ANNUAL REPORT 2022

Accelerating impact together

Innovations for a **better world.**

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You can find the full Business Review section of the Annual Report 2022 and more information on our web page.

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ACCELERATING IMPACT TOGETHER

Calvin Grieder
Chairman of the Board

Stefan Scheiber
Chief Executive Officer

Dear customers, partners, and colleagues,

For Bühler, 2022 was a good year with progress in many areas. We grew, we managed to improve our profitability, and at the same time, strengthened our balance sheet. We continued to launch new solutions, creating value for customers, and through this, enhanced our market positions globally. Yet again, our broad portfolio of processing technologies and services for the human- and animal-nutrition markets, as well as for technical materials and applications, strengthened the development of our company. The global network of Bühler organizations, led by passionate Bühler people with a strong customer focus, created an even better balance in the distribution of our business across all continents. Thanks to our strong financial position we were able to honor our obligations to the financial markets and improved our equity ratio further.

This good performance was achieved against the backdrop of a tense economic environment resulting from the Covid-19 pandemic and amplified by wars, especially the one in Ukraine. That war is not only causing immense human suffering, but it has also created energy shortages, sent shock waves through the global grains and food markets, and, through this, led to sharp price increases and food security issues on a global scale. Market volatilities, disrupted supply chains, and soaring costs have left their mark on the global economy and our daily business. Nevertheless, we have learned to manage these unpredictable developments with agility and flexibility. We thank our skilled and engaged employees all over the world, for their great commitment and resilience. Their dedication was integral to our progress and success.

Several key factors contributed to our positive business development. In 2022, we also kept our innovation efforts high, and this resulted in the successful launch of new products and services. Moreover, our efforts in enhancing our education and training offerings for our customers and partners in schools and training facilities all over the world created significant value. We engaged in new partnerships to develop a portfolio of technologies that creates unique value for our customers. We are convinced that this will continue to be an important differentiator in a very dynamic market environment in future. All of this came together at the Networking Days event we hosted in June 2022, where 1,000 leaders of global food and mobility industries came together in Uzwil. The strong resonance from this event serves as a great encouragement that collaboration can contribute to making value chains in our industries more effective and sustainable.

Looking forward, we remain positive about the many opportunities offered by the transition of our industries. We will continue to innovate and aim at being even more customer oriented through personal relations locally, combined with an effective organization which is globally leveraged.

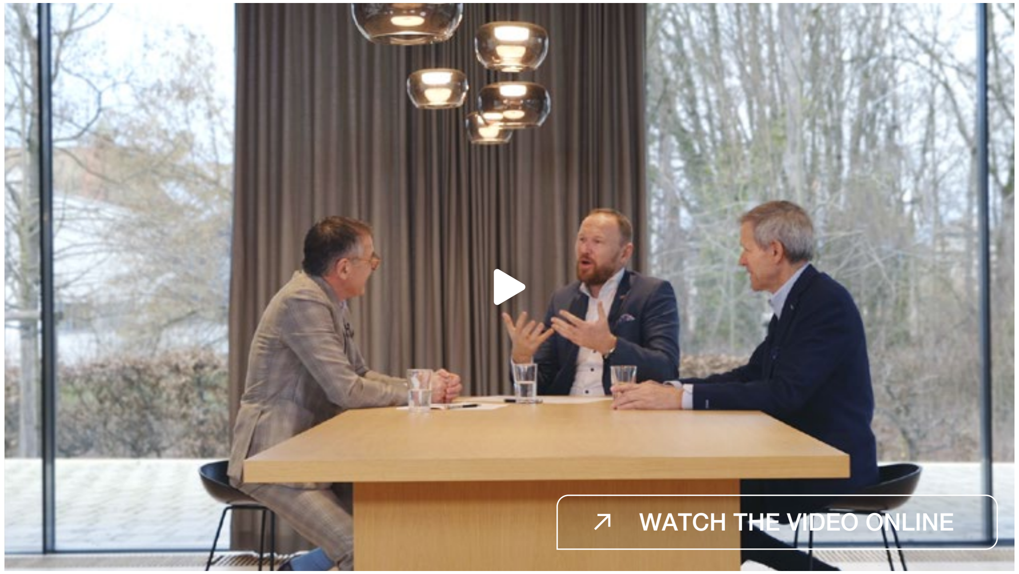
We would like to thank you, our customers and partners all over the world for the confidence and loyalty you have placed in Bühler. The trustful collaboration with all of you has never been more appreciated than during these turbulent times. Lastly, we also extend our deepest thanks to our shareholders, the Bühler Family, who continue to support our business in the fifth generation.

We wish you all the very best for 2023 and beyond and look forward to meeting you again soon.

Yours sincerely,

Calvin Grieder
Chairman of the Board

Stefan Scheiber
Chief Executive Officer

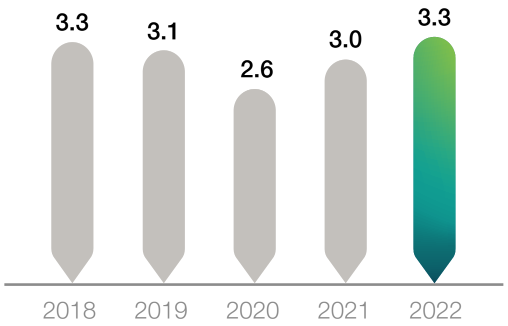


Year in review with CEO Stefan Scheiber and Chairman Calvin Grieder.

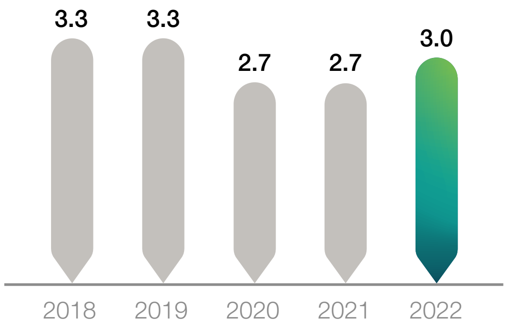
HIGHLIGHTS OF THE YEAR

RESULTS AT A GLANCE

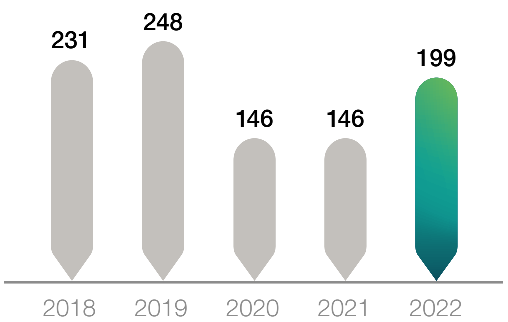
Order intake
(in billion CHF)
+8.7%



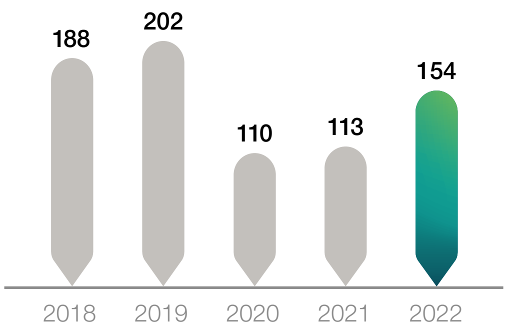
Turnover
(in billion CHF)
+10.3%



EBIT
(in million CHF)
+36.0%

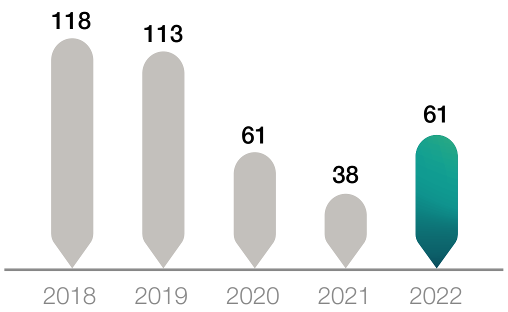


Net profit
(in million CHF)
+35.7%

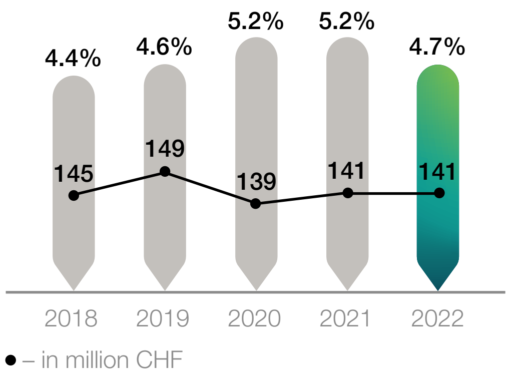


RESULTS AT A GLANCE

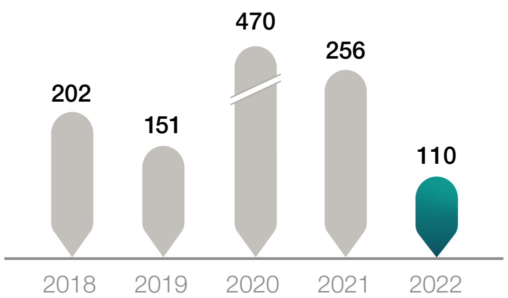
Investments into asset base
(in million CHF)
+60.4%



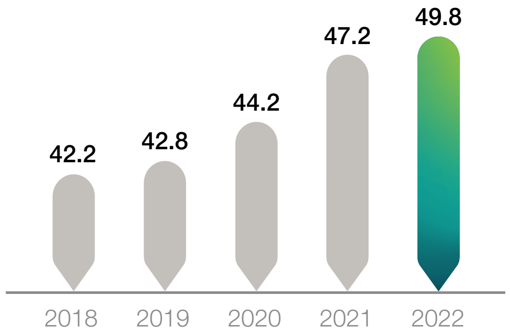
R&D expenses
(as % of turnover)
-0.5pp



Operating cash flow
(in million CHF)
-57.1 %



Equity ratio
(in %)
+2.6pp



GOOD PERFORMANCE IN AN UNCERTAIN ENVIRONMENT

In 2022, Bühler expanded its business and improved profitability in an uncertain and volatile business environment. The company was able to mitigate effects of the war in Ukraine, tense supply chains as well as soaring energy and raw material prices, while further improving its financial position with a high equity ratio and repaying the first tranche of its bond. The company continued to invest in innovation, new partnerships, education, and training. With numerous opportunities in its markets and a high order book of over CHF 2.1 billion, the company's ambition is to continue its positive development in 2023. A key factor in achieving these successes was the impressive dedication of the Bühler employees all over the world.

Overview of financial results with CEO Stefan Scheiber and CFO Mark Macus.

GROUP REPORT 2022

Profitable growth

At the Group level, order intake rose 8.7% to CHF 3.3 billion and the order book was very high at CHF 2.1 billion. Turnover increased by 10.3% to CHF 3.0 billion. EBIT improved by 36.0% to CHF 199 million, reflecting an EBIT margin of 6.7% (prior year: 5.4%). Net profit strongly improved by 35.7% to CHF 154 million (prior year: CHF 113 million).

The growth in volume came mainly from the Advanced Materials business, where order intake soared by 40.6% to CHF 871 million, nearly doubling its volume within the last two years. Within Advanced Materials, the Die Casting business showed an outstanding performance, growing orders by 60.4%. Turnover in Advanced Materials increased by 31.8% to CHF 671 million. In addition, the Consumer Foods business continued its recovery with strong order intake growth of 21.6% to CHF 710 million, and turnover growth of 13.6% to CHF 578 million. The largest business, Grains & Food, which had been particularly impacted by disrupted supply chains and a slow feed market in China, showed a solid performance. The segment saw order intake in 2022 of CHF 1,663 million, down 6.5%, while turnover grew by 2.6% to CHF 1,696 million, and with this managed to keep business very stable through the years of the Covid-19 pandemic.

To keep the pace of innovation high, expenses for research and development (R&D) remained stable at CHF 141 million (4.7% of turnover) in line with the strategy to be the innovation leader in the industries in which Bühler operates. In 2022, Bühler again expanded its innovation and education ecosystem and entered into several joint ventures and partnerships that will facilitate the transition towards more efficient food and feed production and accelerate the transformation towards sustainable mobility. To strengthen its training offerings, Bühler also announced plans to build a new Grain Innovation Center, where customers and partners will develop, test, and scale sustainable and efficient solutions for grain- and feed-processing, to improve performance of lines and systems, and to continue innovating for the food- and feed-customers globally.

Financial stability improved further

In 2022, Bühler's financial position continued to strengthen, with the equity ratio increasing by 2.6pp to 49.8% (prior year: 47.2%). An important milestone was the repayment of the first tranche of the corporate bond of CHF 180 million in December. In 2017, Bühler raised capital on the financial markets for the first time in the form of a CHF 420 million dual tranche bond to invest in its growth and innovation capabilities. The second tranche of the bond of CHF 240 million is due in 2026.

Operating cash flow amounted to CHF 110 million and was impacted by higher profitability and an increase in absolute net working capital. In 2022, net working capital increased by CHF 92 million driven by the growth of turnover and by a targeted increase in inventory to ensure the availability of key components and stock items. Despite this, net liquidity remained on a high level of CHF 308 million compared to CHF 329 million in 2021 (-6.5%).

Services business expanded

Bühler's Customer Service business (including Single Machines) also grew by 3.4% and added substantially to the 2022 results with turnover amounting to CHF 955 million, representing a 32% share of Group turnover. Bühler offers a holistic service portfolio with seven modules from hardware, components, and spare parts to upgrading, maintenance, software, and process optimizations for systems, with the objective of improving the performance of the existing asset base of customers in terms of efficiency, safety, and sustainability. Sustainability gained importance in 2022, as services are the fastest lever to reduce energy, waste, and water in existing plants.

The global Bühler services network comprises 105 service stations, and over 2,000 experts, including 680 field service engineers supporting 500 customers every single day.

After the launch and initial ramp-up of the extended service portfolio, the new offering received strong market resonance and demand. For instance, remote services more than doubled in 2022 to around 800 agreements; the amount of core machines under a Total Care agreement (Bühler's inspection and maintenance services program) grew by more than 5,000, or 40%, to over 17,000. In addition, more than 130 customer production facilities are benefiting from connected digital services, which enable customers to better monitor, predict, and control production, supported by Bühler's process experts.

Strong global network

2022 again proved Bühler's global network of 30 manufacturing sites, 91 sales offices, and Application & Training Centers in 23 countries to be a key strength of the company. Locally, also in regions with ongoing travel difficulties, Bühler experts were able to serve customers. This enabled Bühler to keep delays resulting from highly stressed supply chains at a minimum. To increase the flexibility and agility of the company's manufacturing network even further, Bühler expanded its production capabilities in India and

Samuel Schär, Chief Services & Sales Officer explains how Bühler's Global Services & Sales organization supported its customers to overcome the global economic challenges.

Learn more about our Services on our web page.

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Vietnam to serve the Middle East and Africa more directly from these hubs. All regions contributed to Bühler's turnover growth, with the Americas and Middle East Africa & India standing out. Regional growth rates and turnover shares were as follows: Asia 6% growth to 32% turnover share; Europe 3% growth to 30% turnover share; North America 17% growth to 17% turnover share; Middle East Africa & India 24% growth to 16% turnover share; and South America 26% growth to 5% turnover share. With these successes in important markets, Bühler's global distribution of turnover is very robust and balanced.

A leader for sustainable solutions and services

The positive course of Bühler's business in 2022 is confirmation of the strategy to be a provider of sustainable solutions and services. More than ever, the world demands a turnaround in CO_2e emissions, loss of biodiversity, and distribution of wealth. It is at the core of Bühler's strategy to balance the needs of humanity, nature, and the economy in every decision it takes.

Bühler's R&D efforts and product and services development were put in the context of improved commercial and sustainability performance. The expenditure on innovation in the past 4 years amounts to more than CHF 500 million. In 2022, Bühler continued its innovation promise to sustainably transform value chains, launching roughly 40 new products, including six new core products.

2022 also marked an important milestone for Bühler with the announcement of next level targets with more tangible calculations, goals, and action plans. Bühler has developed a pathway to achieve a 60% reduction of greenhouse gas emissions in its operations by 2030[1] and has committed to having solutions ready to multiply by 2025 that reduce energy, waste, and water by 50% in the value chains of its customers.

Expanding the collaborative ecosystem

2022 marked a milestone in new partnerships involving industry synergies and technological advances aimed at mitigating climate change. With these agreements the company now has a portfolio in place to develop and offer solutions for the whole plant-based protein and food bioprocessing area.

A new joint venture with Austrian pharmaceutical and biotechnology company ZETA was announced in June. The new company, Eridia, will engineer food and feed biotechnology plants mainly in precision fermentation and cellular agriculture. A new strategic partnership with German engineering company endeco was formed to drive forward pulse processing. In July 2022, Bühler and CN & Partners AG announced a partnership to create Circular Food Solutions Switzerland AG, a company that will produce a Swiss meat alternative based on upcycled spent grain from Swiss breweries. A true upcycling solution, produced locally, the product is rich in protein and fiber, and has a low environmental impact. Bühler has also worked with partners Migros and Givaudan to create The Cultured Hub, located in The Valley in Kemptthal near Zurich, to accelerate the future of cultured food processes.

Bühler and Flottweg SE, Germany signed a cooperation agreement in June 2022 to offer full value chain solutions to customers in the plant-based protein market. An innovation and technology partnership was formed by Bühler and MMS AG in Urdorf, Zurich, in June 2022 to drive the development of high functionality ingredients for sustainable meat and dairy analogues.

[1] Greenhouse Gas Protocol Scopes 1 & 2, 2019 baseline.

Bühler Networking Days as a focal point

The goal of accelerating impact together with a broader ecosystem was made tangible during the Bühler Networking Days. The event's focus was a call for immediate joint action, at scale, across a range of issues as the world demands sustainable solutions in feed, food, and mobility. Over June 27 and 28, more than 1,000 leading academics, business leaders, entrepreneurs, and innovators engaged with each other on how to improve energy and food security, reduce waste, cut water usage, lower CO_2e emissions, improve biodiversity, rethink mobility, and close the gap on wealth distribution. Through technology, innovation, and education the company can create a more sustainable future for all. The strong resonance and positive feedback received following the event is a clear sign that industry has taken responsibility.

Delegates had traveled from 95 countries and between them represented companies that feed 4 billion of the world's population and provide mobility for 2 billion people. The event footprint has been estimated at 1,300 tons CO_2e. This estimation includes flights, food, local transportation, accommodation, and infrastructure.

It was compensated through projects with Restor and Climeworks. The projects were chosen to raise awareness of the importance of nature-based solutions, not only in climate contributions, but also to protect and restore biodiversity and generate incomes in rural communities.

Learn more about Networking Days 2022 on our web page.

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GRAINS & FOOD:
STABLE PERFORMANCE

In 2022, Grains & Food performed solidly, operating in a challenging environment with disrupted value chains. After a strong start to the year and a recovery of markets in the first half, the investment pattern stagnated due to the disruptions created by the war in Ukraine and the developments in China. In addition, the business suffered from disruptions in the grain and energy markets, especially in Europe and Africa. In these demanding circumstances, order intake amounted to CHF 1,663 million, down 6.5%, while turnover improved by 2.6% to CHF 1,696 million. All business areas of Grains & Food contributed to the turnover growth, with Digital Technologies excelling.

