increase the high safety culture, training, and awareness modules have been released to complement the existing content available to all Bühler sites. This includes the establishment and roll-out of the Bühler's 10 Lifesaving Rules and our TAKE FIVE campaigns, which emphasize that taking five minutes to assess how safety can save lives.

Bühler's accidents occurrence rate has remained below one over the past year through actions aimed at increasing safety awareness of employees. More details about Bühler's management of the Covid-19 pandemic and the support provided to employees, can be found in the Our People section.

Measuring and managing the CO_2 equivalent footprint of Bühler locations

Bühler has expanded the reporting of its emission inventory in 2021 to include several Scope 3 subcategories. With this, Bühler takes greater ownership of its emissions and management of them to be in line with the Paris Agreement goal to limit global warming to 1.5 degrees Celsius, compared to pre-industrial levels.

Bühler has continued to carry over material topics from the previous reporting cycle. For example, the focus to decarbonize the energy mix procured has remained a top priority with 15 of the 30 sites procuring certified renewable electricity, while the number of sites using self-generated renewable electricity has increased to five.

More information on the subject can be found in the management approach of emissions as well as the energy, water, and waste management approach.

Bühler's commitment to compliance

Bühler's commitment to remain compliant and address issues which could compromise its business practices and those of its stakeholders has always been a top priority. Moving into the new reporting period, it continues to remain so with further steps taken to build strong governance and awareness of the conduct of actions. This is reflected in the tracked indicators.

The drive for stronger social responsibility is reflected in the high percentage (> 92% in all regions) of our global employees who have completed the required compliance training. This was achieved through a coordinated program across all functions and businesses.

Not reflected in the tracked indicators is the success of a new cybersecurity training module which has been released and widely adopted to curb the risk of corporate espionage and risks of ransomware or malware attacks. With compulsory training about the risks of phishing, the click rate potential phishing emails has fallen to a self-determined manageable level. However, Bühler intends to further improve in this area as it is seen as a high risk.

More information about Bühler's commitment to compliance can be found in the Governance section.

Innovation aligned to our goals

In 2019, Bühler made the announcement that it will have viable solutions ready to reduce energy, water, and waste by 50% in its customers' value chains by 2025. Major steps have been made to quantify the impact of solutions, technologies, and services in our customers' value chains. Additional KPIs have been included to provide transparency on the progress.

From the partnerships we engage in, to the percentage of solutions which are being quantified for reductions in energy, waste, water and CO_2e, our stakeholders can see the progress being made internally, and the assessment of the impact resulting from our actions beyond the boundaries of our company at our partners and customers.

In 2019 we mandated that Research & Development (R&D) projects must contribute to our targets of 50% reduction in waste, water and energy consumption at our customers sites or improved access to nutrition. In 2022 we will complete the upgrade of our R&D project management system and implement new tracking of our project portfolio to track our progress. These will be reported in Annual Report 2022.

More about Bühler's commitments to collaborate and innovate for a better world can be found in Quantification of our CO_2 impact and examples can be found in Our impact on CO_2e.

Partnering to accelerate impact

In the new reporting period, Bühler benefited from existing partnerships and created new partnerships to gain access to the skills and capabilities to deliver our targets for business growth and sustainability impact hand in hand. Partnerships are counted that have contracts in place, require resource allocation, both financial and human from both parties and result in an acceleration of impact. Partnerships are reported in more detail in the section Partnerships with Purpose.

Engaged, informed employees and an inclusive culture of continuous learning

In the new reporting period, Bühler has expanded its reporting of social KPI's to reflect the integration of our core values of Trust, Ownership, and Passion (TOP) into the business. This includes the focus on fostering a fair and equal workplace for all through the Bühler Diversity & Inclusion program. With programs such as the Beyond Bias workshop series or the Women in STEM initiative, we aim to nurture an inclusive diverse work culture for all employees, partners, and customers. Learning & development remains a key pillar and receives increased focus at Bühler. The apprenticeship programs and network of training schools are complemented by learning and development modules on our global B-Learning portal. Training is available for employees, customers, and partners.

The Bühler D25 strategy includes the defined targets for HR, and these are reflected in the tracked KPIs.

This year, Bühler reported a defined set of HR KPIs as "where we stand" and will further elaborate on refining these KPIs as "where we want to be", with the setting of annual targets, actions to reach them and support to the business with data which helps to drive profitability. The focus this year was to improve data quality and establish the foundation for the integration of S4/Hana into the reporting system, while continuing to promote transparency of these KPI's among all employees.

More information on how Bühler fosters a TOP culture and actions towards it can be found in the Our People section.

Commitment to transparency

Recognizing the importance of best industry practices and the need to undergo Corporate Social Responsibility (CSR) rating exercises, Bühler has continued to undergo certification by recognized industry bodies such as EcoVadis, CDP (Carbon Disclosure Project) and the Drive Sustainability Program. As well as undergoing several on-site assessment programs, such as ISO 9001; ISO 14001; ISO 45001; SEDEX (Supplier Ethical Data Exchange) / SMETA (SEDEX Members Ethical Trade Audit) 4-pillar.

More detail on the work done to be drive transparency can be found under certificates.

This material references as declared are Disclosure 201-1 from GRI 201: ECONOMIC PERFORMANCE 2016; Disclosures 205-1 and 205-2 from GRI 205: ANTI-CORRUPTION 2016; Disclosure 303-1 from GRI 302: ENERGY 2016; Disclosure 303-1 from GRI 303: WATER AND EFFLUENTS 2018; Disclosures 305-1, 305-2, 305-3 and 305-4 from GRI 305: EMISSIONS 2016; Disclosures 306-3, 303-4 and 303-5 from GRI 306: WASTE 2020; Disclosure 307-1 from GRI 307: ENVIRONMENTAL COMPLIANCE 2016; Disclosure 308-1 from GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT 2016; Disclosure 401-1 from GRI 401: EMPLOYMENT 2016; Disclosure 403-4 from GRI 403: OCCUPATIONAL HEALTH AND SAFETY 2018; Disclosure 404-1 from GRI 404: TRAINING AND EDUCATION 2016; Disclosure 405-1 from GRI 405: DIVERSITY AND EQUAL OPPORTUNITY 2016; Disclosure 419-1 from GRI 419: SOCIOECONOMIC COMPLIANCE 2016.

ECONOMY

Key performance indicator (KPI)		Reference to GRI Standards	Target 2025	2021
Direct economic value generated: revenue (mCHF)		Related to 201-1		2,701
Economic value distributed: operating costs, employee wages and benefits, payments to providers of capital and payments to government (mCHF)		Related to 201-1		2,650
i.	Operating costs			1,639
ii.	Employee wages and benefits			939
iii.	Payments to providers of capital			25
iv.	Payments to government			47
Economic value retained: 'direct economic value generated' less 'economic value distributed' (mCHF)		Related to 201-1		1,282
Accelerate turnover growth in region MEA and create better balance in geographical diversification of Bühler (% of turnover)				10%
Number of Bühler sites internally audited on financial, operational, and compliance risk management		Related to 205-1	Best practice in definition with peers	8
Total percentage of employees who finalized the compliance training broken down by region (%)		Related to 205-2	100%	
	NAM			99.5%
	SAM			99.9%
	CH			99.8%
	EUR			99.0%
	MEA			100%
	SOA			99.6%
	SEA			100%
	CN			99.8%
	EAS			100%

NATURE

Key Performance Indicator (KPI)	Reference to GRI Standards	Target 2025	2021
Number of Bühler solutions quantified for CO_2e impact in operations			25
Avoided emissions quantified from new services & technologies installed during the reporting period (t CO_2e)			30,459
Employees involved in the Innovation Challenge		50%	Not reported this year
Employees involved in Generation B		20%	17%
Significant partnerships reducing atmospheric CO_2e levels			2
Significant partnerships improving access to nutrition			2
Significant partnerships for education			5
Significant partnerships supporting biodiversity			1
Significant partnerships supporting start-ups			5
Energy consumption within the organization (GJ)	302-1	Best practice based on operational and environmental risk	596,549
Total water withdrawal from all areas (m^3)	303-3	Best practice based on operational and environmental risk	302,916
Total water withdrawal from areas with water stress (m^3)	303-3	Best practice based on operational and environmental risk	70,897
Gross direct (scope 1) GHG emissions (t CO_2e)	305-1	50%[1]	15,335
Gross indirect (scope 2) GHG emissions – location based (t CO_2e)	305-2		54,896
Gross indirect (scope 2) GHG emissions – market based (t CO_2e)	305-2	50%[1]	30,377
Gross indirect (scope 3) GHG emissions (t CO_2e)	305-3	See individual subcategories	841,083
Gross indirect (scope 3) GHG emissions – purchased goods and services (t CO_2e)	305-3	20%[1]	530,000
Gross indirect (scope 3) GHG emissions – capital goods (t CO_2e)	305-3	50%[1]	1,411
Gross indirect (scope 3) GHG emissions – fuel and energy related activities (t CO_2e)	305-3	50%[1]	3,464

[1] The target is set against baseline year of 2019. [2] 'Gross indirect (scope 3) GHG emissions – upstream transportation & distribution (t CO_2e)' is calculated as a percentage of 'Gross indirect (scope 3) GHG emissions – downstream transportation & distribution (t CO_2e)'. [3] The scope of 'Gross indirect (scope 3) GHG emissions – business travel (t CO_2e)' does not include flights from the regions of: North America, South America, Middle East, Africa, Asia, South Asia and Southeast Asia.

NATURE

Key performance indicator (KPI)	Reference to GRI standards	Target 2025	2021
Gross indirect (scope 3) GHG emissions – upstream transportation & distribution (t CO_2e)[2]	305-3	20%[1]	121,946
Gross indirect (scope 3) GHG emissions – waste generated from operations (t CO_2e)	305-3	50%[1]	3,927
Gross indirect (scope 3) GHG emissions – business travel (t CO_2e)[3]	305-3		5,716
Gross indirect (scope 3) GHG emissions – employee commuting (t CO_2e)	305-3		Not reported this year
Gross indirect (scope 3) GHG emissions – upstream leased assets (t CO_2e)	305-3	50%[1]	411.2
Gross indirect (scope 3) GHG emissions – downstream transportation & distribution (t CO_2e)	305-3	20%[1]	174,209
Gross indirect (scope 3) GHG emissions – use of sold products (t CO_2e)	305-3		Not reported this year
Gross indirect (scope 3) GHG emissions – end of life treatment of sold products (t CO_2e)	305-3		Not reported this year
GHG emissions intensity ratio for the organization (t CO_2e / 1,000 working hours)	305-4		47.5
Total weight of waste generated (kg)	306-3	Best practice based on operational and environmental risk	13,911,107
Total weight of waste generated – non-hazardous waste diverted from disposal (kg)	306-4	Best practice based on operational and environmental risk	10,285,385
Total weight of waste generated – hazardous waste diverted from disposal (kg)	306-4	Best practice based on operational and environmental risk	623,083
Total weight of waste generated – non-hazardous waste directed to disposal (kg)	306-5	Best practice based on operational and environmental risk	2,514,385
Total weight of waste generated – hazardous waste directed to disposal (kg)	306-5	Best practice based on operational and environmental risk	483,254
Percentage of top suppliers who have signed the Bühler supplier code of conduct or have an equivalent code	Related to 308-1		86%

[1] The target is set against baseline year of 2019. [2] 'Gross indirect (scope 3) GHG emissions – upstream transportation & distribution (t CO_2e)' is calculated as a percentage of 'Gross indirect (scope 3) GHG emissions –downstream transportation & distribution (t CO_2e)'. [3] The scope of 'Gross indirect (scope 3) GHG emissions – business travel (t CO_2e)' does not include flights from the regions of: North America, South America, Middle East, Africa, Asia, South Asia and Southeast Asia.

HUMANITY

Key performance indicator (KPI)			Reference to GRI standards	Target 2025	2021
Total number of new employees hired during the reporting period by region and globally split by:			401-1	Best practice in definition with peers	1,699
i.	Region | Gender: female, male, not assigned	GLO			322, 1,376, 1
		NAM			29, 202, 1
		SAM			33, 103
		CH			40, 161
		EUR			91, 249
		MEA			16, 54
		SOA			7, 95
		SEA			25, 57
		CN			78, 450
		EAS			3, 5
ii.	Region | Born today – 1996	GLO			369
		NAM			49
		SAM			27
		CH			67
		EUR			80
		MEA			10
		SOA			14
		SEA			22
		CN			100
		EAS			0
iii.	Region | Born 1981 – 1995	GLO			950
		NAM			82
		SAM			85
		CH			106
		EUR			158
		MEA			41
		SOA			83
		SEA			51
		CN			340
		EAS			4

HUMANITY

Key performance indicator (KPI)			Reference to GRI standards	Target 2025	2021
Total number of new employees hired during the reporting period by region and globally split by:			401-1	Best practice in definition with peers	1,699
iv.	Region | Born 1965 – 1980	GLO			323
		NAM			69
		SAM			24
		CH			23
		EUR			87
		MEA			17
		SOA			5
		SEA			9
		CN			85
		EAS			4
v.	Region | Born 1964 and earlier	GLO			56
		NAM			31
		SAM			0
		CH			5
		EUR			15
		MEA			2
		SOA			0
		SEA			0
		CN			3
		EAS			0
Total number of employee turnover during the reporting period globally and by region split by:			401-1	Best practice in definition with peers	1,637
i.	Region | Gender: female, male	GLO			296, 1341
		NAM			26, 171
		SAM			25, 107
		CH			49, 196
		EUR			93, 356
		MEA			19, 61
		SOA			2, 77
		SEA			23, 68
		CN			58, 300
		EAS			1, 5

HUMANITY

Key performance indicator (KPI)			Reference to GRI standards	Target 2025	2021
Total number of employee turnover during the reporting period globally and by region split by:			401-1	Best practice in definition with peers	1,637
ii.	Region | Born today – 1996	GLO			164
		NAM			32
		SAM			8
		CH			21
		EUR			53
		MEA			2
		SOA			1
		SEA			11
		CN			36
		EAS			0
iii.	Region | Born 1981 – 1995	GLO			799
		NAM			75
		SAM			85
		CH			86
		EUR			162
		MEA			44
		SOA			63
		SEA			56
		CN			223
		EAS			5
iv.	Region | Born 1965 – 1980	GLO			398
		NAM			50
		SAM			36
		CH			52
		EUR			124
		MEA			24
		SOA			11
		SEA			23
		CN			78
		EAS			0

HUMANITY

Key performance indicator (KPI)		Reference to GRI standards	Target 2025	2021
Total number of employee turnover during the reporting period globally and by region split by:		401-1	Best practice in definition with peers	1,637
v. Region | Born 1964 and earlier	GLO			276
	NAM			40
	SAM			3
	CH			86
	EUR			110
	MEA			10
	SOA			4
	SEA			1
	CN			21
	EAS			1
Total leavers as a percentage of workforce		Related to 401-1		12.8%
Rate of attrition[1]		Related to 401-1		7.5%
Percentage of apprentices who are hired subsequently to their apprenticeship (Uzwil)		Related to 401-1		63.9%
Percentage of workers trained on occupational health and safety		Related to 403-4		Not reported this year
Work-related injuries (TRI rate)		Related to 403-4	0	0.89
Percentage of training costs over total personnel costs		Related to 404-1	Best practice in definition with peers	0.72%
Number of training days per full-time employee per year		Related to 404-1	Best practice in definition with peers	1.54

[1] The scope of 'Rate of attrition' only includes voluntary leavers, while the scope of 'Total leavers as a percentage of workforce' includes all forms of leavers.

HUMANITY

Key performance indicator (KPI)			Reference to GRI standards	Target 2025	2021
Percentage of employees by gender total for the following categories:			Related to 405-1	Best practice in definition with peers	
i.	Region | Gender: female to male	NAM			14.1% female to 85.9% male
		SAM			17.4% female to 82.6% male
		CH			16.4% female to 83.6% male
		EUR			18.2% female to 81.8% male
		MEA			17.7% female to 82.3% male
		SOA			5.0% female to 95.0% male
		SEA			22.4% female to 77.6% male
		CN			17.6% female to 82.4% male
		EAS			22.9% female to 77.1% male
ii.	Born today – 1996				18.5% female to 81.5% male
iii.	Born 1981 – 1995				19.2% female to 80.8% male
iv.	Born 1965 – 1980				15.7% female to 84.3% male
v.	Born 1964 and earlier				10.9% female to 89.1% male
Percentage of employees by gender of supervisors for the following categories:			Related to 405-1	Best practice in definition with peers	
i.	Region | Gender: female to male	NAM			18.2% female to 81.8% male
		SAM			20.6% female to 79.4% male
		CH			11.9% female to 88.1% male
		EUR			13.0% female to 87.0% male
		MEA			16.8% female to 83.2% male
		SOA			2.3% female to 97.7% male
		SEA			24.8% female to 75.2% male
		CN			17.4% female to 82.6% male
		EAS			8.3% female to 91.7% male
ii.	Born today – 1996				0% female to 100% male
iii.	1981 – 1995				19.0% female to 81.0% male
iv.	1965 – 1980				13.0% female to 87.0% male
v.	1964 and earlier				6.0% female to 94.0% male
Number of relevant fines for non-compliance with laws and regulations in the social, economic and environmental area (> CHF200,000). [2]			419-1, 307-1	Best practice in definition with peers	0

[1] The scope of 'Rate of attrition' only includes voluntary leavers, while the scope of 'Total leavers as a percentage of workforce' includes all forms of leavers.
[2] This KPI corresponds to the disclosure requirements of both GRI 419 and GRI 307.

A STAKEHOLDER PERSPECTIVE

Providing the overall guidance of Bühler's sustainability strategy, the materiality assessment was conducted in 2020 by bringing together key stakeholders of the company. Bühler will regularly reevaluate the topics for its materiality based on the stakeholders' perspective.

The Bühler sustainability team asked internal and external stakeholders to share their perspective on the company's biggest impact areas. Balancing the needs of economy, humanity, and nature, 48 topics were predefined, using the materiality assessment topics based on the GRI standard and as well strongly individualizing them to fit Bühler's business. The goal was to lower the risks of blind spots and increase global reach, therefore customers, various business areas and functions, partners from NGOs, and academia were all considered.

These three questions guided through each topic:

1. How significant is the impact of Bühler in these topics?
2. How significant is the impact of these topics on Bühler?
3. How important is it for you that Bühler targets these topics?

Here are the highest ranked topics in the areas of economy, humanity, and nature.

The top four for economy:

1. Assessment of corruption risks and incidents in operations
2. Designing sustainable solutions
3. Ethical non-compliance reporting
4. Addressing customers' concerns related to sustainability

The top three for humanity:

1. Zero tolerance towards discrimination
2. Zero tolerance towards human rights violations
3. Ensuring equal and fair payment

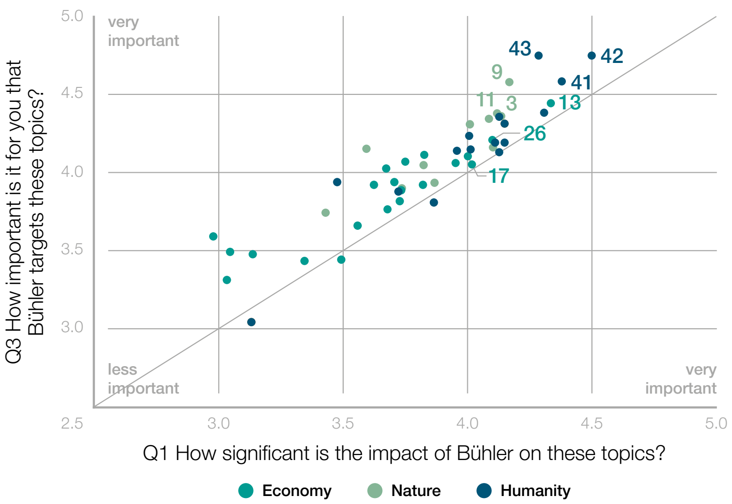
The top four for nature:

1. Energy consumption reduction within the value chain
2. Reducing greenhouse gas emissions in the value chain
3. Waste reduction within the value chain
4. Water usage reduction within the value chain

Based on these priorities, we are readjusting our KPIs and are steering our actions the next 5 years.

To see the detailed results of this analysis, please refer to the Materiality Assessment.

Impacts of Bühler and perception of all stakeholders



GOVERNANCE

GROUP STRUCTURE

Bühler follows international standards of corporate governance. Its corporate governance activities are based on the principles of the Swiss Code of Best Practice – an instrument for clearly defining internal powers and responsibilities and optimally designing the interaction between the Board of Directors, the Executive Board, and the Group Internal Audit.

As a non-listed, family-owned, but economically significant company, Bühler has decided to pay special attention to the design of its corporate governance. As a consequence, Bühler's corporate governance goes far beyond the statutory requirements of Swiss corporate law and incorporates, to a great extent, the recommendations contained in the "Swiss Code of Best Practice for Corporate Governance" issued by economiesuisse. Bühler's Articles of Incorporation set the material parameters of the corporate governance system.

The Articles of Incorporation are complemented by Bühler's Organizational Regulations, which further specify the responsibilities, competencies, and regulations of the governing bodies of the company. Unless prescribed by law or the Articles of Incorporation, the management is delegated by the Board of Directors, with the power to subdelegate to the Chief Executive Officer, the Executive Board, and its members. Separate charters specify the organization of the Nomination and Compensation Committee and the Audit Committee. The Board of Directors has also issued a regulation governing the cooperation between the Board of Directors, the CEO/ Executive Board, and the Urs Bühler Innovation Fund.

Bühler remains a family-owned company

In 2014, Urs Bühler transferred his shares in Bühler to his three daughters, Karin, Dr. Maya, and Jeannine Bühler, each of whom owns a third of the company. For the three sisters, continuity is the top priority, as they want to build on the strengths and values of Bühler. They continue to maintain optimal general conditions for the company to operate in: a stable shareholder structure, a long-term orientation, steady company management that is not subject to the constraints of quarterly reporting – but nevertheless a management style pursuing business success. The three owners are represented on the Board of Directors and act in one unified voice in relation to company issues and decisions.

