

+GF+



Going forward
and shaping the future

Management Review 2022

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Financial key figures 2022

Click here to see the [sustainability key figures](#).

Sales
in CHF million



- GF Piping Systems
- GF Casting Solutions
- GF Machining Solutions

EBIT
in CHF million



- GF Piping Systems
- GF Casting Solutions
- GF Machining Solutions

EBIT before one-offs
in CHF million



- GF Piping Systems
- GF Casting Solutions
- GF Machining Solutions

Sales in CHF million

3'998

2022



2021



2020



EBIT in CHF million

391

2022



2021



2020



EBIT margin in %

9.8

2022



2021



2020



EBIT before one-offs in CHF million

391

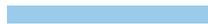
2022



2021



2020



EBIT margin before one-offs in %

9.8

2022



2021



2020



Net profit shareholders GF in CHF million

276

2022



2021



2020



ROIC in %

23.4

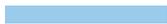
2022



2021



2020



Earnings per share in CHF

3.37

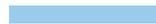
2022



2021



2020



Free cash flow before acquisitions/divestments in CHF million

146

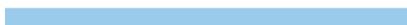
2022



2021



2020



Number of employees

15'207

2022



2021



2020



	GF Corporation		GF Piping Systems		GF Casting Solutions		GF Machining Solutions	
CHF million	2022	2021	2022	2021	2022	2021	2022	2021
Order intake	4'227	4'058	2'319	2'211	965	907	945	941
Orders on hand	931	814	442	326	284	276	206	213
Sales	3'998	3'722	2'160	1'971	892	880	948	873
Sales growth %	7.4	16.9	9.6	15.4	1.4	17.1	8.7	20.3
Organic growth %	13.5	15.9	13.3	14.3	17.2	15.9	10.9	19.9
EBITDA	507	412	341	302	99	63	81	61
EBITDA margin %	12.7	11.1	15.8	15.3	11.1	7.2	8.6	7.0
EBIT	391	278	291	247	55	5	67	47
Return on sales (EBIT margin) %	9.8	7.5	13.5	12.5	6.2	0.5	7.0	5.4
Net profit shareholders GF	276	214						
Basic earnings per share in CHF	3.37	2.62						
Free cash flow before acquisitions/divestments	146	151						
Invested capital (IC)	1'277	1'355	705	630	326	504	196	151
Return on invested capital (ROIC) %	23.4	16.4	35.6	32.1	11.2	0.3	31.7	21.9
Net debt (+)/Net cash (-)	-159	54						
Number of employees	15'207	15'111	8'085	7'686	3'570	4'008	3'398	3'282

Strong FY2022 results with all-time high profitability

The page features a dark teal background with two decorative blue lines. One is a thick, light blue line that starts on the left and slopes upwards towards the right. The other is a thin, white line that starts on the left and slopes downwards towards the right.

Dear shareholders,

In 2022, GF's business momentum further accelerated, mainly driven by increasing sales of products and solutions with environmental or social benefits. Among these were solutions for water treatment, as well as solutions to minimize water losses in urban infrastructure, lightweight components for sustainable mobility and highly energy-efficient machine tools. Organically, sales grew strongly in the US (+21%) and Europe (+11%) and remained stable in China, despite significant headwinds related to the pandemic and its adverse effects on the country's economy.

The strategic thrust to focus on resilient and sustainable end markets with innovative solutions, as well as the initiatives to further develop GF's Winning Culture, paid off and enabled GF to withstand persisting macroeconomic challenges, such as the impact of the war in Ukraine, COVID-19 lockdowns across China and high inflation rates.

Group results

Order intake reached CHF 4.2 billion (+4.2%, +10.3% organically). Sales amounted to CHF 4.0 billion, an increase of 7.4% (13.5% organically) compared with 2021, supported by price adjustments and strong US and European markets. Overall, sales were impacted by negative currency effects of approximately CHF 142 million.

The operating result (EBIT) rose 41% to CHF 391 million. The EBIT margin reached the highest level ever recorded at GF with 9.8%, already well within the target range set in the Strategy 2025. In 2021, these figures were CHF 278 million and 7.5%, respectively.

The return on invested capital (ROIC) reached an excellent 23.4% (2021: 16.4%), exceeding the ambitious average target range in the Strategy 2025 (20%–22%). GF Piping Systems and GF Machining Solutions achieved remarkable ROIC levels of 35.6% (2021: 32.1%) and 31.7% (2021: 21.9%), while GF Casting Solutions' ROIC was 11.2% (2021: 0.3%).

At the end of 2022, 15'207 employees worked for GF, compared with 15'111 employees at year-end 2021 (+0.6%).

Free cash flow reached a high level of CHF 201 million (2021: CHF 110 million). Free cash flow before acquisitions/divestments amounted to CHF 146 million, compared with CHF 151 million the year before.

Net profit attributable to shareholders of GF amounted to CHF 276 million (2021: CHF 214 million), reflecting an increase of 29%.

In April 2022, GF successfully divested its 50% stake in the joint venture in Mills River (US) between GF Casting Solutions and Linamar Corp., Guelph (Ontario, Canada), while GF Machining Solutions acquired 100% of Italy-based Vam Control S.r.l. in July 2022, to further strengthen its service and engineering offering in Europe. As a consequence of the war in Ukraine, GF ended its trading operations in Russia in the first quarter of 2022 and closed its representative office in Moscow during the course of the year.



Yves Serra, Chairman of the Board of Directors, and Andreas Müller, CEO

On 28 April 2022, GF shares were split at a ratio of 1:20 to allow for higher trading volumes. Earnings per share were up to CHF 3.37 compared with CHF 2.62 in 2021, adjusted for the share split. At the upcoming Annual Shareholders' Meeting, the Board of Directors will propose a dividend per share of CHF 1.30 compared with CHF 1.00 in the previous year (adjusted for the share split).

GF Piping Systems

Sales for the first time surpassed the CHF 2 billion mark at CHF 2'160 million, representing a growth of 9.6% and an organic growth of 13.3% compared with the previous year (CHF 1'971 million). EBIT stood at CHF 291 million, 18% above the previous year (CHF 247 million), resulting in a EBIT margin of 13.5%, compared with 12.5% in 2021.

Segments such as microelectronics, process automation and water treatment continued to drive the performance of GF Piping Systems, which is successfully present in growth markets that address important sustainability megatrends across the world.

The division recorded a strong organic growth in the Americas (+21%) and a solid organic growth in Europe (+5%), thanks to its strong industrial presence in these markets. ([See how GF Piping Systems is supporting its Belgian customer Ekopak in building containerized systems for decentralized water treatment](#)). This helped mitigate the effects of the COVID-19 lockdowns in China and a softer Building Technology market in China and Europe. Input price increases were successfully passed on to the market, contributing to growth.

GF Casting Solutions

GF Casting Solutions reached sales of CHF 892 million (2021: CHF 880 million), an increase of 1.4% (organically +17.2%). The strong organic growth is the result of favorable demand for components for e-vehicles, an increase of supplies for industrial applications, higher metal prices and a rebound of the aerospace market. Growth was negatively affected by the divestment of the Joint Venture in the US and currency effects.

Sales of components for e-vehicles increased by 27% to CHF 112 million. Lifetime order intake for e-vehicle components amounted to CHF 566 million (2021: CHF 433 million) with a share of 57% of the total light-metal orders. EBIT came in at CHF 55 million (2021: CHF 5 million), considerably higher than in the previous year. The EBIT margin reached 6.2% (2021: 0.5%), supported by a good performance in the second half of the year.

In April 2022, the division sold its 50% stake in the light metal foundry in Mills River (US) to its joint venture partner. The division subsequently entered into a strategic partnership with Mexico-based Bocar Group, a light metal castings and assemblies solutions provider, to develop and invest in new technologies and services to support customers in North America, Europe and China on their way toward sustainable mobility. The new facility in Shenyang (China) has started the delivery of aluminum and magnesium components to the local customers. ([See how GF Casting Solutions and BMW are working on new approaches for the efficient production of light car bodies.](#))

GF Machining Solutions

GF Machining Solutions reached an order intake of CHF 945 million, representing an organic growth of 3%, thanks to robust end markets, such as medical and new mobility, but also due to a recovering aerospace industry. Sales increased by 8.7% (10.9% organically) to CHF 948 million (2021: CHF 873 million), thanks to a good market development in milling applications and strong sales in laser texturing and electrical discharging machining (EDM). Sales of solutions with automation also strongly increased and customer service remained a solid pillar of the division.

The APAC region and European markets were key drivers of the organic growth, and while the business in China was affected by the COVID-19-related lockdowns, sales remained at the previous year's level. Despite supply chain disruptions for components, EBIT of the division reached CHF 67 million (2021: CHF 47 million), leading to an EBIT margin of 7.0% (2021: 5.4%).

The division reinforced its position as an industrial technology leader with a high innovation rate. GF Machining Solutions is pursuing its strategy to strengthen customer experience and service offerings. ([See how GF Machining Solutions supports Swiss-based Berhalter Group in producing cost-efficient food packaging with new composite materials.](#))

Strategy 2025 on track; sustainability deeply embedded in GF's business

GF's strategic focus on solutions addressing customers' sustainability needs is generating steady growth. At GF Piping Systems, these are, for example, solutions to minimize losses in cooling systems or water infrastructure. GF Casting Solutions focuses on components to reduce the weight of e-vehicles. Replacing chemical etching with laser texturing is another such example from GF Machining Solutions. The strong and well-balanced presence in Europe, Asia and the Americas is another key factor that strengthens the resilience of GF and enabled the company to grow substantially in 2022 despite strong headwinds.

GF is jointly reporting all financial and ESG [key figures](#) for the first time together in its 2022 Corporate Reports. In the year under review, GF reached an important milestone with its near-term greenhouse gases (GHG) emissions targets being validated by the SBTi (Science Based Targets Initiative). The company is steadily investing in its own processes and facilities to reduce CO₂e emissions. In 2022, scope 1 and 2 emissions were reduced by 14% compared with 2021, well in line with the Sustainability Framework 2025. GF is also pursuing a culture change to unleash the full potential of its most important asset, its people. The company strives to create and foster a [diverse and inclusive work environment](#), where inspiration, collaboration and innovation empower employees to perform at their best and are key elements to attract and retain talent.

Proposed changes to the Board of Directors

GF has announced it will propose Michelle Wen and Monica de Virgiliis as new members of the Board of Directors at the next Annual Shareholders' Meeting on 19 April 2023. These experienced senior executives will further deepen the Board's expertise on key strategic topics, such as global purchasing and supply chains, as well as the energy and semiconductor fields. GF also announced that Jasmin Staiblin will not stand for re-election due to GF's 12 year-limit on Board tenure, while Riet Cadonau has decided not to stand for re-election for personal reasons. GF warmly thanks Jasmin Staiblin and Riet Cadonau for their excellent service over the years.

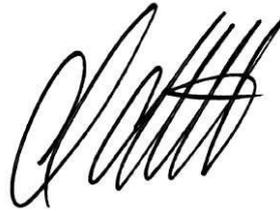
Outlook 2023

Geopolitical and macroeconomic uncertainties are persisting in 2023, and are thus further limiting visibility for the full year. However, GF expects its strong position in resilient market segments and its balanced global presence to partially offset possible recessions in various markets. GF is well positioned in growing segments, such as semiconductors and water treatment for GF Piping Systems. GF Casting Solutions is set to further benefit from the increasing demand of e-vehicle components and GF Machining Solutions has already started 2023 with a solid order book. GF expects a further recovery in previously subdued markets, such as aerospace or marine. Markets in China are also expected to stabilize and further grow after the COVID-19-induced slowdowns. Barring any unforeseen circumstances, GF expects to continue growing with an operating profitability in the Strategy 2025 corridor (EBIT margin 9–11%).

We would like to take this opportunity to express our heartfelt thanks to our shareholders for their ongoing trust, and to our employees, business partners and customers for continuing to support GF on its journey to become an innovation and sustainability leader.



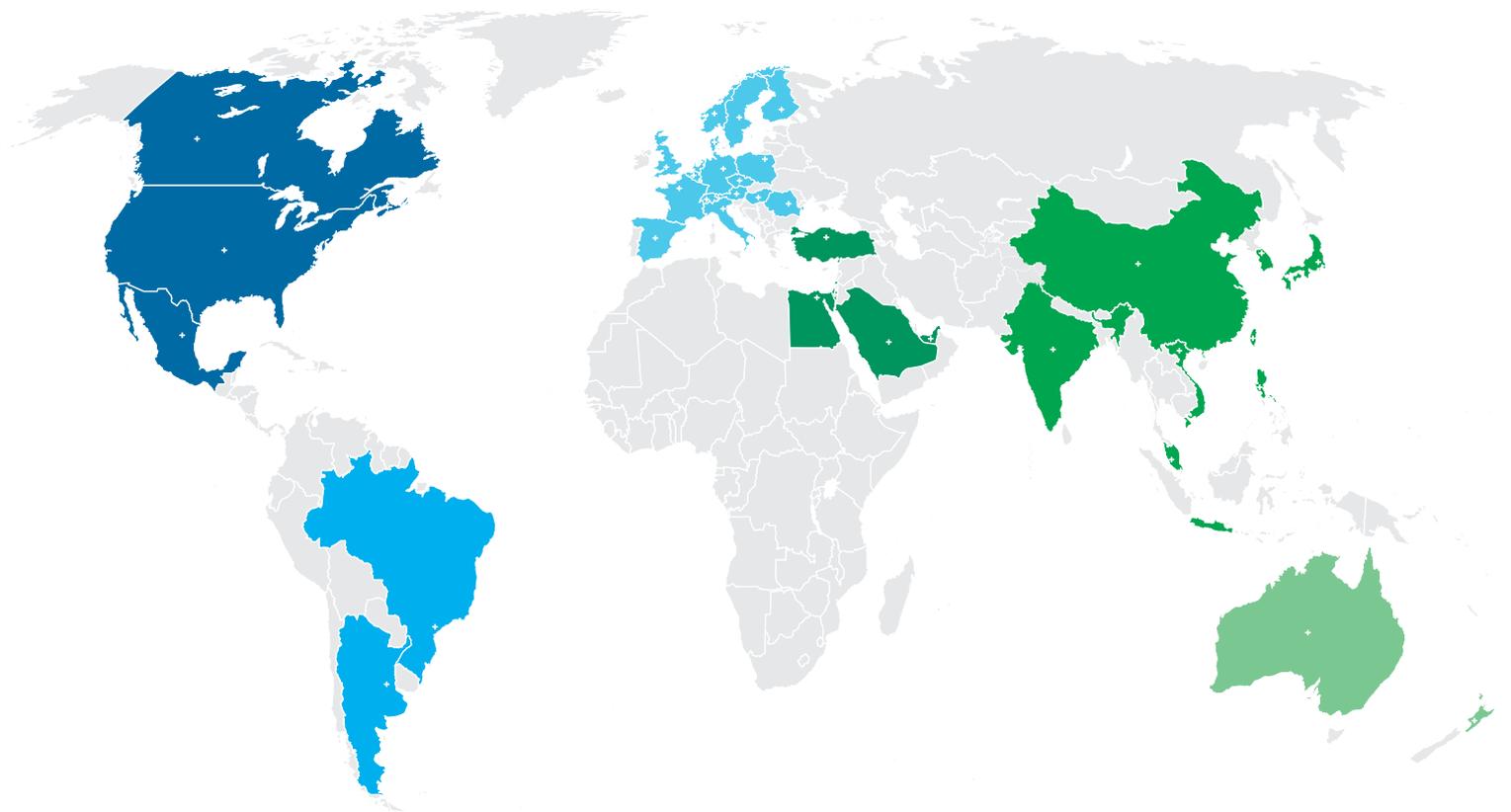
Yves Serra
Chairman of the Board of Directors



Andreas Müller
CEO

Our Corporation

GF – with its three divisions GF Piping Systems, GF Casting Solutions, and GF Machining Solutions – offers products and solutions that enable the safe transport of liquids and gases, as well as lightweight casting components and high-precision manufacturing technologies. As a sustainability and innovation leader, GF strives to achieve profitable growth while offering superior value to its customers for more than 200 years. Founded in 1802, the Corporation is headquartered in Switzerland and present in 34 countries with 138 companies, 60 of which are production companies with 83 facilities. GF's 15'207 employees worldwide generated sales of CHF 3'998 million in 2022.



- North America 17 Locations
- South America 5 Locations
- Europe 80 Locations
- Middle East 13 Locations
- Asia 72 Locations
- Oceania 5 Locations

 Find all places of GF at:
annual-report.georgfischer.com/22/en/our-corporation-2022/

GF Piping Systems at a glance

As the leading flow solutions provider for the safe and sustainable transport of fluids, GF Piping Systems creates connections for life. The division focuses on industry-leading leak-free piping solutions for numerous demanding end-market segments. Its strong focus on customer-centricity and innovation is reflected by its global sales, service, and manufacturing footprint and its award-winning portfolio, including fittings, valves, pipes, sensors, automation, fabrication, and jointing technologies.

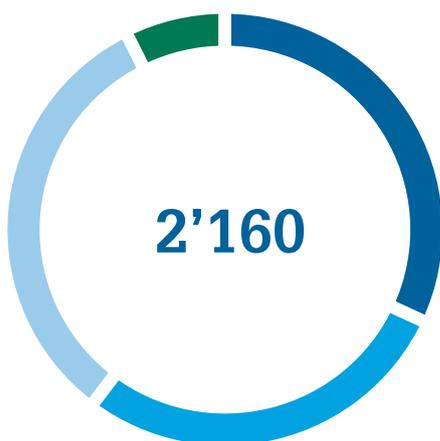
Key figures

CHF million	2022	2021
Order intake	2'319	2'211
Orders on hand at year-end	442	326
Sales	2'160	1'971
Sales growth %	9.6	15.4
Organic growth %	13.3	14.3
EBITDA	341	302
EBITDA margin %	15.8	15.3
EBIT	291	247
Return on sales (EBIT margin) %	13.5	12.5
Invested capital (IC)	705	630
Return on invested capital (ROIC) %	35.6	32.1
Number of employees	8'085	7'686

Number of employees

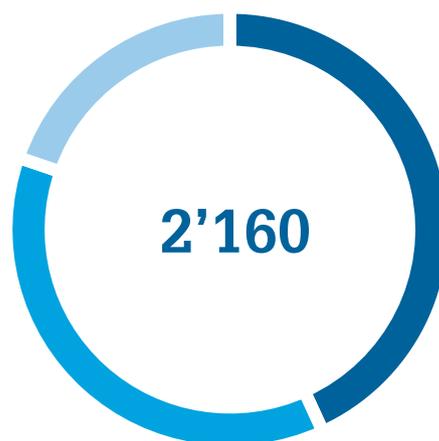
8'085

Sales per region in CHF million



- 32% Europe
- 28% Americas
- 33% Asia
- 7% Rest of world

Sales per segment in CHF million



- 43% Industry
- 37% Utility
- 20% Building Technology

GF Casting Solutions at a glance

GF Casting Solutions is one of the leading solution providers of lightweight components in the mobility and energy industries. As a future-oriented company, GF Casting Solutions acts as a driving force for innovation in the foundry and additive manufacturing world and aims to take the lead in developing and manufacturing innovative and energy-efficient lightweight solutions, empowering sustainable mobility.

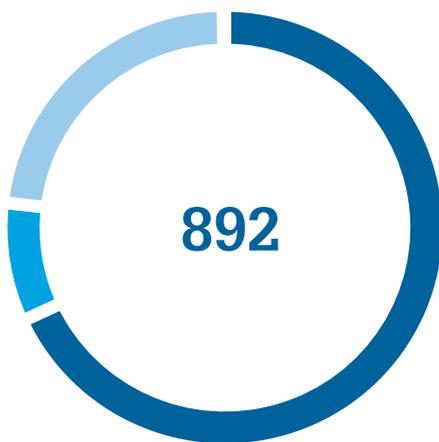
Key figures

CHF million	2022	2021
Order intake	965	907
Orders on hand at year-end	284	276
Sales	892	880
Sales growth %	1.4	17.1
Organic growth %	17.2	15.9
EBITDA	99	63
EBITDA margin %	11.1	7.2
EBIT	55	5
Return on sales (EBIT margin) %	6.2	0.5
Invested capital (IC)	326	504
Return on invested capital (ROIC) %	11.2	0.3
Number of employees	3'570	4'008

Number of employees

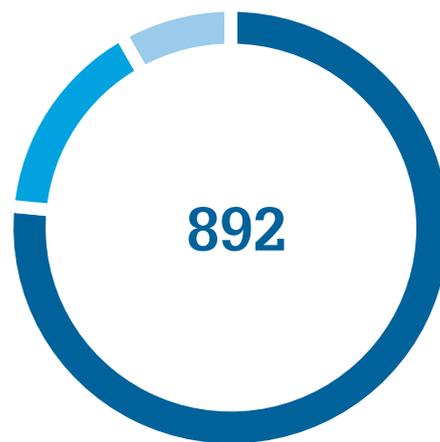
3'570

Sales per region in CHF million



- 68% Europe
- 9% Americas
- 23% Asia
- 0% Rest of world

Sales per segment in CHF million



- 77% Automotive
- 15% Industrial Applications
- 8% Aerospace/Energy

GF Machining Solutions at a glance

GF Machining Solutions is one of the world's leading providers of complete solutions for precision components and tools manufacturers, and the mold-making industry. The portfolio includes milling, EDM, laser texturing, laser micromachining, and additive manufacturing machines. Additionally, the division offers spindles, automation, tooling, and digitalized solutions backed by unrivaled customer services and support. With its solutions, the division advances energy-efficient and clean manufacturing.

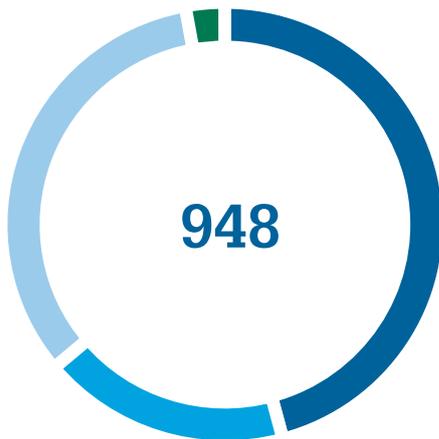
Key figures

CHF million	2022	2021
Order intake	945	941
Orders on hand at year-end	206	213
Sales	948	873
Sales growth %	8.7	20.3
Organic growth %	10.9	19.9
EBITDA	81	61
EBITDA margin %	8.6	7.0
EBIT	67	47
Return on sales (EBIT margin) %	7.0	5.4
Invested capital (IC)	196	151
Return on invested capital (ROIC) %	31.7	21.9
Number of employees	3'398	3'282

Number of employees

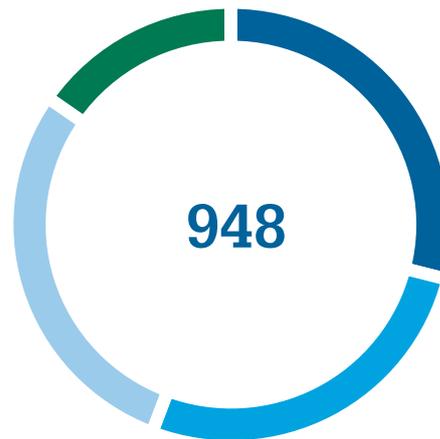
3'398

Sales per region in CHF million



- 46% Europe
- 18% Americas
- 33% Asia
- 3% Rest of world

Sales per segment in CHF million



- 29% Customer Service
- 27% Milling
- 29% EDM
- 15% Advanced Manufacturing/Automation & Tooling

Strategy 2025: Continued implementation of targeted measures in 2022

GF's Strategy 2025 focuses on profitable growth, portfolio resilience and a "go for the full potential" spirit within the organization. This is in line with GF's vision to become a sustainability and innovation leader providing superior customer value.

In 2022, GF generated 63% of sales with products and solutions that have a social or environmental benefit for its customers (2021: 60%), reflecting progress made toward reaching the 70% target by 2025. This is a clear sign of the importance that GF places on sustainability, which it supports by enabling the safe transport of water and gas, empowering sustainable mobility and advancing energy-efficient and clean manufacturing.

GF is also strengthening its capacity for innovation; currently, around 1200 employees are working on future applications. The company is continuously expanding its innovation ecosystem with a wide range of customers, suppliers, universities, digital platforms as well as start-up incubators and systematically measures its success in terms of innovation by monitoring roadmaps and conducting bi-annual deep dives. GF strives to learn from all stakeholders, in line with its purpose of becoming better every day.

With its Culture Movement, GF launched an initiative that is having a transformative impact on how its people operate by helping them embed the GF values into their daily work. GF also continued to provide Global Operational Excellence programs, with Lean-6 Sigma and others, focused on creating business impact by driving operational improvement activities globally.

Here is a summary of the activities of the three divisions in 2022, the second year of the five-year strategic cycle.

GF Piping Systems

In 2022, the division expanded and aligned its global R&D and offsite manufacturing footprint in the Americas, EMEA and Asia, focusing on high-value solutions and innovations for Industry, Building Technology and Utility. The division is well on track to achieve its 2025 innovation targets, while ensuring new products positively contribute to its sustainability objectives.

To support the goal of increased customer proximity, the division has invested significantly in the Global Industries sales organizations dedicated to marine, microelectronics and data center segment. It also invested in specialized sales teams focused on non-revenue water, industrial cooling and process automation. In partnership with customers, the division is developing customized solutions within its worldwide prefabrication and engineering facilities network and with its partners, enabling business models like "Water as a Service".

The introduction of a learning culture at GF Piping Systems in 2022, with the motto "Try. Fail. Learn and Evolve", encourages an open-minded approach to pushing boundaries and providing the framework for accelerated innovation and growth. Additionally, the new Global Academy, local Full Potential, and customer service programs allow the organization to improve domain expertise and increase customer proximity and operational excellence.



Interview with Joost Geginat, President GF Piping Systems

How do these business highlights of GF Piping Systems in 2022 reflect progress against the Strategy 2025?

The positive correlation of our solutions between sustainability impact and higher margins is a win-win, for GF, for our customers and for the environment. Consequently, we continue developing high-value solutions with a positive sustainability impact. We have invested in R&D, sales and product management to boost our innovation capabilities. At GF Piping Systems, we have also strengthened the sales and marketing organization globally in our focus areas of process automation for water treatment, efficient cooling, non-revenue water and hygiene for potable water. Additionally, we are investing globally in our production capacity and have reinforced our offsite manufacturing hubs.

What innovation in 2022 stands out for its benefits in terms of sustainability?

The maritime industry is increasingly looking to thermoplastic piping systems to meet more stringent sustainability targets. Due to their lightweight, modern and long-lasting insulation techniques and material properties, they can make ships of all sorts more efficient, while simultaneously reducing costs. In 2022, following six years of development, we introduced the HEAT-FIT, a unique pipe jacket system that can cope with the strict fire resistance regulations of the International Maritime Organization (IMO) and now ensures thermoplastic piping systems are resistant to temperatures of around 1'000°C for at least 30 minutes under pressure.

What will the division focus on in 2023?

In order to safely complete construction projects in today's fast-paced world, there are numerous challenges that need to be overcome, including shortages of skilled labor, time constraints, cost overruns, quality concerns and physical space limitations on job sites. Thanks to our worldwide network of offsite manufacturing and prefabrication hubs, we are well placed to sustainably support our customers, wherever they are. The Global Industries teams will continue to drive tight project execution while expanding our global industries strategy and R&D efforts to make flow solution applications even more sustainable. We will also further develop our "Full Potential programs" in various countries to ensure their strategy execution drives regional market development.



GF Casting Solutions

Sustainable mobility has become one of the main pillars of the division, which is successfully integrating innovation and sustainable solutions.

The division is well on track to achieve its divisional strategic targets. 2022 was characterized by new project acquisitions, with electric vehicles accounting for more than 50% of new business. Operational performance improved significantly and many new projects were ramped up during the year. The division's global presence was strengthened by the divestment of the joint venture in North America, a new partnership with the Mexican market leader Bocar Group, and the opening of a new factory in Shenyang, China.

The division engaged with key customers in early-stage development projects. The competence in product and process development was in high demand, especially in the context of the transition to e-mobility.



Interview with Carlos Vasto, President GF Casting Solutions

How do these business highlights of GF Casting Solutions in 2022 reflect progress against the Strategy 2025?

With its Strategy 2025, GF Casting Solutions is focusing on sustainable mobility. Positive feedback from the market and our successful acquisitions of new orders confirm that this was the right strategic direction. The transition to e-mobility has triggered a large number of new vehicle development projects, both at established OEMs and new entrants. GF Casting Solutions is contributing with its expertise in development and industrialization.

What innovation in 2022 stands out for its benefits in terms of sustainability?

GF Casting Solutions, together with key customers, has been able to develop innovative large structural parts that combine several assembled parts into one big casting. This reduces complexity in production and the weight of the final product, with a substantial positive effect on CO₂ emissions in production, as well as in the use of the final product. The shift to e-mobility calls for a re-design of the vehicle structure. Designing new components for these body structures is the division's core competence and opens up new opportunities for sustainable innovations.



What will the division focus on in 2023?

The division will launch many new products in 2023, but it will place particular focus on the extension of its foundries in Europe as well as on the production ramp-up in Shenyang (China). In addition, GF Casting Solutions will roll out its approach to innovation across the entire organization with a continued focus on sustainable mobility.

GF Machining Solutions

GF Machining Solutions sharpened its focus on intelligent solutions that support the sustainability goals of its customers.

The division is well on track to achieve the targets set out in its divisional strategy. For example, in 2022, GF Machining Solutions increased the speed of its numerous, successful launches, raised the rate of machine sales with intelligent automation from 15% to 40% and succeeded in ensuring that 100% of the new products it developed had sustainability benefits for its customers.

The division strengthened its customer focus and is continuously improving and expanding its competence centers around the world. Many of these are specialized, for example, in the medical or aerospace market segment. Today, the division is an innovation leader in electrical discharge machining (EDM), laser and automation/tooling.

In 2022, GF Machining Solutions also launched digital and more sustainable manufacturing solutions like wire and spool recycling, laser texturing machines to replace chemical etching and solutions to increase the energy efficiency of its machines. The worldwide R&D teams were reorganized and are ready for scale-up.



Interview with Ivan Filisetti, President of GF Machining Solutions

How do these business highlights of GF Machining Solutions in 2022 reflect progress against the Strategy 2025?

We presented many exciting machine technologies and new digital solutions at IMTS and JIMTOF, two leading technology exhibitions. The market launch of the AgieCharmilles CUT X, GF Machining Solutions' new wire-cutting EDM solution, is a good example. Operating the machine is easy for experts and beginners alike. During the exhibitions, we also introduced the new customer service platform, My rConnect.

Another example is the introduction of the Liechti Turbomill 500g to reduce costs in precision airfoil manufacturing. These highlights were possible thanks to the successful combination of our three focus areas.

What innovation in 2022 stands out for its benefits in terms of sustainability?



We made a lot of progress in terms of our intelligent machining applications in EDM. Our "Spark Track" technology measures and optimizes sparks on wires, thus avoiding wire breakage (ISPS) and optimizing wire consumption (iQ Wire). Because secure energy supplies were a big topic in 2022, we improved our Econowatt system, which enables our machines to significantly reduce their energy consumption during standby mode, without compromising machine readiness and precision.

What will the division focus on in 2023?

GF Machining Solutions will focus its efforts on core technologies and features required for the target segments in order to maintain its competitive advantage. Innovations in digital solutions, automation and advanced manufacturing will complement the solution offering.

Intelligent manufacturing and services is a growing market. We are responding to this renewed demand with a fully integrated digital infrastructure based on Econosuite – a common suite of indicators and functions that facilitate sustainability performance management and with My rConnect, a unified customer service platform that provides comprehensive services, including live remote assistance.

We expect the aerospace market to continue its recovery and are ready to support the growth of our customers with new and dedicated solutions.

Highlights 2022

In 2022, the second year of the current strategy cycle, the company continued to successfully blend innovation and sustainability thanks to the contribution of its employees and strong collaboration with suppliers, customers, and business partners.



First prize at the "European Die Casting Award" ceremony – January

GF Casting Solutions wins the first prize in the "Magnesium" category at the "European Die Casting Award" ceremony. The winning magnesium part is a cross car beam for Daimler AG's current S-class. The die-cast magnesium cross car beam was selected, among other things, for its design, which was adapted to the very narrow environment.



New innovation partnership with STARTUP AUTOBAHN – February

GF Casting Solutions partners up with STARTUP AUTOBAHN, an innovation platform that unites young tech companies from around the world with the unrivalled tech expertise of Silicon Valley and the best of German engineering. It is one of several GF partnerships with start-up incubators.



Coveted award received from Intel – April

GF Piping Systems receives Intel’s EPIC Distinguished Supplier Award for its dedication to excellence, inclusion and continuous quality improvement.



Heat resistant to 1'000°C – April

Following six years of development, the unique Pipe Jacket System HEAT-FIT successfully meets the strict fire resistance regulations and makes thermoplastic piping systems resistant to temperatures of around 1'000°C for at least 30 minutes under pressure. First systems are already installed in cruise ships.



Strengthening global footprint – April

With two new plants in Shenyang, China and Yangzhou, China, GF is strengthening its global footprint and supporting the development of its activities and customer relations on the Chinese market.



GF and Bocar enter global collaboration – May

GF Casting Solutions and the leading light-metal castings and assemblies solutions provider Bocar Group, which is headquartered in Mexico City (Mexico), sign an agreement to offer a specialized range of products and services worldwide. The partnership reflects Bocar Group and GF's commitment to develop and invest in new technologies and services to support customers in North America, Europe and Asia on their path to sustainable mobility.



Lightweight castings at EUROGUSS 2022 – June

At the EUROGUSS 2022 trade fair in Nuremberg (Germany), visitors learn about the innovative die casting solutions of GF Casting Solutions. Lightweight castings and additive components developed and manufactured by the division reduce weight, fuel consumption as well as emissions, and enable more functions to be integrated into individual parts.



Joint power at Farnborough – July

At the Farnborough International Airshow in the UK, GF Machining Solutions and GF Casting Solutions present their highly complex solutions for aerospace and energy parts and Additive Manufacturing solutions. GF's centerpiece at Farnborough is a combustion chamber for rocket launcher engines, proving that GF offers its customers the best value proposition thanks to a unique combination of know-how and expertise.



Four awards for GF's image movie – July

GF's corporate image movie receives four prestigious film awards: Finalist Award Winner at the New York Festivals TV & Film Awards, Gold at the International Creative Media Award (ICMA), Silver at the Cannes Corporate Media & TV Awards and first place at the German Business Film Award. Based on the image movie, GF launches a PR campaign at Zurich Airport centered around the theme "Going Forward".



New Board members proposed – August and November

GF announces that Michelle Wen and Monica de Virgiliis will be proposed as new Board members at the GF Annual Shareholders' Meeting (ASM) on 19 April 2023. Jasmin Staiblin (due to the term limitation) and Riet Cadonau (for personal reasons) will leave the Board.



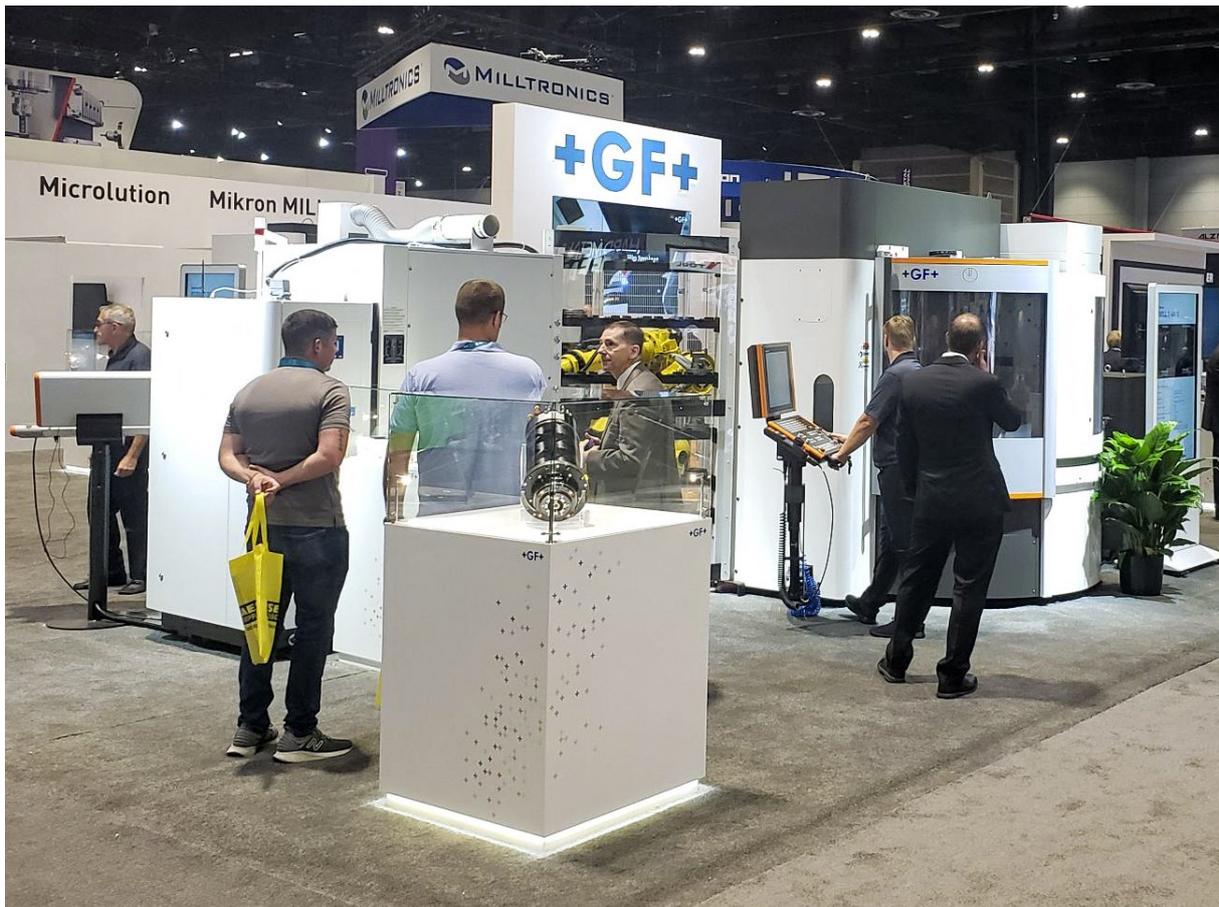
Opening of offsite manufacturing hub in Taiwan – September

GF Piping Systems opens its latest offsite manufacturing hub in Taiwan. The total of six hubs worldwide are a customer-oriented answer to overcoming challenges such as shortages of skilled labor, time constraints, cost overruns, quality concerns and space limitations on construction sites.



Capital Markets Day 2022 – September

At its 6th Capital Markets Day in Schaffhausen (Switzerland), GF offers analysts and media a deep dive into its most promising innovations across its three divisions, driven by the latest sustainability and digitalization trends. Highlights include new solutions for efficient water treatment, the latest developments for sustainable mobility as well as machines and components for intelligent manufacturing.



IMTS Chicago 2022 and JIMTOF Tokyo 2022 – September

At the leading exhibition IMTS in Chicago (USA), GF Machining Solutions gives an additional example of its technology leadership. The divisions highlights new digital solutions such as My rConnect, and in laser texturing. At JIMTOF in Tokyo (Japan), the focus is on advanced manufacturing, automation, tooling and digital solutions.



SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Successful SBTi validation and CDP rating – October

SBTi validates GF's science-based targets to reduce the company's greenhouse gas emissions along its value chain. Working closely with its suppliers and customers, GF is leading the way in mitigating climate change in its industry. In addition, the rating agency CDP (Carbon Disclosure Project) confirms GF's "A-" rating (Leadership level) for the third consecutive year.



TSMC Excellence and Drinking Water Awards – October

GF Piping Systems receives the TSMC 2022 Excellent Performance Award to Outstanding Suppliers as well as the Swiss Real Estate Award in the category "Manufacturer Innovation" for its Hycleen Automation System, which improves the energy efficiency of drinking water systems.



Culture Movement and new intranet – November

The global Culture Movement at GF turns one and celebrates with a global hybrid event with more than 4'000 participants worldwide. At the same time, GF launches its new intranet, which facilitates and fosters dialogue between all employees worldwide.



Launch of new energy certificate – December

Energy efficiency plays a crucial role in modern manufacturing. GF energy certificates enable customers to compare the energy consumption of machines to that of previous generations. The AgieCharmilles CUT X, GF Machining Solutions' new wire-cutting EDM solution, receives its GF energy certificate. The machine series which already have the energy certificate are the MILL X U (Milling), the LASER P and S (Laser), the CUT P and the FORM P (EDM).



WE CAN "GO FORWARD" SUSTAINABLY BY TACKLING SOME OF THE BIGGEST CHALLENGES OF OUR TIMES

Our Forward Stories

Read about how GF is having a positive impact and responding to an ever-evolving landscape by developing innovative solutions to address global challenges.

Why do we innovate?

The world is facing many challenges. Climate change, water scarcity and the European energy crisis have a big impact on our everyday lives. Thanks to advances in the pharmaceutical and medical technology industries and growing health awareness, people are living longer. Solutions for the responsible use of our scarce natural resources are key to meeting the challenges ahead of us. As a technology company with a learning culture, GF is called upon to develop sustainable and smart solutions that can add quality to people's lives.

The GF Strategy 2025 sets the course for how GF develops some of these solutions today and in the coming years. The Forward journey has begun.

For this report, we have identified three areas where we can showcase GF's global contribution: **urbanization**, with a focus on ensuring the supply of safe water; **sustainable mobility** with lightweight solutions for passenger cars; and **food safety and packaging**, with the goal of making food last longer and increasing efficiency in food production.

Read about how we keep Going Forward where it really matters.



URBANIZATION

Improving water access

Sprawling cities

The global population is growing, and our economies have become increasingly industrialized over the centuries. As a result, 57% of all people live in cities today – and the trend towards greater urbanization is continuing. As people move from rural to high-density urban areas, the demand increases for better access to work, transportation, education and health, as well as social, cultural and political activities. Experts predict that by 2050, more than two thirds of the global population will live in cities. The development of safe energy supplies, modern health facilities and stable infrastructures for clean water are key to ensuring this shift will be successful.

Facts about urbanization

4.3 bn

More than 4.3 billion people worldwide currently live in urban areas.

68%

Estimates show, that by 2050, 68% of the world's population will live in urban areas.

50%

The percentage of city inhabitants lacking safely managed drinking water has increased by more than 50% since 2000.

126 bn

126 billion cubic meters of water is lost in pipes and valves during transport every year, enough to fill Lake Zurich 32 times over.

Sources: Statista, UN-Water, International Water Association

Using water resources sparingly

GF Piping Systems and Ekopak

While urban water management in Europe and North America is at a comparatively high level, drinking water supplies in some areas of Africa, Asia or Latin America are no longer enough to supply a steadily growing population. GF Piping Systems is helping its Belgian customer Ekopak to develop a practical solution for using water resources in industry and households as sparingly as possible.

Anyone who looks into the subject of water will come across impressive figures: 2.5% of water on Earth is fresh (drinkable) water. Expressed in liters, that would be 35 followed by 18 zeros. However, more than 126 billion cubic meters of drinking water are lost every year in the world due to leaks in pipes and valves during transport. That is enough water to fill Lake Zurich, the fifth largest lake in Switzerland, 32 times over.

Water is precious. We drink it, use it in our households, produce goods with it and then use it to transport those goods.

How can we make water consumption more sustainable?

Saving water is one way to make water consumption more sustainable. But industry, for example, uses certain production methods that require a huge quantity of water, much more than in private households. Chemicals, paper, metal and food production are just a few industries where companies rely on clean and high-quality water.

The Belgian company Ekopak is specialized in water treatment and recycling, both for industrial and municipal use. It offers customized and decentralized mobile systems in containers that treat water through reverse osmosis – a water purification process that removes 90–100% of pathogens, particles and bacteria. The purified water can then be reused. GF Piping Systems provides valves, actuators, measurement and control technology, pipes and fittings for the mobile containers – the equipment varies according to the requirements, but the average container bringing water where it is most needed features about 500 fittings, 80 valves and 20 sensors. Because fresh water and sewage water do not have to be transported over long distances but remain in a closed loop, decentralized water treatment saves a substantial amount of energy.

GF expert's view

How does GF Piping Systems help its customers contribute to greater sustainability?

We have in-depth experience in process automation, which, in addition to our expertise in traditional piping systems, allows us to offer a broad range of components that are used for more efficient and sustainable processes. Thanks to these, customers like Ekopak can monitor and control the water quality of their own customers around the clock. The valves and sensors designed for plastic piping systems are very light and durable, reducing both the logistical effort to move and replace them, and the impact on the environment. The piping systems are sourced from one provider, making planning even more simple.

How has GF contributed to the success of the relationship?

GF's R&D and engineering teams are able to respond to two major requirements for the systems in Ekopak's containers: firstly, we guarantee high quality products thanks to our outstanding innovation and production capabilities, and we ensure peace of mind thanks to the low maintenance and robustness while in use. At the same time, the systems need to be compact and light enough for transportation to the customer in a container. Using modern plastics and our engineering expertise, GF Piping Systems makes an important contribution to the partnership's success.

"The valves and sensors designed for plastic piping systems are very light and durable."



Sandra Schiller, Head of Process Automation & Global Product Management in the Industry Business Unit at GF Piping Systems says GF is helping to solve many water scarcity challenges linked to urbanization.

Why is the partnership of GF and Ekopak an answer to the challenges posed by urbanization?

Thanks to being able to remotely monitor our process automation technology, Ekopak has been able to develop "Water as a service" solutions that enable decentralized industrial water treatment. We're helping to solve water scarcity challenges linked to urbanization, protecting the environment from untreated industrial wastewater while giving companies full control over their water supply. GF and Ekopak have also taken action on fluctuating demand and are able to scale as needed so as not to waste energy.



"We have to switch to a circular economy, which is an economy of partnerships. This is what we believe in. We have the same ambition and share values of our partner GF."

Pieter Loose, CEO Ekopak

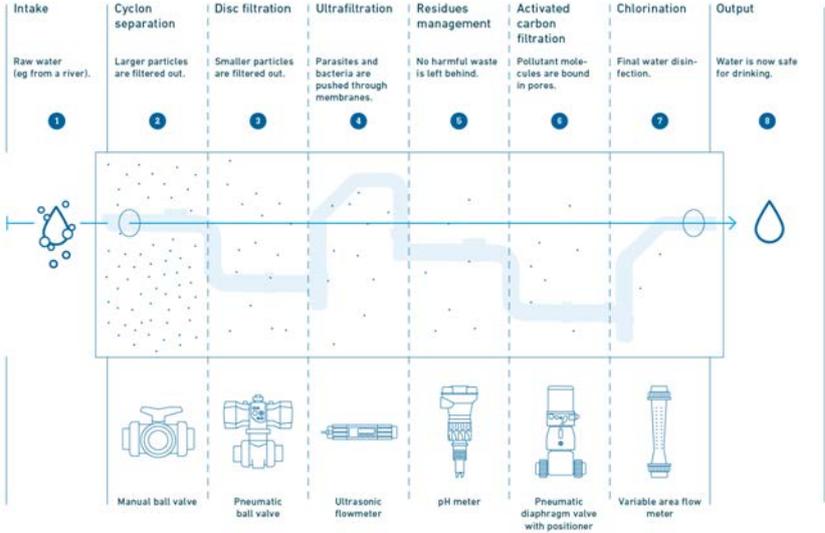
From Tielt near Ghent (Belgium), Ekopak supplies customers all over the world including food and textiles manufacturers as well as chemical and pharmaceutical companies. Municipalities, from rural to urban areas, are also among Ekopak's customers. They use the containers, for example, to install temporary drinking water supplies or for crisis support. Ekopak recently delivered 140 energy self-sufficient containers, equipped with solar panels and chemical waste purification, to dry areas in Africa for drinking water treatment.

Ekopak equips up to 75 containers a year with solutions from GF Piping Systems.

"Drinking water is basically the lowest quality level of treated water," says Sandra Schiller, Head of Process Automation & Global Product Management in the Industry Business Unit at GF Piping Systems. "While people can deal with slight fluctuations in water quality, companies in the process industry or food production require a much higher and constant water quality. This places completely different demands on the containers." GF Piping Systems and Ekopak have been working together successfully since 2007. "By listening to each other, we can gain more knowledge about sustainable applications in water treatment and continuously improve our solutions," Schiller says.

The elixir of life goes circular: How does it work?

Ekopak's containers are customized and decentralized mobile systems that treat water. Several sensors and valves at the intake, output and in between constantly monitor the water quality, which increases with every step. The challenge is to ensure consistent water quality, no matter how polluted the water is. The average Ekopak container features about 500 fittings, 80 valves and 20 sensors, all manufactured by GF. This infographic explains how the system works.



Read about GF's other projects to sustain development in urban areas.



Preferred partner

Helsinki wants to become the world's most sustainable urban region. This is the goal set by the **Finnish capital's environmental authority HSY**. The municipal body supplies drinking water as well as wastewater treatment and waste management services, and maintains the area's water piping network. As HSY's preferred partner, **GF Piping Systems** supplied HSY with polyethylene piping fittings for its water network maintenance and upgrade program. GF was the only bidder to meet HSY's challenging requirement to provide a comprehensive breakdown of CO₂ emissions generated during the entire manufacturing and supply process.

[Read about how GF Piping Systems made this happen.](#)

Swift delivery

Consumer goods are increasingly being ordered online, especially in urban areas. Logistics and distribution centers are booming, and can increasingly be seen outside of urban centers and at many highway exits. To ensure that the goods get from the sender to the recipient smoothly and quickly, intelligent and highly automated logistics systems are needed, such as those manufactured by **Boston Dynamics**, an engineering and robotics design company based in Waltham, MA (US). **GF Casting Solutions** is in close collaboration with Boston Dynamics to support it with an iron casting solution for a logistics robot that can move some 800 packages per hour. The component for the robot body was designed and simulated on a computer. GF Casting Solutions produced the prototype for preview using a 3D sand printer. This significantly accelerated the development in prototyping and simultaneously reduced the resources required for this process.

Learn more about prototyping using [3D printing at GF](#).

Our contribution to the UN Sustainable Development Goals (SDGs)

Through its collaboration with **Ekopak, GF Piping Systems** contributes to the achievement of:

3 GOOD HEALTH AND WELL-BEING



UN SDG 3:

Ensure healthy lives and promote well-being for all at all ages.

6 CLEAN WATER AND SANITATION



UN SDG 6:

Ensure availability and sustainable management of water and sanitation for all.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



UN SDG 9:

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Learn more about GF and its contribution to the UN SDGs in the [GF Sustainability Report](#).



SUSTAINABLE MOBILITY

The future is big

Mobility is a key factor for enabling economic exchange, employment and prosperity in our society. At the same time, however, the global transport system is partly responsible for environmental pollution, even if some forms of transportation have become significantly cleaner and quieter. How can we make sure people and goods can keep moving without damaging the environment in the long term? This question is at the heart of sustainable mobility. The automotive industry in particular is working on new solutions.

Facts about sustainable mobility

80'000 bn

By 2030, passenger traffic will exceed 80'000 billion passenger-kilometers – a 50% increase – and freight volume will grow by 70% globally.

+100%

Globally, the number of vehicles on the road is expected to double by 2050.

81 m

Around 81 million light vehicles were sold worldwide in 2021. Light vehicles include passenger cars and light commercial vehicles up to a weight of 6 tonnes.

66%

It is estimated that around two-thirds of global car sales will be electric by 2040.

Sources: World Bank, Statista, Bloomberg, LMC Automotive

A strong development partnership

GF Casting Solutions and BMW

Climate change is a major challenge worldwide – that is why empowering our customers with solutions for sustainable mobility is at the heart of our strategic targets. The R&D departments of GF Casting Solutions and Germany's BMW Group are working closely together to create new approaches for the efficient production of light car bodies.

15 November 2022 was a historic day. Since then, according to the United Nations, more than 8 billion people live on our planet. And the more of us there are, the more we move around, be it by car, by train or by airplane.

The need for lower-emission and more environmentally friendly vehicles is posing significant challenges for manufacturers. One such challenge is the weight of car bodies. In the past, companies typically assembled individual parts to build the car bodies, but the body of the future will consist of fewer and larger structural components – referred to as Big Castings. GF Casting Solutions is working with its customers to develop components that are light, combine as many functions as possible and can be manufactured in just one shot on existing high-pressure-die-casting machines, increasing efficiency all around. An additional investment in new equipment is not necessary and therefore resource saving.

How can we make mobility more sustainable?

Together with the German premium manufacturer BMW, GF Casting Solutions is developing a crash-relevant Big Casting for a vehicle that will be launched in the near future. The two partners have been working closely together for years to ensure that GF Casting Solutions can produce particularly light and strong parts for new BMW vehicles. The collaboration includes part design and simulation, tool development and production, and tests and validation of the cast parts. For GF and BMW, the reusability of the material in the process chain is important: the recyclability of the aluminum for circulating material, gating systems and scrap is 100%. In the past, for similar vehicle types, multiple single components had to be cast and assembled to produce one part. Now, GF Casting Solutions produces just one Big Casting. Big Castings require fewer individual tools and fewer joints. They lower susceptibility to defects and reduce waste, which in turn saves resources and energy. "When vehicle manufacturers assemble a complete front or rear car in the form of a Big Casting, they save a lot of time," says Frank Gensty, Chief Technology Officer at GF Casting Solutions. "A manufacturer can produce a new typical mid-size vehicle in 10 hours instead of 25." Thanks to strategic development partnerships like the one between GF and BMW, Big Castings can equal big results.

GF expert's view

What advantages does GF bring to the development and production of Big Castings?

Our unique selling point is our globally networked R&D capability with a strong focus on part simulation. We also operate our own tool shops at our sites in Germany and in China. In addition, we can check the quality of our components in our own DIN-certified validation department.

How is GF's R&D contributing to the BMW project's success?

Our strategic development partnership started at the earliest possible stage and covers all key steps in the value chain. This enabled us to understand BMW's needs for the new vehicle and the production process at an early stage and to take appropriate measures. From part design and simulation to the development and production of the die-casting tool, we accompanied the casting trials at the BMW Group facilities and at our production site. We also tested the first cast parts at our own, accredited testing and validation lab in Schaffhausen.

"We're interested in what the lightweight part will look like in the end, but also how it can be manufactured in an energy-efficient and assembly-friendly way."

Why is collaboration with the customer so important in the early stages of development?

The earlier we get involved, the more opportunities we have to think outside the box. This enables us to find solutions for integrating the component optimally into the body, which in turn saves the customer time and energy during assembly. Basically, we're not only interested in what the lightweight part will look like in the end, but also how it can be manufactured in an energy-efficient and assembly-friendly way.



Frank Gensty is Chief Technology Officer at GF Casting Solutions.



"GF Casting Solutions is one of our important partners in product and process development. Together, we rethink components and production processes to become more efficient and sustainable."

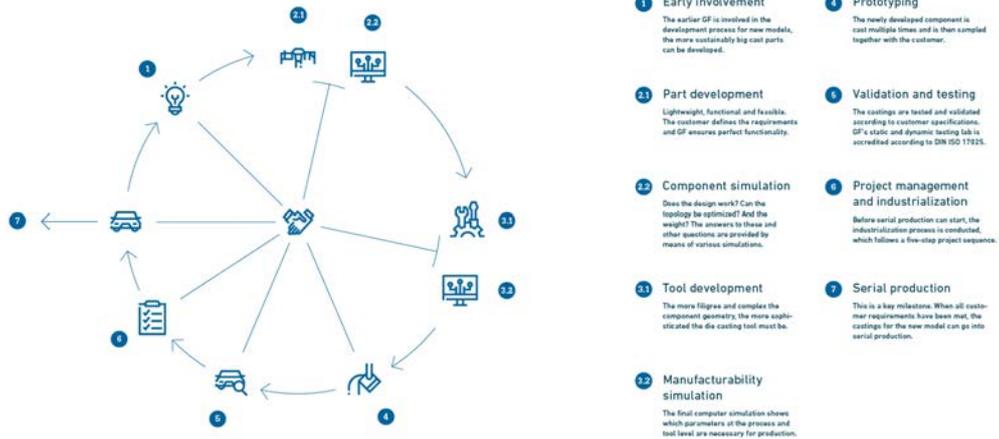
Frank Wimmer, Senior Manager Purchasing Light Metal Casting Structure Components at BMW Group

Part supply as local as possible and without long transport routes

GF sees strong development partnerships as the foundation for the successful development and production of Big Castings – especially with regard to the reduction of weight and assembly steps, material and time savings, as well as quality improvement and logistics. GF Casting Solutions operates lightweight die-casting sites in Suzhou and Shenyang (both in China), Altenmarkt and Herzogenburg (both in Austria), as well as Pitești and Scornicești (both in Romania) and has a collaboration with Bocar Group in North America in order to be able to supply parts as locally as possible and without long transport routes.

Co-developing lightweight components: How does the collaboration work?

Before a new car is launched on the market, a complex development process takes place in which each single part is examined individually. GF supports its customers throughout the entire process, from the early development stages through to serial production. This infographic shows the individual steps in the casting design process and illustrates how closely GF collaborates with customers to ensure their specific requirements are met.



Get to know GF's other activities in the sustainable mobility space



Electric future

Our reality today has little to do with what we once thought the future would look like. While our cars remain on the ground rather than flying, the world is looking for technologies to replace fossil fuels and make mobility more environmentally friendly. **GF Machining Solutions** has therefore focused its R&D activities on providing the German automotive supplier **Schaeffler** solutions for their environmentally friendly automotive components.

Read about how GF is developing and producing [innovative and sustainable mobility solutions](#).

Fossil-free steel

The need for low-emission transportation is rising globally not only for passengers, but also for goods. The electrification of trucks and off-highway vehicles, such as bulldozers and carriers, has been underway for many years and construction equipment is following suit. The **Volvo Group** has unveiled what it claims is the world's first fossil-free steel vehicle and announced that more concept vehicles are on the way. One of these vehicles is the TA15. The battery-electric load carrier is a new machine concept, compared to traditional off-road transport. **GF Casting Solutions** supports Volvo Construction Equipment (CE) in the development and production of lightweight iron cast components.

Learn more about GF's solutions for [off-highway vehicles](#).

Our contribution to the UN Sustainable Development Goals (SDGs)

Through its collaboration with **BMW**, **GF Casting Solutions** is contributing to the achievement of:

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



UN SDG 9

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



UN SDG 12

Ensure sustainable consumption and production patterns.

13 CLIMATE ACTION



UN SDG 13

Take urgent action to combat climate change and its impacts.

Learn more about GF and its contribution to the UN SDGs in the [GF Sustainability Report](#).



FOOD SAFETY AND PACKAGING

Making food last longer

How can technology support food production?

Food is one of the most traded commodities in the world. With the globalization of markets and an increasing global population, the food supply chain will continue to grow in scale and complexity. This has a significant impact on the production as well as the distribution of food products. Compliance with food production quality standards is more essential than ever. Every year, one in ten people suffers from food-borne illness or injury, according to the World Health Organization. An estimated 420'000 people die each year as a result of poor food hygiene. The packaging industry has an important role to play in extending the shelf life of food products and making them less susceptible to interruptions in logistics chains, such as those caused by the COVID-19 pandemic.

Facts about food safety and packaging

2030

According to the EU Plastics Strategy, all packaging should be able to be recycled or reused in an economically viable manner by 2030.

930 m

An estimated amount of more than 930 million tonnes of food per year are thrown away. Active packaging systems enable food to be transported over longer distances while helping to minimize losses and waste associated with food spoilage.

5.7%

Global food sales will amount to around EUR 7.75 trillion in 2022. In 2027, the market volume is expected to reach EUR 10.23 trillion. This corresponds to annual sales growth of 5.72%.

37%

France has banned the use of plastic packaging for around 30 fruit and vegetables starting in 2022. In 2021, around 37% of fruit and vegetables in France were sold in plastic packaging.

Sources: European Commission, Statista, United Nations, Reuters

EDM technology for new materials

GF Machining Solutions and Berhalter

GF Machining Solutions supports Swiss-based Berhalter in producing cost-efficient packaging with new materials.

In 2022, the global food market generated sales of almost EUR 7.75 trillion, with a strong upward trend. The EUR 10 trillion mark is expected to be exceeded in just five years. The food production and processing is booming, but according to the Food Index Report 2021 of the United Nations (UN), more than 900 million tonnes of food go to waste every year. The production and transport of food still puts a strain on resources such as energy and water, as well as land, where fertilizers and pesticides are used.

Food manufacturers and producers, together with the packaging industry, are developing new technologies and smarter food packaging solutions that make food last longer or make it less susceptible to disruptions in logistics chains. GF Machining Solutions works closely with customers in the packaging industry. Packaging, together with Food and Beverage, is one of the division's five key segments, and GF estimates the global market size for machine tools for packaging production at approximately USD 1.5 billion.

For its customers in this market, GF Machining Solutions develops solutions in the areas of laser texturing, milling, EDM and additive manufacturing, as well as automation and software. GF Machining Solutions thus provides the technology to produce ultra-precise cutting dies and molds for plastic, aluminum, paper and combinations of multiple materials. The GF division enables packaging manufacturers to break new ground in an energy-efficient way.

Berhalter has been successful in the packaging industry for decades. The Swiss company, based in the Rhine valley in Widnau (Switzerland), uses a total of five GF wire-cutting EDM to process punches and dies for cutting out materials like plastic lids for food packaging.

GF expert's view

How does GF enable its customers to take greater responsibility for reducing food waste?

We enable our customers in the packaging business to cut innovative materials with a high level of precision. This makes it possible to preserve food for longer. The tighter the tolerances, for example, in the closure of a lid, the better the content of the container is protected – therefore prolonging the shelf life of perishable goods. The precision of our CUT X series, for example, is achieved through a combination of optimized mechanics, new 3D-printed heads design or AI-based thermal management.

Why is GF Machining Solutions an ideal partner for helping Berhalter make its production more sustainable?

GF and Berhalter are both passionate about providing customers with high-precision and energy-efficient machining solutions. With our durable and precise machines and materials, we help Berhalter extend the lifetime of its punch and die tools, reduce the scrap rate of material and lower the wear of EDM wire, for example. This in turn enables Berhalter to reduce waste, energy consumption and emissions to a minimum during its production process.

"Listening is part of our Design Thinking approach, which helps us to continuously make improvements."

How has GF Machining Solutions' R&D contributed to the success of the collaboration?

We listen to their needs carefully; which is why we know Berhalter's processes very well. Listening is part of our Design Thinking approach, which helps us to continuously make improvements so that we meet the needs of Berhalter.