Grains & Food

Order intake	Turnover
-6.5%	+2.6%
CHF 1,663 million	CHF 1,696 million

With new partnerships, Bühler's food and feed collaboration and innovation ecosystem entered a new level with multiple benefits for customers. Regarding innovative solutions, all businesses report important milestones, be it with new orders for example for large rice projects, start-of-operations with the extension of food parks including that of Angola-based customer, Carrinho Group, and market launches, such as the Sortex H and J optical sorter with Merlin Ai and SpectraVision, and the Granulex® 5 series of hammer mills. To improve agility and customer proximity, Bühler has extended its Asian manufacturing footprint with enlarged capabilities at its India site for the manufacture of optical sorting products.

The Grain Quality & Supply business area benefitted from a rising demand for grain storage solutions, mainly in the Middle East and Africa, triggered by food security stock projects due to the disruptions of the global grain supply. Many governments decided to invest in strategic storage to mitigate food security risks considering the uncertain geopolitical situation. The same background is the cause for large investments in big rice projects, as this staple food is considered an alternative and haven against wheat. However, the rice business is still impacted by a post-pandemic effect, as ongoing travel restrictions in Southeast Asia slowed down decision processes and investments were evaluated more cautiously.

A highlight of 2022 was the brewing business, where Grain Quality & Supply won several projects from small to large scale, with strong demand from China's distilling industry that partially offset the low activity in the malting market.

Milling Solutions continued its upward trend, growing both in orders and turnover. The business unit profited from the trend to refocus on regional supply chains, triggered by the Covid-19 pandemic. As a result, the investment pattern changed from a few large to numerous small- and mid-sized projects, of which many went to Bühler. Due to the high-capacity utilization in the milling industry, maintenance services also contributed to growth. In 2022, the second Mill E3 was installed and the 74th milling line was connected to the Bühler Insights platform to support milling customers all over the globe. While each Mill E3 is tailored to individual customer needs, energy savings in the range of 8%, approximately 20% in building volume reductions, and installation time savings well above 10,000 hours have been experienced. The energy reduction offered by the Mill E3 combined with digital services is of interest given rising energy costs globally.

Another important driver for this progress was the ongoing trend of plant-based proteins, oats, and pulses, in short: from bean to burger. To ensure leading-edge technology development and new means of collaborating with customers and partners, Milling Solutions, together with the other business areas, started construction on a new Grain Innovation Center (GIC) in Uzwil, Switzerland, where Bühler and its customers and partners will develop, test, and scale sustainable and efficient solutions for grain and feed processing to improve food and feed solutions. The focus will be on yield, quality, energy efficiency, and the flexibility of the plants together with nutritious and great tasting recipes based on a broad variety of grains and pulses. The GIC is scheduled to start operations by the end of 2024.

This new complex will be rounded off by a biomass energy center, which Bühler is building together with its partner Vyncke. Vyncke specializes in converting biomass and industrial waste into clean energy and has been a strategic partner of Bühler since 2021. The plant is scheduled to go into operation in 2023 and will become a cornerstone of heating energy at the Uzwil site thereby contributing to a significant reduction in its CO_2e footprint. Together with other measures already implemented at the site, such as the switch to wood pellets, this plant is expected to reduce CO_2e emissions for heating energy by over 60%.

After a rapid expansion during the past years, the Value Nutrition business area experienced restrained development. In its various market segments for animal and human nutrition, trends in the industries and regions differ strongly. Whereas demand for pasta and breakfast cereal equipment was rather low, and market cultivation in China was difficult due to the ongoing restrictive Covid-19 policy, solutions for pet food and alternative proteins enjoyed growing demand. To strengthen its market position, Value Nutrition launched a new generation of hammer mills, the key component for animal nutrition solutions, and concluded new partnerships. A highlight was the formation of a joint venture with IMDHER, the leading company in Mexico in building turnkey plants for animal feed, aqua and pet food plants. Combining the market and project knowledge of IMDHER with the state-of-the-art core technologies such as extrusion and pellet presses from Bühler creates a unique offering. Bühler became a member of MISTA, an innovation platform based in San Francisco, US, which has been created to transform the global food system to meet the needs of the future. Bühler is providing an extruder machine that will be used as part of a co-creation project with other MISTA members. It will be commissioned in February 2023.

The Digital Technologies business area experienced a strong rebound, driven by a completely renewed portfolio for optical sorting, scales, dosing, and packaging. With new automation and camera systems these products reach a new level of connectivity, efficiency, speed, and precision. The LumoVision optical sorter, which uses ultraviolet light for detection, was applied to additional applications and can now be deployed to sort wheat, coffee, maize, nuts – and plastic waste. Plastic sorting has become a key area as the demand for high quality recycling constantly increases due to high oil prices and the necessity to reduce waste. In packaging, Digital Technologies continued the success story with the joint venture partner Premier Tech and launched new automated packers, complementing Bühler's offering.

To be able to profit from the elevated level of dynamism in the food industries, Grains & Food has massively expanded its collaboration and innovation ecosystem with new partnerships and joint ventures. Together with the partners Hosokawa Alpine, endeco, Flottweg, MMS, and ZETA, Bühler is the only industry player that can now offer integrated solutions for all plant-based protein and food bioprocessing processes for traditional crops such as soy, pulses, single cells, and cultured food. With Value Nutrition and Bühler's competence in extrusion, texturing, depositing, and moulding, the company covers the complete value chain from the raw materials to finished products.

To make this new competence field more tangible and accessible for customers, Bühler and endeco are building a protein application center in Uzwil with full integration of the process from raw material to milling, to wet extraction, to extrusion, to finished products. This will enhance processes and recipes for plant-based protein, meat, and dairy applications as well as improved sustainability with less energy consumption.

Johannes Wick, CEO Grains & Food provides insight into developments in the business segment during 2022.

CUSTOMER STORIES

Ardent Mills
A mill to feed millions

Ardent Mills is driven by a clear purpose and mission – to enhance people's quality of life and standard of health. With their new state-of-the-art mill in Florida, they are leading the way in efficiency, quality, and quantity. The mill is testament to the long-standing partnership between Ardent Mills and Bühler and perfectly embodies their path to ensure food security for an ever-growing population.

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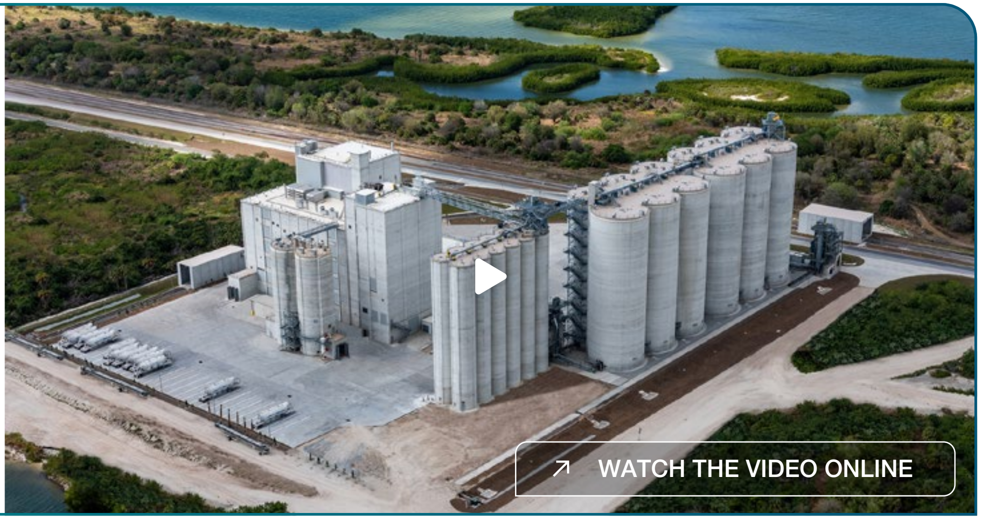

Carrinho Group
Building a business to feed Angola's future

In Angola, the family-owned company Carrinho Group has built one of the most modern food parks in the world – and in doing so has embarked on the country's transformation to a better future. Comprising 17 factories producing more than 20 different consumer products, the food park is a driving force for the country's food security. For Angola, Carrinho's Benguela Food Park is a turning point, the beginning of a new, brighter future for the country, where industrial processing of food is practically non-existent. The Group is already planning its next food park in northern Angola, which will be three times the size of the Benguela facility.

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CONSUMER FOODS: STRONG REBOUND

After the recovery started in late 2021, the rebound of the Consumer Foods business gained speed in 2022, resulting in an increased order intake of 21.6% to CHF 710 million and an improved turnover of 13.6% to CHF 578 million. Resumed travel and social events, as well as demand for snacking and gifting, stimulated consumer buying behavior, and this resulted in increased investments into processing lines by customers. The main drivers for this upward trend came from the chocolate areas, whereas in the baked goods business (Wafer and Biscuit), investments were taken more cautiously. Market volatility along with the developments in Russia and Ukraine impacted the European business, which usually counted among the strongest regions for Consumer Foods. In 2023, Bühler plans to integrate Consumer Foods into the Grains & Food business.

Consumer Foods

Order intake	Turnover
+21.6%	+13.6%
CHF 710 million	CHF 578 million

The Chocolate & Coffee, and Confectionery business units of Consumer Foods reported strong activity, specifically from the North America, Middle East Africa & India, and Asia regions. After two years of moderate investment due to the Covid-19 pandemic, the need to secure production capacities and new business opportunities for customers triggered many projects for chocolate mass and moulding processing lines. Major players, including Barry Callebaut, Hersheys, and Mars, invested in increasing capacities to meet the continued growing demand for chocolate.

In the baked goods area, especially in Europe, investment behavior was more cautious due to volatile raw material prices (flour and sugar) and increasing gas prices, which impacted the purchase of gas ovens. Energy savings and independence from gas was a major topic for many customers, and interest in sustainable solutions, such as the electrification of ovens, gained momentum. Opportunities to retrofit gas ovens from gas to electric were especially high in Europe, but the trend also picked up in North America. Despite the slowdown, the Biscuit business unit still won several key projects, including a new Danish Butter Cookie line for Jacobsen Bakery in Denmark, and a cookie line for Smuckers, US.

A key differentiator for Bühler is integration on two levels: first the ability to offer fully integrated lines from bean to bar; and complex solutions across Bühler's businesses. Best Biscuits Maroc, a leading player in the Moroccan biscuits market, added two wafer lines and two moulding lines, including mixing equipment for producing wafer bars and chocolate fingers with wafer. Ferrero North America added a chocolate mass line and moulding line and purchased a three-year service contract.

A second important distinguishing feature for the Consumer Foods business is the capability to test and develop innovative ideas for consumer products together with customers in Bühler's network of Application & Training Centers in 23 countries – and afterwards to engineer and implement the respective integrated solutions. This is not only within the Consumer Foods segment, but also in combination with technologies from the Grains & Food business, starting from grain handling and logistics to milling, sorting, and protein processing. The Application & Training Centers were heavily utilized for product development during 2022.

In all Consumer Foods business units, the ability to lower energy consumption and CO_2e emissions has become a top priority, along with reducing the risks associated with potential gas shortages. To meet this increasing market demand, new electric ovens were launched, including the SWAKT-E wafer baking oven and the Meincke Turbu E electric tunnel oven. To safeguard investments in the existing asset base of customers, retrofit kits to electrify the gas-powered ovens were developed and customers opted to retrofit their Turbu ovens. This was an important trigger for the Consumer Foods service businesses, which developed nicely in 2022. Additionally, customer interest in the Total Care service offerings increased, and so too did their willingness to engage in long-term service agreements.

Germar Wacker, CEO Consumer Foods explains how the rebound of the business gathered pace in 2022.

CUSTOMER STORIES

Kägi Söhne AG
On the way to a smart factory

Everyone in Switzerland knows Kägi. It's both the name of a company and the name of a crunchy treat that they produce, enjoyed by generations of Swiss families. In recent years, it's become recognized around the world. The wafers and cookies made by this chocolate wafer manufacturer are in great demand. To maintain its cutting edge, Kägi continuously invests in superior product quality and innovation. Today, Bühler supports Kägi on its journey to becoming a Smart Factory.

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PRONATEC AG
The most modern cocoa processing plant in Switzerland

PRONATEC AG has been distributing fair-trade and sustainably manufactured products for the global food and cosmetics industry and the grocery trade for over 45 years. In 1996, they launched the world's first organic and fair-trade certified chocolate. In 2021, the next logical, yet courageous step followed. With the construction of PRONATEC Swiss Cocoa Production, one of the world's most modern cocoa processing plants in Beringen, Switzerland, PRONATEC not only freed itself from the dependence on external contractors, but also secured the pole position for organic cocoa products.

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ADVANCED MATERIALS: ACCELERATED GROWTH

In 2022, the Advanced Materials business was the driver of the Group's overall performance. Order intake jumped by 40.6% to CHF 871 million, and turnover soared by 31.8% to CHF 671 million. With these results, Advanced Materials has impressively switched from a recovery into an upswing mode, benefiting from the transition in its industries, mainly in automotive, and reaching a record high in nearly doubling the business in two years. All business areas contributed to this massive boost, benefiting from the optimal market positioning of their innovative product portfolios. Die Casting benefited from its large megacasting machines. Grinding & Dispersing profited from electrode mixing lines for lithium-ion batteries. Leybold Optics gained significantly from glass coaters not only for architectural, but also car glass, capacitor machines for e-mobility and grid applications, and from the continued strong trends in photonics and semiconductors. Due to rising energy prices, customers' business cases changed and the need to improve energy efficiency drove demand for Bühler's sustainable solutions across the board.

Advanced Materials

Order intake	Turnover
+40.6%	**+31.8%**
CHF 871 million	CHF 671 million

Die Casting was the outstanding business area within the Bühler Group, with more than double order intake over the past two years and with turnover increasing in 2022 by over 50%. The market was marked by contrasting trends. The conventional die-casting market in Europe and US proved challenging. The number of cars produced has not fully recovered as a result of a lack of semiconductors. Additionally, die casting customers in Europe faced difficulties resulting from the massive increase in energy costs and their dependency on gas in the foundry. The transition to electromobility created new, strong demand for large structural parts. Carmakers are fundamentally rethinking how to build cars more efficiently with fewer parts. Additionally, more integrated drivetrain parts for electric vehicles require machines with locking force above 2,000 tons.

Bühler Group's long-term strategy and ability to invest in innovation even in a downturn, meant that the Die Casting business was able to design and launch large Carat solutions with more than 4,400 tons of locking force exactly as the megacasting trend first took off in China. Die Casting was on top of this trend, with multiple orders for the Carat 560 and Carat 610, and first orders for the Carat 840 and Carat 920. This was driven by demand for large structural parts for car bodies, including battery cases. Bühler's application centers and expertise in part design, die design, process simulations, and machine-size evaluation turbocharged the upsurge. The same is true for the services business, which was propelled by growing demand for retrofits. With the launch of SmartCMS, the new control system for complex and fully integrated megacasting cells, Die Casting further differentiated itself in the market.

The Grinding & Dispersing business area doubled its order volume in the last two years and has fully recovered from the pandemic downturn, reaching a historic high. The business area continues to benefit 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 recorded high demand.

Around 10 years ago, Bühler started the development of a new process to produce anode and cathode battery slurry, a key component for batteries. The main assumption was that a continuous process using extruders is superior to the existing batch processes in terms of space, quality, energy usage, and productivity overall. In 2012, Bühler invested in a new battery lab in China and started process development in partnership with a key customer. Since then, additional efforts have been placed on market penetration, and 2022 confirms the breakthrough of the solution with a doubling of order volume to 22 new lines. While the buildup of new battery capacities in Asia and Europe is in full swing, North America is still underdeveloped in this regard and represents additional future growth potential. The strong market development also increased demand for grinding applications for lithium-ion battery additives and raw materials.

The solid development in packaging inks was based on the performance of Bühler's core grinding machines. This was improved significantly with the MicroMedia Invicta and Macromedia innovative dispersion technologies. The superior grinding performance results in lower energy use – a key differentiator in the market.

Leybold Optics has continued its success story in 2022, with strong improvements for the third consecutive year. In the 10th anniversary of the acquisition, Leybold Optics has proven to be a strong contributor to the Group. Three trends resulted in higher orders: the shortage of semiconductors, the development of autonomous mobility systems, and the demand for higher energy efficiency.

The shortage of semiconductors causes many challenges globally. However, this situation and the current race to produce the smallest and most efficient microchips in the world generate higher demand for Leybold Optics equipment. EUV lithography plays a key role, as this technology enables structural reduction of semiconductors. EUV lithography 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 large, curved substrates.

Samuel Schaer, CEO Advanced Materials, discusses the drivers for the upswing in the business segment in 2022.

Leybold Optics serves the photonics and semiconductor application markets with its leading technologies. These include the Helios 1200, which is semiconductor grade, and solutions for Ion Beam Sputtering and Ion Beam Figuring that meet the cutting-edge requirements at the frontiers of optics.

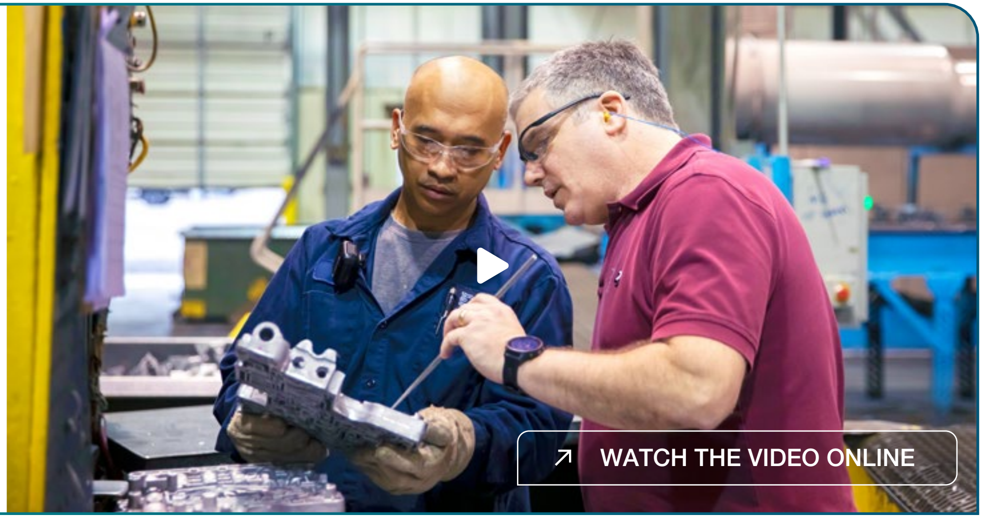
The increasing demand for electric and hybrid vehicles has a direct impact on the film capacitors market. Leybold Optics serves this market with its vacuum metalizing CAP machine platform. To stay ahead of market developments, Bühler launched the Leybold Optics CAPone, a modular system for capacitor applications enabling capacitor manufacturers to upgrade the speed of their production volume. There was strong demand for both. The same is true for coating solutions for architectural and car glass which lower energy consumption in buildings and automobiles, respectively.

CUSTOMER STORIES

TRACE DIE CAST
Every shot counts

Trace Die Cast have read the signs of the time well to become a key supplier of die casting parts for the booming electric vehicle market. What started out in the late 1980s as a prime example of entrepreneurship and drive to innovate is now a thriving company with a strong sense of purpose that is facilitating fundamental change in American mobility. With Bühler's Carat die-casting technology, Trace has backed the right horse and is leading the race in times of great disruption and new opportunities.