GROUP STRUCTURE

BOARD OF DIRECTORS

Chairman	Board Members	Audit Committee	Nomination and Compensation Committee
Calvin Grieder	Linda Yang	Rainer E. Schulz (Chairman)[2]	Dr. Konrad Hummler (Chairman)[3]
	Stefan Scheiber	Dr. Maya Bühler	Karin Bühler
	Christoph Goppelsroeder[1]	Clemens E. Blum	Jeannine Bühler
			Frank N.J. Braeken

EXECUTIVE BOARD

CEO
Stefan Scheiber

CFO
Dr. Mark Macus

Grains & Food
Johannes Wick

Consumer Foods
Germar Wacker

Advanced Materials
Samuel Schär

CTO
Dr. Ian Roberts

Manufacturing, Logistics & Supply Chain
Dr. Holger Feldhege

Human Resources
Irene Mark-Eisenring

Services & Sales
Samuel Schär

URS BÜHLER INNOVATION FUND

Chairman
Dr. Ian Roberts

Dr. Mark Macus

Prof. Dr. Edward S. Steinfeld

Prof. Dr.-Ing. Werner Bauer

Dr. Matthias Kaiserswerth

Prof. Dr. Lino Guzzella

Calvin Grieder[4]

Peter Stähli

Founder and Honorary Member
Urs Bühler[5]

[1] Elected on Oct. 8, 2021
[2] Named Chairman of Audit Committee in Feb. 2021
[3] Audit Committee Member as of Feb. 2021
[4] Joined in July 2021
[5] Honorary member, stepped down Jan. 2021

GROUP STRUCTURE

BUSINESSES

Grains & Food	Consumer Foods	Advanced Materials
Grain Quality & Supply	Bakery	Die Casting
Milling Solutions	Wafer	Leybold Optics
Value Nutrition	Biscuit	Grinding & Dispersing
Digital Technologies	Chocolate & Coffee	
	Confectionery	
	Non-food	

REGIONS

North America	Europe	Asia
South America	Middle East & Africa	South Asia

BOARD OF DIRECTORS

BOARD OF DIRECTORS

Calvin Grieder
Chairman

Calvin Grieder has held various executive positions at Swiss and German companies active in the areas of control technology, automation, and system engineering. In these roles, he was primarily responsible for successfully establishing and expanding international business.In 2001, Calvin Grieder moved from Swisscom to Bühler Group, where he acted as CEO for 15 years. In February 2014, he was elected Chairman of the Board of Directors of Bühler Group and named to the Board of Directors of Givaudan, becoming Chairman of the Board in 2017. In 2020, he was named Chairman of the Board of Directors of Société General de Surveillance (SGS). Other roles of his include, Chairman of the Board of Directors of AWK Group, member of the Advisory Board of the ETH, Department of Mechanical and Process Engineering, as well as Member of the Board of Trustees of Avenir Suisse. Calvin Grieder has been educated at the ETH in Zurich (Master of Science) and completed his Studies at the Harvard University Boston (AMP). He is a citizen of Switzerland and was born 1955 in the USA.

Dr. Konrad Hummler*
Member of the Board

Dr. Konrad Hummler graduated in Law from the University of Zurich and in Economic Science from the US University of Rochester. In the eighties, he acted as the personal assistant to the Chairman of the Board of Directors of what is now UBS, Dr. Robert Holzach. From 1991 to 2012, he was Managing Partner with unlimited liability of Wegelin & Co. Private Bankers (St. Gallen). In addition to his bank activities, he was a member of the Board of various companies, including Neue Zürcher Zeitung (NZZ), Swiss National Bank (SNB), or the German Stock Exchange. Dr. Konrad Hummler heads the M1 AG, a private think tank dealing with strategic issues of current interest, and is Chairman of the Board of Private Client Bank in Zurich. Dr. Konrad Hummler was appointed as a Member of the Board of Bühler in 2010 and as a Chairman of the Nomination and Compensation Committee in 2016. In addition, he is a member of the Audit Committee since 2021. He is strongly committed to cultural and social projects. Dr. Konrad Hummler was born in 1953 and is Swiss.

Frank N.J. Braeken
Member of the Board

Frank N. J. Braeken graduated with a degree in Law and holds an MBA degree in Finance from the University of Leuven (Belgium). He is an alumnus of the Wharton Executive Program, Penn University (Philadelphia / US). In his professional career, he has specialized in finances and general management. From 1996 to 2013, he held various management functions in different countries for Unilever, including a position as Group Vice President of Unilever China (Shanghai), Executive Vice President of Unilever Namca (Dubai / UAE), and Executive Vice President of Unilever Africa (Dubai / Durban). After leaving Unilever, Frank N. J. Braeken acted as investment advisor and investor for large-scale agro and food enterprises on the African continent. From 2016 to 2020, he was elected Chairman of the Board of Feronia Inc, a Toronto-listed palm oil producer in Africa. Frank N. J. Braeken is also a non-executive Board Member of Marie Stopes International, AGRA and AECF, all non-profit organizations, as well as of Black Volta Ventures and Zambeef. He was elected to the Board of Directors of Bühler in 2014. Frank Braeken was born in 1960 and is Belgian.

*Audit Committee Member as of Feb. 2021

BOARD OF DIRECTORS

Karin Bühler
Member of the Board

After obtaining her university entry qualifications, Karin Bühler acquired a degree in Marketing. Karin Bühler was re-elected to the Board of Directors in 2017. Karin Bühler was born in 1978 and is Swiss.

Jeannine Bühler
Member of the Board

After successfully completing her federal vocational matriculation certificate and passerelle (supplementary exam certificate) in St. Gallen, Jeannine Bühler was awarded a Bachelor of Arts degree from the University of Zurich. She later received a Master of Arts in Social Sciences majoring in journalism, communication sciences, and political science. Following completion of her studies, she joined the development organization Helvetas Swiss Intercooperation. From February 2018 to March 2020, Jeannine Bühler acted as an Asset Manager for Swiss Prime Site Immobilien AG. Jeannine Bühler was elected to the Board of Directors of Bühler in 2016. Jeannine Bühler was born in 1986 and is Swiss.

Dr. Maya Bühler
Member of the Board

Dr. Maya Bühler studied Veterinary Science at the University of Zurich. After completing her studies, she held various positions in the horse surgery department of the animal hospital in Zurich and became a Veterinary Specialist for Horses (FVH) in 2012. At the beginning of 2013, she became the owner and Managing Director of the company Pferdeklinik Thurland in Uzwil. Dr. Maya Bühler was re-elected to the Board of Directors of Bühler in 2017. Dr. Maya Bühler was born in 1981 and is Swiss.

BOARD OF DIRECTORS

Rainer Schulz*

Member of the Board

After obtaining his degree in Production Engineering, Rainer Schulz first held various materials management and production supply chain positions in the electronics and mechanical engineering industries. Since 1995, Rainer Schulz has acted as head of production and later as general head of purchasing in charge of global procurement at the jet engine manufacturer BMW Rolls-Royce AeroEngines. In 2001, Rainer Schulz moved on to the global REHAU Group. As Chief Operating Officer, he was first in charge within the context of the company management of the engineering, production, and materials management functions. In 2010, Rainer Schulz was appointed Chief Executive Officer of the REHAU Group, holding this position up to mid-2018. Rainer Schulz was appointed to the Bühler Board of Directors in 2019. He is a member of the Board of Directors of Eisenmann SE (DE) and RUAG International Holding AG, where he is also Chairman of the Nomination & Compensation Committee. Since mid-2020, he has also been a member of the Advisory Board of the German Röchling SE & Co KG. Due to a vacancy, he suspended his Advisory Board mandate in autumn 2021 and took over the function as Chairman of the Group Executive Board on an interim basis. Rainer Schulz is a Swiss national who was born in Germany in 1965.

Linda Yang

Member of the Board

Linda Yang holds Bachelor's degrees in both Mathematics and Business / Finance from Nan Kai University (Tianjin, China). She graduated from the Executive MBA program at the China Europe International Business School (CEIBS) in 2009. Following various assignments in China in the fields of consumer insight, consulting, and marketing, at companies such as Procter & Gamble (China) Ltd., she acted from 2001 to 2004 for Nestlé (China) Ltd. as Head of Consumer Insight. Since then, she has been the General Manager of BSI (Tianjin) Foods Co. Ltd., a subsidiary of Savencia Fromage & Dairy (previously known as Bongrain SA) in China. Thanks to her experience and training, Linda Yang has a proven understanding of the Chinese market. She has been a Member of the Bühler Board of Directors since 2014. Linda Yang was born in 1971 and is Chinese.

Christoph Goppelsroeder**

Member of the Board

Christoph Goppelsroeder studied Civil Engineering at ETH in Zurich and holds an MBA from Insead, Fontainebleau. He began his career at The Boston Consulting Group. From 1994 to 2003, he held management positions at Roche Vitamins in Switzerland, Belgium, and the United States. In 2003, he joined DSM through their acquisition of Roche's Vitamins business where he co-led the integration of Roche Vitamins and acted as DSM Managing Board member from 2005 to 2006. From 2007 to 2012, he was in charge of Syngenta's Global Seed Care Division. In 2013, Christoph Goppelsroeder was appointed President and CEO DSM Nutritional Products and Member of DSM's Executive Committee, a position he retired from in April 2021. He is Chairman of the Board of Directors of Hologram Sciences, a US start-up focusing on personalized nutrition, and he is a Member of the Board of Directors of CIC Bank in Basel. Christoph Goppelsroeder was appointed as a Member of the Board of Bühler in 2021. He was born in 1959 and is Swiss.

*Named Chairman of Audit Committee in Feb. 2021

**Elected on Oct. 8, 2021

BOARD OF DIRECTORS

Stefan Scheiber

Chief Executive Officer,
Member of the Executive Board

Stefan Scheiber graduated in Business Administration from the University of Applied Science in St.Gallen and later continued his education at the Institute IMD Lausanne and the Harvard Business School. In 1986, Stefan Scheiber started as a management trainee at Bühler and has spent more than 30 years with Bühler in different functions. From 1988 onwards, he has worked in various international management positions within Bühler worldwide, including East and South Africa, Eastern Europe, and Germany. After a first international assignment in Nairobi/Kenya, he became Commercial Manager and interim Sales & Service Manager at Bühler South Africa. In 1999, he took charge of the Brewing/Malting and Rice business units, located in Braunschweig/Germany, and thereafter, assumed the overall responsibility for Bühler in Germany. From mid-2005, Stefan Scheiber headed the Sales & Services division and became Member of the Executive Board in the age of 39. In 2009, he was assigned Division Manager of the Engineered Products division which he divided and reorganized into the Food Processing and the Advanced Materials divisions. He led the Food Processing division as of 2009 for the next four years. In 2014, he was charged with the re-organization and integration of the Food Processing and the Grain Processing divisions, creating the Grains & Food division, which he led until 2016. Stefan Scheiber was appointed CEO of the Bühler Group on July 1, 2016 and became Member of the Board of Directors on August 28, 2020. In 2017 and 2018, Stefan Scheiber led the process of the acquisition and post-merger integration of the Haas-Group which became part of Bühler as of January 1, 2018. In 2019, he re-structured the Group organization and formed the new Consumer Foods division, into which the Haas Group was integrated, in addition to the existing Grains & Food and Advanced Materials divisions. Furthermore, Stefan Scheiber is a Member of the Board of Directors of the Kistler Group and a Member of the Executive Committee of Swissmem. Stefan Scheiber was born in 1965 and is Swiss.

Clemens Blum

Member of the Board

Clemens Blum has a degree in Electronic Engineering from Furtwangen University (Germany) and Business Management from Pforzheim University (Germany). After holding various positions in sales in different companies, he joined the Swiss Industrial Group (SIG) as Sales Director of SIG Positec Automation in 1992 and was promoted to General Manager in 1997. In 2000, Schneider Electric acquired the SIG Positec activities from SIG, and Clemens Blum then took on various executive positions within the Schneider Electric Group. From July 2010 until December 2016, he acted as Executive Vice President of the industry business, located in Foxborough (Massachusetts / US) for two years. Until his retirement, Clemens Blum was responsible for specific merger and acquisition strategies and key executive customers in the industrial automation market. He currently supports international private equity companies. In April 2018, he was appointed by one of those companies to the Advisory Board of Laird Connectivity, Ohio / US, a manufacturer of professional Wi-Fi, antenna and IoT platform technologies. In January 2020, he was also appointed to the Supervisory Board of Rafi GmbH & Co.Kg, Germany, a leading supplier of Human Machine Interface Technology. Since October 2021, Clemens Blum has also been a member of the Supervisory Board of DTE Metals Intelligence, a company based in Reykjavik / Iceland that develops and produces equipment for real-time analysis of liquid metals, for example in aluminum production. Clemens Blum was elected a Member of the Board of Bühler in December 2015. Clemens Blum was born in 1955 and is German.

EXECUTIVE BOARD

EXECUTIVE BOARD

Stefan Scheiber

Chief Executive Officer,
Member of the Executive Board

Read the full bio on page 10.

Irene Mark-Eisenring

Chief Human Resources Officer

Irene Mark-Eisenring graduated in Business Administration from the University of Applied Sciences in St. Gallen, Switzerland. She expanded her studies with additional diplomas in personnel management, profiling, psychology, and project management. Mark-Eisenring has a broad human resources background and extensive experience in human resources leadership and projects, primarily in the financial industry. From 1996 to 2016, she held various human resources leadership roles at UBS Investment Bank and UBS AG in Zurich, Switzerland, and has lead projects in different countries, such as in London in the United Kingdom. She joined Bühler in 2016 as Head of Corporate Personnel Development. In that role she was responsible for setting and implementing strategies in the fields of global human resources development, strategic recruiting, and Diversity & Inclusion. She is also on the Board of the local Business & Professional Women Network Eastern Switzerland. In February 2020, she was named Chief Human Resources Officer of the Bühler Group and Member of the Executive Board, effective September 1. Irene Mark-Eisenring was born in 1967 and is Swiss.

Samuel Schär

Chief Services & Sales Officer – Group,
CEO Advanced Materials

After obtaining a diploma as a Physics Engineer from the Swiss Federal Institute of Technology in Lausanne (EPFL) and accumulating three years of experience with the consultancy McKinsey, Samuel Schär joined Bühler in 2002. He took charge of the Nanotechnology business unit in 2005. From 2009 to 2012, he bore overall responsibility for the Grinding & Dispersing business area. Samuel Schär has headed the Advanced Materials business since 2013 and was appointed CEO of Advanced Materials as of September 2014. In addition to his responsibility as CEO of Advanced Materials, he took up the role of Chief Services & Sales Officer – Group in June 2020. Samuel Schär was born in 1975 and is Swiss.

EXECUTIVE BOARD

Johannes Wick
CEO Grains and Food

Johannes Wick joined Bühler in 2014 and took over the management of Grain Milling, the largest business area. He has led the Bühler Grains & Food business since April 1, 2016. Before joining Bühler, he worked for more than 20 years in different management positions in the energy and infrastructure sector at ABB, ABB Alstom Power, Iberdrola, and Alstom. Johannes Wick earned a Master's degree in Engineering at the ETH in Zurich with an exchange at the Technical University in Madrid. He expanded his knowledge with an MBA from IESE in Barcelona with an exchange at Sloan Management School of Business at the Massachusetts Institute of Technology (MIT) in Boston. Johannes Wick was born in 1969 and is Swiss.

Germar Wacker
CEO Consumer Foods

After receiving a degree in Business from the University of Regensburg, Germany, and a master's degree in Business Administration from Murray State University, US, Germar Wacker began his professional career in the automotive industry at Daimler Chrysler AG. In 2000, he moved on to the Canadian rail vehicle manufacturer Bombardier Transportation, where he held executive positions in the areas of restructuring, operations, project management, and service. From 2010, he was responsible for several divisions of the group, sustainably expanding its international market position. Among other things, he was also Chairman of the Supervisory Board of Bombardier Transportation Austria. From September 2017, Germar Wacker was CEO of the Haas Group, which became part of the Bühler Group in January 2018. He has led the Consumer Foods business at Bühler since January 2019. Germar Wacker was born in 1970 and is German.

Dr. Holger Feldhege
COO, Manufacturing, Logistics & Supply Chain

Dr. Holger Feldhege studied Business Administration and holds a PhD in Production Management. He has extensive experience in the sales and service business as well as production, engineering, and logistics. He worked in various management positions at Mannesmann and ThyssenKrupp Elevator, spending nearly 8 years in Asia. Upon his return to Germany in 2010, Dr. Holger Feldhege took on the position of CEO Manufacturing for the business unit Central, Eastern, and Northern Europe and later Senior Vice President Manufacturing Elevator for the worldwide group. In 2014, Dr. Holger Feldhege joined Bühler as Head of Manufacturing & Logistics. In 2017, he was named Chief Operations Officer responsible for Manufacturing, Logistics & Supply Chain. Dr. Holger Feldhege was born in 1968 and is German.

EXECUTIVE BOARD

Dr. Ian Roberts
Chief Technology Officer

Dr. Ian Roberts has a PhD in Chemical Engineering from the University of Wales and is a Fellow of the Institute of Chemical Engineers. Ian Roberts has served as CTO of Bühler since 2011. During that period the company has undergone a digital transformation, developed a collaborative innovation culture, building and engaging with broad ecosystems and continued to strengthen an innovation leadership position. A strong advocate for entrepreneurship and sustainability, he is a co-founder and president of the startup accelerator MassChallenge Switzerland, a board member of RESTOR, a global ecology and land restoration platform and an Ambassador for the education programme Aiducation. He has more than 25 years experience in the food industry, having previously worked in a range of innovation and business development roles for Nestlé. Ian Roberts was born in 1970 and is British.

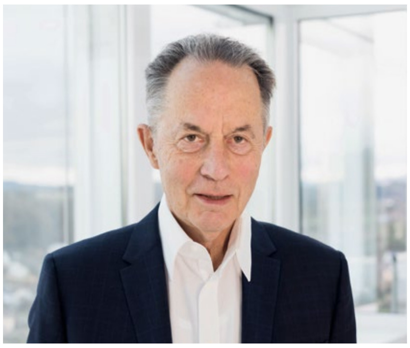
Dr. Mark Macus
Chief Financial Officer

Dr. Mark Macus graduated with a PhD in Business Administration from the University of St. Gallen with an exchange at the Wharton School of the University of Pennsylvania. Later he earned his certification as a Swiss Certified Public Accountant. Prior to his employment as Head of Corporate Controlling at Bühler in 2013, Dr. Mark Macus held management positions at KPMG and the Holcim Group. In 2018, he joined the Vitra Group as Group CFO, before returning to Bühler and assuming the role of Group CFO as of September 1, 2019. He is a member of the Board of Corvaglia Group. Dr. Mark Macus was born in 1972 and is Swiss.

ADVISORY BOARD
Urs Bühler Innovation Fund

The Urs Bühler Innovation Fund (UBIF) was established in 2014 to support the company's innovation efforts. Bühler invests between 4% to 5% of its turnover in research and development every year – developing breakthrough technologies and services to strengthen Bühler's market position as well as exploiting new opportunities to stay ahead of the innovation curve. The Advisory Board managing the UBIF focuses on accelerating innovation and developing relevant ecosystems.

ADVISORY BOARD
Urs Bühler Innovation Fund



Urs Bühler *
Founder

Calvin Grieder **
Chairman

Dr. Matthias Kaiserswerth
Managing Director,
Hasler Stiftung

Urs Bühler graduated as a mechanical engineer from the Swiss Federal Institute of Technology in Zurich (ETH). After holding a number of positions in Switzerland and abroad, he was appointed to the Corporate Management of Bühler AG in 1975, in charge of sales and development. From 1980 to 1984, he was President of Bühler GmbH, Braunschweig (Germany). In 1986, Urs Bühler was appointed CEO of Bühler in Uzwil, Switzerland. He handed over the executive management duties of the company to Calvin Grieder at the beginning of 2001. Urs Bühler was a Member of the Board since 1981, from 1991 as its Vice Chairman and from 1994 to 2014 as its Chairman. He was a member of the Board of several Swiss companies. Urs Bühler was born in 1943 and is Swiss.

Read the bio on page 7.

Dr. Matthias Kaiserswerth studied Computer Science at the Friedrich-Alexander University in Erlangen-Nuremberg (Germany) and at McGill University in Montreal (Canada). He obtained his PhD in Engineering from Erlangen University. From 1988 to 2015, Dr. Matthias Kaiserswerth worked for IBM. He has spent almost his entire career as a researcher in the areas of high-performing communication and security in Switzerland and the US apart from mid-2002 to the end of 2005, when he was responsible for global IBM business relations with a large international industrial customer. For more than 11 years Dr. Matthias Kaiserswerth was Director of the IBM Research Laboratory in Rüschlikon (Switzerland) until he became Managing Director of the nonprofit Hasler Stiftung in Berne, in May 2015. This foundation supports education, research, and innovation in information and communication technologies. Dr. Matthias Kaiserswerth was born in 1956. He is Swiss and German.

* Honorary member, stepped down Jan. 2021 ** Joined in July 2021

ADVISORY BOARD
Urs Bühler Innovation Fund

Prof. Dr. Edward S. Steinfeld
Professor of Political Science;
Director, Thomas J. Watson,
Jr. Institute for International
Public Affairs, Brown University

Prof. Dr. Edward S. Steinfeld studied Government and Political Science at Harvard University (US) and holds a PhD in Political Science. From 1996 to 2013, he was a Professor of Political Economy and Management at the Massachusetts Institute of Technology (US). He also served as a visiting scholar at the Tsinghua University School of Public Policy and Management in Beijing from 2012 to 2013. From 2005 to 2013, he was Director of the China Energy Program at the MIT Industrial Performance Center. In 2013, Prof. Dr. Edward S. Steinfeld moved to Brown University (US), where he currently directs the Watson Institute for International and Public Affairs as well as the Brown China Initiative and is a Professor of the Department of Political Science. Besides his university engagement, Prof. Dr. Edward S. Steinfeld is a member of various boards of directors, and academic and advisory boards in the US, Asia, and Europe. In 2012, he was appointed as a member of the China Advisory Board of Bühler Group. Prof. Dr. Edward S. Steinfeld was born in 1966 and is American.