Thomas Wengi, Managing Director GF Machining Solutions International SA, says that the durability and precision of GF machines and materials are key, because they mean the tools can be used for longer and reduce the amount of scrap material.



"We want to put our customers in a leading position. This requires the right machines. GF Machining Solutions offers cutting-edge solutions regarding energy efficiency and precision."

Patrick Berhalter, CEO
Berhalter AG

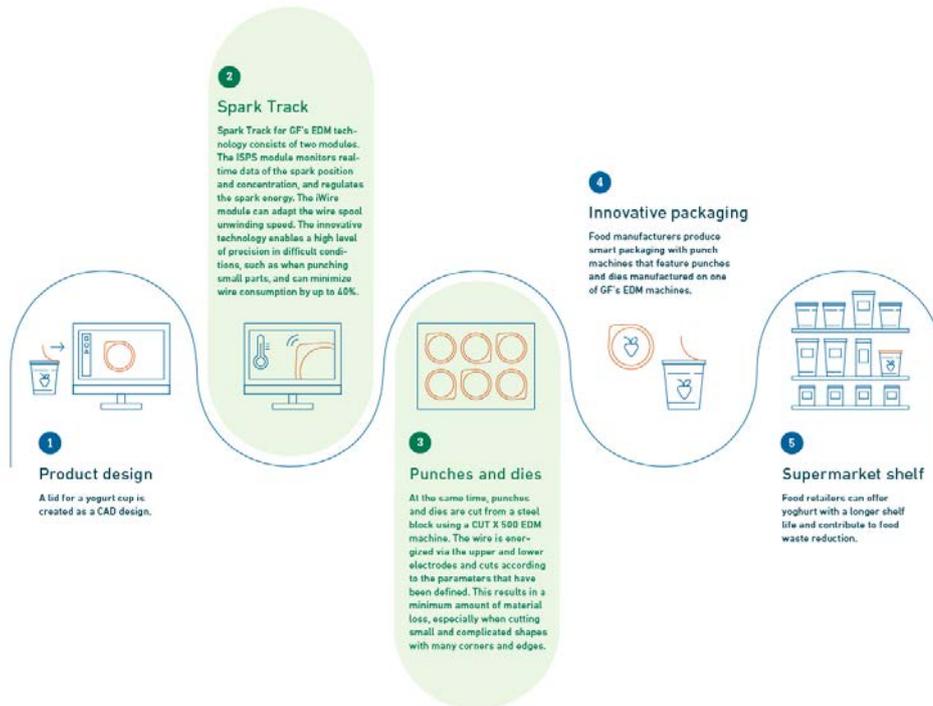
GF's wire-cutting EDM technology enables Berhalter to machine composite materials, which make food and beverages last longer. Composite materials generally have a high strength-to-weight ratio, and can therefore be used to manufacture strong and efficient packaging. In addition, composites provide a high barrier to moisture, oxygen, microbes and light.

Reducing plastic and increasing the effectiveness of packaging requires a high level of precision and accuracy in the manufacturing process.

Several trends are emerging in the packaging industry. First, the sector wants to help tackle food waste through shelf-life-extending packaging. It is also promoting a shift toward recycled packaging and expanding the production of biodegradable or compostable alternatives to plastics. Reducing plastic and increasing the effectiveness of packaging requires high precision and accuracy in the manufacturing process, which should consume as little energy as possible. Together with Berhalter and other customers, GF Machining Solutions will continue to develop innovative solutions in this field.

Hot wire for new lids: How does it work?

New composite materials can be used to manufacture strong and efficient packaging that makes food and beverages last longer. When cutting or punching a yogurt lid, for example, precision is essential. The tighter the tolerances in a lid's closure, the better the content of the cup is protected. Wire-cutting EDM technology is ideal for filigree cuts. It uses a metallic wire (electrode) to cut a programmed contour in a workpiece. This infographic shows how it works.



Read about GF's other projects focusing on food safety and packaging



Cool production

Champinter, a mushroom production and processing cooperative in Villamalea (Spain), needed a new piping system to cool the pasteurization and production processes at its facility. **The GF Piping Systems** team opted for the COOL-FIT 2.0 and 4.0 system to meet the exact demands of mushroom cultivation. Different stages of the growing process require precise conditions ranging from 15°–55°C, with 85–95% humidity and no condensation build-up. The COOL-FIT system not only meets all the technical requirements for stable growing conditions, it is also 50% more efficient than the old piping system.

Read more about [COOL-FIT 4.0](#), which is designed for use in commercial and industrial refrigeration installations.



Textured bottles

Custom Etch is the largest laser texturing service provider in North America. The company, based in New Castle PA (US), processes more than 4'000 molds every year. It discovered laser texturing more than ten years ago, when faced with the challenge of applying a geometric-style texture to PET bottles for a leading global beverage company. Environmentally friendly Laser technology from **GF Machining Solutions** enables Custom Etch to process molds without applying chemical etching.

Discover [GF Machining Solutions' Laser technology](#).

Our contribution to the UN Sustainable Development Goals (SDGs)

Through its collaboration with **Berhalter, GF Machining Solutions** contributes to the achievement of:

7 AFFORDABLE AND CLEAN ENERGY



UN SDG 7:

Ensure access to affordable, reliable, sustainable and modern energy for all.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



UN SDG 12:

Ensure sustainable consumption and production patterns.

Learn more about GF and its contribution to the UN SDGs in the [GF Sustainability Report](#).

Our employees

GF employees are the driving force behind the company's success and play the most important role in the realization of its five-year strategy. GF's company tagline, "Going Forward", inspires a collaborative spirit at all levels and locations, encouraging new approaches to teamwork and supporting each employee's personal and professional growth. As a leading global company with a focus on sustainability and innovation, GF strives to offer attractive employment conditions in line with the market.

In 2022, despite the ongoing effects of COVID-19 and other challenges, GF's global teams demonstrated exceptional resilience and dedication. As GF entered the second year of its five-year strategy cycle, it continued to realize its vision to become a sustainability and innovation leader providing superior customer value.

As set out in the GF Sustainability Framework 2025, an integral part of its Strategy 2025, the company strives to offer a diverse, engaging and safe workplace. In 2022, GF published its Diversity, Engagement and Inclusion Policy, thus consolidating the existing directives and practices on this topic into a single document.



GF values

To unlock the potential of a company's teams, a common culture with shared values is essential. GF promotes a culture that focuses on creating highly efficient teams, fosters a caring and inclusive environment, and promotes learning and growth.

Three values underpin GF's culture:

- + Caring is about being part of a team.
- + Learning is about having an open mind.
- + Performance is about speed and excellence.



Culture Movement

GF continued to roll out the Culture Movement in 2022. This initiative encompasses all employees at all seniority levels and aims to embed the GF values in their daily activities. A number of Change Agents, employees who have volunteered to participate actively in the movement, are helping to convey the values and behaviors to local teams. In 2022, an estimated 300 Change Agents led some 2'400 employees in "team experiments" focusing on how to apply the values in their day-to-day work.

In November, GF celebrated the first anniversary of the Culture Movement with more than 4'200 employees worldwide attending a global hybrid event. Held over two sessions to accommodate different time zones, the event featured exchanges between the GF Executive Committee and Change Agents about their experiences with the Culture Movement.



Attracting new talents

To position itself as an employer of choice in 2022, GF ran targeted social media campaigns to address potential employees in various demographic categories, for example, with the "Meet our pioneers" campaign.

For GF, creating a diverse and inclusive culture starts with the talent recruitment process. In line with the company's ambition to create a diverse and inclusive workplace, recruiters and managers from Germany, Austria and Switzerland underwent training on unconscious biases in recruiting, promotion and performance evaluations.

Diversity in education is also very important at GF, and both higher education and vocational trainings are highly valued. In 2022, the company joined UNITECH, a pan-European network through which GF can recruit top graduates from some of the leading technical universities in Europe. To shine a spotlight on the company's focus on innovation, GF Machining Solutions invited prospective apprentices at a job fair in Switzerland to program and rewire a robotic arm so it could complete a simple task – namely, picking up a piece of chocolate.



https://www.youtube.com/embed/t4RN_RnjWNs

Nurturing existing talents

GF offers its employees online and in-person training that enables them to work on the skills needed in today's fast-changing and increasingly digitalized economy. For example, the GF Academy provides a broad range of internal training and opportunities to drive personal and professional development. Among these are advanced leadership training sessions, including modules geared specifically to female leaders.

GF also continually encourages its employees to take control of their professional growth and development. It supports employees through various programs and processes, such as the Talent Management initiative launched in 2021 that features the application "MyNextBigStep". The initiative aims to motivate employees to prepare, apply for and take the next big step in their careers at GF. In this way, GF aims to foster stronger employee commitment and discover new talents who are looking to learn and advance.



Digitalization also enables employees spread across over 30 countries to get to know one another better as individuals and professionals. In 2022, GF Piping Systems launched "GF Mystery Coffee", a platform that gives employees the opportunity to benefit from GF's global presence. After employees register, an algorithm finds a random match, and two colleagues then engage in a virtual exchange. Such exchanges foster cross-departmental and cross-country collaboration.

Organization of GF

Georg Fischer Ltd, the Holding Company of the GF Corporation, is organized under Swiss law. It is headquartered in Schaffhausen (Switzerland), and listed on the SIX Swiss Exchange.



The members of the Executive Committee in the renovated GF Corporate Center that will be ready to welcome employees in May 2023: (from left) Carlos Vasto, President GF Casting Solutions; Mads Joergensen, CFO; Andreas Müller, CEO; Ivan Filisetti, President GF Machining Solutions; Joost Geginat, President GF Piping Systems

Board of Directors

The members of the Board of Directors are elected individually by the Annual Shareholders' Meeting for a one-year term until the next ordinary Annual Shareholders' Meeting. The Board of Directors has ultimate responsibility for supervising and monitoring the management of Georg Fischer Ltd. It decides the company's strategy and organizational structure, the organization of finance and accounting, the annual budget and the investment budget. It also appoints the members of the Executive Committee, to which it transfers responsibility for the operational management of the Corporation. In accordance with the Swiss Code of Best Practice for Corporate Governance of *economiesuisse*, all eight members are non-executive and independent. The Chairman of the Board of Directors is not simultaneously the CEO.

Executive Committee

Unless specified otherwise by law or in the Articles of Association of Georg Fischer AG, the Board of Directors delegates responsibility for the operational management of the Corporation to the CEO, who is supported in this task by the Executive Committee. The extent to which competencies are delegated by the Board of Directors to the Executive Committee and the nature of the cooperation between the Board of Directors and the Executive Committee are defined by the Organization and Business Rules. Under the leadership of the Chief Executive Officer (CEO), the Executive Committee addresses all issues of relevance to the Corporation, takes decisions within its remit and submits proposals to the Board of Directors.

Corporate structure

The GF Corporation is organized in the three divisions GF Piping Systems, GF Casting Solutions and GF Machining Solutions, and the two Corporate Staff Units Finance & Controlling and Corporate Development. The Presidents of the divisions and the Corporate Staff Units are responsible for managing their businesses and for achieving their business objectives.

Corporate Center

The CEO and the CFO form the management of the Corporate Center. Strategically important competencies and information are shared and made available at this level. The Corporate Center is closely involved in management, planning, IT, communications, finance, management development and corporate culture. The Corporate Center also ensures that sustainability, governance, risk management and compliance practices meet the requirements of the owners and the public, and it supports the Board of Directors in meeting its responsibilities.

Finance, Controlling and Sustainability

Finance & Controlling uses state-of-the-art information systems to ensure the time-critical financial management of the Corporation. A standardized system of financial reporting is used across the entire Corporation, guaranteeing immediate and complete transparency. Currency, interest rate and credit risks are monitored and managed at Corporation level. GF considers sustainability to be a key element in both its strategy and its business activities. An integral part of this Corporate staff's responsibilities is the active management of the Corporation in order to meet the ambitious sustainability goals defined in the Strategy 2025.

Corporate values and management development

The sustainable overall development of the Corporation is supported by shared corporate values. These are enshrined in the Code of Conduct and are becoming increasingly important with the spread of globalization. Great importance is also attached to internal training, talent management and to selecting the best possible people for management positions. Up to 70% of all Senior Management positions are filled with internal candidates.

Communication

GF is a strong brand that has been built and strengthened consistently over many years. The Corporation builds confidence in its products and services through open and active communication with customers, employees, the media, analysts, shareholders and other stakeholders.

Corporate values

The sustainable development of the Corporation is supported by shared corporate values. These are enshrined in the Code of Conduct and are becoming increasingly important with the spread of globalization.

Corporate governance

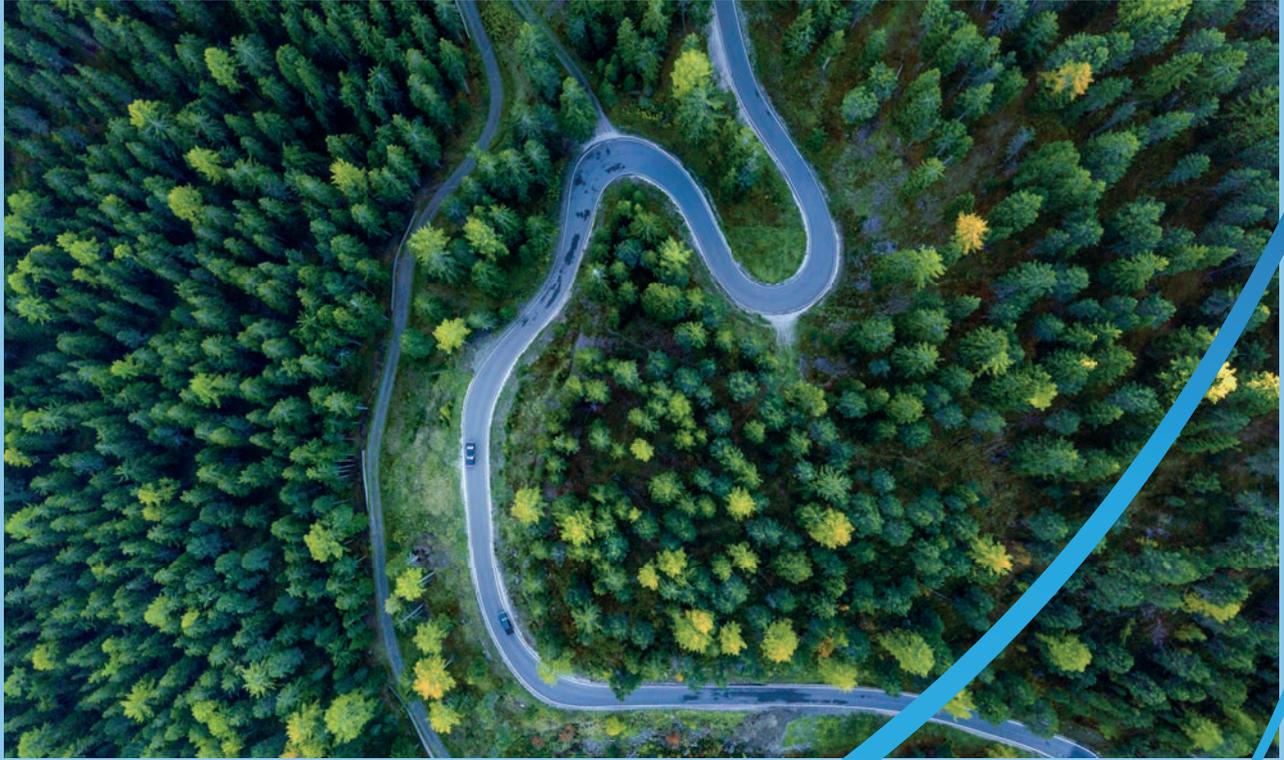
For detailed information on corporate governance, see the Corporate Governance Report.

GF organization structure

As of 1 January 2023



+GF+



Sustainability Report

Going forward and shaping the future

Sustainability Report

Sustainability key figures

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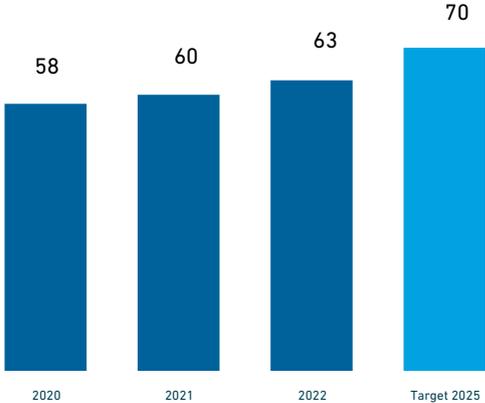
Sustainability key figures 2022

Click here to see the [financial key figures](#).

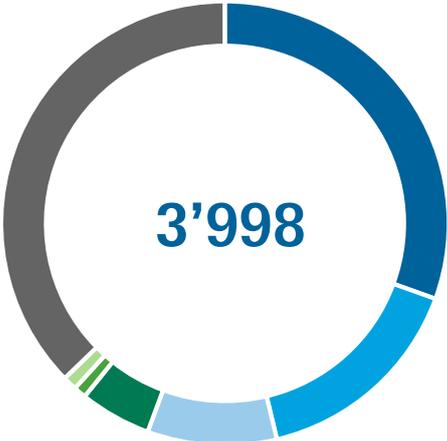
The presented Sustainability key figures follow the targets of GF's [Sustainability Framework 2025](#) which is an integral part of the strategy 2025.

Product portfolio

Sales with social or environmental benefits
% of total sales



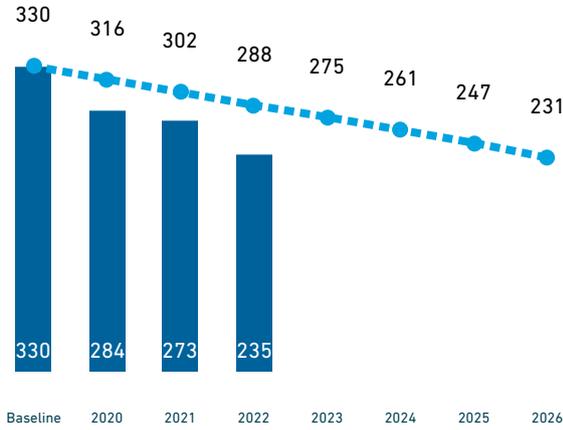
2022 sales with social or environmental benefits
in CHF million



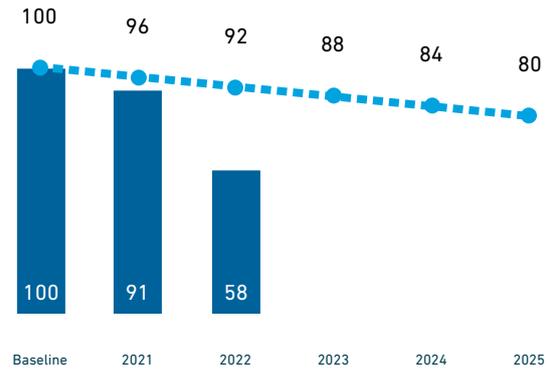
- 31% Mitigating climate change
- 16% Conserving water
- 9% Promoting safety
- 5% Ensuring health
- 1% Delivering education
- 1% Sustainable buildings
- 37% No direct or substantial impacts

Climate and resources¹

CO₂e emissions (scope 1 and 2)
in 1'000 tonnes



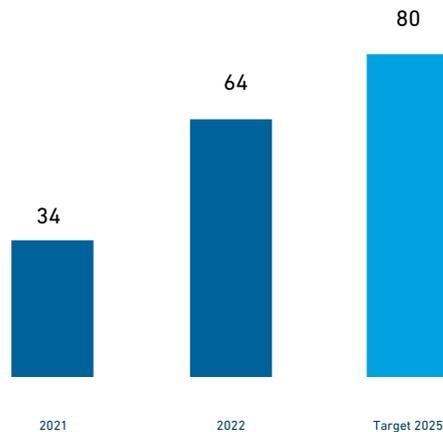
Unrecycled waste intensity index
(unrecycled waste per production volume) in %



Water intensity index
(water consumption per production volume) in %

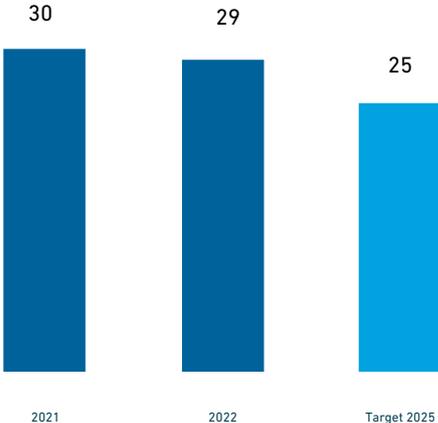


Conducted sustainability assessments of key suppliers
in % of procurement spend

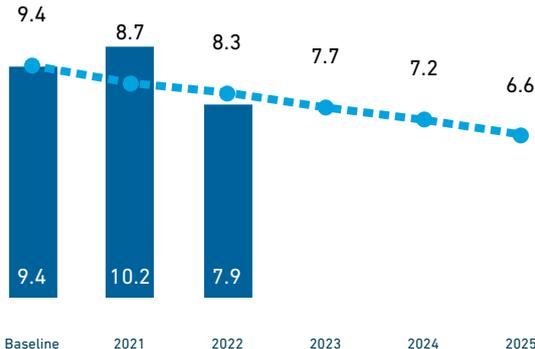


People and well-being

Newly appointed women managers in %



Accident rate as lost time injury frequency rate (LTIFR)² per million hours worked



+ GRI 303-1 | GRI 305-1 | GRI 305-2 | GRI 305-5

¹ In order to report data in time for the publication of the 2022 Sustainability Report, data for environmental figures are actuals for the period from January to September, where available from January to October, and forecasted for the remaining period from October/November to December 2022. Further information on the forecasting methodology is available in the [Reporting approach](#).

² In 2022, following GF's target calculation approach four GF companies were newly added to the sustainability targets 2025. The change of scope in reporting was only visible in the baseline of the accident rates target and therefore the target and the baseline was adjusted. Further details are available: [Reporting approach](#)

Progress on Sustainability Framework 2025

An integral part of the GF Strategy 2025, the Sustainability Framework defines eight clear targets to achieve across the company's operations as part of its roadmap to become a sustainability and innovation leader providing superior customer value. Reflecting the company's commitment to transparency, this report discloses the progress made in the second of this five-year journey.

Progress in 2022

In the past year, GF made good progress against most of its targets. The following provides an overview of where GF stands with regards to its targets and what has been achieved during 2022.


Product portfolio

Target 2025	Status 2022	Progress in 2022
<div style="display: flex; align-items: center;">  <div> <p>Product portfolio</p> <p>70% of sales with social or environmental benefits</p> </div> </div> <div style="margin-left: 20px; text-align: center;">  </div>	<p>GF generated 63% of its sales from products, systems or solutions that deliver social or environmental benefits.</p> <p>All three divisions continuously carry out measures and projects to increase the share of products, systems and solutions with social or environmental benefits. All divisions aim to maximize the social and environmental benefits of their innovations. For this purpose, a sustainability radar was developed to quickly evaluate different options.</p> <p>Further details are available in Product portfolio.</p>	


Climate and resources

Target 2025	Status 2022	Progress in 2022
<div style="display: flex; align-items: center;">  <div> <p>SBT CO₂e emissions</p> <p>Reduce absolute scope 1 and 2 CO₂e emissions by 30% by 2026</p> </div> </div> <div style="margin-left: 20px; text-align: center;">  </div>	<p>GF reduced its scope 1 and 2 emissions by 29% compared with the baseline.</p> <p>In 2022, the SBTi validated GF's GHG emissions targets.</p> <p>GF made significant progress toward achieving this target in the year under review. The increase of renewable energy by 31%, contributed to this great achievement. In addition, several sites invested to install photovoltaic (PV) systems on the roofs of buildings.</p>	

Further details are available in [Climate and energy](#).



SBT CO₂e emissions

Reduce **scope 3 CO₂e emissions by 34.6% per tonne of processed material and use of sold products** by 2030



The scope 3 intensity increased to 3.9 tonnes of CO₂e per tonne of processed material and use of sold products compared with the baseline.

The main reason was the planned ramp-up phase of magnesium components and change of content in the iron foundry of GF Casting Solutions. The other two divisions decreased the intensity due to their investment in bio-based material for GF Piping Systems' products and reduced electricity consumption of machines.

Further details are available in [Climate and energy](#).



Water

Reduce **water intensity by 20%** in high stress areas



GF's water intensity in high-stress areas decreased by 6% compared with the baseline.

Compared to 2021, the company decreased its water intensity. The main improvements stem from water management measures at a GF Casting Solutions site in China and GF Piping Systems sites in Indonesia and the US.

Further details are available in the [Water footprint](#).



Waste

Reduce **by 20% intensity of waste** sent to landfill or incineration



GF reduced the intensity of waste sent to landfill or incineration by 42% compared with the 2018–2020 average.

The main contribution to the target achievement was the sand recycling programs at the GF Casting Solutions site in Leipzig (Germany) and the GF Piping Systems site in Sissach (Switzerland). During the reporting year, GF recycled 78% of its waste.

Further details available in [Natural resources, materials and waste management](#).



Supply chain

Perform **sustainability assessments for 80%** of procurement spend



GF assessed 64% of its procurement spend in 2022, which is in line with achieving its five-year goal.

GF has partnered with the rating agency EcoVadis to conduct these sustainability assessments. In addition, the company accepts similar ratings and in-house developed sustainability risk screenings. In 2022, the responsible procurement team continued with the supplier assessments and started with a series of webinars to help suppliers improve their ratings. In total, approximately 600 suppliers out of some 1'200 key suppliers were assessed. In the upcoming years, the team will continue with the assessments and work in parallel to improve the supplier's score, if necessary.

Further details are available in [Responsible supply chain](#).



People and well-being

Target 2025	Status 2022	Progress in 2022
-------------	-------------	------------------



Diversity and inclusion

25% of newly appointed managers are women



29% of newly appointed managers were women, meaning GF exceeded its target.

All three divisions contributed to this progress. In the year under review, several awareness raising trainings and leadership programs took place in various GF locations worldwide. To further advance the D&I initiatives, GF conducted a specific survey at the end of 2022. Those results are being analyzed in the first quarter of 2023. To move beyond the gender focus, the internal employee magazine **Globe** focused on various aspects of diversity in GF in all facilities in its last 2022 issue.

Further details are available in the section [Diversity and inclusion](#).



Employee engagement

At least **80%**
recommend GF as an
employer of choice



Two divisions conducted an employee engagement survey during 2022, a global survey is planned for 2023.

GF Casting Solutions conducted an employee survey that 2'228 employees participated in, with 79% considering the division as an "employer of choice". GF Machining Solutions carried out a similar survey in November 2022 that had a participation rate of 65.8% and an employee satisfaction rate of 74.1%. Local management teams have started to work on improvement measures to raise employee satisfaction.

Further details are available in [Fair and attractive employer](#).



Health and safety

Reduce **accident rate by**
30%



GF's accident rate dropped to 7.9 LTIFR in 2022. The total number of accidents were 265 which equals a 12% reduction in the number of accidents compared with 2021.

This progress is mainly due to a focus on safety, the continuous improvements implemented and the "Zero Risk/Be aware Be safe" campaign.

Further details are available in [Safety and well-being](#).



Exceeded



On track



Below expectations

Sustainability Framework 2025



Product portfolio

Innovate products and solutions for a sustainable lifecycle



Product portfolio

70% of sales with social or environmental benefits



Climate & resources

Decouple resource consumption from growth

SBT CO₂e emissions

Reduce absolute scope 1 and 2 CO₂e emissions by 30% by 2026

Reduce scope 3 CO₂e emissions by 34.6% per tonne of processed material and use of sold products by 2030



Water

Reduce water intensity by 20% in high-stress areas



Waste

Reduce waste intensity by 20% sent to landfill or incineration



Supply chain

Perform sustainability assessments for 80% of procurement spend



People & well-being

Pursue a diverse, engaging and safe work place



Diversity and inclusion

25% of newly appointed managers are women



Employee engagement

At least 80% recommend GF as an employer of choice



Health and safety

Reduce accident rate by 30%

+ GRI 3-3 | GRI 303-1 | GRI 305-5 | GRI 403-9 | GRI 405-1

Sustainability governance

As an integral part of GF's business and corporate culture, sustainability is a core focus for GF throughout its entire organization – from the highest decision-makers on its Board of Directors to its individual divisions, sites and teams. Its governance structure defines clear responsibilities and accountabilities in its sustainability planning, implementation, tracking and reporting.

Under this sustainability governance structure, GF works to continually raise the sustainability benefits of its product portfolio, lower its green house gas emissions (GHG), reduce waste and preserve natural resources, while creating a safe, diverse, inclusive and engaging workplace. It achieves these goals through defined key performance indicators (KPIs) and tracking and reporting across all levels of the company, in compliance with international standards and strict internal policies. GF's commitment to sustainability governance is reflected in its external ratings, where it consistently receives positive assessments from the world's leading rating agencies.



GF achieves its sustainability goals through defined key performance indicators (KPIs) and tracking and reporting across the company.

Sustainability ratings

Rating agency	Performance	Performance
	2022	2021
CDP (A is the highest score.)	A- on climate	A- on climate
	A- on water	A- on water
S&P Global CSA	63/100	60/100
MSCI (AAA is the highest score.)	AA	AA
Sustainalytics	ESG Risk Rating: 25.2 (Medium Risk) (last update March 2022) Score 59/413 (update November 2022)	ESG Risk Rating: 25.3 (Medium Risk) Score 46/363
ISS ESG	C+ prime status	C+ prime status
ISS quality scores (1 is the highest score. Scores updated throughout the year, last update December 2022)	1 - Environment 1 - Social 2 - Governance	1 - Environment 2 - Social 4 - Governance

CDP

In December 2022, for the third year in a row, the London-based CDP (formerly, Carbon Disclosure Project) rating agency awarded GF an A- rating (leadership level) for its efforts regarding climate change and water security. GF's management of its environmental and climate impacts is embedded in its Sustainability Framework 2025.

S&P Global CSA

In 2022, GF obtained an overall score of 63, an increase of two points compared with 2021. For the very first time, [GF was recognized as a Sustainability Yearbook Member](#) for its good rating performance in 2022 in the S&P Global Sustainability Yearbook. Only 708 companies qualified for the yearbook out of over 7'800 in 61 industries that were assessed. The S&P Global Corporate Sustainability Assessment (CSA) is an annual evaluation of companies' sustainability practices. The CSA focuses on sustainability criteria that are both industry-specific and financially material.

EcoVadis

Both GF Piping Systems and GF Casting Solutions received an EcoVadis silver medal, placing them among the top 25% of companies assessed. The award recognizes their performance in 2022 on criteria relating to the environment, labor and human rights, ethics and sustainable procurement.

MSCI

In 2022, GF maintained a AA rating from MSCI, a global agency that measures and ranks companies' management of financially relevant sustainability risks and opportunities. GF was among just 28% of companies to achieve a AA score in 2022.

Financial Times (FT) and Statista Climate Leaders list

After reducing its GHG emission intensity by 10.9% between 2015 and 2020, GF now ranks among the top five of 26 machinery and industrial equipment companies in the 2022 FT and Statista Climate Leaders list. The financial media outlet and the statistics portal recognize companies that achieve the greatest reduction in their scope 1 and 2 greenhouse gas (GHG) emission intensity in a five-year period. The FT and Statista have defined emission intensity as tonnes of GHG emissions per EUR 1 million of revenue.

Environmental management system

An environmental management system (EMS) enables GF to manage resources more efficiently and sites to take corrective actions if their consumption exceeds defined targets. An EMS also helps facility operators create data-driven approaches for improving energy efficiency and reducing consumption.

At the end of 2022, 93% of GF's legal entities with production facilities reported their data into the Sustainability Information System (SIS) tool and 89% of them had an EMS in place that was certified to ISO 14001, an internationally recognized standard for environmental management systems. In addition, nine facilities from GF Piping Systems and GF Casting Solutions were certified to the energy management standard ISO 50001. These nine sites account for 47% of GF's total energy consumption.

Health and safety management system

GF has formalized its goal of reducing injuries through its global adoption of the occupational health and safety (OHS) management system according to ISO 45001. The company had committed that all its production plants worldwide must be certified to ISO 45001 and that newly acquired companies have up to three years from their acquisition to achieve certification. At the end of 2022, 48 plants, representing 86% of production companies, were ISO 45001 certified. GF Urecon's newly acquired companies have now been certified to ISO 45001.

Governance

The GF Board of Directors is responsible for the company's overall sustainability performance. In mid-2020, sustainability came under the remit of the Nomination Committee, which was renamed the Nomination and Sustainability Committee. More information about the areas of focus and meetings held in the year under review can be found in the chapter [Nomination and Sustainability Committee](#). GF measures its overall progress against a predetermined timeline and the strategy cycle.

The Sustainability Committee also ensures that executive compensation is aligned with GF's sustainability goals – in particular, the eight targets of the [Sustainability Framework 2025](#). As a result, each Executive Committee member's [short-term incentive \(STI\)](#) is linked to the company-wide CO₂e emission target. Members also have individual targets linked to initiatives such as the zero accidents campaign, as well as circular economy benchmarks or targets to implement the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

The Executive Committee oversees GF's progress in reaching its strategic goals and targets. It also conducts performance reviews between two and four times per year and within each division's management meetings. These reviews allow the Executive Committee to take the strategic and operational actions needed to ensure the company is on track to meet its sustainability goals.

To assist the Executive Committee in implementing the Sustainability Framework 2025, GF established the Corporate Sustainability Council (CSC). Headed by the CSC Chairperson, who advises the Executive Committee, the council also oversees and coordinates all sustainability-related activities. The CSC meets twice a year. Members include the CEO, CFO, divisional presidents, corporate and divisional sustainability teams and high-level members of management.

The CSC's key responsibilities include the following:

- tracking and reporting GF's progress in its Sustainability Framework 2025;
- supporting the Executive Committee in making decisions on cross-divisional sustainability projects and initiatives;
- coordinating and supervising these projects and initiatives; and
- reporting their progress to the Executive Committee.

Corporate Sustainability

Corporate Sustainability manages and coordinates all relevant sustainability activities within GF and with its external stakeholders. In a broader sense, it also raises organizational awareness about sustainability and climate-related risks. Its core duties include implementing the Sustainability Framework 2025 as an integral part of the Strategy 2025 and collaborating with the divisions to support the rollout of sustainability activities.

Corporate Sustainability is also responsible for the transparent annual disclosure of the company's sustainability performance in the annual sustainability report and other channels. The department's ongoing cooperation with external ESG rating agencies is an important task and is closely linked to Investor Relations. It also works in close contact with each division's sustainability teams to track the progress of individual sites, business units and divisions against their targets.

Reporting to the CFO, the Head of Corporate Sustainability leads the Corporate Sustainability team in focusing on key strategic, cross-functional sustainability-related projects and initiatives. They are also responsible for sustainability reporting, including coordinating with external ESG rating agencies. The Head of Corporate Sustainability participates in Sustainability Committee meetings.

Sustainability in GF divisions

To meet the goals of the Sustainability Framework 2025, all of GF's divisions and departments are responsible for continuously integrating sustainability into their activities, products and solutions. The divisional sustainability units review their sustainability performance every quarter and present the results to their respective management teams.

The divisions review:

- the achievement of sustainability targets and the implementation status of agreed actions;
- the monitoring of the sustainability performance of GF's business partners; and
- the development and marketing of products and solutions that provide customers with sustainability benefits.

Every year, the divisions establish a list of actions needed to achieve the company's sustainability targets. Among their responsibilities, the divisional sustainability managers:

- ensure their locations define and submit initiatives to meet defined goals;
- aggregate overviews for their division to track progress; and
- coordinate with Corporate Sustainability on status, cross-divisional information sharing and dispute escalation, where needed.

GF provides incentives to achieve its corporate targets at various levels within the company. For example, it defines individual goals for Executive Committee members and for the corporate and divisional sustainability teams.

Board of Directors
Nomination and Sustainability Committee

The Board of Directors is represented by Nomination and Sustainability Committee (NSC).

Corporate Sustainability Council

Executive Committee

The NSC strategically consults and oversees the GF sustainability program. In addition it aligns in close collaboration with the Executive Committee the compensation targets and releases the annual sustainability report.

The Corporate Sustainability Council assists the Executive Committee in strategic cross-divisional decisions and steers the rollout of Sustainability Framework 2025. It monitors and reports progress of GF's targets.

The Executive Committee drives the implementation and update of the Sustainability program, prepared in consultation with the Board of Directors.

Corporate and divisional Sustainability Teams

The Corporate and divisional Sustainability teams manages and coordinates the operative sustainability measures following GF's material topics. They connect local actions with strategic goals to ensure alignment across the company and external stakeholder requests.

EU taxonomy for sustainable activities

1 Relevance of the EU taxonomy at GF

The European Commission has set climate targets for 2030 underpinned by an action plan, the European Green Deal, to reduce the European Union's net greenhouse gas (GHG) emissions to zero by 2050. A core element of the European Green Deal is the EU taxonomy, a classification system for defining "environmentally sustainable" economic activities. In accordance with Article 10 (3) of Regulation (EU) 2020/852, an activity is "sustainable" ("taxonomy-aligned") if it makes a substantial contribution to at least one of six environmental objectives according to the technical screening criteria defined by the EU taxonomy:

1. Climate change mitigation
2. Climate change adaptation
3. Sustainable use and protection of water and marine resources
4. Transition to a circular economy
5. Pollution prevention and control
6. Protection and restoration of biodiversity and ecosystems

In addition, the activity may not significantly harm the achievement of other objectives and must comply with "Social Minimum Safeguards". Companies are then required to disclose the proportions of sales, capital and operating expenditures for their taxonomy-eligible (economic activities that are described and have technical screening criteria in the taxonomy) and taxonomy-aligned economic activities.

GF supports the EU Taxonomy Regulation as an important step in sustainably transforming the economy. In 2022, GF assessed its business activities against the developed taxonomy criteria and voluntarily disclosed information on its implementation of the EU Taxonomy Regulation and taxonomy-eligible activities, but without financial ratios as it does not yet fall under the taxonomy's regulatory scope. However, mandatory reporting will be required from GF in the future with the adoption of the Corporate Sustainability Reporting Directive (CSRD).

2 Internal approach and methodological background

To implement the EU taxonomy's requirements, GF set up a project group led by the heads of Investor Relations and Corporate Sustainability. The core team worked closely with the Sustainability and Controlling specialists from the three business divisions of GF Piping Systems, GF Casting Solutions and GF Machining Solutions. In addition, the functional departments were also involved in the process.

First, the project group conducted mapping sessions to assign GF's economic activities to the taxonomy's relevant activity descriptions to identify those covered by the EU Taxonomy Regulation, known as taxonomy-eligible activities. In addition to revenue-relevant activities, the project group also considered cross-cutting activities, to which only capital and operating expenditures are attributed. In a second step, the taxonomy-eligible activities were also selectively checked for taxonomy alignment. To follow the EU taxonomy's approach in future reporting periods, GF will enhance the taxonomy alignment checks for its activities and seek to disclose taxonomy KPIs.

There is a general uncertainty around the initial reporting requirements based on the EU Taxonomy Regulation. For GF, this is because the taxonomy covers only particular focus industries, which account for the largest share of GHG emissions. In addition, the taxonomy only focuses on original manufacturers rather than all supply chain contributors such as component manufacturers. As a result, only GF Casting Solutions has some degree of exposure to the EU taxonomy, whereas GF Piping Systems and GF Machining Solutions have minor overlapping potential within the scope of their activities. Furthermore, many of the taxonomy's regulations and notes have unclear or ambiguous formulations, leading to a level of interpretation.

3 Taxonomy-eligible activities

The following activities defined by the EU Taxonomy Regulation have been identified for the recognition and assignment of GF sales revenues, CAPEX and OPEX.

- **3.1. "Manufacture of renewable energy technologies"** includes solutions for solar photovoltaic (PV) panels, biogas and biofuel plants, heat pumps and geothermal energy plants from GF Piping Systems.
- **3.2. "Manufacture of equipment for the production and use of hydrogen" (3.2)** includes solutions by GF Piping Systems used in hydrogen storage tanks.
- **3.3. Manufacture of low-carbon technologies for transport** covers the manufacture, repair, maintenance, retrofitting, repurposing and upgrade of low-carbon transport vehicles, rolling stock and vessels. The activity includes GF Casting Solutions products for EVs and hybrid cars, such as e-axles, shock towers and cross-car beams. It also includes components for fuel cells produced by GF Piping Systems. However, the interpretation is subject to uncertainty as the inclusion of automotive parts under the activity 3.3 is still under discussion.
- **3.4. Manufacture of batteries** includes manufacturing rechargeable batteries, battery packs and accumulators for transport, stationary and off-grid energy storage, and other industrial applications. It also includes manufacturing-related components, such as battery active materials, battery cells, casings and electronic components. GF Casting Solutions produces many of these components for the automotive industry, such as battery housings. GF Piping Systems contributes products into the redox flow battery industry with projects in Japan and Europe.
- **3.6. Manufacture of other low-carbon technologies** is a collective activity for further solutions aimed at substantially reducing GHG emissions. GF Piping Systems contributes water supply and distribution solutions, enabling landfill gas capture and CO₂ storage. GF Machining Solutions contributed to the Blue Competence initiative of the Verband Deutscher Maschinen- und Anlagenbau (VDMA, or Machinery and Equipment Manufacturers Association), which promotes sustainability in mechanical and plant engineering.
- **3.9. Manufacture of iron and steel** includes the manufacturing of iron (including alloy melting) by GF Casting Solutions and iron fittings produced by GF Piping Systems. However, it is not yet clear if only the melting process or also the casting process is eligible. In GF's opinion, only the melting process can be considered eligible.

In addition to revenue-relevant activities, cross-cutting activities to which only capital and operating expenditures are attributed were also considered, such as solar PV projects.

GF aims to gradually expand its reporting and disclosure of taxonomy-eligible and taxonomy-aligned activities, including the proportions of sales, capital and operating expenditures. To date, only the first two environmental objectives have been assessed. In a next step, the technical screening criteria of the remaining four activities will be assessed as soon as the final criteria are released. However, a trend is already emerging. For example, GF Piping Systems' solutions, such as corrosion-resistant piping and leak detection, are enabling the industries mentioned in the draft of the technical screening criteria.

✚ GRI 2-9 | GRI 2-12 | GRI 2-13 | GRI 2-14 | GRI 3-3

Product portfolio

GF is committed to becoming a global sustainability and innovation leader providing superior customer value.

Across its divisions, the company enables the safe and reliable transport of water and gas, empowers greener forms of mobility, and advances energy-efficient and clean manufacturing. As part of its sustainability approach, the company also supports its customers with value-adding services throughout the entire life cycle of each solution.

3 GOOD HEALTH AND WELL-BEING



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



13 CLIMATE ACTION



In 2022, 63% of GF sales (60% in 2021) delivered a social or environmental benefit. In 2022, GF focused its innovations on improving energy efficiency and increasing its use of recycling components as part of its circular economy approach.

By 2025:



Product portfolio
70% of sales with social or environmental benefits

The remaining 30% consists of products that have not recently been substantially upgraded by GF's divisions in terms of sustainability contributions. This covers the following:

- **GF Piping Systems:** applications in the non-renewable energy industry, as this does not contribute to the transformation
- **GF Casting Solutions:** non-automotive products for different industries, as traditionally weight reduction was the key lever for emission reduction during use phase
- **GF Machining Solutions:** machines that were not recently upgraded with energy efficiency features or improved ergonomics for the operator

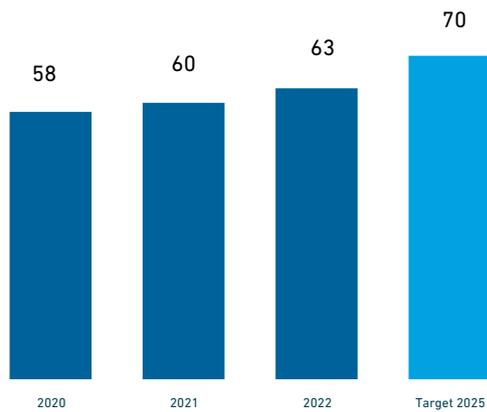


GF enables the safe and reliable transport of water and gas, empowers greener forms of mobility, and advances energy-efficient and clean manufacturing.

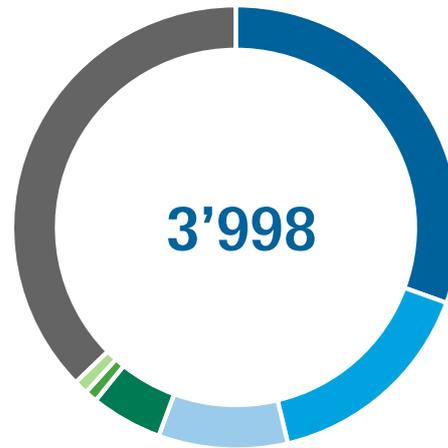
The GF approach to sustainable products

To improve the sustainability impact of its products and services, the company follows a clear guideline: each new solution must demonstrate an improvement in at least two of the three sustainability dimensions (environmental, social and economic) compared with its previous generation. In cases where no predecessor exists, it must demonstrate these benefits in comparison to its main competing product or service.

Sales with social or environmental benefits
% of total sales



2022 sales with social or environmental benefits
in CHF million



- 31% Mitigating climate change**
- 16% Conserving water**
- 9% Promoting safety**
- 5% Ensuring health**
- 1% Delivering education**
- 1% Sustainable buildings**
- 37% No direct or substantial impacts**

Defining categories to measure impact

In each sustainability category, the company measures the benefits of each new solution using the following criteria and definitions:

- **Environmental benefits:** reduced CO₂e emissions; reduced energy consumption and/or water consumption; materials that are biodegradable, recyclable and/or recycled may add longevity
- **Social benefits:** improved ease of operation, enabling users to maximize the solution's potential and efficiency; enhanced health, safety and security of users
- **Operational and economic benefits:** improved efficiency and/or productivity compared with previous (or competing) solutions; compatible with the circular economy

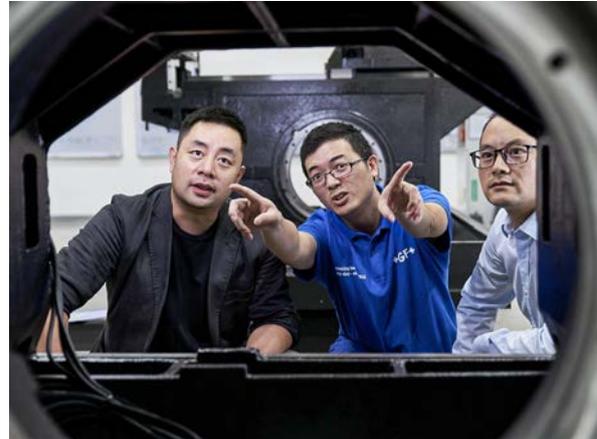


Each new solution must demonstrate an improvement in at least two of the three sustainability dimensions (environmental, social and economic) compared with its previous generation.

GF's sustainability assessment methodology

To incorporate environmental and social benefits into the early stages of its product development, the company has adopted a unique sustainability assessment methodology. All three divisions – GF Piping Systems, GF Casting Solutions and GF Machining Solutions – adopted and developed it for their respective solutions and markets.

The methodology incorporates the "radar model", which provides a quantifiable means of improving the sustainability of new products and solutions. In this model, teams assign values to many important criteria, such as raw materials, weight, energy consumption or logistics methods. The radar then calculates the values into a total score used to compare the social or environmental benefits of the new solution with its previous version or with competitors' products in the same category.



To incorporate environmental and social benefits into the early stages of its product development, the company has adopted a unique sustainability assessment methodology.

Using the company's sustainability assessment methodology, project managers can use the radar model to simulate and compare various possibilities quickly and easily. For example, via a simple color-coded system, managers can adjust various criteria to find more sustainable solutions, such as changing a product's materials to reduce its weight and logistical carbon footprint.

Each division has adapted the methodology to suit its respective processes and goals. GF Piping Systems focuses on raw materials and recyclability, GF Casting Solutions aims to use more sustainable materials and reduce energy, while GF Machining Solutions seeks greater energy efficiency. The company's product and supply chain experts assess all final proposals to ensure they meet the company's strict quality, safety and performance standards.

+ GRI 203-1

GF Piping Systems' product portfolio

GF Piping Systems develops solutions reflecting its belief that "everything is connected". Its cutting-edge products and systems combine leading design efficiencies with digital innovations and strict environmental standards.

Strategy and solutions

As the leading flow solutions provider for the safe and sustainable transport of fluids, GF Piping Systems develops solutions reflecting its belief that "everything is connected". The division creates advanced flow solutions that ensure the safe and sustainable transport of water, gas and chemicals. Its cutting-edge products and systems combine leading design efficiencies with digital innovations and strict environmental standards.



GF has created and published LCAs and EPDs for the Butterfly Valve 565 and other key products.

To create "[connections for life](#)", the division works to:

1. ensure its customers benefit from a consistent flow of fluids without safety issues, leakages or any other environmental concerns;
2. support its customers' decarbonization goals by lowering their energy consumption and GHG emissions; and
3. reduce each solution's environmental impact by incorporating more sustainable materials and increasing system efficiencies during installation and operation.

The Sustainability Framework 2025 is the foundation of GF Piping Systems' sustainability performance. As part of the framework's targets, the division is committed to ensuring each innovative product delivers environmental and social benefits. To achieve this, the division uses sustainability assessment tools and life cycle assessment (LCA) along the entire innovation process, from idea to product launch.

This tool guides and educates the innovation teams, directing their ideas, R&D efforts and innovation processes towards the framework's targets. This tool also offers the innovation teams ideas on areas where sustainability can be improved and guides them in terms of implementation. It also gives guidance on how different aspects of the circular economy principle can be integrated into an innovation project.

Additionally, in 2022, the division accelerated the development and publication of life cycle assessments (LCAs) in partnership with external consultants. The aim is to understand and reduce the environmental impacts of new and existing products, especially key products such as the Butterfly Valve 565 and COOL-FIT.

Due to the growing need for LCAs and environmental product declarations (EPDs), GF Piping Systems continues to verify and document the impact of its solutions throughout all phases of its life cycle – from production use phases to end-of-life. In this context, GF has created and published LCAs and EPDs for the Butterfly Valve 565, the COOL-FIT 2.0/4.0 Systems, and MULTI-JOINT couplers. When a new LCA is available, the division's sales staff receive support via internal training sessions to ensure customers receive clear and accurate information about the environmental performance of a product or system within their current installed base or future installations.

GF Piping Systems' innovative products and solutions address a variety of challenges. These include:

- reducing waterborne Legionnaires' disease and ensuring drinking water installations meet the highest hygiene standards;
- helping to mitigate global drinking water losses due to leakages in aging infrastructure;
- creating energy-efficient solutions for the cooling process of the increasing number of data centers;
- contributing to the development of sustainable city infrastructure and the expanding green building sector;
- developing lighter, longer-lasting solutions that enable the marine industry to reduce GHG emissions and fuel consumption while increasing load capacity; and
- enabling the efficient use of water in industrial processes with reliable and innovative process automation solutions.

Key innovations in 2022

GF Piping Systems is helping make the marine industry more environmentally friendly thanks to its lightweight, corrosion-free solutions. The weight reduction the solutions provide makes it possible to reduce fuel consumption and increase load capacity. With a design lifetime of at least 25 years, these solutions are persistently efficient. They are helping lower vessels' maintenance and overall lifetime costs – and reduce downtime as much as possible.

In 2022, the division developed and brought to market the world's first fire-retardant pipe jacket solution to use lightweight, corrosion-free plastic piping systems in essential applications on ships and offshore locations. The unique HEAT-FIT pipe jacket system meets the International Maritime Organization's (IMO) stringent fire resistance regulations, making thermoplastic piping systems resistant to temperatures around 1'000°C for at least 30 minutes under pressure. The HEAT-FIT jackets are made of durable and flexible materials to withstand the demanding conditions of the marine industry.



The unique HEAT-FIT pipe jacket system makes thermoplastic piping systems resistant to temperatures around 1'000°C for at least 30 minutes under pressure.

Another key innovation is the Ball Valve 543 Pro, which has many enhanced features compared with its predecessor, while retaining its original quality features. For example, a reinforced security break point in the stem interface prevents leaks from excessive wear or force, and two integrated sealing rings in the stem interface provide double safety. Additionally, the Ball Valve 543 Pro features a manual spring return unit ("dead man's lever"), a unique safety feature that enables customers to safely operate valves by automatically resetting the valve into closed position, which keeps the chemicals safely in the piping system and avoids unintended flow. This reliable, compact and cost-effective solution ensures end-to-end process safety and easily eliminates potentially far-reaching risks. The Ball Valve 543 Pro offers complete reliability and is expandable using optional accessories.



The Ball Valve 543 Pro ensures end-to-end process safety, keeping chemicals safely in the piping system and eliminating potentially far-reaching risks.

Today, generating hot water for a building often requires more energy than heating a well-insulated building. To address this problem, GF Piping Systems, together with scientists from the Ostfalia University of Applied Sciences, has developed an online calculator to easily and quickly determine the amount of energy needed to provide hot water in buildings. It can also simulate potential savings and financial payback periods, depending on the technical optimization measures selected by the user.



GF Piping Systems, together with the Ostfalia University of Applied Sciences, has developed an online calculator to easily and quickly determine the amount of energy needed to provide hot water in buildings.

The newly introduced IR PVC-U system is a groundbreaking solution for water treatment applications and the chemical processing sector. It combines two areas of expertise at GF Piping Systems: the heritage of the PVC-U piping system and its market-leading infrared welding machines. This eliminates cementing and improves workplace safety by avoiding hazardous fumes that would otherwise require ventilation. This change improves process reliability and security by using a machine-controlled process that limits the risk of human error and saves the parameters for each weld. With welding obstacles eliminated, it is possible to increase chemical resistance and use PVC-U with media like sulfuric acid at 98%.



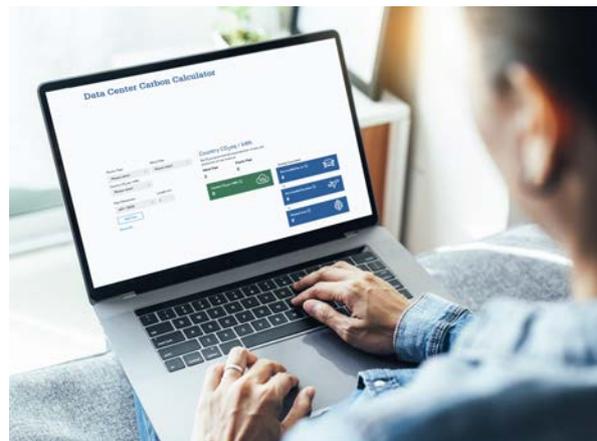
The newly introduced IR PVC-U system eliminates cementing and improves workplace safety by avoiding hazardous fumes.

With its COOL-FIT 2.0 Systems, GF Piping Systems provides several advantages to building owners and industrial leaders, changing how they plan, install and operate cooling applications across their enterprise. The newly introduced COOL-FIT 2.0 Push System is an addition to the existing system and bridges the gap with additional dimensions covering the final meter between the main pipeline and the HVAC unit, improving energy efficiency and ensuring maintenance-free operation for 25 years thanks to unique material properties and safe jointing technology. The heat pump market is one of the fastest-growing markets in both building technology and industry applications. COOL-FIT is already used in these applications; the next step is therefore to evaluate the perfect product fit. A pre-insulated solution will help to provide highest energy efficiency.



Thanks to its unique material properties and safe jointing technology, the COOL-FIT 2.0 Push System improves energy efficiency and ensures maintenance-free operation for 25 years.

To enable data center owners and operators to compare the carbon footprint of plastic pipes to metal pipes within their planned construction or existing enterprise, GF Piping Systems introduced a [carbon calculator](#). This calculator evaluates the energy required to produce the raw materials and the energy needed during the production of the pipes. The core data used to generate this comparison is openly published data available in environmental databases. The results are calculated in kilograms of CO₂e per meter of pipe. The low weight per meter of plastic pipe compared to metal results in a far lower carbon footprint for plastic pipes compared to metal pipes.



GF Piping Systems introduced a carbon calculator that enables data center owners and operators to compare the carbon footprint of plastic pipes to metal pipes within their planned construction or existing enterprise.

GF Casting Solutions' product portfolio

GF Casting Solutions' lightweight solutions help its customers reduce CO₂e emissions and develop alternative drive systems.

Strategy and solutions

As a future-oriented company and as a driving force for innovation in the casting and additive-manufacturing world, GF Casting Solutions aims to take the lead in shaping the development of sustainable mobility. The division's lightweight solutions help its customers reduce CO₂e emissions and develop alternative drive systems. In close cooperation with its customers and partners, the division guarantees that it provides targeted solutions for the challenges faced in the market – from the initial concept and its precise realization to its validation.

The Sustainability Framework 2025, which is an integral part of the Strategy 2025, serves as GF Casting Solutions' guiding star. In its own Strategy 2025, the division is committed to growing within the e-mobility and renewable energy sectors, with a strong strategic focus on e-drive components and structural parts.

The sustainability framework aligns the division's innovation process, as well as its material, product and process development, with environmental criteria. Ultimately, the division aims to adopt a holistic approach to sustainability by developing sustainable products in a socially and environmentally conscious way along the entire value chain.

In this regard, GF Casting Solutions continuously strengthens its product development and sales organization to foster even earlier customer engagement in developing innovative products that deliver environmental benefits. To receive approval, each innovation must undergo a sustainability assessment at an early project stage and provide clear added value from a sustainability point of view.

At a production level, the division also supports process innovations to ensure best-in-class performance at its facilities and foundries. For example, using artificial intelligence reduces raw material losses and scrap rates during the ramp-up of new products. To take another example, using additive manufactured prototypes makes it possible for the division to obtain, test and improve geometries in early design stages before starting actual series production.



In close cooperation with its customers and partners, GF Casting Solutions guarantees that it provides targeted solutions for the challenges faced in the market.

GF Casting Solutions empowers sustainable mobility by developing advanced lightweight products combined with cutting-edge production processes. Thanks to the excellent lightweight design of its die-cast magnesium cross car beam, the division won first prize in the "Magnesium" category at the 2022 European Die Casting Award ceremony.

These innovations provide distinct advantages to customers, particularly those in the automotive and aerospace sectors, where developing alternative drive systems and lightweight components is critical to reducing GHG emissions. Using fewer and lighter components lowers a vehicle's weight, which is one of the most effective ways to reduce fuel consumption or extend battery range, resulting in lower emissions during the vehicle's lifetime.

The division also enables sustainable energy generation by designing and manufacturing state-of-the-art power plant components, including 3D-printed metal equipment – allowing for nearly unlimited design options. In addition, it helps reduce GHG emissions by producing advanced combustion chambers enabling the use of renewable energy sources (eg, hydrogen) in gas power plants.

With circularity as a core focus, each GF Casting Solutions component is made from aluminum, magnesium, iron or superalloys – all of which can be recycled nearly indefinitely. All alloy and production details are stored in a unique QR code laser-marked onto every product.



The GF Casting Solutions' lightweight die-cast magnesium cross car beam met key award criteria, such as innovation, quality, economic viability, resource-efficient construction and complexity.



A unique QR code laser-marked on GF Casting Solutions components enables them to be recycled.

Key innovations in 2022

GF Casting Solutions has now entered a strategic partnership with the open innovation platform STARTUP AUTOBAHN to drive innovation through rewarding collaborations with start-ups and corporate partners. Powered by Plug and Play Germany, the international platform provides an interface to foster partnerships between emerging tech companies and industry-leading corporations.

Through this partnership and strong relations to world-class universities, the division aims to accelerate its proof of concept development across a range of new products, processes and services. The division uses a multilayered central innovation process to identify promising innovations and start-ups. Collaborations may range in scope from developing joint proofs of concept (POCs) to long-lasting collaborations, with the ultimate goal of commercialization-ready implementation.

During 2022, GF Casting Solutions initiated a pilot with a start-up specializing in developing automated carbon-management solutions for industrial companies. The pilot aimed to measure product carbon footprints using a scalable, highly automated, certified method. Both partners have gained important learnings in this project – notably, on managing a product's carbon footprint – and built up their capacity for digitized sustainability processes.

GF Machining Solutions' product portfolio

GF Machining Solutions provides state-of-the-art machining solutions to a broad range of industrial partners, many of which create products that enrich our everyday lives.

Strategy and solutions

GF Machining Solutions strives to be at the forefront of energy-efficient and sustainable manufacturing. As part of its goal to set the standard for intelligent machining solutions and become a trusted partner for the global precision machining industry, it provides state-of-the-art machining solutions to a broad range of industrial partners, many of which create products that enrich our everyday lives.



GF Machining Solutions' laser texturing technology offers a cleaner and faster alternative to chemical etching.

The division supports each machine throughout its entire life cycle, driving a new era of manufacturing that is more intelligent, connected and environmentally friendly. The division's laser texturing technology offers a cleaner and faster alternative to chemical etching. Benefits include eliminating the use of hazardous substances, reduced scrap thanks to a fully digital and repeatable process, and lower energy consumption.

The Sustainability Framework 2025 is the roadmap for the division's sustainability journey. To minimize its environmental impact, the division has two primary goals:

- **to maximize resource efficiency throughout each machine's life cycle.** The division works closely with its customers from the pre-sales concept phase to the end of the equipment's life cycle, when the machine can be refurbished. Remote access solutions offer faster response times and a suite of remote maintenance services.



Benefits include eliminating the use of hazardous substances, reduced scrap thanks to a fully digital and repeatable process, and lower energy consumption.

■ **to reduce each machine's energy consumption.** In addition to delivering maximum performance, GF Machining Solutions' innovations also help its customers reduce their energy consumption. For example, many of the machine models feature energy management systems (such as the Econowatt function) that initiate standby mode during idle periods while keeping auxiliary functions activated to maintain precision. Thanks to features such as improved control efficiency, higher energy efficiency and intelligent temperature control, the MILL X U series consumes 7% less energy than its predecessor.

The division is working to significantly reduce each machine's lifetime carbon footprint via several steps. Firstly, the divisional R&D team has introduced energy reduction programs to drive hardware and software improvements that it implements and monitors annually. Starting with a 2020 baseline, GF Machining Solutions is targeting a reduction of 20% in energy consumption per machine for its laser machines, 20% for electrical discharge machining (EDM) and 35% for milling by 2025. As part of these multi-year programs, the R&D team presents its energy-reduction targets, including how and when they will achieve them, to management.



Many of the division's machine models feature energy management systems, such as the Econowatt function.