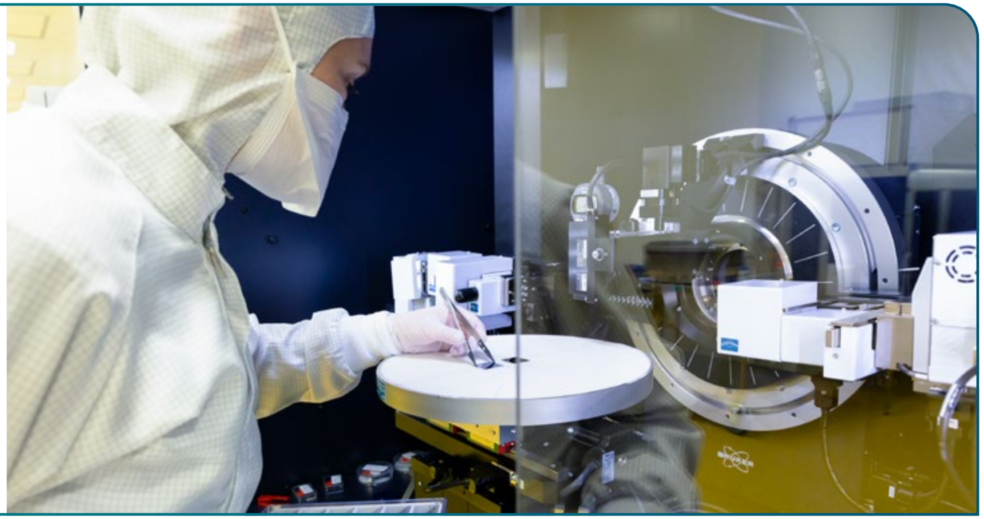
↗ READ ONLINE



OPTIX FAB
Coating the most precise mirrors in the world

Smarter, smaller, more powerful devices are only possible thanks to EUV lithography, an optical technology that uses extreme ultraviolet light to create highly advanced microchips. optiX fab in Jena, Germany plays a crucial role in this process, working with a high level of precision at an unimaginably tiny scale. Bühler has been at the side of the company's founders for more than 20 years, supporting their success in this growing and important market.

↗ READ ONLINE



OUTLOOK:
CONTINUED SUCCESSFUL DEVELOPMENT

The economic outlook was corrected downwards in many countries for 2023, and it is assumed that several markets will go into recession. Inflation is peaking in many countries. Market volatilities and supply chain tensions are expected to continue. Bühler is well prepared with its global positioning and strong balance sheet. At the same time, the human and animal nutrition markets, as well as the automotive and technical materials markets require new technological solutions and innovations, which Bühler can provide. A carryover of more than CHF 2.1 billion orders serves as a robust starting base for the business in 2023.

The high volatility and unpredictability of markets will likely remain, so too the tensions and shortages in global supply chains, energy, and transportation systems. On the other hand, the changing needs of the food, feed, and mobility industries, driven by the increasing demand for sustainable solutions, will provide favorable conditions for the businesses.

For Bühler, this means keeping the innovation rate high and using the many opportunities arising from this trend. The suite of services, including digital platforms and solutions, will continue to grow and gain resonance with customers looking to address increasing sustainability demands, including Scope 1 and 2 emissions. This represents interesting growth potential as Bühler has over 1 million machines installed worldwide with about 30,000 customers. Bühler's strong financial position will allow it to continue investing strategically. By strengthening the company's global supply chain with new manufacturing hubs in India and Vietnam, customers worldwide will benefit from short delivery times and logistics routes, risk mitigation from tense supply chains, and from an improved CO_2e footprint for the equipment delivered. In 2023, the focus will be on targeted market introductions of various innovations that were created in the past year.

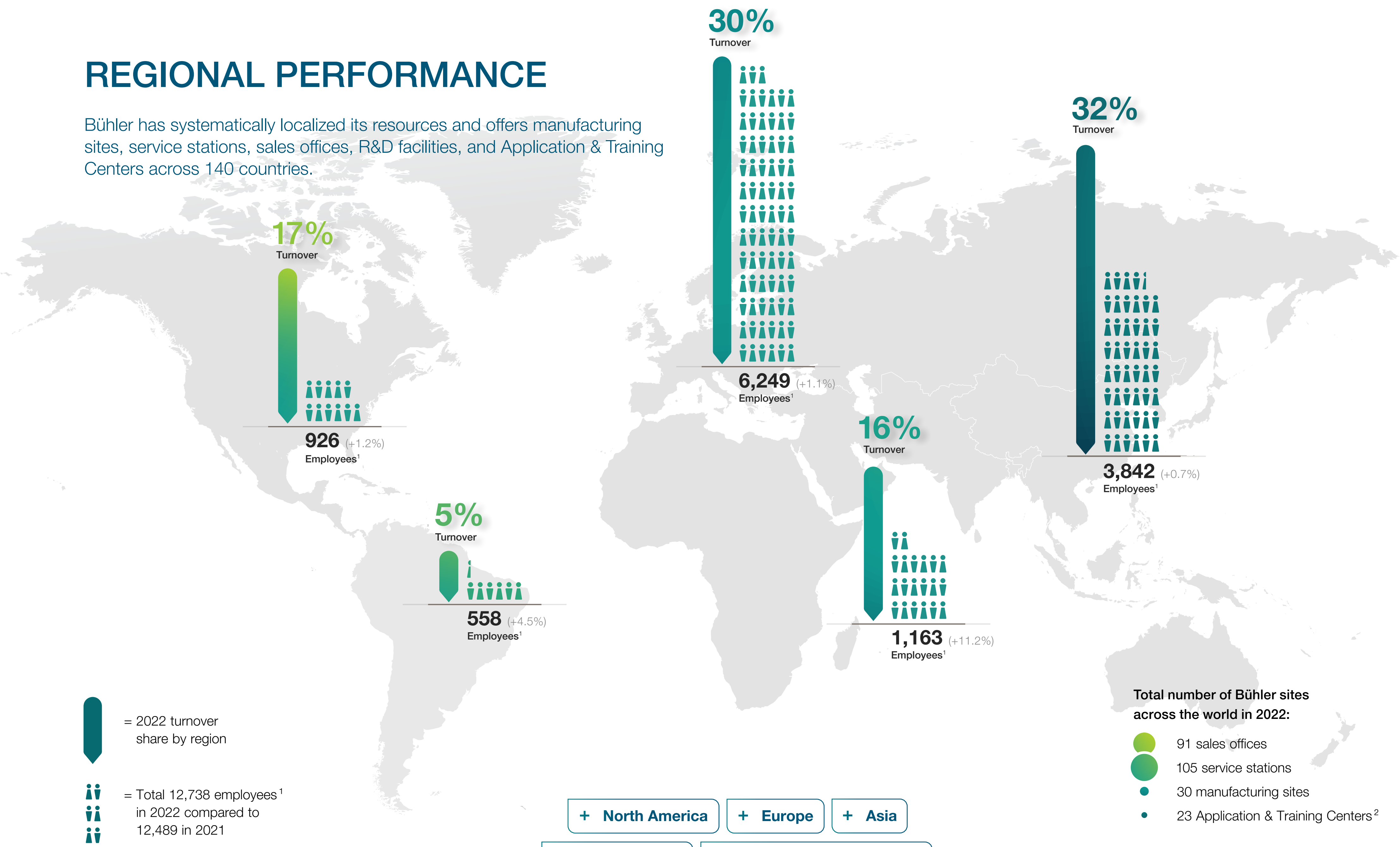
Grains & Food will profit from an expanded portfolio of innovations, capabilities, and collaborations, for example, for processing plant-based protein ingredients. Additionally, the development of new applications that enable customers to serve the plant-based beverages and dairy substitutes markets is underway. And new partnerships will accelerate the future of cultured food processes. Consumer Foods will start 2023 with a strong order book, based on a very innovative portfolio mix and, with this, is expected to rebound strongly in 2023. In 2023, the Consumer Foods business segment will be integrated into the Grains & Food business.

The global automotive industry is in a state of profound transition, driven by the need for more sustainable mobility, including electric vehicles. The Advanced Materials business is well positioned to be a key solution provider with its large die-casting cells for megacasting and range of solutions for the crucial process steps in lithium-ion battery cell production. Additionally, new technologies for optics, surface coatings, and glass-coating technologies are meeting increasing demand.

Overall, Bühler is well prepared to take another positive step in developing the business successfully in 2023, even in a very dynamic market environment.

REGIONAL PERFORMANCE

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



[1] FTE (= full-time equivalent)

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

Total number of Bühler sites across the world in 2022:

- 91 sales offices
- 105 service stations
- 30 manufacturing sites
- 23 Application & Training Centers[2]

[2] Bühler has Application & Training Centers in 23 countries, some of which cover multiple industrial applications.

OUR STRATEGY

Our purpose: Innovations for a better world

As a Swiss family enterprise with a history of over 160 years, we are driven by a strong sense of purpose, and our strategy is based on deeply held values. Our purpose is to create innovations for a better world. And our values of trust, ownership, and passion are the guiding principles of our behavior.

Based on this, we have set goals for the coming years to improve profitable growth and be a technology leader in our industries, while balancing the needs of humanity, nature, and economy. We see profitable growth as a prerequisite to creating impact for a better world. It enables us to invest in the development of our company, products, and people. In choosing Bühler, our customers benefit in terms of their own business performance, their environmental impact, and from opportunities to offer their employees training at our schools and application centers. They also benefit from our global setup.

Attaining our goals is only possible with a skilled and educated workforce. Therefore, we invest in our people and in so doing, contribute to improving their skills and their lives. We care for each other, and safety is a top priority. We never compromise on health and safety for our own employees, or the employees of our customers and our partners. We comply with all applicable rules and regulations, and human rights, wherever we do business, and our business activities are closely linked to the United Nations' Sustainable Development Goals (SDGs).

To create and accelerate impact requires intense collaboration among all market players – industry, start-ups, and academia. Therefore, we have built a strong innovation ecosystem, which we are continuously expanding. In this way, we bring together purpose, people, and performance to accelerate impact for a better world.

The 6 key elements of our strategy:

- **We drive customer success:** 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:** 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 commit to greater access to affordable and healthy food:** With our food and feed business solutions and our focus on safety, we contribute to a better life.
- **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 offer the best training for our employees:** 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.

Our sustainability goals

More than ever, the world demands a turnaround in CO_2e emissions, loss of biodiversity and distribution of wealth. Every study published in the reporting year, such as the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), concluded that the condition of our planet and societies are even more challenging than we previously believed. The IPCC report also underscored that human actions still have the potential to determine the future course of the climate, primarily by cutting emissions down to net zero.

We have for many years focused our research and development (R&D) efforts on improving both commercial and sustainability performance. In 2022 we took our commitment to a new level:

- We committed to developing a pathway to achieve a 60% reduction of greenhouse gas emissions in our own operations by 2030.[1]
- We committed to having solutions ready to multiply by 2025 that reduce energy, waste, and water by 50% in the value chains of our customers.

We proactively collaborate with suppliers to reduce climate impacts throughout the value chain. 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: Solutions, Services, and People.

Solutions

At the very core of Bühler's business model is the transformation of raw materials to intermediate and finished consumer products: from grains to flour, malt, baked goods, and bread; from beans to coffee, chocolate mass, pralines, and bars; from proteins to meat substitutes; from aluminum to structural car parts; from substrates to coated glass; from pigments to printing inks. The offering to our customers consists of complete value chain solutions with lines, plants and food parks, services, and single machines. Core technologies within our solutions include grinding, dispersing, extrusion, cleaning, optical sorting, drying, roasting, mixing, dosing, thin-film vacuum coating, casting, and more.

With these technologies, we can contribute to providing adequate food and nutrition within more sustainable food value chains. Major opportunities lie in enabling a sustainable protein supply by reducing the CO_2e footprint and use of antibiotics in livestock, for instance with feed based on upcycling of side streams through insect rearing and processing. Developing great-tasting meat and dairy alternatives is another key topic which will be addressed through solutions leveraging plant-based proteins valorization opportunities. 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 and safe transportation.

[1] Greenhouse Gas Protocol Scopes 1 & 2, 2019 baseline.

An important core competence of Bühler is the highly specified process know-how for many solutions. This is the essence of Bühler: understanding, shaping, and controlling material transformation processes. This enables us to support our customers on all levels, starting from the evaluation of future finished products and recipe development to trials, scaling to industrial level, and implementation of the solution.

By continuing to spend up to 5% of our turnover on research and development (R&D) annually, we can develop technologies, machines, and services, which differentiate in the market with high performance, reliability, efficiency, and improved sustainability Key Performance Indicators (KPIs) for energy, waste, and water.

Services

We balance the needs of humanity, nature, and economy in every decision in order to unlock sustainable business opportunities. Services enable us to improve the performance and productivity of the existing installed base of our customers and in doing so, minimize energy, waste, and water. Services are key enablers to making our customers installed assets more efficient and sustainable.

Bühler has developed a comprehensive services portfolio from process optimization and maintenance to hardware and spare parts, as well as 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 and water and reduce waste at any point in time. Retrofit services to renovate our customers' installed base allow us to make sustainability step changes – new equipment and plants could never fully compensate for the existing production capacities. The current share of Customer Service is 25% of turnover. It is our goal to further increase this proportion.

People

All progress 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_2e 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.

Our values

To give orientation to our employees and lay the foundation for a corporate culture that supports our endeavors we established our values of trust, ownership, and passion (TOP). Trust relates to integrity, partnership skills, and the credibility required for Bühler to form collaborative networks with customers, start-ups, academia, and

Learn more about our values on our web page.

READ ONLINE

Find the section about our strategy also on our web page.

READ ONLINE

non-governmental organizations (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.

Education and training

People development has always been the essence of Bühler. We have a strategy of people development, starting from apprenticeship education, and internal programs, to schools and Application & Training Centers for our customers. Our company was one of the first to start systematic vocational training. Since then, we have continued to develop and expand our education and training system, both internally and externally. Bühler provides apprenticeships for 500 apprentices globally and has trained over 8,250 since 1915. We run schools for milling, grain, rice, and cocoa processing along with Application & Training Centers around the world.

Customer proximity

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 global setup continues to prove its value for our customers, and thereby for Bühler. With our 105 service stations, 30 manufacturing sites, 91 sales offices, and Application & Training Centers in 23 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.

Ecosystem of collaboration and innovation

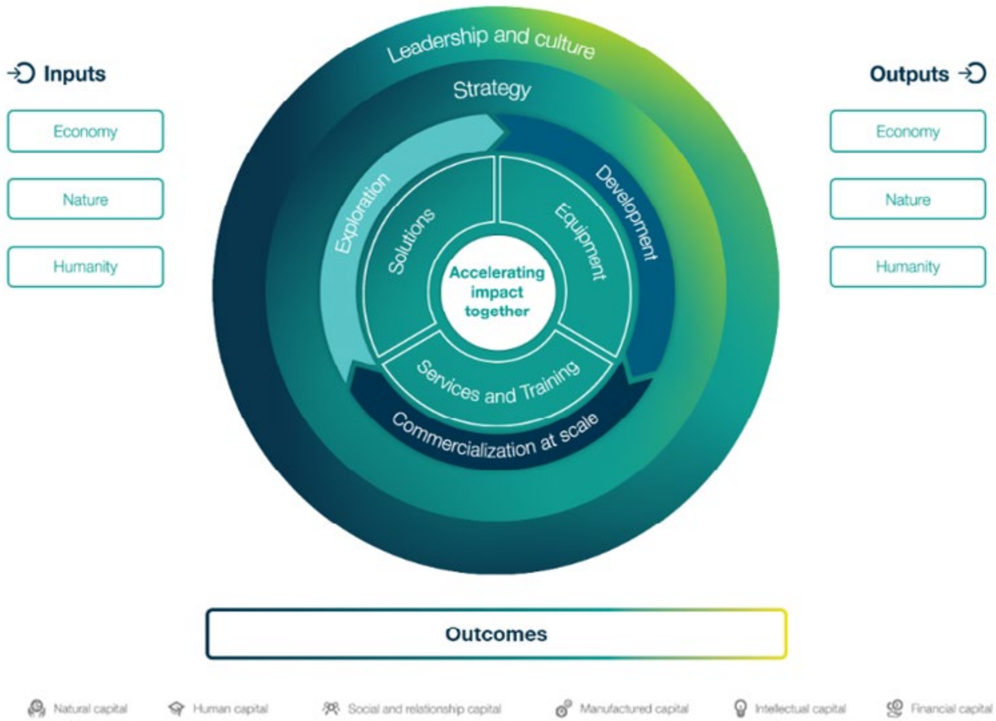
We believe that collaboration between industry players, academia, start-ups, and NGOs is essential to develop the solutions required to meet the needs of a growing global population sustainably. We have therefore established an ecosystem of collaboration and innovation. We connect our ecosystem partners with the process and technology know-how and experience of Bühler employees. The key to unlocking the value of the external ecosystem is the openness and capability of our employees. To give this ecosystem a regular focal point, we have established the Bühler Networking Days, which we host every three years in Uzwil, Switzerland.

Sustainable family ownership

Bühler is an independent, family-owned enterprise in the fifth generation. Our strategy is founded in this set-up and the premise of its continuation.

VALUE CREATION MODEL

The Value Creation Model illustrates how Bühler creates value for customers, employees, bondholders, business partners, and owners by unlocking sustainable business opportunities in the global food, feed, and automotive industries. It shows how we seek to balance humanity, nature, and economy in every decision and how this translates into outcomes for wider society and the environment.



Discover the full Value Creation Model on our web page.

SEE ONLINE

OUR PEOPLE:
ACCELERATING CHANGE

Bühler Networking Days event in June 2022.

The past few years have taught businesses that the only true certainty is the need to be prepared for uncertainty. The global pandemic, market volatility, unprecedented disruptions in supply and logistics markets, soaring energy costs, a summer of climate threatening temperatures, and global economic turbulence all demonstrate the need for a resilient, skilled, and flexible workforce directed by purposeful leadership. It takes the right mindset for future success in a world that is volatile, uncertain, complex and ambiguous (VUCA). It takes time and a purpose-driven approach to establish the culture by which a company can facilitate lifelong learning and accelerate the skills that provide the foundation for future leadership. Throughout 2022, Bühler has been building on, refining, and complimenting the programs it has in place to secure the safety, development, growth, wellbeing, and lifelong learning of its 12,738 full-time equivalent employees globally.

Leadership programs

In 2022, Bühler placed a strong focus on strengthening its leadership capability by targeting programs suitable for employees at different points of experience and seniority. At the senior level Bühler continues to develop its TOP leadership program established in 2021 in cooperation with IMD Business School, in Lausanne, Switzerland. This initiative creates impact by taking the 100 plus top leaders on a personal leadership journey and provides them with the tools to build high performance teams to enable Bühler to continue to play to win.

Aimed at experienced people leaders, Bühler launched its Advanced Leadership Program (ALP) in February 2022 with a pilot group of 21 colleagues from seven countries who all successfully graduated from the course in September. The success of the pilot means ALP is now an integral part of Bühler's global leadership development architecture. Designed with professors from the Hult International Business School, ALP is targeted at experienced people leaders with significant leadership experience. Over the six-month course participants in virtual training sessions that teach them how to lead in the VUCA world. The training covers resilience and well-being, influencing across a networked organization, the power of collaboration, the relationship between power and organizational culture, and how to translate strategy into action. The ethos of the

ALP is centered on three concepts: "Best Self – understanding oneself", "Best Teams – building and managing high-performing teams", and "Best Business – understanding the matrix".

Now in its sixth year, the Excelerator Program 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. This year was the first time Excelerator participants were assessed outside of the Bühler headquarters with four candidates participating in an assessment event in Leobendorf in Austria.