Dr. Ian Roberts
Chief Technology Officer

Read the bio on page 15.

Prof. Dr.-Ing. Werner Bauer
Food Science, biotechnology,
and R&D expert

Prof. Dr.-Ing. Werner Bauer started his career as a university professor in chemical engineering at the Technical University in Hamburg, Germany. After serving as the Director of the Fraunhofer Institute for Food Technology & Packaging and as Professor in Food Bioprocessing Technology at the Technical University of Munich from 1985 to 1990, he joined Nestlé as Head of Nestlé Research worldwide in 1990. After commercially heading Nestlé South and East Africa, he joined general management as Executive Vice President in 2002, responsible for Technical, Production, Environment, and R&D. In 2007 he became Chief Technology Officer and Head of Innovation, Technology, Research and Development, a post from which he retired in September 2013. Prof. Dr.-Ing. Werner Bauer holds mandates in companies that are quoted on an official stock exchange and in companies that are non-quoted. He received a diploma and a PhD in Chemical Engineering from the University Erlangen-Nürnberg in Germany. Prof. Dr.-Ing. Werner Bauer was born in 1950 and is German and Swiss.

ADVISORY BOARD
Urs Bühler Innovation Fund

Prof. Dr. Lino Guzzella
Professor of Thermotronics
Swiss Federal Institute of Technology, ETH

Lino Guzzella received his mechanical engineering diploma in 1981 from ETH Zurich, followed by his doctoral degree in 1986. Since 1999, Lino Guzzella has been a full professor in the Mechanical and Process Engineering Department of ETH where he teaches all introductory classes in control systems and system dynamics. From 2012 to 2014 he was Rector and from 2015 to 2018 President of ETH. Lino Guzzella held positions in industry (Sulzer Brothers, Winterthur and Hilti, Schaan) and academia (in the EE and ME department of ETH, and as Honda Visiting Professor at OSU, Columbus, Ohio and as Springer Visiting Professor at UC Berkeley, California). With his group he focused his research on novel approaches in system dynamics and control of energy conversion systems. A particular emphasis was placed on the minimization of fuel consumption and pollutant emission of vehicle propulsion systems. He is a fellow of IFAC and of IEEE and a member of the Swiss Academy of Engineering Sciences. In addition to his academic activities he is a member of several boards of directors and advisory committees. Lino Guzzella was born in 1957 and is a Swiss and Italian citizen.

Peter Stähli
CEO Swiss Entrepreneurs Foundation

Peter Stähli is a graduate electrical engineer, with higher degrees in business management and energy technology. He is also a graduate of the University of Michigan executive program in innovation marketing. He has been an independent entrepreneur since 1992, having founded six companies and made three exits. In 1999, he founded the Swiss Economic Forum together with Stefan Linder, today Switzerland's leading business and networking platform. They have managed it for 18 years as CEO and Chairman. In the last 15 years, in his role as expert for the Swiss Economic Award, Switzerland's major prize for young entrepreneurs, he has assessed over 1,500 start-up business plans and undertaken over 300 company visits involving detailed analyses and due diligence evaluations. In 2016, they sold Swiss Economic Forum (SEF) to the Neue Zürcher Zeitung newspaper. Within the SEF's growth initiative, he helped provide start-ups and SMEs with CHF 100 million of growth capital (borrowed capital and equity). He is active as a recognized strategy expert in his own consultancy firm, sits on a number of boards of directors, and undertakes targeted investments in start-ups. He also has a consulting mandate for the Swiss Entrepreneurs Foundation, which is under the patronage of the Federal Council Guy Parmelin. Peter Stähli was born in 1964 and is Swiss.

Dr. Mark Macus
Chief Financial Officer

Read the bio on page 15.

SUSTAINABILITY BOARD

The Sustainability Board was established in 2021 to inform and advise on the implementation of the Bühler sustainability strategy. The Board consists of two external experts, Prof. Dr. Lino Guzzella and Dr. Thomas Crowther, and includes selected members of the Executive Board. It is chaired by CTO Dr. Ian Roberts.

COLLABORATION
principles

Permitted external activities of the Board of Directors and the Executive Board

Bühler's Articles of Incorporation provide for a certain restriction of the permitted external activities of the Members of the Board of Directors. Members of the Board of Directors may not hold more than four additional mandates in listed companies, eight additional mandates against remuneration in unlisted companies, and eight unpaid additional mandates. Not included in these limitations are mandates in companies affiliated with Bühler, corporate mandates of Bühler, and mandates in associations, foundations, employee welfare foundations, charitable organizations, and other comparable structures. However, no Board Member shall hold more than 20 such additional mandates. Mandates refers to mandates in the supreme governing body of a legal entity registered in the commercial register in Switzerland or elsewhere. Members of the Executive Board are limited to two mandates at public companies or other legal entities against remuneration and four unpaid mandates.

Elections and term of office of the Board of Directors

Bühler's Articles of Incorporation provide for the annual election by the General Assembly of all Board Members, its Chairman, and the Members of its Nomination and Compensation Committee. Term of office shall be one year, starting with the General Assembly at which each individual member is elected and ending with the following General Assembly. The Members of the Audit Committee are annually elected by the Board of Directors. Board Members will generally not be re-elected once they pass their 70th birthday or have been on the Board for 12 years.

Election date and attendance

For the year of first election to the Board of Directors, please refer to the individual curriculum vitae of each Board Member on pages 7–10. At the General Assembly, the Board of Directors gives account to the shareholders on the attendance of Board and Committee meetings by each individual Board Member.

Audit Committee

The Audit Committee shall monitor the integrity of the financial statements of the Company, including its Annual Report. It promotes effective communication between the management, internal and external audits. The Audit Committee regularly reviews the functionality and effectiveness of the internal control system. It supports the Board of Directors in corporate governance issues.

Nomination and Compensation Committee

The Nomination and Compensation Committee determines and agrees with the Board of Directors on the policy for the compensation of the Members of the Board of Directors and of the Executive Board. It approves the design of, and determines targets for any performance-related compensation schemes operated by the Company and approves the total annual payments made under such schemes. Within the parameters of the agreed policy the Nomination and Compensation Committee determines the total individual compensation package for each Member of the Board of Directors as well as of the Executive Board and prepares the remuneration report.

Work method of the Board of Directors and its committees

Board meetings are held as often as matters require or upon the request of a Board Member, but at least four times per year. The agenda of the meeting shall be announced when it is convened, and pertinent information, if needed, shall be sent 10 days before the meeting to each Board Member. On unannounced items the Board can only decide if all Members of the Board are in attendance. Decisions may also be taken by circulation, provided that none of the Board Members request a formal meeting. Meetings of the Board Committees are convened separately from the Board meetings and scheduled as often as business requires. The Board of Directors receives verbal updates after each meeting of its Committees by their Chairperson.

COLLABORATION principles

Areas of responsibilities

The Board of Directors is responsible for the ultimate direction, strategic supervision, and control of the management of the Company, and for other matters which are, by law, under its responsibility. Such inalienable duties include, essentially, (i) the ultimate management of the Company, (ii) the determination of its organization, (iii) the structuring of its accounting system and of the financial controlling, (iv) financial planning, (v) the appointment, removal, and ultimate supervision of persons entrusted with the management and representation of the Company, (vi) the preparation of the business report as well as the General Assembly and the implementation of its resolutions.

Executive Board

The Executive Board is responsible for all areas of strategic and operational management of the Company that are not reserved to the Board of Directors. The Executive Board is chaired by the Chief Executive Officer.

Urs Bühler Innovation Fund (UBIF)

The Advisory Board of the Urs Bühler Innovation Fund supports and advises the Board of Directors in innovation and identifies and executes first moves into future-oriented growth opportunities.

External auditors

The external auditors are appointed at the General Assembly and present the outcome of the audit to the Audit Committee.

COMPLIANCE

Effective corporate governance

Effective corporate governance is a precondition for Bühler to ensure a long-term and sustainable increase of its corporate value. Bühler bases this both on the Swiss Code of Best Practice for Corporate Governance and the OECD Principles of Corporate Governance. Corporate governance at Bühler is organized with the interests of its stakeholders in mind, including customers, employees, suppliers, and public communities. It also comprises compliance with environmental and social standards as well as an uncompromising commitment to financial integrity. As an international Swiss company, strict observation of local laws on a global scale and systematic and continuous monitoring of compliance in all markets are indispensable for Bühler. This is the only way to prevent operating risks and an impairment of reputation that might be caused by violation of compliance rules.

An active Code of Conduct

The Code of Conduct is part of the so-called Bühler Essentials. It serves all employees as a beacon, showing them how to live the Group's core corporate principles (Trust, Ownership and Passion) in their day-to-day jobs. It states what is expected of employees and business partners, defines the standards governing compliance with laws and regulations, and includes the fundamentals of communications, employee rights, health and safety, and financial integrity.

Bühler regularly reviews its own principles of corporate governance to ensure that they are up to date. Its Code of Conduct also includes binding standards for its business partners. The Code of Conduct is continuously adjusted to the changing environment. Furthermore, a Supplier Code of Conduct for business partners exists and its roll-out is ongoing as part of the onboarding process.

Clear rules against corruption and bribery

The so-called ABC (Anti Bribery & Corruption) rules against bribery and corruption unmistakably state that no violations will be tolerated. They concern, in particular, collaboration with agents. Furthermore, it is mandatory for all employees with access to the learning platform to undergo the state-of-the-art online training program (Web Based Training, WBT) and to pass a final test. Employees without access take part in an offline classroom training. Participation in the training takes place upon entry into the company and the training must be repeated every three to five years.

Compliance organizational structure proves its effectiveness

Bühler further decentralized the organizational structure of its compliance function. In six Bühler regions regional compliance officers act as the first contact, except for compliance cases involving special risks, which are handled directly by the Compliance Board. This decentralization has greatly streamlined and accelerated the related processes. This is also because linguistic barriers have been eliminated, and the regional compliance officers are familiar with local regulations and conditions.

Compliance reporting

Clear accountability and defined actions ensure that compliance-related incidents are systematically reported to the central Compliance Board. This transparency is a precondition for ensuring that the company can gain the necessary insight from such incidents and take the required measures in response.

Bühler is happy to report that awareness of the benefits of a transparent compliance reporting system have become increasingly acknowledged.

Trade compliance

The trade compliance program addresses customs, sanctions and export controls. Such formal regulatory conditions for international trade are further evolving and are impacted by global political and economic trends.

Trade Compliance is supported by the Export Compliance Program and trainings for management and employees. Furthermore since 2020 it is mandatory for all new relevant employees to undergo the state-of-the-art online training program (Web Based Training, WBT) and to pass a final test.

COMPLIANCE

Group Internal Audit

The Internal Audit Department reports functionally to the Board of Directors, represented by the Audit Committee and administratively to the Chief Financial Officer. Meetings between internal and external auditors take place on a regular basis.

The audit plan is aligned with the strategy and key business risks. A yearly risk assessment is prepared by Group Internal Audit. It is the basis for the yearly audit plan, which is approved by the Audit Committee. The results of the audits are discussed with the management of the audited unit, and major topics are presented to the Executive Board and the Audit Committee and thereafter reported to the Board of Directors.

In 2021, seven worldwide audits were carried out including two cross-sectional audits involving multiple world-wide legal entities. Group Internal Audit also reviews Groupwide compliance with the Code of Conduct as part of their internal audits. Violations are reported to the Compliance Board, Audit Committee and the Executive Board.

Risk management

Risks are assessed regularly as part of the company's integrated risk management process. This process includes risk assessments being part of the Businesses annual strategic planning cycle as well as a moderated risk workshop per Business. The results are mapped and discussed with the management.

The risk management system covers all measures in a systematic and transparent approach towards risks. It aims to identify, evaluate, mitigate, or avoid risks using suitable measures. Transferable risks are insured under the global insurance program of the Group.

Risks are assessed regularly as part of the company`s integrated risk management process. The results are discussed with the management. The risk management system includes all measures in a systematic and transparent approach towards risks. It aims to identify, evaluate, handle or avoid them using suitable measures.

Bühler Group renews ISO certification for quality and environmental management

In 2020 we managed to successfully re-certify the group ISO 9001 and ISO 14001 certificates with validity until November 2023. This was the result of the random sample check at our Bühler locations Bühler AG (BUZ), Uzwil, Switzerland; Bühler GmbH, Braunschweig (BBS), Bühler Alzenau GmbH (BLOA), Bühler Prince Inc., USA, (BPRI) Buhler (China) Holding Co. Ltd. (BCHN), Wuxi, China; Wuxi Buhler Machinery Manufacturing Co. Ltd. (BWUX), China, Buhler (Changzhou) Machinery Co. Ltd., China (BCHA), Changzhou Buhler Construction and Engineering Co. Ltd., China, (BCHE), Buhler Equipment (Xian) Co. Ltd., China, (BXIA) and Bühler (India) Private Ltd., India (BBAN); all of which have successfully passed SGS audits.

Initial certification according to ISO 45001 for occupational safety and health

With the Uzwil site, Bühler successfully passed the first surveillance audit in accordance with the ISO 45001:2018 standard.

SEDEX / SMETA 4-pillar re-certification

In addition to the headquarters of Bühler AG (BUZ) in Uzwil, Switzerland, further locations in China, Buhler Machinery Manufacturing Co. Ltd. (BWUX) and Buhler (Changzhou) Machinery Co., Ltd. (BCHA), in Austria, FHW Franz Haas Waffelmaschinen GmbH (BHWL) and in the US, Buhler Aeroglide Corporation (BRAL) were audited according to SEDEX/SMETA-4. The aim is to use the SMETA audit (Sedex Members' Ethical Trade Audit) procedure to ensure greater transparency and security across the entire supply chain. Issues such as employee rights (e.g. wages, benefits, working hours, etc.), business ethics, health and safety and environmental management were in the scope of the audit scheme.

REMUNERATION report

Attract, develop, perform and retain

Boosting employee future skills, excelling at global talent management and embedding workforce agility as well as employability are key drivers in human resources to achieve the Bühler mission. A high employee engagement and a focus on people development paired with leadership excellence are required for Bühler to play to win. The Remuneration Policies are designed with this purpose in mind.

Remuneration governance

Overview

The Members of the Nomination and Compensation Committee (NCC) are elected by the General Assembly. The Board of Directors (BoD) appoints the Chairman from among the elected members. The NCC supports the BoD in the remuneration issues defined here, with responsibilities being retained by the BoD. The NCC is in charge of defining and periodically reviewing the Remuneration Policy. It prepares all the relevant decisions of the BoD in the area of remuneration, for the Members of the BoD, Members of the Executive Board (EB), and submits its proposals (remuneration type and annual remuneration) to the BoD. In addition, it submits proposals to the BoD defining the annual goals for success and performance-related remuneration, and then defines the circle of potential recipients of this success- and performance-related remuneration.

Nomination and Compensation Committee

For the year under review, the Members of the Nomination and Compensation Committee (NCC) were Dr. Konrad Hummler (Chairman), Frank N. J. Braeken, Karin Bühler and Jeannine Bühler. Permanent invitees were Calvin Grieder, Chairman of the Board of Directors; Stefan Scheiber, CEO; Irene Mark-Eisenring, Chief HR Officer (as of Sept. 1, 2020); and Christof Oswald, Head of HR Region Switzerland. Three meetings were held. The NCC Chairman reported to the BoD after each meeting, and the minutes were kept and distributed in a timely manner.

Authority chart

Subject	Recommendation	Final approval
Definition of Remuneration System and Policy for remuneration paid to the Board of Directors and the Executive Board	NCC	Board of Directors
Development of variable remuneration scheme and approval of all annually paid performance-related remuneration at Bühler Group	NCC	Board of Directors
Definition of individual remuneration, including bonus, variable portion, shares-related remuneration, etc., to the Executive Board and the Board of Directors	NCC	Board of Directors General Assembly

REMUNERATION
report

Remuneration principles

Bühler is committed to performance- and market-related remuneration. Success as a result of sound individual performance plus the success of the organization impacts the remuneration. All employees, including the Executive Board, shall undergo a formalized annual performance appraisal process (Employee Performance Management, EPM). The Individual Performance Goals are defined and agreed upon jointly with each employee at the start of the fiscal year. The financial success of the organization, measured on the basis of EBIT, is also part of performance-related remuneration.

Principles of Remuneration Policy

Fairness, consistency, and transparency	The remuneration schemes shall be simple, clearly structured, and transparent. They are linked to the responsibilities and powers of the individual functions, thereby ensuring fair remuneration at all levels.
Performance-related remuneration	Variable remuneration is directly tied to the success of Bühler (EBIT) and to individual performance (EPM).
Long-term success sharing	Part of the remuneration of the Executive Board shall be paid in the form of deferred compensation in order to ensure long-term sharing in the success of Bühler.
Orientation toward the labor market	In order to attract and retain talent, qualified and dedicated management staff and employees, remuneration shall be oriented toward the market environment and be regularly subjected to benchmarking.
Bühler values: TOP	The Remuneration Policy is oriented toward the Bühler values of TOP (Trust, Ownership, and Passion). These values are incorporated into the above-mentioned principles and determine the “Bühler way of doing business” in all respects.

REMUNERATION
elements

Overall remuneration model for employees and the Executive Board

	Instrument	Purpose	Influencing factors
Fixed annual base salary	Monthly cash remuneration	Regular, predictable remuneration for the specific function	Sphere of work, complexity, and responsibility of the function, competencies, and experience of the function owner, Function benchmarks
Performance-related variable portion	Annual cash remuneration	Remuneration for performance	Success of the organization (EBIT) and individual performance (EPM) on an annual basis
Deferred compensation plan	Deferred compensation plan with a vesting period of three to ten years	Sharing in long-term success	Hierarchical position of the function within the organization
Other employee benefits	Pension and insurance schemes; other fringe benefits	Protection against risks and coverage of expenses	Local legislation and market practice

REMUNERATION
elements

Remuneration of the Board of Directors

The Members of the Board of Directors shall receive a fixed cash payment and be remunerated as Committee Members (if applicable).

	Office
Basic remuneration	Membership in the Board of Directors
Additional remuneration	Chairmanship of the Board of Directors Vice Chairmanship of the Board of Directors
	Chairmanship of the Audit Committee Activity in the Audit Committee
	Chairmanship of the Nomination and Compensation Committee Activity in the Nomination and Compensation Committee
	Other Committee Chairmanship/Memberships Other activities
Expenses	Only expenses incurred are reimbursed

Remuneration of the Executive Board

The Members of the Executive Board shall receive a basic salary, a variable cash remuneration portion, employer contributions to pension funds and social security institutions, and long-term remuneration in the form of a deferred compensation plan with a vesting period of three to 10 years. In addition, the lump-sum expenses allowance regulations apply.

FINANCIAL REPORT

Financial Report
Bühler Group

Consolidated income statement

	Notes	2021 CHF m	2020* CHF m
Revenue	3.1	2,701.3	2,708.4
Other operating income	3.2	54.0	32.3
Total operating income		**2,755.3**	**2,740.7**
Cost of materials		–1,196.3	–1,161.1
Changes in inventories of finished goods and work in progress		6.5	–22.7
Employee benefit expenses	3.3	–939.2	–912.6
Other operating expenses	3.4	–402.1	–415.7
Net result from associates	4.4	2.5	3.6
Operating result before interest, taxes, depreciation and amortization (EBITDA)		**226.7**	**232.2**
Depreciation and amortization	4.1/4.2/4.3	–80.7	–86.5
Operating result before interest and taxes (EBIT)		**146.0**	**145.7**
Interest income and expenses	3.5	–0.7	–0.9
Other financial income	3.5	3.8	1.2
Financial result		**3.1**	**0.3**
Profit before taxes		**149.1**	**146.0**
Income taxes	3.6	–35.9	–36.4
Net profit		**113.2**	**109.6**
Attributable to:			
– Owners of the parent		108.2	105.0
– Non-controlling interests		5.0	4.6

*Restated (see Note 6.1).

Consolidated statement of comprehensive income

	Notes	2021 CHF m	2020 CHF m
Net profit		**113.2**	**109.6**
Other comprehensive income			
Translation differences of foreign operations		–7.4	–57.6
– Realized through income statement		0.9	0.0
Net gain (loss) on hedge of net investment		–12.1	–8.4
– Tax effect		1.1	0.8
Cash flow hedges			
– Changes recycled in the income statement		–7.5	–2.1
– Changes recognized in OCI		8.3	8.4
– Tax effect		–0.1	–0.9
Other comprehensive income to be reclassified to profit or loss in subsequent periods		**–16.8**	**–59.8**
Remeasurements of defined benefit plans	4.12.3	82.9	–6.7
– Tax effect		–13.1	0.7
Financial assets at fair value through OCI		5.9	–3.5
– Tax effect		–0.9	0.3
Other comprehensive income not to be reclassified to profit or loss in subsequent periods		**74.8**	**–9.2**
Total other comprehensive income		**58.0**	**–69.0**
Total comprehensive income		**171.2**	**40.6**
Attributable to:			
– Owners of the parent		164.3	36.9
– Non-controlling interests		6.9	3.7

Consolidated balance sheet

Assets	Notes	Dec. 31, 2021 CHF m	Dec. 31, 2020* CHF m
Property, plant and equipment	4.1	659.3	691.3
Right-of-use assets	4.2	55.6	60.5
Intangible assets and goodwill	4.3	661.8	683.3
Investments in associates	4.4	28.6	32.1
Non-current financial and other assets	4.5	176.1	113.5
Deferred tax assets	3.6.4	55.5	53.6
Non-current assets		**1,636.9**	**1,634.3**
Assets classified as held for sale		2.4	0.0
Inventories	4.6	496.4	461.7
Contract assets relating to production orders in progress	3.1	259.6	252.1
Trade accounts receivable	4.7	553.9	560.2
Other receivables	4.7	126.5	102.0
Current income tax assets		5.8	5.5
Marketable securities	2.3.2	87.1	81.8
Cash and cash equivalents	4.8	808.2	708.2
Current assets		**2,339.9**	**2,171.5**
Total assets		**3,976.8**	**3,805.8**
Equity and liabilities			
Share capital	4.13	15.0	15.0
Capital reserves		185.1	185.1
Other reserves / retained earnings		1,642.2	1,503.9
Equity attributable to the owners of the parent		**1,842.3**	**1,704.0**
Non-controlling interests		**35.2**	**32.1**
Total equity		**1,877.5**	**1,736.1**
Non-current financial liabilities	2.2	340.3	553.0
Non-current lease liabilities	4.2	39.7	42.9
Deferred tax liabilities	3.6.4	120.9	109.6
Defined benefit obligations	4.12.4	76.9	112.5
Non-current provisions	4.10	38.9	39.5
Non-current liabilities		**616.7**	**857.5**
Current financial liabilities	2.2	191.1	41.3
Current lease liabilities	4.2	15.1	17.5
Trade accounts payable	4.9	302.5	212.5
Contract liabilities relating to production orders in progress	3.1	623.5	539.1
Current provisions	4.10	59.3	69.8
Other current liabilities	4.11	266.1	299.9
Current income tax liabilities		25.0	32.1
Current liabilities		**1,482.6**	**1,212.2**
Total liabilities		**2,099.3**	**2,069.7**
Total equity and liabilities		**3,976.8**	**3,805.8**

*Restated (see Note 6.1).