Secondly, to integrate the review process across broader management levels, GF Machining Solutions has adopted the sustainability radar – shared across all divisions – to perform sustainability assessments during its new product development. Using this tool, it is possible to measure and proactively manage the carbon footprint. The division will review implementation when key milestones are reached during the development process.

Finally, the division is working on improvements with its suppliers to ensure its purchased components have a smaller environmental footprint than previous generations.

Key innovations in 2022

In 2022, GF Machining Solutions continued its circularity drive, building on its 2021 spool redesign to make them recyclable by focusing on the EDM wire itself. In selected locations, the division has implemented recycling partnerships that are yielding their first results, recycling used EDM wires into new metal parts, such as faucets.

To reduce material consumption in wire EDM, the division has developed software algorithms. This process removes material from metal workpieces using electrical current supplied via a thin tight wire. Using the Intelligent Spark Protection System, customers now have greater control over the wear of the wires. The algorithm detects strain on the wire and adjusts its running speed accordingly. In doing so, the software ensures that the machine is using the minimum amount of wire that the cut requires. This can result either in less wire consumption (and waste) or faster cutting, which could result in less energy consumption.



https://www.youtube.com/embed/A0i1L5Cb_a8

Climate and energy

As a leading company in the machining and manufacturing sectors, GF works across divisions to make meaningful reductions in its scope 1, 2 and 3 GHG emissions.

GF is committed to reducing energy consumption and greenhouse gas (GHG) emissions, critical steps in the ongoing efforts to slow down climate change. As a leading company in the machining and manufacturing sectors, GF sets an example, working across divisions to make meaningful reductions in its scope 1, 2 and 3 GHG emissions.



Science Based Targets initiative (SBTi)

In September 2022, GF reached an important milestone in its environmental journey when the [SBTi](#) validated the company's science-based targets (SBTs) to reduce GHG emissions along its value chain. These targets demonstrate the company's commitment to long-term climate action and its willingness to address the challenge that climate change represents for the world.



As part of its global commitment to invest in photovoltaic (PV) installations, GF installed several additional systems during 2022.

The company's goals are to reduce absolute scope 1 and 2 GHG emissions by 30% by 2026. By 2030, it will also reduce its scope 3 GHG emissions from purchased goods and services and the use of sold products by 34.6% per tonne of processed material and use of sold products, using 2019 as a baseline.

To meet these ambitious goals, GF is accelerating its key measures to reduce GHG emissions across the three divisions, which have put in place roadmaps to support the company's targets and their customers' sustainability journeys.



SBT CO_{2e} emissions

Reduce **absolute scope 1 and 2 CO_{2e} emissions by 30%** by 2026

Reduce **scope 3 CO_{2e} emissions by 34.6% per tonne of processed material and use of sold products** by 2030

The SBTi is an internationally recognized framework for climate change goals that provide a clearly defined pathway for companies to reduce GHG emissions, aligned with the research community's latest understanding of climate change. Targets are considered science based if they support the Paris Agreement's goals to limit global warming to well below 2°C above pre-industrial levels and make efforts to limit warming to 1.5°C.



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Energy usage and GHG emissions

GF's scope 1 and 2 GHG emissions account for about 13% of the total GHG impact of the company. The remainder comes from scope 3 emissions in the company's value chain. The recently approved science-based targets (SBTs) consider all three scopes of emissions.

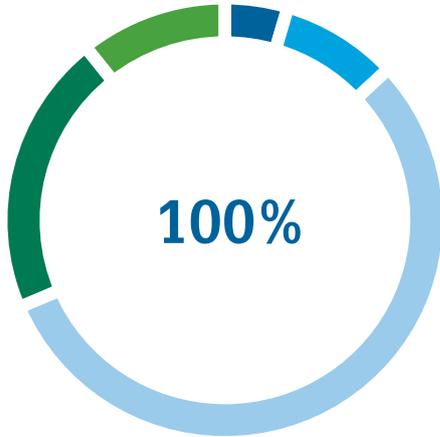
Almost 90% of the company's total GHG emissions occur in the upstream and downstream sections of its value chain; they are classified as scope 3 emissions. In 2021, GF calculated its scope 3 emissions in all 15 categories in accordance with the GHG Protocol. Four of these categories were deemed irrelevant, while two of the remaining 11 were identified as material in the 2019 emission inventory as they contribute to 90% of GF's scope 3 emissions.¹ Moving forward, the company will increase its focus on reducing emissions attributable to purchased goods and services (category 1) and the use of sold products (category 11).¹

Progress in 2022

GF is on track to meet its scope 1 and 2 emission reduction targets for 2022. Compared with 2021, total scope 1 and 2 emissions decreased in the reporting year by 14% and by 29% against the 2019 baseline. According to the 2022 forecast, GF increased its scope 1 emissions by 2% and reduced its scope 2 emissions by 38% compared with 2019 baseline data. This progress was due to several factors including the reduced energy consumption in China, a divestment from a joint venture (GF Linamar) in the US, energy efficiency measures and an increase in renewable energy consumption.

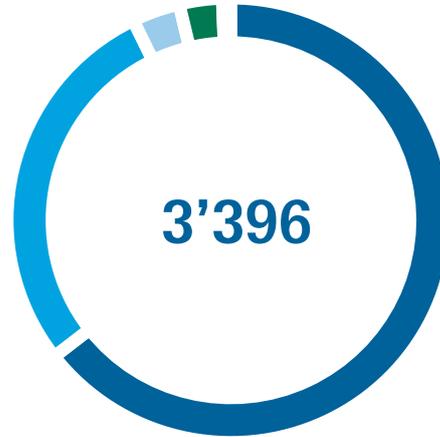
In 2022, renewables accounted for 31% of total energy consumption (up from 24% in 2021). The vast majority (95%) come from purchasing approximately 992'000 GJ of renewable electricity, primarily hydro and wind power. The remaining amount was self-generated hydro and solar power, and purchased renewable district heat.² Total fuel consumption in 2022 decreased by 7% compared with 2021, mainly due to the divestment of the GF Casting Solutions site.

**CO₂e emissions per scope
in % of total emissions**



- 5% Scope 1 emissions (stationary fuels)
- 8% Scope 2 market-based emissions (electricity + district heating)
- 55% Scope 3 emissions (category 1)
- 21% Scope 3 emissions (category 11)
- 11% Scope 3 emissions (remaining categories)

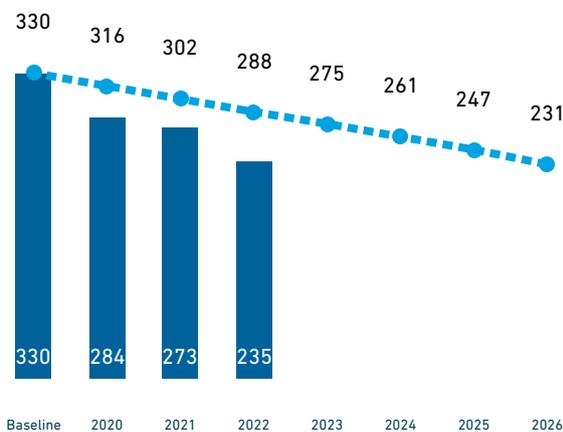
**Energy sources
in 1'000 GJ**



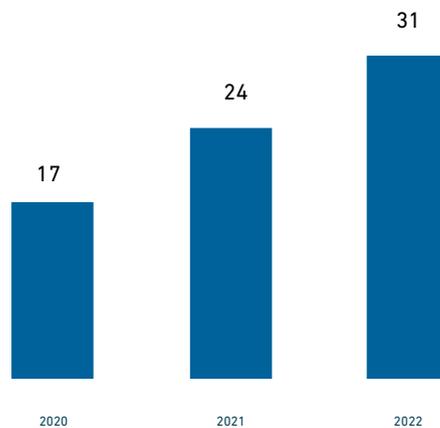
- 65% Electricity
- 28% Natural gas, biogas, fuel oil
- 3% Coke
- 3% Fuel use (for internal transportation)
- 1% Other energy sources

An analysis shows that scope 3 emissions account for close to 90% of GF's CO₂e emissions, while scope 1 and 2 emissions make up the remaining 10%.

**CO₂e emissions (scope 1 and 2)
in 1'000 tonnes**



**Renewable energy (incl. certified green electricity)
in %**



Actions for managing energy and mitigating climate impact

GF's SBT action plan includes purchasing renewable electricity in different countries, investing in energy efficiency measures and self-generating renewable energy where possible. These actions help reduce the company's current GHG emissions as well as those projected to arise from the growth of the business.

Renewable energy

Following the scope 2 roadmap and given that 65% of GF's total consumed energy is electricity, increasing the amount of renewable energy is key to achieving its GHG goals. In 2022, 20 production sites purchased certified renewable electricity, covering 46% of the company's total purchased electricity. Going one step further in this area, GF Casting Solutions has committed to using 100% renewable electricity by 2025. As part of this goal, in 2022, around 46% of the division's production sites purchased renewable electricity.

For the first time this past year, renewable electricity was purchased in Germany, Indonesia and the US – in addition to Austria, China, Switzerland and Turkey, where renewable electricity had been purchased.

In 2021, GF made a global commitment to invest in photovoltaic (PV) installations and installed several additional systems during 2022. To aid in this effort, GF's project team created a manual to support sites in conducting their first economic assessments to help determine whether onsite renewables are technically possible and make economic sense for a particular location.

In 2022, three of GF Piping Systems' facilities completed solar PV installations: in Ratnagiri (India), Albershausen (Germany) and Traisen (Austria). At the Ratnagiri site, for example, solar energy now covers one-third of its electricity needs, reducing its associated emissions by around 30%. In addition to installing solar panels, the Traisen site has significantly increased – from 1'900 MWh to 5'700 MWh annually – its use of hydroelectric power, generated at a river near the factory.

GF Casting Solutions installed 2.0 MW of roof-mounted PV capacity, highlighted by a 1.4 MW system on the iron foundry in Kunshan (China) that will prevent 1'200 t of CO₂e emissions each year. The division also completed a 0.6 MW PV installation in Shenyang (China) that will avoid 700 t of CO₂e emissions annually. In addition, construction work is ongoing for a 1.0 MW installation in Suzhou (China).

In 2022, 50% of GF Casting Solutions' total electricity demand came from renewable generation, using sources aligned with SBTi requirements. Overall, 31% of the division's total energy demand was supplied by renewable sources, and it is planning more on-site PV and hydropower projects for its European plants in 2023.



GF Casting Solutions installed 2.0 MW of roof-mounted PV capacity, such as this 1.4 MW system on the iron foundry in Kunshan (China).

In Switzerland, GF Machining Solutions completed a 0.122 MW solar system at its facility in Langnau and a 1.5 MW system at its facility in Biel/Bienne, the latter of which should supply around 25% of the site's annual electricity demand. Its site in Schorndorf (Germany) has also installed a 0.44 MW solar PV system, which it expects to become operational in the first quarter of 2023.

Several GF Machining Solutions sites are also exploring large-scale solar PV installations, including a location in the Czech Republic.

The investment in renewables is paying off. During 2022, GF Machining Solutions' Swiss sites in Langnau and Biel/Bienne joined the System 3R International facility in Vällingby (Sweden) as carbon-neutral sites.

In 2022, Vällingby production site reduced its scope 1 and 2 emissions significantly and the remaining 1 t (<0.01% of GF's scope 1 emissions) of residual emissions (from company cars) was offset using a certified Swiss-based forestry project. The Langnau and Biel/Bienne facilities reduced their scope 1 and 2 CO₂e emissions by at least 90% compared with 2019 adjusted baseline data by purchasing renewable electricity. Biel/Bienne's switch from natural gas to biogas heating also contributed to this outcome.

Energy efficiency

The most important step a company can take to reduce its GHG impact is to increase energy efficiency wherever possible. GF's leadership has made it their priority and supports efforts across the divisions to identify opportunities for energy efficiency.

For example, the Sustainability team at GF Piping Systems collaborated with the Global Manufacturing team to organize several best practice exchanges on energy efficiency across different sites. The exchange allowed sites to share their best practices and identify local actions to increase energy efficiency.

Furthermore, GF Piping Systems launched a pilot program at three sites in Turkey that, with the help of a leakage detection device, regularly checks for leaks in air pressure systems, which are a common source of energy inefficiency and increased operating costs for manufacturing companies. Currently, the average observed leak rate in the plastic processing industry is around 40%.³

In the pilot project at GF Hakan's plants in Çerkezköy and Şanlıurfa (both in Turkey):

- 354 leaks were identified
- 45% of identified leaks were eliminated
- More than CHF 60'000 were saved, with potentially higher ongoing savings due to rising energy costs

The success of these pilot programs led GF Piping Systems to implement this initiative across Europe and develop plans to launch the program in the Americas.

The division has also launched several energy efficiency initiatives across all sites, such as replacing injection-molding machines and installing LED lighting and free cooling chiller units. GF Hakan in Turkey is working to become ISO 50001 certified by pursuing several measures, including retrofitting its existing machines with insulation and recovering their waste heat for other purposes.

In 2022, various GF Piping Systems facilities in the US invested in plastic processing machines and replaced several old injection molding machines with more efficient models. By using servo-hydraulic drives and variable displacement pumps, each new machine is expected to reduce its associated energy consumption by up to 50% compared to conventional machines.



GF Piping Systems launched several energy efficiency initiatives across all sites, such as replacing injection-molding machines.

Two US locations of GF Harvel – Bakersfield, CA, and Easton, PA – replaced four old chillers with new, more efficient air-cooled models to supply process water. These replacement chillers increase line performance, reduce production scrap and improve energy efficiency through new drive and fan technology.

The Bakersfield and Easton sites also deployed Project Shine, where teams inspect each production line to assess and repair any safety, mechanical or cosmetic issues. Bakersfield has completed three of its nine extrusion lines and Easton has completed six of its 22 extrusion lines. GF expects full completion of the project during 2023.

GF Casting Solutions continued its energy efficiency program at all production sites by upgrading equipment such as compressors, frequency conversion motors and improving general infrastructure. In addition, every month, the division's environment, health and safety (EHS) managers and energy managers share information about the status of their projects to help strengthen its global network.



GF Harvel replaced four old chillers with new, more efficient air-cooled models to supply process water, such as here in Bakersfield (CA).

For example, the optimized heat recovery process at GF Casting Solutions in Novazzano (Switzerland) now fuels all internal hot water systems with process heat, eliminating the need for oil heating. At the Herzogenburg (Austria) site, it implemented new software that allows the energy-optimized ramp-up and shut-down of ovens on days without active production. Compared with 2021, the site reduced its electricity consumption by 10%.

Building for the future

In accordance with GF's Environmental Standards, all newly constructed or renovated buildings include planning for energy efficiency measures from the outset of a project.

For example, a new GF Piping Systems plant in Yangzhou (China) has been built to maximize energy efficiency and minimize its environmental impact, with energy-saving features including:

- heat recovery from compressors to heat shower water
- geothermal energy to heat and cool offices
- LED lighting installations
- roof tower cooling

The site also uses GF's COOL-FIT technology for the energy-efficient design and operation of its cooling systems.

GF Casting Solutions also completed a new plant in Shenyang, its second high-pressure die-casting (HPDC) plant in China. The 80'000 m² plant features die casting machines with closing forces of up to 4'400 t each. The plant uses the latest environmental and climate-friendly technologies, such as light chimneys (a system that uses a mirror tube to direct and diffuse natural daylight into building interiors), on-site solar panels and e-mobility charging stations.

Both the Yangzhou and Shenyang sites are on track to receive LEED Silver certification and several ISO certifications⁴ by the end of 2023.

GF Signet is moving its operations into a new upgraded facility in Irwindale, CA (US) that is expected to receive LEED Silver certification. This facility has a target to achieve a 50% reduction in grid electricity use, including >18% reduction in consumption through energy efficiency measures and a >50% reduction by generating on-site renewable energy. The site will also have sub-metering of its water and electricity systems, part of its sustainability strategy to support data-driven reductions and greater consumption transparency.



The Shenyang plant features light chimneys and on-site solar panels.

E-mobility

Part of the comprehensive strategy to reduce GHG emissions across the company includes electrifying the logistics and transport solutions utilized in GF's operations. GF Casting Solutions is reducing its intercompany transport emissions through two new initiatives. In 2022, the first e-truck for its Austrian plants in Altenmarkt and Herzogenburg was ordered. It will make its Austrian intercompany and external warehouse logistics CO₂e neutral and save up to 75 t of CO₂e emissions annually.

Additionally, at its iron foundry in Leipzig (Germany), GF Casting Solutions has decided to upgrade three of its heavy-load forklifts (up to 5 t each) with electric versions. The division also continued fulfilling the updated car leasing requirements in 2022 to ensure that each replacement model is a 100% battery electric vehicle (BEV), with three BEVs currently in use and 21 additional vehicles on order.



GF Casting Solutions continues to expand its fleet of cars with battery electric vehicles, such as here in Altenmarkt (Austria).

Efforts to reduce scope 3 emissions

At the end of 2021, GF finalized its first scope 3 assessment, which identified actions to address and reduce supply chain emissions. Following on from this, in 2022, the divisions focused on defining project teams, creating business cases and working through the first stages of their CO₂e reduction roadmaps. GF is already exploring several opportunities to reduce emissions in its value chain, including material substitution, supplier engagement and more efficient logistics services.

Bio-based materials

GF Piping Systems is creating scope 3 roadmaps with its plastic resin suppliers to commercialize more bio-based materials and reduce the CO₂e intensity of its piping solutions. The division introduced bio-based polyvinyl chloride (PVC) in its industrial PVC portfolio in Europe in late 2021. Between January and October 2022, the division processed more than 1'000 t of bio-attributed PVC in its European operations. This achievement made it one of the first pressurized industrial piping companies to process bio-based PVC commercially. By processing bio-based materials, the division is reducing its scope 3 emissions and offers customers solutions with a lower carbon footprint.

In addition, GF Piping Systems is approaching suppliers to collaborate on other CO₂e-reducing initiatives. Using a supplier assessment tool, it is seeking to foster collaborations on more sustainable materials and renewable energy projects.



GF Piping Systems is one of the first pressurized industrial piping companies to process bio-based PVC commercially.

Supplier engagement

To reduce its scope 3 emissions, GF Casting engaged with key suppliers, particularly those supplying raw materials such as aluminum and magnesium, to explore opportunities to source materials with lower GHG footprints. For example, the scaling of low-carbon technologies is crucial to achieving long-term emission reductions.

In 2022, the division also joined several industry networks to improve material specifications and recycling rates, and increase the use of secondary (recycled) materials. In addition, it has integrated robust scope 3 reporting in its procurement system, providing greater visibility and tracking of emissions along its value chain.

During the year, GF Casting also held capacity-building workshops with key suppliers to explain its emission-reduction efforts, share its expectations and encourage key stakeholders to reduce their emissions. In this effort, the division reached suppliers representing close to 50% of its total external spend.

Efficient logistics

GF Machining Solution' logistics networks have a relatively small environmental footprint, however, the division continually seeks different ways to minimize its impact. This includes analyzing its transport systems to achieve greater optimization, reducing the amount of shipping required and adopting greener forms of transport, such as using sea freight instead of air freight.

During 2022, the division also continued with its "InOutIn" sustainable delivery system, which helps dramatically reduce the amount of packaging and transport needed to deliver each machine. This system features custom-equipped Euro 6 trucks for greater fuel efficiency, an efficient packaging solution (going from 750 kg of wood in the previous packaging method to 15 kg of wood with this system) and efficient truck loading as more machines can be transported per truck due to the reduction of packaging. Furthermore, the efficient packaging solution allows for shorter installation times at the customer site due to the simplification of the packaging. In 2023, the division will continue refining its "InOutIn" system to make its deliveries even simpler and more sustainable.



<https://www.youtube.com/embed/uNxW9V9faqg>

+ GRI 3-3 | GRI 302-1 | GRI 302-2 | GRI 302-4 | GRI 305-1 | GRI 305-3 | GRI 305-5

¹ Detailed information on scope 3 calculation can be found in the [Reporting approach](#)

² Biogas was purchased in 2019 and again in 2022 and contributed <0.01% of the total renewable energy consumption.

³ Robin Kent, **Energy Management in Plastics Processing**, edition 2013, Plastics information direct

⁴ This includes: ISO 14001, ISO 45001 and ISO 50001 for GF Piping Systems' Yangzhou site. For GF Casting Solutions' site in Shenyang, it is expected to achieve ISO 14001 by the end of 2022 and ISO 45001 and ISO 50001 by early 2023.

Water footprint

GF strives to be a sustainability leader offering solutions that ensure water can be delivered safely and with minimal environmental impact, while continually working to reduce its own footprint.

Clean water is the foundation of individual, social and environmental health. However, many areas of the world face ongoing challenges in maintaining access to clean water and leak-free water transport. GF strives to be a sustainability leader offering solutions that ensure water can be delivered safely and with minimal environmental impact, while continually working to reduce its own footprint.

While water use is particularly high in upstream processes such as aluminum and plastic manufacturing, the company's production facilities generally use only small amounts of water in closed-loop cooling systems. In addition, all its sites comply with applicable laws and regulations governing wastewater discharge. As a result, its facilities discharge most of their water as unpolluted water into natural water systems and send the rest to municipal sewage systems.



Clean water is the foundation of individual, social and environmental health.

Progress in 2022

Water intensity index

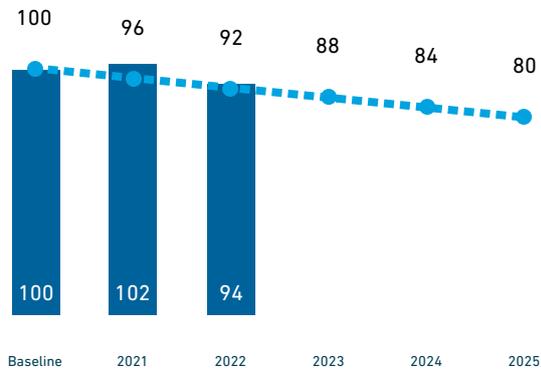
For the strategy cycle 2025, GF set a goal to reduce water intensity by 20%, compared with the 2018–2020 average used as its baseline, at sites operating in areas with high water stress. This target is binding for 14 facilities across all three divisions. Compared with the baseline (2018–2020 average), facilities in water-scarce locations decreased their absolute water consumption by 14%, in line with the target.

By 2025:



Water
Reduce **water intensity by 20%**
in high-stress areas

Water intensity index (water consumption per production volume) in %¹



In 2022, the company reduced its total water consumption by 2% compared with the full year 2021. This reduction was due to factors such as GF Casting Solutions' enacting strict water consumption plans at sites in Kunshan and Suzhou (both in China), and in Herzogenburg (Austria) and its divestment from the Mills River, NC (US) facility, combined with several water-saving initiatives at GF Piping Systems' sites in the US and Indonesia. Like in previous years, the majority (70%) of the company's total water supply came from groundwater and rainwater. The three divisions are also developing various water conservation measures to reduce their consumption further.

Actions for better water management at sites in water-stressed areas

GF Piping Systems adopted various water-saving measures across its nine sites located in China, Indonesia, Turkey and the US. These measures range from installing compact chiller and water limiter systems to filtering and recycling water from hydrostatic pressure tests on pipes.

GF Casting Solutions focused on water conservation measures in its four plants in water-scarce areas, particularly in China, Romania and Germany. Its high-pressure die casting (HPDC) plant in Suzhou (China) renovated the water pipe infrastructure around its casting cells. In addition, though not a water-scarce area, its HDPC site in Herzogenburg reduced its overall water consumption by 33% in 2022 compared with 2021.

Smart meters to prevent water leaks

GF Casting Solutions plants in Kunshan and Suzhou installed smart metering devices to maintain reliable consumption profiles and receive early warnings about leakages. The Suzhou plant installed these devices on three of its main water pipes, which are expected to reduce its total water consumption by up to 7% per year. By carefully monitoring and promptly fixing leakages, as well as rebuilding water pipes above ground to simplify maintenance and avoid rust, these sites lowered their combined water consumption by 12% in 2022 compared with 2021.

Other upgrades and efficiency measures

Various sites across all three divisions have invested in improvements and efficiency upgrades to reduce their water consumption.



State-of-the-art technology such as NeoFlow protect water distribution networks from excess pressure, while reducing leakage rates and pipe bursts.

This was seen at GF Piping Systems, at the GF Central Plastics site in Dallas, TX (US), where they installed a more compact and efficient chiller system that decreased its water use by 7% in 2022. The division's GF Indonesia site in Jawa Barat continued with various water-saving projects it started in 2021. In particular, this site reduced its water pressure from 2 bar to 1.2 bar, installed water limiters of 30'000 l per day to meet increasingly stringent government regulations, scheduled periodic maintenance, and repaired and redesigned a separator tank.

In addition, the Jawa Barat site has begun reusing the water from hydrostatic pressure tests on its pipes, which is collected in a tank, filtered and recycled for the same purpose. Through these combined initiatives, the site has lowered its water consumption by 26% compared to its baseline (the average from 2018 to 2020).

GF Casting Solutions in Pitești (Romania) installed a new evaporator unit that can clean up to 1'000 l of water per day and make it reusable on-site. This initiative saves around 252'000 l of water per year, 1.5% of the site's annual consumption.



The Jawa Barat site of GF Piping Systems has begun reusing the water from hydrostatic pressure tests on its pipes, which is collected in a tank, filtered and recycled for the same purpose.

Participating in UN World Water Day

At its sites in Çerkezköy and Şanlıurfa (both in Turkey), GF Hakan Plastics organized a water awareness day for UN World Water Day in 2022. Employees took part in various training sessions and presentations, learning about water scarcity and protecting natural water resources, particularly in their home country. They also submitted their own water-saving suggestions, to which a committee allocated points, with a prize going to the highest-scoring idea. Thus, beyond raising awareness about water scarcity, this day was valuable in creating a roadmap to reduce long-term water consumption.



+ GRI 3-3 | GRI 303-1 | GRI 303-2 | GRI 303-5

¹ GF's divisions define production volume according to the nature of their particular business. GF Piping Systems defines it as "tonnes produced", GF Casting Solutions as "gross value added" (operating income less the cost of materials and products, changes in inventory, and operating expenses), and GF Machining Solutions as "hours worked".

Natural resources, materials and waste management

The GF environmental strategy embraces the principles of a circular economy and all major steps of the product life cycle.

GF takes a holistic approach to managing the environmental impacts of its operations. Its environmental strategy embraces the principles of a circular economy and all major steps of the product life cycle. These include the selection of raw materials in the design phase, conserving natural resources during manufacturing, recovering scrap or waste materials, and responsibly disposing of or recycling products at the end of their life cycle.

GF actively works to preserve resources through various steps. Firstly, it continually seeks new and effective ways to reuse or recycle the materials it uses in its manufacturing processes. Secondly, it fosters partnerships with other industrial companies to reuse scraps, by-products and waste materials from its production processes, reducing the overall demand for energy and resources. Finally, although most of GF's waste is non-hazardous, it ensures there are reliable systems and processes in place to reduce the environmental impact of the waste it generates.



GF fosters partnerships with other industrial companies to reuse scraps, by-products and waste materials from its production processes, reducing the overall demand for energy and resources.

Progress in 2022

GF recycles the majority (78%) of its waste. In addition, some divisions sold their waste material in 2022. GF Piping Systems sold over 600 t of used sand and GF Casting Solutions provided its construction industry partners with around 8'000 t of used core sand. This generates additional income and reaffirms the value of a circular economy approach.

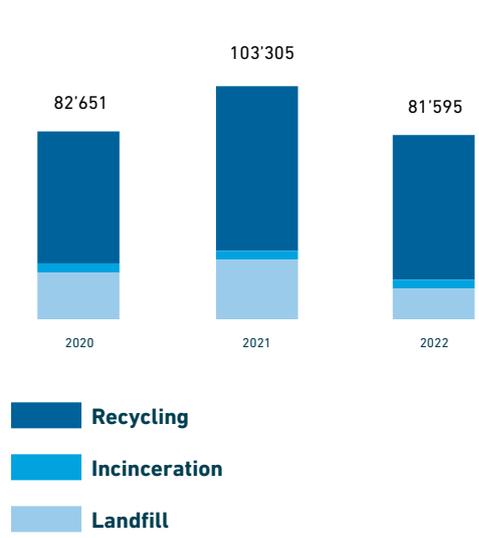
By 2025:



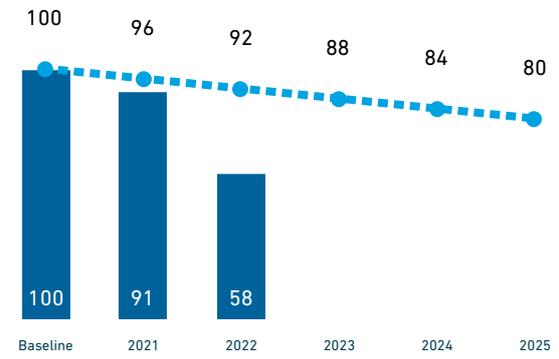
Waste

Reduce **waste intensity by 20%** sent to landfill or incineration

**Waste disposal
(in tonnes)**



**Unrecycled waste intensity index
(unrecycled waste per production volume) in %**



Unrecycled waste intensity index

In 2022, GF’s unrecycled waste intensity was 34 percentage points below its target value for the year. Therefore, the company is currently on track to meet its target at the end of 2025. This achievement was mainly due to sand recycling at the GF Casting Solutions site in Leipzig (Germany) and the GF Piping Systems site in Sissach (Switzerland).

In addition, recycling programs at GF Piping Systems’ facilities in Switzerland, Turkey and the US also contributed to the target. The division’s US recycling program includes the external regrind of all high-density polyethylene (HDPE), which can be used in production as reworked material.

Actions for effective use of natural resources

All three GF divisions continued their efforts throughout the year to reduce, reuse and recycle their natural resources more effectively.

Reducing wastewater

In March 2022, the GF Casting Solutions site in Altenmarkt (Austria) upgraded its wastewater treatment systems by installing two new vacuum evaporators. As a result, the site now only disposes of a very small amount of concentrated wastewater sludge (5% of total volume) through a certified disposal company. The site forwards the rest of its wastewater directly to a local purification plant.

Overall, the vacuum evaporators have significantly upgraded the site’s ability to reuse natural resources and reduce its waste and CO₂e emissions. Through this latest project, Altenmarkt’s recycling rate is now above 94%.

Reducing waste

GF Piping Systems joined Operation Clean Sweep® (OCS) to prevent plastic litter from entering the environment, taking the division a step closer to its goal of "zero pellet loss" to protect the environment and waterways. OCS is an international initiative to prevent the loss of plastic granules (such as pellets, flakes and powders) along the entire plastics value chain. Working with this initiative, the division is incorporating a few small but important changes in its facilities management and operations to prevent plastic granules from being released into the environment. In a first phase, the division is rolling out the program in its European plastic processing plants and aims to gradually implement it worldwide, even in areas that have local alternatives.



**Prevent microplastics in the environment:
see it, stop it, clean it and recycle it!**

To engage its employees in this area, GF Piping Systems apprentices at GF JRG in Sissach (Switzerland) spent an afternoon learning how to manage and reduce waste under the motto "No Time to WASTE". After a short introduction, the apprentices collected litter from around the site – mostly cigarette ends – and learned about how the company disposes of waste. The division's apprentices then visited a local bulk goods shop, where consumers can bring their own containers for unpackaged food and non-food items and reduce or eliminate the need for plastic packaging. Finally, back at their site, the apprentices created a poster and shared their thoughts and experiences with vocational trainers.



"No Time to WASTE": GF JRG apprentices learn how to manage and reduce waste at their Swiss site in Sissach.

Re-using activated carbon

At GF Piping Systems, the GF JRG site in Sissach initiated its first process to reactivate (reuse) activated carbon, a material that filters pollutants out of the air in the foundry. While the site previously disposed of its used activated carbon after a designated period of time, the reactivation process allows it to reuse the material.

Using this new process, the site avoids sending around 9 t of waste to landfill each year. This measure contributed to reducing hazardous waste at this site by 20% in 2022 compared with 2021. The site's overall recycling rate is 86%.

Recycling waste sand

Waste sand is produced during casting due to balancing the inflow of sand from cores, sand blasting and sieving, over-burning and contamination. In 2022, as part of a new concept, GF Piping Systems found a top-tier copper producing and recycling company that will buy the company's used sand and recycle it, preserving an increasingly rare natural resource. Overall, the plant is now recycling 87% of its total waste amount, continuing the adoption of circularity principles in its iron foundry business. The site already uses a high proportion of recycled material (over 80% of iron scrap). All of its raw waste material is either re-melted and reused on-site or provided to partners and included in new ingots.

Reusing other materials

GF Machining Solutions has implemented a "No Material Waste" program, in which employees can upload, to the division's intranet, pictures of functioning but unused material. The project started after two apprentices in Biel/Bienne (Switzerland) noticed usable material lying around unused or being thrown away. They developed the idea of creating an online platform where people can upload their unused materials so that those who need them can access them.

To this end, the apprentices submitted a proposal to the division's intrapreneurship program "Kickbox". The aim of this program is to tap into the intrapreneurship of employees to come up with new ideas that may lead to technical innovations or new business models. The "No Material Waste" program has since moved from the validation to the pilot phase, with the aim of testing a working prototype in Biel/Bienne, before moving into the final implementation phase. At the end of 2022, computer screens topped the list of the most-exchanged products on the platform.

Circular economy initiatives

For GF, a [circular economy](#) aims to keep materials and resources in the product cycle for as long as possible, by reusing, refurbishing and re-manufacturing them before recycling. Throughout the year, all three divisions have targeted new initiatives to source reusable materials and components while enhancing their waste management processes to enable reuse.

GF Piping Systems launched a new range of pipes made from reworked polyvinylidene difluoride (PVDF) material instead of virgin PVDF. With this new product line, high-value reworked production material is used to create new high-value products instead of being sold to a recycling partner. By using the material more efficiently, the division is reducing waste and applying the circular economy principle in more of its product lines.

The division also conducted its first workshops with external partners to identify opportunities to apply the "cradle-to-cradle" principle to its solutions. According to this principle, products are designed in such a way that they can be reused or recycled beyond their first life cycle, so that they do not end up in incineration or landfill. The division sees this principle as an effective way to create more circular economy-based solutions in the future.

The GF Piping Systems site in Shawnee, OK (US) has increased its use of reworked material (both external and production scrap) into products where the design allows. As a result, by the end of 2022, the site had increased its total recycling rate to 80%, up from 75% in 2021.

GF Casting Solutions' products are made from secondary aluminum or iron scrap, whenever customer specifications allow. Iron casting uses over 80% scrap, which is melted down into high-quality alloys directly in the division's foundries. Aluminum products that are not structural parts (required to withstand high forces during a vehicle's use phase) are cast in secondary alloys made of up to 80% recycled content.

After successfully implementing the sustainability radar into its R&D processes, GF Machining Solutions can today assess the sustainability performance of new machines during the R&D phase. Subsequently, the division can use that assessment to identify ways to improve the circularity characteristics of its machines during the planning phase, for example, by increasing the number of parts and spare parts that are recycled and recyclable.

The division has started recycling its electrical discharge machining (EDM) spools and wires at selected sites. The EDM spools are recycled into new spools (combined with a variable amount of virgin material), and it supplies used EDM wires to a partner company that produces faucets using the raw material. In 2022, the division extended its offer to 30 of its customers across Belgium, Germany and Italy to recycle their used wire. In addition, European customers now have the option to source EDM wires locally, which reduces transportation – and thus their carbon footprint by 15%.



GF Machining Solutions has started recycling its electrical discharge machining (EDM) spools and wires at selected sites.

+ GRI 3-3 | GRI 306-1 | GRI 306-2 | GRI 306-3

Safety and well-being

As a progressive and responsible employer, GF places the highest priority on the health, safety and well-being of its employees.

A safe and healthy working environment is the foundation of strong employee engagement, high productivity and exceptional customer value. As a progressive and responsible employer, GF places the highest priority on the health, safety and well-being of its employees. It endeavors to create a zero-risk workplace through regular cross-site safety audits, awareness campaigns and appropriate safety measures. Overall, GF continually instills a safety mindset in its employees and empowers them to take responsibility for health and safety, both for themselves and others.

3 GOOD HEALTH AND WELL-BEING



8 DECENT WORK AND ECONOMIC GROWTH



Progress in 2022

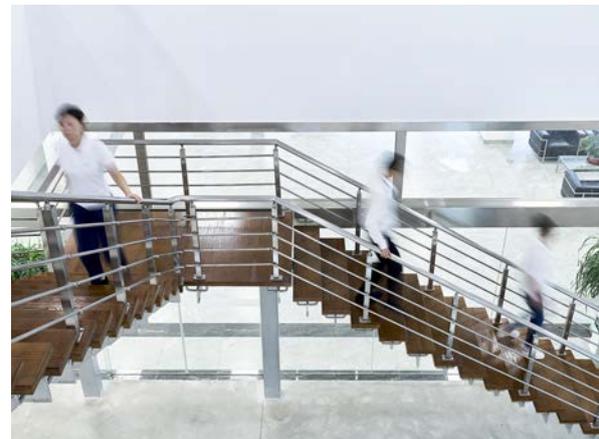
In 2022, thanks to the concerted efforts of its employees, GF reported zero work-related fatalities for the seventh year in a row. During the reporting year, the overall accident rate – measured using the lost-time injury frequency rate (LTIFR) – decreased to 7.9 per 1 million working hours with a total of 265 accidents, compared with a LTIFR of 10.2 (301 accidents) in 2021⁶ (which equals a 12% reduction in the number of accidents compared with 2021).

Data shows that 86% of those involved in accidents were GF employees, while 14% were leased employees. More than half (56%) of the total accidents were minor injuries to the upper extremities, primarily fingers, hands and arms. The most common causes of injuries were workers struck by objects (51%), followed by slipping, tripping or falling (25%). In terms of working locations, most accidents occurred in production plants (81%), followed by warehouses (5%).

By 2025:

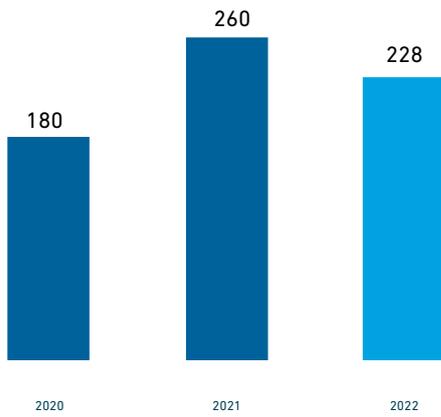


Health and safety
Reduce **accident rate by 30%**

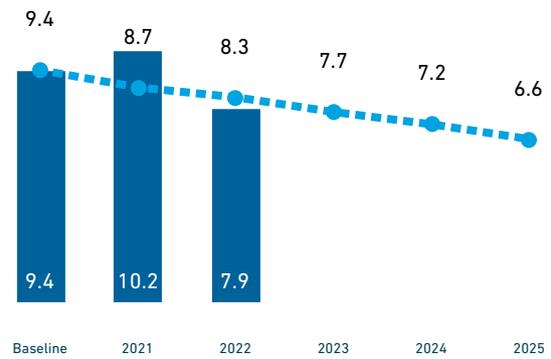


Employees use handrails on stairs to prevent themselves from slipping, tripping or falling.

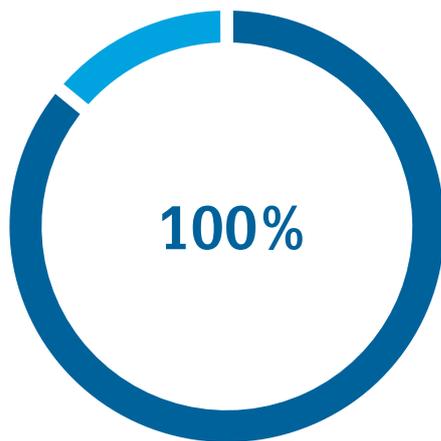
Number of accidents among GF employees



Accident rate as lost time injury frequency rate (LTIFR)¹ per million hours worked



Share of accidents, GF employees and leased personnel, 2022 (in %)



- 86% GF employees
- 14% Leased employees

As part of its Sustainability Framework 2025, GF aims to reduce its accident rate by at least 30% against the three-year average (2018–2020) of 9.4⁶ as the baseline LTIFR. The three-year average used as a baseline takes into account temporary site closures due to COVID-19 health measures in the first half of 2020.

To raise safety performance, all three divisions have intensified their safety campaigns to increase awareness and strengthen GF's safety mindset. This includes building time and space into meetings so that employees can share and discuss unsafe conditions or near misses. Different communication tools – such as safety videos or events – continue to reinforce health and safety messages. Building upon its Culture Movement program, GF will continue to foster a strong safety culture at all sites, specifically as this pertains to its [value related to "Caring"](#). Through this value, GF underpins the importance of caring for colleagues and team members, giving constructive feedback on behavioral safety as well as acting as a role model.



Acting as a role model to foster a strong safety culture is linked to the GF value related to "Caring".

Safety Standards

The GF Safety Standards contain binding health and safety instructions for the entire company. They apply to all GF and leased employees. The standards set out the applicable regulations and organizational, personal technical measures designed to make daily working practices as safe as possible. They also detail the safety requirements for a wide range of high-risk areas including, but not limited to, the maintenance of equipment, working at height, the use of forklifts/towing vehicles for transportation and storage, and the management of hazardous substances.



The GF Safety Standards set out the applicable regulations and organizational, personal and technical measures designed to make daily working practices as safe as possible.

Improving safety through hazard and risk identification

On both a routine and non-routine basis, GF conducts risk assessments in accordance with corporate and local procedures. It seeks to identify any major risk areas and implement preventative action plans. In line with best practices in safety management and GF Safety Standards, these plans follow the STOP principle. Substitution and technical measures taking precedence over organizational and personnel ones is a method companies use to reduce exposure to hazards for their employees. GF documents these assessments and then summarizes the defined protective measures and safety rules as new operating instructions.

Actions for creating a zero-risk workplace

To ensure full compliance with its safety standards, GF continued to conduct cross-site safety audits (CSSAs) at the divisional level between the operations of each location. Management teams in all divisions receive a summary of the findings and recommended follow-up actions.

GF conducted CSSAs at 45 facilities worldwide, representing 75% of its total production sites. In China, safety teams from GF Casting Solutions and GF Machining Solutions cooperated in conducting cross-divisional CSSAs at each other's sites. Due to travel restrictions, the Environment, Health and Safety (EHS) Manager at GF Machining Solutions audited its US site. In Europe, safety teams from GF Machining Solutions sites carried out CSSAs on each other.

Communication and training

GF works to instill a safety mindset in its employees to ensure the safety of everyone in the workplace. Since 2015, the company has run a "Zero Risk"/"Be Aware – Be Safe" campaign at the divisional level to improve the safety awareness of its employees, contractors and visitors. In 2022, all three divisions continued to expand their campaigns.

GF Piping Systems continued to drive across all sites – both production facilities and in sales companies – the implementation of "Be Aware – Be Safe" campaign that it had launched in 2021, with materials (such as posters and videos) and safety events. The local safety manager of the business units tailored training sessions to the needs of the business and cascaded them to all employees. The positive effect of this can be seen in GF Indonesia, where 1'000 consecutive days with zero injury-related lost-time incidents were recorded, testifying to the effectiveness of the safety program over time.



"Gemba" walks take site managers to the shop floor to identify unsafe situations and improve safety behaviors.

GF Piping Systems continued its safety "gemba" walks (Japanese for "the actual place"), which it has implemented at all production sites. Based on lean management principles, these walks take site managers to the shop floor to identify unsafe situations and improve safety behaviors to prevent injuries and property loss.

In raising safety awareness, the division aims to go beyond creating a safe work environment by developing safety-conscious employees. That is why, in 2022, the division reinforced the core message that all employees have the authority to stop any unsafe work activity they see by using their "Stop Work Authority" card. Available in 13 different languages, the card is a new feature of the "Stop Work Authority" program launched in 2021.

In addition, to prevent incidents that could result in severe injury or fatality, GF Piping Systems communicated a list of life-saving rules to support its existing safety management systems, programs and policies. These rules cement the division's commitment to continuously improving its safety culture.

As well as launching a global best-practice exchange to encourage all sites to collaborate and share their best practices, the division also required each site to hold an annual safety event with its employees.

In the same division, at the GF Harvel facility in Little Rock, AR (US), an internal safety observation program promotes safety awareness in the workplace by recording unsafe conditions and behaviors. Through monthly staff participation, it encourages ownership of the company's safety culture by making all employees feel included and fostering positive conversations about safety.

GF Casting Solutions focused on raising awareness about identifying risk-reduction opportunities. As part of its division-wide health and safety training, it provided sites with engaging training sessions to enhance employees' risk awareness and offered solutions to help resolve any identified risks.

The division's "Zero Risk" campaign entered its third phase at the start of 2022 with a renewed focus on risk awareness and accident prevention. More specifically, this phase focused on educating employees about potential risks in their working areas and empowering them to address and report them to management and to local EHS teams.

GFPS' Life-Saving Rules



The list of life-saving rules complements existing safety management systems, programs and policies.



Monthly staff participation encourages ownership of the company's safety culture by making all employees feel included and fostering positive conversations about safety.

The division also started publishing a monthly "Safety First" moment – a brief safety talk about a specific subject at the beginning of a meeting or shift – focusing on crucial health and safety messages. These moments provide employees with discussion points on key health and safety topics within the division, including risk awareness, near-miss reporting and seasonal risks.

GF Machining Solutions started a new safety campaign to raise awareness among staff and visitors, as well as to identify near-misses and unsafe conditions. The division launched the campaign with an educational video highlighting the importance of near-misses and hazardous conditions. The video also highlighted the need for all staff to report such situations to safety officers so they can take action. Finally, during the year, five or six scheduled exchanges between safety officers enabled them to share best practices and keep the momentum on driving the safety mindset within the division.

Moreover, the division requires all sites to report near misses. By providing valuable insights into risky situations, the reports enable the division to take a proactive approach to safety and accident prevention. Analysis of the collected data informs new safety measures as part of the division's overall goal to achieve zero accidents.

GF Machining Solutions also introduced safety moments at the start of daily meetings in production. Lasting no more than five minutes, this practice encourages employees to tell a personal story about safety and to raise any unsafe conditions they have seen. By serving as a powerful reminder that safety is the top priority, these safety moments play a key part in embedding a safety-conscious mindset in an ongoing culture change.

+GF+



**Everyone
has a story**

Remind everyone to stay safe
Be Aware – Be Safe



Accident reporting and prevention of potential accidents

When an accident occurs, GF requires the relevant site to report it within three days – along with a root-cause analysis and the corrective measures implemented – via the company-wide accident reporting tool. This procedure enables the company to gauge the effectiveness of its safety measures and initiatives.

In addition, on a monthly or quarterly basis, all divisions prepare regular accident reports with safety recommendations for divisional management as well as safety officers and employees. Reflecting the high priority GF has put on health and safety, information on this topic is included in the monthly reports provided to the Board of Directors.

After a near-miss or accident, the hazard identification is reviewed and, if necessary, the risk assessment is updated. The head of the department, the safety manager and the managers are responsible for regularly monitoring the implementation of technical and practical safety measures and identifying improvements.

GF Casting Solutions launched its Near-Miss and Observation Reporting tool and made it available to all divisional locations in all relevant languages. The tool enables employees to anonymously report a near-miss or observation – either digitally or physically – to their local EHS teams and management. The Near Miss and Observation reporting tool encourages employees to provide input on solutions and other ways of addressing reported risks.

Safety award

In August 2022, GF Central Plastics in Shawnee, OK (US) won the Pinnacle of Safety Award. The award recognizes an Oklahoma Safety Council member company for achieving the highest level of excellence in its industry in terms of its management commitment, safety culture as well as exceptional health and safety performance.



Cassandra Wiggins and Lewis Chambers from GF Central Plastics receive the Pinnacle of Safety Award with Betsey Kulakowski, Executive Director for the Oklahoma Safety Council

Employee well-being

Beyond its focus on safety, GF also offers its employees opportunities to improve their health and well-being. These can include discounted rates at sports and fitness classes, workshops to manage their work/life balance and on-site yoga classes.

GF Hakan Plastik in Ankara (Turkey) launched the Ergoffice Desk Exercise Program. It aims to provide office employees, who often work in seated positions for longer periods, an opportunity to recharge and be more productive. Participants follow an Ergoffice exercise instructor online three days a week, for 15 minutes of exercises at their desks during their breaks.

Due to its success, GF Health – the competence center for health, encompassing all areas of life in Schaffhausen (Switzerland) – has offered the program as a pilot to office employees at its corporate headquarters, at GF Piping Systems and GF Casting Solutions. Like the program in Turkey, the exercises are offered three times a week for 15 minutes under the guidance of a physiotherapist. With these and other measures, GF Health aims to optimize the health and well-being of all employees at the four Swiss locations in the long term.



Beyond its focus on safety, GF also offers its employees opportunities to improve their health and well-being, such as the Ergoffice Desk Exercise Program offered by GF Health in Switzerland.

+ GRI 3-3 | GRI 403-1 | GRI 403-2 | GRI 403-3 | GRI 403-4 | GRI 403-5 | GRI 403-6 | GRI 403-7 | GRI 403-8 | GRI 403-9

¹ In 2022, following GF's target calculation approach four GF companies were newly added to the sustainability targets 2025. The change of scope in reporting was only visible in the baseline of the accident rate target and therefore the target and the baseline was adjusted. Further details are available: [Reporting approach](#)

Diversity and inclusion

As a globally active company, GF is committed to greater diversity and inclusion on many levels. The goal is to create a diverse and inclusive work environment where inspiration, cooperation and innovation can grow and employees are empowered to perform at their best.

GF supports a diverse and inclusive culture where people's unique identities, experiences and perspectives come together to create intelligent customer solutions and address societal and environmental challenges.



Diversity refers to accepting and celebrating the rich spectrum of personal and social differences that make each person unique. These include, but are not limited to, ethnic or national origin, gender, sexual orientation, age, physical and mental ability, as well as religious and political beliefs or associations.

Inclusion refers to fostering a work environment where all individuals are treated fairly and respectfully, have equal access to opportunities and resources, and feel empowered to contribute to their personal and organizational success.



Different identities, experiences and perspectives help create intelligent solutions to meet customer needs, and societal and environmental challenges.

New policy on diversity, engagement and inclusion

In 2022, GF published its new [Diversity, Engagement and Inclusion Policy](#), consolidating various directives and practices. The policy aims to achieve the company's three primary goals:

1. reinforce its commitment as a fair and attractive employer that promotes diversity and inclusion (D&I);
2. support its strategy to become a sustainable leader fostering a diverse, engaging and safe working environment; and
3. reaffirm its corporate values relating to Caring, Learning and Performance

Gender balance

Progress in 2022

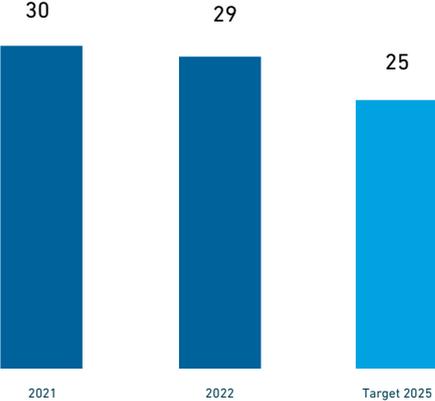
In 2022, 29% of newly appointed managers were women (compared with 30% in 2021). GF is exceeding its target of 25% newly appointed women managers by 2025. Also in 2022, 17.2% (165 full-time equivalents or FTEs) of managers were women – compared with 15.8% in 2021 or 114 FTEs in 2021. Overall, 20% of employees (2'941 FTEs) were women in 2022 (compared with 19.5% or 2'817 FTEs in 2021).

By 2025:



Diversity and inclusion
25% of newly appointed managers are women

Newly appointed women managers in %



Empowering women

GF's target for empowering women at work is in line with the United Nations [Sustainable Development Goal \(SDG\) 5](#) – "Empower all women and girls". In particular, the company focused on target 5.5: "Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life".

In line with these goals, an independent federal wage equality analysis confirmed that the company's wages across genders in Switzerland are fair and equitable. In the year 2022, GF further conducted the equal pay analyses in Switzerland with a certified external partner using the well-accepted L&M-Aba R® method. The outcome confirms compliance with GF's internal equal pay for equal work pay practices and guidelines. The analyses conducted in the year 2021 have been successfully verified by an independent external auditor. The analysis conducted in 2022 is currently being verified. GF will provide information about the outcome of the audit in its next report.

To further support women's empowerment, the company also encourages regular engagement and exchanges between its women Board members and women employees.



GF's target for empowering women at work is in line with the UN SDG 5 – "Empower all women and girls".

Actions for promoting gender equality

GF joined "Advance", a business association of 120 leading Swiss companies promoting gender equality. Through its membership, employees – including women leaders from various departments – participated in online "Advance" events and shared best practices with D&I experts from other companies.

HR launched the "Women@GF" initiative to strengthen the influence of women in the company. Over 450 participants across all three divisions joined events focused on topics such as emotional intelligence, work-life balance and the benefits of networking for women. Towards the end of 2022, GF Casting Solutions expanded this initiative, renaming it "Diversity@GF" and opening it up to all colleagues interested or involved in these important topics.



The "Women@GF"/"Diversity@GF" initiative focuses on topics of importance to women and others – including personal branding, negotiating skills and overcoming challenges.

As part of its participation in Engineer's Day 2022, GF offered an online exchange for women interested in science, technology, engineering and mathematics (STEM). During the event, women in engineering roles at the company talked about their jobs and contributions. The exchange enabled STEM professionals and university graduates to gain valuable insights about GF employees, their careers and their professional experiences.

In addition, the company launched its first-ever employer branding social media campaign focusing on women working in various fields. "The Winning Formula" global campaign highlighted what working at the company is like and what makes women successful at GF.



<https://www.youtube.com/embed/4MAIEhD3K8w>

D&I training and development

The company formally rolled out two training programs it had piloted in 2021. They aimed to raise awareness about the strengths of D&I and promote its broader adoption. In the first program, "Women in Leadership", 24 women leaders from Germany, Austria and Switzerland came together to compare, discuss and strengthen their leadership styles and extend their network of women professionals.

In the second program, 24 recruiters and managers from these same countries participated in awareness training regarding unconscious biases in recruiting, promotion and performance evaluations. The sessions covered topics ranging from improving self-awareness to enhancing one's visual and verbal perception. This training helps these experts to acknowledge and reduce unconscious biases in performance reviews and during conversations with team members about their career progression.



Participants in the "Women in Leadership" program discuss and strengthen their leadership style and network.

First global D&I survey

Late in 2022, GF also conducted its first global D&I survey across all three divisions and its corporate headquarters. The survey measured employees' attitudes and perceptions of a diverse and inclusive workplace. The company will use the results, due in the first quarter of 2023, to identify areas where improvements are required.

Moving beyond gender balance

In late 2022, D&I was the focus of an issue of **Globe**, the global employee magazine published in eight languages. In it, employees shared their day-to-day experience with D&I. The example of a four-member team at GF Machining Solutions in Chicago, where the diverse backgrounds – including age, gender, work experience, cultures and personalities – is representative of the many employees in the company. For this team, diversity means that everyone has specific, individual skills and experiences. As one team member says, when problem solving, what matters is working together as one team to get the best input, not how people look.



In problem solving, what matters is working together as one team to get the best input.

Career development for mature employees

In Switzerland, GF offers employees aged 45 and older options to support them with a professional re-orientation should they want or need to change direction in their career, or if they would like to continue working beyond retirement age.

These employees have access to a platform run by "Loopings", a specialist agency that works with companies to prolong or help change the career or profession of employees in this age group. The platform provides them with information on life-long learning, opportunities to network with others, as well as webinars and other events on professional development at this stage in one's professional life.

In addition, employees aged 58 and older may take a specific three-day course to prepare for changes in their lifestyle upon retirement. Employees' partners are also invited and encouraged to attend the program.

Fair and attractive employer

Through its values and culture, GF encourages all employees to cooperate, grow and take pride in their work.

Engaged and motivated employees represent GF's values and are the driving force for its long-term success. The company therefore strives to promote an inspiring work culture centered on its values related to "Caring", "Learning" and "Performance". Through its values and culture – reinforced through ongoing training and development – the company encourages all employees to cooperate, grow and take pride in their work.

4 QUALITY
EDUCATION



8 DECENT WORK AND
ECONOMIC GROWTH

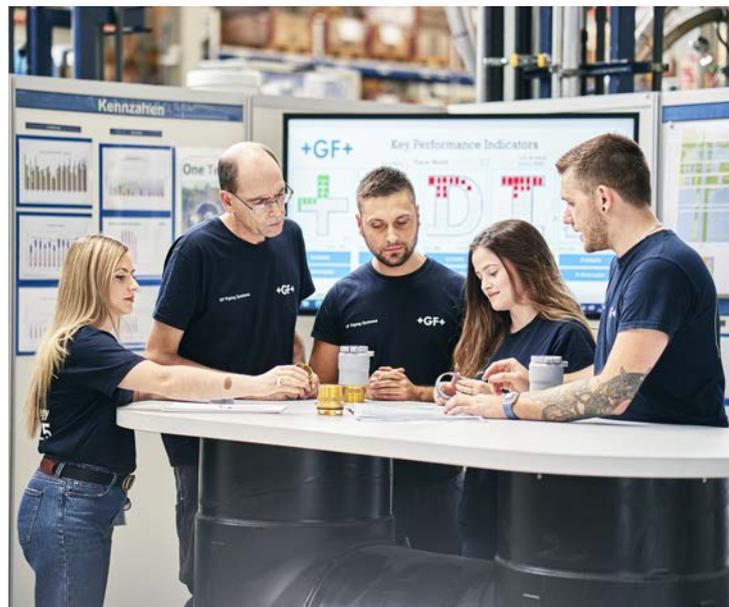


17 PARTNERSHIPS
FOR THE GOALS



Three values underpin the company's culture

- + Caring is about being part of a team.
- + Learning is about having an open mind.
- + Performance is about speed and excellence.



In 2022, with the support of about 300 "Change Agents", some 2'400 employees took part in experiments focusing on how to embed these three values in their day-to-day work as part of the [Culture Movement](#).

Employee engagement

In December 2022, GF Casting Solutions conducted an employee survey that 2'228 employees participated in, with 79% indicating the division as an "employer of choice". Though this is slightly below 80% overall, this result shows that the division is on the right track. GF Casting Solutions continues to work on raising this score with corresponding action plans for each site. GF Machining Solutions carried out a similar survey in November 2022 that had a participation rate of 65.8% and an employee satisfaction rate of 74.1%. Local management teams have started to work on improvement measures to raise employee satisfaction. GF Piping Systems did not carry out an employee engagement survey in 2022. In 2023, GF will conduct a global survey.

By 2025:



Employee engagement
At least **80% recommend GF**
as an employer of choice

Actions for promoting GF as an attractive employer

Throughout 2022, the company continued to promote its vision and culture through various channels. One example of this was an employer branding campaign on social media that showcased employees and their experience, giving potential recruits deeper insights into the employee experience. The campaign also sought to inspire current employees to further their careers within the company.

In April, more than 3'000 employees took part in a pulse check survey to gauge how well the three values related to "Caring", "Learning" and "Performance" are embedded in daily working life. The results show that the cultural evolution is progressing well and that most employees are familiar with the values. The company will continue to promote these during 2023.



https://dms.licdn.com/playlist/C4E05AQEVQdavVsBj6g/mp4-360p-30fp-crf28/0/1664862333769?e=2147483647&v=beta&t=84KqliRGlyCMn_f-bbMb_5uMX_Fb45jsbzN5Dzw4VUk

Corporate HR launched a global employer attractiveness challenge where local HR teams shared their experiences with ideas and events they have implemented. When they shared their experience, each team had the chance to receive points from a jury consisting of representatives from all divisions. At the Corporate HR summit in April 2022, the most successful team (from Shawnee, OK, US) won CHF 1'000 to fund their events. These measures strengthened employee retention and positively impacted employee turnover.

Learning and development

As part of its focus on innovation, GF places great importance on the professional and personal growth of its employees. In 2022, to enable employees to learn or refresh their knowledge at their own pace, HR strengthened the global learning management system, "MyLearning@GF", by putting courses online that were previously taught in person. They include "The 4 Disciplines of Execution" (4DX) and "The 7 Habits of Effective People" (7 Habits).

In 2022, approximately 8'200 employees engaged with the online platform. In addition, over 950 employees took part in in-person courses as part of the GF Academy – all of these were made available on "MyLearning@GF".

Employee training

Course or platform	Number of trainings	Number of participants
The 4 Disciplines of Execution (4DX)	31	368
7 Habits	25	346
GF Academy	14	241

Training and apprenticeships

The Swiss system of vocational education and training is one of the hallmarks of the country's economic success. As part of its commitment to innovation, the company has been training apprentices in technical and commercial professions for over 100 years.

Due to its effectiveness in developing young people who want to grow their skills in a trade, GF aims to expand the Swiss model of apprenticeships to other locations around the globe. In 2022, 375 apprentices across its Austrian, German, Swiss and US sites participated in this valuable dual approach to professional education and on-the-job training. Part of the success of this approach lies in its ability to nurture young people's abilities.



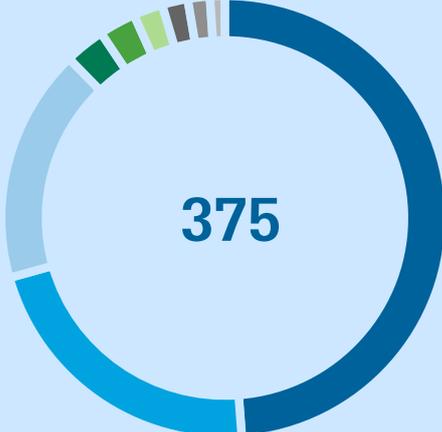
Apprentices receive both educational and on-the-job training, like as here in Altenmarkt (Austria).

Number of apprentices



- 0% GF Corporation
- 45% GF Piping Systems
- 22% GF Casting Solutions
- 33% GF Machining Solutions

Number of apprentices per country



- 49% Switzerland
- 22% Austria
- 17% Germany
- 3% USA
- 3% Turkey
- 2% Italy
- 2% Spain, France
- 1% China
- 1% Brasil, Canada, India

Embracing the next generation of talent

GF recognizes that upcoming generations bring new ideas, energy and perspectives in their approach to work. The company therefore strives to build trust and cooperation between different generations of employees. It encourages them to learn from one another through a variety of mentoring and coaching processes.

The company promotes itself as an attractive employer in a variety of ways. This includes job and student fairs, open days for schools, apprentice exchanges between divisions, as well as collaborations with universities and advanced technical colleges around the world.