Targeted at first time leaders, Bühler has also this year launched the Ready-to-go Leadership Essentials program, a leadership journey for employees stepping into their first people leadership role whether through appointment or promotion. Leadership is a path you should not start alone and so the training is designed to support colleagues in their new roles by getting them ready for Bühler leadership from the very start. This learning journey not only provides learning materials, personality assessments and a 360-degree feedback opportunity but also enables experience sharing and networking. By the end of the 12-month program individuals are familiar with the key management processes and principles at Bühler and well equipped to step into their first leadership role with the tools in place to develop a common leadership mindset and increase leadership engagement with the minimum of business disruption.

All leadership training programs are based around Bühler's corporate values of Trust, Ownership, and Passion (TOP). In addition to the above-mentioned, Group-wide programs, several regional leadership programs were designed and launched in 2022 to facilitate career development for leaders and talents in the regions. Key ex-

Strengthening leadership capability with targeted programs.

Lifelong learning is one of Bühler's core principles.

amples are the Middle East Africa & India (MAI) Leadership Program, the Leadership Sprint Program in China, and the Basic's in Bühler Management (BBM) for Europe.

Expert careers

Innovation is central to our ability to accelerate impact together when tackling global challenges and Bühler relies on the expertise and strong knowledge base of its employees. One example of an expert community in Bühler is M2M (market to market). Our M2M employees have the technological and research skills to drive the innovation behind the connectivity that lies at the heart of Bühler solutions. Over 1,000 Bühler employees, or nearly 10% of our workforce, work in the M2M community. They are involved in research and development, product management, and supply chain engineering at over 20 sites globally. This pool of talent and experience must be maintained and nurtured, which is why in 2022 Bühler launched the M2M career path to attract, retain, and develop talent in the field of technology and, in recognition of the importance of career development for these experts, the M2M Principal. The first Principals have been nominated as part of the annual Talent Board process and are bringing the expert career path to life. They have not only been selected based on their expertise in their field but are also role models of living Bühler's TOP values and their passion for sharing their knowledge and expertise.

Lifelong learning

In order to play to win in a fast paced, uncertain world, it is imperative for all that we are open to learning new skills to stay relevant. For organizations, this means that a learning environment needs to be established and a learning offering provided to facilitate continuous up- and reskilling for its employees. As a technology company, it is the know-how of our experts that allows us to drive customer success and it is the collective knowledge of our workforce that makes us successful.

At Bühler, lifelong learning for all employees is a core principle, regardless of age, location, or career stage. 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, and webinars that offer training in formats that are short, relevant, engaging, personalized, and mobile.

Bühler runs several academies, including the Sales Academy, a salesforce training program that recognizes that frontline staff need to be highly adaptable to quickly react to dynamic market changes. Bühler is on a sales transformation journey from business type sell-


African Milling School, Kenya


Insect Technology Center, Switzerland

ing to account management, and it is therefore critical to ensure customer facing colleagues have the skills they need. Sales staff 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, to build the skills required by the individual salesperson. Over 1,430 customer facing colleagues globally participated in a development program and a network of local trainers was established to embed the new sales skills in the organization.

Training centers and schools

Responsibility for lifelong learning does not end at the company door. Bühler has Application & Training Centers in 23 locations, some of which cover multiple industrial applications located around the globe where we offer dedicated trainings for our customers and provide them with a platform to test new product ideas and experiment with product innovations. Over 2022, Bühler focused on learning within the field of insect processing technology with the opening of the Insect Technology Center in Uzwil. Bühler's Application & Training Centers provide the opportunity to share knowledge and learn from specialists while providing access to the latest generation of Bühler technologies.

The principle of offering lifelong learning to our customers also extends to different specialist schools around the world including the Cocoa Innovation Competency Centre in Côte d'Ivoire (Ivory Coast) and the International Rice Milling Academy in India, which offers training programs covering the entire rice value chain from seed to packaged rice. Other schools include the Swiss Institute of Feed Technology, the African Milling School in Kenya, the Training Center in China, and courses on offer at the Food Application & Training Center in the US. Bühler also supports schools run with partners in the US, Mexico, and the UK.

In addition, through Partners in Food Solutions, a nonprofit organization which aims to strengthen food security, improve nutrition, and increase overall economic development across Africa, 65

Noah Salvisberg, Swiss Champion in the designer's category at SwissSkills

Monique Halter, U19 World Champion in Mountain Bike at the World Championships

Jan Meier won a Medallion for Excellence in Mechanical Engineering CAD at WorldSkills

Bühler employees volunteered a total of 886 hours to pass on their know-how to 59 companies in Africa in 2022. (See Partnerships with Purpose section for more information.)

Vocational training

More than 8,250 apprentices have been trained at Bühler since 1915 with a total of 500 apprentices globally who are in vocational education in different Bühler locations in 2022. 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-and-four-year courses cover nine different vocational fields. In 2022, we onboarded 230 new apprentices across Europe, North America, South America, Africa, and Asia. The apprentices are paid during their training and Bühler also provides tools, books, computers, and uniforms. The courses continually evolve to meet the changing skill sets required by companies. In 2022, 66% of the apprentices finishing their courses chose to pursue careers within Bühler. Thirty-two apprentices worked abroad in 2022.

We are proud that Bühler apprentice Noah Salvisberg became Swiss Champion in the designer's category at the SwissSkills in Bern while Manuel Ulmann won the bronze medal in the welding category. Jan Meier, as the Swiss Champion of the Design Engineers 2020, was a medal contender at the WorldSkills in Bordeaux, France in October 2022, competing with 20 participants for the world title in Mechanical Engineering CAD (Computer Aided Design). He was awarded a Medallion for Excellence and placed seventh in his category. We also provide sports apprenticeships to talents who are athletes. We are particularly proud that Bühler apprentice Monique Halter became U19 World Champion in Mountain Bike at the World Championships in Les Gets in France in 2022.

Degree level programs

Together with ETH Zurich in Switzerland and Ashesi University in Ghana, Bühler offers a master's program in mechatronics engineering. The aim is to promote the next generation of leaders in Sub-Saharan Africa who will take responsibility for sustainable development in the region.


One Young World Switzerland

Bühler is also an active Corporate Partner of UNITECH International, which connects European universities with engineering companies with a global reach to develop the next generation of engineering leaders. The UNITECH Diploma is awarded to students who complete an academic exchange at one of the partner universities, three coaching modules, and an internship at one of the corporate partners. In 2022, Bühler continued to employ 10 UNITECH interns to run the Environmental Quantification Program, research and development projects, automation and digitalization projects, data science, and Bühler's product development process. Furthermore, Bühler increased its employer branding, strengthened its position in different face-to-face fairs and online fireside chats, which made the company visible to young, talented engineers. The partnership is a great pipeline reaching many highly educated talents, including female engineers. (See Partnerships with Purpose section for more information about both initiatives.)

Future readiness

Bühler Generation B is a global initiative that aims to inspire employees to be engaged and motivated in initiatives that will shape the future of Bühler. Generation B is an opportunity to look at global challenges and take ownership of how Bühler can address them. In 2022, Generation B has not only continued to be a platform for employees to build the company they want to work for but also showcase to other organizations how to establish an intercompany movement and consult them to get started.

Bühler is a proud partner of One Young World, the NGO that brings young people together to create impact. 2022 saw the launch of the Swiss chapter of One Young World with Bühler as founding member. The One Young World Caucus brings together future leaders from different industries and backgrounds to connect and exchange ideas to discuss how we live within the boundaries of our planet. The event brings people together from sustainable start-ups, sustainable tourism, and grass-root movements to generate business ideas to build a more sustainable planet and build ecosystems with the creativity to make real change.

Employee wellbeing

The Covid-19 pandemic took a toll on mental health and wellbeing for many. During 2021, Bühler launched a range of mental health and wellbeing support. In 2022, we continued with this support through our six global health ambassadors, one for each region,


Lifelong learning


Lifestyle


Health

Prototyping & Production

to help drive both physical and mental health strategies across the organization at a local level.

In 2022 we launched the Bühler Olympics, an event taking place over three months around the world with 120 participants joining the sport challenge from all six regions. We ran a virtual global event on women's health and the power of prevention, and Mental Health Days covering superpower resilience, positive resilient leadership, and employee wellbeing.

Bühler Energy Center

Bühler believes that achieving innovation and productivity requires a skilled and healthy workforce. It is currently building the Bühler Energy Center on its campus in Uzwil, Switzerland, to support its employees in gaining knowledge and becoming fit for the future in both their personal and professional lives. It is expected to open in June 2023 and will be made up of three distinct zones: Health & Lifestyle, Lifelong Learning, and Prototyping & Production.

In the Health & Lifestyle area employees of all ages will be able to enhance their individual health skills. Information on nutrition, exercise, recreation, and stress management will play a key part in the process.

The Lifelong Learning area will offer employees state-of-the-art training opportunities for automation technicians, plant and apparatus engineers, polymechanics, design engineers, apprentices, computer scientists, and more. It will set a new milestone for lifelong learning providing colleagues with the tools for long-term and sustainable success. New didactic methods will consider individual learning needs and interests.

The Prototyping & Production area is where new manufacturing technologies will be developed and where prototypes and functional models as well as series parts for our products will be produced. The zone will enable professional and innovative cooperation between the research and development departments of the business units and the production teams.

Learn more about the Diversity, Equity, and Inclusion Annual Report on our web page.

↗ READ ONLINE

Irene Mark-Eisenring, Chief Human Resources Officer, explains the importance of leadership, talent development, and addressing the impacts of the global recession in 2022.

Employer branding

For the fourth year running, Bühler is pleased to announce winning the prestigious Swiss Leading Employer Award, ranking us among the top 1% of more than 40,000 Swiss employers analyzed.

Bühler took second place in the mechanical and plant engineering category, sixth place across all categories in the St. Gallen region, and 112th place in the overall evaluation. Despite challenging times Bühler has maintained its top ranking among Swiss companies. We continue to leverage our social media presence to build our employer brand among potential recruits to the business. In 2022, we launched Meet Bühler Monday, where every second week we use LinkedIn to introduce our Bühler employees from our different regions who are at different career points, and to showcase our diverse career offerings.


Receiving the Swiss Leading Employer Award 2022.

Diversity, Equity, and Inclusion

We are proud of our diverse workforce who make us Bühler! Their dedication and passion for our business is inspiring. As a global organization, we see it as our corporate responsibility to represent the societies we operate in. It is a business priority for us to harness the diversity of our global workforce and include them in their amazing uniqueness to create a culture of belonging guided by our TOP values. We are proud of the progress we have made in 2022 in Diversity, Equity, and Inclusion (DE&I) and invite you to read our dedicated DE&I report.

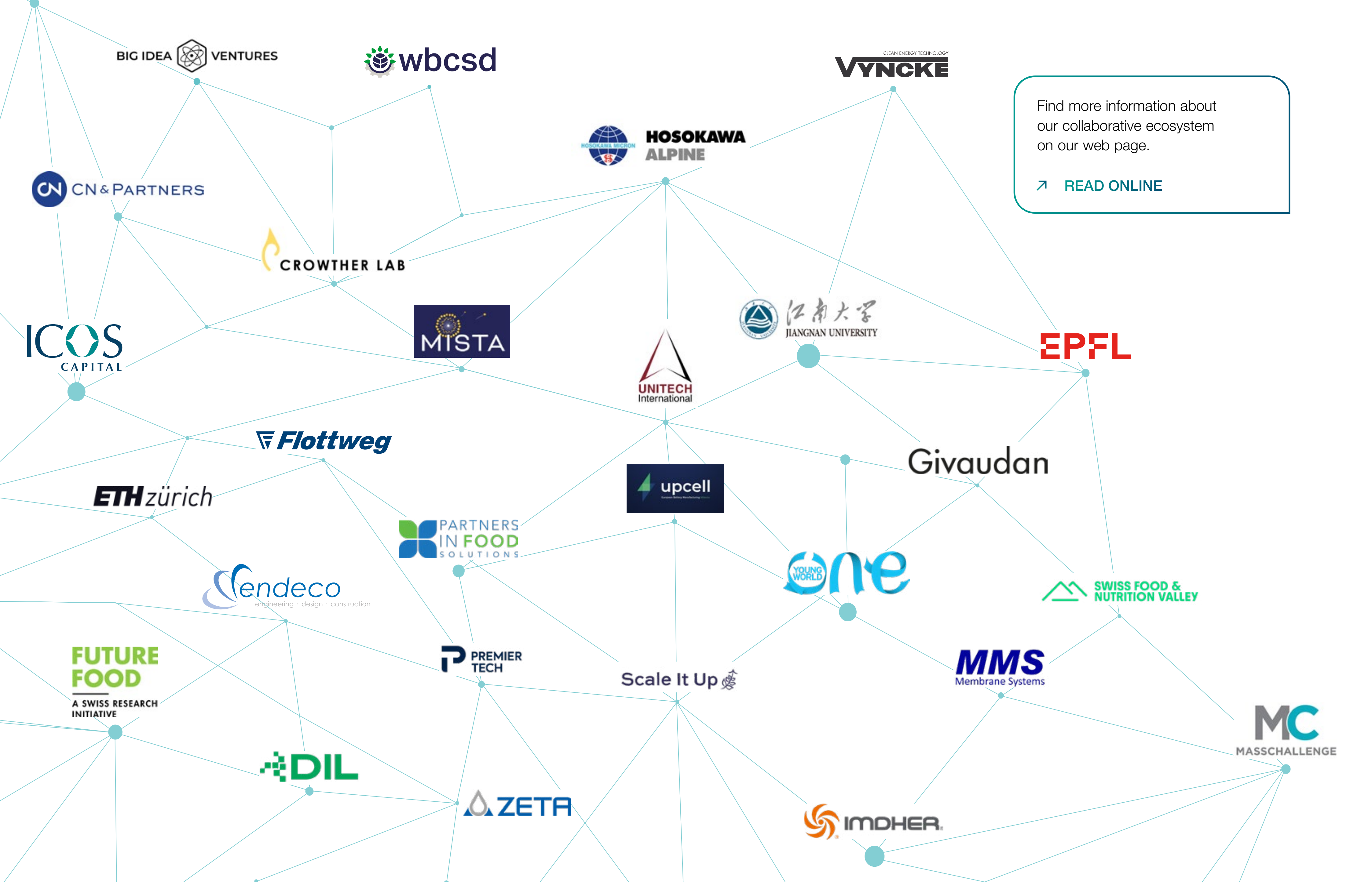
OUR COLLABORATIVE ECOSYSTEM

Bühler has consciously driven an ecosystem-based approach to innovation for more than 15 years with the goal of forming businesses that contribute to solving some of the burning issues of our times. Through collaboration we can do this faster. Today, our growing global network of academic partners, start-ups, NGOs, customers, and suppliers contribute to delivering pioneering technology and business solutions that tackle issues such as climate change, and food and energy security, and accelerate the transition to more sustainable mobility. Here are some examples of our many partnerships.

Ian Roberts, CTO, talks about the purpose behind our growing global network.

Find more information about our collaborative ecosystem on our web page.

↗ READ ONLINE



02
SUSTAINABILITY

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You can find the full Sustainability section of the Annual Report 2022 and more information on our web page.

↗ **READ ONLINE**

SUSTAINABILITY COMMITTEE

The Sustainability Committee was formed by the Executive Board to strengthen Bühler's sustainability strategy and execution plans. Its members include renowned international experts from outside Bühler as well as internal experts. It focuses on the delivery of environmental targets for climate with Scopes 1, 2 and 3, on circular economy, nature, and biodiversity.

SUSTAINABILITY COMMITTEE

Chairman
Stefan Scheiber

Committee Members

Dr. Ian Roberts

Dr. Mark Macus

Dr. Holger Feldhege

Expert external Committee Members

Prof. Dr. Tom Crowther

Prof. Dr. Lino Guzzella

SUSTAINABILITY COMMITTEE

+ Stefan Scheiber

+ Dr. Ian Roberts

+ Dr. Mark Macus

+ Prof. Dr. Tom Crowther

+ Prof. Dr. Lino Guzzella

+ Dr. Holger Feldhege

REPORTING OF TRACKED INDICATORS

Reporting with reference to the guidelines of the Global Reporting Initiative (GRI)

2022 was the second year of our 5-year reporting cycle for the period 2021-2025. In total, 56 KPIs have been disclosed this year, with the intention to increase this over the course of the coming reporting cycles.

In 2022 we continued improving our reporting methodology across all categories relevant to our company footprint, in particular all 30 manufacturing sites.

The following reporting is based on full calendar year data, providing a basis for more reliable absolute figures.

Bühler's focus on employee health and safety

In 2022, the success curve we have established in recent years in reducing occupational accidents suffered a small dip, with a slight increase in the number of work-related injuries. However, this confirms that the establishment of the 10 Lifesaving Rules and the Factory Safety Standards were the right decisions in pursuing our journey to "Zero harm". In 2022 we have worked intensively on safety awareness and safety culture and will continue to do so. Bühler's entire management team is committed to this goal and has taken up this challenge.

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, this continues to be the case, 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 (> 98%) of our global employees who have completed the required compliance training. This was achieved through a coordinated program across all functions and businesses in the regions. Further actions to stabilize and increase the completion rate are in preparation such as an automated de-activation process of the Windows account for employees who do not complete the mandatory e-learnings within the given timeframe.

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

Measuring and managing Bühler's impact on nature

In 2022 Bühler has significantly improved its understanding of the main levers affecting environmental sustainability across the organization. Bühler is committed to a 60% reduction of greenhouse gas emissions in Scopes 1 & 2 by 2030.[1] This is in comparison to a baseline year 2019. In 2022 the greenhouse gas emissions in Bühler's Scopes 1 and 2 as expressed by CO_2 equivalents are 15% lower compared to 2019 mainly as a consequence of shifting to renewable sources of electricity. At every site, we are in discussions with our energy providers to procure green electricity, or we cover the consumption of the site with renewable electricity certificates. In some locations we also generate renewable electricity on site. This leads us to report 50% renewable electricity at our manufacturing sites, in a market-based approach. We understand that certificates may not be a long-term solution going forward and will be continuously developing our green electricity strategy in 2023. Furthermore, our focus is on reducing consumption of energy and water and reducing the production of waste.

In 2022 we have improved our reporting methodology across all categories relevant to our company footprint. In Purchased Goods and Services, we have externally validated our calculations of 2019, 2021, and 2022 emissions. In upstream logistics, we had previously taken a conservative assumption proportional to downstream logistics. We have now calculated this value based on purchasing data. With the goal of reducing waste, reducing consumed raw materials, and reducing logistics emissions, we have worked with suppliers this year to change packaging used on our inbound materials. This has been implemented or tested in Bühler Sanmak and Bühler Wuxi.

In Logistics and Supply Chain we have piloted many projects this year, working with our suppliers to reduce emissions. Our outbound logistics emissions have reduced 35% this year (compared to 2019), and we can see that this is influenced by a reduction in distance travelled and reduction in the average emission factor, which is a result of improved container utilization and lower emitting modes of transport. We are striving to move production further towards "in the region for the region", which supports progress towards both points. In Bühler Leobendorf we have worked with suppliers to ensure some deliveries can be carried out with electric vehicles. We have supported one of our logistics providers to change one outbound route from fully truck delivery to intermodal transport using train for most of the journey. We have also changed internal processes to reevaluate our use of airfreight. Overall, we have intensified the collaboration with our suppliers to reduce climate impacts throughout the value chain. To date, 90% of our suppliers are aligned with Bühler's supplier code of conduct.

[1] Greenhouse Gas Protocol Scopes 1 & 2, 2019 baseline.