Consolidated statement of changes in equity

	Notes	Share capital CHF m	Capital reserve CHF m	Retained earnings CHF m
January 1, 2020*		15.0	185.1	1,762.5
Dividends paid	6.5			–25.0
Changes in non-controlling interests				–0.9
Net profit				105.0
Other comprehensive income				–6.0
December 31, 2020		**15.0**	**185.1**	**1,835.6**
January 1, 2021		15.0	185.1	1,835.6
Dividends paid	6.5			–25.0
Changes in non-controlling interests				–0.9
Net profit				108.2
Other comprehensive income				69.8
December 31, 2021		**15.0**	**185.1**	**1,987.7**

*Restated (see Note 6.1).

Hedge reserve CHF m	Financial assets at fair value through OCI CHF m	Foreign currency translation reserves CHF m	Total other reserves and retained earnings CHF m	Equity attributable to the owners of the parent CHF m	Non-controlling interests CHF m	Total equity CHF m
2.1	3.4	–275.1	1,492.9	1,693.0	31.6	1,724.6
			–25.0	–25.0	–4.1	–29.1
			–0.9	–0.9	0.9	0.0
			105.0	105.0	4.6	109.6
5.4	–3.2	–64.3	–68.1	–68.1	–0.9	–69.0
7.5	**0.2**	**–339.4**	**1,503.9**	**1,704.0**	**32.1**	**1,736.1**
7.5	0.2	–339.4	1,503.9	1,704.0	32.1	1,736.1
			–25.0	–25.0	–4.8	–29.8
			–0.9	–0.9	0.9	0.0
			108.2	108.2	5.0	113.2
0.7	5.0	–19.5	56.0	56.0	2.0	58.0
8.2	**5.2**	**–358.9**	**1,642.2**	**1,842.3**	**35.2**	**1,877.5**

Consolidated statement of cash flows

	Notes	2021 CHF m	2020* CHF m
Profit before taxes		149.1	146.0
Financial result	3.5	–3.1	–0.3
Operating result before interest and taxes (EBIT)		**146.0**	**145.7**
Depreciation and amortization	4.1/4.2/4.3	80.7	86.5
Other items not affecting cash flow		–4.6	–0.3
Changes in provisions		–9.6	9.7
Changes in trade accounts receivable		20.5	103.8
Changes in inventories		–38.9	57.3
Changes in trade accounts payable		85.0	–55.7
Changes in contract assets/liabilities relating to production orders in progress		75.9	161.8
Changes in other net operating assets		–50.1	13.4
Gains/losses on disposal of fixed assets		–3.3	5.3
Interest received		5.6	5.3
Interest paid		–4.3	–4.5
Income taxes paid		–47.3	–58.6
Cash flow from operating activities		**255.6**	**469.6**
Purchase of property, plant and equipment		–33.2	–57.5
Disposal of property, plant and equipment		4.5	3.1
Purchase of intangible assets		–4.7	–5.2
Cash flow from acquisition of Group companies, net of cash acquired		–12.9	1.1
Purchase of marketable securities		–54.6	–97.9
Disposal of marketable securities		42.8	82.3
Purchase of non-current financial assets		–4.2	–3.6
Disposal of non-current financial assets		0.1	0.9
Dividends received		4.9	0.0
Cash flow from investing activities		**–57.3**	**–76.8**
Proceeds from financial liabilities	2.2	0.0	19.0
Repayment of financial liabilities	2.2	–50.2	–34.1
Cash outflow for leases	4.2	–19.0	–20.4
Dividends paid of Bühler Holding AG	6.5	–25.0	–25.0
Dividends paid to non-controlling interests		–4.8	–4.1
Cash flow from financing activities		**–98.9**	**–64.6**
Translation differences		0.6	–16.5
Changes in cash and cash equivalents		**100.0**	**311.7**
Cash and cash equivalents at the beginning of period		708.2	396.5
Cash and cash equivalents at the end of period		808.2	708.2

*Restated (see Note 6.1).

Notes to the financial statements

1. Group information

1.1 General information

The consolidated financial statements of the Bühler Group and its subsidiaries (collectively, the Group) for the year ended December 31, 2021, were authorized for issue in accordance with a resolution of the Board of Directors on February 11, 2022. Bühler Holding AG (the Company or the parent) is a company incorporated and domiciled in Switzerland whose shares are privately held. The registered office is located in Uzwil, Switzerland.

The Group is a globally active solutions provider for the industrial manufacturing of food and advanced materials. The worldwide solutions portfolio contains engineering, application development, manufacturing, services, and training.

These financial statements are the consolidated financial statements of Bühler Holding AG and its subsidiaries. The list of significant Group companies can be found on pages 13 to 15.

The consolidated financial statements of the Bühler Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and comply with Swiss law. The consolidated financial statements are based on the single-entity financial statements of the Group companies, which are prepared in accordance with consistent accounting principles. The consolidated financial statements are prepared under the historical cost convention. Any exceptions to this general rule are outlined in the respective note. The overall accounting principles applied to the Annual Report as a whole are described below. The accounting policies related to specific line items are described in the notes to which they relate.

Due to rounding, the numbers do not necessarily correspond exactly with the totals.

COVID-19. Bühler's financial performance for the year-end 31 December 2021 was comparable with 2020. The on-going volatile environment is impacting the supply chains by increased costs as well as more complex and time-consuming routing of goods. Bühler's decentral set-up and the flexibility of the global production footprint helped to sustain the supply chain and continue to serve customer demands efficiently throughout its industries. In contrast to 2020, a clear upswing in the markets was observed, which resulted in significantly more order intake compared to the prior year. Due to the time gap in the plant business between order entry and turnover, the upward trend in orders is not yet visible in turnover.

1.2 Use of estimates

The preparation of the consolidated financial statements in accordance with IFRS requires management to make estimates and assumptions that affect the reported amounts of revenue, expenses, assets, and liabilities and the related disclosures at the date of the financial statements. These estimates are based on management's best knowledge of current events and possible future measures. However, actual results could differ from those estimates.

If in the future such estimates and assumptions, which are based on management's best knowledge at the date of the financial statements, deviate from the actual circumstances, the original estimates and assumptions will be modified as appropriate in the year in which the circumstances change.

The estimates and assumptions that may have a higher degree of uncertainty to cause a material adjustment to the carrying amounts of assets and liabilities within the next financial periods relate primarily to goodwill and intangible assets with an indefinite useful life (Note 4.3) and, to a lesser extent, revenue (Note 3.1), defined benefit obligations (Note 4.12) and Level 3 financial assets (Note 2.4).

Estimates related to specific line items are described in the notes to which they relate.

1.3 Foreign currency translation

The individual financial statements of the Group companies are measured using the currency of the primary economic environment in which the entity operates ("the functional currency") and are translated into Swiss francs for consolidation purposes. Year-end exchange rates are used for the balance sheet and the average exchange rate for the income statement, statement of other comprehensive income, and statement of cash flows.

Differences resulting from the application of these different exchange rates for the balance sheet and the income statement and from equity transactions are recognized directly in the consolidated statement of other comprehensive income.

Goodwill arising on the acquisition of a foreign entity is expressed in the functional currency of the foreign operation and is translated at the closing rate.

Foreign currency transactions translated into the functional currency are accounted for at the exchange rates prevailing at the date of the transactions; gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies are recognized in the income statement, except when they are deferred outside the income statement as qualifying cash flow hedges.

Foreign exchange differences arising on monetary items that form part of a company's net investment in a foreign operation are reclassified to equity (currency translation adjustment) in the consolidated financial statements and are only fully recycled to the income statement when the Group loses control of a subsidiary or loses significant influence in an associate.

For foreign currency translation, the Bühler Group used the following exchange rates:

	Average exchange rates		**Closing rates 31.12.**	
	2021 CHF	**2020 CHF**	**2021 CHF**	**2020 CHF**
BRL	0.1697	0.1841	0.1630	0.1700
CAD	0.7296	0.7002	0.7170	0.6920
CNY	0.1417	0.1360	0.1445	0.1356
CZK	0.0422	0.0405	0.0416	0.0414
DKK	0.1454	0.1436	0.1390	0.1460
EUR	1.0814	1.0705	1.0370	1.0850
GBP	1.2580	1.2042	1.2340	1.1990
INR	0.0124	0.0127	0.0123	0.0121
JPY	0.0083	0.0088	0.0080	0.0086
MXN	0.0451	0.0440	0.0445	0.0446
SGD	0.6804	0.6806	0.6788	0.6677
THB	0.0286	0.0300	0.0275	0.0295
USD	0.9143	0.9388	0.9190	0.8850
ZAR	0.0619	0.0573	0.0582	0.0604

1.4 Principles of consolidation

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. The cost of an acquisition is measured at the fair value of the consideration transferred at the date of exchange. For each business combination, the acquirer measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed in the income statement. Identifiable assets acquired and liabilities assumed in a business combination are measured initially at fair value at the date of acquisition, irrespective of the extent of any non-controlling interest assumed. When the Bühler Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances, and pertinent conditions as at the acquisition date.

If the business combination is achieved in stages, the acquisition date fair value of the Group's previously held equity interest in the acquiree is remeasured to fair value at the date control is obtained. Any gain or loss arising from such remeasurement is recognized in the income statement.

Any contingent consideration to be transferred by the Group is recognized at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration are recognized in the income statement.

Subsidiaries are consolidated from the date on which control is transferred to the Group and are no longer consolidated from the date that control ceases.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

All intercompany transactions and balances between Group companies are eliminated in full.

Investments in associated companies are accounted for using the equity method of accounting. These are companies over which the Group generally holds between 20% and 50% of the voting rights and has significant influence but does not exercise control. Goodwill arising on the acquisition is included in the carrying amount of the investment in associated companies. The Group does not recognize further losses when the carrying amount of the investment together with any long-term interest in an associated company reaches zero, unless the Group has in addition either incurred or guaranteed additional obligations in respect to the associated company.

Investments below 20% are recognized at fair value and classified as financial assets at fair value through profit or loss. Changes in fair value are recognized in the income statement.

Any non-current assets held for sale and discontinued operations are presented separately on the face of the balance sheet. This includes all those assets associated with the discontinuation of entire lines of business or geographical areas of operation, which are to be realized through a sale transaction rather than through continued use. Reclassifications are only made if management is committed to the sale and has started seeking buyers. In addition, the asset or disposal group must be available for sale in its current condition and its sale must be highly probable within one year. Non-current assets or disposal groups classified as held for sale are no longer depreciated. If necessary, they are written down for impairment.

The income and expenses of discontinued operations are separated from ordinary income and expenses in the income statement for both the reporting period and the prior year down to the "profit after tax" level. The resulting gain or loss (after taxes) is presented separately in the income statement.

1.5 Additions and disposals of Group companies

Additions

2021
There was no significant addition in 2021.

2020
On December 31, 2020, the Group acquired 100% of the shares of a leading supplier of roller mill parts with an extensive portfolio of services. With the acquisition the Group expands its Customer Service network.

The goodwill of CHF 6.7 million arising from the acquisition is mainly attributable to a strengthening of the market position, the expertise of the workforce and the expected synergies from combining the operations of the acquired business with the Bühler Group. There was no other significant addition.

Disposals

2021
There was no significant disposal in 2021.

2020
There was no significant disposal in 2020.

1.6 Significant Group companies

Name of company	Country	Share capital in millions of local currency	Participation rate	Holding / financing company	Held by
Switzerland					
Bühler Holding AG, Uzwil	CH	CHF 15.00		O	
Bühler AG, Uzwil	CH	CHF 30.00	100.0%		Bühler Holding AG, Uzwil
Bühler-Immo Betriebs AG, Uzwil	CH	CHF 0.10	100.0%		Bühler Holding AG, Uzwil
UBIF AG, Uzwil	CH	CHF 4.00	100.0%		Bühler Holding AG, Uzwil
Benlink AG, Zurich	CH	CHF 0.10	100.0%		Bühler Holding AG, Uzwil
Bühler + Scherler AG, St. Gallen	CH	CHF 0.80	60.0%		Bühler Holding AG, Uzwil
Europe					
FHW Franz Haas Waffelmaschinen GmbH, Leobendorf	AT	EUR 0.04	100.0%		Bühler Food Equipment GmbH, Leobendorf
Bühler Food Equipment GmbH, Leobendorf	AT	EUR 4.40	100.0%	O	Bühler AG, Uzwil
Metall- und Kunststoffwaren Erzeugungs-ges.m.b.H, Heidenreichstein	AT	EUR 2.91	100.0%		Bühler Food Equipment GmbH, Leobendorf
Bühler CZ s.r.o., Zamberk	CZ	CZK 265.20	100.0%		Bühler Holding AG, Uzwil
Bühler Deutschland GmbH, Beilngries	DE	EUR 0.03	100.0%		Bühler AG, Uzwil
Bühler GmbH, Beilngries	DE	EUR 16.00	100.0%		Bühler Deutschland GmbH, Beilngries
Bühler Deutschland Holding GmbH, Braunschweig	DE	EUR 0.03	100.0%	O	Bühler AG, Uzwil
Bühler GmbH, Reichshof	DE	EUR 1.14	100.0%		Bühler Deutschland Holding GmbH, Braunschweig
Bühler GmbH, Braunschweig	DE	EUR 12.63	100.0%		Bühler Deutschland Holding GmbH, Braunschweig
Leybold Optics Verwaltungs GmbH, Alzenau	DE	EUR 0.44	100.0%	O	Bühler Deutschland Holding GmbH, Braunschweig
Bühler Alzenau GmbH, Alzenau	DE	EUR 0.05	100.0%		Leybold Optics Verwaltungs GmbH, Alzenau
Haas-Meincke A/S, Ballerup	DK	DKK 5.00	100.0%		Bühler Food Equipment GmbH, Leobendorf
Buhler S.A., Madrid	ES	EUR 0.06	100.0%		Bühler Holding AG, Uzwil
Bühler SAS, Haguenau	FR	EUR 0.20	100.0%		Bühler Holding AG, Uzwil
Buhler UK Holdings Ltd., London	GB	GBP 3.60	100.0%	O	Bühler Holding AG, Uzwil
Buhler UK Ltd., London	GB	GBP 1.25	100.0%		Buhler UK Holdings Ltd., London
CDD Automation Solutions Limited, Peter-borough	GB	GBP 0.01	100.0%		Buhler UK Holdings Ltd., London
Buhler S.p.A., Milano	IT	EUR 2.67	100.0%		Bühler Holding AG, Uzwil
Haas-Mondomix B.V., Almere	NL	EUR 0.50	100.0%		Bühler Food Equipment GmbH, Leobendorf
OOO Haas, Moscow	RU	RUB 3.21	100.0%		FHW Franz Haas Waffelmaschinen GmbH, Leobendorf

Name of company	Country	Share capital in millions of local currency	Participation rate	Holding / financing company	Held by
North America					
Buhler US Holding Inc., Minneapolis	**US**	USD 0.05	100.0%	O	Bühler Holding AG, Uzwil
Buhler Inc., Minneapolis	**US**	USD 3.20	100.0%		Buhler US Holding Inc., Minneapolis
BuhlerPrince Inc., Holland	**US**	USD 0.38	100.0%		Buhler US Holding Inc., Minneapolis
Buhler Sputtering Components Inc., Owatonna	**US**	USD 0.02	100.0%		Buhler US Holding Inc., Minneapolis
Latin America					
Buhler S.A., Buenos Aires	**AR**	ARS 1.10	100.0%		Bühler Holding AG, Uzwil
Buhler Indústria e Comércio de Equipamentos Industriais Ltda, Curitiba	**BR**	BRL 20.69	100.0%		Bühler Holding AG, Uzwil
Buhler Sanmak Industria de Maquinas Ltda., Blumenau	**BR**	BRL 10.00	100.0%		Bühler Holding AG, Uzwil
Haas do Brasil Industria de Maquinas Ltda., Curitiba	**BR**	BRL 3.04	100.0%		Bühler Food Equipment GmbH, Leobendorf
Buhler S.A. de C.V., Toluca	**MX**	MXN 50.00	100.0%		Bühler Holding AG, Uzwil
Buhler S.A.S., Bogota	**CO**	COP 291.49	100.0%		Bühler AG, Uzwil
Middle East and Africa					
Buhler Limited, Nairobi	**KE**	KES 900.00	100.0%		Bühler Holding AG, Uzwil
Buhler (Pty) Ltd., Johannesburg	**ZA**	ZAR 141.37	90.0%		Bühler Holding AG, Uzwil

Name of company	Country	Share capital in millions of local currency	Participation rate	Holding / financing company	Held by
Asia					
Buhler (Changzhou) Machinery Co. Ltd., Liyang City	**CN**	CNY 320.00	100.0%		Buhler (China) Holding Co. Ltd., Wuxi
Buhler (China) Holding Co. Ltd., Wuxi	**CN**	USD 123.60	100.0%	O	Bühler Holding AG, Uzwil
Buhler (China) Machinery Manufacturing Co. Ltd., Wuxi	**CN**	CNY 150.00	100.0%		Buhler (China) Holding Co. Ltd., Wuxi
Buhler (Wuxi) Commercial Co. Ltd., Wuxi	**CN**	USD 5.50	100.0%		Buhler (China) Holding Co. Ltd., Wuxi
Buhler (Changzhou) Insect Technologies Co. Ltd., Changzhou	**CN**	CNY 10.00	100.0%		Bühler AG, Uzwil
Buhler Equipment (Xian) Co. Ltd., Xi'an	**CN**	CNY 28.00	100.0%		Bühler Holding AG, Uzwil
Buhler Mechanical Equipment (Shenzhen) Co. Ltd., Shenzhen	**CN**	USD 4.00	100.0%		Bühler Holding AG, Uzwil
Wuxi Buhler Machinery Manufacturing Co. Ltd., Wuxi	**CN**	USD 23.00	51.0%		Bühler Holding AG, Uzwil
Buhler Leybold Optics Equipment (Beijing) Co. Ltd., Beijing	**CN**	CNY 10.10	100.0%		Bühler Alzenau GmbH, Alzenau
Buhler (India) Private Ltd., Bangalore	**IN**	INR 100.00	100.0%		Bühler Holding AG, Uzwil
Buhler K.K., Yokohama	**JP**	JPY 250.00	100.0%		Bühler Holding AG, Uzwil
Buhler Ltd., Seoul	**KR**	KRW 250.00	100.0%		Bühler Holding AG, Uzwil
Buhler Asia Private Limited, Singapore	**SG**	USD 14.38	100.0%	O	Bühler Holding AG, Uzwil
Buhler Asia Vietnam Limited, Long An	**VN**	VND 149,815.50	100.0%		Buhler Asia Private Limited, Singapore
Buhler (Thailand) Limited, Bangkok	**TH**	THB 110.00	100.0%		Buhler Asia Private Limited, Singapore
PT Buhler Indonesia, Jakarta	**ID**	IDR 68,500.00	100.0%		Buhler Asia Private Limited, Singapore

No significant change to prior year.

2. Financial risk management

The Group is exposed to financial market risks (foreign exchange risk, interest rate risk, and price risk), credit risks, and liquidity risks as a result of its global activities. Financial risk management focuses on the management of foreign exchange risk, credit risk, and liquidity risk. The Group's risk management aims to minimize the potential adverse impact of developments on the financial markets on the Group's financial conditions and secure its financial stability.

The corporate treasury executes the risk management function in accordance with the directives issued by the Board of Directors. Financial risks are identified, evaluated, and mitigated in close cooperation with the Group's business units and subsidiaries.

Foreign exchange risk. Due to the nature of a global business, the Group is exposed to future business transactions or assets and liabilities recognized on the balance sheet denominated in another currency than the functional currency (transaction risk). The objective is to minimize transaction risks arising from sales contracts and purchase commitments in non-functional currencies. In order to hedge such transaction risks, subsidiaries use foreign currency contracts with the corporate treasury as counterparty, if permitted by local legislation. The corporate treasury manages these positions by entering into foreign currency spot, forward, swap, and derivative contracts with financial institutions.

The Group's main business is project-based with an execution over a longer period of time. Small projects and customer service transactions are continuously monitored and hedged based on the expected sales volume. Hedge accounting is applied.

Foreign exchange risks also arise from net investments in foreign Group companies (translation risk). Net investments in foreign Group companies are long term in nature. Their fair value changes with exchange rates. However, in the long run the spread in the inflation rate should match the corresponding exchange-rate movements, so that changes in the fair value of foreign net investments will offset the exchange-rate related changes in value. For this reason, the Group currently does not hedge its net investments in foreign Group companies.

The table below shows the changes in the key currency pairs on profit after taxes and equity, based on the assumption that all other variables remained constant. The volatility value used in the calculation is that of one-year historical volatility as per December 31.