The company has joined UNITECH, a pan-European network that makes it possible for companies to recruit top graduates from some of the leading technical universities in Europe. These engineering students are required to complete a case study focusing on leadership and management scenarios. The students then undergo a yearly program that ends with an internship at GF or other companies.

In Switzerland, as part of National Future Day, the company invited school-aged children to join their parents for a day to gain insights into day-to-day life in the workplace. Over 80 children took part in 2022 at many sites across the country.



Trust and cooperation between generations brings new ideas, energy and perspectives.

Employee fluctuation

In 2022, the global employee fluctuation rate was 13.8% (compared with 14.6% in 2021). Throughout the year, the company took concrete measures to improve talent retention, such as providing employees with a talent management platform where they can learn and develop their skills in line with the corporate values.

Employee representation

GF respects its employees' right to join employee representation bodies. Many of these agreements exist in various locations and entities around the world, including Austria, China, France, Germany, Japan, Sweden, Switzerland and Taiwan. In countries where the law grants employees the right of codetermination, this right is protected and valued. In 2022, 58% of the company's employees were represented by a collective bargaining agreement.

[+](#) [GRI 3-3](#) | [GRI 401-1](#) | [GRI 404-2](#)

Stakeholder engagement

GF operations and solutions affect its stakeholders in different ways. For the company, engaging with its stakeholders and working with them on important issues lies at the heart of its way of doing business.

When it comes to reviewing its progress against its own goals, being transparent with internal and external stakeholders enables the company to remain accountable. Such engagements help shape corporate policies and commitments, target sustainability investments as well as strengthen relationships with stakeholders.



Engaging with its stakeholders and working with them on important issues lies at the heart of GF way of doing business. | Photo © Thomas Oehrl

Employees

In November 2022, the company launched its new intranet platform "We@GF", strengthening employees' interactions and improving the way the company communicates with employees globally. The associated smart app has the potential to engage more employees, so employees without a PC can use it to access content on the platform.

Championed by Corporate Sustainability and its divisional counterparts, sustainability is an integral part of GF's business. Corporate Sustainability worked with the divisional teams to organize employee workshops on topics ranging from science-based targets to diversity and inclusion, as well as a global internal sustainability conference planned for 2023.

17 PARTNERSHIPS
FOR THE GOALS



In November, the company launched the GF Susty Fund with the aim of engaging with employees and enabling them to leave a positive sustainability footprint. The fund provides financial support for employees' sustainability project ideas in areas such as introducing biodiversity measures for a site or its surroundings, raising sustainability awareness, offering sustainability training within the company, providing support to start-ups or science projects linked to environmental benefits, or for community projects with clear social or environmental benefits.

At the divisional level, GF Piping Systems' Mystery Coffee, a networking initiative, gave employees the opportunity to sign up to a platform where they could meet with one another for a virtual exchange after being randomly matched. To date, some 1'000 employees have participated in such exchanges, fostering and improving cross-departmental and cross-country relations.

Also in 2022, as part of its continuous improvement process (CIP), GF Casting Solutions launched its "CIP Meets Sustainability" program, showcasing ideas from employees to further embed sustainability into day-to-day operations. Key areas covered were sustainable products, climate protection and resource conservation.

In September 2022, GF Machining Solutions introduced a "Success Reward" to celebrate and recognize actions by outstanding employees or teams who embrace the new GF values and help achieve the division's Strategy 2025. In particular, recognition will go to employees showing a positive attitude in their work, a commitment to quality and a willingness to take initiative for the good of the community.

Lastly, in March 2022, women employees in China organized a series of activities to celebrate International Women's Day.



+GF+

GF Susty Fund
Bringing your best sustainability ideas to life

**Got a brilliant sustainability idea?
Need some funding to get going?**

Types of projects

- Biodiversity measures for your site or its surroundings
- Sustainability awareness or training
- Sustainability CAPEX (funds to acquire, upgrade and maintain physical assets)
- Support start-ups or science projects linked to environmental benefits
- Community projects with clear social or environmental benefits



GF Casting Solutions launched its "CIP Meets Sustainability" program, showcasing ideas from employees to further embed sustainability into day-to-day operations.

Customers

GF's products and solutions address the needs of its customers while enabling them to become more sustainable. In 2022, GF Piping Systems launched its "Connections for life" campaign, which focuses on some of today's most pressing sustainability issues, for example, overcoming water loss, improving energy efficiency, ensuring clean water, improving water quality and providing operational safety. The campaign brings to life how solutions such as process automation or cooling systems provide opportunities to improve efficiency, lower a company's carbon footprint and save precious resources, such as water.



The GF Machining Solutions Academy delivers bespoke training for the division's customers' technicians.

At Euroguss 2022, Europe's largest die-casting trade fair, GF Casting Solutions showcased how it is developing sustainable and innovative solutions to address the challenges of mobility in the future. The division is already making vehicle components lighter, integrating more functions and shortening time-to-market.

The GF Machining Solutions Academy serves as a unique platform for engaging with the division's customers. The academy delivers bespoke training for customers' technicians, thus providing knowledge transfer and enabling customers to realize the full potential of the division's solutions throughout their life cycle.

GF Machining Solutions took part in key international trade shows during 2022, with September marking an exceptional period of customer engagement. This includes events such as the International Manufacturing Technology Show (IMTS) in Chicago, IL (US), the AMB International Exhibition for Metal Working in Stuttgart (Germany) and Micronora in Besançon (France).



GF Machining Solutions took part in key international trade shows during 2022, such as the AMB International Exhibition for Metal Working in Stuttgart (Germany).

Investors

GF participated in a total of 20 roadshows and investor conferences, meeting with investors and analysts, throughout the year. Sustainability remained a key topic, reflecting the growing importance of sustainability for investors and analysts, especially in areas such as sustainable finance and regulatory compliance.

The Chairman of the Board of Directors, the Chairwoman of the Compensation Committee and the Head of Investor Relations held about 20 dedicated meetings on sustainability and governance during ESG roadshows with the investor stewardship and sustainability teams of institutional investors and leading proxy advisors.

In September 2022, the company hosted its sixth Capital Markets Day, which is held once every three years. In line with the Strategy 2025, the event focused on innovation and sustainability. Over 60 analysts and journalists attended this event, and expressed their appreciation for the opportunity to discuss new technologies, applications and manufacturing methods directly with the members of the Executive Committee, senior management and experts.

During the event, a presentation on the Sustainability Framework 2025 and targets provided insights into how the divisions are bringing social or environmental benefits to the market with their products. These benefits include:

- mitigating water loss at a time of rapidly increasing water scarcity;
- empowering sustainable mobility with new technologies; and
- developing technologies for factories of the future.



Analysts and journalists at the sixth Capital Markets Day discussed new technologies, applications and manufacturing methods with the members of the Executive Committee, senior management and experts.

Suppliers

Building and maintaining trusting, long-term relationships with sourcing and logistics partners is vital to GF's strategic business success. In addition to focusing on its own sustainability impact, the company also supports its suppliers on their sustainability journey. Through onboarding, reviews and assessments, the company works closely with its suppliers and business partners to identify, measure and reduce their sustainability impacts. The company provided webinars and training materials to its suppliers as part of its ongoing efforts to foster a sustainability-oriented supplier ecosystem.

Universities and research institutes

This year's Capital Markets Day also inspired the more than 50 university students who attended a dedicated afternoon session that included a Q&A session with GF's Executive Committee. The students, who highly appreciated the open interaction, took a strong interest in the company's sustainability framework and progress towards its targets.

GF has now joined UNITECH, which enables it to recruit top graduates from leading technical universities in Europe. Founded in 2000, this pan-European network brings together the academic and corporate worlds to develop talented young engineers and enable them to successfully manage future challenges in global industry.



The GF Capital Markets Day inspired the more than 50 university students who attended a dedicated afternoon session.

Regulators and industry associations

Operating across over 30 countries, GF complies with all applicable laws and regulations. As a member of the Conference Board, a global non-profit business membership organization and research group, the company engages with many councils and working groups. Throughout the year, the company continued to engage with the Corporate Responsibility and Sustainability Council, which focuses on sustainability topics. These include the need to shift from reporting on activity to reporting on impact, the circular economy, support for and alignment with UN Sustainable Development Goals (SDGs), and stakeholder communication.

As a member of Swissmem, the association for the Swiss technology industry, GF hosted the association's first in-person meeting. Company representatives shared its approach to sustainability reporting and listened to the successes and challenges that others face in this area.

Communities and non-governmental organizations (NGOs)

GF supports and promotes cultural and social programs in many communities, and aspires to enrich lives and create a positive impact. The company also cooperates with many NGOs within the framework of its corporate citizenship programs, which focus on improving access to drinking water and education.



Employees at the GF Piping Systems facility in Irvine, CA (US) raised USD 150'000 for the Water Mission's water-related projects through their eighth Walk4Water.

Employees at the GF Piping Systems facility in Irvine, CA (US) organized their eighth Walk4Water, raising USD 150'000 for the Water Mission's water-related projects. In Germany, the division's staff took part in "Christmas in a shoe box" for the third consecutive year. The charity program offers boxes packed with socks, hats, scarves, toys and Christmas treats for children and families in need, primarily in eastern Europe.



In Germany, GF Piping Systems' staff took part in "Christmas in a shoe box" for children and families in need.

Media and the general public

GF regularly publishes media releases, full and mid-year financial results, as well as information on the development of new markets, product innovations and acquisitions. The company also regularly invites journalists to events.

The publication of the GF Sustainability Report 2021 inspired the **Schaffhauser Nachrichten**, a local newspaper, to publish a comprehensive report on corporate sustainability reporting. The article also shone a spotlight on GF's reporting approach, notably the evolution from its first environmental report 25 years ago to its sustainability report today.

On social media, GF grew its presence by 20% on LinkedIn, with over 70'000 followers in 2022 (58'000 in 2021). It enjoyed stable growth on other channels (such as Twitter, YouTube and Xing) and built its presence on Instagram.



Through events such as media conferences, GF engages with the media on its performance and other developments.

Material topics

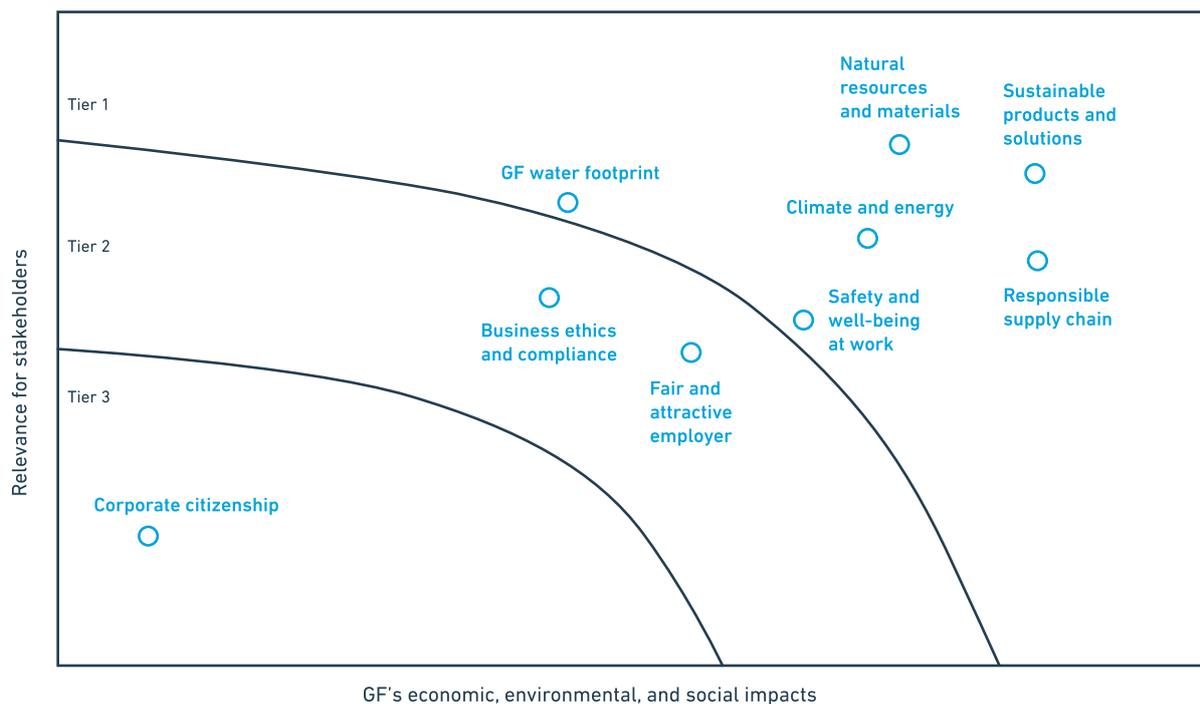
In 2022, GF continued to make progress against the goals and measures in its Sustainability Framework 2025, which is an integral part of its Strategy 2025. The company defined these measures by placing specific emphasis on the topics identified as material by its stakeholders.

The company last re-evaluated its topics of material importance in 2019, towards the end of the strategic cycle 2016-2020 and in preparation for the Sustainability Framework 2025. This evaluation led to the creation of a materiality matrix that the Executive Committee approved in early 2020. The company has since reviewed the process it used to identify material topics in 2019, which featured interviews with a diverse group of internal and external stakeholders. These included key customers, suppliers, investors, the Executive Committee, representatives from senior management and employees from different regions.

GF has made no changes to its material topics in this reporting cycle. It is committed to continuously improving and re-evaluating its efforts to foster sustainable development. The company therefore aims to re-design its process to identify material topics in 2023, with a particular focus on identifying and evaluating the impacts it has on the environment, people, economy and human rights. Details of the categories in the matrix and the reasons for their positions on the graph are described in the graphic and tables below.

In line with the requirements of the Global Reporting Initiative (GRI), GF reports on all material topics identified by its stakeholders in this sustainability report. To continue meeting GRI standards, the company continually works to describe its impacts on the environment, people, economies and human rights more precisely.

More information about the measures that have been introduced and the progress made can be found in the chapter [Progress on sustainability](#).



Areas of high materiality

Topic	Related aspects	Explanation for high materiality
Sustainable products and solutions	<ul style="list-style-type: none"> • Sustainable products • Circular economy in product R&D • Innovation • Customer relationship management • Product and customer safety 	<p>GF's product portfolio is its main direct impact on sustainable development. The design phase determines a product's environmental or social impacts during its life cycle. GF therefore considers it crucial to ensure that the entire life cycle is taken into account during this phase. The notion of a circular economy is integrated into product development at a very early stage. Different materials and components are analyzed to decide whether they are reusable or recyclable. It is essential for GF to have a precise understanding of customers' needs and to provide them with the right solution. GF's three divisions can only have a positive impact on sustainability by working closely with their customers. Product and consumer safety is integral to product development; it is essential for preventing individuals from being harmed by hazardous substances or materials, particularly in the disassembly phase. It is vital for GF to comply with applicable laws (such as REACH and RoHS) and ensure that all necessary declarations are in place, visible, and understandable for its customers.</p>
Natural resources and materials	<ul style="list-style-type: none"> • Reuse of materials at GF's operations • Waste reduction • Biodiversity and land use • Pollution prevention 	<p>Valuable natural resources and other inputs are essential for the manufacture of GF's products. Manufacture results in products and also waste. As part of GF's commitment to being a responsible industrial company, it is therefore important for GF to continuously work to ensure that this waste is minimized and that circular approaches are implemented by each division wherever feasible. This applies to GF's use of resources and materials at its operations, its treatment of waste, its efforts to reuse or recycle itself or to work with outside partners to find possible reuse and recycling options. Biodiversity provides the existential basis for human beings to live on this planet. GF's facilities are sited in industrial zones that have the infrastructure needed by its operations. Their impact on biodiversity and land use is relatively small. GF adopts the precautionary principle. It therefore places a high priority on environmental management and ensures its compliance with all applicable laws and regulations.</p> <p>In addition, the majority of GF's sites are ISO 14001 certified. As such, these sites are responsible for locally identifying, managing and monitoring environmental risks, including accidental pollution.</p>
Climate and energy	<ul style="list-style-type: none"> • GHG emissions along the value chain • Energy use in GF's operations • Non-GHG emissions (such as SOx, NOx, PM, and VOCs) in GF's operations 	<p>Energy consumption is a major source of GHG emissions, and the majority of GF's total GHG footprint results from emissions generated across the value chain (scope 3). Increasing concentrations of greenhouse gases in the atmosphere directly contribute to global warming. Climate change is the biggest energy-related concern of many external stakeholders and regulators; and the international community is broadly committed to tackling the challenges it presents. Being a global industrial company makes it essential for GF to understand, manage and reduce the GHG emissions attributable to its operations, supply chain and customers' use of its products. Non-GHG emissions from GF's production processes are important for nearby communities and the environment. However, GF facilities do not release significant quantities. Consequently, GF's impact on non-GHG emissions is small.</p>
Responsible supply chain	<ul style="list-style-type: none"> • Supply chain management (social and environmental impacts) • Integration of social and environmental topics into procurement processes • Human rights 	<p>GF's supply chain could potentially be a source of adverse social and environmental impacts. GF therefore has a responsibility to systematically manage its suppliers in order to minimize these risks. Respect for human rights and the prevention of human rights violations are integral to responsible supply chain management. As a basis for long-term partnerships with its suppliers, GF expects them to do their part to ensure the protection of human rights.</p>
Safety and well-being at work	<ul style="list-style-type: none"> • Occupational health and safety • Ergonomic work environments • Mental health and well-being 	<p>Occupational safety is of paramount importance to GF and many of its stakeholders. Caring about the people who work for GF (or on its premises) is integral to GF's corporate culture. GF is therefore committed to fostering a robust safety culture and, more broadly, to providing a work environment that promotes its employees' overall well-being.</p>

GF water footprint	<ul style="list-style-type: none"> • Water consumption • Wastewater • Reducing water pollution 	<p>Although GF’s operations are not water-intensive, water is used along its entire value chain. Water use is particularly high in some of the upstream processes. Sustainable water management (access to clean water and leak-free water transport) are urgent societal issues that GF takes very seriously. GF’s operations mainly use water in closed-loop cooling cycles. Quality is always controlled before water is returned to source.</p>
Fair and attractive employer	<ul style="list-style-type: none"> • Diversity, equal opportunity, and inclusion • Learning and development • Talent retention, attraction, and engagement • Employee work-life balance, flexible work arrangements • Working time and wages • Freedom of association 	<p>A fair and attractive employer treats all employees equally, motivates them, enables them to achieve a healthy work-life balance, supports freedom of association, and provides training and development opportunities. A respectful and diverse work environment in which all employees feel included and affirmed regardless of their gender, nationality, ethnic origin, age, identity, sexual orientation or identity is essential: retaining diverse and skilled talent supports future business growth. Demographic change, digitalization and automation require GF and its employees to acquire new skills. It is therefore a priority for GF to offer employees a wide range of training and development opportunities. As a matter of course, GF ensures that its employees worldwide enjoy internationally recognized human rights.</p>
Business ethics and compliance	<ul style="list-style-type: none"> • Corporate governance • Business ethics and compliance • Risk and opportunity management • Business continuity • Data privacy and safety • Cybersecurity 	<p>Good corporate governance enables GF to address the interests of all internal and external stakeholders. It ensures objective decision-making, clear checks and balances, and legal and regulatory compliance. Risk and opportunity management is crucial for GF and its outside stakeholders to maintain business continuity in a rapidly changing environment and to systematically identify and manage emerging and potentially disruptive developments. Although GF does not collect sensitive customer data, it does store its employees’ personal data. GF handles all such data in full compliance with the GDPR and other applicable data protection laws in the jurisdictions in which it operates. Amid ongoing digitalization, data availability, integrity, and security are crucial for GF’s IT infrastructure and business systems.</p>
Corporate citizenship	<ul style="list-style-type: none"> • Community engagement • Local community impact 	<p>GF is committed to having a positive impact on the communities where it operates. GF is at once a global and a local citizen: maintaining good relations with its neighbors and partnering with them to achieve common goals are of great importance to the Corporation. In general, GF’s production sites pose no material risks for, or have adverse effects on, nearby communities. Their direct impact is therefore minimal.</p>

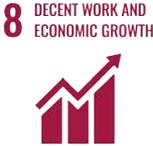
+ GRI 3-1 | GRI 3-2

Business ethics and compliance

Strong values and principles guide the decisions and conduct of GF employees in their daily work. As a sustainable leader, the company believes it can generate sustainable, long-term value only if it adheres both legally and ethically to the highest standards of conduct. Respect and responsibility – in both the physical and digital sphere – towards its stakeholders and the environment underpin the sustainable development of its business.

Code of Conduct

The GF Code of Conduct is a comprehensive declaration of the company's mission, values and ethical principles. It helps GF to maintain the highest levels of professional conduct by defining the expected standards of behavior for its employees, contractors and partners.



The company has now revised its Code of Conduct to clarify its requirements and expectations. As the company global workforce encompasses a diverse range of nationalities, languages and cultures, its improved code more accurately aligns its divisions and employees with its high ethical and behavioral standards. The new Code of Conduct was approved in 2022 with the release planned for 2023 in 18 languages and is a cornerstone in all employment contracts and staff onboarding programs.



Respect and responsibility towards GF stakeholders and the environment underpin the sustainable development of its business

Whistleblower platform

GF has an ISO 27001-compliant whistleblower platform in place, which enables individuals to securely and anonymously report any issues or wrongdoing (eg, discrimination, bullying, sexual assault and legal violations) via the confidential GF Transparency Line. The line is available 24/7 in nine languages: English, German, Chinese, French, Italian, Portuguese, Romanian, Spanish and Turkish.

- The number of issues reported in 2022 was 19.



Corporate compliance

Internal Audit and the Chief Compliance Officer (CCO) monitor compliance with the applicable laws and guidelines worldwide, as well as with business ethics standards. The CCO reports to the General Counsel or, where necessary, directly to the CEO. As a member of the Corporate Risk Council, the CCO's task is to ensure that risk management is given appropriate importance within the organization.

In addition, employees are required, and business partners are encouraged, to report potential misconduct by calling the CCO or writing to a special compliance e-mail address, contacting the Legal department in Schaffhausen (Switzerland), or sending the report anonymously. A corporate instruction details the procedure that employees follow for reporting such violations and governs the conduct of persons receiving the report. Proven misconduct is subject to appropriate sanctions.



Employees are required, and business partners are encouraged, to report potential misconduct.

Data ethics and cybersecurity

GF's centralized IT organization now includes the specialized IT Security team managed by a Chief Security Officer, who reports to the Chief Information Officer (CIO).

In 2022, the company rolled out its Security and Privacy campaign (awareness and training) to all employees worldwide. In addition, it began implementing a new Corporate Policy Framework that outlines the management of its IT, IT security and data privacy systems. The framework enables the company to remain compliant with all local and international data privacy regulatory requirements, including the EU's General Data Protection Regulations (GDPR). GF expects to complete its roll-out of the framework by the third quarter of 2023.

- The number of data breaches reported in 2022 was zero.
- GF also began implementing an ISO 27001-based Information Security Management System (ISMS) across all its divisions. The ISMS will enable the company to maintain the "CIA triad" of confidentiality, integrity and availability, while permitting robust business continuity plans, including regular tests where appropriate. GF's upgraded security controls will ensure it continues to meet the standards of its customers and suppliers.

In addition, the ISO 27001-based ISMS will help the company to:

- secure new business and strengthen its existing customer base;
- demonstrate that the organization regards cyber security as a critical priority;
- reaffirm its integrity and credibility with its partners; and
- protect its customers and suppliers and build stronger working relationships.

Cyberattacks are increasing in frequency and scale. The financial and reputational damage caused by inadequate IT security systems can have severe consequences for GF and its partners. The company therefore endeavors to avoid any financial penalties or other losses associated with data breaches through its increased security awareness and robust security controls.



In 2022, GF rolled out its Security and Privacy campaign (awareness and training) to all employees worldwide.

Compliance training

Compliance training, via e-learning or in person, is carried out under the direction of the CCO at the corporate companies. Supported by the CCO, the Executive Committee determines the focus topics. In 2022, over 3'500 in-house compliance training sessions included an e-learning program on:

- anticorruption/antibribery
- antitrust/competition law
- export controls/sanctions
- data privacy, including the GDPR

Globally, the company also held on-site training sessions for specific employees with compliance responsibilities at its companies in the EU, the US and China. In addition, to reinforce compliance, the company has implemented the following measures:

- improved regular performance checks of the GF Compliance Agreement for intermediaries to ensure the compliance of business partners who act on behalf of or in the interests of GF and its companies;
- the introduction of a web-based system that helps GF to ensure it does not conduct business with any sanctioned organizations or individuals; and
- on-site compliance officers who work to identify and assess compliance risks, implement internal compliance controls, and provide support in identifying and implementing appropriate new measures.



Human rights

GF published its [Corporate Policy on Human Rights](#), emphasizing the critical need to uphold and promote human rights within the company and its supply chain. In addition, GF endorses core international labor standards of the International Labour Organization (ILO) and maintains anti-corruption standards, which it has enshrined in its Code of Conduct, emphasizing the critical need to uphold and promote human rights within the company and its supply chain. In addition, GF endorses core international labor standards of the International Labour Organization (ILO) and maintains anti-corruption standards, which it has enshrined in its Code of Conduct.

GF is also a signatory and an active participant in the UN Global Compact (UNGC), underscoring its commitment to responsible business conduct. GF issues an annual "Communication on Progress" update to the UNGC.

Human rights in the supply chain and products

The company is committed to maintaining and continually improving its internal processes to avoid any potential human rights issues associated with its supply chain or products. Its core focus areas include child labor, human trafficking and modern slavery, freedom of association, the recognition of the right to collective bargaining, as well as diversity and inclusion.

GF works to maintain these critical human rights standards by:

- monitoring its progress and reviewing the performance of its targets;
- reporting on issues regarding human rights and consulting with key stakeholders;

- seeking the participation of its employees and management teams to communicate its aims and raise overall awareness;
- ensuring that human rights are understood, complied with and promoted by all training personnel and managers; and
- committing to adopting grievance mechanisms, providing corrective actions for negative impacts, applying due diligence and conducting risk assessments.

Product and service information and labeling

GF complies with all relevant laws and regulations regarding product safety, labelling and information provided to its customers. These efforts include, but are not limited to, the following:

- enclosing the CE and RoHS labels, when relevant;¹
- providing customers, where required or at their request, with information regarding conflict minerals (as defined by the Dodd-Frank Act) and the presence of substances of very high concern in products (as defined by REACH).²

Corporate Conflict Minerals Policy

Striving to be a good corporate citizen, GF is committed to ensuring the health, safety and protection of people who come into contact with its products and business. The company requires its suppliers to have high social, environmental and human rights standards. Managing its obligations in relation to conflict minerals is part of this corporate responsibility.

The company recognizes the risks of significant adverse impacts that may be associated with the extraction, trading, handling and exporting of minerals from conflict-affected and high-risk areas. Recognizing that GF has the responsibility to respect human rights and avoid contributing to conflict, it has adopted a [Corporate Policy on Conflict Minerals](#) on responsible sourcing from conflict-affected and high-risk areas, representing a common reference for conflict-sensitive sourcing practices and suppliers' risk awareness from the point of extraction until the end user.

In protecting human rights, suppliers offering goods that potentially contain conflict minerals are asked to provide proof of their supply chain due diligence using the Conflict Minerals Reporting Template (CMRT) or the Extended Minerals Reporting Template (EMRT) of the Responsible Minerals Initiative (RMI). In addition, a sustainability self-assessment is mandatory for all new suppliers. In parallel, GF requires its existing suppliers to provide a sustainability assessment as part of its ongoing program for sustainable supply chains.

More information is available in the [Corporate Policy on Conflict Minerals](#).



For GF, managing its obligations in relation to conflict minerals is part of its corporate responsibility.

Tax management

GF recognizes that the administration and payment of taxes form an integral part of each company's responsibility to a functioning society. GF is committed to responsible tax governance and

- following all applicable laws and regulations relating to its tax activities;
- maintaining a transparent and honest relationship with the tax authorities based on collaboration and integrity;
- applying diligence and care in its management of the processes and procedures by which all tax related activities are undertaken, and ensuring that the corporation's tax governance is appropriate; and
- using incentives and reliefs to minimize the tax cost of conducting its business while ensuring that these reliefs are not used for purposes that are knowingly contradictory to the intent of the legislation.

The GF Tax Policy is a Board directive that presents the foundation on which GF bases its tax activities, including the information on the corporation's tax governance structure and risk management process. GF's Executive Committee and Audit Committee discuss and assess the company's tax position and tax development at least once a year and present the results to the Board of Directors. This process ensures that all tax activities are planned and executed in line with the GF Tax Policy.

GF's tax results and disclosures are part of the annual half-year and year-end results and are audited semi-annually by an external auditor.

The company also carries out annual tax surveys across all group companies to ensure compliance with the GF Tax Policy and detect any adverse conduct. In these surveys, any tax risks and uncertain tax positions must be disclosed. The results are assessed centrally, and, if necessary, the company takes appropriate measures in accordance with the GF Tax Policy.

In addition, GF also engages with its stakeholders on tax-related issues. For example, the company participates in various organizations involved with tax policies and international tax developments, such as its membership and participation in the SwissHoldings association. This activity promotes exchanges with other groups and tax authorities and ensures that GF recognizes any relevant changes within the tax environment and implements them accordingly. By doing so, the Corporation maintains strict compliance with the GF Tax Policy, is transparent and open in its decisions, governance and tax planning and follows all applicable laws and regulations.

+ GF Tax Policy

+ GRI 2-23 | GRI 2-24 | GRI 2-25 | GRI 2-26 | GRI 3-3 | GRI 205-1 | GRI 206-1 | GRI 207-1 | GRI 207-2 | GRI 207-3 | GRI 417-1

¹ Conformité Européenne (CE) indicates conformity with health, safety, and environmental protection standards for products sold within the European Economic Area (EEA). RoHS indicates conformity with the EU's Restriction of Hazardous Substances Directive.

² Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) is an EU regulation. It addresses the production and use of chemical substances, and their potential impacts on both human health and the environment.

Responsible supply chain

Suppliers are strategic partners in the GF mission to become a sustainability and innovation leader providing superior customer value.

Maintaining a transparent and ethical supply chain is critical to sustainable business growth. GF therefore regards its suppliers as strategic partners in its mission to become a sustainability and innovation leader providing superior customer value. Through onboarding, reviews and assessments, the company works closely with its suppliers and partners to identify and measure their sustainability impacts. These actions promote sustainability throughout its operations, ensuring its products and solutions comply with all relevant laws, regulations and standards.



Maintaining a transparent and ethical supply chain is critical to sustainable business growth.

Implementing sustainable procurement principles

GF sets very high standards of ethical business conduct for itself and expects the same from its business partners. The Code for Business Partners, of which all suppliers receive a copy for acknowledgment and compliance, outlines the core principles that business partners must adhere to. In particular, as part of this code, the company expects its business partners to:

- firmly adhere to ethical principles and business practices for labor, environment, health and safety, and management systems;
- effectively integrate, communicate and apply these principles to improve performance over time; and
- operate in full compliance with all applicable laws, rules and regulations.

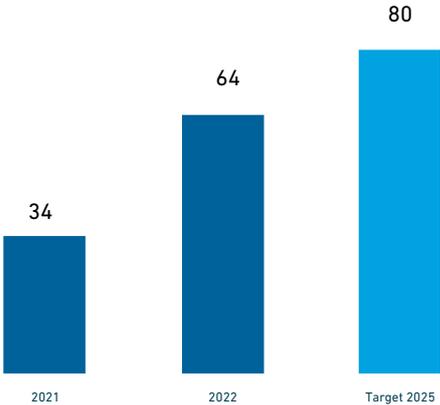
By 2025:



Supply chain
Perform **sustainability assessments for 80%** of procurement spend

Progress in 2022

Conducted sustainability assessments of key suppliers in % of procurement spend



Supplier assessment results in 2022

At the end of 2022, GF completed sustainability assessments for 64% of its procurement spend, accounting for around 600 key suppliers. Approximately 70% received a very good score (above 45 on a scale of 0–100, with 100 being the highest), indicating that the majority of GF's suppliers already have effective sustainability measures in place. The remaining 30% of the assessed suppliers scored below 45 points, indicating average or insufficient corporate social responsibility (CSR) performance in the four assessment categories: environment; labor and human rights; ethics; and sustainable procurement.

Supporting suppliers for improved performance

In order to improve suppliers' sustainability performance, GF conducted several initiatives. They included:

- supplier webinars focusing on sustainable sourcing activities and promoting ethical behavior that identified improvements relevant to all three divisions;
- sharing existing training resources from the online EcoVadis academy; and
- communication on the importance of external sustainability assessments for future collaboration.

Supplier assessments focusing on sustainability performance

Sustainability assessments are an essential part of the company's responsible sourcing activities. In light of new legislations concerning sustainability-related due diligence, such as the German Supply Chain Act, GF has put in place comprehensive processes to ensure that sustainability aspects in its supply chains are transparent and considered in the supply chain management of all three divisions.

To monitor progress towards a responsible supply chain, the company has made supplier assessments one of the targets of its Sustainability Framework 2025. The company's long-term goal is to maintain a transparent overview of its entire supply chain's sustainability status and developments. The ratings and associated guidance of the external rating agency EcoVadis are vital to achieving this goal and ensuring that directly contracted suppliers consistently improve their sustainability performance.

EcoVadis customizes each evaluation based on the supplier's size, industry and country. In addition, as some other agencies provide the same sustainability assessments, GF also accepts their ratings if their scope is comparable to those of EcoVadis, such as the self-assessment questionnaire (SAQ) of Drive Sustainability – an association of automotive companies working on a circular and sustainable automotive value chain.

The logo for EcoVadis, featuring the word "ecovadis" in a lowercase, sans-serif font. The letter "v" is stylized with a green leaf-like shape integrated into its upper right portion.

To ensure objectivity, GF prefers its suppliers to use third-party assessments. However, recognizing that this is not always possible, particularly for smaller suppliers, the company launched its own self-assessment questionnaire in 2022 with questions based on EcoVadis assessments. This questionnaire is offered to smaller suppliers and a detailed analysis of their responses is conducted.

The next steps in GF's high-level process until 2025 include:

1. performing risk assessments on suppliers of purchased commodities for all three divisions;
2. engaging with suppliers to highlight relevant risk categories and support sustainability improvements; and
3. maintaining ongoing EcoVadis assessments to ensure suppliers continuously improve their sustainability efforts.

Ensuring compliance with laws and regulations

The German Supply Chain Act, which will come into force in January 2023, aims to ensure companies comply with human rights and observe environmental standards in their supply chains. To comply with the requirements of this act, GF has carried out an initial assessment, using the [Transparency International Corruption Perceptions Index 2021](#) country indices to assess its exposure to human rights and environmental risks per country.

+ [Statement of principles regarding the German Supply Chain Act \(in German\)](#)

Furthermore, using internal and external expertise, the company evaluated each sourcing group's incremental human rights and environmental risks. The assessment results in a "heat map" – a color-coded data visualization of the significance of one or more criteria — indicating the level of risks of the suppliers based on country and commodity risk. This approach enables GF to have a clearer focus to work on mitigating human rights and environmental risks in its supply chain.

UN Global Compact — Sustainable Supply Chain Management working group

Since early 2019, GF has been an active participant in the Sustainable Supply Chain Management working group organized by the [UN Global Compact's Swiss network](#). The group is a forum for companies to share knowledge and best practices about important topics, including improvements to supply chain visibility and traceability, supply chain risk assessments, supplier engagement and human rights due diligence.

In 2022, the group met at in-person and virtual events on three occasions. The network's discussions focused on assessing scope 3 emissions, the risks of child labor in the supply chain and the German Supply Chain Act.

At its third meeting, the working group invited GF to share its initial assessment of the German Supply Chain Act. Participants welcomed the company's approach, especially in terms of the composition of its project team and its risk assessment method. This invaluable peer feedback has positively contributed to GF's cross-divisional team's decisions on future steps, underlining the importance of the peer-to-peer exchange of expertise in such international forums.

+ GRI 3-3 | GRI 308-1 | GRI 414-2

Corporate citizenship

Since its founding in 1802, GF has provided strong corporate and financial support to social organizations, commercial foundations and humanitarian projects. In 2022, it invested around CHF 2 million in social engagement activities at the corporate level, in addition to donations of around CHF 900'000 made by its individual sites. The largest contributions in 2022 went to GF's foundations: the Clean Water Foundation, Klostergut Paradies and the Iron Library.

Celebrating 20 years of the Clean Water Foundation

Every year, the company supports the Clean Water Foundation with a substantial lump-sum contribution. The foundation's Board of Trustees includes the company's CEO, who is also the chairperson, and two members of the Executive Committee. GF created the Clean Water Foundation in 2002 to mark the 200th anniversary of Georg Fischer AG. That year, shareholders agreed to waive an anniversary dividend to set up the foundation and invest CHF 3.5 million in charitable projects aiming to ensure clean drinking water around the world. To date, the company has invested more than CHF 13 million in projects that provided access to safe drinking water, improving the lives of more than 360'000 people.

To mark the foundation's 20th anniversary, the Board of Trustees slightly adjusted the current strategy by approving financial support in the areas of health/hospital infrastructure and education/school buildings. As a result, the board decided to send two young engineers from GF Piping Systems to visit two projects – a health infrastructure in Somaliland and an education building in Zambia – to explore how GF, in addition to its financial support, can make a greater contribution in the future with its technical expertise and know-how. Due to the situation on the ground, one of the visits will take place in early 2023.

In Somaliland, the Swiss non-profit organization Safe Water Matters is building a drinking water treatment center in Berbera, the capital of the Sahil region. With the company's financial support, it will significantly improve access to clean drinking water at the Berbera Regional Hospital.

In Zambia, Water for Water (WfW) Switzerland, another non-profit organization, has been working since 2013 to improve vocational training in the Zambian water sector. With support from the Clean Water Foundation and in collaboration with local school authorities and water sector representatives, WfW has established a hands-on training program for prospective water supply specialists in the Luapula Province.

4 QUALITY EDUCATION



6 CLEAN WATER AND SANITATION



8 DECENT WORK AND ECONOMIC GROWTH



17 PARTNERSHIPS FOR THE GOALS



In Uganda, GF provided financial support for a safe water project implemented by Water Mission.

In addition, the foundation's Board of Trustees approved new funds for water projects in Cambodia, Nicaragua and Uganda. In Cambodia, it financed the water supply for the country's first home for children with intellectual disabilities, located in Neak Loeung, and built by Goutte d'eau, a Swiss-Cambodian non-profit organization. In Nicaragua, the foundation supported a water project for small farmers run by the Swissaid Foundation. In Uganda, GF provided financial support for a safe water project implemented by Water Mission for refugee settlements in northern part of the country.



The project in Uganda benefited refugee settlements in the northern part of the country.

Klostergut Paradies and the Iron Library Foundation

The historic Klostergut Paradies in Schlatt (Switzerland) has been part of the company since 1918 and serves as its main center for seminars and training. Since 1948, the building has also been home to the Iron Library Foundation, one of the world's largest private collections of books on material science and the history of technology.

Iron Library and GF Corporate Archives

The Iron Library and the Corporate Archives, managed by one team, preserve the company's historical and cultural heritage dating back to the 18th century. In 2022, its digital library included over 1'300 digitized volumes totaling more than 110'000 pages.

Since its establishment in 1948, the GF Iron Library Foundation has developed into one of the world's most important knowledge centers focusing on the history of technology. Its extensive holdings (more than 47'000 titles) date back over 750 years and, together with the Corporate Archives of Georg Fischer AG, attract scientists and researchers from all over the world. In recognition, the Corporate Archives are listed as an archive of national importance in the Swiss inventory of cultural assets.

Sharing the history of technology with the world

Although the library's profile has changed over the years, its purpose remains the same: to make the history of technology accessible to researchers and the general public. The library fulfills this mission through activities such as guided tours, the History of Technology Conference, the Scholar in Residence program and a growing suite of digital activities. While many specialist libraries have been negatively impacted by the digital revolution, the Iron Library remains popular with researchers from all over the world, a testament to its ongoing relevance.



The extensive holdings (more than 47'000 titles) of the Iron Library date back over 750 years.

Digital services

Libraries are also creating new ways to make their analog collections electronically available to the public. They are doing this in the spirit of "OpenGLAM" (galleries, libraries, archives and museums), a global network for preserving and sharing important cultural heritage. For its digitization, the Iron Library works primarily with cooperation platforms managed by larger university libraries, such as the ETH Library in Zurich. In 2022 alone, the Iron Library's online presence expanded by over 17'000 digitized pages.

Wikipedia

The Iron Library also regularly organizes Wikipedia GLAM touring events in which experienced "Wikipedians" use the extensive holdings to write new articles and expand existing entries. In 2022, around 15 new Wikipedia articles were created at two Wikipedia events about "Women as multi-talents".

Scholar in Residence program

Since 2015, the Iron Library has been offering scholars the opportunity to engage intensively with the holdings as a scholar in residence. The program attracts an international mix of established researchers, younger scholars and advanced students. Previous scholars have studied a range of topics, from the types of iron bridges built in the late 19th century to the sociological implications of metallurgy and the industrial applications of machine learning. Over the past seven years, the Iron Library has welcomed 23 scholars from 11 countries in Europe, as well as North and South America.

History of Technology Conference

Every two years, around 60 international experts from the world of science, academia and industry meet at the Klostersgut Paradies for a conference on the history of technology. These conferences started in 1978 and are well known for their wide variety of topics, specialist presentations and relevance with regard to current events. The papers presented are subsequently published in the journal *Ferrum*, which is available free of charge online. This year, the latest issue of the journal focuses on a series of articles under the heading "Raw Materials: Natural Resources in History".



Participants at the Wikipedia Workshop "Women as multi-talents" writing articles at the Iron Library

Reporting approach

This report covers the reporting period from 1 January to 31 December 2022. It was prepared in reference to the GRI Standards, SASB and the GHG Protocol.

Since publishing its first environmental report in 1997, GF has continually expanded the scope of the sustainability data it records and collects. Initially, only environmental indicators were collected. Social indicators were added in 2005.

This sustainability report is based on the same reporting period as the [Corporate Reports 2022](#). Sustainability reports from previous periods are available online on the [GF website](#) and in the [Corporate Archives](#). GF has prepared this report in reference to the GRI Standards, as well as the SASB Standards. The company has conducted for the first time in 2020 a mapping exercise to align GF's sustainability disclosures with the SASB Standards ([GRI/SASB Content Index](#)). Emissions are reported in scope 1, 2 and 3, in accordance with the Greenhouse Gas Protocol (GHG Protocol). Information on energy consumption, GHG emissions and GF's management of water as a resource is also provided annually to [CDP](#).

The list of entities included in this sustainability report follows the list of affiliated companies disclosed in Corporate Governance Report. This excludes companies that joined GF during the reporting period and have been associated with the company for less than one year. Companies with less than 10 employees only report data on the number of work-related accidents.

In 2022, the company again participated in the S&P Global Corporate Sustainability Assessment (CSA) with data for the 2021 reporting period.¹ In addition, GF Piping Systems and GF Casting Solutions underwent an annual reassessment by EcoVadis in 2022.

More information on GF's rankings can be found in the [Sustainability governance chapter](#) of this report and on the [Investor Relations page](#) of the corporate website.

Scope of data collection and reporting

In the year under review, GF had 138 affiliated companies. About 77% of them report their social and environmental indicators, which covers 78% of the total workforce and 93% of production facilities².

In 2022, and in line with the organizational adjustments made at GF, the scope of reporting was adjusted as follows:

- In 2022, two of GF Piping Systems' production sites in Brazil, and GF Casting Solutions' new production site in Shenyang (China) were included in the reporting from January 2022.
- The divested GF Linamar plant in Mills River, NC (US), was excluded from the reporting as of 1 April 2022. The GF Machining Solutions sales company in Turkey was excluded as of 31 December 2021.

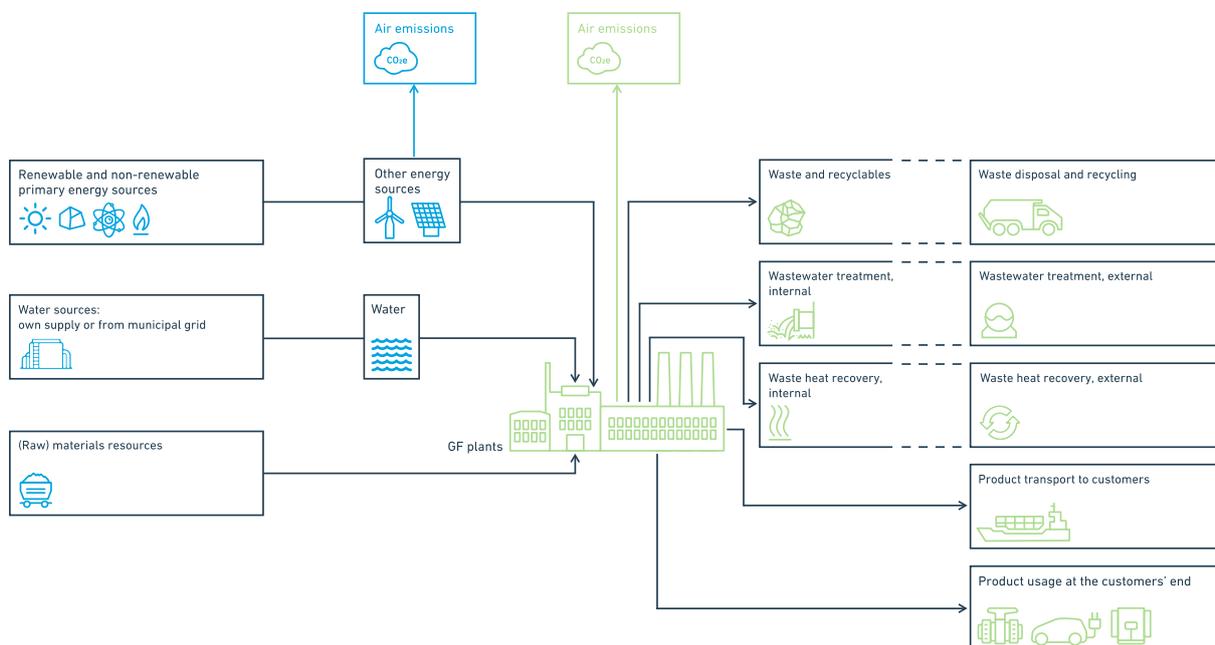
As in previous reporting periods, the information presented in this sustainability report accounts for the equity stake that GF holds in the individual companies under its control. The criteria for the inclusion of companies in this report is in line with the approach used in financial reporting and is as follows:

- The scope of consolidation includes GF and all GF Corporate Companies, which GF controls directly or indirectly by either holding more than 50% of the voting rights or by otherwise having the power to control their operating and financial policies (GF and these GF Corporate Companies are also collectively referred to as the GF Corporation). These GF Corporate Companies are fully consolidated.
- For companies where GF has a joint venture participation of 50% or less, environmental and health and safety, workforce and financial data are weighted accordingly.

The financial performance indicators follow Swiss GAAP FER principles (Swiss Generally Accepted Accounting Principles Accounting and Reporting Recommendations) and are consistent with those reported in the [Financial Report 2022](#). Economic performance indicators cover all of the companies within the scope of corporate consolidation, as reported in the [Financial Report 2022](#).

The social performance indicators presented in this report are based on the data collected from all sales and production companies worldwide with more than 10 employees (106 legal entities in total). They report this information to the sustainability teams at the divisional and corporate levels on a monthly, quarterly or bi-annual basis using the Sustainability Information System (SIS). Environmental performance indicators are reported by the production companies according to the same reporting cycles (56 production legal entities in total). Depending on the company's contribution to the consolidated result and the figure, the reporting cycle differs. Fuel consumption of company cars is part of the social data reporting and is therefore also reported by sales companies. Sales companies report only social data, as the impact of their environmental data is negligible³. In addition, all GF entities, regardless of their headcount, report information about work-related incidents as they occur.

GF's environmental indicators are energy and water consumption (on the input side), and air and GHG emissions, waste and wastewater (on the output side). In addition, GF has been calculating its scope 3 GHG emissions in accordance with the Greenhouse Gas Protocol Corporate Standard since 2019. These emissions are the result of activities that GF does not directly control, but that it indirectly impacts through its value chain.



Reporting limitations as of 31 December 2022

Target scope and calculation for the Sustainability Framework 2025

The [Sustainability Framework 2025](#) was introduced in 2021 and is part of the Strategy 2025. Its targets must be achieved within five years, so by year-end 2025.

In order to provide companies with a realistic timeframe for reaching the targets, only those that have contributed to GF's sustainability reporting for the entire year until the end of 2022 are included in the calculation of the progress made against the Sustainability Targets 2025. Companies that join the sustainability reporting later have individual targets.

Business acquisitions, divestments and closures can also affect the results. Organizational adjustments that took place in 2022 are explained in the section: [Scope of data collection and reporting](#). For changes prior to this, please refer to the specific sustainability report for that year.

Progress against the Sustainability Framework 2025 targets for water and waste is calculated relative to production volume. The production volume is defined based on the activities of the individual divisions. For GF Piping systems, the production volume is defined as "produced tonnes"; for GF Casting Solutions, it is defined as "gross value added" (which includes all operating income minus the costs of materials and products, changes in inventory, and operating expenses); and for GF Machining Solutions, it is "hours worked".

In addition, for the Sustainability Framework, the CO₂e emissions targets are calculated using adjusted 2019 GHG emissions as a baseline reference. The CO₂e emissions targets were approved by the [Science Based Target initiative](#) in October 2022.

For the target regarding supplier sustainability assessments, GF Piping Systems used the 2020 purchase volume. The division has a conservative supplier base, and those suppliers do not, therefore, change often. For GF Casting Solutions and GF Machining Solutions, the purchase volume was updated in 2022, as the supplier base has changed compared to 2020. Both divisions will update the purchase volume data on an annual basis.

Environmental performance indicators

Forecasting of environmental data

In order to report environmental data in time for the publication of the Sustainability Report 2022, environmental data for the full-year 2022 have been forecasted based on historical data until 31 October 2022, the third quarter of 2022, or in some cases, 30 June 2022. As the reporting cycle varies based on a company's contribution to the consolidated result and the reported figure, the forecast is based on monthly, quarterly, half-yearly or annual data from 2022. The Sustainability Report 2022 discloses actual social data. In the first half of 2023, GF will publish actual environmental data. In the event that the actuals differ from the forecast by more than 5%, the respective figure will be restated. To ensure an earlier publication of the data, GF plans to continue applying forecasting of environmental data over a mid-term horizon.

The forecast is only relevant for environmental data, and it therefore covers production facilities only. The forecast consists of a best-fit model approach based on the following database:

- Option 1: all top contributing sites, if they accounted for more than 90% of the consolidated full-year 2021 result. This represents 60% of GF's production sites in SIS.
- Option 2: all top contributing sites and sites that report half-yearly, if the top contributing sites account for less than 90% of the consolidated full-year 2021 result. This represents 80% of GF's production sites in SIS.
- For both options, the figures for the remaining sites at group level are extrapolated to cover 100% of the KPI at group level.
- Out of eight different forecasting methods, the analysis delivers a best-fit model offering the highest accuracy compared to the last available reporting period for each KPI and site. The best-fit model is used to forecast data for the sites' respective reporting cycle.
- GF recognizes that the best-fit model for the third quarter is not necessarily the best-fit model for the fourth quarter. However, as there is insufficient historic seasonal data to verify this method, the company is relying on the fact that the fourth quarter seasonality is included in multiple forecast options.
- In 2022, four new sites joined GF's SIS reporting. No historical data exist for those sites (see above). GF therefore decided to exclude these sites from the forecast.
- Data on air emissions (four figures) are reported annually, as they are generally small. For 2022, the company used prior-year data (full-year 2021) for forecast 2022.

Energy

Data are sourced from on-site meters, utility bills or environment management systems. Energy consumption is disclosed as gross and net energy consumption, the latter excludes energy sold. Energy sold includes only waste heat/steam sold and electricity. Renewable energy contains mainly purchased electricity and <0.1% biogas as disclosed in the [Sustainability Report 2022](#).

GHG emissions

The company follows the GHG Protocol Corporate Accounting and Reporting Standard (GHG Protocol Corporate Standard).

Scope 1 and 2 emissions

Scope 1 and 2 calculations are based on site-specific data for fuel consumed and utilities purchased. These calculations, apply published emissions factors and global warming potentials (GWPs) in accordance with the GHG Protocol Corporate Standard. Biogenic CO₂ emissions and process emissions are not material (<0.2% of total scope 1 emissions) and therefore part of the total scope 1 emissions. Scope 1 emissions are reported as total, because the majority thereof stems from CO₂, and the remaining five GHGs make only a minor contribution (<1%). GHG emissions from processes are also reported annually as scope 1 emissions. Those emissions are either measured or calculated and a GaBi (a life cycle assessment modeling software) emission factor – v13.0 (12/2020) – is applied.

The company calculates scope 2 GHG emissions using the location and market-based methods, and includes the impact of renewable energy certificates (RECs) in accordance with the GHG Protocol. Market-based scope 2 emissions are used in GF's science-based targets and calculated in accordance with GHG protocol prioritization using emission factors derived from energy attribute certificates, from contractual instruments with energy suppliers or residual mix factors from GaBi (v13.0 (12/2020)). In the absence of contractual agreements or residual mix factors, GF uses location-based emission factors.

Scope 3 emissions

GF calculated its scope 3 emissions in all 11 categories in accordance with the GHG Protocol and the Science Based Targets initiative criteria V4.2. Category 1 (Purchased goods and services) and category 11 (Use of sold products) were identified as material in the 2019 emission inventory, as they contribute to 90% of GF's scope 3 emissions.

Four categories – specifically, 8 (Upstream leased assets), 13 (Downstream leased assets), 14 (Franchises) and 15 (Investments) – were excluded due to their irrelevance to GF's business model.

In addition, two categories – category 2 (Capital goods) and category 5 (Waste generated in operations) – were calculated and deemed irrelevant due to their very low contribution. Purchased services and traded gas meters were excluded from the inventory. In total, the exclusions amount to 5% of total scope 3 emissions in 2019. (The exclusions consists of: excluded services: 3%; excluded traded meters: 2%; category 5 (Waste generated in operations) and category 2 (Capital goods): <1%.)

Category 1 (Purchased good and services) and category 11 (Use of sold products) were identified as material in the 2019 emission inventory, as they account for 90% of GF's scope 3 emissions.

In general, scope 3 emissions data were calculated using a combination of methods for each category, as prescribed by the GHG Protocol.

Category 1: Purchased goods and services

For GF Piping Systems, the amounts of purchased raw material, pipes, glue, copper wires and other raw metals for fittings are included in the calculation. For GF Casting Solutions, the amounts of purchased aluminum (primary, secondary), magnesium (alloy, pure), iron (scrap, pig), steel, alloys, inoculants and other consumables are included in the calculation.

Both divisions review their calculation annually and include annual updates.

For GF Machining Solutions, emissions from purchased goods and services are included. In addition, for GF Machining Solutions, emissions were derived from five representative machines based on the share of sales per machine type. As GF Machining Solutions contributed 2% to the total amount of category 1 emissions in 2019, the emissions from this category are calculated based on the share of sales per machine type; the representative machine types remain unchanged for the Strategy 2025 period.

For all three divisions, a combination ofecoinvent, supplier declarations and third-party research was used as the source for emission factors. Services were excluded from the purchased goods and services category due to the low emission intensity compared to the raw materials purchased for all three divisions.

Category 11: Use of sold products

GF Machining Solutions' electrical discharge machining (EDM), milling and laser machines consume energy and are therefore the main source of GHG emissions in this category. The figure for electricity consumption was calculated based on the electricity consumption of a selection of representative machines using the ISO 14955 standards and on the depreciation tables taken from the German Federal Ministry of Finance, while emission factors for electricity, including CH₄ and N₂O, were taken from the International Energy Agency. In addition, for GF Machining Solutions, emissions were derived from five representative machines based on the share of sales per machine type.

Neither GF Piping Systems' nor GF Casting Solutions' products consume energy in the use phase. For GF Piping Systems, "the process automation portfolio," comprising all products with energy consumption, was excluded, as this was estimated to consume <0.1% of electricity during the use phase over a 10-year period.

Remaining scope 3 categories

Emissions from Business Travel (category 6) are calculated annually based on travel data from GF's travel management system. All remaining scope 3 categories were calculated or estimated for 2019 and are multiplied by sales increase/decrease on an annual basis.

+ [GRI 305-1](#) | [GRI 305-2](#) | [GRI 305-3](#) | [GRI 305-5](#)

Air emissions

GF monitors halogenated and non-halogenated volatile organic compounds (VOCs), sulfur oxide (SO_x), nitrogen oxide (NO_x) and particulate matter (PM 10 and PM 2.5), heavy metals and persistent organic pollutants (POPs) that occur during manufacturing or due to infrastructure.

VOCs mainly originate from the use of halogenated and non-halogenated solvents, cleaning agents, diluents, propellants and paints in production processes. These emissions are not considered material and have therefore not been included in GF's environmental targets.

+ [GRI 305-7](#)

Water and wastewater

GF classifies water withdrawn by source (public water supply, ground and rainwater), and wastewater by channel (sewage systems, unpolluted to nature). The water directly abstracted from the environment is used mainly for cooling purposes in closed-loop cooling cycles. Cooling with water enables the company to reduce its energy consumption because it does not require mechanical chillers. Data for water withdrawals are sourced from meters on-site, utility bills or environment management systems.

The water intensity target is binding for 14 sites that are located in water-stressed areas and have a significant annual water consumption of at least 10'000 m³. Water-scarce and water-stressed areas are defined using two different scenarios from the Aqueduct Water Risk Atlas developed by the World Resources Institute. Average consumption from 2018–2020 serves as a baseline to reflect a more realistic consumption trajectory. Progress made against the Sustainability Framework 2025 water target is calculated relative to production volume.

+ [GRI 303-3](#) | [GRI 303-4](#) | [GRI 303-5](#)

Waste and recycling

GF classifies waste by type (normal waste, non-hazardous waste) and according to the disposal routes: recycling, landfill or incineration, storage or incineration. Included are all waste/recycling materials from production as well as any other waste from maintenance, offices, canteens, warehouses, etc.

Energy utilization of waste is not counted as recycling. Ultimately, GF aims to reduce the amount of waste sent to landfill and disposal and to increase the recycling rates.

The waste target is binding for all production companies. Average consumption from 2018–2020 serves as a baseline to reflect a more realistic consumption trajectory. The progress made against the Sustainability Framework 2025 waste target is calculated relative to production volume.

+ [GRI 306-1](#) | [GRI 306-3](#) | [GRI 306-4](#) | [GRI 306-5](#)

Recycled input material

Data on recycled input material is collected from GF Piping Systems production companies. Due to the different nature of their business and negligible relevance, the other two divisions are excluded from this reporting.

Supplier sustainability assessments

Data on supplier sustainability assessments is reported by each divisional procurement department based on an agreed process, and consolidated by Corporate Sustainability.

+ [GRI 301-1](#) | [GRI 308-1](#) | [GRI 414-2](#)

Social performance indicators

Employees, governance bodies, training and professional development

Employee data are disclosed according to age group, gender, full- or part-time employment, and management level, as well as departures and new hires with breakdowns, according to age group and gender. Data on interns, students and apprentices is also disclosed.

Management positions are defined as members of the management board of each business entity or managers who report to a managing director.

Employee data breakdown by age group and gender cover all GF sites and operations around the world. Data to disclose full- or part-time employment, management level, new hires and departures are reported by sites with more than 10 employees.

The turnover rate is calculated based on by dividing the number of departures by the average headcount in previous period.

Disclosure on training data follows the total number of training days and number of GF employees receiving training in the reporting period.

+ [GRI 404-1](#) | [GRI 404-2](#) | [GRI 405-1](#)

Health and safety

GF reports work-related injuries and illnesses for GF and leased employees, and other third parties (eg, visitors) from all operations and sites (106 legal entities in total). The accident rate target is binding for all sites globally with more than 10 employees, and GF includes employees and leased employees in the KPI accident rate per 1 million working hours (LTIFR). Work-related fatalities are reported internally for all different employee types and disclosed in one consolidated number. In addition, GF collects data on days of absence for GF employees, which are separated into absences due to accident or illness, and total absence days.

+ GRI 403-1 | GRI 403-2 | GRI 403-4 | GRI 403-5 | GRI 403-6 | GRI 403-7 | GRI 403-8 |
GRI 403-9

¹ Formerly known as the SAM CSA and Dow Jones Sustainability Rating.

² A production facility manufactures GF's products and solutions, while a sales company sells these to the market.

³ In accordance with the SBTi requirements, the GHG emissions of sales companies were calculated and found to account for <5% of GF's scope 1 and 2 emissions.