By far the largest potential climate impact that Bühler can have is in enabling emissions reductions for sold goods in customer operations and increasing the efficiency of its installed base. Bühler focuses on implementing innovative technologies and services for energy efficiency, higher yield, and waste reduction through circularity. A major step was achieved in 2022 by increasing the number of solutions which are quantified in terms of CO_2e impact in operations and other environmental metrics from 25 to 71. Bühler has also established the methodology to quantify avoided emissions and has tracked impact for 12 solutions benchmarked against our pre-2017 solutions. Going forward this methodology is being implemented to automatically track avoided emissions of newly installed projects and plants.

Bühler is committed to protecting and restoring biodiversity and is collaborating with Prof. Tom Crowther (ETH Zurich) to set up a science-informed program that will be reported in 2023.

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 employees and an inclusive culture

In the new reporting period, Bühler continued to expand its reporting of social KPIs 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 and the Women in STEM initiative and Employee Resource Groups, we aim to nurture an inclusive diverse work culture for all employees, partners, and customers. Learning and development remains a key pillar and receives increased focus at Bühler. Bühler executes against its lifelong learning commitment through apprenticeship programs, leadership development programs at all levels, and technical training offerings through a global network of Application & Training Centers and training schools complemented by learning and development modules on our global B-Learning portal. Training is available for employees, customers, and partners.

The Bühler Destination 25 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 for 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 KPIs among all employees.

Bühler continues to track its efforts through a set of standard HR KPIs to facilitate business strategy execution and help leaders make informed decisions and take corrective actions to drive performance and profitability.

More information on how Bühler fosters a TOP culture of inclusive diversity and lifelong learning and actions towards it can be found in Our People.

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 drive transparency can be found under certificates.

ECONOMY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Direct economic value generated: revenue		201-1	mCHF	N/A	2,981
Economic value distributed: operating costs, employee wages and benefits, payments to providers of capital and payments to government		201-1		N/A	
	Total		mCHF		2,848
	Operating Cost		mCHF		1,797
	Employee wages and benefits		mCHF		979
	Payments to providers of capital		mCHF		27
	Payments to government		mCHF		45
Economic value retained: 'direct economic value generated' less 'economic value distributed'		201-1	mCHF	N/A	1,502
Accelerate turnover growth in region Middle East Africa & India and create better balance in geographical diversification of Bühler			% of turnover	N/A	16
Number of Bühler sites internally audited on financial, operational, and compliance risk management		205-1	#	Best practice in definition with peers	8

ECONOMY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Total percentage of employees who finalized the compliance training broken down by region:		205-2		100%	
	North America		%		93.5
	South America		%		96.1
	Europe		%		97.4
	Middle East Africa & India		%		94.7
	Asia		%		98.4

NATURE KPIs

Key performance indicator (KPI)	Reference to GRI Standards	Unit/Metric	Target 2025	Baseline year 2019	2022
Number of Bühler solutions quantified for CO_2e impact in operations		#	N/A		71
Amount of estimated avoided emissions from selected services & technologies installed in 2022		t CO_2e/year	N/A		47,631 [1]
Employees involved in the Innovation Challenge		%	50%		Not reported this year
Employees involved in Generation B		%	20%		18
Significant partnerships reducing atmospheric CO_2e levels		#	N/A		3
Significant partnerships improving access to nutrition		#	N/A		1
Significant partnerships for education		#	N/A		11
Significant partnerships supporting biodiversity		#	N/A		1
Significant partnerships supporting start-ups		#	N/A		7
Energy consumption within the organization	302-1	GJ	Best practice based on operational and environmental risk	564,764	700,000
Total water withdrawal from all areas	303-3	m^3	Best practice based on operational and environmental risk	353,311	304,200

[1] Benchmarked against our solutions pre-2017; total emissions tracked: 140,000 since 2017.

NATURE KPIs

Key performance indicator (KPI)	Reference to GRI Standards	Unit/Metric	Target 2025	Baseline year 2019	2022
Total water withdrawal from areas with water stress	303-3	m^3	Best practice based on operational and environmental risk	74,440	87,400
Gross direct (Scope 1) GHG emissions	305-1	t CO_2e	Scope 1 & 2 (together) -60% by 2030	27,252	28,000
Gross indirect (Scope 2) GHG emissions – location based	305-2	t CO_2e	Target refers to market based	50,226	44,200
Gross indirect (Scope 2) GHG emissions – market based	305-2	t CO_2e	Scope 1 & 2 (together) -60% by 2030	41,455	30,300
Gross indirect (Scope 3) GHG emissions	305-3	t CO_2e	See individual subcategories	771,458	730,000
Gross indirect (Scope 3) GHG emissions – purchased goods and services	305-3	t CO_2e	Best practice based on operational and environmental risk	528,000	539,000
Gross indirect (Scope 3) GHG emissions – capital goods	305-3	t CO_2e	Best practice based on operational and environmental risk	0	0

NATURE KPIs

Key performance indicator (KPI)	Reference to GRI Standards	Unit/Metric	Target 2025	Baseline year 2019	2022
Gross indirect (Scope 3) GHG emissions – fuel and energy related activities	305-3	t CO_2e	Best practice based on operational and environmental risk	1,368	2,070
Gross indirect (Scope 3) GHG emissions – upstream transportation & distribution	305-3	t CO_2e	Best practice based on operational and environmental risk	41,000	30,000
Gross indirect (Scope 3) GHG emissions – waste generated from operations	305-3	t CO_2e	Best practice based on operational and environmental risk	5,957	5,600
Gross indirect (Scope 3) GHG emissions – business travel	305-3	t CO_2e	N/A	Not reported this year	26,800
Gross indirect (Scope 3) GHG emissions – employee commuting	305-3	t CO_2e	N/A	Not reported this year	Not reported this year
Gross indirect (Scope 3) GHG emissions – upstream leased assets	305-3	t CO_2e	Best practice based on operational and environmental risk	133	132
Gross indirect (Scope 3) GHG emissions – downstream transportation & distribution	305-3	t CO_2e	Best practice based on operational and environmental risk	195,000	123,000

NATURE KPIs

Key performance indicator (KPI)	Reference to GRI Standards	Unit/Metric	Target 2025	Baseline year 2019	2022
Gross indirect (Scope 3) GHG emissions – use of sold products	305-3	t CO_2e	N/A	Not reported this year	Not reported this year
Gross indirect (Scope 3) GHG emissions – end of life treatment of sold products	305-3	t CO_2e	N/A	Not reported this year	Not reported this year
GHG emissions intensity ratio for the organization	305-4	t CO_2e/1000h	N/A	42	41
Total weight of waste generated	306-3	t	Best practice based on operational and environmental risk	16,667	19,000
Total weight of waste generated - non-hazardous waste diverted from disposal	306-4	t	Best practice based on operational and environmental risk	13,232	13,700
Total weight of waste generated - hazardous waste diverted from disposal	306-4	t	Best practice based on operational and environmental risk	0	240
Total weight of waste generated – non-hazardous waste directed to disposal	306-5	t	Best practice based on operational and environmental risk	2,560	4,500 [1]
Total weight of waste generated – hazardous waste directed to disposal	306-5	t	Best practice based on operational and environmental risk	875	700
Percentage of top suppliers who have signed the Bühler supplier code of conduct or have an equivalent code	308-1	%	N/A	50	90

[1] This figure includes all Bühler locations globally, not just the manufacturing sites that were reported previously.

HUMANITY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Total number of new employees hired during the reporting period by region and globally split by:		401-1		Best practice in definition with peers	
Region and Gender (female | male | not assigned)	Total		#		1,779
	Global		#		385 | 1,390 | 4
	North America		#		27 | 140 | 0
	South America		#		23 | 92 | 0
	Europe		#		202 | 586 | 0
	Middle East Africa & India		#		39 | 210 | 4
	Asia		#		94 | 362 | 0

HUMANITY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Total number of new employees hired during the reporting period by region and globally split by:		401-1		Best practice in definition with peers	
Region and Born today - 1996	Global		#		462
	North America		#		53
	South America		#		30
	Europe		#		228
	Middle East Africa & India		#		36
	Asia		#		115
Region and Born 1981 - 1995	Global		#		989
	North America		#		70
	South America		#		71
	Europe		#		362
	Middle East Africa & India		#		186
	Asia		#		300

HUMANITY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Total number of new employees hired during the reporting period by region and globally split by:		401-1		Best practice in definition with peers	
Region and Born 1965 - 1980	Global		#		284
	North America		#		36
	South America		#		14
	Europe		#		167
	Middle East Africa & India		#		28
	Asia		#		39
Region and Born 1964 and earlier	Global		#		44
	North America		#		8
	South America		#		0
	Europe		#		31
	Middle East Africa & India		#		3
	Asia		#		2

HUMANITY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Total number of employee turnover during the reporting period globally and by region split by:		401-1		Best practice in definition with peers	
	Total		#		1,525
Region and Gender (female | male)	Global		#		324 | 1,201
	North America		#		18 | 134
	South America		#		28 | 57
	Europe		#		161 | 557
	Middle East Africa & India		#		21 | 120
	Asia		#		96 | 333

HUMANITY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Total number of employee turnover during the reporting period globally and by region split by:		401-1		Best practice in definition with peers	
Region and Born today - 1996	Global		#		163
	North America		#		19
	South America		#		12
	Europe		#		87
	Middle East Africa & India		#		5
	Asia		#		40
Region and Born 1981 - 1995	Global		#		741
	North America		#		50
	South America		#		51
	Europe		#		293
	Middle East Africa & India		#		102
	Asia		#		245

HUMANITY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Total number of employee turnover during the reporting period globally and by region split by:		401-1		Best practice in definition with peers	
Region and Born 1965 - 1980	Global		#		352
	North America		#		46
	South America		#		20
	Europe		#		162
	Middle East Africa & India		#		30
	Asia		#		94
Region and Born 1964 and earlier	Global		#		269
	North America		#		37
	South America		#		2
	Europe		#		176
	Middle East Africa & India		#		4
	Asia		#		50

HUMANITY KPIs

Key performance indicator (KPI)	Reference to GRI Standards	Unit/Metric	Target 2025	2022
Total leavers as a percentage of workforce	401-1	%	N/A	11.8
Rate of attrition	401-1	%	N/A	7.1
Percentage of apprentices who are hired subsequently to their apprenticeship (Uzwil)	401-1	%	N/A	66.22
Percentage of workers trained on occupational health and safety	403-4	%	N/A	92.15

HUMANITY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Work-related injuries (TRI rate)[1]		403-9	#		0.92
Percentage of training costs per total personnel costs		404-1	%	Best practice in definition with peers	0.72
Number of training days per full-time employee per year		404-1	#	Best practice in definition with peers	1.61
Percentage of employees by gender total for the following categories:		405-1		Best practice in definition with peers	
Region and Gender (female | male)	North America		%		15 | 85
	South America		%		16 | 84
	Europe		%		18 | 82
	Middle East Africa & India		%		12 | 88
	Asia		%		21 | 79

[1] Total recorded injury rate per 1,000 full-time equivalent employees over the year.

HUMANITY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Percentage of employees by gender total for the following categories:		405-1		Best practice in definition with peers	
	Born today - 1996 (female | male)		%		18 | 82
	Born 1981 - 1995 (female | male)		%		20 | 80
	Born 1965 - 1980 (female | male)		%		15 | 85
	Born 1964 and earlier (female | male)		%		12 | 88

HUMANITY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Percentage of employees by gender of supervisors for the following categories:		405-1		Best practice in definition with peers	
Region and Gender (female | male)	North America		%		18 | 82
	South America		%		20 | 80
	Europe		%		12 | 88
	Middle East Africa & India		%		11 | 89
	Asia		%		16 | 84

HUMANITY KPIs

Key performance indicator (KPI)		Reference to GRI Standards	Unit/Metric	Target 2025	2022
Percentage of employees by gender of supervisors for the following categories:		405-1		Best practice in definition with peers	
	Born today - 1996 (female | male)		%		20 | 80
	Born 1981 - 1995 (female | male)		%		19 | 81
	Born 1965 - 1980 (female | male)		%		12 | 88
	Born 1964 and earlier (female | male)		%		8 | 92
Number of relevant fines for non-compliance with laws and regulations in the social, economic and environmental area (>CHF 200,000)		419-1 & 307-1		Best practice in definition with peers	
	Total		#		0
	Social		#		0
	Economic		#		0
	Environment		#		0

MATERIALITY ASSESSMENT: A STAKEHOLDER PERSPECTIVE

To see the detailed results of this analysis, please refer to the detailed materiality assessment.

↗ DOWNLOAD PDF

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 is working on a renewed Enterprise Risk Management process that embeds all sustainability topics. It will be published in the next Annual Report.

For the 2020 materiality assessment, 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?

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:

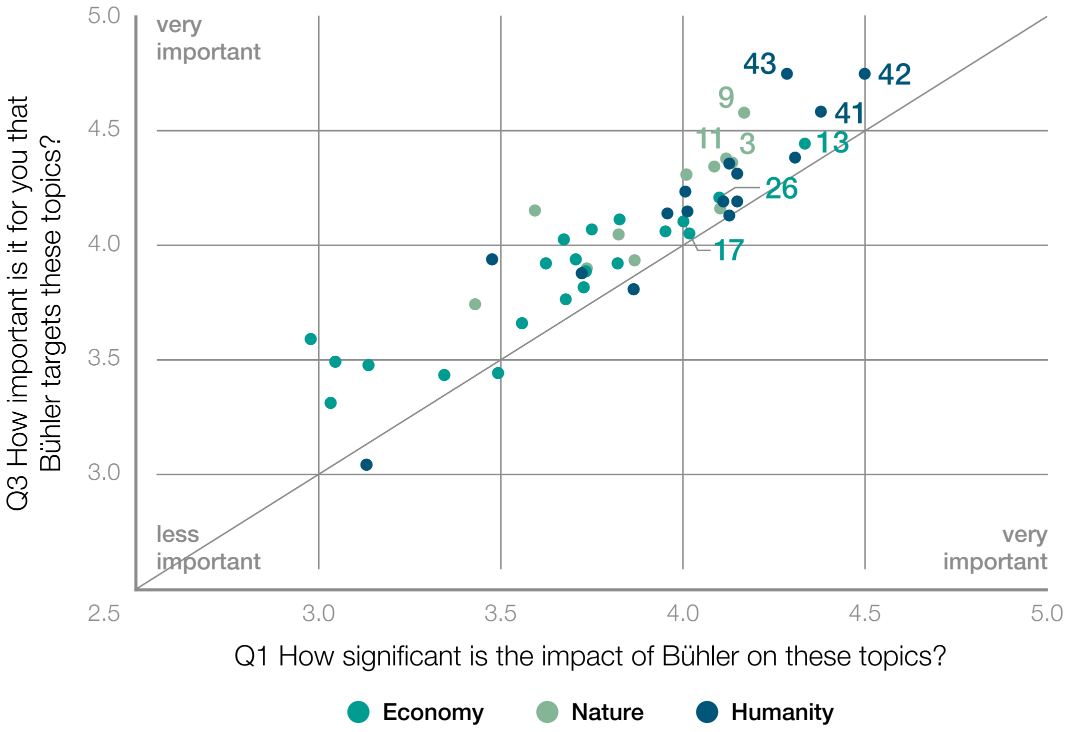
1. Energy consumption reduction within the value chain
2. Reducing greenhouse gas emissions in the value chain
3. Waste reduction within the value chain
4. Water usage reduction within the value chain

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

Find more information about the materiality assessment on our web page.

↗ READ ONLINE

Impacts of Bühler and perception of all stakeholders



OUR SUSTAINABILITY GOALS

We develop services and solutions for material transformation and processing, which improve the business outcome for our customers with a substantially lower environmental footprint. Our biggest impact comes from supporting our customers in reducing their energy consumption, waste generation, and water usage, reducing their CO_2e footprint and at the same time ensuring their productivity and yield.

We have clear targets on these topics. It is our goal to have solutions ready to multiply by 2025 that reduce energy, waste, and water by 50% in the value chains of our customers. We have developed a pathway to achieve 60% reduction of greenhouse gas emissions in our own operations by 2030.[1] Sustainability is embedded in all functions, responsibilities, and activities of our company.

There are three key elements that contribute to the transition of our industries: new solutions, services, and people (education, ecosystems, and the ability to build partnerships across value chains).

Beatrice Conde-Petit, Sustainability Officer, explains the acceleration of our sustainability activities.

[1] Greenhouse Gas Protocol Scopes 1 & 2, 2019 baseline.

Solutions

For Bühler, innovation and longevity are interconnected – the former is a cause for the latter. Since its origin in 1860, the world has undergone serial technological and market transformations. With its strong research and development (R&D) mindset, Bühler has always focused on how new scientific advances can provide potential benefits to customers at each evolutionary moment. We have for many years concentrated our R&D efforts on improving both commercial and sustainability performance.

Overall, reducing energy, waste, and water use along value chains and increasing circularity are core targets. Major opportunities lie in enabling a sustainable protein supply by reducing the CO_2e footprint and use of antibiotics in livestock, for instance with feed based on upcycling of side streams through insect rearing and processing. Developing great-tasting meat and dairy alternatives is another core theme which will be addressed through solutions leveraging plant-based protein valorization opportunities.

The biggest opportunities for the mobility industries lie in ultra-large structural aluminum parts (megacasting), improved battery components as well as optical systems to allow for autonomous and safe transportation.

Services

Services enable us to improve the performance and productivity of our customers' existing installed base and with this to minimize energy, waste, and water. With our services, we support our customers in their efforts to become more sustainable. We have over 1 million machines installed worldwide with more than 25,000 customers, and billions of people cover their basic needs for food and mobility every day with products manufactured using Bühler technology. By ensuring that our installed assets in the market run more efficiently, reduce energy, waste, and water, we and our customers together can make a major contribution to reducing the environmental impact of production.

People (education and ecosystems)

On a company level, sustainability is not just 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. On the individual level, it is about awareness and the right skills to take necessary decisions and actions.

Bühler has a strategy of people development and lifelong learning, 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 to establish systematic vocational training.

By expanding our collaborative ecosystem, we can accelerate meaningful and lasting impact in the food, feed, and mobility industries. Our growing global network of academic partners, start-ups, NGOs, customers, and suppliers contribute to delivering pioneering technology and business solutions that tackle issues such as climate change, food, and energy security, and accelerate the transition to more sustainable mobility. What makes our approach unique is our culture of innovation, experimentation and openness, and our willingness to share our ecosystem with our customers.

ADDRESSING OUR ENVIRONMENTAL IMPACT

We have developed a pathway to achieve a 60% reduction of greenhouse gas emissions in our own operations by 2030.[1] We are also addressing energy, waste, water, and the associated emissions.

Energy, water, and waste

Why it matters and our approach	+ GRI disclosure 302, 303, and 306
What we achieved	+ Energy
	+ Water
	+ Waste
	+ Impact on the SDGs

Find full information about energy, water, and waste on our web page.

↗ **READ ONLINE**

Emissions

Why it matters and our approach	+ GRI disclosure 305
What we achieved	+ Emissions
	+ Impact on the SDGs

Find full information about the emissions on our web page.

↗ **READ ONLINE**

[1] Greenhouse Gas Protocol Scopes 1 & 2, 2019 baseline.