2021 Currency pair	EUR/CHF	USD/CHF	CNY/CHF	GBP/CHF
Volatility	5.0%	6.2%	6.0%	7.1%
Effect on profit after taxes (rate increase) CHF m	0.6	0.0	3.2	0.5
Effect on profit after taxes (rate decrease) CHF m	–0.6	0.0	–3.2	–0.5
Effect on equity (rate increase) CHF m	10.7	–7.5	3.1	–0.2
Effect on equity (rate decrease) CHF m	–10.7	7.5	–3.1	0.2

2020 Currency pair	EUR/CHF	USD/CHF	CNY/CHF	GBP/CHF
Volatility	5.1%	6.4%	8.3%	7.4%
Effect on profit after taxes (rate increase) CHF m	1.5	0.6	6.2	0.5
Effect on profit after taxes (rate decrease) CHF m	–1.5	–0.6	–6.2	–0.5
Effect on equity (rate increase) CHF m	11.4	–1.2	3.3	–0.1
Effect on equity (rate decrease) CHF m	–11.4	1.2	–3.3	0.1

Interest rate risk. The Group held, with the exception of cash and time deposits, no material interest-bearing assets during the reporting and the prior-year period. Both income and cash flow from operations are therefore unaffected by the market interest rates. The liabilities contain mainly two corporate bonds with a fixed interest rate, which are measured at amortized costs. Hence, the Group is not exposed to a fair value risk.

Price risk. Holding marketable securities exposes the Group to a risk of price fluctuation that can result in proportional changes in the carrying amount.

Credit risk. Credit risks arise in connection with investments of liquid funds, derivative financial instruments, and receivables from customers. The Group does not expect to incur any material loss as a result of its counterparties being unable to meet their contractual obligations, nor does it have any cluster risks with respect to individual sectors or countries.

Financial institutions: The default risk on investments, derivative financial instruments, money market funds, deposits, and cash is minimized by selecting different counterparties with at least an investment-grade rating. The risks are monitored and kept within periodically reviewed and approved limits.

Receivables from customers: In order to minimize potential losses on customers' receivables, an Operational Risk Management (ORM) guideline has been implemented. The evaluation of our customers' financial reliability and/or the terms of payment and hedging on our deliveries are key concerns in this respect. In addition, it can be stated that none of our customers has outstanding payments accounting for more than 5% of total sales revenue. The nominal value of the trade accounts receivable less valuation allowances is considered an approximation of the receivables' fair value. The book value stated represents the maximum credit risk. Information on the analysis of outstanding receivables and allowance for bad debts is disclosed in Note 4.7.

Liquidity risk. Liquidity risk refers to the risk of the Group being unable to fulfill its obligations when due or at a reasonable price. The Group's liquidity management includes holding adequate reserves of cash and committed credit lines with different banks to ensure financial stability and to use free cash flows as a source of financing. Group management monitors the Group's net liquidity position by means of ongoing forecasts based on expected cash flows.

Maturity analysis

2021	Book value Dec. 31, 2021 CHF m	Cash outflow Total CHF m	< 1 year CHF m	1–5 years CHF m	> 5 years CHF m
Trade accounts payable to third parties	299.5	299.5	299.5		
Liabilities to associates and related parties	133.4	133.4	31.4	102.0	0.0
Other liabilities (incl. derivative financial instruments through profit or loss)	57.0	57.0	57.0	0.0	0.0
Corporate bonds	391.6	398.4	155.7	242.7	0.0
Derivative financial instruments held for hedging	5.9	5.9	5.7	0.2	
Total	**887.4**	**894.2**	**549.3**	**344.9**	**0.0**

2020*	Book value Dec. 31, 2020* CHF m	Cash outflow Total CHF m	< 1 year CHF m	1–5 years CHF m	> 5 years CHF m
Trade accounts payable to third parties	210.2	210.2	210.2		
Liabilities to associates and related parties	175.7	175.7	49.1	102.6	24.0
Other liabilities (incl. derivative financial instruments through profit or loss)	71.2	71.2	69.0	2.2	0.0
Corporate bonds	420.6	429.0	1.6	185.9	241.5
Derivative financial instruments held for hedging	4.7	4.7	4.5	0.2	
Total	**882.4**	**890.8**	**334.4**	**290.9**	**265.5**

*Restated (see Note 6.1).

Capital management. The Group's objectives in relation to capital management are to safeguard the Group's financial stability, its financial independence, and its ability to continue as a going concern in order to generate returns for shareholders and benefits for all other stakeholders. In addition, capital management aims to maintain an optimal capital structure. As at December 31, 2021, the equity ratio amounts to 47.2% (prior year*: 45.6%).

2.1 Financial assets

Financial assets are initially recognized at fair value plus transaction costs that are directly attributable to the acquisition of the asset, except for financial assets held at fair value through profit or loss where the transaction costs are expensed immediately to the income statement.

The subsequent valuation depends on the Group's business model for managing the respective asset and the cash flow characteristics of the assets:

- → Cash, time deposits, receivables, non-current interest-bearing receivables, and other financial assets are valued at amortized costs.
- → Debt instruments are valued at fair value through profit or loss due to the irrevocable election of the fair value option.
- → Equity instruments acquired with the intention of generating a profit or compensatory effect from short-term price fluctuations are considered operational investments and are valued at fair value through profit or loss.
- → Equity instruments acquired for long-term strategic reasons are considered strategic investments and are valued at fair value through other comprehensive income with no future recycling to the income statement. As of December 31, 2021, all non-current private equity investments were considered strategic investments and their fair value amounted to CHF 31.4 million (prior year: 21.8 million).

Credit risks relating to debt instruments valued at amortized cost are considered to be low. The Group therefore determines the impairment allowance as the credit losses expected in the next 12 months. Lifetime expected credit losses would be recognized when the credit risk is no longer regarded as low risk.

For trade receivables and contract assets, allowances are calculated in the amount of the expected credit losses over the term. The Group analyses the credit losses incurred in the past and also estimates anticipated credit losses based on the economic conditions.

As at December 31, 2021, capital commitments of CHF 7.1 million (prior year: 10.7 million) had not yet been drawn.

Information on derivative financial instruments is disclosed in Note 2.3.

2021	Cash and cash equivalents CHF m	Marketable securities CHF m	Non-current financial assets CHF m	Receivables CHF m	Total book value CHF m	Total market value CHF m
Financial assets at amortized costs	808.2		38.6	593.7	1,440.5	1,440.5
Financial assets at fair value through profit or loss		81.4	27.9		109.3	109.3
Financial assets held for hedging		5.7	0.6		6.3	6.3
Financial assets at fair value through OCI			31.4		31.4	31.4
Total financial assets	**808.2**	**87.1**	**98.5**	**593.7**	**1,587.5**	**1,587.5**

2020	Cash and cash equivalents CHF m	Marketable securities CHF m	Non-current financial assets CHF m	Receivables CHF m	Total book value CHF m	Total market value CHF m
Financial assets at amortized costs	708.2		42.8	603.9	1,354.9	1,354.9
Financial assets at fair value through profit or loss		74.7	23.2		97.9	97.9
Financial assets held for hedging		7.1	0.3		7.4	7.4
Financial assets at fair value through OCI			21.8		21.8	21.8
Total financial assets	**708.2**	**81.8**	**88.1**	**603.9**	**1,482.0**	**1,482.0**

2.2 Financial liabilities

Financial liabilities are initially recognized at fair value, net of transaction cost incurred. Subsequently, financial liabilities are measured at amortized cost using the effective interest method with any difference between net proceeds and the principal value due on redemption being recognized in the income statement over the term of the borrowings. Financial liabilities are de-recognized when the contractual obligations are discharged, cancelled, or expired. In 2021 the Group has bought back CHF 28.9 million (prior year: CHF 0.0 million) of its own corporate bond obligations.

2021	Current financial liabilities CHF m	Non-current financial liabilities CHF m	Payables CHF m	Total book value CHF m	Total market value CHF m
Financial liabilities at amortized costs	182.0	340.1	356.1	878.1	883.8
Financial liabilities at fair value through profit or loss	3.4			3.4	3.4
Financial liabilities held for hedging	5.7	0.2		5.9	5.9
Total financial liabilities	**191.1**	**340.3**	**356.1**	**887.4**	**893.1**

2020*	Current financial liabilities CHF m	Non-current financial liabilities CHF m	Payables CHF m	Total book value CHF m	Total market value CHF m
Financial liabilities at amortized costs	33.4	552.8	288.1	874.3	880.5
Financial liabilities at fair value through profit or loss	3.4			3.4	3.4
Financial liabilities held for hedging	4.5	0.2		4.7	4.7
Total financial liabilities	**41.3**	**553.0**	**288.1**	**882.4**	**888.6**

*Restated (see Note 6.1).

Corporate bonds

Corporate bonds	Company	Term	Currency	Effective interest rate	Nominal value CHF m	Book value CHF m	Buy-backs CHF m	2021 CHF m	2020 CHF m
Bond, Switzerland 0.1%	Bühler Holding AG	12/2017 – 12/2022	CHF	0.11%	180.0	180.0	–25.9	154.1	180.0
Bond, Switzerland 0.6%	Bühler Holding AG	12/2017 – 12/2026	CHF	0.55%	240.0	240.5	–3.0	237.5	240.6
Total corporate bonds					**420.0**	**420.5**	**–28.9**	**391.6**	**420.6**

The corporate bonds are listed on the SIX Swiss Exchange.

Reconciliation of liabilities arising from financing activities

	2020 CHF m	Cash flows CHF m	Non-cash changes Others CHF m	FX movement CHF m	Reclassification CHF m	2021 CHF m
Current financial liabilities	41.3	–34.1	–11.6	0.5	195.0	191.1
Non-current financial liabilities	553.0	–16.0	–1.7	0.0	–195.0	340.3
Total liabilities from financing activities	**594.3**	**–50.1**	**–13.3**	**0.5**	**0.0**	**531.4**

	2019 CHF m	Cash flows CHF m	Non-cash changes Others CHF m	FX movement CHF m	Reclassification CHF m	2020 CHF m
Current financial liabilities	32.3	–0.1	8.9	0.0	0.2	41.3
Non-current financial liabilities	632.6	–15.0	–64.4	0.0	–0.2	553.0
Total liabilities from financing activities	**664.9**	**–15.1**	**–55.5**	**0.0**	**0.0**	**594.3**

2.3 Marketable securities and derivative financial instruments

Derivative financial instruments and hedge accounting. Derivative financial instruments with banks are mainly concluded to hedge foreign exchange risks. They are initially recognized at fair value and are subsequently measured at fair value (replacement cost). The method applied for recognizing the resulting profits or losses depends on whether a derivative was designated for hedging, and if so, on the type of position being hedged. Certain derivatives may be used to hedge foreign exchange risks in connection with a transaction that is highly likely to take place in future, or to hedge a fixed commitment (hedging of cash flows). When the hedge is implemented, the Group documents the relationship between the hedging instrument and the risk being hedged, as well as setting out risk management objectives and strategies. Furthermore, the Group records its assessment of the effectiveness of the hedging instrument with respect to the hedged cash flows, both when the hedging transaction is concluded and on an ongoing basis.

The fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months; it is classified as a current asset or liability when the remaining maturity of the hedged item is less than 12 months. Trading derivatives are classified as a current asset or liability.

The hedging of cash flows is undertaken for certain anticipated Group-internal transactions as well as for the foreign exchange risk of firm commitments. For hedges with designated hedging relationships that meet the qualifying criteria, the effective portion of the change in fair value of derivatives used for the hedging of cash flows is recognized in other comprehensive income. The ineffective portion of the hedging instrument is immediately recognized in the income statement.

Amounts accumulated in other comprehensive income are recycled in the income statement in the periods when the hedged item affects profit or loss. When a forecasted transaction is no longer expected to occur, the cumulative gain or loss that was recorded in other comprehensive income is immediately transferred to the income statement.

Derivatives not designated as hedge accounting instruments are accounted for at fair value through profit or loss. Changes in the fair value of these derivative instruments are recognized immediately in the income statement.

Futures and options were entered into with banks mainly to hedge foreign exchange risks. The following positions were open as of December 31, 2021:

	Contract or underlying principal amount		Positive fair values		Negative fair values	
2.3.1 Derivative financial instruments	**2021 CHF m**	**2020 CHF m**	**2021 CHF m**	**2020 CHF m**	**2021 CHF m**	**2020 CHF m**
Currency-related instruments						
Forward foreign exchange rate contracts	1,096.8	1,400.1	13.2	11.7	9.3	8.1
– held for trading	455.2	520.8	7.0	4.3	3.4	3.4
– cash flow hedges (effective part)	641.6	879.3	6.2	7.4	5.9	4.7
Over-the-counter currency options	0.0	0.0	0.0	0.0	0.0	0.0
Total of currency-related instruments	**1,096.8**	**1,400.1**	**13.2**	**11.7**	**9.3**	**8.1**
Options	0.0	0.0	0.0	0.0	0.0	0.0
Futures	1,096.8	1,400.1	13.2	11.7	9.3	8.1
Sum of derivative financial instruments	**1,096.8**	**1,400.1**	**13.2**	**11.7**	**9.3**	**8.1**
Thereof included in securities and in current financial liabilities	1,023.0	1,341.4	12.6	11.4	9.1	7.9
Thereof included in other non-current financial assets and financial liabilities	73.8	58.7	0.6	0.3	0.2	0.2

	USD CHF m	EUR CHF m	Other currencies CHF m	Total 2021 CHF m	Total 2020 CHF m
Currency-related instruments					
Forward foreign exchange rate contracts	361.3	570.5	165.0	1,096.8	1,400.1
– held for trading	170.1	223.3	61.8	455.2	520.8
– cash flow hedges	191.2	347.2	103.2	641.6	879.3
Total of currency-related instruments	**361.3**	**570.5**	**165.0**	**1,096.8**	**1,400.1**
Futures	361.3	570.5	165.0	1,096.8	1,400.1
Sum of derivative financial instruments	**361.3**	**570.5**	**165.0**	**1,096.8**	**1,400.1**

Positive replacement values are included in marketable securities or non-current financial assets and negative replacement values are included in current and non-current financial liabilities.

2.3.2 Marketable securities	2021 CHF m	2020 CHF m
Equity securities	1.4	4.2
Bonds	0.0	0.6
Derivative financial instruments	12.6	11.4
Other securities	73.1	65.6
Total marketable securities	**87.1**	**81.8**

2.4 Estimation of fair values

The fair values of financial instruments that are actively traded on markets are based on the relevant trading exchange prices (offer prices) on the balance sheet reference date. Instruments of this nature are classified as Level 1. The fair values of financial instruments that are not actively traded on markets (e.g. derivative OTC instruments) are determined using valuation models. If all the parameters required for the valuation are based on observable market data, the instrument in question is classified as Level 2. If one or more parameters are based on unobservable market data, the instrument is classified as Level 3. For Level 3 financial instruments valuation is determined based on management's judgment about the assumptions that market participants would use in pricing assets.

2021	CHF m	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss		77.1	6.9	25.3	109.3
Derivative financial assets held for hedging			6.3		6.3
Financial assets at fair value through OCI				31.4	31.4
Total financial assets		**77.1**	**13.2**	**56.7**	**147.0**
Financial liabilities at fair value through profit or loss			3.4		3.4
Financial liabilities held for hedging			5.9		5.9
Total financial liabilities		**0.0**	**9.3**	**0.0**	**9.3**

2020	CHF m	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss		70.4	4.3	23.2	97.9
Derivative financial assets held for hedging			7.4		7.4
Financial assets at fair value through OCI				21.8	21.8
Total financial assets		**70.4**	**11.7**	**45.0**	**127.1**
Financial liabilities at fair value through profit or loss			3.4		3.4
Financial liabilities held for hedging			4.7		4.7
Total financial liabilities		**0.0**	**8.1**	**0.0**	**8.1**

3. Detailed information on consolidated income statement

3.1 Revenue

Revenue is measured based on the consideration specified in the contract with a customer and excludes amounts collected on behalf of third parties. Depending on the specific contractual circumstances, the Group recognizes revenue over time or when it transfers control over a product or service to a customer, at a point in time.

The input method is used to measure progress for each performance obligation satisfied over time. Revenue recognition over time requires the use of estimates and forecasts concerning future costs that affects the stage of completion. Thus, there is a higher degree of uncertainty that actual costs in the next financial periods may differ from these estimates. The forecasts are reviewed on a regular basis and adjusted if necessary.

These adjustments affect costs, the stage of completion, and both realized and anticipated profits. Any changes in estimates are recognized in the period in which they occur. Losses can occur when the expected contract costs exceed the expected revenue. Losses are recognized as an expense immediately when identified.

Revenue recognized at a point in time also requires the use of estimates regarding the exact time when control transfers to a customer. Thus, there is an uncertainty that the point in time when control actually transfers deviates from these estimates.

The following is a description of the principal activities of the Group, segregated by business type:

Business type	Nature, timing of satisfaction of performance obligations, and significant payment terms
Project/Plant	Projects with a higher degree of complexity or customization usually have no alternative use. The general contract terms do not include a right of return and require a down payment upon contract signing with a letter of credit covering the remaining amount. This constitutes a right to payment. Revenue for these projects is recognized over time. Revenue for all other projects is recognized at a point in time.
Single Machines	The Group recognizes revenue when the customer takes possession of the goods. This is usually when the goods arrive at the customer site. The general contract terms do not include a right of return and require a down payment upon contract signing with a letter of credit covering the remaining amount in some cases.
Customer Service	The Group recognizes revenue for spare parts when the customer takes possession of the goods. This is usually when the goods are shipped. The general contract terms do not include a right of return. Revenue for service contracts is recognized over time.

In the following table, revenue is disaggregated by primary geographical market, major products / service lines, and timing of revenue recognition. The table also includes a reconciliation of the disaggregated revenue with the Group's three businesses, which are its reportable segments (see Note 5).

Disaggregation of revenue 2021	Grains & Food CHF m	Advanced Materials CHF m	Consumer Foods CHF m	Corporate Functions CHF m	Group CHF m
North America	247.7	106.2	92.5	0.0	446.4
South America	87.5	6.2	30.6	0.1	124.4
Europe	467.0	148.2	225.9	28.4	869.5
Middle East and Africa	207.9	8.7	66.2	0.0	282.8
South Asia	70.5	12.4	10.2	0.5	93.6
Asia	573.5	227.7	83.4	0.0	884.6
Total revenue by geography	**1,654.1**	**509.4**	**508.8**	**29.0**	**2,701.3**
Revenue recognized at a point in time	606.1	437.2	314.5	29.0	1,386.8
Revenue recognized over time	1,048.0	72.2	194.3	0.0	1,314.5
Total revenue by timing of revenue recognition	**1,654.1**	**509.4**	**508.8**	**29.0**	**2,701.3**
Revenue Project/Plant	1,048.0	343.4	359.7	25.8	1,776.9
Revenue Single Machines	214.3	11.5	3.3	2.6	231.7
Revenue Customer Service	391.8	154.5	145.8	0.6	692.7
Total revenue by product	**1,654.1**	**509.4**	**508.8**	**29.0**	**2,701.3**

Disaggregation of revenue 2020*	Grains & Food CHF m	Advanced Materials CHF m	Consumer Foods CHF m	Corporate Functions CHF m	Group CHF m
North America	231.5	78.2	116.3	0.0	426.0
South America	98.0	6.9	29.0	0.8	134.7
Europe	406.1	143.7	245.2	15.7	810.7
Middle East and Africa	199.5	11.0	86.2	0.2	296.9
South Asia	56.5	4.9	12.5	0.1	74.0
Asia	681.7	193.9	83.2	7.3	966.1
Total revenue by geography	**1,673.3**	**438.6**	**572.4**	**24.1**	**2,708.4**
Revenue recognized at a point in time	580.0	383.9	346.0	24.1	1,334.0
Revenue recognized over time	1,093.3	54.7	226.4	0.0	1,374.4
Total revenue by timing of revenue recognition	**1,673.3**	**438.6**	**572.4**	**24.1**	**2,708.4**
Revenue Project/Plant	1,093.3	302.9	416.6	17.3	1,830.1
Revenue Single Machines	227.3	9.3	5.8	1.8	244.2
Revenue Customer Service	352.7	126.4	150.0	5.0	634.1
Total revenue by product	**1,673.3**	**438.6**	**572.4**	**24.1**	**2,708.4**

*Restated (see Note 6.1).

The following table provides the information about receivables, contract assets, and contract liabilities from contracts with customers.

Contract balances	2021 CHF m	2020* CHF m
Trade accounts receivable	**553.9**	**560.2**
Production orders in progress	544.7	612.3
Advance payments from customers	–285.1	–360.2
Contract assets relating to production orders in progress	**259.6**	**252.1**
Production orders in progress	43.9	25.2
Advance payments from customers	–667.4	–564.3
Contract liabilities relating to production orders in progress	**–623.5**	**–539.1**
Accumulated costs and recognized profits	2,220.6	2,122.0

*Restated (see Note 6.1).

The contract assets primarily relate to the Group's rights to consideration for work completed but not invoiced at the reporting date. The contract assets are transferred to receivables when the rights become unconditional. The contract liabilities primarily relate to the advanced consideration received from customers, for which revenue is recognized on completion or if the advanced consideration received exceeds the work completed. The complete prior-year contract liability balance of CHF 539.1 million was recognized in the income statement in the current year (prior year: CHF 473.5 million).

The following table includes revenue expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at the reporting date.

Performance obligation	2022 CHF m	2023 CHF m	2024 CHF m	2025 CHF m
Project/Plant	1,293.5	237.7	74.3	5.1
Single Machines	98.8	0.1	0.0	0.0
Customer Service	213.1	10.5	2.0	0.0

The Group incurs commission fees for intermediaries to enter into contracts. These fees are considered non-recoverable at the time of occurrence and are therefore recognized as expenses.