Environmental performance indicators

Environmental performance indicators ¹	Unit	FC 2022	2021	2020	2019	2018
Energy						
Gross energy consumption	1'000 GJ	3'396	3'632	3'032	3'565	6'823
Electricity	1'000 GJ	2'190	2'342	2'087	2'427	3'249
Natural gas, biogas, fuel oil ²	1'000 GJ	962 ²	1'066	765	949	1'363
Coke	1'000 GJ	118	98	93	101	2'092
Fuel use (for internal transportation)	1'000 GJ	105	104	53	65	97
Other energy sources	1'000 GJ	21	22	34	22	22
Energy sold	1'000 GJ	-7	-8	-8	-1	-82
Net energy consumption	1'000 GJ	3'389	3'624	3'024	3'564	6'742
Renewable energy (incl. green electricity)	%	31	24	17	15	9
Energy intensity (net energy consumption per sales)	1'000 GJ / CHF million	0.85	0.97	0.71	0.96	1.47
GHG emissions (in CO₂e)						
Total CO ₂ e emissions ("market based" approach)	1'000 tonnes CO ₂ e	1'802	1'975	1'592	1'873	630
Scope 1 (Direct emissions: fuel-related energy consumption) ²	1'000 tonnes CO ₂ e	82 ^{2,7}	84	68	77	312
Scope 2 market-based (Indirect emissions: electricity and district heating) ³	1'000 tonnes CO ₂ e	153 ⁷	189	216	263	312
Scope 2 location-based (Indirect emissions: electricity and district heating) ⁴	1'000 tonnes CO ₂ e	272 ⁷	293	297	333	411
Scope 3 absolute (Indirect emissions) ⁵	1'000 tonnes CO ₂ e	1'567	1'702	1'308	1'533	6
Category 1: Purchased goods and services	1'000 tonnes CO ₂ e	1'001 ⁷	1'176	858	1'003	
Category 3: Fuel and energy-related services	1'000 tonnes CO ₂ e	59	55	47	55	
Category 4: Upstream transportation and distribution	1'000 tonnes CO ₂ e	46	43	36	43	
Category 5: Waste generated in operations	1'000 tonnes CO ₂ e	0	0	0	0	
Category 6: Business travel	1'000 tonnes CO ₂ e	4	2	2	7	6
Category 7: Employee commuting	1'000 tonnes CO ₂ e	19	17	15	17	
Category 9: Downstream transportation and distribution	1'000 tonnes CO ₂ e	35	32	28	32	
Category 10: Processing of sold products	1'000 tonnes CO ₂ e	17	16	13	16	
Category 11: Use of sold products	1'000 tonnes CO ₂ e	373 ⁷	349	298	348	
Category 12: End of life treatment of sold products	1'000 tonnes CO ₂ e	13	12	10	12	
SBT 2026: scope 1 + 2 emission reduction (status at year-end)	1'000 tonnes CO ₂ e	235	273	284	330	
SBT 2030: scope 3 emission intensity index (t CO ₂ e emissions per t of processed material) (status at year-end) ⁶		3.9				
Air emissions⁸						
Nitrogen oxides (NO _x)	1'000 tonnes	0.02	0.02	0.01	0.01	0.05
Sulfur oxides (SO _x)	1'000 tonnes	0.01	0.01	0.00	0.01	0.01
Volatile organic compounds (VOCs)	1'000 tonnes	0.05	0.05	0.05	0.05	0.06
Particulate matter	1'000 tonnes	0.004	0.004	0.002	0.001	0.005

Water and wastewater						
Total water consumption	1'000 m ³	2'254	2'304	2'013	2'417	2'759
City water from public supply	1'000 m ³	682	696	648	702	697
Ground and rainwater	1'000 m ³	1'572	1'608	1'365	1'715	2'062
Water consumption of GF sites located in water stressed areas	1'000 m ³	407 ⁷	457			
Wastewater volume	1'000 m ³	1'743	1'803	1'772	1'961	1'961
Wastewater to sewage systems	1'000 m ³	576	593	674	750	814
Wastewater returned to nature, unpolluted	1'000 m ³	1'167	1'211	1'098	1'211	1'147
Sustainability Targets 2025: Water intensity index (status at year-end)		94	102	100		
Sustainability Targets 2025: Target line water intensity index ⁹ (water consumption per production volume ¹⁰)		92	96	100		
Waste and recycling						
Total waste	1'000 tonnes	82 ⁷	103	83	99	306
Non-hazardous waste		70	83	73	91	286
Normal waste, recycling	1'000 tonnes	58	58	53	67	245
Normal waste, landfill or incineration	1'000 tonnes	12	25	20	24	41
Hazardous waste	1'000 tonnes	11 ⁷	20	10	8	20
Hazardous waste, recycling	1'000 tonnes	6	15	5	3	16
Hazardous waste, storage or incineration	1'000 tonnes	6	5	5	5	4
Recycled waste as % of total waste	%	78	70	71	71	85
Sustainability Targets 2025: Unrecycled waste intensity index (status at year-end)		58	91	100		
Sustainability Targets 2025: Target line unrecycled waste intensity index ⁹ (non-recycled waste per production volume ¹⁰)		92	96	100		
Recycled input material⁸						
GF Piping Systems recycled input material ¹¹	1'000 tonnes	9	9			
Supplier sustainability assessment						
Key suppliers spend assessed with sustainability assessments ¹¹	% of total purchase volume	64 ⁷	34			
Monetary values⁸						
Expenditure for environmental protection	CHF million	8	8	10	5	18
Energy costs	CHF million	86	81	65	72	130
Water and wastewater costs	CHF million	2.4	2.5	2.0	2.5	3.5
Waste disposal costs (-) and recycling credits (+)	CHF million	-2.2	-1.0	1	3	9

1 The environmental performance indicators include all GF production companies. In order to report data in time for the publication of the 2022 Sustainability Report, data for environmental figures are actuals for the period from January to September, where available from January to October, and forecasted for the remaining period from October/November to December 2022. Scope 3 GHG emissions and supplier sustainability assessments are shown as actuals and selected indicators if explicitly stated as previous year data. Further information on the forecasting methodology is available in the "Reporting approach", follow this link: <https://annual-report.georgfischer.com/22/en/reporting-approach>

2 In 2022, the share of biogas was 0.02% of natural gas, biogas and fuel oil, and less than 0.01% of scope 1 emissions. It is therefore not reported separately.

3 Market-based emissions refer to specific emission factors, e.g., from local utility providers, and they account for market instruments such as guarantees of origin that might be purchased in order to reduce scope 2 market-based emissions.

4 Location-based emissions refer to the average emission factors of the area where the electricity consumption takes place, eg, average emission factor of one country.

- 5 Category 1 (Purchased goods and services) and category 11 (Use of sold products) were identified as material in the 2019 emission inventory, as they contribute to 90% of GF's scope 3 emissions. The scope 3 SBT therefore focuses only on category 1 and 11. Four categories – specifically, 8 (Upstream leased assets), 13 (Downstream leased assets), 14 (Franchises) and 15 (Investments) – were excluded due to their irrelevance to GF's business model. Further information on the scope 3 emissions calculation is available in the "Reporting approach", follow this link: <https://annual-report.georgfischer.com/22/en/reporting-approach>
- 6 GF's scope 3 target focuses on category 1 and category 11, as those categories account for around 90% of total scope 3 emissions.
- 7 2022 PwC-assured, the assurance statement is available at the following link: <https://annual-report.georgfischer.com/22/en/external-assurance>
- 8 No forecasts have been calculated for these indicators as their contribution to GF's material topics is low. Values from the previous year are therefore displayed.
- 9 The target line is calculated linearly based on the standardized baseline consumption (=100) and according to the defined target.
- 10 The production volume is defined based on the specificities of the businesses of the individual divisions: as "produced tonnes" for GF Piping Systems, as "gross value added" (including all operating income minus the costs of materials and products, changes in inventory, and operating expenses) for GF Casting Solutions, and as "hours worked" for GF Machining Solutions.
- 11 In alignment with the targets of the Sustainability Framework 2025, the key figures were extended and the data collection began in 2021. As a result, no prior-year data is available.

GRI 302-1 | GRI 302-3 | GRI 302-2 | GRI 302-4 | GRI 303-3 | GRI 303-4 | GRI 303-5 |
+ GRI 305-1 | GRI 305-2 | GRI 305-3 | GRI 305-4 | GRI 305-5 | GRI 305-7 | GRI 306-3 |
GRI 306-4 | GRI 306-5

Social performance indicators

Social performance indicators ¹	Unit	2022	2021	2020	2019	2018
Employees						
Number of employees	Headcount	15'207	15'111	14'118	14'678	15'027
	FTE ²	14'634	14'532	13'562	14'073	14'413
Employees under 30	% of headcount	16	16	15	17	19
Employees aged 30-50	% of headcount	58	58	59	57	54
Employees over 50	% of headcount	26	26	26	26	27
Female employees						
	Headcount	3'060	2'952	2'812	2'958	2'512
	FTE	2'941	2'817	2'764	2'851	2'397
	% of headcount	20.1	19.5	19.9	20.2	16.7
Women on the Board of Directors	Number	3	2	2	2	2
	%	37.5	28.6	25.0	22.2	22.2
Women on the Executive Committee	Number	0	0	0	0	0
Women in management positions ³	FTE	165	114	97	100	88
	% of total management positions	17.2	15.8	15.8	16.4	14.8
Newly appointed male managers ⁴	Headcount	155	74			
Newly appointed female managers ⁴	Headcount	65	31			
	% of new appointments	29	30			
Part-time employees						
	Headcount	524	405	396	400	457
	%	3.4	2.7	2.8	2.7	3.0
Female part-time employees	Headcount	278	264	261		
	% of part-time employees	53	65	66		
Student interns	Headcount	107	98	104	133	174
Apprentices	Headcount	375	363	387	446	469
Employees with disabilities						
	Headcount	110	115	114	129	280
	%	0.7	0.8	0.8	0.9	1.9
Total new hires						
	Headcount	2'622	2'842			
New hires, male	Headcount	1'998	2'279			
New hires, female	Headcount	624	563			
New hires of employees under 30 ⁴	Headcount	956	1'055			
New hires of employees aged 30-50 ⁴	Headcount	1'370	1'438			
New hires of employees over 50 ⁴	Headcount	297	349			
Total departures⁵						
	Headcount	1'999	2'038	2'019	2'162	1'796
Departures, male ⁴	Headcount	1'574	1'610			
Departures, female ⁴	Headcount	425	428			
Departures of employees under 30 ⁴	Headcount	523	553			

Departures of employees aged 30-50 ⁴	Headcount	1'132	1'113			
Departures of employees over 50 ⁴	Headcount	344	373			
Total employee fluctuation ⁵	%	13.8	14.6	14.6	15.8	11.9
Employee surveys ⁶	Number of employees surveyed	6'254	5'431	3'289	5'448	6'341
Investigated incidents of discrimination	Number	0	0	2	1	3
Employees under collective bargaining agreement	Headcount	8'836	8'509	8'178		
	%	58	56	58		
Training and professional development						
Training and professional development	Number of GF employees with training (headcount)	10'997	10'209	9'394	10'517	11'558
	%	72.3	67.6	66.5	71.7	76.9
Training days	Days worked	28'704	22'975	18'860	30'527	36'974
	Days per employee	1.9	1.5	1.3	2.1	2.5
Health and safety						
Fatalities, work-related	Number	0 ⁷	0	0	0	0
Work-related accidents involving injury of GF employees	Number	228	260	180	282	425
Work-related accidents involving injury of leased personnel	Number	37	41	22	56	133
Work-related accidents involving injury of other third parties	Number	1	1 ⁸	4	7	10
Sustainability Targets 2025: Lost time injury frequency rate (LTIFR)	per 1'000'000 hours worked	7.9 ⁷	10.2	9.4		
Sustainability Targets 2025: Target line lost time injury frequency rate (LTIFR) ⁹	per 1'000'000 hours worked	8.3	8.9	9.4		
Absence days due to work-related accidents or illness	Days worked	5'142	4'943	3'593	6'605	8'675
Absence rate due to work-related accidents or illness	% of total days worked	0.1	0.1	0.1	0.2	0.2
Total absence days	Days worked	132'689	121'114	113'478	127'228	148'361
Community						
Order volume from workshops employing disabled people	CHF million	2.3	2.5	2.5	2.6	2.9
Charitable donations	CHF million	2.5	2.5	2.9	3.5	4.0

1 The social performance indicators include all GF companies with ten or more employees.

2 FTE stands for full-time equivalents.

3 Management positions are defined as members of the management board of each business entity or managers who report to a managing director.

4 In 2021, the scope of social data reporting was extended and several figures were collected for the first time. As a result no prior-year data is available.

5 The definition of departures was slightly amended in 2021 and does not include internal transfers or natural departures, e.g. retirements, as of the 2021 reporting period. In previous reporting periods, those departures were still included.

6 The figure represents the number of employees who were asked to participate in the survey.

7 2022 PwC-assured, the assurance statement is available at the following link: <https://annual-report.georgfischer.com/22/en/external-assurance>

8 Restatement due to correction received.

⁹ The target line is calculated linearly based on the baseline data and according to the defined target. In 2022, in line with GF's target calculation approach, four companies were added to the Sustainability Targets 2025 for the first time. The baseline of the accident rate target was adjusted accordingly. Further details can be found at: <https://annual-report.georgfischer.com/22/en/sr-keyfigures-2022>

✚ GRI 2-7 | GRI 2-30 | GRI 401-1 | GRI 404-1 | GRI 405-1 | GRI 406-1

GRI/SASB content index

2 General Disclosures

Statement of use		GF has reported the information cited in this GRI content index for the period from 1 January to 31 December 2022 with reference to the GRI standards.			
GRI 1 used		GRI 1: Foundation 2021			
GRI reference number	SASB reference number	Disclosure title	Location of content		
			Sustainability Report 2022	Management Review 2022	Other
2		General Disclosures			
		The organization and its reporting practices			
2-1		Organizational details		Organization of GF Corporate Structure and Affiliated Companies	
2-2		Entities included in the organization's sustainability reporting	Reporting approach		
2-3		Reporting period, frequency and contact point	Reporting approach Contacts		
2-4		Restatements of information	Reporting approach		
2-5		External assurance	External assurance		
		Activities and workers			
2-6		Activities, value chain, and other business relationships		Our Corporation Governance bodies	
2-7	RT-IG-000.B	Employees	Social performance indicators	Financial key figures 2022	
		Governance			
2-9		Governance structure and composition	Sustainability governance	Organization of GF Governance bodies	
2-10		Nomination and selection of the highest governance body		Organization of GF Governance bodies	
2-11		Chair of the highest governance body		Board of Directors	
2-12		Role of the highest governance body in overseeing the management of impacts	Sustainability governance	Governance bodies	
2-13		Delegation of responsibility for managing impacts	Sustainability governance	Governance bodies	
2-14		Role of the highest governance body in sustainability reporting	Sustainability governance		
2-15		Conflicts of interest		Independent Lead Director Corporate Compliance	
2-16		Communication of critical concerns		Corporate Compliance	
2-17		Collective knowledge of the highest governance body		Nomination and Sustainability Committee	
2-18		Evaluation of the performance of the highest governance body		Self-evaluation	
2-19		Remuneration policies		Compensation Governance	
2-20		Process to determine remuneration		Compensation Governance	
		Strategy, policies and practices			

2-22	Statement on sustainable development strategy	Letter to shareholders	Introduction by the Chairman of the Board of Directors
2-23	Policy commitments	Code of Conduct Human rights	
2-24	Embedding policy commitments	Code of Conduct	
2-25	Processes to remediate negative impacts	Whistleblower platform Corporate compliance	
2-26	Mechanisms for seeking advice and raising concerns	Whistleblower platform Compliance training	
2-28	Membership associations Stakeholder engagement		Memberships
2-29	Approach to stakeholder engagement	Stakeholder engagement	
2-30	Collective bargaining agreements	Social performance indicators	

3 Material Topics

GRI reference number	SASB reference number	Disclosure title	Location of content		
			Sustainability Report 2022	Management Review 2022	Other
3		Material Topics			
		Disclosures on material topics			
3-1		Process to determine material topics	Material topics		
3-2		List of material topics	Material topics		

200 Economic Topics

GRI reference number	SASB reference number	Disclosure title	Location of content		
			Sustainability Report 2022	Management Review 2022	Other
200		Economic topics			
		GRI 201: Economic performance 2016			
3-3		Management of material topics		Letter to shareholders	Introduction by the Chairman of the Board of Directors
				Strategy 2025: Continued implementation of targeted measures in 2022	
201-1		Direct economic value generated and distributed		Financial key figures 2022	

			Georg Fischer Ltd. income statement
			Balance sheet
			Five-year overview of the GF corporation
GRI 203: Indirect economic impacts 2016			
3-3	Management of material topics	Sustainability governance	
203-1	Infrastructure investments and services supported	Corporate citizenship Product portfolio	Our Forward Stories GF Piping Systems' contribution to the UN Sustainable Development Goals GF Casting Solutions' contribution to the UN Sustainable Development Goals GF Machining Solutions' contribution to the UN Sustainable Development Goals
GRI 205: Anti-corruption 2016			
3-3	Management of material topics	Business ethics and compliance	
205-2	Communication and training about anti-corruption policies and procedures	Compliance training	
GRI 206: Anti-competitive behavior 2016			
3-3	Management of material topics	Business ethics and compliance	
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Whistleblower platform	
GRI 207: Tax 2019			
3-3	Management of material topics	Business ethics and compliance	GF Tax Policy
207-1	Approach to tax	Tax management	
207-2	Tax governance, control, and risk management	Whistleblower platform	
207-3	Stakeholder engagement and management of concerns related to tax	Tax management	

300 Environmental Topics

GRI reference number	SASB reference number	Disclosure title	Location of content		
			Sustainability Report 2022	Management Review 2022	qwwsdx
300		Environmental topics			
		GRI 301: Materials 2016			
3-3		Management of material topics	Natural resources		GF Corporate Environmental Management Policy
301-1		Materials used by weight or volume	Environmental performance indicators		
		GRI 302: Energy 2016			
3-3		Management of material topics	Climate and energy		
302-1	RT-IG-130a.1	Energy consumption within the organization	Reporting approach Energy usage and GHG emissions Renewable electricity Environmental performance indicators		
302-2		Energy consumption outside the organization	Reporting approach Efforts to reduce scope 3 emissions		
302-3		Energy intensity	Reporting approach Environmental performance indicators		
302-4		Reduction of energy consumption	Energy usage and GHG emissions Renewable electricity Energy efficiency Environmental performance indicators		
		GRI 303: Water and effluents 2018			
3-3		Management of material topics	Water footprint Progress on Sustainability Framework 2025		
303-1		Interactions with water as a shared resource	Reporting approach Water footprint Sustainability key figures 2022 Progress on Sustainability Framework 2025		
303-2		Management of water discharge-related impacts	Water footprint		
303-3		Water withdrawal	Reporting approach Environmental performance indicators		
303-4		Water discharge	Reporting approach		

		Environmental performance indicators	
303-5	Water consumption	Reporting approach Water footprint	
		Environmental performance indicators	
GRI 305: Emissions 2016			
3-3	Management of material topics	Progress on Sustainability Framework 2025 Climate and energy	GF Corporate Environmental Management Policy
305-1	Direct (Scope 1) GHG emissions	Reporting approach Energy usage and GHG emissions Sustainability key figures 2022 Environmental performance indicators	
305-2	Energy indirect (Scope 2) GHG emissions	Reporting approach Energy usage and GHG emissions Sustainability key figures 2022 Environmental performance indicators	
305-3	Other indirect (Scope 3) GHG emissions	Reporting approach Efforts to reduce scope 3 emissions Environmental performance indicators	
305-4	GHG emissions intensity	Environmental performance indicators	
305-5	Reduction of GHG emissions	Reporting approach Climate and energy Environmental performance indicators Sustainability key figures 2022 Progress on Sustainability Framework 2025	
305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	Reporting approach Environmental performance indicators	
GRI 306: Waste 2020			
3-3	Management of material topics	Natural resources Progress on Sustainability Framework 2025	
306-1	Waste generation and significant waste-related impacts	Reporting approach Natural resources	
306-2	Management of significant waste-related impacts	Natural resources	
306-3	Waste generated	Reporting approach Natural resources Environmental performance indicators	

306-4		Waste diverted from disposal	Reporting approach Natural resources Environmental performance indicators
306-5		Waste directed to disposal	Reporting approach Natural resources Environmental performance indicators
GRI 308: Supplier environmental assessment 2016			
3-3	RT-IG-440a.1	Management of material topics	Responsible supply chain Progress on Sustainability Framework 2025
308-1		New suppliers that were screened using environmental criteria	Reporting approach Responsible supply chain

400 Social Topics

GRI reference number	SASB reference number	Disclosure title	Location of content		
			Sustainability Report 2022	Management Review 2022	Other
400		Social topics			
GRI 401: Employment 2016					
3-3		Management of material topics	Fair and attractive employer Diversity and inclusion Stakeholder engagement Progress on Sustainability Framework 2025		
401-1		New employee hires and employee turnover	Social performance indicators Fair and attractive employer		
GRI 403: Occupational Health and Safety 2018					
3-3		Management of material topics	Safety and well-being Progress on Sustainability Framework 2025		
403-1		Occupational health and safety management system	Reporting approach Safety and well-being		
403-2		Hazard identification, risk assessment, and incident investigation	Reporting approach Safety and well-being		
403-3		Occupational health services	Safety and well-being		

403-4		Worker participation, consultation, and communication on occupational health and safety	Reporting approach Safety and well-being	
403-5		Worker training on occupational health and safety	Reporting approach Safety and well-being	
403-6		Promotion of worker health	Reporting approach Safety and well-being > Employee well-being	
403-7		Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Reporting approach Safety and well-being	
403-8		Workers covered by an occupational health and safety management system	Reporting approach Safety and well-being	
403-9	RT-IG-320a.1	Work-related injuries	Reporting approach Safety and well-being Social performance indicators Progress on Sustainability Framework 2025	
GRI 404: Training and education 2016				
3-3		Management of material topics	Fair and attractive employer	
404-1		Average hours of training per year per employee	Reporting approach Social performance indicators	
404-2		Programs for upgrading employee skills and transition assistance programs	Reporting approach Fair and attractive employer Diversity and inclusion	
GRI 405: Diversity and equal opportunity 2016				
3-3		Management of material topics	Diversity and inclusion Progress on Sustainability Framework 2025	
405-1		Diversity of governance bodies and employees	Reporting approach Diversity and inclusion Social performance indicators Progress on Sustainability Framework 2025	Members of the Board of Directors
GRI 406: Non-discrimination 2016				
3-3		Management of material topics	Diversity and inclusion	Code of Conduct
406-1		Incidents of discrimination and corrective actions taken	Social performance indicators	
GRI 414: Supplier social assessment 2016				
3-3		Management of material topics	Responsible supply chain Human rights in the supply chain and products	GF Corporate Policy on Human Rights
414-2		Negative social impacts in the supply chain and actions taken	Reporting approach Responsible supply chain	

GRI 415: Public policy 2016			
3-3	Management of material topics	Stakeholder engagement	Memberships
GRI 416: Customer health and safety 2016			
3-3	Management of material topics	Product and service information and labeling	
GRI 417: Marketing and labeling 2016			
3-3	Management of material topics	Product and service information and labeling	
417-1	Requirements for product and service information and labeling	Product and service information and labeling	

External assurance

Independent practitioner's limited assurance report

on selected sustainability indicators 2022 in the Georg Fischer Sustainability Report 2022 to the Board of Directors of Georg Fischer AG Schaffhausen

We have been engaged by the Board of Directors to perform assurance procedures to provide limited assurance on the selected sustainability indicators 2022 (including the statements on greenhouse gases) published in the Sustainability Report 2022 of Georg Fischer AG, Schaffhausen and its consolidated subsidiaries ('GF' for short) for the period ended 31 December 2022.

The following specified sustainability indicators 2022 published in the Sustainability Report 2022 are within the scope of our limited assurance engagement and are referenced with footnote 7 '2022 PwC-assured':

- Selected environmental performance indicators:
 - 'GHG emissions – Scope 1' on page 207
 - 'GHG emissions – Scope 2 – market-based' on page 207
 - 'GHG emissions – Scope 2 – location-based' on page 207
 - 'GHG emissions – Scope 3 – Category 1: Purchased goods and services' on page 207
 - 'GHG emissions – Scope 3 – Category 11: Use of sold products' on page 207
 - 'Water consumption of GF sites located in water stressed areas' on page 208
 - 'Total waste' on page 208
 - 'Hazardous waste' on page 208
 - 'Key suppliers spend assessed with sustainability assessments' on page 208
- Selected social performance indicators:
 - 'Fatalities, work-related' on page 211
 - 'Lost time injury frequency rate' on page 211

The reporting process and the sustainability indicators 2022 in the GF Sustainability Report 2022 (including the statements on greenhouse gases) were also prepared by the management on the basis of the guidelines for sustainability reporting of the Global Reporting Initiative, the "GRI Standards" (October 2016 version) and the Greenhouse Gas Protocol Initiative of the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) (collectively referred to as "suitable Criteria"). GF presents its entire Reporting Approach from page 197 to 206.

Inherent limitations

The accuracy and completeness of sustainability indicators (including the statements on greenhouse gases) in the Sustainability Report 2022 of GF are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. GHG quantification is subject to inherent uncertainty, because of incomplete scientific knowledge used to determine GHG emission factors and the values needed to combine emissions of different gases. Our assurance report should therefore be read in connection with the 'GRI and on the Greenhouse Gas Protocol Initiative of the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

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PricewaterhouseCoopers AG is a member of the global PricewaterhouseCoopers network of firms, each of which is a separate and independent legal entity.

Board of Directors' responsibility

The Board of Directors of Georg Fischer AG is responsible for preparing the Sustainability Report 2022 (including the GHG statement) in accordance with the Reporting Approach. This responsibility includes the design, implementation and maintenance of the internal control system related to the preparation of the Sustainability Report 2022 of GF that are free from material misstatement, whether due to fraud or error. Furthermore, the Board of Directors is responsible for the selection and application of the Reporting Approach and adequate record keeping.

Independence and quality management

We are independent of the Georg Fischer AG in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code). We have fulfilled our other ethical responsibilities in accordance with the IESBA Code, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

PricewaterhouseCoopers AG applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Practitioner's responsibility

Our responsibility is to perform an assurance limited engagement and to express a conclusion on the on selected sustainability indicators 2022 in the Sustainability Report 2022 of GF. We conducted our engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised) 'Assurance engagements other than audits or reviews of historical financial information' and the International Standard on Assurance Engagements 3410, Assurance Engagements on Greenhouse Gas Statements ('ISAE 3410'), issued by the International Auditing and Assurance Standards Board. Those standards require that we plan and perform our procedures to obtain limited assurance whether anything has come to our attention that causes us to believe that the selected data and information of GF Sustainability Report 2022 (including the GHG statement) was not be prepared, in all material aspects, in accordance with suitable Criteria.

Based on risk and materiality considerations, we performed our procedures to obtain sufficient and appropriate assurance evidence. The procedures selected depend on the assurance practitioner's judgement. A limited assurance engagement under ISAE 3000 (Revised) and ISAE 3410 is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. Consequently, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement and therefore less assurance is obtained with a limited assurance engagement than for a reasonable assurance engagement.

Summary of the work performed

Our limited assurance procedures included, amongst others, the following work:

- *Evaluation of the application of Corporation guidelines*
Reviewing the application of the internal sustainability reporting guidelines from point of view of the suitable Criteria.
- *Site visit and management inquiry*
 - Remotely visiting of selected sites of GF Casting Solutions Suzhou Co. Ltd in China and Georg Fischer Fittings GmbH in Austria.
 - Interviewing personnel responsible for the internal sustainability reporting and data collection at the sites and at the Group level.
- *Assessment of the selected sustainability indicators 2022*
Performing tests on a sample basis for the evidence supporting the selected sustainability indicators 2022 concerning completeness, accuracy, adequacy and consistency.
- *Review of documentation and analysis of relevant basic policies and principles*
Reviewing relevant documentation on a sample basis, including the sustainability policies of GF, management of reporting structures and documentation.



We have not carried out any work on data other than for those selected sustainability indicators 2022 defined above.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our assurance conclusions.

Conclusion

Based on the work we performed, nothing has come to our attention that causes us to believe that the selected sustainability indicators on pages 207 to 212 in the Sustainability Report 2022 of Georg Fischer AG, and referenced with a foot-note 7 '2022 PwC-assured', are not prepared in accordance with suitable Criteria.

Intended users and purpose of the report

This report is prepared for, and only for, the Board of Directors of Georg Fischer AG, and solely for the purpose of reporting to them on selected sustainability indicators 2022 in the Sustainability Report 2022 (including the GHG statement) and no other purpose. We do not, in giving our conclusion, accept or assume responsibility (legal or otherwise) or accept liability for, or in connection with, any other purpose for which our report including the conclusion may be used, or to any other person to whom our report is shown or into whose hands it may come, and no other persons shall be entitled to rely on our conclusion.

We permit the disclosure of our report, in full only, to enable the Board of Directors to demonstrate that they have discharged their governance responsibilities by commissioning an independent assurance report over the selected sustainability indicators in the Sustainability Report 2022 (including the GHG statement), without assuming or accepting any responsibility or liability to any third parties on our part. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Board of Directors of Georg Fischer AG for our work or this report.

PricewaterhouseCoopers AG

Thierry Trösch

Simon Hux

Zürich, 27 February 2023



Links to selected sustainability indicators:

- [GHG emissions – Scope 1](#)
- [GHG emissions – Scope 2 – location-based](#)
- [GHG emissions – Scope 2 – market-based](#)
- [GHG emissions – Scope 3 – Category 1: Purchased goods and services](#)
- [GHG emissions – Scope 3 – Category 11: Use of sold products](#)
- [Water consumption of GF sites located in water stressed areas](#)
- [Total waste](#)
- [Hazardous waste](#)
- [Key suppliers spend assessed with sustainability assessment](#)
- [Accident rate, as LTIFR](#)
- [Fatalities, work-related](#)

+ GRI 2-5

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+ GRI 2-3

+GF+



Financial Report



Going forward and shaping the future

Financial Report

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Consolidated income statement

CHF million	Notes	2022	%	2021	%
Sales	1.1	3'998	100.0	3'722	100.0
Other operating income	1.2	37		42	
Income		4'035	100.9	3'763	101.1
Cost of materials and products		-1'812		-1'784	
Changes in inventory of unfinished and finished goods		17		67	
Operating expenses	1.3	-680		-640	
Gross value added		1'560	39.0	1'407	37.8
Personnel expenses	1.4	-1'053		-995	
Depreciation on tangible fixed assets	2.6	-108		-127	
Amortization on intangible assets		-7		-7	
Operating result (EBIT)		391	9.8	278	7.5
Financial result	3.4	-45		-23	
Share of results of associates		-1		-0	
Ordinary result		346	8.6	254	6.8
Non-operating result	5.4	8		-2	
Profit before taxes		354	8.8	253	6.8
Income tax expenses	5.3	-74		-53	
Net profit		280	7.0	200	5.4
- Thereof attributable to shareholders of Georg Fischer Ltd		276		214	
- Thereof attributable to minority interests		4		-15	
Basic earnings per share in CHF ¹	3.5	3.37		2.62	
Diluted earnings per share in CHF ¹	3.5	3.37		2.62	

1 In April 2022, a 1:20 share split was conducted, see note 3.6. Previous year figures have been adjusted accordingly.

Consolidated balance sheet

CHF million	Notes	31.12.2022	%	31.12.2021	%
Cash and cash equivalents	2.1	877		932	
Marketable securities		17		12	
Trade accounts receivable	2.2	660		611	
Inventories	2.4	833		776	
Income taxes receivable		6		18	
Other accounts receivable	2.3	62		74	
Prepayments to creditors		18		23	
Accrued income		16		13	
Current assets		2'489	67.3	2'459	65.3
Property, plant, and equipment	2.6	915		1'029	
Investment properties	2.6	51		76	
Intangible assets	2.7	36		40	
Deferred tax assets	5.3	70		71	
Other financial assets	5.2	137		93	
Non-current assets		1'209	32.7	1'308	34.7
Assets		3'698	100.0	3'767	100.0
Trade accounts payable		563		543	
Bonds	3.1			150	
Other financial liabilities	3.1	84		97	
Other liabilities	2.5	65		68	
Prepayments from customers		72		86	
Current tax liabilities		62		58	
Provisions	2.9	45		42	
Accrued liabilities and deferred income	2.10	310		273	
Current liabilities		1'202	32.5	1'318	35.0
Bonds	3.1	625		625	
Other financial liabilities	3.1	26		127	
Employee benefit obligations	5.1	43		47	
Other liabilities	2.5	28		28	
Provisions	2.9	79		83	
Deferred tax liabilities	5.3	39		44	
Non-current liabilities		840	22.7	953	25.3
Liabilities		2'042	55.2	2'271	60.3
Share capital	3.6	4		4	
Capital reserves		26		25	
Treasury shares	3.6	-8		-11	
Retained earnings		1'579		1'454	
Shareholders' equity		1'602	43.3	1'472	39.1
Minority interests		54	1.5	24	0.6
Equity		1'656	44.8	1'496	39.7
Liabilities and equity		3'698	100.0	3'767	100.0

Consolidated statement of changes in equity

CHF million	Retained earnings							Shareholders' equity	Minority interests	Equity
	Share capital	Capital reserves	Treasury shares	Goodwill offset	Translation differences	Cash flow hedging	Other			
Balance at 1.1.2022	4	25	-11	-586	-194	0	2'233	1'472	24	1'496
Net profit							276	276	4	280
Translation differences					-68			-68	-6	-74
Changes in cash flow hedges						5		5	0	5
Goodwill offset				-5				-5		-5
Transactions with minorities									7	7
Changes in scope of consolidation									36	36
Purchase of treasury shares			-5					-5		-5
Share-based compensation										
- Settlement		1	9				-10			
- Grants, forfeitures, adjustments							9	9		9
Dividends							-82	-82	-10	-92
Balance at 31.12.2022	4	26	-8	-590	-262	5	2'427	1'602	54	1'656
Balance at 1.1.2021	4	24	-7	-544	-201	-2	2'079	1'353	36	1'389
Net profit							214	214	-15	200
Translation differences					7			7	1	7
Changes in cash flow hedges						2		2		2
Goodwill offset				-42				-42		-42
Transactions with minorities									13	13
Purchase of treasury shares			-11					-11		-11
Share-based compensation										
- Settlement		1	7				-8			
- Grants, forfeitures, adjustments							10	10		10
Dividends							-62	-62	-10	-72
Balance at 31.12.2021	4	25	-11	-586	-194	0	2'233	1'472	24	1'496

Consolidated cash flow statement

CHF million	Notes	2022	2021
Net profit		280	200
Income tax expenses	5.3	74	53
Financial result	3.4	45	23
Share of results of associates		1	0
Depreciation and amortization	2.6	116	134
Other non-cash income and expenses		9	12
Increase and release in provisions	2.9	26	21
Use of provisions	2.9	-21	-32
Profit/loss from disposal of tangible fixed assets		-11	-5
Changes in inventories		-108	-146
Changes in trade accounts receivable		-109	-75
Changes in prepayments to creditors		2	-8
Changes in other receivables and accrued income		4	-12
Changes in trade accounts payable		50	100
Changes in prepayments from customers		-10	36
Changes in other liabilities and accrued liabilities and deferred income		70	49
Interest paid		-28	-20
Income taxes paid		-61	-43
Cash flow from operating activities		326	288
Additions to property, plant, and equipment	2.6	-160	-135
Additions to intangible assets		-5	-10
Additions to other financial assets		-28	-3
Disposals of property, plant, and equipment	2.6	7	8
Disposals of other financial assets		2	1
Purchase/disposal of marketable securities		-0	-1
Cash flow from acquisitions	4.1	-6	-41
Cash flow from divestments	4.1	61	
Interest received		5	3
Cash flow from investing activities		-125	-178
Free cash flow before acquisitions/divestments		146	151
Free cash flow		201	110
Purchase of treasury shares	3.6	-5	-11
Dividend payments to shareholders of Georg Fischer Ltd		-82	-62
Dividend payments to minority interests		-10	-10
Inflows from minority interests		7	13
Repayment of bond	3.1	-150	
Increase/repayment of short-term financial liabilities	3.1	-5	15
Increase/repayment of long-term financial liabilities	3.1	17	34
Cash flow from financing activities		-229	-22
Translation adjustment on cash and cash equivalents		-27	10
Net cash flow		-55	98
Cash and cash equivalents at beginning of year		932	834
Cash and cash equivalents at year-end	2.1	877	932

Notes to the consolidated financial statements

Information to the report

This section explains the basis for the preparation of the consolidated financial statements and provides a summary of the main general accounting principles as well as management assumptions and estimates.

Basis for the preparation of the consolidated financial statements

The consolidated financial statements of Georg Fischer Ltd (GF) have been prepared in accordance with all of the current guidelines of the Accounting and Reporting Recommendations (Swiss GAAP FER) and, furthermore, with the provisions of the Listing Rules of SIX Exchange Regulation and with Swiss company law. The consolidated financial statements are based on the financial statements of GF and all GF Corporate Companies for the year ended 31 December, prepared in accordance with uniform corporate accounting principles.

Due to rounding, numbers presented throughout the consolidated financial statements may not add up precisely to the totals provided. All ratios, percentages and variances are calculated using the underlying amount rather than the presented rounded amount. A value of 0 represents an amount rounded to 0. A blank value represents an actual value of 0.

Accounting principles

The consolidated financial statements have been prepared in accordance with the historical cost method with the exception of marketable securities and derivative financial instruments, which are measured at actual value.

Changes in accounting principles

In the year under review, the Swiss GAAP FER accounting principles remained unchanged.

In November 2021, the Swiss GAAP FER Commission has approved the new recommendation "Swiss GAAP FER 28 – Government Grants" (FER 28) and in May 2022 the revised recommendation "Swiss GAAP FER 30 – Consolidated financial statements" (FER 30). Both recommendations are applicable to annual financial statements beginning on 1 January 2024. Early adoption is possible.

The provisions in FER 28 define the accounting treatment and disclosure of government grants. Based on an assessment, GF Corporation assumes that the application of FER 28 will not have a material impact on the consolidated financial statements. GF Corporation early adapts this standard for annual financial statements beginning after 1 January 2023.

The amendments in FER 30 specify in particular the accounting treatment of step-acquisitions, goodwill and translation differences related to equity-like-loans. Under the new recommendation, intangible assets, which have not been recognized previously by the acquired subsidiary and are relevant to the decision to acquire a company, are to be identified and recognized. For the initial application of FER 30, new provisions related to goodwill are not applied retrospectively. GF Corporation does not early adapt the new provisions.

Scope and principles of consolidation

The scope of consolidation includes GF and all GF Corporate Companies, which GF controls directly or indirectly by either holding more than 50% of the voting rights or by otherwise having the power to control their operating and financial policies (GF and these GF Corporate Companies are also collectively referred to as the GF Corporation). These GF Corporate Companies are fully consolidated; assets, liabilities, income, and expenses are incorporated in the consolidated financial statements. Intercompany balances and transactions are eliminated upon consolidation. Minority interests are presented as a component of consolidated equity in the consolidated balance sheet and consolidated net income in the consolidated income statement. Gains arising from intercompany transactions are eliminated in full. Capital consolidation is based on the purchase method, whereby the acquisition cost of a GF Corporate Company is eliminated at the time of acquisition against the fair value of net assets acquired, with the remainder recorded as goodwill that is subsequently offset against the consolidated equity. Identifiable intangible assets, which were previously not recognized by the acquired subsidiary, are not capitalized. In the event of an increase in ownership in a GF Corporate Company, any difference between the purchase price and the acquired equity is recognized as goodwill. In the event of a disposal, the pro rata goodwill is recognized in profit or loss.

Joint ventures in which the GF Corporation exercises joint control together with a joint venture partner are proportionately consolidated.

Companies in which GF has a minority interest of at least 20% but less than 50%, or over which it otherwise has significant influence, are accounted for using the equity method and included in the consolidated financial statements as investments in associates. Investments with less than 20% voting rights are accounted for at actual value and presented under other financial assets.

Foreign currencies

GF Corporate Companies prepare their financial statements in their functional currency. Assets and liabilities held in other currencies are converted at the spot rate on the balance sheet date. Foreign exchange gains and losses resulting from transactions and from the conversion of balance sheet items into the functional currency are reported in the income statement.

The consolidated financial statements are prepared and presented in Swiss francs. For consolidation purposes, the financial statements of the GF Corporate Companies that report in a currency other than Swiss francs are translated into Swiss francs as follows: balance sheets at year-end rates, income and cash flow statements at average rates for the year under review. Any translation differences resulting from the translation of the balance sheets and income statements or from the translation of corporate equity-like-loans denominated in foreign currencies are recognized in equity. Upon the divestment, liquidation or closure of a foreign GF Corporate Company or a part of the business, the related cumulative translation differences are recycled to the income statement.

GF Corporate Companies in hyperinflationary economies

GF Corporation considers that Turkey became a hyperinflationary economy in June 2022, because, among some other economic factors, the last three years' cumulative inflation in Turkey exceeded 100% measured by the consumer price index published by Turkish Statistical Institute.

The GF Corporation has two GF Corporate Companies in Turkey and analyzed the impact of hyperinflation on the consolidated financial statements. The potential adjustments resulting from the application of inflation accounting according to international accounting standards do not have a material impact on the consolidated balance sheet and consolidated net profit. Hence, no adjustment was recorded. The application of inflation accounting would have increased balance sheet assets by 1% and reduced net profit by 2%.

Other valuation principles

Other relevant valuation principles, if relevant for the understanding of the valuation of the respective asset or liability, are reflected in the notes.

Management assumptions and estimates

The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of revenues, expenses, assets, liabilities, and contingent liabilities at the balance sheet date. If in the future such estimates and assumptions, which are based on management's best judgment at the balance sheet date, deviate from the actual circumstances, the original estimates and assumptions will be modified as appropriate in the year in which the circumstances change. Management has identified the following assumptions and estimates to be of special relevance to the presentation of the consolidated financial statements:

Management assumptions and estimates	Notes
Recoverability of property, plant, and equipment	2.6
Recoverability of goodwill	2.8
Valuation of provisions	2.9
Recoverability of financial assets	5.2
Valuation of income taxes	5.3

Key figures not defined by Swiss GAAP FER

GF uses certain key figures to measure its performance that are not defined by Swiss GAAP FER. As these key figures are not defined by Swiss GAAP FER, there might be limited comparability to similar figures presented by other companies. Explanations of these key figures and the reconciliation of certain key figures can be found on the GF website: [Alternative Performance Measures \(APMs\)](#).

"Free cash flow" is reported separately in the cash flow statement and consists of cash flow from operating activities together with cash flow from investing activities. It is defined as:

- +/- Cash flow from operating activities
- +/- Cash flow from investing activities

"Free cash flow before acquisitions/divestments" excludes the cash effective movements arising from acquisitions/divestments. It is defined as:

- +/- Free cash flow
- +/- Cash flow from acquisitions/divestments

1 Operating performance

This section explains the performance and results as well as the segment results, which are reported on the same basis as GF's internal management structure.

1.1 Segment information

The reportable segments are the three operating divisions GF Piping Systems, GF Casting Solutions, and GF Machining Solutions.

GF Piping Systems focuses on system solutions and high-quality plastic and metal components. Its portfolio of fittings, valves, pipes, automation, and jointing technologies covers all water cycle applications. The division further offers specialized solutions, including engineering, customizing, and prefabrication. Customers are served globally by the following customer segments: Utility, Industry, and Building Technology.

GF Casting Solutions provides lightweight components to the mobility and energy industries. The division serves its customers in all global key markets and categorizes its offering into the customer segments Automotive, Industrial Applications, and Aerospace/Energy.

GF Machining Solutions provides complete solutions to the global tool and mold making industries and manufacturers of precision components. The division manufactures high-precision machine tools for milling and EDM (electro discharge machining) applications. The division further offers spindles, laser texturing, laser micromachining, additive manufacturing, automation, and tooling, as well as digitalized solutions. Customers are served globally by the following customer segments: Milling, EDM, Customer Services, and Advanced Manufacturing/Automation & Tooling.

Segment reporting

	GF Piping Systems		GF Casting Solutions		GF Machining Solutions		Total segments	
CHF million	2022	2021	2022	2021	2022	2021	2022	2021
Order intake¹	2'319	2'211	965	907	945	941	4'229	4'060
Orders on hand at year-end¹	442	326	284	276	206	213	932	815
Sales per region								
Europe	690	702	608	556	435	398	1'732	1'655
– Thereof Germany	171	176	284	258	124	123	579	557
– Thereof Switzerland	121	118	19	22	87	64	226	204
– Thereof rest of Europe	398	407	305	276	224	211	928	894
Americas	612	469	78	129	171	150	861	749
Asia	699	647	206	194	316	298	1'220	1'139
– Thereof China	487	498	199	187	243	238	929	924
– Thereof rest of Asia	212	149	7	7	73	60	291	216
Rest of world	159	153	1	1	27	27	187	180
Sales	2'160	1'971	892	880	948	873	4'001	3'724
EBITDA	341	302	99	63	81	61	522	426
Depreciation on tangible fixed assets	–47	–52	–44	–58	–12	–12	–102	–121
Amortization on intangible assets	–4	–3	–1	–1	–3	–3	–7	–6
Operating result (EBIT)	291	247	55	5	67	47	413	298
Assets	1'620	1'563	796	946	786	744	3'203	3'252
– Thereof current assets	1'010	942	403	404	529	469	1'942	1'814
– Thereof non-current assets	610	621	394	542	257	275	1'261	1'438
Investments per region								
Europe	32	25	23	17	19	18	74	60
– Thereof Germany	4	2	5	3	2	4	10	9
– Thereof Switzerland	21	17	2	2	15	12	38	31
– Thereof rest of Europe	8	6	16	13	2	2	26	20
Americas	24	14	2	16	0	0	27	30
Asia	26	16	28	23	2	2	56	41
– Thereof China	24	15	28	23	1	2	53	40
– Thereof rest of Asia	3	1			0	0	3	1
Rest of world	14	9				0	14	9
Investments	97	64	53	56	21	20	171	141
– Thereof in capital expenditures	95	60	53	56	19	16	166	132
– Thereof in intangible assets	2	4	0	0	2	5	4	9
Liabilities	847	828	478	680	524	505	1'848	2'012
– Thereof current liabilities	515	532	289	265	356	340	1'161	1'137
– Thereof non-current liabilities	331	296	189	414	167	164	688	874
Research and development	53	47	13	12	54	54	120	113

1 Order intake and orders on hand at year-end were not included in the scope of the audit by the statutory auditor.

Reconciliation to the consolidated income statement and the consolidated balance sheet

CHF million	2022	2021
Sales		
Sales of reportable segments	4'001	3'724
Elimination of intercompany sales	-3	-2
Consolidated sales	3'998	3'722
Operating result (EBIT)		
Total EBIT for reportable segments	413	298
Total EBIT Corporate Center and Corporate Services	-22	-19
Consolidated operating result (EBIT)	391	278
Assets		
Assets of reportable segments	3'203	3'252
Elimination of intercompany positions	-372	-423
Other assets		
– Current assets (mainly cash and cash equivalents)	568	667
– Non-current assets	300	271
Consolidated assets	3'698	3'767
Liabilities		
Liabilities of reportable segments	1'848	2'012
Elimination of intercompany positions	-527	-608
Other liabilities		
– Current liabilities	65	202
– Non-current liabilities (mainly bonds)	656	666
Consolidated liabilities	2'042	2'271

Sales by customer segment

CHF million	2022	2021
Industry	933	774
Utility	801	722
Building Technology	426	474
GF Piping Systems	2'160	1'971
Automotive	683	702
Industrial Applications	136	110
Aerospace/Energy	73	69
GF Casting Solutions	892	880
Customer Service	275	263
EDM	275	249
Milling	254	220
Advanced Manufacturing/Automation & Tooling	145	140
GF Machining Solutions	948	873
Elimination of intercompany sales	-3	-2
Total	3'998	3'722

There are no single customers whose sales account for 10% or more of GF Corporation's sales.

Accounting principles revenue recognition

Billings for goods and services are recognized as sales when they are delivered or when the principal risks and rewards incidental to ownership are transferred. An assessment as to whether the principal risks and rewards were transferred for a particular delivery is made separately for each sales transaction on the basis of the contractual agreement underlying the transaction. The transfer of legal ownership alone does not necessarily result in the transfer of the principal risks and rewards. This is the case, for instance, if:

- the recipient of the delivery makes a claim against insufficient quality of the delivered item that exceeds a normal warranty claim
- the receipt of the proceeds depends on the resale of the goods by the buyer
- the installation of the goods at the recipient is an essential part of the contract
- the buyer has the right to return the item for a contractually specified reason and the likelihood of such a return cannot be assessed with any certainty

Services rendered are recognized as sales depending on the degree of their completion if the result of the service can be reliably assessed. Sales are stated before value-added tax, sales tax, and after the deduction of discounts and credits. Appropriate warranty provisions are recognized for anticipated claims.

Accounting principles segment reporting

In accordance with the management structure and the reporting to the Executive Committee and the Board of Directors, the divisions represent the reportable segments. Segment accounting is prepared up to the level of operating result (EBIT), as this is the key figure used for management purposes. All operating assets and liabilities that are directly attributable or can be allocated on a reasonable basis to the segments are reported in the corresponding divisions. Customer segments manufacture similar products with comparable production processes and supply them to similar customer groups using similar distribution methods.

1.2 Other operating income

CHF million	2022	2021
Sales of material, waste, and scrap	16	14
Income from insurance contracts	4	4
Income from services	6	8
Gains on disposals of property, plant, and equipment	2	6
Government grants	9	13
Foreign exchange gains/losses	-11	-12
Other ¹	12	11
Total	37	42

1 Primarily includes other operating income from suppliers and customers.

1.3 Operating expenses

CHF million	2022	2021
External services ¹	166	162
Selling costs, commissions	141	135
Repair, maintenance	78	83
Advertisements, communication	88	71
External energy supply	90	84
Rent, leases	49	46
Other expenses	68	58
Total	680	640

1 Primarily includes temporary employees, IT costs, R&D, insurance costs as well as consulting services.

The total compensation of the Board of Directors is recognized as other expenses and amounts to CHF 2.7 million (previous year: CHF 2.9 million). The members of the Board of Directors received a fixed remuneration paid in cash and a fixed number of GF restricted shares. The valuation of the restricted shares of CHF 1.5 million (previous year: CHF 1.7 million) is based on the year-end share price of CHF 56.60 (previous year adjusted for share split: CHF 69.25). A total of 26'084 restricted shares were granted to the Board of Directors (previous year adjusted for share split: 24'940).

1.4 Personnel expenses

CHF million	2022	2021
Salaries and wages	853	807
Employee benefits	30	25
Social security	170	163
Total	1'053	995

Expenses for share-based payment to members of the Executive Committee and members of the Senior Management amounted to CHF 7.5 million (previous year: CHF 8.1 million) and are recognized as personnel expenses.

Long-term share-based incentive (LTI) for the members of the Executive Committee in the form of Performance Shares (PS) is included therein as follows:

LTI plan	Number of granted PS	Grant value in CHF million	Recognized as personnel expenses	
			2022 in CHF million	2021 in CHF million
2021-2023 ¹	39'760	2.1	0.9	0.9
2022-2024	31'040	2.0	0.8	
Total	70'800	4.1	1.7	0.9

¹ In April 2022, a 1:20 share split was conducted, see note 3.6. Number of granted PS has been adjusted accordingly.

Accounting principles

The compensation for the Executive Committee consists of a fixed base salary, a short-term cash incentive (STI), and a long-term share-based incentive (LTI), and is recognized as personnel expenses. The LTI is based on a grant value corresponding to a percentage of the base salary per member, which at the beginning of the period is translated into a specific number of future subscription rights in the form of Performance Shares (PS). The PS are subject to a three-year vesting period. The vesting is further conditional on the achievement of non-market conditions (diluted earnings per share target) as well as market conditions (relative total shareholder return target). Depending on the level of target achievement, the PS will be settled in shares of GF at a conversion rate of between 50% (threshold) and 150% (maximum payout). If the threshold is not met, no settlement will take place. After vesting, vested PS are blocked for additional two years. The current cost of the LTI at grant date is determined by applying a Monte Carlo simulation. Anticipated dividends are included in the model. Subsequent to the grant date, non-market conditions are remeasured at each reporting date. Adjustments from the remeasurement are recognized prospectively. Market conditions are already included in the calculation of actual value at the time they are granted and no subsequent revaluation is conducted. The expenses for PS are recognized over the three-year vesting period as salaries and wages against other retained earnings. Additional information on the functionality of the LTI plan is provided in the [Compensation Report](#).

The payments under share-based compensation for Senior Management are reported as personnel expenses. Costs are recognized fully in the year in which service is rendered.

Entitlements to short-time work compensation programs at the level of individual GF Corporate Companies due to adverse economic effects are reported under salaries and wages.

2 Operating assets and liabilities

This section provides information on current assets and liabilities that support the ongoing operational liquidity of the GF Corporation. The section further describes the non-current tangible and intangible assets required at the GF Corporate Companies to provide products and services to their customers. Furthermore, it provides a summary of the different goodwill items and the theoretical impact of a capitalization and subsequent amortization of goodwill.

2.1 Cash and cash equivalents

CHF million	31.12.2022	31.12.2021
Cash and bank accounts	536	541
Cash on fixed-term deposits	309	343
Checks and drafts	31	48
Cash and cash equivalents	877	932

Accounting principles

Cash and cash equivalents consists of cash on hand, balances on bank accounts and short-term, highly liquid cash equivalents, which are subject to an insignificant risk of change in value and that are readily convertible to cash. Cash equivalents have a maturity of 90 days or less from the balance sheet date.

2.2 Trade accounts receivable

CHF million	31.12.2022	31.12.2021
Gross value	693	645
Individual value adjustments	-5	-5
Overall value adjustments	-28	-28
Net value	660	611
Europe	256	237
– Thereof Germany	52	35
– Thereof Switzerland	24	27
– Thereof rest of Europe	180	175
Americas	93	98
Asia	286	251
– Thereof China	179	165
– Thereof rest of Asia	107	85
Rest of world	25	26
Total	660	611

As of the balance sheet date, the aging structure of the trade accounts receivable, which are not subject to individual value adjustments, was as follows:

CHF million	31.12.2022		31.12.2021	
	Receivable after individual value adjustments	Overall value adjustments	Receivable after individual value adjustments	Overall value adjustments
Not yet due	535		490	
1 to 30 days overdue	66		71	
31 to 90 days overdue	50		39	
91 to 180 days overdue	18	13	18	14
More than 180 days overdue	19	15	21	14
Total	688	28	639	28

The individual value adjustments amounted to CHF 5 million (previous year: CHF 5 million). It is expected that part of the underlying receivables will be paid. Receivables not due are mainly receivables arising from long lasting customer relationships. Based on experience, GF does not anticipate any significant defaults. For further information on credit management and trade accounts receivable, see [note 3.7](#).

Accounting principles

Accounts receivable are stated at nominal value. Value adjustments for doubtful accounts are established based on maturity structure and identifiable credit risks. Besides individual value adjustments with respect to specific known risks, other value adjustments are recognized based on historical experience of default risk.

2.3 Other accounts receivable

CHF million	31.12.2022	31.12.2021
Tax credits from indirect taxes	33	38
Other current accounts receivable	29	36
Total	62	74

2.4 Inventories

CHF million	31.12.2022	31.12.2021
Raw materials and components	307	279
Unfinished goods	164	158
Finished goods	556	522
Gross value	1'027	959
Valuation adjustments	-195	-182
Total	833	776

Accounting principles

Goods held for trading are generally stated at average cost and internally manufactured products at standard cost, including direct labor and materials used, as well as a commensurate share of the related overhead costs. Cash discount deductions are treated as reductions in the purchase cost. If the net realizable value is lower than the above, a corresponding valuation adjustment is made. Inventories with an insufficient turnover rate are partly or fully value-adjusted.

2.5 Other liabilities

CHF million	31.12.2022	31.12.2021
Social security	26	22
Derivative financial instruments	2	2
Other tax liabilities	33	32
Other non-interest-bearing liabilities	32	40
Total	93	96
- Thereof current	65	68
- Thereof non-current	28	28

2.6 Property, plant, and equipment

CHF million	Investment properties	Land components	Buildings and building components	Machinery and production equipment	Other equipment	Assets under construction	Assets held under finance leases	Property, plant, and equipment
Cost at 1.1.2022	210	50	762	1'480	228	107	22	2'648
Additions	1	1	19	25	8	118	9	180
Disposals	-65	-0	-4	-114	-7		-0	-126
Changes in scope of consolidation		-6	-54	-103	-15	-4	1	-180
Reclassifications	-1	0	26	51	10	-87	-1	0
Translation differences	-7	-2	-20	-47	-7	-6	-1	-83
Cost at 31.12.2022	138	43	729	1'292	218	128	29	2'440
Accumulated depreciation at 1.1.2022	-134		-395	-1'042	-168		-14	-1'619
Additions	-2		-24	-69	-14		-2	-108
Impairment	-1			-0				-0
Disposals	45		2	111	7		0	120
Changes in scope of consolidation			6	20	6			31
Reclassifications	1		-1	-0	0		0	-0
Translation differences	5		10	35	5		1	51
Accumulated depreciation at 31.12.2022	-87		-402	-946	-163		-15	-1'525
Carrying amount at 31.12.2022	51	43	328	346	55	128	15	915
Cost at 1.1.2021	194	44	779	1'446	238	80	24	2'612
Additions	0	2	4	34	6	89	0	135
Disposals	-0	-1	-5	-33	-22		-0	-60
Changes in scope of consolidation		0	1	5	1	0		7
Reclassifications	24	6	-16	40	6	-62	-1	-27
Translation differences	-8	-1	-3	-12	-1	1	-1	-17
Cost at 31.12.2021	210	50	762	1'480	228	107	22	2'648
Accumulated depreciation at 1.1.2021	-121		-391	-1'004	-176	-1	-13	-1'585
Additions	-3		-26	-78	-15		-3	-122
Impairment				-6	-0			-6
Disposals	0		4	31	22		0	57
Changes in scope of consolidation			-0	-0	-0			-1
Reclassifications	-16		15	1	1	1	0	17
Translation differences	5		3	14	1	-0	1	19
Accumulated depreciation at 31.12.2021	-134		-395	-1'042	-168		-14	-1'619
Carrying amount at 31.12.2021	76	50	367	438	60	107	7	1'029

Additions to property, plant, and equipment for GF Piping Systems included investment in equipment in Schaffhausen (Switzerland) in the amount of CHF 12 million, in Little Rock (USA) in the amount of CHF 10 million and Shawnee (USA) in the amount of CHF 5 million as well as investment in new buildings or expansion of buildings in Yangzhou (China) in the amount of CHF 9 million and in Bani Suwayf (Egypt) in the amount of CHF 9 million. Additions for GF Casting Solutions included investment in equipment in Suzhou (China) in the amount of CHF 14 million, in Shenyang (China) in the amount of CHF 12 million and in Altenmarkt (Austria) in the amount of CHF 9 million as well as investment in buildings or expansion of buildings in Altenmarkt (Austria) in the amount of CHF 3 million. Additions for GF Machining Solutions included investment in the expansion of buildings in Losone (Switzerland) in the amount of CHF 9 million. Additions for GF Corporate Management included investment in renovation of one building in Schaffhausen (Switzerland) in the amount of CHF 14 million.

In 2022, there were additions to property, plant, and equipment with outstanding payments of CHF 11 million and non-cash additions to assets held under finance leases of CHF 9 million.

The movements in "Changes in scope of consolidation" result from acquisitions and divestments explained in more detail in [note 4.1](#). In the previous year, the movements in "Changes in scope of consolidation" under "Accumulated depreciation" resulted from the ownership increase of Langfang Shuchang Auto Parts Co Ltd and Beijing Jingran Lingyun Gas Equipment Co Ltd.

Land includes CHF 4 million of undeveloped properties (previous year: CHF 4 million).

In the previous year, the overall movements in "Reclassifications" were explained by the reclassification of a building from property, plant, and equipment to investment properties in Werdohl (Germany), as well as demo machines earmarked for sale reclassified to inventories.

In investment properties, properties in Singen (Germany) were disposed in a non-cash transaction, see [note 5.2](#). The actual value of investment properties, as determined by internal assessments on the basis of capitalized and current market values, is CHF 100 million (previous year: CHF 117 million).

In the previous year, impairments amounting to CHF 6 million related mostly to obsolescence of equipment due to phase-outs of product groups.

Accounting principles

Property, plant, and equipment are stated at cost or manufacturing cost less depreciation and impairment. The recoverability of property, plant, and equipment is reviewed at least once a year. If there is any indication of an impairment, an impairment test is performed immediately. If the carrying amount exceeds the recoverable amount, an impairment loss is recognized in the income statement. Financing costs of assets under construction are part of the costs of the asset if material. Assets held under finance lease contracts are capitalized at the lower of the present value of the minimum lease payments and fair value. The related outstanding finance lease obligations are presented as liabilities. See also [note 3.2](#).

Assets are depreciated on a straight-line basis over their estimated useful lives or lease terms:

- Investment properties: 30–40 years
- Buildings: 30–40 years
- Building components: 8–20 years
- Machinery and production equipment: 6–20 years
- Other equipment (vehicles, IT systems, etc.): 1–5 years

Land and assets under construction are usually not depreciated. When components of larger assets have different useful lives, these are depreciated separately. Useful lives and residual values are reviewed annually on the balance sheet date and adjustments are recognized in the income statement. Any gains or losses on the disposal of items of property, plant, and equipment are recognized in the income statement.

Management assumptions and estimates

The recoverability of property, plant, and equipment are reviewed whenever there are indications that their carrying amount may no longer be recoverable due to changed circumstances or events. If such a situation arises, the recoverable amount is determined. It corresponds to the higher of the discounted value of expected future net cash flows and the expected net selling price. If the recoverable amount is lower than the carrying amount, a corresponding impairment loss is recognized in the income statement. The main assumptions on which these measurements are based include growth rates, margins, and discount rates. The actual future cash flows can differ considerably from discounted projections.

2.7 Intangible assets

CHF million	Land use rights	Software	Royalties, patents, others	Intangible assets
Cost at 31.12.2022	19	67	12	98
Accumulated amortization at 31.12.2022	-6	-47	-8	-62
Carrying amount at 31.12.2022	13	20	4	36
Cost at 31.12.2021	20	64	14	98
Accumulated amortization at 31.12.2021	-6	-43	-9	-58
Carrying amount at 31.12.2021	14	21	5	40

Accounting principles

Land use rights are amortized on a straight-line basis over the duration of the usage rights granted. For this item, useful lives can be up to 50 years. Software is amortized on a straight-line basis over the estimated useful lives of 1 to 5 years. Acquired royalties, patents, and similar rights are capitalized and amortized on a straight-line basis over their estimated useful lives of 3 to 15 years. The recoverability of intangible assets is reviewed at least once a year. If there is any indication of an impairment, an impairment test is performed immediately. If the carrying amount exceeds the recoverable amount, an impairment loss is recognized in the income statement. All research costs are recognized in the income statement in the period in which they were incurred. Development costs are recognized as an asset only to the extent that the following specific recognition criteria are all met cumulatively:

- costs are clearly defined, clearly attributable to the product or process, and can be separately identified and measured reliably
- the technical feasibility can be demonstrated
- the required internal resources are available
- the amount recognized is covered by future cash flows

2.8 Goodwill

The theoretical capitalization of goodwill would affect the consolidated financial statement as follows:

Theoretical movements in goodwill

CHF million	2022	2021
Cost at 1.1.	641	615
Additions from acquisitions	5	41
Adjustments		1
Translation differences	-11	-16
Cost at 31.12.	635	641
Accumulated amortization at 1.1.	-596	-574
Additions regular	-18	-37
Translation differences	13	15
Accumulated amortization at 31.12.	-601	-596
Theoretical carrying amount at 31.12.	34	45

Effect on income statement

CHF million	2022	2021
Operating result (EBIT)	391	278
Return on sales (EBIT margin) %	9.8	7.5
Amortization goodwill	-18	-37
Theoretical operating result (EBIT) incl. amortization/impairment of goodwill	373	241
Theoretical return on sales (EBIT margin) %	9.3	6.5
Net profit	280	200
Amortization goodwill	-18	-37
Theoretical net profit incl. amortization/impairment of goodwill	262	163

Effect on balance sheet

CHF million	31.12.2022	31.12.2021
Equity according to balance sheet	1'656	1'496
Theoretical capitalization of goodwill	34	45
Theoretical equity incl. goodwill	1'690	1'541
Equity as % of balance sheet total	44.8	39.7
Theoretical equity incl. goodwill as % of balance sheet total incl. goodwill	45.3	40.4

The theoretical amortization is based on the straight-line method over the useful life of five years. The addition in 2022 is attributable to the acquisition of VAM Control S.r.l. (CHF 5 million). In the previous year, the additions were mainly related to the acquisitions of F.G.S. Brasil Indústria e Comércio Ltda (CHF 31 million) and Oxford Flow Utility & Industries Ltd (CHF 9 million).