QUANTIFICATION OF OUR ENVIRONMENTAL IMPACT

GRI disclosure 103-1 and 103-2

Every day, the food, feed, and materials processed on Bühler technologies help to feed an estimated 2 billion people and provide mobility for 1 billion people. With this global reach comes responsibility. This is why Bühler has set goals to have solutions ready to multiply by 2025 that reduce energy, waste, and water by 50% in the value chains of our customers (50/50/50). This focus was selected as we have the capability to bring impact in these areas. By doing this, we seek to support our customers to reach their sustainability targets, minimize their greenhouse gas emissions, and mitigate climate change. We believe it is only through ambitious targets that we will be able to sustainably feed and transport a growing global population by 2050.

To achieve these goals and to better understand our impact, Bühler launched its environmental quantification program in February 2020, to quantify the CO_2e footprint of the products processed through our technology, and the impact of our solutions and services on the CO_2e footprint of our customers' finished products.

Mitigating climate change is complex and will not be achieved if we are unable to measure the impact of our actions. The purpose of Bühler's environmental quantification program is to achieve just that. Measuring emissions is the priority in the emissions hierarchy. A major focus has been placed on quantifying the emissions occurring in the entire value chain and identifying the carbon hotspots and then taking appropriate action to maximize avoidance and reduction of CO_2e through services for more efficient processing, new solutions, and renewable energy sources. For this, Bühler quantifies the impact of our new solutions compared to previous solutions, to track our progress toward our 50/50/50 goals as well as the corresponding CO_2e reduction potential. Lastly, there is the need to draw down unavoidable emissions from the atmosphere in collaboration with companies such as Climeworks or Ecosystem Regeneration Projects from the Crowther Lab. This process aims at supporting our customers to actively and credibly compensate and/or neutralize their emissions.

Quantification of our CO_2e impact

Why it matters and our approach	+ GRI disclosure 103-1 and 103-2
What we achieved	+ Quantification of our CO_2e impact
	+ How we measure it
	+ Sector analysis
	+ Scopes
	+ Impact on the SDGs

The measured and managed boundaries of this management approach expand to all key products and the impact of all key technologies and services across the Group.

The management approach and its boundaries are under direct responsibility of the Bühler's Chief Technology Officer and Group Sustainability Officer. As a result, the respective team has been tasked to strategize and implement actions to mitigate the negative impacts which result from energy consumption.

Over the last year, Bühler has continued its engagement with colleagues on the topic of sustainability and CO_2e quantification. Also, the environmental quantification team has extended the quantification to be able to evaluate other environmental metrics: water depletion and land use.

Quarterly training and meetings took place with ambassadors and management in the regions and in the businesses to raise awareness of the topic and identify gaps in the quantifications. During these meetings, participants are encouraged to understand how we can further embed this in daily business activities to support our customers in reducing their carbon footprint.

Find full information about Quantification of our CO_2e impact on our web page.

↗ READ ONLINE

IMPACT SOLUTIONS AND SERVICES

To objectively track progress on our goals to have solutions ready to multiply by 2025 that reduce energy, waste, and water by 50% in the value chains of our customers, and to support our customers to quantify and reduce their environmental footprint, we have quantified the environmental footprint of all the key products processed through Bühler technology and quantified the impact of our key technologies and services. The environmental quantification includes CO_2e, land use, and water use.

Learn more about the impact solutions and services on our web page.

↗ READ ONLINE

The quantifications cover 20 value chains, over 40 different solution areas, and 71 high-impact technologies and services. We quantify the impact of technology to understand reductions in energy, waste, and water, and the CO_2e reduction at customer plants and within the entire value chain (from raw materials through to distribution). This carbon foot-printing method follows the ISO 14067 methodology and has been externally verified by an independent third party SGS.

We have also developed a service to enable customers to quantify, reduce, and certify the environmental footprint of their sites and products and to understand key reduction methods. More information on our environmental quantification service can be found here.

Bühler quantifies the impact of its new solutions, compared to previous solutions, in order to track our progress toward our goals to have solutions ready to multiply by 2025 that reduce energy, waste, and water by 50% in the value chains of customers, as well as measuring the CO_2e reduction potential. Also, with its environmental quantification service Bühler is able to quantify the impact of its customers' operations and products and link this with technologies and services that reduce impact.

In 2022, Bühler included land use as an important indicator in its environmental quantification. Insects for animal feed is an example of a solution that has the potential to contribute to saving land and, in turn, to creating a positive impact on biodiversity. High impact solutions for increasing circularity in terms of biomass and technical material have also been quantified. Examples include the utilization of protein-rich side streams for plant-based meat analogues and the service for remanufacturing die casting machines.

CERTIFICATES

Learn more about our certificates on our web page.

↗ READ ONLINE

BÜHLER AND THE SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals (SDGs) are the United Nation's universal call to action to end poverty, protect the planet, improve health and education, spur economic growth, and reduce inequalities. Bühler respects and supports all of the 17 SDGs and understands that the goals are interconnected. To simplify, Bühler has defined eight core SDGs where it focusses its efforts to drive positive impact, and five where it strives to make relevant contributions.

GRI CONTENT INDEX

Bühler has reported the information cited in this GRI content index for the period from January 1, 2022 to December 31, 2022 with reference to the GRI Standards.

GRI 1. Foundation 2021

	GRI Standard	Disclosure	More information
General	GRI 102: General Disclosures 2016	102-47 List of material topics	on pages 67, 68
	GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	on pages 72, 73
		103-2 The management approach and its components	on pages 72, 73
Economy	GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	on page 50
	GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	on page 50
		205-2 Communication and training about anti-corruption policies and procedures	on page 51

GRI CONTENT INDEX

	GRI Standard	Disclosure	More information
Nature	GRI 302: Energy 2016	302-1 Energy consumption within the organization	on pages 52, 71
	GRI 303: Water and Effluents 2018	303-3 Water withdrawal	on pages 52, 53, 71
	GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	on pages 53, 71
		305-2 Energy indirect (Scope 2) GHG emissions	on pages 53, 71
		305-3 Other indirect (Scope 3) GHG emissions	on pages 53, 54, 55, 71
		305-4 GHG emissions intensity	on pages 55, 71
	GRI 306: Waste 2020	306-3 Waste generated	on pages 55, 71
		306-4 Waste diverted from disposal	on pages 55, 71
		306-5 Waste directed to disposal	on pages 55, 71
	GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	on page 55

GRI CONTENT INDEX

	GRI Standard	Disclosure	More information
Humanity	GRI 401: Employment 2016	401-1 New employee hires and employee turnover	on pages 56, 57, 58, 59, 60, 61, 62
	GRI 403: Occupational Health and Safety 2018	403-4 Worker participation, consultation, and communication on occupational health and safety	on page 62
		403-9 Work-related injuries	on page 63
	GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	on page 63
	GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	on pages 63, 64, 65, 66
	GRI 419: Socioeconomic Compliance 2016	419-1 Non-compliance with laws and regulations in the social and economic area	on page 66
	GRI 307: Environmental Compliance 2016	307-1 Non-compliance with environmental laws and regulations	on page 66

03 GOVERNANCE

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You can find the full Governance section of the Annual Report 2022 and more information on our web page.

READ ONLINE

GROUP STRUCTURE 2022

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 2022

BUSINESSES

Grains & Food
Grain Quality & Supply
Milling Solutions
Value Nutrition
Digital Technologies

Consumer Foods
Bakery
Wafer
Biscuit
Chocolate & Coffee
Confectionery
Non-food

Advanced Materials
Die Casting
Leybold Optics
Grinding & Dispersing

REGIONS

North America
South America
Europe
Middle East Africa & India
Asia

Bühler is based in 140 countries.
Click here to find out more.

READ ONLINE

GROUP STRUCTURE 2022

BOARD OF DIRECTORS

Chairman
Calvin Grieder

Board Members
Frank N. J. Braeken
Jeannine Bühler
Karin Bühler
Dr. Maya Bühler
Christoph Goppelsroeder
Dr. Konrad Hummler
Stefan Scheiber
Rainer E. Schulz
Dr. Zeno Staub[1]
Linda Yang

Audit Committee
Rainer E. Schulz (Chairman)
Dr. Maya Bühler
Dr. Konrad Hummler

Nomination and Compensation Committee
Dr. Konrad Hummler (Chairman)
Karin Bühler
Jeannine Bühler
Frank N. J. Braeken

Find our Group Structure, all Boards, and CVs of our Board Members on our web page.

↗ READ ONLINE

[1] Appointed as a Member of the Board in Sept. 2022

BOARD OF DIRECTORS

Linda Yang

Member of the
Board of Directors

READ FULL CV ONLINE

+ Calvin Grieder
+ Rainer E. Schulz
+ Karin Bühler
+ Jeannine Bühler
+ Linda Yang
+ Dr. Konrad Hummler
+ Dr. Maya Bühler
+ Christoph Goppelsroeder
+ Stefan Scheiber
+ Frank N. J. Braeken
+ Dr. Zeno Staub

GROUP STRUCTURE 2022

EXECUTIVE BOARD

CEO
Stefan Scheiber

CFO
Dr. Mark Macus

CTO
Dr. Ian Roberts

Grains & Food
Johannes Wick

Manufacturing, Logistics & Supply Chain
Dr. Holger Feldhege

Consumer Foods
Germar Wacker

Human Resources
Irene Mark-Eisenring

Advanced Materials/ Services & Sales
Samuel Schär

Find our Group Structure, all Boards, and CVs of our Board Members on our web page.

↗ READ ONLINE

EXECUTIVE BOARD

+ Germar Wacker
+ Dr. Ian Roberts
+ Johannes Wick
+ Samuel Schär
+ Stefan Scheiber
+ Irene Mark-Eisenring
+ Dr. Mark Macus
+ Dr. Holger Feldhege

ADVISORY BOARD
URS BÜHLER INNOVATION FUND (UBIF)

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 UBIF

Chairman
Dr. Ian Roberts

Dr. Mark Macus
Dr. Thomas Beck
Prof. Dr. Edward S. Steinfeld
Prof. Dr.-Ing. Werner Bauer
Dr. Matthias Kaiserswerth
Prof. Dr. Lino Guzzella
Calvin Grieder
Peter Stähli

Founder and Honorary Member
Urs Bühler[1]

[1] Honorary member, stepped down Jan. 2021

ADVISORY BOARD
URS BÜHLER INNOVATION FUND (UBIF)

+ Urs Bühler

+ Dr. Ian Roberts

+ Calvin Grieder

+ Prof. Dr. Edward S. Steinfeld

+ Dr. Matthias Kaiserswerth

+ Prof. Dr.-Ing. Werner Bauer

ADVISORY BOARD
URS BÜHLER INNOVATION FUND (UBIF)

+ Prof. Dr. Lino Guzzella

+ Peter Stähli

+ Dr. Mark Macus

+ Dr. Thomas Beck

COLLABORATION PRINCIPLES

Find the Collaboration principles also on our web page.

↗ READ ONLINE

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 page 84. 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 is responsible for evaluating the balance of skills, knowledge, experience, and diversity of the Board, periodically reviewing the Board's structure, and identifying as well as managing the process of potential candidates to be appointed as Directors. Furthermore, 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.

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

Find the Compliance section also on our web page.

↗ READ ONLINE

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. The Russian war on Ukraine has increased relevance and workload of the Trade Compliance Team enormously, as the CEO has mandated the so-called Ukraine/Russia-Desk with full compliance checks of all activities going into the countries concerned. 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.

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, six 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.

Bühler Group ISO certification for quality and environmental management

In 2021 we managed to successfully re-certify the group ISO 9001:2015 and ISO 14001:2015 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, Beilngries/Döbeln (BSSE/BDOE), Germany, Bühler UK Limited, UK, Bühler Inc. (BMIN), USA, Buhler (China) Holding Co. Ltd. (BCHN), Wuxi, China; Wuxi Buhler Machinery Manufacturing Co. Ltd. (BWUX), China, Buhler (China) Machinery Manufacturing Co. Ltd. (BCMC), China, Buhler Premier Tech (Wuxi) Packing Machinery Co. Ltd. (BTEC), China and Bühler + Scherler AG (SCHS), Switzerland; all of which have successfully passed SGS audits.

Initial certification according to ISO 45001 for occupational safety and health

Further, we re-certified the Bühler AG sites in Uzwil and Appenzell in accordance with the ISO 45001:2018 standard with validity until December 2023.

SEDEX / SMETA 4-pillar certification

In addition to the sites Bühler AG (BUZ) in Uzwil, Switzerland, Buhler Machinery Manufacturing Co. Ltd. (BWUX) and Buhler (Changzhou) Machinery Co., Ltd. (BCHA), China, FHW Franz Haas Waffelmaschinen GmbH (BHWL), Austria and Buhler Aeroglide Corporation (BRAL), USA the locations in India, Buhler (India) Pvt. Ltd. (BBAN), Bangalore was 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

Find the Remuneration section also on our web page.

↗ READ ONLINE

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 oversees defining and periodically reviewing the Remuneration Policy. It prepares all the relevant decisions of the BoD around 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; and Christof Oswald, Head of HR Region Switzerland. Four meetings were held. The NCC Chairman reported to the Board of Directors after each meeting, and the minutes were kept and distributed in a timely manner.

REMUNERATION REPORT

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 principles

Bühler is committed to performance- and market-related remuneration. Success because 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.

REMUNERATION REPORT

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) to Business Perfmance (CTE [Contribution to 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 to ensure long-term sharing in the success of Bühler.
Orientation toward the labor market	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), success of the business (CTE) 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 ELEMENTS

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.

04
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FINANCIAL REPORT

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Financial Report
Bühler Group

Consolidated income statement

	Notes	2022 CHF m	2021 CHF m
Revenue	3.1	2,980.5	2,701.3
Other operating income	3.2	41.0	54.0
Total operating income		**3,021.5**	**2,755.3**
Cost of materials		–1,347.4	–1,196.3
Changes in inventories of finished goods and work in progress		4.8	6.5
Employee benefit expenses	3.3	–978.9	–939.2
Other operating expenses	3.4	–427.6	–402.1
Net result from associates	4.4	1.9	2.5
Operating result before interest, taxes, depreciation and amortization (EBITDA)		**274.3**	**226.7**
Depreciation and amortization	4.1/4.2/4.3	–75.7	–80.7
Operating result before interest and taxes (EBIT)		**198.6**	**146.0**
Interest income and expenses	3.5	1.8	–0.7
Other financial income	3.5	1.7	3.8
Financial result		**3.5**	**3.1**
Profit before taxes		**202.1**	**149.1**
Income taxes	3.6	–48.5	–35.9
Net profit		**153.6**	**113.2**
Attributable to:			
– Owners of the parent		146.9	108.2
– Non-controlling interests		6.7	5.0

Consolidated statement of comprehensive income

	Notes	2022 CHF m	2021 CHF m
Net profit		**153.6**	**113.2**
Other comprehensive income			
Translation differences of foreign operations		–74.3	–7.4
– Realized through income statement		0.0	0.9
Net gain (loss) on hedge of net investment		–11.7	–12.1
– Tax effect		1.1	1.1
Cash flow hedges			
– Changes recycled in the income statement		–8.2	–7.5
– Changes recognized in OCI		21.1	8.3
– Tax effect		–1.8	–0.1
Other comprehensive income to be reclassified to profit or loss in subsequent periods		**–73.8**	**–16.8**
Remeasurements of defined benefit plans	4.12.3	12.6	82.9
– Tax effect		–4.1	–13.1
Financial assets at fair value through OCI		6.5	5.9
– Tax effect		–0.7	–0.9
Other comprehensive income not to be reclassified to profit or loss in subsequent periods		**14.3**	**74.8**
Total other comprehensive income		**–59.5**	**58.0**
Total comprehensive income		**94.1**	**171.2**
Attributable to:			
– Owners of the parent		90.1	164.3
– Non-controlling interests		4.0	6.9

Consolidated balance sheet

Assets	Notes	Dec. 31, 2022 CHF m	Dec. 31, 2021 CHF m
Property, plant and equipment	4.1	637.3	659.3
Right-of-use assets	4.2	56.4	55.6
Intangible assets and goodwill	4.3	635.5	661.8
Investments in associates	4.4	38.4	28.6
Non-current financial and other assets	4.5	163.1	176.1
Deferred tax assets	3.6.4	47.1	55.5
Non-current assets		**1,577.8**	**1,636.9**
Assets classified as held for sale		0.0	2.4
Inventories	4.6	577.7	496.4
Contract assets relating to production orders in progress	3.1	309.6	259.6
Trade accounts receivable	4.7	550.5	553.9
Other receivables	4.7	150.7	126.5
Current income tax assets		16.7	5.8
Marketable securities and time deposits	2.3.2	94.3	87.1
Cash and cash equivalents	4.8	617.9	808.2
Current assets		**2,317.4**	**2,339.9**
Total assets		**3,895.2**	**3,976.8**
Equity and liabilities			
Share capital	4.13	15.0	15.0
Capital reserves		185.1	185.1
Other reserves / retained earnings		1,705.3	1,642.2
Equity attributable to the owners of the parent		**1,905.4**	**1,842.3**
Non-controlling interests		**35.6**	**35.2**
Total equity		**1,941.0**	**1,877.5**
Non-current financial liabilities	2.2	319.0	340.3
Non-current lease liabilities	4.2	40.3	39.7
Deferred tax liabilities	3.6.4	115.8	120.9
Defined benefit obligations	4.12.4	51.7	76.9
Non-current provisions	4.10	34.2	38.9
Non-current liabilities		**561.0**	**616.7**
Current financial liabilities	2.2	48.9	191.1
Current lease liabilities	4.2	15.6	15.1
Trade accounts payable	4.9	294.2	302.5
Contract liabilities relating to production orders in progress	3.1	665.1	623.5
Current provisions	4.10	47.7	59.3
Other current liabilities	4.11	281.4	266.1
Current income tax liabilities		40.3	25.0
Current liabilities		**1,393.2**	**1,482.6**
Total liabilities		**1,954.2**	**2,099.3**
Total equity and liabilities		**3,895.2**	**3,976.8**

Consolidated statement of changes in equity

	Notes	Share capital CHF m	Capital reserve CHF m	Retained earnings CHF m
January 1, 2021		15.0	185.1	1,835.6
Dividends paid	6.4			–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**
January 1, 2022		15.0	185.1	1,987.7
Dividends paid	6.4			–27.0
Changes in non-controlling interests				0.0
Net profit				146.8
Other comprehensive income				8.5
December 31, 2022		**15.0**	**185.1**	**2,116.0**

	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
	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**
	8.2	5.2	–358.9	1,642.2	1,842.3	35.2	1,877.5
				–27.0	–27.0	–3.6	–30.6
				0.0	0.0	0.0	0.0
				146.8	146.8	6.8	153.6
	11.1	5.8	–82.1	–56.7	–56.7	–2.8	–59.5
	19.3	**11.0**	**–441.0**	**1,705.3**	**1,905.4**	**35.6**	**1,941.0**

Consolidated statement of cash flows

	Notes	2022 CHF m	2021 CHF m
Profit before taxes		202.1	149.1
Financial result	3.5	–3.5	–3.1
Operating result before interest and taxes (EBIT)		**198.6**	**146.0**
Depreciation and amortization	4.1/4.2/4.3	75.7	80.7
Other items not affecting cash flow		–2.1	–4.6
Changes in provisions		–14.3	–9.6
Changes in trade accounts receivable		–18.9	20.5
Changes in inventories		–103.8	–38.9
Changes in trade accounts payable		7.0	85.0
Changes in contract assets/liabilities relating to production orders in progress		–9.0	75.9
Changes in other net operating assets		18.3	–50.1
Gains/losses on disposal of fixed assets		0.0	–3.3
Interest received		7.8	5.6
Interest paid		–4.5	–4.3
Income taxes paid		–45.1	–47.3
Cash flow from operating activities		**109.7**	**255.6**
Purchase of property, plant and equipment		–52.8	–33.2
Disposal of property, plant and equipment		7.1	4.5
Purchase of intangible assets		–6.5	–4.7
Cash flow from acquisition of Group companies, net of cash acquired		0.0	–12.9
Purchase of marketable securities and time deposits		–6.9	–54.6
Disposal of marketable securities and time deposits		5.6	42.8
Purchase of non-current financial assets		–15.3	–4.2
Disposal of non-current financial assets		9.4	0.1
Dividends received		0.2	4.9
Cash flow from investing activities		**–59.2**	**–57.3**
Proceeds from financial liabilities	2.2	0.0	0.0
Repayment of financial liabilities	2.2	–173.5	–50.2
Cash outflow for leases	4.2	–17.9	–19.0
Dividends paid of Bühler Holding AG	6.4	–27.0	–25.0
Dividends paid to non-controlling interests		–3.6	–4.8
Cash flow from financing activities		**–222.0**	**–98.9**
Translation differences		–18.8	0.6
Changes in cash and cash equivalents		**–190.3**	**100.0**
Cash and cash equivalents at the beginning of period		808.2	708.2
Cash and cash equivalents at the end of period		617.9	808.2

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, 2022, were authorized for issue in accordance with a resolution of the Board of Directors on February 10, 2023. 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.