3.2 Other operating income

	2021 CHF m	2020 CHF m
Dividend income	0.2	0.1
Earnings from coordination of consortium business	1.1	0.3
Gains from sale of fixed assets	4.1	1.0
Gains from sale of scrap materials	5.4	3.5
Government grants	10.1	4.0
Interest income from trade finance	2.0	0.4
License revenue	2.5	3.1
Rental income	2.1	1.5
Supplier discounts	1.6	1.7
Other operating income related parties	0.5	0.9
Others	24.4	15.8
Total	**54.0**	**32.3**

Others comprises a number of individually immaterial items.

3.3 Employee benefit expenses

	2021 CHF m	2020 CHF m
Wages and salaries	721.2	704.5
Social security and employee benefit expenses	153.0	144.6
Other personnel expenses	65.0	63.5
Total	**939.2**	**912.6**

3.4 Other operating expenses

	2021 CHF m	2020 CHF m
Administration expenses	99.1	91.4
Rental and leasing expenses	21.2	21.0
Energy, maintenance and repairs	38.5	34.3
Travel expenses	55.3	50.0
Outbound freight costs	96.6	76.8
Consultancy fees	20.1	24.0
Marketing costs	7.8	9.8
Agency fees	19.7	26.2
Warranty costs, loss orders	0.2	16.3
Contributions and memberships	4.3	4.3
Fixed assets < 10 kCHF	3.8	2.6
Losses on accounts receivable	1.5	22.8
Losses on sales of fixed assets	0.8	6.3
Other operating expenses related parties (Note 6.3, Related parties)	12.1	12.3
Others	21.1	17.6
Total	**402.1**	**415.7**

3.5 Financial result

	2021 CHF m	2020 CHF m
Interest income	5.8	5.4
Interest income from related parties	0.1	0.3
Interest expenses	–4.8	–4.3
Interest expenses from related parties	–1.8	–2.3
Total interest income and expenses	**–0.7**	**–0.9**
Total other financial income	**3.8**	**1.2**
Total financial result	**3.1**	**0.3**

The interest expenses of CHF –4.8 million (prior year: CHF –4.3 million) include the interest payments to bond holders and interest components from leasing and pension fund obligations in accordance with IFRS 16 and IAS 19. Other financial income mainly includes gains from foreign exchange management.

3.6 Taxes

Income taxes comprise the tax expense in respect of all recognized profits for the reporting period. They include current and deferred income taxes. Current income taxes are calculated on taxable profit. Provisions for deferred taxes are calculated according to the liability method. Deferred taxes are recognized for temporary differences between the carrying amounts of assets and liabilities in the balance sheet and their tax base, taking into account actual or substantively enacted tax rates. Changes in deferred tax balances are recognized in the income statement, except when they relate to items recognized outside the income statement, in which case the deferred tax is treated accordingly.

Current income tax relating to items recognized directly in equity is recognized in equity.

Deferred tax assets are only recognized for temporary differences and unused tax loss carry-forwards to the extent that it is probable that future taxable profit will be available, against which temporary differences or unused tax losses can be utilized. This assessment is based on estimates, which could differ from actual results and require a valuation allowance.

3.6.1 Income taxes	**2021 CHF m**	**2020 CHF m**
Income taxes relating to the reporting period	–37.0	–39.7
Income taxes relating to prior periods	–2.6	1.2
Deferred taxes due to temporary differences	6.4	0.8
Deferred taxes due to recognition of tax loss carry-forwards	–3.7	–0.8
Deferred taxes due to changes in tax rates	1.0	2.1
Total	**–35.9**	**–36.4**
Deferred taxes recognized in other comprehensive income	–13.0	0.9

3.6.2 Reconciliation of income taxes	**2021 CHF m**	**2020 CHF m**
Profit before taxes	149.1	146.0
Components of tax expenses:		
Income taxes at anticipated tax rate	–31.0	–39.6
Income and expenses not subject to tax	2.1	5.1
Income taxes relating to prior periods	–2.6	1.2
Deferred taxes due to changes in tax rates	1.0	2.1
Effect of tax loss carry-forwards	0.7	0.3
Effect of losses without recognition of deferred tax assets	–0.9	–3.5
Other impacts	–5.2	–2.0
Income taxes disclosed (current and deferred)	–35.9	–36.4
Total income taxes in % of profit before taxes	24.1%	24.9%

The anticipated tax rate was 20.8% (prior year 27.1%) and consisted of the weighted average of the applicable local tax rates for income taxes. The effective tax rate decreased sligthly to 24.1% in 2021 from 24.9% in 2020. The main contributory factors for the resulting tax rate were the geographic allocation of taxable profits and the sustainable tax management. The revaluation of deferred tax assets and liabilities had an impact on the income statement and on other comprehensive income.

3.6.3 Tax loss carry-forwards	2021 CHF m	2020 CHF m
Expiry		
Unlimited	86.6	88.7
In more than five years	21.2	43.1
In two to five years	16.8	13.0
Within one year	2.7	6.7
Total	**127.3**	**151.5**
Tax loss carry-forwards accounted for in deferred taxes	114.0	136.4
Tax loss carry-forwards not accounted for in deferred taxes	13.3	15.1
Tax effect on tax loss carry-forwards unaccounted for	3.1	3.7

The change in tax loss carry-forwards results from the use of tax losses in particular in Switzerland, Germany, and South Africa as well as from the impact of additional tax loss carry-forwards in particular in Germany.

3.6.4 Breakdown of deferred taxes per line item	2021 CHF m Assets	2021 CHF m Liabilities	2020* CHF m Assets	2020* CHF m Liabilities
Property, plant and equipment	5.0	29.7	5.7	32.6
Post-employment benefits	10.1	9.4	19.5	2.9
Provisions	20.4	2.2	16.7	13.0
Other items (mainly inventory, construction contracts and other current liabilities)	99.8	188.9	103.3	185.9
Tax loss carry-forwards	29.5	0.0	33.2	0.0
Total deferred taxes gross	**164.8**	**230.2**	**178.4**	**234.4**
Offset	–109.3	–109.3	–124.8	–124.8
Total deferred taxes net	**55.5**	**120.9**	**53.6**	**109.6**

*Restated (see Note 6.1).

Deferred tax assets and liabilities are offset if there is a legally enforceable right to set them off and if the calculations of income taxes relate to the same taxation authority.

3.7 Research and development costs

Research costs are recognized in the income statement in the period in which they are incurred. Development costs are capitalized only if, and to the extent that, the IFRS criteria are met and it is probable that the present value of the expected returns will exceed the development costs. Capitalized development costs are amortized on a systematic basis over the period in which the returns are expected to flow to the Group.

Research and development costs directly charged to the income statement in the reporting period amounted to CHF 141.5 million (prior year: CHF 139.0 million).

4. Detailed information on consolidated balance sheet

4.1 Property, plant and equipment

Property, plant, and equipment is valued at acquisition or construction cost less depreciation and write-downs for impairment. Items of property, plant, and equipment are depreciated on a straight-line basis over their estimated useful life, except for land, which is not depreciated. Estimated useful lives of major classes of depreciable assets are as follows:

- → Building shell: 40–80 years
- → Installations/extensions: 20–25 years
- → Machinery and technical equipment: 10 years
- → Other tangible fixed assets: 3–10 years

The estimated useful life of the assets is regularly reviewed and, if necessary, the future depreciation charge is accelerated.

Costs are only included in the asset's carrying amount when it is probable that economic benefits associated with the item will flow to the Group in future periods and the cost of the item can be measured reliably.

Borrowing costs. Borrowing costs that are directly attributable to the acquisition, construction, or production of a qualified asset are capitalized as part of the cost of that asset.

Impairment of assets. At each reporting date, the Group assesses whether there is any indication that an asset may be impaired. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the smallest cash-generating unit to which the asset belongs. The recoverable amount is the higher of an asset's or cash-generating unit's fair value less costs to sell and its value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount. Impairment losses are recognized immediately in the income statement.

Where an impairment loss is subsequently reversed, the carrying amount of the asset or cash-generating unit is increased to the revised estimate of its recoverable amount. However, this increased amount cannot exceed the carrying amount that would have been determined had no impairment loss been recognized for that asset or cash-generating unit in prior periods. A reversal of an impairment loss is recognized immediately in the income statement.

Acquisition cost	Land and buildings CHF m	Machinery and technical equipment CHF m	Other tangible assets CHF m	Assets under construction CHF m	Total CHF m
January 1, 2020	605.5	330.1	165.6	36.6	1,137.8
Additions	6.0	13.2	6.7	31.6	57.5
Disposals	–1.5	–15.1	–25.4	–4.9	–46.9
Changes in the scope of consolidation	1.8	1.2	0.1	0.0	3.1
Reclassifications	28.6	11.3	1.4	–41.3	0.0
Translation differences	–13.8	–10.5	–4.0	–0.9	–29.2
December 31, 2020	**626.6**	**330.2**	**144.4**	**21.1**	**1,122.3**
Additions	2.6	9.4	5.4	15.8	33.2
Disposals	–14.2	–9.3	–8.9	–1.4	–33.8
Changes in the scope of consolidation	0.0	0.0	0.0	0.0	0.0
Reclassifications	7.4	13.1	–0.4	–22.7	–2.6
Translation differences	1.8	–1.0	–1.5	0.3	–0.4
December 31, 2021	**624.2**	**342.4**	**139.0**	**13.1**	**1,118.7**
Depreciation					
January 1, 2020	–117.1	–193.5	–112.7	–0.8	–424.1
Additions	–19.0	–24.0	–12.2	0.0	–55.2
Disposals	1.0	12.6	24.9	0.0	38.5
Changes in the scope of consolidation	0.0	0.0	0.0	0.0	0.0
Impairment	0.0	–0.3	–2.7	0.0	–3.0
Reclassifications	–3.1	0.1	2.2	0.8	0.0
Translation differences	3.2	6.6	3.0	0.0	12.8
December 31, 2020	**–135.0**	**–198.5**	**–97.5**	**0.0**	**–431.0**
Additions	–19.2	–24.4	–12.0	0.0	–55.6
Disposals	7.3	7.8	8.2	0.0	23.3
Changes in the scope of consolidation	0.0	0.0	0.0	0.0	0.0
Impairment	0.0	–0.5	0.0	0.0	–0.5
Reclassifications	–0.0	–0.3	0.5	0.0	0.2
Translation differences	1.0	1.8	1.4	0.0	4.2
December 31, 2021	**–145.9**	**–214.1**	**–99.4**	**0.0**	**–459.4**
Net book values					
January 1, 2021	491.6	131.7	46.9	21.1	691.3
December 31, 2021	478.3	128.3	39.6	13.1	659.3

Net gain on disposal of tangible fixed assets amounted to CHF 3.3 million (prior year: net loss CHF –5.3 million). Commitments relating to property, plant, and equipment, which are not shown in the balance sheet, amounted to CHF 3.1 million (prior year: CHF 4.1 million) and are mainly related to machinery in the US and Switzerland.

4.2 Leases

General accounting policies. At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains a lease, if the contract conveys the right to use an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group assesses whether it:

→ obtains substantially all of the economic benefits from the use of the asset; and
→ directs the use of the asset.

The Group leases various real estate buildings, vehicles, machinery, and other assets. Rental contracts typically run for a period of two to six years. Some leases include an option to renew, extend, and terminate the lease. In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated). The assessment is reviewed if a significant event or a significant change in circumstances occurs which affects this assessment and that is within the control of the lessee.

The Group recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use assets are capitalized at the date of the commencement of the lease term at the present value of the minimum future lease payment or, if lower, at the amount equal to the fair value of the leased asset as determined at the inception of the lease. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. The associated liabilities are recognized as either current or non-current lease liabilities, depending on their due dates. Lease liabilities include the net present value of the following lease payments:

→ fixed payments, less any lease incentives receivable
→ variable lease payments that are based on an index or a rate
→ the exercise price of a purchase option if the lessee is reasonably certain to exercise that option.

The present value calculation uses the countries and maturity range incremental borrowing rate. This rate is calculated based on the risk-free rate of the country plus a risk premium.

Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

In accordance with IFRS 16.5 the Group makes use of the recognition exemption for short-term leases and leases for which the underlying asset is of low value. Payments associated with short-term leases and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss in accordance with IFRS 16.6. Short-term leases are leases with a lease term of 12 months or less.

Leases where substantially all the risks and rewards of ownership are not transferred to the Group are classified as operating leases. Payments under operating leases are charged to the income statement on a straight-line basis over the period of the lease.

Acquisition cost	Real estate leasing CHF m	Vehicle leasing CHF m	Other assets CHF m	Total CHF m
January 1, 2020	67.7	9.8	2.7	80.2
Additions	17.0	3.7	0.3	21.0
Disposals	–4.2	–1.5	–0.1	–5.8
Translation differences	–1.7	–0.4	–0.1	–2.2
December 31, 2020	**78.8**	**11.6**	**2.8**	**93.2**
Additions	13.1	2.0	0.6	15.7
Disposals	–3.9	–2.4	–0.3	–6.6
Translation differences	–1.6	–0.3	–0.1	–2.0
December 31, 2021	**86.4**	**10.9**	**3.0**	**100.3**
Depreciation				
January 1, 2020	–13.7	–3.1	–0.7	–17.5
Additions	–15.4	–3.6	–0.7	–19.7
Disposals	2.4	1.3	0.1	3.8
Translation differences	0.5	0.1	0.1	0.7
December 31, 2020	**–26.2**	**–5.3**	**–1.2**	**–32.7**
Additions	–14.0	–3.4	–0.7	–18.1
Disposals	2.4	2.3	0.3	5.0
Translation differences	0.8	0.2	0.1	1.1
December 31, 2021	**–37.0**	**–6.2**	**–1.5**	**–44.7**
Net book values				
January 1, 2021	52.6	6.3	1.6	60.5
December 31, 2021	49.4	4.7	1.5	55.6

Lease liabilities

Maturity analysis	Real estate leasing CHF m	Vehicle leasing CHF m	Other assets CHF m	2021 CHF m
Less than one year	12.0	2.5	0.6	15.1
One to five years	27.9	2.2	0.8	30.9
More than five years	8.8	0.0	0.0	8.8
December 31, 2021	**48.7**	**4.7**	**1.4**	**54.8**

Maturity analysis	Real estate leasing CHF m	Vehicle leasing CHF m	Other assets CHF m	2020 CHF m
Less than one year	13.8	3.0	0.7	17.5
One to five years	32.9	3.3	0.9	37.1
More than five years	5.8	0.0	0.0	5.8
December 31, 2020	**52.5**	**6.3**	**1.6**	**60.4**

Amounts recognized in profit and loss	2021 CHF m	2020 CHF m
Depreciation expense on right-of-use assets	18.1	19.7
Interest expenses (included in finance costs)	0.9	1.0
Rental and leasing expenses including related parties		
Expense relating to short-term leases	4.5	4.9
Expense relating to low-value leases	1.0	0.4
Expense relating to service expenses	7.6	7.7
Expense relating to insurance	6.9	6.5
Expense relating to other	1.2	1.7
Total recognized in profit and loss	**40.2**	**41.9**

Amounts recognized in the statement of cash flows	2021 CHF m	2020 CHF m
Cash outflow for leases	**19.0**	20.4

4.3 Intangible assets and goodwill

Goodwill represents the excess of the aggregate of the consideration transferred and the amount recognized for the non-controlling interest over the fair value of the net identifiable assets acquired and liabilities assumed. Goodwill on acquisitions of subsidiaries is included in intangible assets. Goodwill on acquisitions of associates is included in investments in associates.

Goodwill and intangible assets with indefinite useful life are tested annually for impairment or whenever there are impairment indicators, and is carried at cost less accumulated impairment losses.

If the consideration transferred is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the income statement.

On disposal of a subsidiary, associate, or joint venture, the related goodwill is included in the determination of profit or loss on disposal.

Goodwill on acquisitions of subsidiaries and interests in joint ventures is allocated to cash-generating units for the purpose of impairment testing. Impairment losses relating to goodwill cannot be reversed in future periods.

Acquired patents, licenses, and similar rights are initially recorded at cost and amortized on a straight-line basis over their estimated useful life or a period not exceeding 15 years. Acquired trademarks with a Group-wide purpose, well established umbrella trademarks, can have an indefinite useful life. All other trademarks are amortized as described above. Intangible assets acquired through business combinations are carried in the balance sheet at the fair value allocated in the acquisition accounting and amortized over their estimated useful life.

Other intangible assets mainly comprise customer relationships, technologies, patents, and software.

Acquisition cost	Goodwill CHF m	Trademarks CHF m	Other intangible assets CHF m	Total CHF m
January 1, 2020	583.9	106.9	140.7	831.5
Additions	0.0	0.0	5.2	5.2
Disposals	0.0	0.0	–2.5	–2.5
Changes in the scope of consolidation	6.7	0.0	0.0	6.7
Translation differences	–10.2	–0.7	–5.4	–16.3
December 31, 2020	**580.4**	**106.2**	**138.0**	**824.6**
Additions	0.0	0.0	4.8	4.8
Disposals	0.0	0.0	–1.8	–1.8
Changes in the scope of consolidation	0.0	0.0	0.0	0.0
Translation differences	–15.6	–4.5	–0.9	–21.0
December 31, 2021	**564.8**	**101.7**	**140.1**	**806.6**
Amortization				
January 1, 2020	–26.6	0.0	–114.0	–140.6
Additions	0.0	0.0	–8.6	–8.6
Disposals	0.0	0.0	2.4	2.4
Changes in the scope of consolidation	0.0	0.0	0.0	0.0
Translation differences	1.0	0.0	4.5	5.5
December 31, 2020	**–25.6**	**0.0**	**–115.7**	**–141.3**
Additions	0.0	0.0	–6.5	–6.5
Disposals	0.0	0.0	1.8	1.8
Changes in the scope of consolidation	0.0	0.0	0.0	0.0
Translation differences	0.4	0.0	0.8	1.2
December 31, 2021	**–25.2**	**0.0**	**–119.6**	**–144.8**
Net book values				
January 1, 2021	554.8	106.2	22.3	683.3
December 31, 2021	539.6	101.7	20.5	661.8

Impairment test

Goodwill and other intangible assets with an indefinite useful life are allocated to the identifiable cash-generating units of the Group, which were defined based on a business perspective.

The recoverable amounts have been determined based on a value-in-use calculation per cash-generating unit. This calculation uses cash flow projections based on financial budgets approved by management covering a five-year period.

Key assumptions used in value-in-use calculations. The calculations of values in use are most sensitive to the following assumptions:

→ Discount rate
→ Growth rate
→ Revenue growth
→ EBIT margin growth

Discount rate – The discount rates that are used to calculate the discounted present value of the future cash flows are derived from a capital asset pricing model using market data such as the yield on a 10-year government bond of the respective country or specific country risk premiums. The review of our peer group and other parameters resulted in overall higher discount rates in the reporting period.

Growth rate – The assumptions used in the calculation reflect the long-term expected growth rate of the operational business and are based on the growth strategy of the Group.

Revenue growth – The assumptions used in the calculation reflect the expected order backlog at year-end as well as the expected market development based on the strategic priorities set by the Group.

EBIT margin growth – The EBIT margin growth used in the calculation reflects the margin goal as defined in the Group's vision and is based on the margin improvement projects initiated.

Result of the impairment test. The impairment tests performed on a annual basis support the value of the carrying amount. No impairment arose on December 31, 2021.

Sensitivity to changes in assumptions. For all cash-generating units, no reasonably possible changes in key assumptions would neutralize the headroom.

Goodwill and trademarks 2021	Goodwill CHF m	Trademarks CHF m	Base data used (goodwill / trademarks) Discount rate	Long-term growth rate	Revenue growth	EBIT margin growth
Milling Solutions	18.4	0.0	6.8%	2.1%	7.4%	0.5%
Grain Quality & Supply	35.5	0.0	6.8%	2.4%	7.8%	0.7%
Digital Technologies	6.9	0.0	7.6%	2.4%	10.2%	1.8%
Value Nutrition	68.3	0.0	6.8%	2.1%	5.5%	0.7%
Die Casting	1.6	0.0	8.5%	1.7%	15.7%	1.9%
Grinding & Dispersing	0.7	0.0	8.6%	1.7%	11.4%	1.5%
Leybold Optics	91.7	3.2	8.2% / 8.6%	1.9% / 2.2%	6.1% / 9.9%	1.1% / -
Consumer Foods	44.7	10.9	5.4% / 6.1%	1.5% / 1.9%	9.1% / 9.2%	1.6% / -
Haas	271.8	87.6	5.8% / 5.8%	2.0% / 2.0%	12.9% / 7.9%	1.3% / -
December 31, 2021	**539.6**	**101.7**				

Goodwill and trademarks 2020	Goodwill CHF m	Trademarks CHF m	Base data used (goodwill / trademarks) Discount rate	Long-term growth rate	Revenue growth	EBIT margin growth
Milling Solutions	18.0	0.0	7.0%	1.8%	4.6%	0.4%
Grain Quality & Supply	37.2	0.0	7.1%	2.2%	7.6%	1.5%
Digital Technologies	6.5	0.0	8.7%	2.4%	7.6%	1.5%
Value Nutrition	65.8	0.0	7.2%	2.0%	3.2%	0.7%
Die Casting	1.7	0.0	7.5%	1.3%	15.9%	2.3%
Grinding & Dispersing	0.6	0.0	8.1%	1.4%	17.0%	2.3%
Leybold Optics	94.6	3.1	8.1% / 7.3%	1.9% / 2.0%	6.3% / 11.1%	0.8% / -
Consumer Foods	46.1	11.5	5.9% / 5.8%	1.5% / 1.8%	7.6% / 5.8%	0.9% / -
Haas	284.3	91.6	6.1% / 6.1%	1.7% / 1.7%	9.9% / 8.7%	2.5% / -
December 31, 2020	**554.8**	**106.2**				

4.4 Investments in associates

Net book values	Share in equity CHF m	Goodwill CHF m	2021 CHF m	2020 CHF m
January 1	23.9	8.2	32.1	27.4
Additions	0.0	0.0	0.0	1.2
Share of net profit	2.5	0.0	2.5	3.6
Dividends received	–4.8	0.0	–4.8	0.0
Translation differences	–0.9	–0.3	–1.2	–0.1
December 31	**20.7**	**7.9**	**28.6**	**32.1**

Translation differences are recognized in other comprehensive income. The Group purchased goods in the amount of CHF 14.7 million (prior year: CHF 7.8 million) and sold goods in the amounts of CHF 3.9 million (prior year: CHF 1.2 million) to associated companies. Cumulative values of the associated companies are disclosed as only one of the associated companies is material to the Group.