In 2022, no indications of impairment were found.

In 2021, the impairment tests for the former Global Supply Company LLC (merged into Georg Fischer LLC), GF Casting Solutions SRL, and Symmedia GmbH revealed that the resulting recoverable amounts based on value in use calculations exceeded the respective carrying amounts.

Accounting principles

When acquiring a GF Corporate Company or an associate, goodwill as of the date of acquisition is calculated as follows: the acquisition price plus transaction costs incurred in connection with the acquisition less the value of revalued net assets.

The positive or negative goodwill resulting from acquisitions and changes in ownership are offset in equity against retained earnings at the date of acquisition. Upon the disposal of a GF Corporate Company or an associate, the goodwill previously offset in equity is transferred to the income statement. If parts of the purchase price are dependent on future results, they are estimated as accurately as possible at the acquisition date and recognized in the balance sheet. In the event of disparities when the definitive purchase price is settled, the goodwill offset in equity is adjusted accordingly.

The recoverability of the goodwill reported in the theoretical movement table is reviewed at least once a year. If there is any indication of an impairment, an impairment test is performed immediately. If the carrying amount exceeds the recoverable amount, an impairment loss is recognized. As the goodwill is already offset in equity at the date of the acquisition, an impairment of the goodwill does not affect the income statement, but leads to a disclosure in the notes only.

Management assumptions and estimates

For goodwill, an impairment test is performed if there is any indication that the theoretical book value is no longer recoverable. As a basis for the calculation, business plans for the next five years are used. The projections are based on knowledge and experience as well as on current judgments made by management as to the probable economic development of the relevant markets. It is assumed that there are no significant planned changes in the organization of any of the divisions, except for the measures already decided and announced.

2.9 Provisions

CHF million	Personnel	Warranties	Legal	Onerous contracts	Restructuring	Other	Provisions
Balance at 1.1.2022	54	36	9	7	2	17	125
Increase	9	16	4	4	0	4	38
Use	-4	-9	-1	-2	-2	-2	-21
Release	-2	-5	-2	-2		-1	-12
Changes in scope of consolidation	1						1
Translation differences	-3	-1	-0	-0	-0	-1	-5
Balance at 31.12.2022	55	37	9	6	0	17	125
- Thereof current	4	28	2	4	0	7	45
- Thereof non-current	51	10	7	1	0	11	79
Balance at 1.1.2021	56	39	7	9	12	17	140
Increase	7	19	3	3	0	5	37
Use	-5	-12	-1	-1	-10	-3	-32
Release	-2	-8	-1	-4	-0	-1	-16
Changes in scope of consolidation		0	0			0	0
Translation differences	-2	-1	-0	-0	-0	-1	-5
Balance at 31.12.2021	54	36	9	7	2	17	125
- Thereof current	3	24	1	5	2	6	42
- Thereof non-current	50	12	8	1	0	11	83

Personnel

Includes provisions for employee retirement benefits and other service-related employee benefits which are not provided by pension funds or similar institutions, as well as anniversary bonuses and provisions for work accidents. For employee benefits provided by pension funds, refer to [note 5.1](#).

Warranties

Cover expected expenses for warranty benefits such as repairs and replacements. All three divisions provide warranty benefits to their customers: 45% of the provisions relate to GF Piping Systems (previous year: 39%), 27% to GF Casting Solutions (previous year: 28%), and 28% to GF Machining Solutions (previous year: 33%).

Legal

Includes all obligations deriving from legal cases and litigations. None of the individual provisions should lead to an outflow of more than CHF 5 million (previous year: CHF 5 million).

Onerous contracts

Summarizes contracts for which the fulfillment leads to unavoidable costs that exceed the associated economic benefits.

Restructuring

Summarizes provisions for legal and/or constructive obligations deriving from restructurings. A constructive obligation arises when a detailed and formal plan for a restructuring exists and a legitimate expectation of third

parties that the obligation will be fulfilled was raised. The use of provision in 2022 and 2021, were related to restructuring and relocation activities in Europe.

Other

Includes all other events that give rise to a provision such as non-warranty claims by customers and risks from business activities not allocated to the warranties, legal, or onerous contract categories.

Accounting principles

Provisions are recognized if a legal or constructive obligation exists as a result of a past event that makes it probable that an outflow of resources will be required to settle this obligation and the amount can be estimated reliably. The valuation of provisions in all categories is based on actual data if available (e.g. claims that have occurred or been reported) or on the experience of recent years and management estimates. Possible obligations whose occurrence cannot be assessed on the balance sheet date or obligations whose amount cannot be reliably estimated are disclosed as contingent liabilities.

Management assumptions and estimates

In the course of their ordinary operating activities, GF Corporate Companies can become involved in litigation. Provisions for pending legal proceedings are measured on the basis of professional expertise of internal and external lawyers and a best estimate of the expected outflow of resources (considering available insurance coverage). The assessment may change in the following year depending on the future development of ongoing legal proceedings. If there are any contractual obligations for which the unavoidable costs of meeting the obligations exceed the expected economic benefits (e.g. onerous contracts), provisions are made for the agreed amounts over the entire period or over a prudently estimated period.

2.10 Accrued liabilities and deferred income

CHF million	31.12.2022	31.12.2021
Overtime, holiday, and bonuses	132	119
Accrued liabilities/deferred income for commissions and discounts	59	51
Other accrued liabilities and deferred income	119	103
Total	310	273

2.11 Contingent liabilities

Contingent liabilities amounted to CHF 66 million (previous year: CHF 90 million) and include guarantees to third parties.

3 Capital and financial risk management

Total capital is defined as total equity and net debt. The GF Corporation manages its capital structure in order to safeguard its ability to continue as a going concern, achieve an optimal cost of capital and optimize the long-term returns to its shareholders as well as provide financial flexibility with regard to future strategic investments. The GF Corporation is exposed to a number of financial risks, and this section further outlines the key financial risks and how they are managed.

3.1 Interest-bearing financial liabilities

CHF million	Maturity			31.12.2022	31.12.2021
	within 1 year	1 to 5 years	over 5 years		
Bonds (at fixed interest rates)		225	400	625	775
Other financial liabilities (at fixed interest rates) ¹	20	18	8	46	150
Other financial liabilities (at variable interest rates)	64			64	74
Total	84	243	408	735	999

¹ This category comprises other financial liabilities with a fixed interest period of more than three months.

Net debt, which is calculated as the difference between interest-bearing liabilities and cash and cash equivalents and marketable securities, decreased by CHF 213 million to a net cash position of CHF 159 million in the year under review (previous year: net debt of CHF 54 million). This decrease was primarily related to the free cash flow (CHF 201 million) minus the dividend payments to GF shareholders and minority shareholders (CHF 92 million) as well as disposals due to changes in scope of consolidation (CHF 126 million).

The following table shows the changes in financial liabilities arising from cash flows and non-cash changes:

CHF million	1.1.	Cash flows	Changes not affecting liquidity				31.12.
			Translation differences	Unwinding of discount	Scope of consolidation	Leasing additions	
2022							
Bonds	775	-150		0			625
Short-term other financial liabilities	97	-5	-8				84
Long-term other financial liabilities	127	17	-0		-126	8	26
Total	999	-138	-8	0	-126	8	735
2021							
Bonds	775			0			775
Short-term other financial liabilities	93	15	-12		1		97
Long-term other financial liabilities	90	34	3			0	127
Total	958	48	-9	0	1	0	999

In the year under review, the GF Corporation repaid the outstanding amount of CHF 150 million on the bond with the term from 2013 to 2022 when it matured on 12 September 2022.

The following table shows in detail the various categories of interest-bearing financial liabilities by currency and interest rate:

CHF million	Currency	Interest rate %	31.12.2022	Interest rate %	31.12.2021
2.5% Georg Fischer Finanz Ltd Bond, 2013–2022 (12 September), CHF 150 million, CH0221386144	CHF			2.6	150
0.875% Georg Fischer Finanz Ltd Bond, 2016–2026 (12 May), CHF 225 million, CH0319415961	CHF	0.9	225	0.9	225
1.05% Georg Fischer Ltd Bond, 2018–2028 (20 April), CHF 200 million, CH0373476636	CHF	1.06	200	1.06	200
0.95% Georg Fischer Ltd Bond, 2020–2030 (25 March), CHF 200 million, CH0536893230	CHF	0.96	200	0.96	200
Bonds (at fixed interest rates)			625		775
	USD			3.5	117
	EUR	0.4–2.0	18	0.8–2.0	19
	CHF	1.4–4.0	6	1.0–4.3	10
	CNY	4.3–4.4	22	4.4	4
Other financial liabilities (at fixed interest rates)¹			46		150
	CNY	3.1–3.7	29	3.4–3.9	32
	TRY	18.1–25.0	8	18.0–28.0	20
	EUR	2.1–3.5	23	0.6–1.5	17
	Other		4		5
Other financial liabilities (at variable interest rates)			64		74
Total			735		999

¹ This category comprises other financial liabilities with a fixed interest period of more than three months.

Georg Fischer Ltd and Georg Fischer Finanz Ltd has a syndicated credit line with a term of 2019 to 2025 in the amount of CHF 400 million. It provides the GF Corporation with the financial flexibility to act swiftly, for instance in the case of acquisitions, and was not drawn as of the end of the year 2022 and 2021. In addition to other terms, the syndicated credit line is subject to a covenant with respect to the net debt ratio (ratio of net debt to EBITDA). The conditions of the syndicated credit line are considered to represent standard conditions for such types of arrangements. As of 31 December 2022, the financial covenant was not breached.

The bonds as well as the syndicated credit line are subject to standard cross-default clauses, whereby the outstanding amounts may all become due if early repayment of another loan is demanded from GF or one of its subsidiaries, owing to a failure to meet the credit terms. As of the balance sheet date, the effective credit terms had been met.

Other financial liabilities includes loans from pension fund institutions in the amount of CHF 0 million (previous year: CHF 2 million).

Accounting principles

Financial liabilities comprise loans, bonds and finance lease contracts. They are recognized at their amortized cost. Borrowing costs are recognized in the income statement using the effective interest method. Borrowing costs that can be allocated directly to the construction, build-up, or purchase of a qualifying asset are capitalized as part of the acquisition or manufacturing costs of the asset.

3.2 Lease commitments and liabilities

CHF million	31.12.2022	31.12.2021
Lease commitments up to 1 year	24	25
Lease commitments 1 to 5 years	60	55
Lease commitments over 5 years	9	20
Operating leases (nominal values)	93	100

In the previous year, the increase in lease commitments is mainly due to extensions of leases in China.

Liabilities relating to financial lease contracts in the amount of CHF 14 million (previous year: CHF 7 million) were mainly due to the leasing of buildings and machines. The leasing obligations are included in "Other financial liabilities" and are disclosed in [note 3.1](#).

Accounting principles

Finance leases are recognized in property, plant, and equipment as well as in other financial liabilities on the balance sheet when most of the contractual risks and rewards have been transferred. Lease installments are divided into an interest and a repayment component based on the annuity method. Assets held under such finance leases are depreciated over the shorter of their estimated useful life and lease term. Operating lease installments are reported in the income statement under operating expenses.

3.3 Pledged or assigned assets

Assets pledged or restricted on title in part or whole amounted to CHF 8 million (previous year: CHF 8 million). They essentially contain CHF 6 million (previous year: CHF 5 million) of pledged assets related to accounts receivable and CHF 3 million (previous year: CHF 3 million) related to liquid assets. The assets are pledged or restricted on title as collateral for bank loans.

3.4 Financial result

CHF million	2022	2021
Interest income	5	3
Financial income	5	3
Interest expenses	-28	-22
Other financial expenses	-27	-3
Financial expenses	-55	-25
Foreign exchange profit/loss	5	-1
Financial result	-45	-23

"Other financial expenses" includes technical value adjustments of CHF 24 million on non-current loans that were necessary due to the increase in global interest rates and discount rates (previous year: CHF 1 million). See also [note 5.2](#).

3.5 Earnings per share

	2022	2021
Net profit attributable to shareholders of Georg Fischer Ltd in CHF million	276	214
Weighted average number of shares ¹	81'887'028	81'848'130
Basic earnings per share in CHF¹	3.37	2.62
Diluted earnings per share in CHF¹	3.37	2.62

¹ In April 2022, a 1:20 share split was conducted, see note 3.6. Previous year figures have been adjusted accordingly.

There was no dilution of earnings per share in either the year under review or the previous year.

Accounting principles

Earnings per share are calculated by dividing the portion of net profit attributable to shareholders of GF by the weighted average number of shares outstanding in the reporting period. Diluted earnings per share take into account any potential additional shares that may result, for instance, from exercised options or conversion rights.

3.6 Equity

Share capital

The Annual Shareholders' Meeting on 20 April 2022 approved a share split in the ratio of 1:20, resulting in 82'017'960 registered shares at a par value of CHF 0.05 each. The share split affects the earnings per share (EPS) calculation. The EPS for the year 2021 was adjusted accordingly. As of 31 December 2022, the number of registered shares and the par value were unchanged. The dividend-bearing nominal capital amounted to CHF 4'100'898.

Until 19 April 2024, the maximum authorized share capital is CHF 400'000 divided into 8'000'000 fully paid-in registered shares with a par value of CHF 0.05 each. The conditional capital consists of a maximum of CHF 400'000 divided into 8'000'000 fully paid-in registered shares with a par value of CHF 0.05 each. The maximum amount of the authorized or conditional capital is reduced by the amount of authorized or conditional capital created through the issue of bonds or similar debt instruments or new shares.

Dividend policy and dividend

The Board of Directors presents a proposal for the appropriation of retained earnings to the Annual Shareholders' Meeting. Over the medium term, the target is to distribute between 30% and 40% of the consolidated net profit to shareholders.

For the financial year 2022 the Board of Directors is proposing to the Annual Shareholders' Meeting a total dividend payment out of the retained earnings of CHF 1.30 per registered share (previous year adjusted for share split: CHF 1.00 per registered share).

As of 31 December 2022, reserves that cannot be distributed to the shareholders amounted to CHF 94 million (previous year: CHF 97 million).

Treasury shares

	2022			2021		
	Number of shares	Ø transaction price in CHF	Total in CHF million	Number of shares ¹	Ø transaction price in CHF ¹	Total in CHF million
Balance at 1.1.	186'020	61.67	11	153'640	46.47	7
Purchases	89'948	57.55	5	169'440	66.10	11
Transfers (share-based compensation)	-143'595	61.35	-9	-137'060	50.11	-7
Balance at 31.12.	132'373	59.21	8	186'020	61.67	11

¹ In April 2022, a 1:20 share split was conducted, see above. Previous year figures have been adjusted accordingly.

GF purchases treasury shares to meet its obligation under the different share-based compensation models offered to the Board of Directors, the Executive Committee, and the Senior Management. For further information on share-based compensation for the Board of Directors and the Executive Committee see [Compensation Report, note 1.3](#) and [1.4](#).

Accounting principles

Treasury shares are recorded at acquisition cost as a negative position in equity. Gains or losses arising from the disposal of treasury shares are added to or deducted from the capital reserves.

Target capital structure

The GF Corporation uses two ratios to monitor equity: the equity ratio and the return on equity. The equity ratio represents equity as a percentage of total assets. Return on equity is net profit expressed as a percentage of average equity. These ratios are reported to the Executive Committee and the Board of Directors on a regular basis.

	2022	2021
Equity ratio as %, at 31.12.	44.8	39.7
Return on average reported equity as %	17.8	13.8

The GF Corporation aims to maintain an equity ratio of 35% to 40%, with a return on equity above 15%. In the year under review total equity increased and total assets decreased, so that the equity ratio increased to 44.8% (previous year: 39.7%).

3.7 Risk management

Corporate risk management

Enterprise risk management as a fully integrated risk management process was systematically applied in 2022 at all levels of the GF Corporation. A risk map was prepared for the GF Corporation, the three divisions, and all significant GF Corporate Companies and sales regions, including the key risks in the areas of strategy, markets, operations, management and resources, finance as well as sustainability. Unchanged to previous year, the likelihood of the risk occurring was classified into four categories. Where possible and appropriate, the identified risks were subject to a quantifiable assessment, taking into consideration any measures already implemented. Alternatively, a qualitative assessment of the risk exposure was applied.

The Corporate Risk Council, consisting of representatives of the divisions and the Corporate Staff and headed by the Chief Risk Officer, held its meeting in June 2022. The main content of the discussions was the analysis of the adapted risk management process and the evaluation of a new risk management reporting software. In addition, the divisional risk maps were analyzed in depth.

In accordance with the annual risk reporting process, the Executive Committee and divisional management discussed the risk maps in June/July and in November of the reporting year. They defined, at the appropriate level, the key risks of the GF Corporation, the divisions and the GF Corporate Companies and sales regions, and determined adequate measures to mitigate those risks. The Board of Directors held a risk management workshop in December 2022 with the aim to define all relevant risks from a Board of Directors' viewpoint and compare the findings with the risk assessment of the Executive Committee. The result of the risk workshop of the Board of Directors and the workshops of the Executive Committee as well as the determined measures in order to mitigate or control the risks defined, will be included in the risk report 2022, which was provided to the Board of Directors for approval in February 2023.

The multi-stage procedure, including workshops at divisional management, Executive Committee, and Board of Directors level, has proven to be effective. In addition, Internal Audit assesses the risk maps prepared by the GF Corporate Companies.

The following key risks were identified: geopolitical risks related to China, cyber risks, negative impacts of violent conflicts and war, tensions between the US and China. Measures to reduce these and other risks were defined and are being implemented in line with the strategic targets of the GF Corporation and the three divisions.

Financial risk management

Through its different business activities, the GF Corporation is exposed to various financial risks such as credit risk, market risk (including currency risk, interest rate risk, and price risk), and liquidity risk. The following sections provide an overview of the extent of the individual risks as well as the goals, principles, and processes employed for measuring, monitoring, mitigating, and managing these financial risks.

Financial risks	Risk source	Risk management
Credit risk	Default of a counterparty affecting the recoverability of trade accounts receivable or bank deposits	Diversification and regular assessments of credit-worthiness
Market risk		
- Currency risk	Sales and purchases as well as financing to GF Corporate Companies in foreign currencies	Purchasing, producing, and selling in functional currency (congruency principle) and hedging by means of currency forward contracts
- Interest rate risk	Changes in loan discount rates	Periodical re-assessment of loan exposures
- Price risk	Deemed insignificant	Not deemed necessary
Liquidity risk	Insufficient liquidity to pay liabilities due	Constant monitoring of liquidity, liquidity reserves and unused credit lines

The Board of Directors bears ultimate responsibility for financial risk management. The Board of Directors has mandated the Audit Committee with monitoring the development and implementation of the risk management principles. The Audit Committee reports regularly to the Board of Directors on this matter.

The financial risk management principles are designed to identify and analyze the risks to which the GF Corporation is exposed and to establish appropriate control mechanisms. The principles of financial risk management are regularly reviewed, taking into consideration changes in the relevant financial markets and in the activities of the GF Corporation.

Credit risk

As of the balance sheet date, the maximum amount of credit risk including off-balance sheet commitments was as follows:

CHF million	31.12.2022	31.12.2021
On-balance sheet		
Cash and cash equivalents	877	932
Trade accounts receivable	660	611
Other accounts receivable (excl. tax credits)	29	36
Accrued income	16	13
Other financial assets	137	93
Derivative financial instruments	9	5
Total on-balance sheet	1'729	1'690
Off-balance sheet		
Guarantees to third parties ¹	66	90

1 Thereof used CHF 63 million (previous year: CHF 89 million).

Cash is predominantly deposited with leading Swiss, German, US, and Chinese banks with a credit rating of at least BBB– (Standard & Poor's). Furthermore and in accordance with the investment policy, financial transactions are only entered into with counterparties deemed creditworthy. In addition, cash holdings are allocated to different banks in order to limit the counterparty risk. The maximum amount of cash to deposit with a bank is defined in relation to its credit rating. Cash on fixed-term deposits in general have a maturity of less than three months.

Transactions involving derivative financial instruments are only entered into with counterparties with a credit rating of at least BBB– (Standard & Poor's). The purpose of such transactions is to hedge against currency risks.

The risk of concentrated credit risks on trade accounts receivable is limited due to the large number of customers and their wide diversification across industries and regions. The extent of credit risk is determined by individual characteristics of the customers. In order to assess this risk, a review of creditworthiness based on the customer's financial situation and historical experience is performed on a regular basis.

The maximum credit risk on financial instruments corresponds to their carrying amounts. No additional arrangements have been entered into that would increase the risk above the carrying amounts.

Currency risk

Currency risk occurs in connection with transactions (in particular the purchase and sale of goods) that are effected in currencies that differ from the functional currencies. Through such transactions, the GF Corporation is mainly exposed to changes in the euro, US dollar, Chinese yuan, and Turkish lira exchange rates. These currency risks can be reduced by purchasing, producing, and selling goods in the functional currencies (congruency principle) or by entering into foreign currency forwards (cash flow hedges), usually for a maximum of 12 months.

Derivative financial instruments

The table below shows the foreign currency forward contract and actual values of the foreign currency contracts used to mitigate currency risk:

CHF million	Balance sheet hedges	Cash flow hedges	31.12.2022	31.12.2021
Contract value	273	132	404	363
Positive actual value (recognized as marketable securities)	2	7	9	5
Negative actual value (recognized as other liabilities)	-2	-0	-2	-2
Net actual value	0	7	8	4

The balance sheet hedges include foreign currency forward contracts that are used to hedge loans to GF Corporate Companies in foreign currencies. Unrealized gains and losses from changes in the fair value are reported in the financial result. These hedges are mainly in euro, US dollars, Canadian dollars, and Romanian leu, and expire usually no later than twelve months from the balance sheet date.

The balance sheet hedges also include foreign currency forward contracts that serve to hedge currency risks on receivables and payables. Like the currency effects on the underlying balance sheet item, gains and losses from changes to the actual value of these contracts are recognized in "Other operating income". These balance sheet hedges are mainly in US dollars and expire no later than twelve months from the balance sheet date.

Accounting principles

Derivative financial instruments used to hedge balance sheet items are accounted for at market values through the income statement. Hedging transactions on probable future cash flows (cash flow hedges) are initially accounted for at market values through equity. Parts of a hedge that are not effective are recognized in the income statement. Later, when an asset or a liability results from the hedged underlying transaction, the gains and losses previously recognized in equity are transferred to the income statement. In the case of cash flow hedges, the volume of the foreign currency forward contracts is limited to maximum 75% of the probable future cash flows.

Foreign exchange rates

CHF	Average rates			Spot rates		
	2022	2021	Change %	31.12.2022	31.12.2021	Change %
1 CNY	0.142	0.142	0.1	0.134	0.144	-6.8
1 EUR	1.005	1.081	-7.1	0.985	1.033	-4.7
1 GBP	1.179	1.258	-6.3	1.110	1.229	-9.7
1 HKD	0.122	0.118	3.7	0.118	0.117	1.2
1 TRY	0.058	0.106	-44.9	0.049	0.068	-27.3
1 USD	0.955	0.914	4.5	0.923	0.912	1.2
100 SEK	9.460	10.660	-11.3	8.854	10.079	-12.2

Interest rate risk

The interest rate risk may involve either changes in future interest payments owing to fluctuations in market interest rates or the risk of a change in the fair value of interest-bearing liabilities.

As fair value accounting is not applied for interest-bearing liabilities, changes in market interest rates are not expected to have a material impact on the income statement. However, changes in market interest rates may affect the valuation of assets as a result of an impairment test.

Liquidity risk

Liquidity risk is the risk that the GF Corporation is unable to meet its financial obligations when they fall due. Liquidity is constantly monitored to ensure that it is adequate. Liquidity reserves are held in order to offset the usual fluctuations in requirements. At the same time, the GF Corporation has unused credit lines in case more serious fluctuations occur. The total amount of unused credit lines as of 31 December 2022 was CHF 774 million (previous year: CHF 772 million). The credit lines are maintained with different banks in order to ensure swift and adequate access to these credit lines.

CHF million	Carrying amount	Contractual cash flows	Maturity (incl. interest)		
			up to 1 year	1 to 5 years	over 5 years
Trade accounts payable	563	563	563		
Bonds	625	661	6	247	408
Other financial liabilities	110	124	89	23	12
Accrued liabilities and deferred income	310	310	310		
Other liabilities	93	93	65	28	
Total at 31.12.2022	1'702	1'752	1'034	298	420
Total at 31.12.2021	1'909	1'970	1'149	408	412

4 Corporate structure

This section provides information on the changes in the scope of consolidation and in particular on acquisitions and divestments.

4.1 Changes in scope of consolidation

Additions

Company	Country	Division ¹	Transaction	Interest (%)	Date
2022					
Vam Control S.r.l.	Italy	MS	Acquisition	100%	1 July
Chinaust (Hong Kong) International Investments Limited	China	PS	Foundation	50%	15 August
2021					
F.G.S. Brasil Indústria e Comércio Ltda	Brazil	PS	Acquisition	100%	1 March
Langfang Shuchang Auto Parts Co Ltd	China	PS	Ownership increase	from 40% to 50%	1 June
Maintenance Automatisme Commande Numerique SAS	France	MS	Acquisition	100%	1 July
Oxford Flow Utility & Industries Ltd	Great Britain	CM	Ownership increase	from 8% to 23%	23 July
Beijing Jingran Lingyun Gas Equipment Co Ltd	China	PS	Ownership increase	from 40% to 50%	1 August
Ningbo Chinaust Fitting Manufacturing Co., Ltd	China	PS	Foundation	20%	1 December

¹ Division: PS = GF Piping Systems, MS = GF Machining Solutions, CM = Corporate Management

On 15 July 2022, 100% of the shares of the machine tool service company Vam Control S.r.l. (VAM), Onore (Italy), were acquired. Control was assumed as of 1 July 2022. Pro rata sales 2022: CHF 3 million.

On 28 February 2021, 100% of the shares of the leading manufacturer of polyethylene piping systems, F.G.S. Brasil Indústria e Comércio Ltda (FGS), Cajamar (Brazil), were acquired. Control was assumed as of 1 March 2021. FGS serves the local water and gas distribution market and other industrial segments. Pro rata sales 2021: CHF 28 million.

On 15 July 2021, 100% of the shares of the service company Maintenance Automatisme Commande Numerique SAS (MACN), La Roche-Blanche (France), were acquired. Control was assumed as of 1 July 2021. Pro rata sales 2021: CHF 1 million.

The following assets and liabilities were acquired:

	VAM	MACN	FGS
CHF million	1 July 2022	1 July 2021	1 March 2021
Cash and cash equivalents	1	1	0
Trade accounts receivable	1	0	4
Inventories	0	0	3
Other accounts receivable	0	0	2
Prepayments to creditors			0
Property, plant, and equipment	3	1	4
Intangible assets			0
Deferred tax assets			0
Total assets	5	2	14
Deferred tax liabilities	0	0	
Non-interest bearing liabilities	2	1	7
Interest-bearing liabilities	1	0	1
Net assets	3	1	6

On 24 February 2020, 7.55% of the capital of Oxford Flow Utility & Industries Ltd was acquired with an option to acquire up to 23% of the capital in 2021. This stake was later diluted to 6.29%. On 23 July 2021, the option was exercised and further 16.67% of the capital was acquired. As of 31 December 2021, the stake amounted to 22.96%. Since the second acquisition, significant influence was assumed and the investment was recorded as an investment in associates (see [note 5.2](#)).

Disposals

On 1 April 2022, GF Corporation sold its entire investment of 50% in GF Linamar LLC, Mills River (US), a fully consolidated GF Corporate Company. In addition, the sale included loans made by GF Corporation to GF Linamar LLC over the amount of CHF 126 million. The total sale price included a contingent purchase price component of CHF 20 million that was recorded under other financial assets. GF Linamar LLC was deconsolidated per 31 March 2022 and derecognized minority interests on the accumulated losses amounted to CHF 36 million. The effect from the deconsolidation on the operating result (EBIT) was neutral. Pro rata sales 2022 amounted to CHF 34 million (Sales 2021: CHF 108 million).

The following assets and liabilities were derecognized:

	GF Linamar LLC
CHF million	1 April 2022
Cash and cash equivalents	6
Trade accounts receivable	27
Inventories	28
Other accounts receivable	1
Prepayments to creditors	0
Property, plant, and equipment	151
Intangible assets	0
Total assets	213
Non-interest bearing liabilities	34
Interest-bearing liabilities	126
Total liabilities	160

Mergers

As of 1 January 2022, MACN, La Roche-Blanche (France) merged into GF Machining Solutions SAS, Palaiseau (France). Division: GF Machining Solutions.

As of 1 April 2022, Georg Fischer Piping Systems Ltd, Mississauga (Canada) merged with GF Urecon Ltd, Coteau-du-Lac, Québec (Canada). The name of the merged company is GF Piping Systems Canada Ltd, Québec (Canada). Division: GF Piping Systems.

Accounting principles

Companies acquired are consolidated from the date on which control is obtained, while companies divested are excluded from the scope of consolidation as of the date on which control is lost, with any gain or loss recognized in the income statement. The assets and liabilities of acquired companies are valued at actual values at the time control is obtained. Assets and liabilities of divested companies are valued at book values at the time control is lost. For the presentation of acquisitions and divestments, the original balance sheet values and cash flows are translated into Swiss francs using the exchange rates of the respective transaction date.

4.2 Corporate companies

Country	Division ¹	Company	Functional currency	Share capital million	Participation %	Consolidation ²	Function ³	
Europe								
Austria	CM	GF Casting Solutions Altenmarkt GmbH, Altenmarkt	EUR	0,1	100	C	M	
	PS	Georg Fischer Fittings GmbH, Traisen	EUR	3,7	51	C	P	
	PS	Georg Fischer Rohrleitungssysteme GmbH, Loosdorf	EUR	0,2	100	C	S	
	CS	GF Casting Solutions Services GmbH, Herzogenburg ⁴	EUR	4,6	100	C	H	
	CS	GF Casting Solutions Herzogenburg HPDC GmbH, Herzogenburg	EUR	0,1	100	C	P	
	CS	GF Casting Solutions Altenmarkt GmbH & Co KG, Altenmarkt	EUR	2,4	100	C	P	
Belgium	PS	Georg Fischer NV-SA, Bruxelles ⁴	EUR	0,5	100	C	S	
Czech Republic	MS	GF Machining Solutions sro, Brno ⁴	CZK	12,3	100	C	S	
Denmark	PS	Georg Fischer A/S, Taastrup ⁴	DKK	0,5	100	C	S	
France	CM	Georg Fischer Holding SAS, Palaiseau ⁴	EUR	6,4	100	C	H	
	PS	Georg Fischer SAS, Villepinte	EUR	1,1	100	C	S	
	MS	GF Machining Solutions SAS, Palaiseau	EUR	4,0	100	C	S	
Germany	CM	Georg Fischer BV & Co KG, Singen ⁴	EUR	25,6	100	C	H	
	CM	Georg Fischer Geschäftsführungs-GmbH, Singen ⁴	EUR	0,1	100	C	M	
	CM	Georg Fischer Giessereitechnologie GmbH, Singen	EUR	0,5	100	C	M	
	CM	Georg Fischer Meco Eckel GmbH, Biedenkopf-Wallau	EUR	0,1	75	C	M	
	PS	Georg Fischer DEKA GmbH, Dautphetal-Mornshausen	EUR	2,6	100	C	P	
	PS	Georg Fischer GmbH, Albershausen	EUR	2,6	100	C	S	
	PS	Georg Fischer Fluorpolymer Products GmbH, Ettenheim	EUR	4,0	100	C	P	
	PS	Chinaust Automotive GmbH, Düsseldorf	EUR	0,1	50	B	S	
	CS	GF Casting Solutions Leipzig GmbH, Leipzig	EUR	0,9	100	C	P	
	CS	GF Casting Solutions Werdohl GmbH, Werdohl	EUR	0,3	100	C	P	
	CS	GF Meco Eckel GmbH & Co KG, Biedenkopf-Wallau	EUR	0,2	75	C	P	
	CS	Eckel & Co GmbH, Biedenkopf-Wallau	EUR	0,2	75	C	M	
	CS	PEM Zerspanungstechnik GmbH, Schwarzenberg	EUR	0,1	75	C	P	
	MS	GF Machining Solutions GmbH, Schorndorf	EUR	2,6	100	C	S	
	MS	Symmmedia GmbH, Bielefeld	EUR	1,4	100	C	P	
	Great Britain	PS	George Fischer Sales Ltd, Coventry ⁴	GBP	4,0	100	C	S
		CM	Oxford Flow Utility & Industries Ltd, Oxford ⁴	GBP	0,1	23	E	P
		MS	GF Machining Solutions Ltd, Coventry ⁴	GBP	2,0	100	C	S
	Italy	CM	Georg Fischer Holding Srl, Caselle di Selvazzano ⁴	EUR	0,5	100	C	H
		PS	Georg Fischer TPA Srl, Busalla	EUR	0,7	100	C	P
PS		Georg Fischer Omicron Srl, Caselle di Selvazzano	EUR	0,1	100	C	P	
PS		Georg Fischer PfcI Srl, Valeggio sul Mincio	EUR	0,5	100	C	P	
PS		Georg Fischer SpA, Agrate Brianza	EUR	1,3	100	C	S	
MS		GF Machining Solutions SpA, Agrate Brianza	EUR	3,0	100	C	S	

	MS	Vam Control S.r.l., Onore	EUR	0,1	100	C	S
Netherlands	CM	Georg Fischer Holding NV, Epe ⁴	EUR	0,9	100	C	H
	CM	Georg Fischer Management BV, Epe ⁴	EUR	0,1	100	C	M
	PS	Georg Fischer NV, Epe	EUR	0,9	100	C	S
	PS	Georg Fischer WAGA NV, Epe	EUR	0,4	100	C	P
Norway	PS	Georg Fischer AS, Rud ⁴	NOK	1,0	100	C	S
Poland	PS	Georg Fischer Sp.z.o.o., Sękocin Nowy ⁴	PLN	18,5	100	C	S
	MS	GF Machining Solutions Sp.z.o.o., Sękocin Nowy ⁴	PLN	1,3	100	C	S
Romania	CS	GF Casting Solutions SRL, Pitești ⁴	RON	26,5	100	C	P
	CS	GF Casting Solutions Arad SRL, Arad	RON	24,5	100	C	P
Spain	PS	Georg Fischer SA, Madrid ⁴	EUR	1,5	100	C	S
	MS	GF Machining Solutions SAU, Barcelona ⁴	EUR	2,7	100	C	S
Sweden	PS	Georg Fischer AB, Stockholm ⁴	SEK	1,6	100	C	S
	MS	System 3R International AB, Vällingby ⁴	SEK	17,1	100	C	P
Switzerland	CM	WIBILEA AG, Neuhausen ⁴	CHF	1,0	43	E	M
	CM	Eisenbergwerk Gonzen AG, Sargans ⁴	CHF	0,5	49	B	M
	CM	Georg Fischer Ltd, Schaffhausen	CHF	4,1		C	H
	CM	Munot Re AG, Schaffhausen ⁴	CHF	3,0	100	C	M
	CM	Georg Fischer Finanz Ltd, Schaffhausen ⁴	CHF	4,0	100	C	M
	CM	GF Casting Solutions Industrial SA, Novazzano ⁴	CHF	1,0	100	C	H
	PS	Georg Fischer Rohrleitungssysteme AG, Schaffhausen ⁴	CHF	20,0	100	C	P
	PS	Georg Fischer Rohrleitungssysteme (Schweiz) AG, Schaffhausen ⁴	CHF	0,5	100	C	S
	PS	Georg Fischer Wavin AG, Schaffhausen ⁴	CHF	17,8	60	C	P
	PS	Georg Fischer JRG AG, Sissach ⁴	CHF	1,8	100	C	P
	CS	GF Casting Solutions AG, Schaffhausen ⁴	CHF	1,0	100	C	M
	CS	GF Casting Solutions Novazzano SA, Novazzano	CHF	1,0	100	C	P
	CS	GF Ceramics Novazzano SA, Novazzano	CHF	1,2	100	C	P
	CS	GF Precicast Additive SA, Novazzano	CHF	0,2	100	C	P
	MS	Agie Charmilles SA, Losone ⁴	CHF	10,0	100	C	P
	MS	GF Machining Solutions Services SA, Meyrin ⁴	CHF	3,6	100	C	S
	MS	GF Machining Solutions Management SA, Meyrin ⁴	CHF	0,5	100	C	M
	MS	GF Machining Solutions Sales Switzerland SA, Losone ⁴	CHF	2,6	100	C	S
	MS	Mecartex SA, Muzzano	CHF	0,4	30	E	P
	MS	GF Machining Solutions AG, Biel ⁴	CHF	3,5	100	C	P
Near East							
Egypt	PS	Egypt Gas GF-Corys Piping Systems SAE, Cairo	EGP	340,0	38	C	P
UAE	CM	GF Corys Middle East Ltd, Abu Dhabi ⁴	AED	51,3	50	C	H
	PS	Georg Fischer Corys LLC, Dubai ⁴	AED	0,3	50	C	P
Turkey	PS	Georg Fischer Hakan Plastik AS, Cerkezköy ⁴	TRY	270,0	100	C	P
	MS	GF Imalat Cözümleri Ticaret Ltd Sti, Istanbul ⁴	TRY	7,0	100	C	S
Americas							
Argentina	PS	Georg Fischer Central Plastics Sudamerica SRL, Buenos Aires ⁴	ARS	16,2	100	C	S
	PS	Polytherm Central Sudamericana SA, Buenos Aires	ARS	0,1	49	E	S

Brazil	PS	Georg Fischer Sistemas de Tubulacoes Ltda, São Paulo ⁴	BRL	258,1	100	C	S
	PS	F.G.S. Brasil Indústria e Comércio Ltda, Cajamar	BRL	62,0	100	C	P
	MS	GF Machining Solutions Máquinas Ltda, São Paulo ⁴	BRL	153,7	100	C	S
Canada	PS	GF Piping Systems Canada Ltd, Quebec ⁴	CAD	24,6	100	C	P
Mexico	PS	Georg Fischer SA de CV Mexico, Monterrey ⁴	MXN	0,1	100	C	S
	MS	GF Machining Solutions LLC, Monterrey ⁴	MXN	15,1	100	C	S
USA	CM	George Fischer Corporation, Irwindale, CA ⁴	USD	0,1	100	C	H
	CM	Georg Fischer Export Inc, Irwindale, CA ⁴	USD	0,1	100	C	M
	PS	Georg Fischer LLC, Irvine, CA	USD	3,8	100	C	S
	PS	Georg Fischer Signet LLC, Irwindale, CA	USD	0,1	100	C	P
	PS	Georg Fischer Central Plastics LLC, Shawnee, OK	USD	1,1	100	C	P
	PS	Georg Fischer Harvel LLC, Easton, PA	USD	0,1	100	C	P
	PS	Chinaust Automotive LLC, Troy, MI	USD	0,1	50	B	S
	MS	GF Machining Solutions LLC, Lincolnshire, IL	USD	0,1	100	C	S
	MS	Microlution Inc, Chicago, IL	USD	2,6	100	C	P

Asia/Australia

Australia	CM	George Fischer IPS Pty Ltd, Riverwood ⁴	AUD	7,1	100	C	H
	PS	George Fischer Pty Ltd, Riverwood	AUD	3,8	100	C	S
China	CM	Georg Fischer Business Services (Shanghai) Co Ltd, Shanghai ⁴	CNY	1,1	100	C	M
	PS	Changchun Chinaust Automobile Parts Corp Ltd, Changchun	CNY	10,0	50	P	P
	PS	Chinaust Plastics Corp Ltd, Zhuozhou City	CNY	200,0	50	P	P
	PS	Chinaust Plastics (Shenzhen) Co Ltd, Shenzhen ⁴	CNY	80,0	50	P	P
	PS	Sichuan Chinaust Plastics Corp Ltd, Chengdu ⁴	CNY	80,0	50	P	P
	PS	Hebei Chinaust Plastics Corp Ltd, Zhuozhou City ⁴	CNY	58,2	50	P	P
	PS	Shanghai Chinaust Automotive Plastics Corp Ltd, Shanghai ⁴	CNY	40,3	50	P	P
	PS	Shanghai Chinaust Plastics Corp Ltd, Shanghai	CNY	66,0	50	P	P
	PS	Shanghai Georg Fischer Chinaust Plastics Fittings Corp Ltd, Shanghai ⁴	CNY	100,0	51	C	P
	PS	Georg Fischer Piping Systems Ltd, Shanghai ⁴	CNY	41,4	100	C	P
	PS	Georg Fischer Piping Systems (Trading) Ltd, Shanghai ⁴	CNY	1,7	100	C	S
	PS	Georg Fischer Piping Systems Ltd, Beijing ⁴	CNY	36,7	100	C	P
	PS	Beijing Jingran Lingyun Gas Equipment Co Ltd, Langfang ⁴	CNY	50,0	50	P	P
	PS	Langfang Shuchang Auto Parts Co Ltd, Langfang ⁴	CNY	10,0	50	P	P
	PS	Haining Chinaust Plastics Piping System Co Ltd, Haining ⁴	CNY	100,0	50	P	P
	PS	Xi'an Chinaust Plastics Co Ltd, Xi'an ⁴	CNY	80,0	50	P	P
	PS	Georg Fischer Piping Systems Ltd Yangzhou, Yangzhou ⁴	CNY	59,4	100	C	P
	PS	Ningbo Chinaust Fitting Manufacturing Co Ltd, Ningbo	CNY	2,0	10	E	P
	PS	Chinaust (Hong Kong) International Investments Limited, Hong Kong	HKD	0,1	50	C	H
	CS	GF Casting Solutions Suzhou Co Ltd, Suzhou ⁴	CNY	279,5	100	C	P
CS	GF Casting Solutions Kunshan Co Ltd, Kunshan ⁴	CNY	149,5	100	C	P	

	CS	GF Casting Solutions Shenyang Co Ltd, Shenyang ⁴	CNY	108,2	100	C	P
	MS	Agie Charmilles China (HK) Ltd, Hong Kong ⁴	HKD	57,8	100	C	S
	MS	GF Machining Solutions (Shanghai) Ltd, Shanghai	CNY	2,5	100	C	S
	MS	Agie Charmilles China (Shenzhen) Ltd, Shenzhen	CNY	2,5	100	C	S
	MS	Agie Charmilles China (Tianjin) Ltd, Tianjin	CNY	1,7	100	C	S
	MS	Beijing Agie Charmilles Industrial Electronics Co Ltd, Beijing ⁴	CNY	80,3	78	C	P
	MS	Beijing Agie Charmilles Technology & Service Ltd, Beijing	CNY	4,5	78	C	S
	MS	GF Machining Solutions Changzhou Co Ltd, Changzhou ⁴	CNY	164,1	100	C	P
India	PS	Georg Fischer Piping Systems PVT Ltd, Mumbai ⁴	INR	215,4	100	C	P
Indonesia	PS	PT Georg Fischer Indonesia, Karawang ⁴	IDR	183,7	100	C	P
	PS	PT Georg Fischer Trading Indonesia, Karawang ⁴	IDR	3,4	100	C	S
Japan	PS	Georg Fischer Ltd, Osaka ⁴	JPY	480,0	81	C	S
	MS	GF Machining Solutions Ltd, Yokohama ⁴	JPY	50,0	100	C	S
Korea	PS	Georg Fischer Korea Co. Ltd., Yongin-si ⁴	KRW	600,0	100	C	S
	MS	GF Machining Solutions Co Ltd, Anyang ⁴	KRW	1800,0	100	C	S
Malaysia	PS	George Fischer (M) SDN BHD, Petaling Jaya ⁴	MYR	10,0	100	C	P
New Zealand	PS	Georg Fischer Ltd, Wellington ⁴	NZD	0,1	100	C	S
Singapore	CM	Eurapipe Holdings Pte Ltd, Singapore ⁴	SGD	6,2	100	C	H
	PS	George Fischer Pte Ltd, Singapore	SGD	9,2	100	C	S
	MS	GF Machining Solutions Pte Ltd, Singapore	SGD	2,1	100	C	S
Taiwan	PS	Georg Fischer Co Ltd, New Taipei City ⁴	TWD	1,0	100	C	S
	MS	GF Machining Solutions Ltd, San Chung, Taipei Hsien ⁴	TWD	10,0	100	C	S
Vietnam	MS	GF Machining Solutions Co Ltd, Hanoi ⁴	VND	15,1	100	C	S

1 Division: PS = GF Piping Systems, CS = GF Casting Solutions, MS = GF Machining Solutions, CM = Corporate Management

2 Consolidation: C = Fully consolidated, P = Proportionately consolidated, E = Stated based on the equity method, B = Stated at book value

3 Function: H = Holding, P = Production, M = Management and Services, S = Sales

4 Directly held by Georg Fischer Ltd

5 Other disclosures

This section provides other information and disclosures not included in other sections, for example, information about employee benefits obligations and other non-current financial assets. It also includes an overview of the balance sheet-related deferred tax assets and liabilities and the events occurring after the balance sheet date.

5.1 Employee benefit obligations

The table shows the employee benefit obligations as well as the employee benefit expenses.

						2022
CHF million	Employee benefit plans				without own assets	Total
	Patronage funds	without surplus/deficit	with surplus	with deficit		
Balance at 1.1.2022				10	37	47
Contributions to employee benefit plans		2	27	1	1	31
Increase/decrease in economic benefit of surplus/deficit				-4	3	-1
Payments of contributions to employee benefit plans		-2	-27	-1	-1	-31
Translation differences				-1	-2	-3
Balance at 31.12.2022				5	38	43
Surplus/deficit according to FER 26	28		34	-6		56
Employee benefits within personnel expenses		2	27	-3	4	30
						2021
Employee benefits within personnel expenses		2	26	-6	4	25

Employee benefit plans in Switzerland are overfunded by CHF 34 million (previous year: CHF 99 million). The decrease is mainly due to the negative performance of the investments.

The employee benefit plan in the UK is underfunded by CHF 6 million (previous year: CHF 8 million). The amount of the underfunding depends significantly on the value of the securities and on the discount rate and the expected mortality rate used in the calculation of the pension liabilities. The total economic obligation, which represents the expected cash outflow in the medium term, amounts to CHF 5 million (previous year: CHF 10 million).

The recognized economic obligation from the employee benefit plan with no assets of their own, i.e. unfunded plans, amounted to CHF 38 million (previous year: CHF 37 million) and primarily concerns plans in Germany and Sweden. The CHF 3 million increase in the economic obligation is included in the pension fund expenses for the period.

Changes in the recognized economic obligations from employee benefit plans and the employer-paid contributions for the year under review amounted to CHF 30 million (previous year: CHF 25 million) and are included in personnel expenses.

Accounting principles

The employee benefit plans of the GF Corporation comply with the legislation in force in each country. Employee benefit plans are mostly institutions and foundations that are independent of the GF Corporation. They are usually financed by both employee and employer contributions.

The economic impact of the employee benefit plans is assessed each year. Surpluses or deficits are determined by means of the annual statements of each specific benefit plan, which are based either on Swiss GAAP FER 26 (Swiss benefit plans) or on the accepted methods in each foreign country (foreign plans). An economic benefit is capitalized if it is permitted and intended to use the surplus to reduce the employer contributions. Any employer contribution reserves are also capitalized. An economic obligation is recognized as a liability if the conditions for a provision are met. They are reported under "Employee benefit obligations". Changes in the economic benefit or economic obligation, as well as the contributions incurred for the period, are recognized in "Personnel expenses" in the income statement.

5.2 Other financial assets

CHF million	31.12.2022	31.12.2021
Investments in associates	1	2
Non-current loans and receivables	128	80
Securities for the settlement of pension liabilities	2	3
Other securities	6	8
Other financial assets third parties	136	90
Total	137	93

The increase in non-current loans and receivables was explained by several factors.

First, a contingent purchase price component resulting from the divestment of GF Linamar LLC of CHF 17 million is included. The payout will depend on the performance of the divested GF Corporate Company in the years 2023 – 2027.

Next, investment properties used for production purpose by one of the divested German iron foundries was transferred in a non-cash transaction to the entity against granting of new mezzanine financing over the amount of CHF 29 million. The transfer was done in order to strengthen the balance sheet and improve the commercial standing of the business. The former iron foundries in Germany and Austria further drew down existing credit lines of CHF 27 million (previous year: CHF 3 million). Thereof CHF 19 million are secured by properties.

Following these transactions and given the substantial increase in market interest rates and discount rates, the valuation of the loans was re-assessed and the value adjustments were increased to CHF 39 million (previous year: CHF 15 million).

Other securities consist mainly of investment securities held in the captive insurance, non-consolidated investments without significant influence, as well as non-current prepayments.

In 2021, GF increased its stake in Oxford Flow Utility & Industries Ltd. to 22.96%. The investment continued to be classified as an investment in associates with the acquired goodwill offset within equity.

Accounting principles

Non-current loans and receivables are recognized at amortized cost. In addition, an impairment is recorded in case the assumed present value of expected cash flows is below the carrying value of the non-current loans and receivables.

In 2022, a material contingent consideration from a divestment resulted, which is linked to the future profitability of the divested business. The contingent consideration was recorded as "Other financial assets" at actual value and was appropriately discounted. The financial asset is re-measured at each subsequent reporting date. Changes in the actual value of contingent consideration are recognized in the consolidated income statement in "Other operating income" or "Operating expenses".

Associates are companies over which the GF Corporation exercises significant influence. Investments in associates are accounted for under the equity method. Any acquired goodwill is offset within equity. The share of results of associates is reported in the consolidated income statement.

Management assumptions and estimates

The recoverability of non-current loans and receivables is assessed based on the debtors' ability to repay on time and in full. In order to build this assessment, management regularly observes the debtors' adherence to the interest payments and principal amortization schedule. In the case of investments in associates, management also assesses the debtor's ability to continue as a going concern. Assessing the going concern assumptions requires management to assess the risk and opportunities of the debtors' business models, which are inherently subject to a higher level of estimation uncertainty. Such assessments may change in the following year depending on the future development of the debtors' businesses.

To determine the actual value of the contingent consideration, the sales and EBITDA of the divested business must be estimated and these input factors are not directly observable for the GF Corporation. Changes in these input factors might result in a significantly higher or lower measurement.

5.3 Income taxes

Income tax expenses

	2022			2021		
CHF million	Total	Thereof current taxes	Thereof deferred taxes	Total	Thereof current taxes	Thereof deferred taxes
Effective income tax expense reconciliation						
Profit before taxes	354			253		
Statutory tax rate in %	14			14		
Income tax expense at statutory tax rate	50	48	1	35	37	-2
Effect of income taxed at different rates ¹	28	45	-17	20	26	-6
Non-tax deductible expenses/tax exempted income	-5	-5		-3	-3	
Use of unrecognized tax loss carryforwards	-12	-16	4	-7	-8	1
Effect of non-recognition of tax losses in current year	5	5		6	6	
Derecognition of previously capitalized tax loss carryforwards	2		2			
Tax adjustments related to previous periods, net	1	1		-1	-1	
Non-creditable foreign withholding tax	6	6		4	4	
Other effects		-1	1	-1	-2	1
Effective income tax expense	74	83	-9	53	59	-6
Effective income tax rate in %	21			21		

¹ The GF Corporation operates worldwide and is subject to income tax in many different tax jurisdictions. The effect of income taxed at different rates may vary from year to year due to varying results of the individual GF Corporate Companies and changes in local tax rates.

The table shows the main elements that cause the GF Corporation's effective tax rate to differ from the statutory tax rate. The statutory tax rate is the ordinary tax rate applicable in the canton of Schaffhausen in Switzerland, where GF Corporation is headquartered. The above reconciliation starts with the statutory tax rate as it provides more meaningful information than a weighted average tax rate.

In December 2021, the OECD published model rules to introduce a global minimum tax of 15% for multinational companies with consolidated sales of more than EUR 750 million. Meanwhile, many jurisdictions have taken action to amend their local tax laws accordingly by 2024. As a result, multinational companies may be subject to additional taxes. Based on current knowledge, the 15% global minimum tax will likely have little or no direct impact on GF.

Accounting principles

Income taxes include current and deferred taxes. Current income taxes are calculated on the taxable profit. Deferred taxes are calculated by applying the balance sheet liability method for any temporary difference between the carrying amount according to Swiss GAAP FER and the tax basis of assets and liabilities. Tax loss carryforwards are recognized only to the extent that it is probable that future taxable profits or deferred tax liabilities will be available against which they can be offset. The calculation of deferred taxes is based on the country-specific tax rates.

Management assumptions and estimates

Current tax liabilities are calculated based on an interpretation of the tax regulations in place in the relevant countries. The adequacy of such an interpretation is assessed by the tax authorities in the course of the final assessment or tax audits. This can result in material changes to tax expense. Furthermore, in order to determine whether tax loss carryforwards may be capitalized, it is necessary to critically assess the probability of future taxable profits that can be offset. This assessment depends on a variety of influencing factors and developments.

Deferred tax assets and liabilities

	2022			2021		
CHF million	Tax assets	Tax liabilities	net	Tax assets	Tax liabilities	net
Investment properties		13	-13		20	-20
Property, plant, and equipment	15	35	-20	24	40	-16
Intangible assets	7	3	4	8	3	6
Tax loss carryforwards	5		5	11		11
Inventories	32	14	18	29	12	17
Provisions	9	3	6	10	6	4
Other interest-bearing liabilities	1	1	0	1	2	-1
Other non-interest-bearing liabilities	25	1	24	21	2	19
Other balance sheet items	10	3	7	9	2	7
Total before offsetting	104	73	31	112	86	26
Offsetting	-34	-34		-41	-41	
Total after offsetting	70	39	31	71	44	26

As of 31 December 2022, tax loss carryforwards of CHF 21 million (previous year: CHF 46 million) were capitalized, resulting in a deferred tax asset of CHF 5 million (previous year: CHF 11 million).

The unrecognized tax loss carryforwards in 2022 totaling CHF 124 million (previous year: CHF 141 million) have a potential tax relief effect of CHF 28 million (previous year: CHF 34 million), of which CHF 58 million (previous year: CHF 93 million) can be utilized for an indefinite period. CHF 1 million is to expire within one year (previous year: CHF 1 million).

Temporary differences associated with investments in subsidiaries, for which no deferred tax liabilities have been recognized, amounted to CHF 563 million as of 31 December 2022 (previous year: CHF 557 million).

Accounting principles

Deferred tax assets and liabilities are offset within GF Corporate Companies when there is a legally enforceable right to offset current tax assets against current tax liabilities and the deferred taxes related to the same fiscal authority. Deferred tax assets and liabilities are calculated based on the actually expected income tax rates for each GF Corporate Company. No deferred tax is provided for temporary differences on investments in subsidiaries where the timing of the reversal of the temporary difference is controlled by the GF Corporation and where it is probable that the temporary difference will not be reversed in the foreseeable future.

5.4 Non-operating result

The non-operating result of CHF 8 million (previous year: CHF –2 million) includes the result of investment properties. This includes the profit from the sale of an investment property, see also [notes 2.6](#) and [5.2](#).

5.5 Related parties

Related parties include associates, members of the Board of Directors and the Executive Committee, pension funds, and similar institutions.

Transactions with associates

There were no significant transactions with associates in the year under review or in the previous year. Hence, no material receivables or payables were outstanding.

Transactions with members of the Board of Directors and the Executive Committee

Total compensation of the Board of Directors and Executive Committee is broken down as follows:

CHF 1'000	2022	2021
Cash compensation	7'319	6'718
Pension funds	552	521
Social security	634	608
Share-based compensation ¹	3'637	3'784
Other compensation	12	
Total compensation	12'154	11'631

¹ The disclosed value corresponds to the regulation of the Compensation Report.

A total of 392'684 shares (previous year adjusted for share split: 356'540) were held by the Board of Directors, the Executive Committee, as well as parties related to them, corresponding to 0.5% of issued shares (previous year: 0.4%).

No member of the Board of Directors or the Executive Committee or any persons related to them received any fees or other compensation for additional services to GF or its GF Corporate Companies in 2022 or in 2021.

Neither GF nor any GF Corporate Company granted any guarantees, loans, advances, or credit facilities to members of the Board of Directors or the Executive Committee or to any persons related to them in 2022 or 2021.

Significant shareholders

An overview can be found in the [Corporate Governance Report \(GF share and shareholders\)](#).

Transactions with pension funds and similar institutions

The GF Corporation holds current accounts with some of its related pension funds and similar institutions. As of the end of the financial year, it had a liability of CHF 0 million (previous year: CHF 2 million). As in the previous year, the current accounts bear an interest of 1%. Furthermore, contributions of CHF 2 million were made to similar institutions (previous year: CHF 2 million).

5.6 Events after the balance sheet date

The consolidated financial statements were approved and authorized for publication by the Board of Directors on 27 February 2023. They must also be approved at the Annual Shareholders' Meeting.

There were no events between 31 December 2022 and 27 February 2023 that would require an adjustment to the carrying amounts of assets and liabilities and equity or would need to be disclosed under this heading.

Report of the statutory auditor

to the General Meeting of Georg Fischer Ltd

Schaffhausen

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of Georg Fischer Ltd and its subsidiaries (the Group), which comprise the consolidated income statement for 2022, the consolidated balance sheet as at 31 December 2022, the consolidated statement of changes in equity and consolidated cash flow statement 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 (pages 228 to 277) 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 Swiss GAAP FER and comply with Swiss law.

Basis for opinion

We conducted our audit in accordance with Swiss law and Swiss Standards on Auditing (SA-CH). Our responsibilities under those provisions and standards are further described in the 'Auditor's responsibilities for the audit of the consolidated financial statements' section of our report. We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, 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 15 million
	<p>We performed full scope audit work on 47 reporting units. These companies contribute 61% of the Group's sales and comprise 68% of the Group's total assets. In addition, specified procedures were performed on a further three reporting units representing 16% of the Group's sales and 6% of the Group's total assets.</p> <p>As key audit matter the following area of focus has been identified:</p> <p>Valuation of remaining financial assets from divestments</p>

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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 15 million
Benchmark applied	Profit before taxes
Rationale for the materiality benchmark applied	We chose profit before taxes as the benchmark because, in our view, it is the benchmark against which the performance of the Group is most commonly measured. Additionally, profit before taxes is a generally accepted benchmark for materiality considerations.

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.

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 Group comprises three divisions, GF Piping Systems, GF Casting Solutions and GF Machining Solutions, which operate across three geographical regions – Europe, North/South America and Asia. The Group's financial statements are a consolidation of 137 reporting units, including the Group's operating businesses as well as central service functions. Each unit is considered a component for audit purposes.

We identified 47 reporting units that, in our view, required a full scope audit and three reporting units that required specified procedures owing to their size and risk characteristics. These 50 reporting units contribute 77% of the Group's sales and comprise 74% of the Group's total assets.

The remaining 23% of the Group's sales and 26% of the Group's total assets are represented by a large number of smaller reporting units. None of these units individually contributes more than 2.5% to the Group's sales or more than 5% to the Group's total assets.

Where the work was performed by component auditors, we determined the necessary level of our further involvement in the audit work in addition to providing our instructions. This consisted of inquiries of component audit teams, inspecting their work in selected areas, conducting planning and closing calls, or reviewing their final reporting.

Further specific audit procedures on central service functions, Group consolidation and areas of significant judgement (including M&A transactions, taxation, treasury and litigation) were carried out under the direct supervision of the Group audit team.



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.

Valuation of remaining financial assets from divestments

Key audit matter	How our audit addressed the key audit matter
<p>The Group had disposed of automotive iron foundries in Germany (Singen and Mettmann) and in Austria (Herzogenburg) in prior years. To finance the transactions, the new owners in Germany and in Austria were granted loans in the amounts of CHF 61 million and CHF 10 million, respectively.</p> <p>The financing of the divested companies was adjusted in subsequent years and has a carrying amount of CHF 106 million as at 31 December 2022. The loans are recorded under other financial assets.</p> <p>Impairment testing of other financial assets arising from the financing of the divestments in Germany and Austria requires estimates and assumptions regarding the borrowers' ability to repay the loans and whether the interest rates attached to the loans are in line with market conditions.</p> <p>For further details, please refer to note 5.2 'Other financial assets'.</p>	<p>We performed the following audit procedures:</p> <ul style="list-style-type: none"> We assessed the contractual agreements and assumptions used by Management as well as the calculation it performed in connection with the impairment testing of other financial assets. The significant assumptions concern the assessment of the borrowers' ability to repay the loans and whether the interest rates applied to the loans are in line with market conditions. We used observable market data in our assessment of whether the interest rates attached to the loans are in line with market conditions. We examined whether the presentation and disclosure were in accordance with the requirements of Swiss GAAP FER. <p>Based on the audit evidence obtained, we consider the approach chosen by the Board of Directors and Management for the valuation of the remaining financial assets and the corresponding disclosure to be appropriate.</p>

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, the compensation report 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 Swiss GAAP FER 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 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



Beat Inauen
Audit expert
Auditor in charge



Tobias Handschin
Audit expert

Zürich, 27 February 2023

Georg Fischer Ltd

income statement

CHF 1'000	Notes	2022	2021
Dividend income		197'152	150'525
Income from GF Corporate Companies	3.1	68'931	58'363
Commission income from GF Corporate Companies	3.2	4'633	8'002
Other income		1'255	1'790
Total income		271'971	218'680
Value adjustment on investments	3.3	-40'583	
Other expenses for investments		-2'840	-2'585
Cost of services provided by GF Corporate Companies		-2'775	-2'604
Personnel expenses		-30'442	-27'574
Other operating expenses	3.4	-20'547	-19'600
Depreciation on tangible and intangible fixed assets		-514	-348
Operating result		174'270	165'969
Financial income	3.5	10'548	5'784
Financial expenses	3.5	-31'368	-8'352
Profit before taxes		153'450	163'401
Direct taxes		-3'723	-2'903
Net profit for the year		149'727	160'498

Georg Fischer Ltd balance sheet

CHF 1'000	Notes	31.12.2022	31.12.2021
Cash and cash equivalents	3.6	337'923	423'190
Current receivables GF Corporate Companies		29'637	11'111
Current receivables third parties		724	2'181
Accrued income and prepaid expenses		11'197	6'632
Current assets		379'481	443'114
Financial assets GF Corporate Companies	3.7	160'129	133'811
Financial assets third parties	3.7	92'663	61'460
Investments	3.8	1'431'257	1'415'249
Tangible fixed assets		192	79
Intangible fixed assets		1'364	1'167
Non-current assets		1'685'605	1'611'766
Assets		2'065'086	2'054'880
Short-term interest-bearing liabilities GF Corporate Companies		51'189	124'874
Short-term interest-bearing liabilities third parties			1'697
Other current liabilities third parties		8'476	5'840
Deferred income and accrued expenses		24'258	16'096
Current liabilities		83'923	148'507
Long-term interest-bearing liabilities GF Corporate Companies		6'893	7'232
Long-term interest-bearing liabilities third parties	3.9	401'674	401'965
Provisions	3.10	27'606	24'408
Non-current liabilities		436'173	433'605
Liabilities		520'096	582'112
Share capital	3.11	4'101	4'101
Statutory capital reserves		89'506	89'506
Statutory retained earnings		59'234	59'234
Profit carried forward		1'249'492	1'169'644
Net profit for the year		149'727	160'498
Result from treasury shares		768	1'256
Treasury shares	3.12	-7'838	-11'471
Equity		1'544'990	1'472'768
Liabilities and equity		2'065'086	2'054'880

Notes to the financial statements

1 General information

These annual financial statements were prepared in accordance with the provisions on commercial accounting of the Swiss Code of Obligations. The main principles applied that are not prescribed by law are described below. Georg Fischer Ltd (GF), Schaffhausen (Switzerland), reports its consolidated financial statements on the basis of a recognized standard (Swiss GAAP FER) and has therefore, in accordance with the legal provisions, decided to not to provide a management report, a cash flow statement or a note on the audit fees.