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 rates 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.	
	2022 CHF	2021 CHF	2022 CHF	2021 CHF
BRL	0.1855	0.1697	0.1760	0.1630
CAD	0.7341	0.7296	0.6810	0.7170
CNY	0.1421	0.1417	0.1330	0.1445
CZK	0.0409	0.0422	0.0407	0.0416
DKK	0.1351	0.1454	0.1320	0.1390
EUR	1.0049	1.0814	0.9850	1.0370
GBP	1.1796	1.2580	1.1150	1.2340
INR	0.0122	0.0124	0.0112	0.0123
JPY	0.0073	0.0083	0.0069	0.0080
MXN	0.0475	0.0451	0.0477	0.0445
SGD	0.6925	0.6804	0.6862	0.6788
THB	0.0273	0.0286	0.0265	0.0275
USD	0.9551	0.9143	0.9260	0.9190
ZAR	0.0585	0.0619	0.0544	0.0582

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

2022
There was no significant addition in 2022.

2021
There was no significant addition in 2021.

Disposals

2022
There was no significant disposal in 2022.

2021
There was no significant disposal in 2021.

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

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 141.62	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
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 500,818.50	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.

2022	Currency pair	EUR/CHF	USD/CHF	CNY/CHF	GBP/CHF
Volatility		6.1%	8.1%	7.6%	8.7%
Effect on profit after taxes (rate increase) CHF m		0.2	1.1	6.1	0.7
Effect on profit after taxes (rate decrease) CHF m		–0.2	–1.1	–6.1	–0.7
Effect on equity (rate increase) CHF m		8.1	–13.7	4.6	–1.4
Effect on equity (rate decrease) CHF m		–8.1	13.7	–4.6	1.4

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

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 one corporate bond with a fixed interest rate, which is 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

2022	Book value Dec. 31, 2022 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	291.4	291.4	291.4		
Liabilities to associates and related parties	114.5	114.5	32.5	82.0	0.0
Other liabilities (incl. derivative financial instruments through profit or loss)	66.5	66.5	66.5	0.0	0.0
Corporate bond	236.2	241.4	1.4	240.0	0.0
Derivative financial instruments held for hedging	8.1	8.1	7.6	0.5	
Total	**716.7**	**721.9**	**399.4**	**322.5**	**0.0**

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**

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, 2022, the equity ratio amounts to 49.8% (prior year: 47.2%).

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.
- 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, 2022, all non-current private equity investments were considered strategic investments and their fair value amounted to CHF 40.6 million (prior year: 31.4 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, 2022, capital commitments of CHF 4.4 million (prior year: 7.1 million) had not yet been drawn.

Information on derivative financial instruments is disclosed in Note 2.3.

2022	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	617.9		24.8	599.1	1,241.8	1,241.8
Financial assets at fair value through profit or loss		80.0	28.0		108.0	108.0
Financial assets held for hedging		14.3	2.7		17.0	17.0
Financial assets at fair value through OCI			40.6		40.6	40.6
Total financial assets	**617.9**	**94.3**	**96.1**	**599.1**	**1,407.4**	**1,407.4**

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**

*and time deposits

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 2022 the Group has bought back CHF 4.2 million (prior year: CHF 28.9 million) of its own corporate bond obligations.

The corporate bond with a nominal value of CHF 180 million was repaid in full in December 2022.

2022	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	30.8	318.5	348.8	698.1	682.6
Financial liabilities at fair value through profit or loss	10.5			10.5	10.5
Financial liabilities held for hedging	7.6	0.5		8.1	8.1
Total financial liabilities	**48.9**	**319.0**	**348.8**	**716.7**	**701.2**

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**

Corporate bonds

Corporate bonds	Company	Term	Currency	Effective interest rate	Nominal value CHF m	Book value CHF m	Buy-backs CHF m	2022 CHF m	2021 CHF m
Bond, Switzerland 0.1%	Bühler Holding AG	12/2017 – 12/2022	CHF	0.11%	180.0	0.0	0.0	0.0	154.1
Bond, Switzerland 0.6%	Bühler Holding AG	12/2017 – 12/2026	CHF	0.55%	240.0	240.4	–4.2	236.2	237.5
Total corporate bonds					**420.0**	**240.4**	**–4.2**	**236.2**	**391.6**

The corporate bond is listed on the SIX Swiss Exchange.

Reconciliation of liabilities arising from financing activities

	2021 CHF m	Cash flows CHF m	Non-cash changes: Others CHF m	FX movement CHF m	Reclassification CHF m	2022 CHF m
Current financial liabilities	191.1	–172.2	10.1	0.0	19.9	48.9
Non-current financial liabilities	340.3	–1.3	–0.1	0.0	–19.9	319.0
Total liabilities from financing activities	**531.4**	**–173.5**	**10.0**	**0.0**	**0.0**	**367.9**

	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**

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, 2022:

	Contract or underlying principal amount		Positive fair values		Negative fair values	
2.3.1 Derivative financial instruments	**2022 CHF m**	**2021 CHF m**	**2022 CHF m**	**2021 CHF m**	**2022 CHF m**	**2021 CHF m**
Currency-related instruments						
Forward foreign exchange rate contracts	1,449.9	1,096.8	25.4	13.2	18.6	9.3
– held for trading	648.3	455.2	8.4	7.0	10.5	3.4
– cash flow hedges (effective part)	801.6	641.6	17.0	6.2	8.1	5.9
Over-the-counter currency options	0.0	0.0	0.0	0.0	0.0	0.0
Total of currency-related instruments	**1,449.9**	**1,096.8**	**25.4**	**13.2**	**18.6**	**9.3**
Options	0.0	0.0	0.0	0.0	0.0	0.0
Futures	1,449.9	1,096.8	25.4	13.2	18.6	9.3
Sum of derivative financial instruments	**1,449.9**	**1,096.8**	**25.4**	**13.2**	**18.6**	**9.3**
Thereof included in securities and in current financial liabilities	1,357.2	1,023.0	22.7	12.6	18.1	9.1
Thereof included in other non-current financial assets and financial liabilities	92.7	73.8	2.7	0.6	0.5	0.2

	USD CHF m	EUR CHF m	Other currencies CHF m	Total 2022 CHF m	Total 2021 CHF m
Currency-related instruments					
Forward foreign exchange rate contracts	385.9	764.2	299.8	1,449.9	1,096.8
– held for trading	116.1	373.8	158.4	648.3	455.2
– cash flow hedges	269.8	390.4	141.4	801.6	641.6
Total of currency-related instruments	**385.9**	**764.2**	**299.8**	**1,449.9**	**1,096.8**
Futures	385.9	764.2	299.8	1,449.9	1,096.8
Sum of derivative financial instruments	**385.9**	**764.2**	**299.8**	**1,449.9**	**1,096.8**

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.

Time deposits refer to fixed-term deposits with an original maturity term between 4 and 12 months.

2.3.2 Marketable securities and time deposits	2022 CHF m	2021 CHF m
Equity securities	1.3	1.4
Derivative financial instruments	22.7	12.6
Other securities	70.3	73.1
Total marketable securities and time deposits	**94.3**	**87.1**

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.

2022	CHF m	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss		74.0	8.4	25.6	108.0
Derivative financial assets held for hedging			17.0		17.0
Financial assets at fair value through OCI				40.6	40.6
Total financial assets		**74.0**	**25.4**	**66.2**	**165.6**
Financial liabilities at fair value through profit or loss			10.5		10.5
Financial liabilities held for hedging			8.1		8.1
Total financial liabilities		**0.0**	**18.6**	**0.0**	**18.6**

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**

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 2022	Grains & Food CHF m	Advanced Materials CHF m	Consumer Foods CHF m	Corporate Functions CHF m	Group CHF m
North America	245.9	126.8	149.9	0.5	523.1
South America	115.5	8.7	32.0	0.1	156.3
Europe	424.4	193.7	246.6	34.2	898.9
Middle East, Africa, South Asia	363.8	31.8	70.2	0.3	466.1
Asia	546.8	310.4	78.9	0.0	936.1
Total revenue by geography	**1,696.4**	**671.4**	**577.6**	**35.1**	**2,980.5**
Revenue recognized at a point in time	604.7	459.4	297.7	35.1	1,396.9
Revenue recognized over time	1,091.7	212.0	279.9	0.0	1,583.6
Total revenue by timing of revenue recognition	**1,696.4**	**671.4**	**577.6**	**35.1**	**2,980.5**
Revenue Project/Plant	1,091.6	491.9	413.1	28.5	2,025.1
Revenue Single Machines	201.2	12.7	4.4	4.8	223.1
Revenue Customer Service	403.6	166.8	160.1	1.8	732.3
Total revenue by product	**1,696.4**	**671.4**	**577.6**	**35.1**	**2,980.5**

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, Africa, South Asia	278.4	21.1	76.4	0.5	376.4
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**

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

Contract balances	2022 CHF m	2021 CHF m
Trade accounts receivable	**550.5**	**553.9**
Production orders in progress	605.2	544.7
Advance payments from customers	–295.6	–285.1
Contract assets relating to production orders in progress	**309.6**	**259.6**
Production orders in progress	109.5	43.9
Advance payments from customers	–774.6	–667.4
Contract liabilities relating to production orders in progress	**–665.1**	**–623.5**
Accumulated costs and recognized profits	2,338.5	2,220.6

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 623.5 million was recognized in the income statement in the current year (prior year: CHF 539.1 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	2023 CHF m	2024 CHF m	2025 CHF m	2026 CHF m
Project/Plant	1,453.8	273.4	30.0	0.1
Single Machines	86.0	2.0	0.0	0.0
Customer Service	262.5	6.2	0.9	0.3

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

	2022 CHF m	2021 CHF m
Dividend income	0.1	0.2
Earnings from coordination of consortium business	0.9	1.1
Gains from sale of fixed assets	3.0	4.1
Gains from sale of scrap materials	5.2	5.4
Government grants	6.2	10.1
Interest income from trade finance	2.0	2.0
License revenue	3.5	2.5
Rental income	1.8	2.1
Supplier discounts	1.7	1.6
Other operating income related parties	0.4	0.5
Others	16.2	24.4
Total	**41.0**	**54.0**

Others comprises a number of individually immaterial items.

3.3 Employee benefit expenses

	2022 CHF m	2021 CHF m
Wages and salaries	751.8	721.2
Social security and employee benefit expenses	158.8	153.0
Other personnel expenses	68.3	65.0
Total	**978.9**	**939.2**

3.4 Other operating expenses

	2022 CHF m	2021 CHF m
Administration expenses	100.5	99.1
Rental and leasing expenses	20.7	21.2
Energy, maintenance and repairs	39.4	38.5
Travel expenses	74.1	55.3
Outbound freight costs	106.5	96.6
Consultancy fees	20.6	20.1
Marketing costs	15.9	7.8
Agency fees	23.4	19.7
Warranty costs, loss orders	0.0	0.2
Contributions and memberships	3.9	4.3
Fixed assets < 10 kCHF	3.9	3.8
Losses on accounts receivable	4.4	1.5
Losses on sales of fixed assets	3.0	0.8
Other operating expenses related parties (Note 6.2, Related parties)	11.2	12.1
Others	0.1	21.1
Total	**427.6**	**402.1**

3.5 Financial result

	2022 CHF m	2021 CHF m
Interest income	8.3	5.8
Interest income from related parties	0.1	0.1
Interest expenses	–5.0	–4.8
Interest expenses from related parties	–1.6	–1.8
Total interest income and expenses	**1.8**	**–0.7**
Total other financial income	**1.7**	**3.8**
Total financial result	**3.5**	**3.1**

The interest expenses of CHF –5.0 million (prior year: CHF –4.8 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 financial investments.

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	**2022 CHF m**	**2021 CHF m**
Income taxes relating to the reporting period	–49.3	–37.0
Income taxes relating to prior periods	–0.6	–2.6
Deferred taxes due to temporary differences	–1.2	6.4
Deferred taxes due to recognition of tax loss carry-forwards	0.6	–3.7
Deferred taxes due to changes in tax rates	2.0	1.0
Total	**–48.5**	**–35.9**
Deferred taxes recognized in other comprehensive income	–5.5	–13.0

3.6.2 Reconciliation of income taxes	**2022 CHF m**	**2021 CHF m**
Profit before taxes	202.1	149.1
Components of tax expenses:		
Income taxes at anticipated tax rate	–39.7	–31.0
Income and expenses not subject to tax	–4.9	2.1
Income taxes relating to prior periods	–0.6	–2.6
Deferred taxes due to changes in tax rates	2.0	1.0
Effect of tax loss carry-forwards	2.6	0.7
Effect of losses without recognition of deferred tax assets	–0.5	–0.9
Other impacts	–7.4	–5.2
Income taxes disclosed (current and deferred)	–48.5	–35.9
Total income taxes in % of profit before taxes	24.0%	24.1%

The anticipated tax rate was 19.6% (prior year 20.8%) and consisted of the weighted average of the applicable local tax rates for income taxes. The effective tax rate decreased sligthly to 24.0% in 2022 from 24.1% in 2021. 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	2022 CHF m	2021 CHF m
Expiry		
Unlimited	102.7	86.6
In more than five years	15.7	21.2
In two to five years	14.1	16.8
Within one year	7.9	2.7
Total	**140.4**	**127.3**
Tax loss carry-forwards accounted for in deferred taxes	130.4	114.0
Tax loss carry-forwards not accounted for in deferred taxes	10.0	13.3
Tax effect on tax loss carry-forwards unaccounted for	2.4	3.1

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

	2022 CHF m		2021 CHF m	
3.6.4 Breakdown of deferred taxes per line item	Assets	Liabilities	Assets	Liabilities
Property, plant and equipment	4.1	28.3	5.0	29.7
Post-employment benefits	8.8	13.3	10.1	9.4
Provisions	5.4	2.1	20.4	2.2
Other items (mainly inventory, construction contracts and other current liabilities)	101.6	177.5	99.8	188.9
Tax loss carry-forwards	32.6	0.0	29.5	0.0
Total deferred taxes gross	**152.5**	**221.2**	**164.8**	**230.2**
Offset	–105.4	–105.4	–109.3	–109.3
Total deferred taxes net	**47.1**	**115.8**	**55.5**	**120.9**

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 140.8 million (prior year: CHF 141.5 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, 2021	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**
Additions	3.6	6.6	8.9	35.4	54.5
Disposals	–0.2	–10.4	–6.6	–2.1	–19.3
Changes in the scope of consolidation	0.0	0.0	0.0	0.0	0.0
Reclassifications	1.3	3.1	1.0	–5.4	0.0
Translation differences	–20.1	–13.3	–5.0	–0.7	–39.1
December 31, 2022	**608.8**	**328.4**	**137.3**	**40.3**	**1,114.8**
Depreciation					
January 1, 2021	–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**
Additions	–18.1	–23.3	–11.0	0.0	–52.4
Disposals	0.1	8.4	6.0	0.0	14.5
Changes in the scope of consolidation	0.0	0.0	0.0	0.0	0.0
Impairment	0.0	0.0	0.0	0.0	0.0
Reclassifications	0.0	0.0	0.0	0.0	0.0
Translation differences	6.8	9.3	3.7	0.0	19.8
December 31, 2022	**–157.1**	**–219.7**	**–100.7**	**0.0**	**–477.5**
Net book values					
January 1, 2022	478.3	128.3	39.6	13.1	659.3
December 31, 2022	451.7	108.7	36.6	40.3	637.3

Net gain on disposal of tangible fixed assets amounted to CHF 0.0 million (prior year: net gain CHF 3.3 million). Commitments relating to property, plant, and equipment, which are not shown in the balance sheet, amounted to CHF 7.1 million (prior year: CHF 3.1 million) and are mainly related to a new warehouse in Brazil, to a learning center in Switzerland and to machinery in Switzerland, Germany and Singapore.

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, 2021	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**
Additions	16.7	3.7	1.8	22.2
Disposals	–6.8	–3.4	–0.7	–10.9
Translation differences	–3.8	–0.6	–0.2	–4.6
December 31, 2022	**92.5**	**10.6**	**3.9**	**107.0**
Depreciation				
January 1, 2021	–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**
Additions	–13.3	–3.0	–0.9	–17.2
Disposals	5.3	3.2	0.6	9.1
Translation differences	1.8	0.3	0.1	2.2
December 31, 2022	**–43.2**	**–5.7**	**–1.7**	**–50.6**
Net book values				
January 1, 2022	49.4	4.7	1.5	55.6
December 31, 2022	49.3	4.9	2.2	56.4

Lease liabilities

Maturity analysis	Real estate leasing CHF m	Vehicle leasing CHF m	Other assets CHF m	2022 CHF m
Less than one year	12.4	2.5	0.7	15.6
One to five years	27.4	2.6	1.4	31.4
More than five years	8.8	0.0	0.1	8.9
December 31, 2022	**48.6**	**5.1**	**2.2**	**55.9**

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**

Amounts recognized in profit and loss	2022 CHF m	2021 CHF m
Depreciation expense on right-of-use assets	17.2	18.1
Interest expenses (included in finance costs)	0.8	0.9
Rental and leasing expenses including related parties		
Expense relating to short-term leases	6.0	4.5
Expense relating to low-value leases	1.1	1.0
Expense relating to service expenses	1.1	7.6
Expense relating to insurance	11.1	6.9
Expense relating to other	1.4	1.2
Total recognized in profit and loss	**38.7**	**40.2**

Amounts recognized in the statement of cash flows	2022 CHF m	2021 CHF m
Cash outflow for leases	**17.9**	19.0

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, 2021	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**
Additions	0.0	0.0	6.5	6.5
Disposals	0.0	0.0	–1.7	–1.7
Changes in the scope of consolidation	0.0	0.0	0.0	0.0
Translation differences	–22.4	–4.9	–4.0	–31.3
December 31, 2022	**542.4**	**96.8**	**140.9**	**780.1**
Amortization				
January 1, 2021	–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**
Additions	0.0	0.0	–6.1	–6.1
Disposals	0.0	0.0	1.7	1.7
Changes in the scope of consolidation	0.0	0.0	0.0	0.0
Translation differences	0.6	0.0	4.0	4.6
December 31, 2022	**–24.6**	**0.0**	**–120.0**	**–144.6**
Net book values				
January 1, 2022	539.6	101.7	20.5	661.8
December 31, 2022	517.8	96.8	20.9	635.5

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.