Cumulative values of the associated companies	2021 CHF m	2020 CHF m
Share of revenue	23.4	26.7
Share of net profit	2.5	3.6
Balance sheet values:		
Non-current assets	7.6	9.3
Current assets	25.7	17.1
Non-current liabilities	0.1	0.0
Current liabilities	9.0	6.3
Shareholders' equity	24.2	20.1

The associated companies comprise two companies located in Southern Europe and two in East Asia. The Group has a shareholding of 26%, twice 49%, and 44%, respectively. The figures are based on available preview closing data as of December 31, 2021.

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4.5 Non-current financial and other assets

December 31, 2021	Due 1–5 years CHF m	> 5 years CHF m	Total CHF m
Securities	18.9	40.4	59.3
Other non-current financial assets	33.7	5.5	39.2
Overfunding of post-employment benefit plans	0.0	77.6	77.6
Total	**52.6**	**123.5**	**176.1**

December 31, 2020	Due 1–5 years CHF m	> 5 years CHF m	Total CHF m
Securities	7.0	38.0	45.0
Other non-current financial assets	37.6	5.5	43.1
Overfunding of post-employment benefit plans	0.0	25.4	25.4
Total	**44.6**	**68.9**	**113.5**

4.6 Inventories

Inventories are carried at the lower of cost or net realizable value. The cost of finished goods, semi-finished goods, and work in progress includes raw materials, direct labor, and other directly attributable costs and overheads based on the normal capacity of production facilities, excluding borrowing costs. Cost is determined using the standard cost method. Standard costs are regularly reviewed and, if necessary, revised in light of current conditions. Net realizable value is the estimated selling price less cost to completion and selling expenses. Obsolete inventories and goods with a low rate of inventory turnover are written down.

In the prior year, value adjustments deducted from inventories amounted to CHF –58.6 million. No material reversals of value adjustments of the prior year were recognized in the reporting year.

Advance payments to suppliers are also included in inventories.

	Gross value CHF m	Value adjustments CHF m	2021 CHF m	2020 CHF m
Raw materials and supplies	249.0	–37.6	211.4	193.4
Unfinished goods	57.6	–11.3	46.3	46.5
Finished goods and merchandise	64.5	–10.2	54.3	64.3
Work in progress	132.4	0.3	132.7	116.2
Advance payments to suppliers	51.7	0.0	51.7	41.3
Total	**555.2**	**–58.8**	**496.4**	**461.7**

4.7 Trade accounts and other receivables

Trade accounts and other receivables are carried at the original invoice amount less allowances made for doubtful accounts, trade discounts, volume rebates, and similar items. Financing of customer orders using the Group's own funds as part of its treasury strategy is included in this item.

Trade accounts receivable include supplier credits of CHF 50.3 million (prior year: CHF 84.8 million), which are financed in accordance with the treasury strategy.

	2021 CHF m	2020 CHF m
– from third parties	568.5	578.6
– from related parties	0.1	0.0
Allowance for bad debts	–14.7	–18.4
Total trade accounts receivable	**553.9**	**560.2**

	2021 CHF m	2020 CHF m
Value added tax credits	34.1	27.3
Other receivables		
– from third parties	39.8	42.8
– from associates	1.3	0.3
– from related parties	0.1	2.0
Prepayments	52.6	31.0
Allowance for bad debts	–1.4	–1.4
Total other receivables	**126.5**	**102.0**

Receivables outstanding analysis

2021	Total book value Dec. 31, 2021 CHF m	Not due CHF m	Overdue ≤ 3 months CHF m	4–6 months CHF m	7–9 months CHF m	10–12 months CHF m	> 12 months CHF m
Accounts receivable trade and other	695.0	611.6	46.0	9.4	3.0	4.2	20.8
Allowance for bad debts	–16.1	–0.4	–0.4	–0.5	0.0	–0.1	–14.7
Associated companies and other related parties	1.5	1.5					
Total accounts receivable, net	**680.4**	**612.7**	**45.6**	**8.9**	**3.0**	**4.1**	**6.1**

2020	Total book value Dec. 31, 2020 CHF m	Not due CHF m	Overdue ≤ 3 months CHF m	4–6 months CHF m	7–9 months CHF m	10–12 months CHF m	> 12 months CHF m
Accounts receivable trade and other	679.7	566.4	54.9	11.3	7.9	5.5	33.7
Allowance for bad debts	–19.8	–0.4	–1.8	–0.2	–0.2	–2.4	–14.8
Associated companies and other related parties	2.3	2.3					
Total accounts receivable, net	**662.2**	**568.3**	**53.1**	**11.1**	**7.7**	**3.1**	**18.9**

Allowance for bad debts

	2021 CHF m	2020 CHF m
January 1	–19.8	–23.9
Additions	–2.1	–11.1
Consumption	3.6	5.9
Release	2.2	9.1
Translation differences	0.0	0.2
December 31	**–16.1**	**–19.8**

4.8 Cash and cash equivalents

In the consolidated cash flow statement, cash and cash equivalents includes cash in hand, deposits held at call with banks, other current highly liquid investments with original maturities of three months or less, and bank overdrafts. In the consolidated balance sheet, bank overdrafts are shown within current financial liabilities.

Cash and cash equivalents include bank accounts and time deposits with an original maturity of a maximum of three months.

4.9 Trade accounts payable

	2021 CHF m	2020* CHF m
– to third parties	299.5	210.2
– to associates	2.0	1.6
– to related parties	1.0	0.7
Total	**302.5**	**212.5**

*Restated (see Note 6.1).

4.10 Provisions and contingent liabilities

Provisions are recognized when the Group has a legal or constructive obligation arising from past events, an outflow of resources embodying economic benefits to settle the obligation is probable, and a reliable estimate can be made of this amount. Actual expenses may differ from the accrued amounts.

A contingent liability is disclosed when there is a possible obligation that arises from a past event and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group. A contingent liability is also disclosed when there is a present obligation that arises from past events but is not recognized, because an outflow of resources embodying economic benefits to settle the obligation is not probable, or the respective amount of the obligation cannot be measured with sufficient reliability.

When the Group expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the income statement net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as a finance expense.

Warranty provisions are created with a view to meet potential guarantee obligations arising from the sale of machinery and technical equipment. The calculation is based on historic values, recognized claims as well as a forward looking element.

The Group recognizes a collective valuation allowance based on its past experience of warranty costs on projects with similar conditions. Other known risks and risks related to projects with special conditions are estimated on a case-by-case basis and measured individually. The actual warranty costs incurred may differ from the costs provided for.

Provisions for personnel expenses mainly include long-term employee benefits, such as long-service benefits, partial retirement, jubilee benefits, and deferred compensation plans.

Among other things, the other provisions include provisions for pending legal cases, other project risks, as well as for restructuring.

Approximately 64% (prior year: 42%) of the cash outflows of the non-current provisions are expected to materialize within the next three years.

	Provisions for warranties CHF m	Provisions for personnel expenses CHF m	Other provisions CHF m	2021 CHF m	2020 CHF m
January 1	49.4	37.1	22.8	109.3	124.4
Additions	6.8	6.0	15.6	28.4	62.2
Utilization	–4.7	–6.0	–13.0	–23.7	–42.5
Release	–8.9	–0.1	–5.3	–14.3	–9.9
Reclassification	0.0	0.0	0.0	0.0	–22.5
Translation differences	–0.4	–0.9	–0.2	–1.5	–2.4
December 31	**42.2**	**36.1**	**19.9**	**98.2**	**109.3**
Thereof current	38.8	8.3	12.2	59.3	69.8
Thereof non-current	3.4	27.8	7.7	38.9	39.5

Contingent liabilities

	2021 CHF m	2020 CHF m
Sureties, guarantees and other obligations	13.7	17.0
Total	**13.7**	**17.0**

4.11 Other current liabilities

	2021 CHF m	2020 CHF m
Value added tax owed	15.3	9.7
Other liabilities		
– to third parties	52.8	53.8
– to related parties	0.7	21.8
Personnel-related accruals	76.1	75.4
Other accruals	121.2	139.2
Total	**266.1**	**299.9**

4.12 Defined benefit obligations

The Group's main defined benefit pension plans are in Switzerland, Austria, and Germany. The defined benefit plans in Switzerland are funded through legally separate trustee-administered funds. The cash funding of these plans, which may from time to time involve special payments, is designed to ensure that present and future contributions should be sufficient to meet future liabilities. The defined benefit plans in Germany and Austria are partially unfunded.

Pension plans in Switzerland. The Group's Swiss pension plans contain a cash balance benefit formula, accounted for as a defined benefit plan. Employer and employee contributions are defined in the pension fund rules in terms of an age-related sliding scale of percentages of salary. Under Swiss law the pension fund guarantees the vested benefit amount as confirmed annually to members. Interest may be added to member balances at the discretion of the Board of Trustees. At retirement date members have the right to take their retirement benefit as a lump sum, an annuity, or part as a lump sum with the balance converted to a fixed annuity at the rates defined in the fund rules. The Board of Trustees may change the annuity at their discretion subject to the plan's funded status, including sufficient free funds as determined according to Swiss statutory valuation rules.

Swiss pension law requires the Board of Trustees to take measures to resolve a statutory underfunding. The possible measures affect both employers and employees (risk sharing).

Pension plans in Austria. The Group's Austrian pension plans are based on individual pension commitments starting upon leaving the company or reaching a certain age. The employer promises to pay out lifelong pensions as contractually agreed that are adjusted annually based on changes in the consumer price index. The Group is furthermore required by Austrian law to pay a lump sum amount to its employees upon retirement or for other important reasons (e.g. invalidity). The lump sum amount increases with the length of service. All pension promises are funded via book reserve accruals.

Pension plans in Germany. The Group's German pension plans have defined benefit rights based on their length of service and/or final pensionable pay. The employer gives a direct promise to the employee to pay him a certain amount once he retires. At retirement date the value of the employee's benefits is paid as an annuity. The Group is required by German law to increase pensions all three years according to price inflation, as measured by the Consumer Price Index or according to comparable pay grades. Direct pension promises are usually funded via book reserve accruals. In 2008, the Group set up a trust fund to fund their pension liabilities for Bühler GmbH, Braunschweig. No material business combinations/curtailments/settlements occurred during the reported financial period.

Status of the Group's defined benefit plans. The status of the Group's defined benefit plans using actuarial assumptions determined in accordance with IAS 19 is summarized below.

Employee benefits – defined benefit plans. These plans are generally funded through payments to legally independent pension or insurance funds.

The aggregate of the present value of the defined benefit obligation and the fair value of plan assets for each plan is recorded in the balance sheet as net defined benefit liability or net defined benefit asset under non-current financial and other assets. The defined benefit obligation is determined annually by independent actuaries using the projected unit credit method. If the fair value of the plan assets exceeds the present value of the defined benefit obligation, only a net pension asset is recorded, taking account of the asset ceiling.

Pension costs consist of three elements: service costs, net interest, and remeasurements of employee benefits.

Service costs are part of personnel expenses and consist of current service costs, past service costs (including gains/losses from plan amendments or curtailments) and gains/losses from plan settlements.

Net interest is recorded as part of financial expenses and is determined by applying the discount rate to the net defined liability or net defined asset that exists at the beginning of the year.

The gains and losses resulting from the actuarial valuation are immediately recorded in other comprehensive income as remeasurements of employee benefits. The return on plan assets (excluding interest based on the discount rate) and any change in the effect of an asset ceiling are also recorded in this item. Remeasurements of employee benefits are not recycled through the income statement at any later point in time.

Pension assets and pension liabilities in different defined benefit plans are not offset unless the Group has a legally enforceable right to use the surplus in one plan to settle obligations in the other plan.

Employee benefits – defined contribution plans. In addition to the defined benefit plans described above, some Group companies sponsor defined contribution plans based on local practices and regulations. The Group's contributions to defined contribution plans are charged to the income statement to which the contributions relate.

Employee benefits – other long-term employment benefits. Other long-term employment benefits include jubilee, early retirement, or other long-term service benefits, as well as deferred compensation, if not due to be settled within 12 months after the year-end.

The obligations for other long-term employment benefits are disclosed as provisions for personnel expenses. The measurement of these obligations differs from defined benefit plans in that all actuarial gains and losses are recognized immediately in the income statement.

4.12.1 Actuarial assumptions	2021	2020
Discount rate (weighted)	0.4%	0.2%
Future salary increases	1.0%	1.0%
Future pension increases	0.1%	0.2%

The discount rates are determined by referencing market yields at the end of the reporting period on AA- and AAA-rated corporate bonds. In recent years, longevity has increased in all major countries in which the Group sponsors pension plans. The Group sets mortality assumptions after considering the most recent statistics available and uses generational mortality tables to estimate probable future mortality improvements.

Risk sharing. In contrast to prior year, in 2021 the Group did not apply a risk sharing approach to value the defined benefit obligation.

Sensitivities of significant actuarial assumptions. The discount rate and the future increase in salaries were identified as significant actuarial assumptions. The following impacts on the defined benefit obligation are to be expected:

- → 0.25% increase/decrease in the discount rate would lead to a decrease of 3.1% (prior year: 3.3%) / an increase of 3.3% (prior year: 3.6%) in the defined benefit obligation.
- → 0.25% increase/decrease in the expected increase in salaries would lead to a decrease of 0.2% (prior year: 0.3%) / increase of 0.2% (prior year: 0.3%) in the defined benefit obligation.

The sensitivity analysis is based on realistically possible changes as of the end of the reporting year.

The average duration of the defined benefit plan obligation at the end of the reporting period is 12.7 years (prior year: 13.8 years).

The cost of defined benefit pension plans and other long-term employee benefits is determined using actuarial valuations. Actuarial valuations involve making assumptions about discount rates, future salary increases, mortality rates, and future pension increases. Due to the long-term nature of these plans, such estimates are subject to significant uncertainty.

4.12.2 Reconciliation of defined benefit obligation and fair value of plan assets	**2021 CHF m**	**2020 CHF m**
Defined benefit obligation at January 1	1,488.4	1,485.5
Interest costs	3.0	4.9
Current service costs (employer)	27.3	27.7
Contributions by plan participants	17.6	18.3
Benefits (paid) / deposited	–79.6	–78.3
Other effects	0.5	0.7
Remeasurements on obligations	–59.6	32.0
Currency translation adjustments	–4.1	–2.4
Defined benefit obligation at December 31	**1,393.5**	**1,488.4**
Reconciliation of the fair value of plan assets		
Fair value of plan assets at January 1	1,401.3	1,403.5
Interest	2.2	4.2
Contributions by the employer	24.5	28.3
Contributions by plan participants	17.6	18.3
Benefits (paid) / deposited	–73.7	–76.3
Return on plan assets (excluding interest)	108.0	25.3
Currency translation adjustments	–1.0	–2.0
Fair value of plan assets at December 31	**1,478.9**	**1,401.3**
Actual return on plan assets	110.1	29.5

4.12.3 Remeasurements of defined benefit plans	2021 CHF m	2020 CHF m
Return on plan assets excluding interest income	–108.0	–25.3
Current-year actuarial loss (gain) on benefit obligation:		
– change in demographic assumptions	–57.6	–1.3
– change in financial assumptions	–31.5	22.0
– experience adjustments	29.5	11.3
Change in effect of asset ceiling	84.7	0.0
Remeasurements recognized in other comprehensive income	**–82.9**	**6.7**
Cumulative amount recognized in other comprehensive income	**131.0**	**213.9**

4.12.4 Reconciliation of the amount recognized in the balance sheet at year-end	2021 CHF m	2020 CHF m
Present value of funded defined benefit obligation	1,393.5	1,488.4
Fair value of plan assets	1,478.9	1,401.3
Deficit/(surplus)	–85.4	87.1
Adjustment to asset ceiling	84.7	0.0
Liability (asset) recognized in the balance sheet	**–0.7**	**87.1**
Thereof recognized as separate asset	–77.6	–25.4
Thereof recognized as separate liability	76.9	112.5

4.12.5 Pension expenses recognized in the income statement	2021 CHF m	2020 CHF m
Current service costs (employer)	27.3	27.7
Net interest employee benefit	0.8	0.7
Other effects	0.5	0.7
Expenses recognized in the income statement	**28.6**	**29.1**
Thereof service costs and administration costs	27.8	28.4
Thereof net interest on the net defined benefit liability (asset)	0.8	0.7

4.12.6 Best estimate of contributions	2022 CHF m
Contributions by the employer	**26.2**

4.12.7 Plan assets at fair value consist of	2021 CHF m	2020 CHF m
Equity instruments third parties	487.5	416.6
Debt instruments third parties	360.1	395.0
Real estate	514.8	474.1
Cash and cash equivalents	53.4	51.6
Others	63.1	64.0
Total plan assets at fair value	**1,478.9**	**1,401.3**
Thereof quoted	915.8	872.2
Thereof unquoted	563.1	529.1

4.12.8 Information about significant plans	2021 Switzerland	2021 Austria	2021 Germany	2020 Switzerland	2020 Austria	2020 Germany
Discount rate	0.3%	1.1%	1.3%	0.1%	1.0%	1.1%
Future salary increases	1.0%	2.5%	1.6%	1.0%	2.5%	1.6%
Costs of defined benefit plans	26.4	0.8	1.1	26.7	0.8	1.2
Remeasurements employee benefits	–73.0	–0.3	–6.7	7.3	–1.0	–0.5

4.12.9 Defined contribution plan	2021 CHF m	2020 CHF m
Expenses for defined contribution plan	**8.1**	**7.5**

4.13 Share capital

As of December 31, 2021, share capital amounted to CHF 15.0 million (prior year: CHF 15.0 million) and consisted of 105,000 (prior year: 105,000) registered shares with nominal value of CHF 100 each and 112,500 (prior year: 112,500) with nominal value of CHF 40 each.

5. Segment reporting

Segment information. The Group consists of three reportable segments which are identified on the basis of internal business updates that are regularly reviewed by the Chief Executive Officer (CEO). The CEO, being the Chief Operating Decision Maker, regularly reviews the allocation of resources to the three reportable segments. The Group is managed under its businesses Grains & Food, Advanced Materials, and Consumer Foods.

Grains & Food: Engineering and sale of industrial process technologies and solutions for the food and feed industry, such as the processing of grains, rice, coffee, and other raw materials for intermediate and finished products.

Advanced Materials: Engineering and sale of solutions for die-casting, grinding and dispersion, and surface-coating technologies in high-volume application areas such as automotive, optics, inks, and batteries.

Consumer Foods: Engineering and sale of solutions for cocoa processing, chocolate mass production, moulding, and wafer equipment, with its portfolio ranging from weighing and mixing of raw materials to cooking and aerating of masses through extrusion, depositing, and forming up to baking and enrobing.

5.1 Segment reporting

Segment reporting 2021	Grains & Food CHF m	Advanced Materials CHF m	Consumer Foods CHF m	Corporate Functions CHF m	Group CHF m
Segment revenue	1,658.8	509.6	511.7	29.0	2,709.1
Less intersegment revenue	–4.7	–0.2	–2.9	0.0	–7.8
Total segment revenue third parties	**1,654.1**	**509.4**	**508.8**	**29.0**	**2,701.3**
EBIT	138.5	27.8	9.4	–29.7	146.0
in % of revenue	8.4%	5.5%	1.9%	–102.5%	5.4%
Non-current assets	**424.6**	**198.2**	**539.5**	**243.0**	**1,405.3**

Segment reporting 2020*	Grains & Food CHF m	Advanced Materials CHF m	Consumer Foods CHF m	Corporate Functions CHF m	Group CHF m
Segment revenue	1,677.4	438.8	574.1	24.1	2,714.4
Less intersegment revenue	–4.1	–0.2	–1.7	0.0	–6.0
Total segment revenue third parties	**1,673.3**	**438.6**	**572.4**	**24.1**	**2,708.4**
EBIT	148.6	23.4	23.4	–49.7	145.7
in % of revenue	8.9%	5.3%	4.1%	–206.0%	5.4%
Non-current assets	**425.0**	**207.9**	**586.4**	**248.0**	**1,467.3**

*Restated (see Note 6.1).

Internal and external reporting are both based on the same valuation and accounting principles, and there is therefore no need to provide a reconciliation.

The business results are carried over to the Group's consolidated figures by including the results of units with no market operations as well as consolidation effects.

5.2 Geographical information

Segment revenue	2021 CHF m	2020* CHF m
North America	446.4	426.0
South America	124.4	134.7
Europe	869.5	810.7
Middle East and Africa	282.8	296.9
South Asia	93.6	74.0
Asia	884.6	966.1
Total	**2,701.3**	**2,708.4**
- thereof Switzerland	69.8	50.1
- thereof US	320.6	291.4
- thereof China	588.7	578.3

*Restated (see Note 6.1).

Segment non-current assets	2021 CHF m	2020 CHF m
North America	134.5	135.8
South America	7.7	8.3
Europe	1,074.2	1,138.0
Middle East and Africa	12.6	14.1
South Asia	7.2	7.6
Asia	169.1	163.5
Total	**1,405.3**	**1,467.3**
- thereof Switzerland	358.3	355.0
- thereof US	133.6	132.1
- thereof China	157.8	151.5

The information about geographical areas is determined based on the Group's operations. The Group operates in six geographical areas: North America, South America, Europe, Middle East and Africa, South Asia, and Asia. Revenues are shown based on the physical location of the equipment.

6. Other disclosures

6.1 Effect of change in consolidation rules

In the financial year 2021, the consolidation software was upgraded and as such the consolidation rules for the Group were reviewed. The outcome was a refinement of the consolidation setup that leads to a reduction of our contract assets and liabilities relating to production orders in progress as well as trade payables. Furthermore, it impacts turnover and cost of material with an equity impact of CHF 2.1 million. In line with IAS8 (error), this update was applied retrospectively to the financial statements. The amounts for the financial year 2020 are disclosed in the table below.