2 Significant accounting principles

2.1 Financial income and expenses

Financial assets and interest-bearing liabilities from GF Corporate Companies in foreign currencies are valued at year-end exchange rates. Realized currency gains and losses, and all unrealized losses are recognized, whereas unrealized gains are not recognized.

2.2 Financial assets

The valuation is carried out at nominal values, taking into account any value adjustments required.

2.3 Investments

Investments are valued according to the principle of individual valuation. In addition, further overall value adjustments can be made.

2.4 Interest-bearing liabilities

Interest-bearing liabilities are recognized at nominal value. Placement costs of bonds and bond premiums are accrued over the duration of the bond.

2.5 Derivative financial instruments

Derivative financial instruments are used for hedging purposes. These instruments are measured at actual value together with the underlying transaction. Changes in actual value are recognized in the income statement.

2.6 Treasury shares

Treasury shares are recognized at cost and deducted from shareholder's equity. The gain or loss from the sale or transfer of treasury shares is recognized in shareholder's equity as an increase or reduction in retained earnings.

3 Disclosure on income statement and balance sheet positions

3.1 Income from GF Corporate Companies

The income from GF Corporate Companies consisted primarily of licensing income for the use of the corporate brand as well as income for other services provided centrally.

3.2 Commission income from GF Corporate Companies

This position contains commission income from GF Corporate Companies for guarantees issued.

3.3 Value adjustments on investments

This position includes value adjustments on investments held by Georg Fischer Ltd.

3.4 Other operating expenses

The main expense items relate to external consulting services, marketing expenses, compensation for the Board of Directors, and IT costs.

3.5 Financial income and expenses

The financial income mainly includes interest income on the loans granted to GF Corporate Companies. The financial expenses include technical value adjustments of CHF 24 million on non-current loans that were necessary due to the increase in global interest rates and discount rates (previous year: CHF 1 million). Furthermore, the position mainly includes interest expenses for the outstanding bonds of CHF 400 million.

3.6 Cash and cash equivalents

This balance sheet item includes bank accounts in the amount of CHF 103 million (previous year: CHF 108 million) and fixed-term deposits in the amount of CHF 235 million (previous year: CHF 315 million).

3.7 Financial assets GF Corporate Companies and third parties

Financial assets GF Corporate Companies contain long-term loans.

Financial assets third parties mainly include loans in the form of mezzanine financing and loans secured by properties in the amount of CHF 92 million (previous year: CHF 60 million). The net increase includes granting of new loans, negative currency effects as well as technical value adjustments.

3.8 Investments

Direct and indirect investments in GF Corporate Companies include the companies listed in [note 4.2](#) in the consolidated financial statements.

3.9 Long-term interest-bearing liabilities third parties

This balance sheet item contains a 10-year bond in the amount of CHF 200 million with a coupon of 1.05% and a maturity date of 20 April 2028, as well as a 9.5-year bond issued on 25 September 2020 in the amount of CHF 200 million with a coupon of 0.95% and a maturity date of 25 March 2030.

3.10 Provisions

The provisions mainly concern currency risks.

3.11 Share capital

The Annual Shareholders' Meeting on 20 April 2022 approved a share split in the ratio of 1:20, resulting in 82'017'960 registered shares at a par value of CHF 0.05 each. As of 31 December 2022, the number of registered shares and the par value were unchanged. The dividend-bearing nominal capital amounted to CHF 4'100'898.

Until 19 April 2024, the maximum authorized share capital is CHF 400'000 divided into 8'000'000 fully paid-in registered shares with a par value of CHF 0.05 each. The conditional capital consists of a maximum of CHF 400'000 divided into 8'000'000 fully paid-in registered shares with a par value of CHF 0.05 each. The maximum amount of the authorized or conditional capital is reduced by the amount of authorized or conditional capital created through the issue of bonds or similar debt instruments or new shares.

3.12 Treasury shares

	2022			2021		
	Number of shares	Ø transaction price in CHF	Total in CHF 1'000	Number of shares ¹	Ø transaction price in CHF ¹	Total in CHF 1'000
Balance at 1.1.	186'020	61.67	11'471	153'640	46.47	7'139
Purchases	89'948	57.55	5'176	169'440	66.10	11'201
Transfers (share-based compensation)	-143'595	61.35	-8'809	-137'060	50.11	-6'869
Balance at 31.12.	132'373	59.21	7'838	186'020	61.67	11'471

¹ In April 2022, a 1:20 share split was conducted, see note 3.11. Previous year figures have been adjusted accordingly.

Treasury shares were allocated as part of the share-based compensation as follows:

	2022		2021	
	Allocated treasury shares	Total in CHF 1'000	Allocated treasury shares ¹	Total in CHF 1'000
Board of Directors	26'084	1'544	24'940	1'538
Executive Committee	10'940	686	11'880	641
Senior Management	106'571	6'578	100'240	4'690
Total	143'595	8'809	137'060	6'869

¹ In April 2022, a 1:20 share split was conducted, see note 3.11. Previous year figures have been adjusted accordingly.

4 Additional information

4.1 Contingent liabilities

CHF 1'000	31.12.2022	31.12.2021
Guarantees and pledges to GF Corporate Companies in favor of third parties	1'342'541	1'511'095
Guarantees to third parties	63'657	90'266
Guaranteed maximum amount	1'406'198	1'601'361
Thereof utilized	549'894	755'381

The decrease in guarantees and pledges to GF Corporate Companies in favor of third parties is mainly due to a bond repayment on 12 September 2022 of Georg Fischer Finanz Ltd in the amount of CHF 150 million.

In addition, Georg Fischer Ltd bears joint liability with regard to the Swiss Federal Tax Administration for the amounts due of value-added tax of all the Swiss GF Corporate Companies.

4.2 Pension fund obligations

At year-end 2022, there were no pension fund obligations (previous year: CHF 1.7 million).

4.3 Residual amounts of lease liabilities

As in the previous year, there are no material lease liabilities which cannot be terminated within twelve months.

4.4 Significant shareholders

An overview can be found in the Corporate Governance Report ([GF share and shareholders](#)).

4.5 Shareholdings of members of the Board of Directors and Executive Committee

As at 31 December 2022 and 2021, members of the Board of Directors as well as parties related to them held the following number of Georg Fischer shares:

Member	Function	31.12.2022	31.12.2021 ¹
Yves Serra	Chairman Board of Directors	186'700	180'900
Hubert Achermann	Vice Chairman Board of Directors Independent Lead Director	20'780	17'780
Riet Cadonau	Member	20'100	17'100
Peter Hackel	Member	8'140	5'140
Roger Michaelis	Member	32'120	29'120
Eveline Saupper	Member	33'340	30'340
Jasmin Staiblin	Member	35'080	32'680
Ayano Senaha ²	Member	2'084	
Total Board of Directors		338'344	313'060

¹ In April 2022, a 1:20 share split was conducted, see note 3.11. Previous year figures have been adjusted accordingly.

² Elected to the Board of Directors on 20 April 2022.

As at 31 December 2022 and 2021, members of the Executive Committee as well as parties related to them held the following number of Georg Fischer shares:

Member	Function	31.12.2022	31.12.2021 ¹
Andreas Müller	CEO	15'440	12'160
Mads Joergensen	CFO	8'800	8'800
Joost Geginat	President of GF Piping Systems	12'420	9'140
Carlos Vasto	President of GF Casting Solutions	3'280	980
Ivan Filisetti	President of GF Machining Solutions	14'400	12'400
Total Executive Committee		54'340	43'480

¹ In April 2022, a 1:20 share split was conducted, see note 3.11. Previous year figures have been adjusted accordingly.

As at 31 December 2022, a total of 392'684 shares (previous year adjusted for share split: 356'540 shares) were held by the Board of Directors and the Executive Committee, corresponding to 0.5% of issued shares (previous year: 0.4%).

Neither Georg Fischer Ltd nor its GF Corporate Companies granted any guarantees, loans, advances, or credit facilities to members of the Board of Directors or of the Executive Committee or related parties.

4.6 Information on the requirements of the Gender Equality Act

In the year 2022, an equal pay analysis was conducted with a certified external partner applying an accepted method. The outcome confirmed compliance with internal equal pay for equal work pay practices and guidelines. The equal pay analyses is currently verified by an external auditor. The outcome of the audit will be disclosed in the next report.

In 2022, Georg Fischer Ltd employed 123 full-time equivalents on average (previous year: 104).

Proposal by the Board of Directors

for the appropriation of retained earnings 2022

CHF 1'000	2022	2021
Net profit for the year	149'727	160'498
Earnings carried forward	1'249'492	1'169'644
Result from treasury shares	768	1'256
Retained earnings	1'399'987	1'331'398
Proposed/paid dividend ¹	-106'623	-81'906
To be carried forward	1'293'364	1'249'492

1 No distribution will be made for treasury shares held by Georg Fischer Ltd.

The Board of Directors will propose to the Annual Shareholders' Meeting of 19 April 2023 to pay a dividend of CHF 1.30 per registered share (previous year adjusted for share split: CHF 1.00) out of retained earnings.

Report of the statutory auditor

to the General Meeting of Georg Fischer Ltd

Schaffhausen

Report on the audit of the financial statements

Opinion

We have audited the financial statements of Georg Fischer Ltd (the Company), which comprise the income statement for the year 2022, the balance sheet as at 31 December 2022, and the notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the financial statements (pages 282 to 288 and 267 to 270) 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 those provisions and standards are further described in the 'Auditor's responsibilities for the audit of the financial statements' section of our report. We are independent of the 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

<p>Overview</p> 	<p>Overall materiality: CHF 2.1 million</p> <p>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.</p> <p>As key audit matters the following areas of focus have been identified:</p> <ul style="list-style-type: none"> Valuation of investments Impairment testing of financial assets Corporate Companies
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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 financial statements are free from material misstatement. Misstatements may arise due to fraud or

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

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

Overall materiality	CHF 2.1 million
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 a holding company can be assessed, and it is a generally accepted benchmark.

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
<p>As at 31 December 2022, the Company had investments in Corporate Companies in the amount of CHF 1'431 million (prior year: CHF 1'415 million). These investments are stated at acquisition cost in accordance with the commercial accounting and financial reporting provisions of the Swiss Code of Obligations.</p> <p>The investments are valued on an individual basis. Management calculates the valuation of each Corporate Company based on the value of the underlying net assets at book value (for one third of the valuation) and the value of capitalised earnings (for the remaining two thirds).</p> <p>Where necessary, impairment charges are recognised for a loss in value. Moreover, general impairment allowances may be created in addition (see significant accounting principles in the notes to the financial statements and note 3.8 Investments).</p> <p>We consider the valuation of investments in Corporate Companies as a key audit matter due to their significance on the balance sheet.</p>	<p>To verify the appropriateness of the assessment, we performed the following:</p> <ul style="list-style-type: none"> We compared the book value of the investments in Corporate Companies as at year-end 2022 to the companies' valuations as determined by Management. We compared the underlying value of the net assets with the value of the shareholder's equity of the company concerned. We compared the earnings used for the capitalised earnings estimate with the prior year's figures and with the actual figures. We verified the capitalisation rate used against country-specific, long-term interest rate forecasts and a company-specific risk premium. <p>We consider Management's approach to be an appropriate and sufficient basis to value the investments.</p>

Impairment testing of financial assets Corporate Companies

Key audit matter

As at 31 December 2022, the Company had long-term loans to Corporate Companies of CHF 160 million (prior year: CHF 134 million). These loans to Corporate Companies were stated at nominal value in accordance with the commercial accounting and financial reporting provisions of the Swiss Code of Obligations.

Management checks whether the Corporate Companies concerned have positive equity. If this is not the case, an impairment test is performed on the individual asset concerned.

Where necessary, impairment charges are recognised for a loss in value (see significant accounting principles in the notes to the financial statements and note 3.7 Financial assets Corporate Companies and third parties).

We consider the impairment testing of loans to Corporate Companies to be a key audit matter due to the significance of these assets.

How our audit addressed the key audit matter

We compared the companies' equity values as used by Management with the values used for Group consolidation purposes. We reperformed the individual impairment tests, discussed them in detail with Management and checked them for plausibility.

We consider Management's approach to be an appropriate and sufficient basis to value the loans to Corporate Companies.

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, the compensation report 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 EXPERT-suisse 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 retained 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



Beat Inauen
Audit expert
Auditor in charge



Tobias Handschin
Audit expert

Zürich, 27 February 2023

Five-year overview GF Corporation

CHF million	2022	2021	2020	2019	2018
Orders					
Order intake	4'227	4'058	3'160	3'692	4'521
Orders on hand at year-end	931	814	514	563	623
Income statement					
Sales	3'998	3'722	3'184	3'720	4'572
EBITDA	507	412	299	374	529
EBITDA margin %	12.7	11.1	9.4	10.1	11.6
Depreciation and amortization	-116	-134	-133	-140	-147
Operating result (EBIT) before one-offs	391	278	185	281	382
Return on sales before one-offs (EBIT margin before one-offs) %	9.8	7.5	5.8	7.6	8.4
Operating result (EBIT)	391	278	166	235	382
Return on sales (EBIT margin) %	9.8	7.5	5.2	6.3	8.4
Net profit shareholders GF	276	214	116	173	281
Basic earnings per share in CHF ¹	3.37	2.62	1.41	2.12	3.43
Balance sheet as at 31.12.					
Current assets	2'489	2'459	2'142	1'999	2'128
Non-current assets	1'209	1'308	1'303	1'345	1'316
Assets	3'698	3'767	3'445	3'344	3'444
Current liabilities	1'202	1'318	986	1'012	1'124
Non-current liabilities	840	953	1'070	894	892
Liabilities	2'042	2'271	2'056	1'906	2'016
Equity	1'656	1'496	1'389	1'438	1'428
Equity ratio %	44.8	39.7	40.3	43.0	41.5
Return on equity (ROE) %	17.8	13.8	7.9	12.0	19.9
Net working capital	876	781	707	856	926
Invested capital (IC)	1'277	1'355	1'313	1'473	1'494
Return on invested capital (ROIC) %	23.4	16.4	9.3	12.4	22.4
Net debt (+)/Net cash (-)	-159	54	117	232	238
Cash flow statement					
Cash flow from operating activities	326	288	342	318	397
Cash flow from operating activities in % of sales	8.1	7.7	10.7	8.5	8.7
Additions to property, plant, and equipment	-160	-135	-137	-178	-234
Cash flow from investing activities	-125	-178	-118	-186	-404
Free cash flow before acquisitions/divestments	146	151	230	137	147
Free cash flow	201	110	224	132	-7

¹ In April 2022, a 1:20 share split was conducted. Previous years' figures have been adjusted accordingly.

	2022	2021	2020	2019	2018
Employees as at 31.12.					
Europe	8'224	7'941	7'792	8'373	8'721
– Thereof Germany	1'214	1'153	1'177	1'490	1'450
– Thereof Switzerland	3'565	3'412	3'344	3'397	3'406
– Thereof Rest of Europe	3'445	3'376	3'271	3'486	3'865
Asia	4'079	3'814	3'604	3'545	3'725
– Thereof China	3'462	3'246	3'055	2'997	3'199
– Thereof Rest of Asia	617	568	549	548	526
Americas	2'225	2'554	1'938	1'922	1'740
Rest of world	679	802	784	838	841
Total number of employees	15'207	15'111	14'118	14'678	15'027

+GF+



Corporate Governance Report

Going forward and shaping the future

Corporate Governance Report

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Introduction by the Chairman of the Board of Directors

Dear Shareholders,

On behalf of the Board of Directors of GF, I am pleased to present the 2022 Corporate Governance chapter.

Headwinds were mastered

In 2022, the war in Ukraine had a significant impact on the European economy, including a sharp rise in input costs and interest rates, which could be compensated by well-managed price adjustments. Moreover, the government-mandated lockdowns in most parts of China affected both our facilities and our supply chains in this important market.

With respect to China, only virtual interactions were possible for most of the year. However, we were able to take measures to minimize the impact of this situation, thanks to the high level of flexibility and dedication demonstrated by our local management and employees. Our heartfelt gratitude goes to them.

The April 2022 Annual Shareholders' Meeting was also held virtually for the third time on a statutory basis with dedicated channels opened to allow shareholders to ask questions. We will return to a regular in-person Annual Meeting format in April 2023.

Governance roadshows intensified

During the period under review, we continued to engage in a proactive dialogue with our shareholders and proxy advisors. These discussions were mostly held online and led by our Chairman, who was joined by our Independent Lead Director, the Chairwoman of our Compensation Committee and our Head of Investor Relations.

The feedback and updates we received during these exchanges were very helpful, and centered on topics such as Board recruitment, ESG and compensation. We certainly continue to proactively seek and engage in these dialogues, as they provide us with a valuable external perspective and welcome feedback that supports us in our ongoing development.

Board refreshment and diversity

Following worldwide searches, we have announced that we are proposing Michelle Wen and Monica de Virgiliis as new members of the Board of Directors at the next Annual Shareholders' Meeting on 19 April 2023. Furthermore, Jasmin Staiblin will not stand for re-election due to GF's twelve year-limit on Board tenure, while Riet Cadonau has decided not to stand for re-election for personal reasons.

Michelle Wen brings a wealth of experience in supply chains in several industries, including the automobile sector, a key market especially for GF Casting Solutions. Monica de Virgiliis' long tenure in the semiconductor industry and present responsibilities in the utility business will certainly support GF Piping Systems. Both Michelle Wen and Monica de Virgiliis would ideally complement our board. The skills of all board members are individually disclosed in this report (see [Diversity](#)). This serves as a basis for ongoing and future searches.

Risk Management

The regular board risk management workshop took place in December 2022. The results of the workshop were compared to management views and reconciled. The Audit Committee deepened its cybersecurity risk analyses and monitored progress as presented by management.

Board Strategy Meeting

With Innovation as the strategic topic of the year, a two-day seminar was held in September to review GF's innovation roadmap in line with the Strategy 2025.

The management also presented this topic to analysts and investors at GF's sixth Capital Market Day. The event received a very positive feedback. Innovation is a key differentiator for GF. Its link and focus on Sustainability is well in line and congruent with GF's strategy.

Sustainability well-integrated into GF's activities

A key management objective is the share of products and services with environmental or social benefits. This drives both R&D and sales activities.

Consequently, GF must also be at the forefront with regards to its environmental journey and the reduction of greenhouse gas (GHG) emissions in its own facilities. In 2022, GF reached an important milestone in this area: the Science Based Target initiative (SBTi) validated the company's science-based targets to reduce GHG emissions along its value chain. These targets are fully aligned with the Paris Agreement to limit global warming to 1.5° C.

In addition, the combined report 2022 will for the first time integrate both financial and sustainability reporting. The Nomination and Sustainability Committee met four times to review and monitor progress on all above-mentioned topics.

Share split to widen scope of investors

A share split in the ratio 1:20 has been implemented in April 2022 in order to facilitate the entry of individual shareholders into GF's capital. The number of shareholders has increased to more than 20'000.

We thank all our investors for their trust in our company. We hope you find this report interesting and informative and look forward to continuing the dialogue with you, our shareholders and stakeholders.

Sincerely,

A handwritten signature in black ink, appearing to read 'Y.S.', with a large, sweeping flourish extending upwards and to the right.

Yves Serra

Chairman of the Board of Directors

Content of the report

The present publication fulfills all obligations of the SIX Exchange Regulation directive on information relating to Corporate Governance and is based on the Swiss Code of Best Practice for Corporate Governance of Economiesuisse, the Swiss business federation. The [Compensation Report](#) is presented in a separate chapter. All data and information apply to the reporting date as of 31 December 2022, unless otherwise noted. Any changes occurring before the approval of the Corporate Governance Report by the Board of Directors on 27 February 2023 are listed at the end of this chapter. Any changes occurring after the editorial deadline can be found on our website.

This report provides information on structures and processes, areas of responsibility and decision-making procedures, control mechanisms, as well as the rights and obligations of the various stakeholders. GF also publishes the Articles of Association of Georg Fischer Ltd, the internal Organization and Business Rules, the Code of Conduct, and more information on the website.

+ www.georgfischer.com/en/investors/environmental-social-governance/corporate-governance.html

Governance bodies



Board of Directors

The members of the Board of Directors are elected individually by the Annual Shareholders' Meeting for a term of one year until the conclusion of the next ordinary Annual Shareholders' Meeting. Based on the Swiss Code of Best Practice for Corporate Governance from Economiesuisse, all members of the Board of Directors are non-executive and independent. Moreover, the Chairman of the Board of Directors does not simultaneously act as the CEO.

The Board of Directors assigns the preparation of businesses to the following three standing committees:

- Audit Committee
- Compensation Committee
- Nomination and Sustainability Committee

At the end of 2022, the Board of Directors was composed of eight members, with diversity of background, experience, nationalities, skills, and knowledge. Three of the eight (38%) members of the Board of Directors are female. The three committees each consist of three members, with every members of the Board of Directors belonging to at least one committee. Information on the members of the Board of Directors' backgrounds can be found in the chapter [Members of the Board of Directors](#).

Management structure

The Board of Directors appoints the persons entrusted with the management. The CEO, supported by the other members of the Executive Committee, bears responsibility for the management of the GF Corporation, where this is not delegated to the divisions or the Corporate Staff Units. The Presidents of the divisions, supported by the Heads of the Business Units and Service Centers, bear responsibility for the management of the divisions. The Corporate Staff Units support the Board of Directors and the Executive Committee in their supervisory and management functions.

Compensation, shareholdings, and loans

Information regarding the compensation paid to and shareholdings of the members of the Board of Directors and Executive Committee, as well as loans granted to those individuals can be found in the [Compensation Report](#) and in note [4 Additional information](#) of the financial statements of Georg Fischer Ltd.

Corporate structure and affiliated companies

The parent company of all GF Corporate Companies is Georg Fischer Ltd. It is incorporated under Swiss law and domiciled in Schaffhausen (Switzerland). Georg Fischer Ltd is listed on the SIX Swiss Exchange (GF; security number: 116 915 100). Its share capital is CHF 4'100'898, and its market capitalization was CHF 4'642 million as of 31 December 2022 (previous year: CHF 5'680 million).

The GF Corporation has three operational divisions: GF Piping Systems, GF Casting Solutions, and GF Machining Solutions, plus the Corporate Staff Units Finance & Controlling and Corporate Development. The GF organization structure is displayed in the chapter [Organization of GF](#) in the Business Report.

An overview of all affiliated companies in the scope of consolidation can be found in the notes to the consolidated financial statements in note [4.2 Corporate companies](#). The list contains the company name, domicile, share capital, and percentage held by GF.

Memberships

As a leading Swiss industrial company, GF is actively involved in important industrial associations in Switzerland. The CEO of GF is a member of the Council of the Board of Swissmem, the leading association for SMEs and large companies in the Swiss technology industry. GF managers are also actively involved in working groups and training courses. Swissmem is one of the contracting parties to the collective labor agreement for all employees in industry, a cornerstone of the social partnership with the trade unions that has existed in Switzerland for over 70 years.

GF is also committed to SwissHoldings, the association of multinational companies based in Switzerland. At SwissHoldings, GF actively participates in expert groups. At the local level, the GF Corporation is a founding member of IVS, the Schaffhausen Chamber of Commerce and Industry. GF's CFO is a member of the IVS's Board of Directors and GF managers actively participate in various working groups. These associations are important contacts for the authorities and represent the interests of their members in public issues and matters to be voted on.

GF also holds significant roles in the "Vereinigung Schweizerischer Unternehmen" in Germany, the "Schweizerische Management Gesellschaft", the local association ITS Industrie- und Technozentrum Schaffhausen in Switzerland and the "Komitee Weltoffene Zürich", where company's representatives serve in different functions on board level.

In the year under review, membership fees of CHF 0.15 million were paid, and no contributions were made to any political parties or to individual politicians.

GF share and shareholders

Share

Capital and share information

Fully paid-in share capital amounts to CHF 4'100'898 and is divided into 82'017'960 registered shares each with a par value of CHF 0.05. Each registered share has one vote at the Annual Shareholders' Meeting. The authorized capital and the conditional capital amount to a maximum of 8'000'000 shares in total. This would allow the share capital to be increased by a maximum of 9.75%. The maximum authorized or conditional capital is reduced by the amount that authorized or conditional capital is created by the issue of bonds or similar debt instruments or new shares.

By no later than 19 April 2024, the maximum authorized share capital will be CHF 400'000 divided into no more than 8'000'000 registered shares, each with a par value of CHF 0.05. Moreover, the share capital may be increased via the conditional capital by a maximum of CHF 400'000 through the issue of no more than 8'000'000 fully paid-in registered shares, each with a par value of CHF 0.05, through the exercise of conversion rights and/or warrants granted in connection with the issuance on capital markets of bonds or similar debt instruments of the company or one of its GF Corporate Companies. As of 31 December 2022, no such bonds or similar debt instruments were outstanding. The beneficiaries and the conditions and modalities of the issue of authorized capital are described in § 4.4a) of the Articles of Association of Georg Fischer Ltd and those of conditional capital in § 4.4b) of the Articles of Association of Georg Fischer Ltd.

+ www.georgfischer.com/en/investors/environmental-social-governance/corporate-governance.html

The subscription to and acquisition of the new shares, and any subsequent transfer of the shares, are subject to the statutory restrictions on transferability.

There are no participation or profit-sharing certificates.

Restrictions on transferability

Entry in the company's share register as a shareholder or beneficiary with voting rights is subject to the approval of the Board of Directors. Approval of registration is subject to the following conditions: a natural person or legal entity may not accumulate, either directly or indirectly, more than 5% of the registered share capital. Persons who are bound by capital or voting rights, by consolidated management or similar, or who have come to an agreement for the purpose of circumventing this rule, shall be deemed as one person.

Nominee registrations

Persons who hold shares for third parties (referred to as "nominees") are only entered in the share register with voting rights if the nominees declare their willingness to disclose the names, addresses, and shareholdings of those persons on whose behalf they hold the shares. The same registration limitations apply, mutatis mutandis, to nominees as to individual shareholders.

Cancellation or amendment of restrictions

The cancellation or easing of the restrictions on the transferability of registered shares requires a resolution of the Annual Shareholders' Meeting passed by at least two-thirds of the shares represented and an absolute majority of the par value of the shares represented.

Convertible bonds and options

There are no outstanding convertible bonds, and GF has issued no options.

Share split

The Annual Shareholders' Meeting on 20 April 2022 approved the proposed share split in the ratio of 1:20, resulting in 82'017'960 registered shares at a par value of CHF 0.05 each. The split shares traded for the first time on the SIX Swiss Exchange on 28 April 2022 with the new ticker symbol "GF", new ISIN (CH1169151003) and new security number (116 915 100). In the interest of comparability, all per share figures have been adjusted accordingly.

Share information

As of 31 December	2022	2021	2020	2019	2018
Share capital					
Number of registered shares ¹	82'017'960	82'017'960	82'017'960	82'017'960	82'017'960
Thereof entitled to dividend ¹	82'017'960	82'017'960	82'017'960	82'017'960	82'017'960
Number of registered shareholders	20'987	18'907	18'518	19'767	15'521
Share prices in CHF					
Highest (intraday) ¹	74.50	77.45	57.50	52.95	71.00
Lowest (intraday) ¹	45.86	53.55	25.90	36.68	36.50
Closing ¹	56.60	69.25	57.00	49.15	39.33
Earnings per share in CHF¹	3.37	2.62	1.41	2.12	3.43
Price-earnings ratio	17	26	41	23	11
Market capitalization					
CHF million	4'642	5'680	4'675	4'031	3'225
As % of sales	116	153	147	108	71
As % of equity attributable to shareholders of Georg Fischer Ltd	290	386	346	289	233
Cash flow from operating activities per share in CHF¹	3.98	3.52	4.18	3.89	4.85
Equity attributable to shareholders of Georg Fischer Ltd per share in CHF¹	19.56	17.98	16.53	17.05	16.87
Proposed/paid dividend in CHF million	107	82	62	103	103
Proposed/paid dividend per share in CHF¹	1.30	1.00	0.75	1.25	1.25
Pay-out ratio in %	39	38	53	60	36

1 In April 2022, a 1:20 share split was conducted, see paragraph "Share split". Previous years figures have been adjusted accordingly

Ticker symbols

- Bloomberg: GF SW
- Reuters: GF.S
- Security number: 116 915 100
- ISIN: CH1169151003

Share price 2018–2022



Market capitalization and earnings per share

As of 31 December 2022, the market capitalization stood at CHF 4'642 million (previous year: CHF 5'680 million) and earnings per share at CHF 3.37 (previous year adjusted for share split: CHF 2.62).

Proposed dividend payment

At the Annual Shareholders' Meeting for the year under review, the Board of Directors will propose the payment out of retained earnings of a dividend in the amount of CHF 1.30 per share (previous year adjusted for share split: CHF 1.00).

Shareholders

Significant shareholders and shareholder groups

As of 31 December 2022, one shareholder had shareholdings above 5%. Impax Asset Management Limited, London (Great Britain), had shareholdings of 5.01%, according to the last disclosure notification published on 4 March 2020. Four shareholders had shareholdings of between 3% and 5%. The BlackRock Group, held directly or indirectly by BlackRock Inc., New York (USA), had shareholdings of 4.88%, according to the last disclosure notification published on 22 April 2022. Swisscanto Fondsleitung AG, Zurich (Switzerland), had shareholdings of 3.0357%, according to the last disclosure notification published on 25 June 2022. Credit Suisse Funds AG, Zurich (Switzerland), had shareholdings of 3.02%, according to the last disclosure notification published on 17 March 2022. Furthermore, UBS

Fund Management (Switzerland) AG, Zurich (Switzerland), had shareholdings of 3.01%, according to the last disclosure notification published on 23 September 2021.

In the year under review, six disclosure notifications were published, with four of the filings relating to BlackRock Inc., New York (USA), and one each to Credit Suisse Funds AG, Zurich (Switzerland) and Swisscanto Fondsleitungs AG, Zurich (Switzerland).

Disclosure notifications pertaining to shareholdings in Georg Fischer Ltd that were filed with Georg Fischer Ltd and the SIX Swiss Exchange are published on the latter's electronic publication platform and can be accessed via the following link:

[+ www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html](http://www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html)

Cross-shareholdings

There are no cross-shareholdings or shareholder pooling agreements with other companies.

Shareholdings of members of the Board of Directors, the Executive Committee, and the Senior Management

A total of 828'673 Georg Fischer Ltd shares were held by members of the Board of Directors, the Executive Committee, and the Senior Management as of 31 December 2022 (previous year adjusted for share split: 769'940):

	Number of Georg Fischer shares as of 31 Dec. 2022	Number of Georg Fischer shares as of 31 Dec. 2021 ¹
Members of the Board of Directors ²	338'344	313'060
Members of the Executive Committee ²	54'340	43'480
Members of the Senior Management	435'989	413'400
Total	828'673	769'940
In % of issued shares	1.01%	0.94%

¹ In April 2022, a 1:20 share split was conducted, see paragraph "Share split". Previous year figures have been adjusted accordingly

² Shareholdings of the individual members of the Board of Directors and Executive Committee are disclosed in note 4.5 of the financial statement of Georg Fischer Ltd

The shares of the share-based compensation program are either treasury shares or repurchased on the market.

Number of registered shareholders as of 31 December 2022

Number of shares	Number of registered shareholders	Shares in %
1-100	4'316	0.3%
101-1'000	12'542	6.4%
1'001-10'000	3'732	12.4%
10'001-100'000	362	8.8%
100'001-1'000'000	29	9.7%
> 1'000'000	6	18.0%
Total registered shareholders/shares	20'987	55.6%
Unregistered shares		44.4%
Total		100.0%

Registered shareholders per type as of 31 December 2022

	Shareholders in %	Shares in %
Individual shareholders	94.0%	40.4%
Legal entities	6.0%	59.6%
Total	100.0%	100.0%

Registered shareholders per country as of 31 December 2022

	Shareholders in %	Shares in %
Germany	7.0%	3.5%
Great Britain	0.4%	12.0%
Switzerland	89.1%	76.5%
USA	0.3%	3.4%
Other countries	3.2%	4.6%
Total	100.0%	100.0%

Shareholders' rights

As of 31 December 2022, Georg Fischer Ltd had 20'945 shareholders with voting rights (previous year: 18'861), most of whom reside in Switzerland. The number of registered shareholders who hold the shares as fiduciary is 42. To maintain this broad base, the Articles of Association of Georg Fischer Ltd provide for the statutory restrictions summarized hereinafter.

Restriction on voting rights

The total number of votes exercised by one person for their own shares and shares for which they vote by proxy may not exceed 5% of the votes of the company's total share capital. Persons bound by capital or voting rights, by consolidated management, or otherwise acting in concert for the purpose of circumventing this provision are deemed to be one person.

The restriction of voting rights under § 4.10 of the Articles of Association of Georg Fischer Ltd may be revoked only by a resolution of the Shareholders' Meeting, passed by a two-thirds majority of the shares represented and an absolute majority of the par value of the shares represented.

Proxy voting

A shareholder may, on the basis of a written power of attorney, be represented at the Annual Shareholders' Meeting by another shareholder entitled to vote or the independent proxy. Shareholders can also confer powers of attorney and issue instructions to the independent proxy electronically. Partnerships may be represented by a partner or authorized signatory, legal entities by a person authorized by law or the Articles of Association, married persons by their spouse, wards by their legal guardians, and minors by their legal representative, regardless of whether such representatives are shareholders or not.

Statutory quorum

For specific legal and statutory reasons (§ 12.2 of the Articles of Association of Georg Fischer Ltd), the following resolutions of the Shareholders' Meeting require a majority greater than the simple majority as laid down by law for votes. At least two-thirds of the shares represented and an absolute majority of the par value of the shares represented must be in favor of:

- the cases listed in Art. 704 para. 1 CO
- the alleviation or withdrawal of limitations upon the transfer of registered shares
- the creation, extension, alleviation, or withdrawal of the voting restrictions
- the amendments to § 16.1 of the Articles of Association of Georg Fischer Ltd
- the removal of restrictions concerning the passing of resolutions by the Shareholders' Meeting

Convocation of the Annual Shareholders' Meeting

No regulations exist which deviate from those stipulated by law.

Agenda

Shareholders representing a minimum of 0.3% of the share capital may request that an item be added to the agenda. The application must be submitted in writing no later than 60 days before the Annual Shareholders' Meeting and must specify the item to be discussed and the shareholder's proposal.

Entry in the share register

The deadline for entering shareholders in the share register with regard to attendance at the Annual Shareholders' Meeting is around ten days before the date of the Annual Shareholders' Meeting. The deadline is mentioned in the invitation to the Annual Shareholders' Meeting.

Change of control

The Articles of Association of Georg Fischer Ltd do not contain any regulations governing "opting-out" or "opting-up". Since 1 January 2014, the contractually agreed notice period for the members of the Executive Committee has been twelve months. Furthermore, a change of control will result in the cancellation of all existing disposal limitations for shares allocated according to the share plan. In the event of a change of control, bondholders, and banks have the right to demand the immediate repayment of bonds and loans before they fall due.

Blackout periods

The disclosure of the Blackout Period is based on the Directive on Information relating to Corporate Governance of the SIX Exchange Regulation.

Rules apply to the trading of Georg Fischer Ltd shares by members of the Board of Directors, Executive Committee and employees of the GF Corporation.

In accordance with the Code of Conduct and Corporate Instructions of the GF Corporation regarding the handling of insider information, members of the Board of Directors, the Executive Committee, and employees who are in possession of confidential information are not permitted to carry out transactions involving shares or other financial instruments of Georg Fischer Ltd during blackout periods. There were no exceptions to this rule in the 2022 financial year.

General blackout periods start when year-end forecasts – based on November's month-end reports – are first communicated internally and finish when the Corporate Reports are published, and when mid-year forecasts – based on May's month-end reports – are first communicated internally through to the publication of the Mid-Year Report. In the 2022 reporting year, the blackout period for the mid-year financial statements started on 13 June and for the annual financial statements on 8 December.

Board of Directors

As of 31 December 2022



Responsibilities

The Board of Directors has ultimate responsibility for supervising and monitoring the management of Georg Fischer Ltd. The Board of Directors is responsible for all matters vested to it by the law or the Articles of Association of Georg Fischer Ltd, provided it has not delegated these to other bodies. These are in particular:

- decisions on corporate strategy and the organizational structure
- appointing and dismissing members of the Executive Committee
- organizing finance and accounting
- determining the annual and investment budgets

Unless otherwise provided for by law or the Articles of Association of Georg Fischer Ltd, the Board of Directors delegates operational management to the CEO, who is assisted in this task by the Executive Committee. The extent to which competencies are delegated by the Board of Directors to the Executive Committee and the nature of the cooperation between the Board of Directors and the Executive Committee are defined by the Organization and Business Rules.

+ www.georgfischer.com/en/investors/environmental-social-governance/corporate-governance.html

Elections and term of office

As per § 16.2 of the Articles of Association of Georg Fischer Ltd, the members of the Board of Directors have to be elected individually for one year, and their term of office ends at the next ordinary Annual Shareholders' Meeting. Re-election is possible.

According to the GF Organization and Business Rules, each member must resign their mandate at the Annual General Meeting following their 72 birthday, and in principle the maximum term of office of twelve years may not be exceeded. For all members of the Board of Directors, age and term of office are within these limits. The average term of office of members of the Board of Directors is six years.

+ www.georgfischer.com/en/investors/environmental-social-governance/corporate-governance.html

2022

At the 126th Annual Shareholders' Meeting on 20 April 2022, Ayano Senaha was newly elected and seven existing members of the Board of Directors were confirmed for one additional year. After the Annual Shareholders' Meeting, the Board of Directors was composed of eight members.

Internal organizational structure

Pursuant to § 16.3 of the Articles of Association of Georg Fischer Ltd, the Annual Shareholders' Meeting elects a member of the Board of Directors as its Chairman for the period of one year until the next ordinary Annual Shareholders' Meeting has been concluded. Re-election is possible.

With the exception of the election of a Chairman of the Board of Directors, who is elected by the Annual Shareholders' Meeting, the Board of Directors constitutes itself by electing a Vice Chair from within its ranks once a year. Yves Serra was confirmed as Chairman of the Board of Directors. Hubert Achermann, who was re-elected as a member of the Board of Directors, continues to serve as Vice Chairman and Independent Lead Director.

In addition, pursuant to § 20.1 of the Articles of Association of Georg Fischer Ltd, the Annual Shareholders' Meeting elects the members of the Compensation Committee.

Diversity

The Board of Directors consists of six to nine members. Each member normally belongs to at least one of the three standing committees. When members are elected, the focus is on their experience in board, executive and management functions, legal, audit, compliance, overseas experience, sustainability, digitalization and innovation as well as the gender. The Board of Directors aims to achieve a proper balance of skills and knowledge, taking into account the main strategic focus of the GF Corporation, its international orientation, and the accounting requirements of listed companies. Expert knowledge in innovation and digitalization is being gradually expanded.

The Board of Directors consists of members from five different countries. Three of the eight members of the Board of Directors are female (quota of 38%). On 18 August 2022, GF proposed Michelle Wen for election to the Board of Directors at the next Annual Shareholders' Meeting on 19 April 2023. Michelle Wen would add a top executive with a wealth of experience in global purchasing and supply chain matters. On 17 November 2022, GF announced that Monica de Virgiliis will be proposed for election to the Board of Directors, while Jasmin Staiblin will not stand for re-election due to reaching the maximum term of office of twelve years and Riet Cadonau for personal reasons. Monica de Virgiliis would complement our board as highly experienced senior executive with her deep knowledge in energy and semiconductor fields, two key markets of GF. Subject to acceptance for election as members of the Board of Directors, four of the eight members of the Board of Directors will be female after the 2023 Annual Shareholders' Meeting (quota of 50%). The skills and knowledge required of the Board of Directors are broadly covered, and are as follows:

Name	Board	CEO	CFO	Executive Committee	Legal/audit/compliance	Overseas experience	Sustainability	Digitalization	Innovation	Gender	Country of origin	GF Board tenure (years) ¹	Age
Yves Serra	+	+		+		+	+		+	M	FRA & CHE	4	69
Hubert Achermann	+	+			+					M	CHE	9	71
Riet Cadonau ²	+	+		+				+	+	M	CHE	7	61
Peter Hackel			+				+	+		M	CHE	3	53
Roger Michaelis			+			+				M	BRA & DEU	11	63
Eveline Saupper	+				+					F	CHE	8	64
Ayano Senaha	+			+		+	+	+		F	JPN	1	40
Jasmin Staiblin ²	+	+		+					+	F	DEU & CHE	12	52
Monica de Virgiliis ³	+			+			+		+	F	ITA & FRA	-	55
Michelle Wen ³	+			+		+	+			F	FRA	-	57

1 After upcoming Annual Shareholders' Meeting

2 Will not stand for re-election at the 2023 Annual Shareholders' Meeting

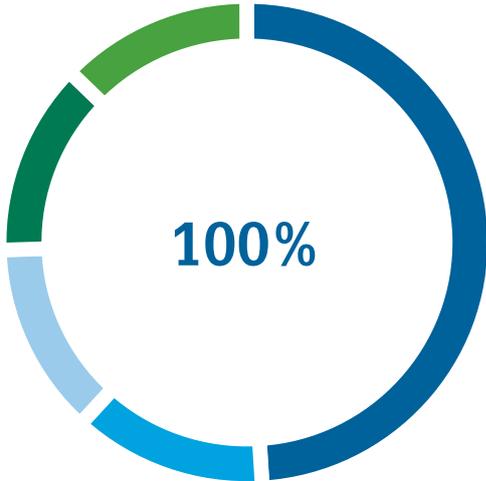
3 Designated member of the Board of Directors (to be proposed for election in April, 2023)

Criteria

Board	In a public listed company or large (private) company
CEO	In a public listed company or large (private) company
CFO	In a public listed company or large (private) company
Executive Committee	In a public listed company or large (private) company
Legal/audit/compliance	Legal degree, at least five years in a leading position in the legal/compliance field or senior audit function in a leading audit firm
Overseas experience	At least three years in a management position outside of own region
Sustainability	Head Sustainability of a large company, Chairperson of the Sustainability Committee of a large company
Digitalization	At least three years' experience in leading digitalization projects, Chief Digital Officer (CDO) of a large company
Innovation	At least three years' experience in innovation as Chief Technology Officer (CTO)/Head R&D or Chairperson Innovation Committee of a large company

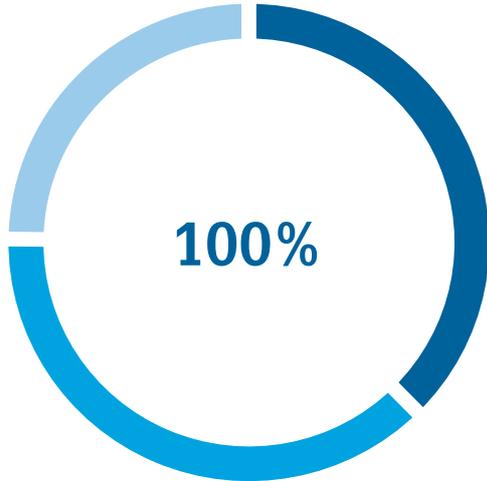
For the criteria, the size of a listed or large (private) company corresponds to a turnover of more than CHF 500 million.

Nationality^{1, 2}



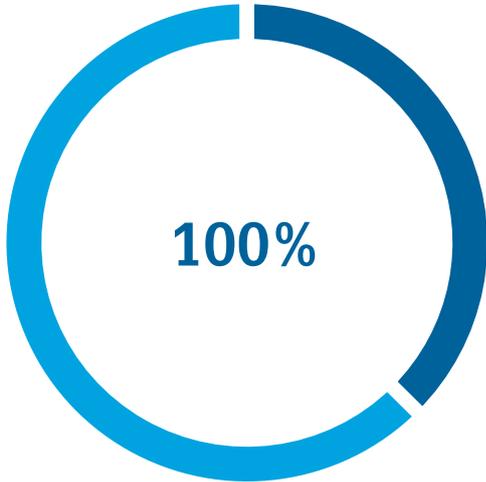
- 50% Switzerland
- 13% Brazil
- 13% France
- 13% Germany
- 13% Japan

Tenure²



- 38% < 5 years
- 38% 5 to 8 years
- 25% 9 to 12 years

Gender²



- 38% Women
- 63% Men

¹ In case of dual citizenship, the country of origin is indicated.

² Due to rounding, the numbers presented in the charts may not add up precisely to 100 percent.

Independence

Based on the Swiss Code of Best Practice for Corporate Governance from Economiesuisse all eight members of the Board of Directors are non-executive and independent. There are no significant business relationships between members of the Board of Directors or the companies or organizations they represent and Georg Fischer Ltd or a GF Corporate Company.

Independent Lead Director

Following the election of Yves Serra as the new Chairman of the Board of Directors, the Board of Directors elected the new Vice Chairman Hubert Achermann additionally as Independent Lead Director. The Independent Lead Director, together with the other independent members of the Board of Directors, will ensure efficient control and supervision in compliance with best Corporate Governance practices. By creating a strong position of Independent Lead Director with Hubert Achermann, GF is ensuring strict compliance with broadly accepted corporate governance guidelines. A brief description of the role and responsibilities of the Independent Lead Director is available on the GF website. In 2022, the Independent Lead Director held bilateral meetings with the members of the Board of Directors as well as several bilateral meetings with the CEO and the CFO.

+ www.georgfischer.com/en/investors/environmental-social-governance/corporate-governance.html

Mandate

Pursuant to § 21 of the Articles of Association of Georg Fischer Ltd, a member of the Board of Directors may at one and the same time hold no more than four additional mandates as a member of the supreme managerial or governing body of listed legal entities and no more than ten additional mandates as a member of the supreme managerial or governing body of not listed legal entities.

In addition, a member of the Board of Directors may not hold more than ten mandates that he or she exercises by order of the company, in legal entities belonging to the member's own family, in a professional or industry association, or in a charitable institution.

Mandates of associated companies or institutions, which are exercised in the function as a member of the supreme managerial or governing body of a legal entity, together count as one mandate.

Board refreshment and succession planning

The Chairman of the Board of Directors, supported by the Nomination and Sustainability Committee, is responsible for succession planning for the Board of Directors.

An individual job profile is created based on the future requirements of the Board of Directors, the results of the annual self-evaluation and the diversity and skill requirements listed in the skills matrix (in the separate section [Diversity](#)). An executive search agency that fulfills the criteria listed in the requirements specification is usually commissioned to initiate the search for a new member of the Board of Directors. The Nomination and Sustainability Committee is responsible for creating the job profile and conducting the initial screening of candidates. Candidates are also interviewed by the Chairman and other members of the Board of Directors personally before any nominations are proposed. The Nomination and Sustainability Committee makes a subsequent recommendation to the whole Board of Directors, which then decides whom to propose for nomination to the shareholders at the forthcoming Annual Shareholders' Meeting. The Head of Corporate HR provides support throughout the process.

Areas of responsibility

The members of the three standing Board Committees are listed at the beginning of this chapter. The Board Committees provide preliminary advice to the Board of Directors and do not make any definitive decisions. They discuss the issues assigned to them and make proposals to the Board of Directors as a whole. The CEO attends the meetings of the Board Committees, but is not entitled to vote. Minutes of the committee meetings are sent to all members of the Board of Directors. The Chairs of the individual committees also provide a verbal report at the next meeting of the Board of Directors and submit any proposals.

Working methods of the Board of Directors

Decisions are made by the Board of Directors as a body. Members of the Executive Committee also take part in board meetings for agenda items relating to the company's business, but are not entitled to vote. Only the CEO is present when personnel topics are dealt with. Personnel topics affecting him directly are treated in his absence. Invitations to board meetings list all the items that the Board of Directors, a Board Committee, or the CEO wish to discuss. All those attending a board meeting receive detailed written material on the proposals in advance.

Number of meetings	8
Number of attendees	8
Average duration (hours)	5:20
Meeting attendance	100%

Overview meetings

Yves Serra, Chairman	8/8
Hubert Achermann	8/8
Riet Cadonau	8/8
Peter Hackel	8/8
Roger Michaelis	8/8
Eveline Saupper	8/8
Ayano Senaha ¹	6/6
Jasmin Staiblin	8/8

¹ Ayano Senaha was elected as a new member of the Board of Directors at the Annual Shareholders' Meeting 2022.

The Board of Directors meets at least four times a year under the leadership of its Chairman. In the year under review, the Board of Directors held eight meetings. In addition to the five regular meetings, two extraordinary meetings were held to discuss and decide on operational issues of strategic importance. The annual strategy meeting was held in the reporting year as part of a visit to GF's Losone (Switzerland) site, was devoted to GF's innovations strategy, and was spread over four hours. Of the five regular and two extraordinary meetings, two lasted a full day, three half a day, and two were shorter. The average duration of the meetings was 5:20 hours. The dates of the regular meetings are generally set well in advance to enable all members to attend personally. In the year under review, some of the meetings were held virtually. The attendance rate was 100 percent. The three standing Board Committees held a total of twelve meetings. To this end, a temporary committee, which also included the Chairman and the Vice Chairman, held one meeting to discuss and deliberate on governance matters of the GF Corporation.

External consultants are brought in for their services when specific topics are involved. Further information is provided in the section on the Board Committees.

Self-evaluation

In line with the recommendations in the Swiss Code of Best Practice for Corporate Governance published by Economiesuisse, the Board of Directors carries out an annual self-evaluation of its work and that of its committees. The Board of Directors then discusses the results of the self-evaluation. The Chairman of the Board of Directors also conducts a structured bilateral meeting with each member of the Board of Directors. After every meeting of the Board of Directors, its process and the discussions are evaluated so that any potential improvements can be identified and implemented.

In 2022, the Board of Directors again conducted the self-evaluation, the results of which were discussed at the Board of Directors meeting in December 2022. Their findings will be implemented in the new reporting period.

Audit Committee

The Audit Committee consists of three members of the Board of Directors.

In the year under review, the Audit Committee held four ordinary meetings, which lasted 3:45 hours on average. As focus topics for 2022, the Audit Committee addressed the activities in the area of mergers and acquisition (M&A), risk management and sustainability reporting. All members of the Audit Committee attended all meetings. The Chairman of the Board of Directors, the CEO, the CFO, the Head of Corporate Controlling, the Head of Internal Audit, and the representatives of the external auditor also take part in the meetings.

Number of meetings	4
Number of attendees	3
Average duration (hours)	3:45
Meeting attendance	100%

Overview meetings

Hubert Achermann, Chairman	4/4
Peter Hackel	4/4
Jasmin Staiblin	4/4

The Audit Committee supports the Board of Directors in monitoring accounting and financial reporting, supervises the internal and external audit function, assesses the efficiency of the internal control system including risk management and compliance with legal and statutory provisions, and issues its opinions on transactions concerning equity and liabilities at Georg Fischer Ltd. It also focuses on ensuring cyber- and IT-security and assessing due diligence processes in M&A transactions. The Audit Committee also decides whether the GF Corporate Reports, comprising the consolidated financial statements of the GF Corporation and the financial statements of Georg Fischer Ltd, can be recommended to the Board of Directors for presentation to the Annual Shareholders' Meeting.

At the request of the Audit Committee, the external auditor also provides information on current questions related to upcoming changes in accounting and legal amendments.

+ <https://www.georgfischer.com/en/investors/environmental-social-governance/corporate-governance.html>

Compensation Committee

The Compensation Committee consists of three members of the Board of Directors, who are elected on a yearly basis by the Annual Shareholders' Meeting.

In the year under review, the Compensation Committee held four ordinary meetings, each of which lasted one to two hours. The average meeting duration was 1:10 hours. All Compensation Committee meetings were consistently attended by all of the Compensation Committee members. In addition, the CEO and the Head of Corporate HR and, if necessary, the Head of Corporate Compensation & Benefits attend the meetings.

Number of meetings	4
Number of attendees	3
Average duration (hours)	1:10
Meeting attendance	100%

Overview meetings

Eveline Saupper, Chairwoman	4/4
Hubert Achermann ¹	2/4
Riet Cadonau	4/4
Roger Michaelis ²	2/4

1 Hubert Achermann has resigned from the Compensation Committee at his own request as of the Annual Shareholders' Meeting 2022.

2 Roger Michaelis was elected as a new member of the Compensation Committee at the Annual Shareholders' Meeting 2022.

The Compensation Committee supports the Board of Directors in setting compensation policy at the highest corporate level. It uses knowledge of internal and external compensation specialists about market data from comparable companies in Switzerland, in addition to publicly available data obtained on the basis of compensation disclosures. Furthermore, based on internal and external sources, common market practices and stakeholder expectations are continuously evaluated by the Compensation Committee. The Compensation Committee proposes to the Board of Directors the total amount of compensation to be paid to the entire Executive Committee and the CEO.

+ <https://www.georgfischer.com/en/investors/environmental-social-governance/corporate-governance.html>

Nomination and Sustainability Committee

The Nomination and Sustainability Committee consists of three members of the Board of Directors. The Chairman of the Board of Directors is also Chairman of the Nomination and Sustainability Committee.

In the year under review, the Nomination and Sustainability Committee held four ordinary meetings, which lasted 2:00 hours on average. All members of the Nomination and Sustainability Committee attended all meetings. The meetings are held separately in two parts for the Nomination and Sustainability topics. In addition to the members of the committee, the CEO and the Head of Corporate HR are present during the Nomination session, while the CEO, the CFO, the Head of Corporate Sustainability, and other specialists from the GF Corporation attend the Sustainability session.

	Nomination	Sustainability	Nomination and Sustainability
Number of meetings	4	4	4
Number of attendees	3	3	3
Average duration (hours)	1:00	1:00	2:00
Meeting attendance	100%	100%	100%

	Nomination	Sustainability	Nomination and Sustainability
Yves Serra, Chairman	4/4	4/4	4/4
Hubert Achermann	4/4	4/4	4/4
Roger Michaelis ¹	2/4	2/4	2/4
Ayano Senaha ²	2/4	2/4	2/4

1 Roger Michaelis has resigned from the Nomination and Sustainability Committee as of the Annual Shareholders' Meeting 2022.

2 Ayano Senaha was elected as a new member of the Nomination and Sustainability Committee by the Board of Directors at the Annual Shareholders' Meeting 2022.

The focus in the area of nominations is on supporting the Board of Directors with succession planning and the selection of suitable candidates for the Board of Directors and the Executive Committee. The CEO and Head of Corporate HR inform the Nomination and Sustainability Committee annually about succession planning at the Senior Management levels, the talent pipeline within Senior Management, and the diversity situation. For specific recruitments at the Board of Directors and Executive Committee level, services of headhunters are hired (see separate section [Board refreshment and succession planning](#)).

The committee's focus in the area of sustainability is on advising the Board of Directors on the sustainability strategy, targets, initiatives, and legislation relating to environment, social, and governance (ESG), and includes the review of the annual Sustainability Report and supporting management in responding to stakeholders.

In the 2022 reporting year, the committee's main focus was on the commitment of the Science Based Targets and validation through SBTi, sustainability reporting in connection with the Indirect Counter-Proposal to the Corporate Responsibility Initiative, the implementation of the EU Taxonomy, and the development of global ESG reporting requirements.

In the year under review, GF conducted one further mandatory equal pay analysis in Switzerland with a certified external partner using the well accepted L&M-Aba R[®] method. This became necessary because one GF company in Switzerland has exceeded 100 employees, thus requiring an analysis. The outcome confirms compliance with GF's internal equal pay for equal work pay practices and guidelines. The audit of this analysis conducted in 2022 is still pending. The analyses conducted in the previous year were verified by an independent external auditor.

<https://www.georgfischer.com/en/investors/environmental-social-governance/corporate-governance.html>

Information and control instruments

The Board of Directors is informed in detail about business performance every month. The members of the Board of Directors receive the monthly report. In addition to an introductory commentary on the current course of business by the CEO and CFO, it contains the most important key figures for the course of business and the monthly closing as well as a preview of the next three months and the year-end. These key figures are broken down by GF Corporation, divisions, and GF Corporate Companies. The Executive Committee presents and comments on business performance, and presents its assessment of business performance for the coming months at board meetings. It also presents all important topics to the Board of Directors.

In addition, the Board of Directors regularly receives the forecast containing the expected figures at year-end. Once a year, the Board of Directors receives and approves the budget of the GF Corporation and the divisions for the following year. The Board of Directors holds as a general rule a two-day meeting once a year to discuss the strategies of the divisions and the GF Corporation as a whole. Once a year, it holds a workshop on the GF Corporation's risk profile, and is updated about the measures taken to minimize and control risk.

The Chairman of the Board of Directors receives the invitations and minutes of the Executive Committee and Corporate Staff Meetings. The development of the Innovation Strategy 2025 provided the Chairman of the Board of Directors and the members of the Board of Directors with an additional opportunity for in-depth discussions with management. In the year under review, the Board of Directors visited GF sites in Italy (Milan region) and Switzerland (Ticino). The Chairman of the Board of Directors, accompanied by the CEO and, depending on the topic and location, other members of the Executive Committee, visited customers and GF sites in Germany, Singapore, Malaysia and Japan. At several meetings, the Board of Directors was informed by internal and external experts about global trends and developments, and discussed the insights gained. The Executive Committee was present at these presentations.

Internal Audit

Internal Audit reports to the Chairman of the Audit Committee operationally and to the CFO administratively. Based on the audit plan approved by the Audit Committee, GF Corporate Companies are audited either annually or every two to five years, depending on the risk assessment and based on a comprehensive audit program. In the year under review, 44 internal audits were conducted. The audit reports are reconciled with the management of the audited GF Corporate Companies or responsible functions and distributed to the line managers, the external auditor, the Executive Committee, the Audit Committee as well as the Chairman of the Board of Directors. Audit reports with significant findings are presented to and discussed in the Audit Committee.

Internal Audit ensures that all discrepancies arising in internal and external audits are addressed and submits a report to the Executive Committee and the Audit Committee. The Head of Internal Audit prepares an annual report, which is discussed by the Executive Committee and the Audit Committee. During the year, the Head of Internal Audit informs the Audit Committee of any changes to the audit plan and of the progress of planned audits. He also serves as the secretary of the Audit Committee.

Corporate Compliance

The Service Center Law & Compliance informs the Board of Directors and the Executive Committee about legal issues and significant changes to the law. The Corporate Compliance Officer (CCO) is appointed by the CEO and in this function reports to the General Counsel; he informs the CEO directly, if necessary. The CCO helps GF Corporate Companies comply with the law, internal directives, and the GF Corporation's principles of business ethics in their business activities, in particular through preventative measures and training in the divisions along with information and advice provided to the GF Corporate Companies. The Executive Committee, in consultation with the CCO, defines priority issues. Furthermore, all GF employees have the possibility to report compliance violations also anonymously to the CCO. In line with the EU Directive on the protection of whistleblowers, an additional confidential reporting channel, the [GF Transparency Line](#), was already implemented in 2021, which complements existing systems. These reporting channels for anonymous reports are accessible to all GF employees and third parties. In the year under review, 19 notifications were reported via this channel, all of which concerned common labor disputes. 18 reports were closed in the reporting year, one report is still pending.

+ https://www.bkms-system.com/georgfischer_en

A number of compliance measures were implemented in 2022:

- Roughly 3'500 internal e-learning courses were conducted on anticorruption, competition, and cartel law, export controls and trade restrictions as well as personal data protection
- Ongoing advice and support for internal audits
- Continuation of specific compliance measures for intermediaries (e.g. ongoing checks regarding the appropriateness of the engagement of and the compensation paid to intermediaries as well as examination of their ownership structure so as to avoid conflicts of interest)
- Advice on the prevention of business with sanctioned persons and organizations
- Advice on questions relating to export controls, cartel law, and labor law
- Support of the Business Unit Controllers, among others through compliance questions, risk assessments, and internal controls
- Further expansion of measures for personal data protection pursuant to GDPR and the (new) Swiss Data Protection Act
- Event-driven internal investigations in cases of suspected misconduct at GF or intermediaries of GF

+ www.georgfischer.com/en/about-gf/sustainability-at-gf/code-of-conduct.html

Risk management

The Board of Directors and the Executive Committee attach great importance to the thorough handling of risks in the areas of strategy, finance, markets, management & resources, operations, and sustainability. The Head of the Service Center Investor Relations and Risk Management acts as the Chief Risk Officer (CRO) and, in this function, reports directly to the CEO. The CRO is supported in this task by a risk officer from each of the three divisions. Together with the Head of Strategy, the Head of Internal Audit, the Head of Corporate Compliance, the Head of Sustainability and the Corporate Risk and Insurance Manager, they form under the leadership of the CRO the Corporate Risk Council. In the year under review, this council met once to coordinate activities in connection with risk management.