As of 2022 Consumer Food represents the lowest level at which goodwill is monitored for internal management purposes. Therefore, the Goodwill related to Haas was tested for impairment on Business Unit level before changing the reporting to the operating segment of Consumer Foods.

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, 2022 and 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 2022	Goodwill CHF m	Trademarks CHF m	Base data used (goodwill / trademarks) Discount rate	Long-term growth rate	Revenue growth	EBIT margin growth
Milling Solutions	18.2	0.0	6.7%	2.1%	6.0%	0.4%
Grain Quality & Supply	33.7	0.0	6.9%	2.5%	6.6%	0.7%
Digital Technologies	6.4	0.0	7.8%	2.6%	8.7%	1.7%
Value Nutrition	67.9	0.0	6.8%	2.3%	5.5%	0.4%
Die Casting	1.5	0.0	8.5%	1.9%	8.2%	1.2%
Grinding & Dispersing	0.7	0.0	8.2%	1.8%	8.4%	0.5%
Leybold Optics	88.0	3.2	8.6% / 9.2%	2.1% / 2.4%	4.7% / 10.8%	0.9% / -
Consumer Foods	301.4	10.4	5.7% / 6.1%	2.1% / 2.1%	5.6% / 3.7%	1.1% / -
Haas	0.0	83.2	5.9%	2.5%	4.4%	-
December 31, 2022	**517.8**	**96.8**				

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**				

4.4 Investments in associates

Net book values	Share in equity CHF m	Goodwill CHF m	2022 CHF m	2021 CHF m
January 1	20.7	7.9	28.6	32.1
Additions	9.8	0.0	9.8	0.0
Share of net profit	1.9	0.0	1.9	2.5
Dividends received	–0.2	0.0	–0.2	–4.8
Translation differences	–1.2	–0.5	–1.7	–1.2
December 31	**31.0**	**7.4**	**38.4**	**28.6**

Translation differences are recognized in other comprehensive income. The Group purchased goods in the amount of CHF 11.7 million (prior year: CHF 14.7 million) and sold goods in the amounts of CHF 2.8 million (prior year: CHF 3.9 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	2022 CHF m	2021 CHF m
Share of revenue	26.0	23.4
Share of net profit	2.2	2.5
Balance sheet values:		
Non-current assets	14.0	7.6
Current assets	31.6	25.7
Non-current liabilities	1.2	0.1
Current liabilities	16.5	9.0
Shareholders' equity	27.9	24.2

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. In 2022, Bühler invested in three additional associated companies, two in Central Europe with 50% shareholding each, and one in Mexico with 49%. The figures are based on available preview closing data as of December 31, 2022.

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4.5 Non-current financial and other assets

December 31, 2022	Due 1–5 years CHF m	> 5 years CHF m	Total CHF m
Securities	18.9	49.7	68.6
Other non-current financial assets	20.8	6.7	27.5
Overfunding of post-employment benefit plans	0.0	67.0	67.0
Total	**39.7**	**123.4**	**163.1**

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**

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 –58.8 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	2022 CHF m	2021 CHF m
Raw materials and supplies	306.2	–38.1	268.1	211.4
Unfinished goods	61.8	–11.5	50.3	46.3
Finished goods and merchandise	56.0	–10.0	46.0	54.3
Work in progress	145.8	0.0	145.8	132.7
Advance payments to suppliers	67.5	0.0	67.5	51.7
Total	**637.3**	**–59.6**	**577.7**	**496.4**

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 56.6 million (prior year: CHF 50.3 million), which are financed in accordance with the treasury strategy.

Receivables outstanding analysis. On an annual basis an expected credit loss evaluation is performed. The analysis covers financial assets and includes contract assets. The result did not show any material deviation from what was recorded as an allowance for bad debts neither in the current nor the prior year.

	2022 CHF m	2021 CHF m
– from third parties	560.9	568.5
– from related parties	0.0	0.1
Allowance for bad debts	–10.4	–14.7
Total trade accounts receivable	**550.5**	**553.9**

	2022 CHF m	2021 CHF m
Value added tax credits	56.4	34.1
Other receivables		
– from third parties	47.6	39.8
– from associates	1.5	1.3
– from related parties	0.1	0.1
Prepayments	45.7	52.6
Allowance for bad debts	–0.6	–1.4
Total other receivables	**150.7**	**126.5**

Receivables outstanding analysis

2022	Total book value Dec. 31, 2022 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	710.6	612.5	61.7	11.0	6.4	3.7	15.3
Allowance for bad debts	–11.0	–0.1	–1.2	–0.2	–0.3	0.0	–9.2
Associated companies and other related parties	1.6	1.6					
Total accounts receivable, net	**701.2**	**614.0**	**60.5**	**10.8**	**6.1**	**3.7**	**6.1**

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**

Allowance for bad debts

	2022 CHF m	2021 CHF m
January 1	–16.1	–19.8
Additions	–3.5	–2.1
Consumption	5.1	3.6
Release	3.0	2.2
Translation differences	0.5	0.0
December 31	**–11.0**	**–16.1**

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

	2022 CHF m	2021 CHF m
– to third parties	291.5	299.5
– to associates	1.9	2.0
– to related parties	0.8	1.0
Total	**294.2**	**302.5**

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 53% (prior year: 64%) 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	2022 CHF m	2021 CHF m
January 1	42.2	36.1	19.9	98.2	109.3
Additions	3.8	9.3	5.6	18.7	28.4
Utilization	–1.5	–3.5	–4.9	–9.9	–23.7
Release	–14.5	–0.5	–8.3	–23.3	–14.3
Reclassification	0.0	0.0	0.0	0.0	0.0
Translation differences	–0.8	–0.8	–0.2	–1.8	–1.5
December 31	**29.2**	**40.6**	**12.1**	**81.9**	**98.2**
Thereof current	27.1	8.9	11.7	47.7	59.3
Thereof non-current	2.1	31.7	0.4	34.2	38.9

Contingent liabilities

	2022 CHF m	2021 CHF m
Guarantees and other obligations	12.1	13.7
Total	**12.1**	**13.7**

4.11 Other current liabilities

	2022 CHF m	2021 CHF m
Value added tax owed	18.4	15.3
Other liabilities		
– to third parties	54.6	52.8
– to related parties	0.0	0.7
Personnel-related accruals	85.0	76.1
Other accruals	123.4	121.2
Total	**281.4**	**266.1**

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	2022	2021
Discount rate (weighted)	2.4%	0.4%
Future salary increases	1.5%	1.0%
Future pension increases	0.1%	0.1%

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.

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 2.0% (prior year: 3.1%) / an increase of 2.1% (prior year: 3.3%) 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: 0.2%) / increase of 0.2% (prior year: 0.2%) 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 8.4 years (prior year: 12.7 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	**2022 CHF m**	**2021 CHF m**
Defined benefit obligation at January 1	1,393.5	1,488.4
Interest costs	5.5	3.0
Current service costs (employer)	27.9	27.3
Contributions by plan participants	18.7	17.6
Benefits (paid) / deposited	–65.5	–79.6
Other effects	1.3	0.5
Remeasurements on obligations	–211.0	–59.6
Currency translation adjustments	–6.8	–4.1
Defined benefit obligation at December 31	**1,163.7**	**1,393.5**
Reconciliation of the fair value of plan assets		
Fair value of plan assets at January 1	1,478.9	1,401.3
Interest	4.8	2.2
Contributions by the employer	24.5	24.5
Contributions by plan participants	18.7	17.6
Benefits (paid) / deposited	–60.6	–73.7
Return on plan assets (excluding interest)	–133.4	108.0
Currency translation adjustments	–4.2	–1.0
Fair value of plan assets at December 31	**1,328.7**	**1,478.9**
Actual return on plan assets	–128.6	110.1

4.12.3 Remeasurements of defined benefit plans	2022 CHF m	2021 CHF m
Return on plan assets excluding interest income	133.4	–108.0
Current-year actuarial loss (gain) on benefit obligation:		
– change in demographic assumptions	–0.1	–57.6
– change in financial assumptions	–201.5	–31.5
– experience adjustments	–9.4	29.5
Change in effect of asset ceiling	65.0	84.7
Remeasurements recognized in other comprehensive income	**–12.6**	**–82.9**
Cumulative amount recognized in other comprehensive income	**118.4**	**131.0**

4.12.4 Reconciliation of the amount recognized in the balance sheet at year-end	2022 CHF m	2021 CHF m
Present value of funded defined benefit obligation	1,163.7	1,393.5
Fair value of plan assets	1,328.7	1,478.9
Deficit/(surplus)	–165.0	–85.4
Adjustment to asset ceiling	149.7	84.7
Liability (asset) recognized in the balance sheet	**–15.3**	**–0.7**
Thereof recognized as separate asset	–67.0	–77.6
Thereof recognized as separate liability	51.7	76.9

4.12.5 Pension expenses recognized in the income statement	2022 CHF m	2021 CHF m
Current service costs (employer)	27.9	27.3
Net interest employee benefit	0.7	0.8
Other effects	1.3	0.5
Expenses recognized in the income statement	**29.9**	**28.6**
Thereof service costs and administration costs	29.2	27.8
Thereof net interest on the net defined benefit liability (asset)	0.7	0.8

4.12.6 Best estimate of contributions	2023 CHF m
Contributions by the employer	**25.3**

4.12.7 Plan assets at fair value consist of	2022 CHF m	2021 CHF m
Equity instruments third parties	413.4	487.5
Debt instruments third parties	316.0	360.1
Real estate	512.7	514.8
Cash and cash equivalents	25.9	53.4
Others	60.7	63.1
Total plan assets at fair value	**1,328.7**	**1,478.9**
Thereof quoted	778.8	915.8
Thereof unquoted	549.9	563.1

4.12.8 Information about significant plans	2022 Switzerland	2022 Austria	2022 Germany	2021 Switzerland	2021 Austria	2021 Germany
Discount rate	2.3%	4.0%	4.1%	0.3%	1.1%	1.3%
Future salary increases	1.5%	3.3%	1.5%	1.0%	2.5%	1.6%
Costs of defined benefit plans	27.0	0.7	0.9	26.4	0.8	1.1
Remeasurements employee benefits	3.9	–5.1	–14.6	–73.0	–0.3	–6.7

4.12.9 Defined contribution plan	2022 CHF m	2021 CHF m
Expenses for defined contribution plan	**8.1**	**8.1**

4.13 Share capital

As of December 31, 2022, 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 2022	Grains & Food CHF m	Advanced Materials CHF m	Consumer Foods CHF m	Corporate Functions CHF m	Group CHF m
Segment revenue	1,702.8	671.6	581.7	35.1	2,991.2
Less intersegment revenue	–6.4	–0.2	–4.1	0.0	–10.7
Total segment revenue third parties	**1,696.4**	**671.4**	**577.6**	**35.1**	**2,980.5**
EBIT	142.2	52.0	3.5	0.9	198.6
in % of revenue	8.4%	7.7%	0.6%	2.6%	6.7%
Non-current assets	**413.2**	**190.7**	**511.2**	**252.5**	**1,367.6**

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**

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	2022 CHF m	2021 CHF m
North America	523.1	446.4
South America	156.3	124.4
Europe	898.9	869.5
Middle East, Africa, South Asia	466.1	376.4
Asia	936.1	884.6
Total	**2,980.5**	**2,701.3**
- thereof Switzerland	83.3	69.8
- thereof US	369.5	320.6
- thereof China	662.4	588.7

Segment non-current assets	2022 CHF m	2021 CHF m
North America	131.1	134.5
South America	8.4	7.7
Europe	1,051.7	1,074.2
Middle East, Africa, South Asia	18.0	19.8
Asia	158.4	169.1
Total	**1,367.6**	**1,405.3**
- thereof Switzerland	375.8	358.3
- thereof US	130.3	133.6
- thereof China	145.4	157.8

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

6. Other disclosures

6.1 Assets pledged or assigned to secure own liabilities

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

6.2 Related parties

Related-party transactions. Total loans from the shareholders of CHF 82.0 million (prior year: CHF 102.0 million) are disclosed under non-current financial liabilities and of CHF 29.7 million (prior year: CHF 27.7 million) under current financial liabilities. A loan toward the shareholders in the amount of CHF 19.5 million (prior year: CHF 20.4 million) is disclosed under other non-current financial assets.

Expenses for rental, energy, and maintenance to related parties amounted to CHF 11.2 million (prior year: 12.1 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 0.2 million as per 2022 (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 9.3 million (prior year: CHF 8.3 million). In addition, pension and social security contributions of CHF 1.4 million (prior year: CHF 1.8 million) are recorded as expenses. The provisions and liabilities for other long-term benefits amount to CHF 10.3 million (prior year: CHF 2.2 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.

6.3 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 2022 the Group received government grants of CHF 6.2 million (prior year: CHF 10.1 million).

6.4 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 27.0 million) or CHF 180.00 (prior year: CHF 180.00) per registered share with a nominal value of CHF 100 and CHF 72.00 (prior year: CHF 72.00) per registered share with a nominal value of CHF 40. The dividend payment to the shareholders of Bühler Holding AG amounted to CHF 27.0 million in the financial year 2022 (prior year: CHF 25.0 million).

6.5 Release for publication of the consolidated financial statement

The consolidated financial statements were released for publication by the Board of Directors of Bühler Holding AG on February 10, 2023.

6.6 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 2022, the consolidated balance sheet as at 31 December 2022, the consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated 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 2022 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 the Swiss Standards on Auditing (SA-CH). Our responsibilities under these regulations 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 16 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	Profit before tax
Rationale for the materiality benchmark applied	We chose profit before tax as the benchmark because, in our view, it is the benchmark against which the performance of the Group is most commonly measured, and it is a generally accepted benchmark.

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 a counting 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 1'583.6 million were recorded over time using the input method to measure progress towards complete 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 other 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 sample 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 614.6 million) and they are not amortized 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 reviewed management's assessment of the presumed indefinite useful lives of brands. • 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 basis for purposes of the impairment testing of goodwill and intangible assets with indefinite useful life.

Other information

The Board of Directors is responsible for the other information. The other information comprises the information included in the annual report, but does not include the financial statements, the consolidated financial statements and our auditor’s reports thereon.

Our opinion on the consolidated financial statements does not cover the other information 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 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.

Board of Directors' responsibilities 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 SA-CH 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 more detailed description of our responsibilities for the audit of the consolidated financial statements can be found on the EXPERTsuisse website: http://www.expertsuisse.ch/en/audit-report. This description forms an integral part of our report.

Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and PS-CH 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
Licensed audit expert Auditor in charge	Licensed audit expert

Zürich, 10 February 2023

Financial Statements Bühler Holding AG

Income statement Bühler Holding AG

	Notes	2022 CHF m	2021 CHF m
Investment income	11	97.1	104.6
Financial income	12	15.1	16.2
Other operating income	14	8.1	8.1
Total operating income		**120.3**	**128.9**
Investment expenses	15	–3.3	–2.7
Financial expenses	16	–9.3	–5.9
Exchange losses on foreign currency valuation	13	–12.4	–9.9
Employee benefit expenses		–0.9	0.0
Other operating expenses	17	–6.7	–7.9
Operating expenses		**–32.6**	**–26.4**
Profit before taxes		**87.7**	**102.5**
Taxes		–0.2	–0.2
Net profit		**87.5**	**102.3**

Balance sheet Bühler Holding AG

Assets	Notes	2022 CHF m	2021 CHF m
Cash and cash equivalents		359.0	317.1
Other accounts receivable third parties		0.8	0.4
Other accounts receivable Group	5	116.7	84.6
Current loans third parties		6.1	0.0
Current loans Group	5	7.2	0.4
Accrued income and prepaid expense		0.2	0.2
Current assets		**490.0**	**402.7**
Non-current securities		7.9	7.9
Other financial assets third parties		0.0	18.0
Other financial assets related parties	8	19.5	20.4
Other financial assets Group	6	583.0	655.5
Investments	18	893.6	883.1
Non-current assets		**1,504.0**	**1,584.9**
Total assets		**1,994.0**	**1,987.6**

Equity and liabilities	Notes	2022 CHF m	2021 CHF m
Current financial liabilities third parties	9	0.0	154.1
Current financial liabilities related parties	8	25.0	25.0
Accounts payables third parties		0.1	0.0
Accounts payables Group	7	221.1	99.1
Current provisions	10	9.0	9.9
Other current liabilities third parties		0.5	0.4
Other current liabilities Group	7	1.8	1.9
Deferred income and accrued expense		1.0	1.0
Current liabilities		**258.5**	**291.4**
Non-current financial liabilities third parties	9	235.8	237.0
Non-current financial liabilities related parties	8	82.0	102.0
Non-current liabilities		**317.8**	**339.0**
Total liabilities		**576.3**	**630.4**
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		1,032.1	956.8
Net profit		87.5	102.3
Total equity		**1,417.7**	**1,357.2**
Total equity and liabilities		**1,994.0**	**1,987.6**

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:

	2022 CHF	2021 CHF
CNY	0.1330	0.1445
EUR	0.9850	1.0370
GBP	1.1150	1.2340
USD	0.9260	0.9190

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
240	38,960,608	0.60%	12/21/2017 – 12/21/2026	12/21/2026

In 2022 the Group has bought back CHF 4.2 million (prior year: CHF 28.9 million) of its own corporate bond obligations.

The corporate bond with a nominal value of CHF 180 million was repaid in full in December 2022.

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

	2022 CHF m	2021 CHF m
Guarantees and other obligations in favor of third parties	542.7	499.7

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, 2024.

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

	2022 CHF m	2021 CHF m
Balance brought forward from prior year	1,032.1	956.8
Net profit of the year	87.5	102.3
Available earnings at the disposal of the General Meeting	**1,119.6**	**1,059.1**
The Board of Directors proposes to the General Meeting:		
- The distribution of a dividend	27.0	27.0
- Carry forward to new accounting period	1,092.6	1,032.1

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 1.0 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 (the Company), which comprise the income statement for the year ended 31 December 2022, the balance sheet as at 31 December 2022 and notes to the financial statements for the year then ended, including a summary of significant accounting policies.

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

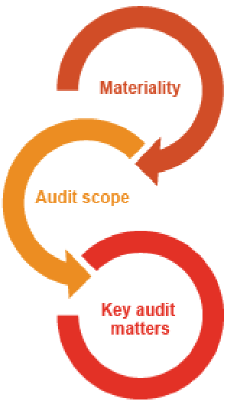
Basis for opinion

We conducted our audit in accordance with Swiss law and Swiss Standards on Auditing (SA-CH). Our responsibilities under these regulations 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 Company 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 Company, the accounting processes and controls, and the industry in which the Company operates.

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

Valuation of Investments

PricewaterhouseCoopers AG, Birchstrasse 160, Postfach, 8050 Zürich, Switzerland
Telefon: +41 58 792 44 00, www.pwc.ch

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 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	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.

Key audit matters

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 893.6 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 2022.

Other information

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

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

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the 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.

Board of Directors' responsibilities 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 Company'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 Company 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 SA-CH 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 more detailed description of our responsibilities for the audit of the financial statements can be found on the EXPERTsuisse website: http://www.expertsuisse.ch/en/audit-report. This description forms an integral part of our report.

Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and PS-CH 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
Licensed audit expert Auditor in charge	Licensed audit expert

Zürich, 10 February 2023