Consolidated income statement	Presented 2020 CHF m	Restated 2020 CHF m	Delta
Revenue	2,699.8	2,708.4	8.6
Cost of materials	–1,152.5	–1,161.1	–8.6

Consolidated balance sheet	Presented Jan. 1, 2020 CHF m	Restated Jan. 1, 2020 CHF m	Delta	Presented Dec. 31, 2020 CHF m	Restated Dec. 31, 2020 CHF m	Delta
Deferred tax assets	59.2	59.9	0.7	52.9	53.6	0.7
Non-current assets	**1,739.1**	**1,739.8**	**0.7**	**1,633.6**	**1,634.3**	**0.7**
Contract assets relating to production orders in progress	455.3	332.4	–122.9	383.0	252.1	–130.9
Current assets	**2,293.0**	**2,170.1**	**–122.9**	**2,302.4**	**2,171.5**	**–130.9**
Total assets	**4,032.1**	**3,909.9**	**–122.2**	**3,936.0**	**3,805.8**	**–130.2**
Other reserves / retained earnings	1,495.0	1,492.9	–2.1	1,506.0	1,503.9	–2.1
Equity attributable to the owners of the parent	**1,695.1**	**1,693.0**	**–2.1**	**1,706.1**	**1,704.0**	**–2.1**
Total equity	**1,726.7**	**1,724.6**	**–2.1**	**1,738.2**	**1,736.1**	**–2.1**
Trade accounts payables	389.4	281.5	–107.9	327.8	212.5	–115.3
Contract liabilities relating to production orders in progress	473.5	461.3	–12.2	551.9	539.1	–12.8
Current liabilities	**1,367.5**	**1,247.4**	**–120.1**	**1,340.3**	**1,212.2**	**–128.1**
Total liabilities	**2,305.4**	**2,185.3**	**–120.1**	**2,197.8**	**2,069.7**	**–128.1**
Total equity and liabilities	**4,032.1**	**3,909.9**	**–122.2**	**3,936.0**	**3,805.8**	**–130.2**

6.2 Assets pledged or assigned to secure own liabilities

In connection with open legal cases, assets of CHF 45.0 million and CHF 0.6 million, respectively (prior year: CHF 45.0 million and CHF 0.7 million) serve as collateral for own liabilities where the right of disposal is limited.

6.3 Related parties

Related-party transactions. Total loans from the shareholders of CHF 102.0 million (prior year: CHF 130.0 million) are disclosed under non-current financial liabilities and of CHF 27.7 million (prior year: CHF 21.6 million) under current financial liabilities. A loan toward the shareholders in the amount of CHF 20.4 million (prior year: CHF 21.3 million) is disclosed under other non-current financial assets.

Expenses for rental, energy, and maintenance to related parties amounted to CHF 12.1 million (prior year: 12.3 million) and are included in other operating expenses. Other related-party positions are disclosed separately in the notes.

Liabilities to pension plans amounted to CHF 0.1 million as per 2021 (prior year: CHF 0.1 million). This amount is included in other current liabilities.

Key management compensation. Key management (defined as Group Management and Board of Directors) received a total current paid out compensation of CHF 8.3 million (prior year: CHF 9.1 million). In addition, pension and social security contributions of CHF 1.8 million (prior year: CHF 1.7 million) are recorded as expenses. The provisions and liabilities for other long-term benefits amount to CHF 2.2 million (prior year: CHF 23.2 million).

The Bühler Group operates deferred compensation plans for members of the management. The deferred compensation plans comprise a vesting period of three years and an execution period of 10 years from the grant date. The amounts are charged to the income statement over the relevant vesting periods and are adjusted to reflect actual and expected levels of vesting. The value of the deferred compensation is determined annually based on the Group's net profit for the three preceding years and equity at year-end.

6.4 Government grants

Government grants are offset with the items of expense which they finance. Government grants related to assets are deducted from the assets in deriving the carrying amount of the asset. In 2021 the Group received government grants of CHF 10.1 million (prior year: CHF 4.0 million).

6.5 Proposal of the Board of Directors

At the General Meeting, the Board of Directors proposes a dividend of CHF 27.0 million (prior year: CHF 25.0 million) or CHF 180.00 (prior year: CHF 166.6) per registered share with a nominal value of CHF 100 and CHF 72.0 (prior year: CHF 66.7) per registered share with a nominal value of CHF 40. The dividend payment to the shareholders of Bühler Holding AG amounted to CHF 25.0 million in the financial year 2021 (prior year: CHF 25.0 million).

6.6 Release for publication of the consolidated financial statements

The consolidated financial statements were released for publication by the Board of Directors of Bühler Holding AG on February 11, 2022.

6.7 Subsequent events

No material events have occurred after the balance sheet date.

Report of the statutory auditor

to the General Meeting of Bühler Holding AG

Uzwil

Report on the audit of the Financial Report Bühler Group (consolidated financial statements)

Opinion

We have audited the consolidated financial statements of Bühler Holding AG and its subsidiaries (the Group), which comprise the consolidated income statement and consolidated statement of comprehensive income for the year ended 31 December 2021, the consolidated balance sheet as at 31 December 2021 and the consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements (page 3 to 55) give a true and fair view of the consolidated financial position of the Group as at 31 December 2021 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with the International Financial Reporting Standards (IFRS) and comply with Swiss law.

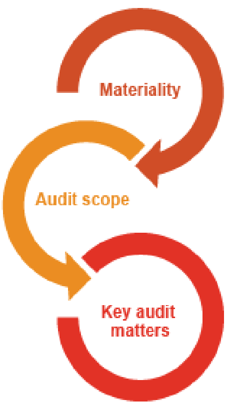
Basis for opinion

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements" section of our report.

We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the International Code of Ethics for Professional Accountants (including International Independence Standards) of the International Ethics Standards Board for Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview



Overall Group materiality: CHF 10'000'000

We concluded full scope and specific accounts audit work at 20 reporting units in 10 countries. Our audit scope addressed over 72% of the Group's revenue

As key audit matters the following areas of focus have been identified:

Accounting for customer orders (Project/Plant)

Impairment testing of goodwill and intangible assets with indefinite useful life

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Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall Group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the consolidated financial statements as a whole.

Overall Group materiality	CHF 10'000'000
Benchmark applied	0.37% of revenue
Rationale for the materiality benchmark applied	We chose total revenue as the benchmark because, in our view, this benchmark takes into account the volatility of the business environment and it is a generally accepted benchmark for materiality considerations.

We agreed with the Audit Committee that we would report to them misstatements above CHF 500'000 identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Audit scope

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

The audit strategy for the audit of the consolidated financial statements was determined taking into account the work performed by the component auditors. As Group auditor, we performed the audit of the consolidation, disclosures and presentation of the consolidated financial statements and of the impairment testing of goodwill and intangible assets with indefinite useful life. Where full scope audits or specific accounts audit work was performed by component auditors, we ensured that, as Group auditor, we were adequately involved in the audit in order to assess whether sufficient appropriate audit evidence was obtained from the work of the component auditors to provide a basis for our opinion. Our involvement comprised communicating the risks identified at Group level, specifying the audit procedures relating to the accounting for customer orders (Project/Plant), specifying the materiality thresholds to be applied, participating in local closing meetings (virtual), conducting telephone calls with the component auditors during the interim audit and the year-end audit and reviewing the reporting.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Accounting for customer orders (Project/Plant)

Key audit matter	How our audit addressed the key audit matter
The Bühler Group has customer orders, where the performance obligations are satisfied either over time or at a point in time in accordance with IFRS 15 'Revenue from contracts with customers'. In the year under review, revenue from customer orders in the amount of CHF 1'314.5 million were recorded over time using the input method to measure the satisfaction of the performance obligation. Management measures the progress as of the balance sheet date based on relative costs incurred to the total costs expected to fulfil the performance obligation. An incorrect estimate of the expected costs could have a significant impact on the recorded revenue and the net profit of the Group. Please refer to page 9 (Use of estimates) and pages 25 - 27 (Revenue) in the notes to the financial statements.	Our audit of revenue from customer orders where the performance obligations are satisfied over time mainly comprised the following procedures: • We assessed the design and the existence of the key controls regarding the customer orders and tested the effectiveness of selected controls. • We assessed whether the internal guidelines regarding the approval of the costs and margins had been adhered to. • We selected a number of customer orders based on the contract volumes, the contribution margin and changes in the margin compared with prior year and the planning phase, and focused our testing on the following, in particular: - We assessed the contracts in respect of the classification of revenue recognition. - We assessed whether the contractual terms and the approved planned costs had been recorded appropriately in the project accounting system. - We discussed with the project controllers and project managers the progress of the projects based on the latest project reports and assessed the costs still to be incurred until their completion and changes in the margin. • We obtained written information from the legal representatives of the Group. We inspected this written information with regard to indications of potential quality deficiencies or penalties for non-performance and if applicable assessed whether these matters were recorded appropriately in the consolidated financial statements. • For the customer orders completed during the year under review, we compared various final parameters with the estimates made in the planning phase or those as of the previous balance sheet date in order to assess, with hindsight, the accuracy of the estimates made by Management. We consider Management's process and assumptions to be reasonable for purposes of determining the accounting for customer orders (Project/Plant).

Impairment testing of goodwill and intangible assets with indefinite useful life

Key audit matter	How our audit addressed the key audit matter
The impairment testing of goodwill and intangible assets with indefinite useful life was deemed a key audit matter for the following reasons: Goodwill and intangible assets with indefinite useful life are significant items on the consolidated balance sheet (CHF 641.3 million); they are not amortised but tested for impairment at least annually. In calculating the value-in-use of the assets for these tests, the Board of Directors and Management have significant scope for judgement in defining the cash-generating units (CGUs), in allocating the goodwill and net operating assets to the CGUs and in determining the underlying assumptions (discount rate, royalty rates, growth rates, revenue growth and EBIT margin growth). Management adopted an established process in order to forecast the cash flows. The Board of Directors monitored adherence to this process. Please refer to page 9 (Use of estimates) and pages 37-40 (Intangible assets) in the notes to the financial statements.	In our audit of the impairment testing of goodwill and intangible assets with indefinite useful life, we performed audit procedures including the following: • We assessed the design and the existence of the key controls regarding the impairment testing of goodwill and intangible assets with indefinite useful life. Furthermore, we checked whether the Board of Directors reviewed the impairment tests. • We assessed how the CGUs were defined, taking into account the accounting standards and our knowledge of the organisation of the Group. • We assessed the appropriateness of Management's process for allocating goodwill and net operating assets to the CGUs. • We compared the revenue and the EBIT of the year under review with the budget in order to identify, in retrospect, any forecasts that were too optimistic and to assess the accuracy of the estimates that were made. • We performed plausibility checks on the key assumptions Management used for the impairment tests as well as on the changes in net working capital resulting from the application of these assumptions. To this end, we involved our internal valuation experts, who compared the assumptions with data from analogous companies and market data. Furthermore, we assessed the technical and mathematical correctness of the valuation model. • We assessed the sensitivity analyses carried out by Management. In addition, we performed our own sensitivity analyses using different discount rates, revenues and gross profit margins. • We assessed the appropriateness of the disclosures in the notes to the financial statements in accordance with IAS 36 'Impairment of Assets'. We consider the valuation process and the assumptions applied by Management to be an appropriate and reasonable for purposes of the impairment testing of goodwill and intangible assets with indefinite useful life.

Other information in the annual report

The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements of Bühler Holding AG and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is located at the website of EXPERTsuisse: http://expertsuisse.ch/en/audit-report-for-public-companies. This description forms part of our auditor's report.

Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

PricewaterhouseCoopers AG

René Rausenberger	Oliver Illa
Audit expert Auditor in charge	Audit expert

Zürich, 11 February 2022

Financial Statements Bühler Holding AG

Income statement Bühler Holding AG

	Notes	2021 CHF m	2020 CHF m
Investment income	11	104.6	92.1
Financial income	12	16.2	18.5
Exchange gains on foreign currency valuation	13	0.0	3.2
Other operating income	14	8.1	8.8
Total operating income		**128.9**	**122.6**
Investment expenses	15	–2.7	–0.5
Financial expenses	16	–5.9	–5.0
Exchange losses on foreign currency valuation	13	–9.9	0.0
Other operating expenses	17	–7.9	–7.6
Operating expenses		**–26.4**	**–13.1**
Profit before taxes		**102.5**	**109.5**
Taxes		–0.2	–2.0
Net profit		**102.3**	**107.5**

Balance sheet Bühler Holding AG

Assets	Notes	2021 CHF m	2020 CHF m
Cash and cash equivalents		317.1	141.5
Other accounts receivable third parties		0.4	0.1
Other accounts receivable Group	5	84.6	258.9
Current loans Group	5	0.4	0.6
Accrued income and prepaid expense		0.2	0.2
Current assets		**402.7**	**401.3**
Non-current securities		7.9	7.9
Other financial assets third parties		18.0	18.2
Other financial assets related parties	8	20.4	21.3
Other financial assets Group	6	655.5	669.7
Investments	18	883.1	881.0
Non-current assets		**1,584.9**	**1,598.1**
Total assets		**1,987.6**	**1,999.4**

Equity and liabilities	Notes	2021 CHF m	2020 CHF m
Current financial liabilities third parties	9	154.1	0.0
Current financial liabilities related parties	8	25.0	19.0
Accounts payables third parties		0.0	0.1
Accounts payables Group	7	99.1	145.7
Current provisions	10	9.9	12.0
Other current liabilities third parties		0.4	0.4
Other current liabilities Group	7	1.9	1.8
Deferred income and accrued expense		1.0	3.5
Current liabilities		**291.4**	**182.5**
Non-current financial liabilities third parties	9	237.0	420.0
Non-current financial liabilities related parties	8	102.0	117.0
Non-current liabilities		**339.0**	**537.0**
Total liabilities		**630.4**	**719.5**
Share capital		15.0	15.0
Legal reserves		7.5	7.5
Other free reserves		275.6	275.6
Available earnings brought forward from prior year		956.8	874.3
Net profit		102.3	107.5
Total equity		**1,357.2**	**1,279.9**
Total equity and liabilities		**1,987.6**	**1,999.4**

Notes to the financial statements Bühler Holding AG

1 General information
The financial statements of Bühler Holding AG, domiciled in Uzwil SG, were prepared in accordance with the regulations of Swiss financial reporting law.

Bühler Group prepares consolidated financial statements on a Group level according to International Financial Reporting Standards (IFRS). Therefore, Bühler Holding AG does not publish additional notes, a cash flow statement, and management reporting according to article 961d of the Swiss Code of Obligations.

2 Valuation principles
The financial statement accounting policies meet the requirements of Swiss financial reporting law. The main financial statement line items are accounted for as described below.

The balance sheet positions in foreign currency have been valued at the following closing rates:

	2021 CHF	2020 CHF
CNY	0.1445	0.1356
EUR	1.0370	1.0850
GBP	1.2340	1.1990
USD	0.9190	0.8850

Loans to Group subsidiaries are recorded at their nominal value. If necessary, value adjustments are made for potential impairment losses.

3 Number of full-time equivalents
The number of full-time equivalents is on average less than 10 employees (prior year: less than 10 employees).

4 Definition of related parties and Group companies
Related parties are companies that are directly or indirectly owned by the Bühler family. Also included are members of the Bühler family as well as the Board of Directors and companies owned by Members of the Board of Directors of the Bühler Group.

Group companies are companies in which the Bühler Group holds direct or indirect investments and are included in the consolidated Group financial statements.

5 Other accounts receivable and current loans Group
Accounts receivable and current loans Group mainly include current loans to Group companies for working capital financing purposes.

6 Other financial assets Group
Financial assets mainly include loans to Group companies, which are granted at market conditions and are non-current (more than one year).

7 Liabilities Group
Liabilities Group consist primarily of current liabilities related to cash pooling (mainly Bühler AG, Uzwil) as part of the Group's cash management.

8 Other financial assets/liabilities related parties
These loans are owed from and to the shareholders as well as from other related parties (associates).

9 Financial liabilities third parties
This position contains corporate bonds issued to third parties.

Nominal amount in CHF m	Valor	Interest rate	Period of validity	Expiration nominal value
180	38,960,607	0.10%	12/21/2017 – 12/21/2022	12/21/2022
240	38,960,608	0.60%	12/21/2017 – 12/21/2026	12/21/2026

In 2021 the Group has bought back CHF 28.9 million (prior year: CHF 0.0 million) of its own corporate bond obligations.

10 Provisions
This item mainly includes provisions for currency risks relating to loans to Group companies and accounts receivable from Group companies.

11 Investment income
This position mainly contains dividend income from subsidiaries and other participations.

12 Financial income
Financial income mainly includes interest income on loans to Group companies.

13 Exchange gains/losses on foreign currency valuation
Exchange gains/losses on foreign currency valuation contains currency gains and losses.

14 Other operating income
Other operating income contains mainly licence fee income.

15 Investment expenses
Investment expenses include impairments on Group investments.

16 Financial expenses
Financial expenses primarily include interest on foreign expenses paid to Group companies and interest payments for corporate bonds issued to third parties.

17 Other operating expenses
Other operating expenses predominantly include service fee expenses and non-refundable withholding taxes.

18 Investments
Investments are recorded at cost less economically necessary adjustments. The principal investments that are held directly or indirectly by Bühler Holding AG are shown in the table on pages 13 to 15. The participation rate is equal to the voting rights and share in capital.

19 Contingent liabilities

	2021 CHF m	2020 CHF m
Sureties, guarantees and other obligations in favor of Group companies	421.8	466.6
Sureties, guarantees and other obligations in favor of third parties	77.9	125.9

Bühler Holding AG issued a letter of comfort for Bühler GmbH, Reichshof, Germany, on August 17, 2017. With this letter of comfort, Bühler Holding AG commits itself to financially support Bühler GmbH, Reichshof in order that Bühler GmbH, Reichshof is able to meet its current and future obligations at all times. The issued letter of comfort is valid as long as Bühler GmbH, Reichshof belongs to the Bühler Group, at the latest until December 31, 2022.

20 Proposal of the Board of Directors for the appropriation of available earnings

	2021 CHF m	2020 CHF m
Balance brought forward from prior year	956.8	874.3
Net profit of the year	102.3	107.5
Available earnings at the disposal of the General Meeting	**1,059.1**	**981.8**
The Board of Directors proposes to the General Meeting:		
- The distribution of a dividend	27.0	25.0
- Carry forward to new accounting period	1,032.1	956.8

The statutory obligation of appropriation to reserves is waived as the legal reserve amounts to 50% of the paid-in share capital.

21 Others
CHF 1.0 million hidden reserves were released in the reporting period (prior year: CHF 11.0 million).

22 Significant events after the balance sheet date
No material events have occurred after the balance sheet date.

Report of the statutory auditor

to the General Meeting of Bühler Holding AG

Uzwil

Report on the audit of the financial statements

Opinion

We have audited the financial statements of Bühler Holding AG, which comprise the income statement for the year ended 31 December 2021, the balance sheet as at 31 December 2021 and notes for the year then ended, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements (pages 62 to 65) as at 31 December 2021 comply with Swiss law and the company's articles of incorporation.

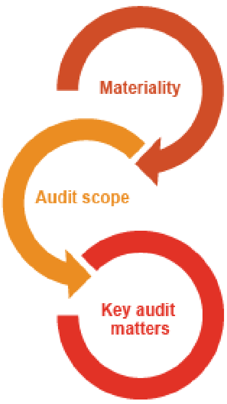
Basis for opinion

We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report.

We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview



Overall materiality: CHF 19'800'000

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the entity, the accounting processes and controls, and the industry in which the entity operates.

As key audit matter the following area of focus has been identified:

Valuation of Investments

Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the financial statements are free from material misstatement. Misstatements may arise due to fraud or

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error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the financial statements as a whole.

Overall materiality	CHF 19'800'000
Benchmark applied	1% of total assets
Rationale for the materiality benchmark applied	We chose total assets as the benchmark because, in our view, it is a relevant benchmark against which holding companies can be assessed, and it is a generally accepted benchmark with regard to materiality considerations in holding companies.

We agreed with the Audit Committee that we would report to them misstatements above CHF 990'000 identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Audit scope

We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we considered where subjective judgements were made; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Report on key audit matters based on the circular 1/2015 of the Federal Audit Oversight Authority

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation of Investments

Key audit matter	How our audit addressed the key audit matter
Investments in subsidiaries represent a significant balance sheet line item (CHF 883.1 million). The Board of Directors uses business valuations in order to test these investments for impairment. The company valuations are prepared using the "practitioner's method". In cases were indications of impairment exist, the book values of the investments were compared with the impairment test prepared to assess the goodwill at the Group level. In calculating these company valuations, there is significant scope for judgement in determining the underlying assumptions, particularly with regard to the future business results and the discount rate to apply to the forecast cash flows. Management adopts a specified impairment testing process to identify the potential need for the impairment of investments. Please refer to page 65 (Investments) in the notes to the financial statements.	In our audit of the investments in subsidiaries, we performed audit procedures including the following: • We assessed the design and the existence of the key controls regarding the valuation of the investments. • We compared the book value of the investments in the year under review with the results from using the practitioner's method of valuation. If there were indications of impairment, the book values of the investments were compared with the impairment test applied to assess the goodwill at the Group level. • We performed plausibility checks on the key assumptions applied by Management used for the impairment tests. To this end, we involved our internal valuation experts, who compared the assumptions with data from analogous companies and market data. Furthermore, we assessed the technical and mathematical correctness of the valuation model. We consider the valuation process and the assumptions used to be an appropriate and adequate basis for the impairment testing of investments in subsidiaries as at 31 December 2021.

Responsibilities of the Board of Directors for the financial statements

The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located at the website of EXPERTsuisse: http://expertsuisse.ch/en/audit-report-for-public-companies. This description forms part of our auditor's report.

Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers AG

René Rausenberger	Oliver Illa
Audit expert Auditor in charge	Audit expert

Zürich, 11 February 2022