In addition, the CRO conducted workshops with the management of the three divisions as well as with the Executive Committee to analyze the risk situation, discuss measures to mitigate the risks, and define the actual top risks of each unit. The results of these discussions were presented to the Board of Directors during its risk management workshop in December 2022. The purpose of this workshop was also to define the main risks to the GF Corporation from the perspective of the Board of Directors and to compare these with the risk assessment of the members of the Executive Committee. The outcome of this workshop and the measures adopted to reduce or control the risks will be summarized in the Risk Report 2022, which will be presented to the Board of Directors in February 2023 for discussion and approval.

At the beginning of the reporting year 2022, the Board of Directors decided to extend the [Audit Committee Charter](#) to cover all risk management in order to deepen this topic at board level. These adjustments were approved by the Board of Directors in February 2022 and became effective.

+ <https://www.georgfischer.com/en/investors/environmental-social-governance/corporate-governance.html>

The handling of financial and operational risks is explained in the notes to the consolidated financial statements in note [3.7 Risk management](#).

Assessment of the Executive Committee

The Board of Directors evaluates and assesses the performance of the Executive Committee and its members at least once a year in the absence of the Executive Committee members. The Board of Directors must approve any appointments of Executive Committee members to external Boards of Directors or to high-level political or other public functions.

Members of the Board of Directors

As of 31 December 2022



Yves Serra
Chairman of the Board of Directors
 1953 (France and Switzerland)

Engineering degree from École Centrale de Paris (France); MSc in Civil Engineering from the University of Wisconsin-Madison (USA)

Board member since 2019, Vice Chairman 2019–2020, Chairman since 2020

Committees

Chairman of the Nomination and Sustainability Committee

Corporate Governance

Independent member

Professional background, career

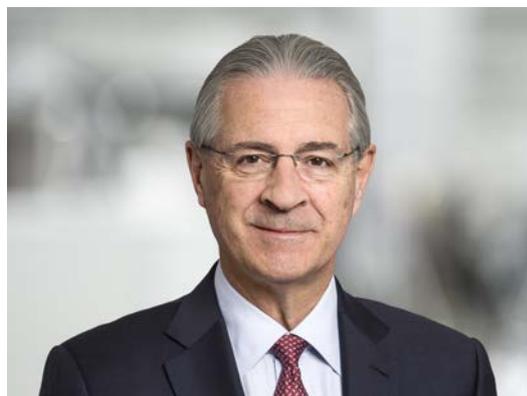
Deputy Commercial Attaché at the French Embassy in Manila (Philippines) (1977–1979); Customer Service Engineer for Alstom in France and South Africa (1979–1982); various positions at Sulzer in France and Japan (1982–1992); various positions at GF (1992–2019), Managing Director of Charmilles Technologies Japan and Regional Head of Sales Asia (1992–1998), Head of Charmilles (1998–2003), Head of GF Piping Systems (2003–2008), President and CEO of Georg Fischer Ltd (2008–2019)

Involvement in governing bodies of other listed corporations

—

Further professional activities and functions

Chairman of the Board of Directors of Stäubli Holding AG; member of the Board of BNP Paribas Switzerland (both Switzerland); Advisor Sustainability Committee of Recruit Holdings and of Asset Management One, Tokyo (both Japan)



Hubert Achermann
Vice Chairman and Independent Lead Director
 1951 (Switzerland)

Dr. iur, attorney, graduated in Law at the University of Bern (Switzerland)

Board member since 2014, Vice Chairman and Independent Lead Director since 2020

Committees

Chairman of the Audit Committee

Member of the Nomination and Sustainability Committee

Corporate Governance

Independent member

Professional background, career

Legal advisor at FIDES Treuhandgesellschaft in Zurich (1982–1987), Head of the company's Lucerne office (1987–1994), Partner and Vice Chairman of the Board of Directors of the newly created KPMG Schweiz (1992–1994), member of the four-person Executive Board, responsible for tax and law (1994–2004), CEO of KPMG Schweiz and performed several key roles for KPMG International (2004–2012), first Lead Director of KPMG International and member of the KPMG Global Board (2009–2012)

Involvement in governing bodies of other listed corporations

Member of the Board and Head Audit Committee of UBS Switzerland AG (Switzerland)

Further professional activities and functions

—



Riet Cadonau
Member of the Board of Directors
 1961 (Switzerland)

B.A. in Business and Economics of the University of Basel (Switzerland); M.A. in Economics and Business Administration from the University of Zurich (Switzerland); INSEAD Advanced Management Program AMP (France)

Board member since 2016

Committees

Member of the Compensation Committee

Corporate Governance

Independent member

Professional background, career

Various positions at IBM Switzerland (1990–2001), ultimately member of the Executive Board and Director of Global Services; various positions as member of the Executive Board of Ascom Group (2001–2005, from 2007–2011 as CEO); in between due to an Ascom divestment, Managing Director and Senior Vice President at ACS Inc. (later Xerox); CEO of Kaba Group, today dormakaba Group (2011–2018), Chairman and CEO of dormakaba Group (2018–2021), Chairman (as of 2021)

Involvement in governing bodies of other listed corporations

Member of the Board of Directors at Zehnder Group (Switzerland)

Further professional activities and functions

Chairman Swiss-American Chamber of Commerce, Zurich (Switzerland)



Peter Hackel
Member of the Board of Directors
 1969 (Switzerland)

Dr. sc. nat. ETH; Master and PhD in Biochemistry and Molecular Biology from the Swiss Federal Institute of Technology (ETH) in Zurich (Switzerland); degree in Business Administration at the Open University of Hagen (Germany)

Board member since 2020

Committees

Member of the Audit Committee

Corporate Governance

Independent member

Professional background, career

Various management positions at McKinsey and Geistlich Biomaterials (Switzerland); various management positions at Straumann AG, ultimately as Head of Group Controlling and member of Executive Management Group Straumann AG (2004–2011); CFO of the global segment Oerlikon Drive Systems (2011–2013); CFO of Straumann Group (2014–2022); CFO of Syntegon (since 2023)

Involvement in governing bodies of other listed corporations

—

Further professional activities and functions

—



Roger Michaelis
Member of the Board of Directors
 1959 (Brazil and Germany)

Studied Business Administration at the University of São Paulo (Brazil), post-graduate degree in Management and Strategy at Krupp Foundation Munich (Germany) and Babson College (USA)

Board member since 2012

Committees

Member of the Compensation Committee

Corporate Governance

Independent member

Professional background, career

Various positions at Osram Group (1988–2012), ultimately as CEO at Osram Brazil and Head of Human Resources of Osram in Latin America (2004–2012); prior to this CFO at Osram subsidiaries in India and Brazil; Partner and Director of Verocap Consulting, São Paulo, (Brazil) (since 2012)

Involvement in governing bodies of other listed corporations

—

Further professional activities and functions

Managing Director and owner of Verocap Consulting; Corporate CFO and Head of Corporate HR of Bentonit União Group Ltd. São Paulo; Chairman of the Advisory Board of Mast Group Ltd. Sao Paulo; Chairman of the Supervisory Board of the Institute of the German Hospital Oswaldo Cruz São Paulo (all Brazil)



Eveline Saupper
Member of the Board of Directors
 1958 (Switzerland)

Dr. iur, attorney and certified Tax Expert, graduated in Law at the University of St. Gallen (Switzerland)

Board member since 2015

Committees

Chairwoman of the Compensation Committee

Corporate Governance

Independent member

Professional background, career

Legal and Tax Advisor at Peat Marwick Mitchell (now KPMG Fides) (1983–1985); Attorney at Baker & McKenzie (1985–1992); Employee (1992–1994), Partner (1994–2014) and of counsel at Homburger AG (2014–2017)

Involvement in governing bodies of other listed corporations

Member of the Board of Directors of Flughafen Zurich AG, Clariant AG and Forbo Holding AG (all Switzerland)

Further professional activities and functions

Member of the Board of Directors of Stäubli Holding AG; member of the Board of Trustees of UZH Foundation (both Switzerland)



Ayano Senaha
Member of the Board of Directors
 1982 (Japan)

B.A. in Economics from the Waseda University
 Tokyo (Japan)

Board member since 2022

Committees

Member of the Nomination and Sustainability
 Committee

Corporate Governance

Independent member

Professional background, career

Various management positions at Recruit Holdings
 and its group companies since 2006:

Representative at Corporate Planning and Solution

Sales (2006–2012); Director of Advantage

Resourcing UK (2013–2015); Executive Manager at

Recruit Holdings (2015–2018), located in Tokyo

(Japan); Chief of Staff at Indeed Inc., Austin (USA)

(2018–2019); Corporate Executive Officer at

Recruit Holdings (since 2018). Currently, she is

COO, member of the Executive Committee, and

member of the Board of Recruit Holdings, where

she chairs the Sustainability Committee

Involvement in governing bodies of other listed

corporations

—

Further professional activities and functions

—



Jasmin Staiblin
Member of the Board of Directors
 1970 (Germany and Switzerland)

Double degree in Electrical Engineering and
 Physics from the Technical University Karlsruhe

(Germany) and Royal Institute of Technology

Stockholm (Sweden)

Board member since 2011

Committees

Member of the Audit Committee

Corporate Governance

Independent member

Professional background, career

Various positions at ABB, including in Switzerland,

Sweden and Australia (1997–2006), Country

Manager of ABB Switzerland (2006–2012); CEO of

Alpiq Holding AG (2013–2018)

Involvement in governing bodies of other listed

corporations

Board member of Zurich Insurance Group

(Switzerland) and NXP Semiconductors N. V.

(Netherlands)

Further professional activities and functions

Chair of the Board of Directors of Rolls-Royce

Power Systems AG (Germany)

Designated members of the Board of Directors (to be proposed for election in April 2023)



Monica de Virgiliis
1967 (Italy and France)

Masters in Electronics Engineering; Politecnico di Torino (Italy)

Corporate Governance

Independent member

Professional background, career

1993–1996 Manufacturing Engineer at Magneti Marelli Electronics Division (Italy); 1996–2001 Program Manager at the Alternative Energies and Atomic Energy Commission (CEA) (France); 2001–2015 several executive roles at STMicroelectronics (Switzerland), since 2005 as Vice President and including General Manager of the Wireless Multimedia Division (2007–2010) and ultimately as Vice President Corporate Strategy & Development (2013–2015); 2015–2016 Vice President & General Manager Industrial Microcontrollers at Infineon Technologies (Germany); 2017–2019 Chief Strategy Officer of the Alternative Energies and Atomic Energy Commission (CEA) in Paris (France)

Involvement in governing bodies of other listed corporations

Chairwoman of the Board of Directors of SNAM (Italy) and member of the Supervisory Board of ASM International (Netherlands)

Further professional activities and functions

Co-founder and Chairwoman of the Board of Directors of Chapter Zero France, the French branch of the Climate Governance Initiative built on the World Economic Forum's Principles for Effective Climate Governance



Michelle Wen
1965 (France)

B.A. in International Business from American Christ's College in Taipei (Taiwan); Economics & Accounting at the London School of Economics (UK); MBA from ESCP-EAP in Paris (France); Executive Management at INSEAD (France) and The Wharton School, University of Pennsylvania (USA)

Corporate Governance

Independent member

Professional background, career

1993–1997 several management positions at Thomson Multimedia (France and USA); 1997–2000 at Philips (now Continental AG) (Germany and France), ultimately as Senior Alliance Manager; 2000–2008 at Renault-Nissan (France), ultimately as Senior Global Supplier Account Manager for Vehicle Body Purchasing; 2008–2012 Vice President of Sourcing & Supplier Quality Development at Alstom Transport; 2012–2016 Group Sourcing & Procurement Vice President at Vallourec (France); 2016–2017 Group Supply Chain Management Technology Director & Board member at Vodafone (Luxembourg); 2017–2022 several Executive Board positions at Opel Vauxhall (also Board member in 2018/2019), PSA&Stellantis Group (Germany, France and Netherlands), ultimately as member of the Executive Committee Group of Opel Vauxhall, PSA and Stellantis as Chief Global Purchasing & Supplier Quality Officer

Involvement in governing bodies of other listed corporations

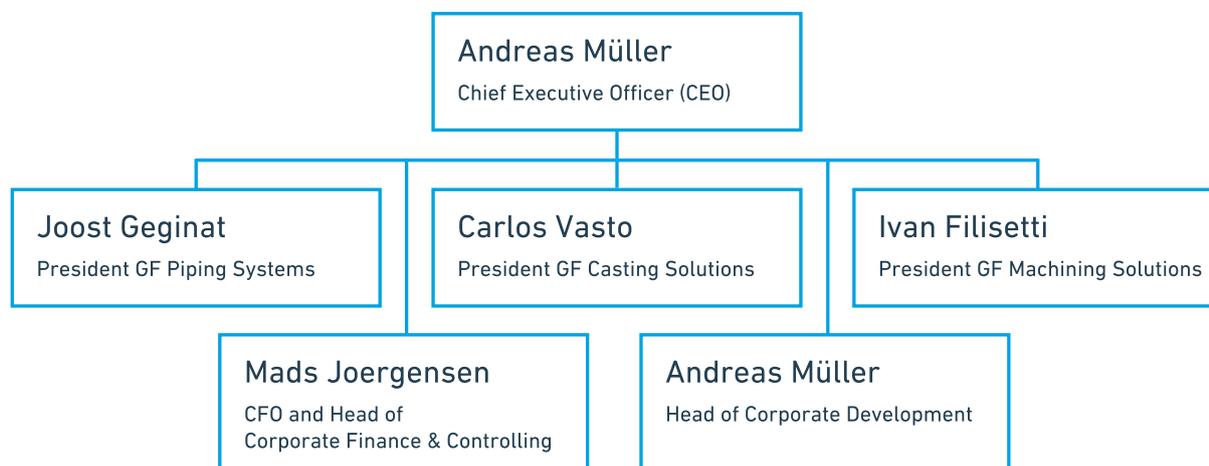
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Further professional activities and functions

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Executive Committee

As of 31 December 2022



The CEO is responsible for the management of the GF Corporation. Under his leadership, the Executive Committee addresses all issues of relevance to the GF Corporation, takes decisions within its remit, and submits proposals to the Board of Directors. The Heads of the three Divisions and two Corporate Staff Units are responsible for drafting and achieving their business objectives and for managing their units autonomously. No management responsibility is delegated to third parties at the Executive Committee level (management contracts).

Members

As of 31 December 2022, the Executive Committee was composed of the following members: Andreas Müller, CEO and at the same time Head of Corporate Development; Joost Geginat, President of GF Piping Systems; Carlos Vasto, President of GF Casting Solutions; Ivan Filisetti, President of GF Machining Solutions; Mads Joergensen, CFO and Head of Corporate Finance & Controlling. There were no changes in the Executive Committee in the year under review.

Mandate

Pursuant to § 23a of the Articles of Association of Georg Fischer Ltd, a member of the Executive Committee may at one and the same time hold no more than one additional mandate as a member of the supreme managerial or governing body of listed legal entities and no more than five additional mandates as a member of the supreme managerial or governing body of not listed legal entities. These mandates must be approved by the Board of Directors.

In addition, a member of the Executive Committee may not hold more than ten mandates that he or she exercises by order of the company, in legal entities belonging to the member's own family, in a professional or industry association, or in a charitable institution.

Mandates of associated companies or institutions and involvement in professional or industry associations, which are exercised in the function as a member of the supreme managerial or governing body of a legal entity, shall together count as one mandate.

Members of the Executive Committee

As of 31 December 2022



Andreas Müller
Chief Executive Officer, CEO
1970 (Germany)

Degree in Business Administration (Dipl.-Betriebswirt FH), from the University of Applied Sciences (HTWG), Constanz (Germany)

Member of the Executive Committee since 2017, CEO since 2019

Professional background, career

Various positions at GF (since 1995), including Head of Controlling of GF Piping Systems, Schaffhausen (1998–2000), Head of Operations for GF Piping Systems companies in Australia (2000–2002), Head of Controlling Business Unit Industry & Utility of GF Piping Systems, Schaffhausen (2002–2008), CFO of GF Casting Solutions (2008–2016), CFO of Georg Fischer Ltd (2017–2019), CEO of Georg Fischer Ltd (since 2019)

Involvement in governing bodies of other listed corporations

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Further professional activities and functions

Member of the Executive Committee of Swissmem and of the Chapter Board “Doing Business in USA” of the Swiss American Chamber of Commerce (both Switzerland)



Mads Joergensen
Chief Financial Officer, CFO
1969 (Denmark and Switzerland)

Bachelor in Economics and Business Administration from Aarhus Business School, Aarhus (Denmark); Master in Economics & Business Administration from Copenhagen Business School, Copenhagen (Denmark), and University of Washington, Seattle (USA); studies in Risk & Restructuring/Advanced Corporate Finance at London Business School, London (UK)

Member of the Executive Committee since 2019

Professional background, career

Project Manager of Perot Systems Consulting (Icarus Consulting AG), Zurich (1995–1998); Manager Corporate Finance of Gate Gourmet International, Zurich (1998–2000); Strategic Investments Manager/Director Strategic Investments of TFC – The Fantastic Corporation, Zug (2000–2001); Associate Director (M&A) of Ernst & Young AG, Corporate Finance, Zurich (2001–2003); Head of Strategic Planning of GF Piping Systems, Schaffhausen (2003–2009), CFO of GF Piping Systems (2009–2019), CFO of Georg Fischer Ltd (since 2019)

Involvement in governing bodies of other listed corporations

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Further professional activities and functions

Member of the Board of IVS Industrie- und Wirtschafts-Vereinigung Region Schaffhausen



Joost Geginat
President of GF Piping Systems
 1966 (Germany and Switzerland)

Degree in Business Management from the University of Cologne (Germany) and International Management from École des Hautes Études Commerciales (HEC) Paris (France); Dipl. Kaufmann degree and CEMS Master

Member of the Executive Committee since 2016

Professional background, career

Various management functions at Roland Berger Strategy Consultants (Germany, Switzerland and Asia) (1995–2014); Senior Managing Director and Partner at AlixPartners (Switzerland) (2014–2016); President of GF Piping Systems (since 2016)

Involvement in governing bodies of other listed corporations

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Further professional activities and functions

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Carlos Vasto
President of GF Casting Solutions
 1963 (Brazil and Italy)

Degree in Metallurgical Engineering from Mackenzie University, São Paulo (Brazil); Bachelor of Business Administration GSBA from the Graduate School of Business Administration, Zurich (Switzerland)

Member of the Executive Committee since 2018

Professional background, career

Various positions at GF Casting Solutions (1987–2000), Head of Production at former GF Casting Solutions site, Lincoln (UK) (2000–2003), Managing Director GF Casting Solutions, Lincoln (UK) (2003–2005); Executive Vice President Acotecnica SA (Brazil) (2005–2010), Managing Director Intra do Brazil (2011–2015); General Manager GF Linamar (USA) (2015–2018), President of GF Casting Solutions (since 2018)

Involvement in governing bodies of other listed corporations

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Further professional activities and functions

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Ivan Filisetti
President of GF Machining Solutions
1969 (Switzerland and Italy)

Mechanical Engineering degree in Automation and Robotics from the Magistri Cumancini technical institute, Como (Italy)

Member of the Executive Committee since 2020

Professional background, career

Various management positions at AGIE Losone (Switzerland) (1990–2000); Operations Manager at Gildemeister Italiana (DMG Group) (Italy) (2000–2005); Operations and Division Manager at Samputensili (Italy) (2005–2008); Managing Director at GF AgieCharmilles (Switzerland) (2009–2012); Vice President Operations (COO) at GF Machining Solutions (Switzerland) (2013–2020); President of GF Machining Solutions (since 2020)

Involvement in governing bodies of other listed corporations

—

Further professional activities and functions

—

Auditors

Mandate

In 2012, PricewaterhouseCoopers, Zurich (Switzerland), was elected as external auditor. Beat Inauen has been the auditor in charge since the Annual Shareholders' Meeting in 2019. He will assume the responsibility of the audit for no longer than seven years. The statutory auditor is elected at the Annual Shareholders' Meeting for a term of one year.

Audit fees

In 2022, services provided by PricewaterhouseCoopers in connection with the audit of the financial statements of Georg Fischer Ltd, the GF Corporation, and the GF Corporate Companies resulted in worldwide fees of CHF 2.41 million (previous year: CHF 2.38 million). For additional services, PricewaterhouseCoopers received in 2022 fees of approximately CHF 0.31 million (previous year: CHF 0.52 million), thereof CHF 0.13 million (previous year: CHF 0.1 million) for consulting mandates in connection with accounting and reporting, CHF 0.05 million (previous year: CHF 0.28 million) for services related to tax advice and CHF 0.13 million (previous year: CHF 0.14 million) for further consultancy fees.

Supervisory and control instruments

The external auditor informs the Audit Committee in writing about relevant auditing activities and findings as well as other important information regarding the audit of the GF Corporation. The auditor in charge of the external auditor attended the four ordinary meetings of the Audit Committee.

The Audit Committee reviews and evaluates the effectiveness and independence of the external auditors annually. For this purpose, Internal Audit reviews all auditing services rendered by external auditors for the GF Corporation and their costs. The Audit Committee bases its evaluation on the following criteria:

- Quality of the documents and reports provided to the Audit Committee and the management
- Time taken and costs
- Quality of oral and written reports on individual aspects and pertinent questions relating to accounting, auditing, or additional consulting mandates

In cooperation with internal and external audit, the Audit Committee evaluates the potential for improvements regarding the collaboration, the processing of assignments, and the interfaces or overlapping of internal and external audit work.

For the evaluation, the members of the Audit Committee use first of all the knowledge and experience which they have acquired as a result of similar functions at other companies. Internal Audit also issues an annual list of all services rendered by external auditors for the GF Corporation and their costs. The costs for the annual audits of Georg Fischer Ltd, the GF Corporation, and of all GF Corporate Companies were approved by the Audit Committee. Further services from PricewaterhouseCoopers are examined by the Head of Internal Audit and, depending on the amount, approved either by the CFO or by the Managing Directors of the respective GF Corporate Companies.

Communication and Investor Relations

Corporate Communications and Investor Relations are the two Service Centers responsible for all stakeholder information. The content of communication is primarily based on GF's Strategy 2025 and vision. Communication with all GF stakeholders is active, open, and timely with all stakeholders. If possible and permissible under the ad hoc regulations of the Swiss stock exchange, employees are notified first.

The renewal of communication channels and content that was started with the launch of the Strategy 2025 was pursued further in 2022. The image film launched at the end of 2021 was used in an adapted form as a PR campaign. During the vacation months with high passenger numbers, the "Going forward" motto was displayed on around 100 screens at Zurich Airport. This film also received several awards, including the top prize at the German Business Film Awards in the category "Economy well presented".

Another highlight of 2022 was the launch of the new We@GF Intranet at the end of November. This new platform allows us to reach all employees, even those without direct PC access, in an uncomplicated way through a modern, user-friendly mobile app and thus to promote dialogue.

The "Globe" magazine has been redesigned in terms of its look and content, and provides employees with in-depth information about current topics within the company. On social media channels, our visibility has been expanded and GF created an Instagram account in fall 2022. The growing number of followers and interactions underscores our successful strategy of growing slowly but sustainably, and thus continuously increasing awareness among the various user groups.

The shares of Georg Fischer Ltd are listed on the SIX Swiss Exchange. GF is therefore subject to the requirements on ad hoc publicity stipulated in the listing rules and the directive on ad hoc publicity. This relates to the obligation to report any share price-sensitive facts. GF also maintains a dialogue with investors and journalists at events and roadshows.

Subscription to an e-mail service for GF news is free of charge. All media releases, Corporate Reports, and Mid-Year Reports as well as important publications go online at www.georgfischer.com at the same time as they are published. Shareholders receive the short version of the Corporate Reports and the Mid-Year Report, and other interested parties can order them.

+ www.georgfischer.com/en/investors/ad-hoc-media-releases.html

+ www.georgfischer.com/subscriptionservice

Head Investor Relations/CRO

Daniel Bösiger

daniel.boesiger@georgfischer.com

Head of Corporate Communications

Beat Römer

beat.roemer@georgfischer.com

Changes after the balance sheet date

Between 1 January 2023 and the approval of the Corporate Governance Report by the Board of Directors on 27 February 2023, no changes occurred.

The Board of Directors of GF will propose to the 2023 Annual Shareholders' Meeting amendments to its Articles of Association, in particular to implement changes imposed by the revised Swiss Corporate Law that entered into force on 1 January 2023.

+GF+



Compensation Report

Going forward and shaping the future

Compensation Report

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Introduction by the Chairwoman of the Compensation Committee

Dear Shareholders,

On behalf of the Board of Directors of GF and the Compensation Committee, I am pleased to present the 2022 Compensation Report.

At the beginning of the current strategy cycle, which runs from 2021 to 2025, GF adjusted and aligned its compensation system to support the implementation of the strategy. After two years, the Compensation Committee validated the alignment with the strategy and engaged with investors and proxy advisors to discuss and respond to their comments and questions. The Compensation Committee is convinced that the current compensation system is working well, but will continue to focus on further improving it as needed.

In 2022, GF delivered a strong performance and record profitability. This is reflected in the short-term incentive (STI) compensation of the Executive Committee, which increased compared to 2021. The Annual Report for the year under review for the first time also includes the Sustainability Report. In order to enhance transparency, direct links have therefore been embedded in the section [Performance in 2022](#) that make it possible to compare certain key objectives with the level of achievement of those objectives in the Sustainability Report.

In April 2022, GF conducted a 1:20 share split. The number of shares has been adjusted accordingly. The share split has not, however, affected the total of the share-based compensation.

In the reporting year, the Compensation Committee reviewed the Board of Directors compensation structure and levels. The analysis found that the cash compensation of the Board membership is lower compared to the peer group, while the share-based compensation is higher. In order to create a better balance between these two elements of compensation, the Compensation Committee proposed appropriate adjustments to the Board of Directors, which are described in the [Outlook](#) section of the Compensation Report. As the adjustments constitute a shift between two compensation elements, the impact on total compensation is considered neutral. The Board of Directors approved the adjustments, which will become effective as of the Annual Shareholders' Meeting 2023.

This Compensation Report includes all relevant information concerning the compensation policy and programs, the governance in place for decisions relating to compensation and the compensation awarded in the reporting year. At the upcoming Annual Shareholders' Meeting, our shareholders will be asked to approve the maximum compensation amount for the Board of Directors for the period until the next Annual Shareholders' Meeting, and the maximum compensation amount for the Executive Committee for the next financial year (prospective binding votes). Our shareholders' valued opinion will also be sought with regard to the Compensation Report through a consultative retrospective vote.

On behalf of the Board of Directors, I would like to thank you for your valuable feedback and support. We look forward to continuing our constructive dialogue with our shareholders and stakeholders. We remain convinced that GF's compensation system rewards performance in a balanced and sustainable way, and that it is therefore well aligned with the interests of our shareholders.

Sincerely,



Eveline Saupper

Chairwoman of the Compensation Committee

Compensation at a glance

Compensation for the Board of Directors

Compensation model

In order to ensure independence in their supervisory function, the members of the Board of Directors receive fixed compensation only, paid out in cash and shares that are blocked for five years.

Responsibility	Fee	Restricted shares ²
Basis fee		
Board membership	CHF 70'000	3'000 shares
Additional fees		
Board chairmanship ¹	CHF 290'000	3'000 shares
Independent Lead Director	CHF 22'500	
Audit Committee chairmanship	CHF 80'000	
Audit Committee membership	CHF 30'000	
Compensation Committee chairmanship	CHF 60'000	
Compensation Committee membership	CHF 20'000	
Nomination and Sustainability Committee chairmanship	CHF 60'000	
Nomination and Sustainability Committee membership	CHF 20'000	

1 The Chairman of the Board of Directors is not eligible for additional committee fees.

2 In April 2022, a 1:20 share split was conducted. The figures have been adjusted accordingly.

Compensation awarded for 2022

The compensation awarded to the Board of Directors for the period from the Annual Shareholders' Meeting 2021 to the Annual Shareholders' Meeting 2022 is within the limits approved by the shareholders:

Compensation period	Amount approved	Effective amount
2021-2022	CHF 3'140'000 ¹	CHF 2'781'000 ²
2022-2023	CHF 3'600'000 ¹	n/a ³

1 Based on a share value of CHF 80.00.

2 Based on a share value of CHF 69.25 for the period in 2021 and CHF 56.60 for the period in 2022.

3 Compensation period not yet completed; a conclusive assessment will be provided in the Compensation Report 2023.

The compensation system for the Board of Directors does not contain any performance-related components.

Compensation for the Executive Committee

Compensation elements	Purpose	Vehicle	Period	Performance measure
Fixed compensation				
Fixed base salary	Pay for the function	Cash	Monthly	Skills, experience and individual performance
Benefits	Ensure protection against risks such as death, disability and old age			
Variable compensation				
Short-term incentive (STI)	Pay for annual performance based on GF strategic targets	Cash	Annual	Organic sales growth Return on sales (EBIT margin) ROIC Sustainability (ESG) Individual objectives
Long-term incentive (LTI)	Pay for long-term performance Align with shareholders' interests and GF's strategy Participate in long-term success of the company	Performance shares	3-year vesting and additional 2-year blocking	EPS rTSR

Performance in 2022

In 2022, business momentum further accelerated and the company achieved significant sales growth as well as record profitability. Despite raised targets, the STI payout for 2022 was higher compared to the previous year.

STI payout for 2022	
EC (incl. CEO)	130.2%-139.1% of target

Compensation awarded for 2022

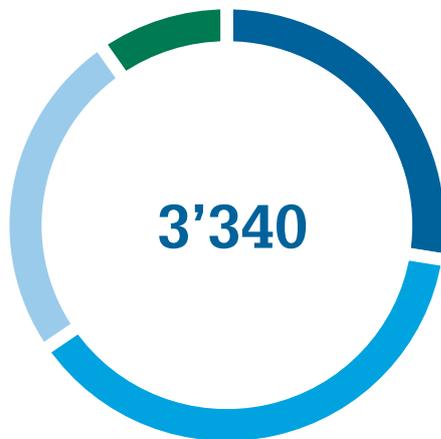
The compensation awarded to the Executive Committee (including CEO) for 2022 is within the limits approved by the shareholders at the 2021 Annual Shareholders' Meeting:

Compensation period	Amount approved	Effective amount
2022	CHF 10'829'000	CHF 9'418'000

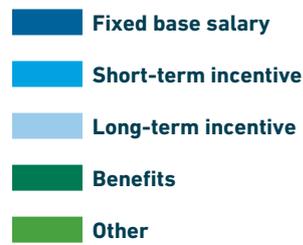
The vesting level of the LTI plan 2019 (performance period ended at the end of 2022) amounted to 0% for the EPS-related performance shares and 130.73% of target for the rTSR-related performance shares, resulting in an overall vesting level of 65.37%.

Performance period	EPS-related performance shares (weighted 50% of the grant)	rTSR-related performance shares (weighted 50% of the grant)	Overall vesting level
LTI 2019 2020-2022	0% of target	130.73% of target	65.37% of target

CEO compensation for 2022
in CHF 1'000



Executive Committee compensation (incl. CEO) for 2022
in CHF 1'000



Compensation principles

The compensation policy applicable to the Executive Committee is designed to attract, motivate and retain talented individuals based on the following principles:

- Fairness and transparency;
- Pay for performance, business and sustainability strategy implementation;
- Long-term orientation and alignment to shareholders' interests;
- Market competitiveness.

Compensation governance

- Authority for decisions related to compensation are governed by GF's Articles of Association;
- The Board of Directors is supported by the Compensation Committee in preparing all compensation-related decisions regarding the Board of Directors and the Executive Committee;
- The maximum aggregate amounts of compensation of the members of the Board of Directors and of the Executive Committee are subject to binding prospective shareholders' votes at the Annual Shareholders' Meeting;
- In addition, the Compensation Report is subject to a retrospective consultative vote at the Annual Shareholders' Meeting.

Contents

The Compensation Report provides information about the compensation policy, the compensation programs and the process for determining compensation for the Board of Directors and the Executive Committee of GF. It also includes details on the compensation payments related to the 2022 business year.

This report is written in accordance with the Swiss Ordinance against excessive pay in stock exchange listed companies ("OaEC"), the Swiss Code of Obligations ("CO"), the standards for information on corporate governance issued by the SIX Swiss Exchange and the principles of the Swiss Code of Best Practice for Corporate Governance of Economiesuisse.

The Compensation Report is structured as follows:

Compensation governance

[Rules relating to compensation in the Articles of Association](#)

[Compensation Committee](#)

[Levels of authority](#)

[Method used to determine compensation](#)

Compensation structure

[Compensation of the Board of Directors](#)

[Compensation principles](#)

[Compensation model](#)

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[Compensation of the Executive Committee](#)

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[Compensation mix and caps](#)

[Fixed base salary](#)

[Short-term incentive](#)

[Long-term incentive \(share-based compensation\)](#)

[Clawback and malus provisions](#)

[Benefits](#)

[Contractual terms](#)

[Shareholding ownership guideline](#)

Compensation for the financial year 2022

[Board of Directors](#)

[Executive Committee](#)

[Performance in 2022](#)

[Shareholdings of the members of the Board of Directors and of the Executive Committee](#)

[Loans to members of the governing bodies](#)

[Functions of the members of the Board of Directors](#)

[Functions of the members of the Executive Committee](#)

[Equal pay analyses](#)

[Outlook](#)

[Report of the statutory auditor to the Annual Shareholders' Meeting](#)

Compensation governance

Rules relating to compensation in the Articles of Association

The Articles of Association of GF contain provisions regarding the compensation principles applicable to the Board of Directors and to the Executive Committee. These provisions can be found on GF's website and include:

- Principles of compensation of the Board of Directors (Article 22);
- Principles of compensation of the Executive Committee (Article 23c);
- Additional amount for new members of the Executive Committee (Article 23c.9);
- Provisions on the employment contracts for members of the Executive Committee (Article 23b);
- Credits and loans (Article 23d.1);
- Provisions on early retirement for members of the Executive Committee (Article 23d.2).

According to articles 22 and 23 of the Articles of Association, the Annual Shareholders' Meeting approves annually the maximum aggregate compensation of the Board of Directors for the period from the Annual Shareholders' Meeting to the next Annual Shareholders' Meeting, as well as the maximum aggregate compensation of the Executive Committee for the following calendar year. In addition, the Compensation Report is submitted to the Annual Shareholders' Meeting for an advisory vote on a yearly basis, so that shareholders can express their opinion on the compensation policy and programs.

Compensation Committee

The Compensation Committee consists of three non-executive members of the Board of Directors who are elected annually and individually by the Annual Shareholders' Meeting for a one-year period until the next Annual Shareholders' Meeting. At the 2022 Annual Shareholders' Meeting, Eveline Saupper (Chairwoman) and Riet Cadonau were re-elected as members of the Compensation Committee and Hubert Achermann was replaced by Roger Michaelis, who was elected as a new member of the Compensation Committee.

The Compensation Committee supports the Board of Directors with the following duties:

- Determining the compensation policy of the company at the highest corporate level, including the principles for the variable compensation and shareholding programs;
- Reviewing the guidelines governing compensation of the Board of Directors and the Executive Committee;
- Preparing the motions related to the maximum aggregate amounts of compensation for the Annual Shareholders' Meeting;
- Proposing the amount of compensation to be paid to the Board of Directors, to the CEO and to the other members of the Executive Committee within the limits approved by the Annual Shareholders' Meeting;
- Reviewing and proposing the annual Compensation Report to the Board of Directors.

During 2022, the Compensation Committee performed the following regular tasks:

- Conducted a benchmark analysis for the compensation of the Board of Directors and, based on the outcomes, proposed adjustments to the Board of Directors;
- Conducted a benchmark analysis for the compensation of the CEO and of the other members of the Executive Committee, and proposed salary adjustments to the Board of Directors;

- Evaluated the business performance for the 2021 financial year against the pre-set objectives and prepared a proposal to the Board of Directors on the short-term incentive to be paid to the CEO and to the other members of the Executive Committee;
- Determined the business objectives for the 2022 financial year for the CEO and reviewed those of the other members of the Executive Committee, before submitting them to the Board of Directors for approval;
- Reviewed the Compensation Report 2021 and prepared the compensation motions to be submitted to vote at the 2022 Annual Shareholders' Meeting;
- Reviewed and discussed the voting results on the compensation motions at the 2022 Annual Shareholders' Meeting, as well as the proxy advisors' and shareholders' feedback received on compensation matters;
- Engaged with proxy advisors and major shareholders on compensation matters in order to gather their feedback and comments;
- Prepared the Compensation Report 2022.

The Compensation Committee convenes as often as necessary, but at least twice per year. In 2022, the Committee held four meetings of approximately two hours, each according to the schedule below:

Overview of meeting schedule 2022

February (8 February)	February (21 February)	September (22 September)	December (15 December)
Target setting for the STI 2022 (business and individual objectives) for CEO and EC	Business performance 2021; approval of the STI 2021 (business and individual objectives) for CEO and EC	Analysis of the voting results on compensation motions at the Annual Shareholders' Meeting	Review of proxy advisors' and investors' feedback on compensation (con't)
Review draft of the Compensation Report 2021	Approval of the LTI 2018 vesting and LTI 2022 grant	Review of proxy advisors' and investors' feedback on compensation	Benchmark of compensation for the Board of Directors
	Approval of the Compensation Report 2021		Review compensation for the Board of Directors for the next compensation period
	Determination maximum amounts of compensation for the Board of Directors until the next Annual Shareholders' Meeting		Benchmark of compensation for the CEO and EC members
	Determination maximum amounts of compensation for the EC for the business year 2023		Review target compensation for the CEO and EC members for the coming financial year
			Review draft of the Compensation Report 2022

In 2022, all Compensation Committee members attended all meetings. The Chairman of the Board, the CEO, the Head of Corporate Human Resources and the Head of Corporate Compensation and Benefits are invited to attend the Compensation Committee meetings in an advisory capacity. The Chairman of the Board and the CEO do not attend the meeting when their own compensation or performance is discussed.

After each meeting, the Chairwoman of the Compensation Committee reports to the Board of Directors about the activities of the Compensation Committee. The minutes of the Compensation Committee meetings are available to all members of the Board of Directors.

Compensation proposals and decisions are made based on the following levels of authority:

Levels of authority

Approval framework

Subject	Recommendation from	Final approval from
Compensation policy and principles	Compensation Committee	Board of Directors
Aggregate compensation amount of the Board of Directors	Board of Directors based on proposal by Compensation Committee	Annual Shareholders' Meeting (binding vote)
Individual compensation of the members of the Board of Directors	Compensation Committee	Board of Directors
Aggregate compensation amount of the Executive Committee	Board of Directors based on proposal by Compensation Committee	Annual Shareholders' Meeting (binding vote)
Individual compensation of the CEO	Compensation Committee based on proposal by the Chairman of the Board	Board of Directors
Individual compensation of the Executive Committee members	Compensation Committee based on proposals by the CEO	Board of Directors
Compensation Report	Board of Directors based on proposal by Compensation Committee	Annual Shareholders' Meeting (consultative vote)

On behalf of the Board of Directors, internal and external Auditors annually review the compliance of the compensation decisions made with the Articles of Association, the Organizational Rules and the compensation regulations for the Executive Committee and the Board of Directors.

The Compensation Committee regularly calls in external compensation specialists and consultants to obtain independent advice and/or benchmarking compensation data. In the year under review, [dialog]unlocked provided services related to Executive Committee compensation. Obermatt was appointed to measure the relative performance of Georg Fischer for the purpose of the long-term incentive plan. These companies have no other mandates with GF.

Method used to determine compensation

Benchmarking

The compensation structure and levels of the Board of Directors and the Executive Committee are reviewed every two to three years and are tailored to the relevant sectors and labor markets in which GF competes for talent. For the purpose of comparison, the Compensation Committee relies on compensation surveys published by independent consulting firms and on publicly available information such as the compensation disclosures of comparable companies.

Comparable companies are defined as multinational industrial companies listed on the Swiss stock exchange (SIX) with a similar business model and size in terms of market capitalization, sales, number of employees, complexity and geographic scope. The peer group for the compensation benchmark of the Board of Directors and the Executive Committee include the following Swiss companies: Bucher Industries, DKSH, Dormakaba, Geberit, OC Oerlikon, SIG Combibloc, Sonova, Straumann and Sulzer. Compensation benchmarking was last conducted in 2022.

Performance management

The Compensation Committee also takes into consideration effective business and individual performance while determining the compensation amounts to be paid to the CEO and to the other members of the Executive Committee. Individual performance is assessed through the annual Management By Objectives (MBO) process, for which individual objectives are defined at the beginning of the year and the achievement against those objectives is evaluated at the end of the year. The objective setting and the performance assessment of the members of the Executive Committee are conducted by the CEO and by the Chairman of the Board for the CEO. The performance assessment of the CEO and the other members of the Executive Committee is reviewed by the Compensation Committee.

Compensation structure

Compensation of the Board of Directors

Compensation principles

In order to ensure their independence in exercising their supervisory duties, the members of the Board of Directors receive fixed compensation only. The compensation is paid partially in cash and partially in shares blocked for a period of five years in order to closely align their compensation with shareholders' interests.

Compensation model

The compensation applicable to the Board of Directors is reviewed every two to three years based on competitive market practice and its basic structure is kept as constant as possible. The last analysis was conducted in 2022 and adjustments will become effective as of the 2023 Annual Shareholder's Meeting (please refer to section [Method used to determine compensation/Benchmarking](#) for details on the peer group and the [Outlook](#) section for the changes). In 2022, no changes were made to the compensation levels or to the compensation model of the Board of Directors.

In order to guarantee the independence of the members of the Board of Directors in executing their supervisory duties, their compensation is fixed and does not contain any performance-related component. The annual compensation for each Member of the Board of Directors depends on the functions and tasks carried out in the year under review and consists of an annual basis fee paid in cash and in blocked shares, as well as additional committee fees paid in cash. The cash fees are paid in January for the previous calendar year, while the shares are allocated in December of the respective calendar year. The shares are blocked for a period of five years. The blocking period is lifted in the event of death or disability and remains in place in all other instances of termination. The shares are disclosed at their market value based on the closing share price on the last trading day of the reporting year.

Responsibility	Fee	Restricted shares ²
Basis fee		
Board membership	CHF 70'000	3'000 shares
Additional fees		
Board chairmanship ¹	CHF 290'000	3'000 shares
Independent Lead Director	CHF 22'500	
Audit Committee chairmanship	CHF 80'000	
Audit Committee membership	CHF 30'000	
Compensation Committee chairmanship	CHF 60'000	
Compensation Committee membership	CHF 20'000	
Nomination and Sustainability Committee chairmanship	CHF 60'000	
Nomination and Sustainability Committee membership	CHF 20'000	

1 The Chairman of the Board of Directors is not eligible for additional committee fees.

2 In April 2022, a 1:20 share split was conducted. The figures have been adjusted accordingly.

The compensation of the Board of Directors is subject to regular social security contributions and is not pensionable.

Shareholding ownership guideline

Members of the Board of Directors are required to hold 200% of the annual basis cash fee in GF shares. Newly elected members must build up the required ownership within five years of their election to the Board of Directors. In the event of a substantial rise or drop in the share price, the Board of Directors may at its discretion amend that time period accordingly.

The minimum holding requirements are illustrated in the table below:

	Shareholding ownership requirement	Build-up period
Board of Directors	200% of annual basis cash fee	5 years

To calculate whether the minimum holding requirement is met, all held shares are considered regardless of whether they are blocked or not. The Compensation Committee reviews compliance with the share ownership guideline on an annual basis.

Compensation of the Executive Committee (including CEO)

Compensation principles

The compensation policy applicable to the Executive Committee is designed to attract, motivate and retain talented individuals based on the following principles:

- Fairness and transparency;
- Pay for performance, business and sustainability strategy implementation;
- Long-term orientation and alignment to shareholders' interests;
- Market competitiveness.

Fairness and transparency (internal equality)	Pay for performance and strategy implementation	Long-term orientation and alignment with shareholders' interests	Market competitiveness
Compensation programs are straightforward, clearly structured and transparent. They ensure fair compensation based on the responsibilities and competencies required to perform the function.	A portion of compensation is directly linked to the company's performance, to the implementation of the business strategy and to individual performance.	A significant portion of the compensation is delivered in the form of performance shares, ensuring participation in the long-term success of the company and a strong alignment with shareholders' interests.	Compensation levels are competitive and in line with relevant market practice.

Compensation model

The compensation of the Executive Committee includes the following elements:

- Fixed base salary in cash;
- Benefits such as pension and social insurance funds;
- Performance-related short-term incentive (STI) in cash;
- Share-based compensation (long-term incentive, LTI).

	Fixed compensation elements		Variable compensation elements	
	Fixed base salary	Benefits	STI performance 2022	LTI performance 2022
Purpose	Ensure basic fixed remuneration	Ensure protection against risks such as death, disability and old age	Pay for annual performance	Pay for long-term performance Align with shareholders' interests Participate in long-term success and align with Strategy 2025
Drivers	Scope and complexity of the function Profile of the individual Market practice	Local legislation and market practice	Performance against business and individual objectives	Long-term value creation
Performance/ vesting period	-	-	Year 2022	3 years Grant date: 1 January 2022 Vesting period: 2022-2024
Blocking period	-	-	-	Additional 2 years: 2025-2026
Performance measures	Skills, experience and performance of the individual	-	Organic sales growth Return on sales (EBIT margin) ROIC Sustainability (ESG) Individual objectives (MBO)	All LTI-related shares depend on performance: 50% EPS, 50% rTSR EPS-related achievement determination: Ø (EPS value years 2022, 2023, 2024) divided by Ø (EPS value years 2019, 2020, 2021) rTSR-related achievement determination: Ø (ranking in 2022, 2023, 2024 of GF within the SMI MID)
Delivery	Monthly cash	Contributions to social security, pension and insurances	Cash, one-off payment in March 2023	Number of PS, of which 50% PS(EPS), 50% PS(rTSR)

EBIT = Earnings before interest and taxes

EPS = Earnings per share

ESG = Environment, social, governance

PS = Performance shares

PS(EPS) = EPS dependent performance shares

PS(rTSR) = rTSR dependent performance shares

ROIC = Return on invested capital

Ø = Average

For the purpose of comparison, the compensation of the Executive Committee is regularly benchmarked against compensation surveys published by independent consulting firms and on publicly available compensation information of comparable multinational industrial companies (please refer to the section [Method used to determine compensation/Benchmarking](#) for details of the peer group).

The compensation model of the Executive Committee remained unchanged in 2022 compared to the previous year.

Compensation mix and caps

CEO

At target	Fixed base salary 100%	STI 100%	LTI 90%
Maximum payout	Fixed base salary 100%	STI 150%	LTI 135%

Other members of the Executive Committee

At target	Fixed base salary 100%	STI 60%	LTI 60%
Maximum payout	Fixed base salary 100%	STI 90%	LTI 90%

Maximum payouts:

- STI: capped at 150% of the target;
- LTI: capped at 150% of the target;
- Overall cap: the overall variable compensation is capped (value of the STI payout and of the LTI grant) at 250% of the fixed compensation, as stipulated in the Articles of Association.

Fixed base salary

The fixed base salary is determined primarily based on the following factors:

- Scope and complexity of the role, as well as the skills required to perform the function;
- Skills, experience and performance of the individual in the function;
- External market value of the function.

Fixed base salaries of the members of the Executive Committee are reviewed every year based on those factors and adjustments are made according to market developments.

Short-term incentive

The short-term incentive (STI) is a variable incentive designed to reward the achievement of business and sustainability objectives of the GF Corporation and its divisions, as well as the fulfillment of individual performance objectives as defined within the MBO process, over a period of one year.

The STI is expressed as a target in % of the annual fixed base salary. The target STI amounts to 100% of the annual fixed base salary for the CEO and to 60% of the annual fixed base salary for the other members of the Executive Committee. The STI payout is capped at 150% of target level.

	Target ¹	Minimum ¹	Maximum ¹
CEO	100%	0%	150%
Other members of the Executive Committee	60%	0%	90%

¹ In percent of fixed base salary.

Business objectives for the STI

The business objectives include organic sales growth (excluding acquisitions and divestitures), return on sales (EBIT margin) and return on invested capital (ROIC). The annual targets of these business objectives are derived from the five-year strategic goals, taking into account the actual results in the previous year as well as the budget and forecast of the year for which the targets are set. The annual targets are discussed and approved by the Board of Directors.

For each business objective, the Board of Directors sets a target level and a threshold level (hurdle) of achievement under which there is no payout. Particular focus is placed on the sales target, as growth is a strong pillar of the Strategy 2025. Furthermore, the ROIC target is set at a level clearly over the weighted average cost of capital (WACC) of the GF Corporation in order to maximize value creation. The respective achievement level of each business objective is measured on a yearly basis and determines a payout factor for that business objective.

Sustainability objectives for the STI

Sustainability objectives are based on environmental, social, and governance (ESG) criteria material to the company and its stakeholders. The corporate sustainability targets are specifically reflected in the sustainability roadmaps of the divisions and are well represented in the objective setting of the Executive Committee.

The annual sustainability objectives are aligned with the targets, highlighted below, of the Framework 2025, which include:

- Product portfolio: 70% of sales with social or environmental benefits;
- Reduction of absolute CO₂e emissions by 30% to limit global warming to 1.5°C for scope 1 and 2 emissions;
- Reduction of accident rate by 30% by continuing with the "Be Aware-Be Safe/Zero risk" campaign;
- Implementation of measures to increase diversity and inclusion.

Individual objectives for the STI

The individual objectives are set within the MBO process at the beginning of the year. These objectives are clearly measurable, do not overlap with the financial targets and are set in different categories:

- Non-financial strategic goals, such as acquisitions or portfolio adaptations;
- Operational goals, such as the implementation of digitalization projects, the successful launch of new products, implementation of corporate training initiatives, acquisition and integration of new technologies and services, development of new business segments and expansion of production to new regions;
- Goals to promote the implementation of value and culture according to the company's strategy;
- Personal goals, such as personal improvement and/or training sessions and succession planning.

At the end of the year, the achievement of each individual objective is assessed. This determines the payout factor for the portion of the STI related to individual objectives.

Weighting of the business, sustainability and individual objectives

Sustainability objectives are a separate element of the performance measurement and account for 10% of the STI. They are not part of the individual objectives. The individual objectives account for 25% of the STI.

The weighting of the business and individual objectives for the CEO and the other members of the Executive Committee depends on the function (the highest weighting is allocated to the organization the individual is responsible for) and is described in the following table:

	CEO	Division President	CFO
Business objectives			
Corporation level	65%	25%	65%
Organic sales growth (30%)	19.5%	7.5%	19.5%
Return on sales (EBIT margin) (40%)	26.0%	10.0%	26.0%
ROIC (30%)	19.5%	7.5%	19.5%
Division level		40%	
Organic sales growth (30%)		12.0%	
Return on sales (EBIT margin) (40%)		16.0%	
ROIC (30%)		12.0%	
Sustainability	10%	10%	10%
ESG	10.0%	10.0%	10.0%
Individual objectives	25%	25%	25%
MBO	25.0%	25.0%	25.0%
Total	100%	100%	100%

Long-term incentive (share-based compensation)

The purpose of the LTI plan, which remained unchanged for the year under review, is to:

- Align the interests of executives with those of GF's shareholders;
- Allow executives to participate in the long-term success of GF;
- Foster and support a high-performance culture.

The LTI is a performance share (PS) plan. Every year, the CEO and the other members of the Executive Committee are granted a certain number of PS based on a percentage of their annual fixed base salary. The target LTI amounts to 90% of the annual fixed base salary for the CEO and to 60% of the annual fixed base salary for the other members of the Executive Committee. The number of PS granted corresponds to the target LTI amount divided by the average Georg Fischer share closing price of the last 60 trading days of the previous year. For financial year 2022, the PS were granted on 1 January 2022. The PS are subject to a three-year cliff vesting followed by an additional two-year blocking period on the vested shares.

The vesting of the PS is conditional upon the achievement of two specific performance objectives over a prospective period of three years: earnings per share (EPS) as an internal performance measure and relative total shareholder return (rTSR) as an external performance measure.

The number of PS granted is split as follows:

- 50% of the PS depend on the EPS performance (PS(EPS));
- 50% of the PS depend on the rTSR performance (PS(rTSR)).

Performance shares			
	PS(EPS)	PS(rTSR)	Total shares
CEO	Target: 45% of ABS ¹ Vesting: 0%-150%	Target: 45% of ABS ¹ Vesting: 0%-150%	Target: 90% of ABS ¹ Vesting: 0%-150%
Other members of the Executive Committee	Target: 30% of ABS ¹ Vesting: 0%-150%	Target: 30% of ABS ¹ Vesting: 0%-150%	Target: 60% of ABS ¹ Vesting: 0%-150%

¹ ABS = Annual fixed base salary

The EPS target, which is determined by the Board of Directors, is in line with the ambitious Strategy 2025 goals of GF and is measured at the end of the vesting period. Share buybacks, major acquisitions/divestitures or capital increases are neutralized and have no impact on the EPS value calculation.

The rTSR is measured as a percentile rank in relation to a peer group. The peer group consists of the companies of the SMI MID index as these companies are comparable to GF in terms of organizational size, complexity and market capitalization, and the SMI MID index best reflects the economic environment for companies listed in Switzerland. The percentile rank is evaluated on an annual basis: at the end of the vesting period, the final ranking of GF among the peer group is the average annual ranking over the three-year vesting period.

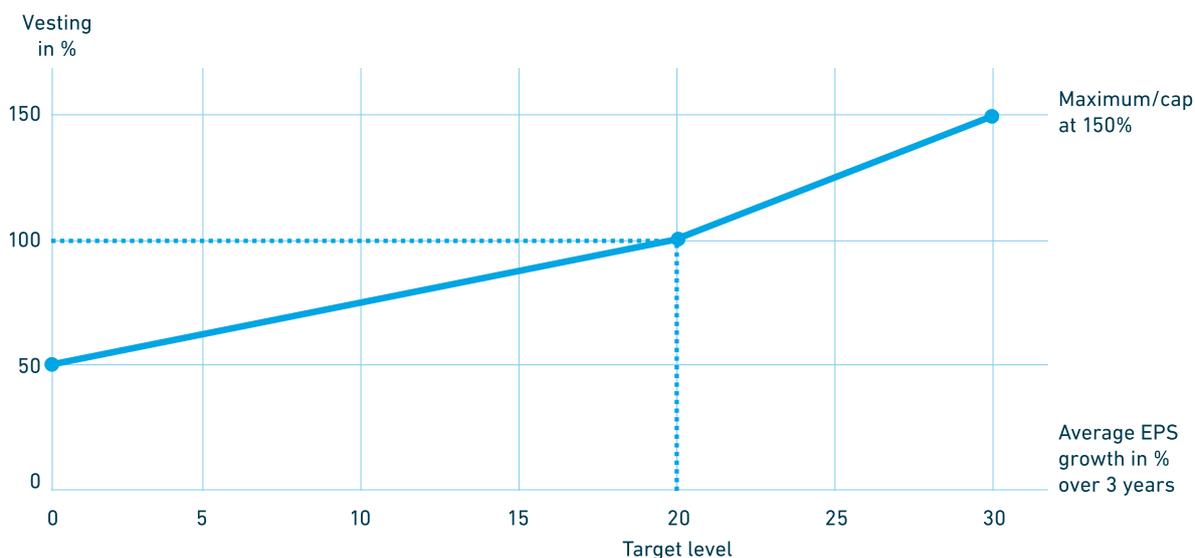
A threshold performance level (hurdle) is defined for both performance measures under which there is no vesting of the PS. The target level, which corresponds to a vesting level of 100%, and the maximum achievement level, for which the vesting is capped at 150%, are also defined.

Both EPS and rTSR are measured individually. Hence, the vesting of the PS(EPS) cannot therefore be compensated by the vesting of PS(rTSR) and vice-versa.

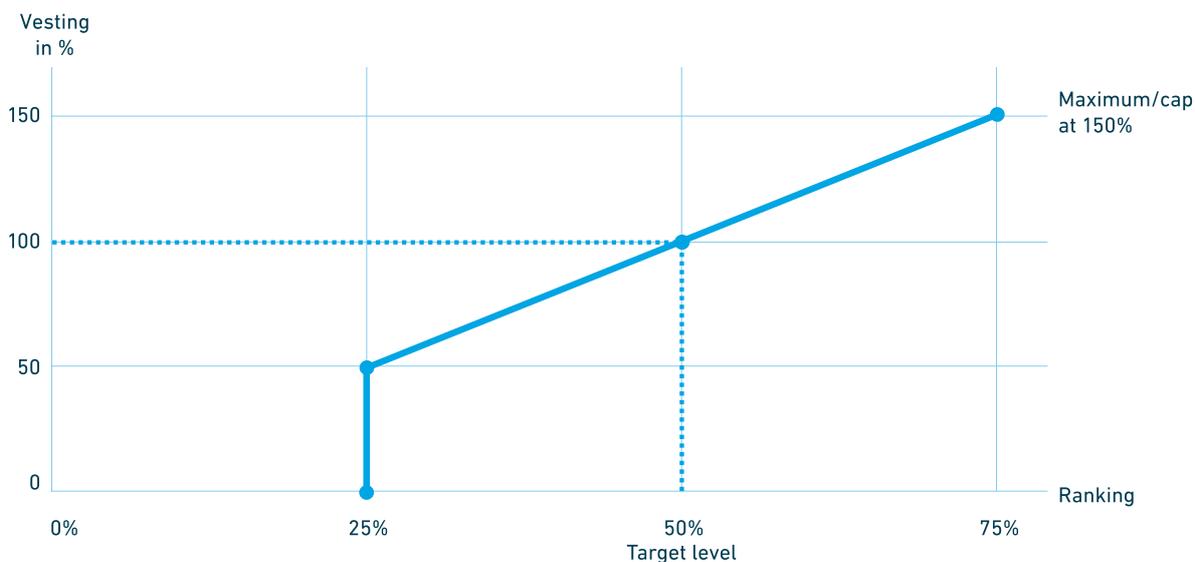
The vesting rules of the LTI plan are summarized in the table below:

Performance measure	Earnings per share (EPS)	Relative total shareholder return (rTSR)
Description	EPS: (Average EPS value years x, x+1, x+2) divided by (Average EPS value years x-1, x-2, x-3)	TSR: starting value of volume-weighted average share price (VWAP) over the first 30 trading days of the year and ending value of the VWAP over the last 30 trading days of the year. Relativity measured as the average annual ranking within the peer group (companies of the SMI MID) over 3 years.
Rationale	Internal measure Reflects GF's profitability and how efficiently the strategy is implemented	External measure Reflects GF's relative value compared to the SMI MID
Weighting	50% of the PS grant	50% of the PS grant
Target level	20% EPS growth over 3 years: 100% vesting	Relative TSR at the median of the peer group: 100% vesting
Maximum achievement level	150%	150%
Vesting period	3 years Followed by 2-year blocking period on vested shares	3 years Followed by 2-year blocking period on vested shares
Vesting rules	Threshold: 0% EPS growth over 3 years = 50% vesting Target: 20% EPS growth over 3 years = 100% vesting Maximum: 30% EPS growth over 3 years = 150% vesting Linear interpolation in between EPS decline over 3 years: 0% vesting	Threshold: 25th percentile = 50% vesting Target: 50th percentile = 100% vesting Maximum: 75th percentile = 150% vesting Linear interpolation between threshold/target and maximum

Vesting curve earnings per share (EPS)



Vesting curve relative total shareholder return (rTSR)



The Compensation Committee is responsible for evaluating each year if extraordinary, one-time events have significantly influenced any of the performance objectives, EPS and rTSR, and, if so, to make adjustment recommendations to the Board of Directors. The explanations for such adjustments, if any, will be included in the Compensation Report of the relevant year. For 2022, no adjustments were necessary.

In case of termination of employment during the vesting period, unvested PS are forfeited except in the following situations: termination of employment due to retirement, death, disability, involuntary termination by the employer other than for cause or behavior, change of control, in which cases unvested PS vest pro-rata based on the time that has expired from the grant date until the termination date.

The vesting is accelerated to the termination date and is based on an estimated performance assessment, except in case of retirement or involuntary termination, in which case the vesting will occur at the regular vesting date based on the performance measurement for the entire performance period.

Vested shares remain blocked until the end of the respective blocking periods, except in the event of death, disability or change of control, in which case the restriction period is immediately lifted.

The shares in the LTI plan are either treasury shares or repurchased on the market. No issuance of shares is foreseen for the LTI plan in order to avoid shareholder dilution.

Clawback and malus provisions

For the LTI, in the event a lower amount would have been awarded or paid out due to a misstatement of financial results or of fraudulent or willful substantial misconduct by a member of the Executive Committee, the Board of Directors will review the specific facts and circumstances and take action. With regard to awards granted under the LTI in respect of the years for which a restatement has to be made and/or in which the misconduct took place, the Board of Directors may determine at any time before or after the delivery of the shares to forfeit or suspend the vesting of any LTI award in full or in part (malus), require the transfer for nil consideration of some or all the shares delivered under the LTI plan (clawback) and/or require a reimbursement in form of a cash payment in respect of some or all the shares delivered under the LTI plan (clawback).

The clawback and malus provisions apply to the members of the Executive Committee for the entire duration of their membership and for up to three years following the termination thereof.

Benefits

Benefits consist primarily of retirement and insurance plans that are designed to provide a reasonable level of income in case of retirement as well as a reasonable level of protection against risks such as death and disability. All Members of the Executive Committee have a Swiss employment contract and participate in the pension fund of GF offered to all Swiss-based employees. The pension fund exceeds the minimum legal requirements of the Swiss Federal Law on Occupational Retirement, Survivors and Disability Pension Plans (BVG) and is in line with commensurate market practice. In the case of top-management positions, including the members of the Executive Committee, an early retirement plan is in place. The plan is entirely funded by the employer and is administered by a Swiss foundation. Beneficiaries may opt for early retirement from the age of 60. Regular retirement is at the age 65.

Members of the Executive Management do not receive special benefits. They are entitled to a lump sum representation allowance and to reimbursement of business expenses in accordance with the expense rules applicable to all employees at management levels employed in Switzerland. The expense regulation has been approved by the relevant cantonal tax authorities.

Contractual terms

The employment contracts with the CEO and the other members of the Executive Committee foresee a notice period of a maximum of 12 months. There are no entitlements to severance payments, nor any change of control provisions, other than the early vesting and early unblocking of share awards as disclosed in the section [Long-term incentive \(share-based compensation\)](#). Their contracts may foresee non-competition provisions that are limited to a maximum of two years and which allow compensation up to a maximum of the last total annual compensation paid.

Shareholding ownership guideline

The CEO and the other members of the Executive Committee are required to hold a minimum percentage of annual base salary in GF shares.

Newly appointed members must build up the required ownership within five years of their appointment. In the event of a substantial rise or drop in the share price, the Board of Directors may at its discretion amend that time accordingly.

The minimum holding requirements are illustrated in the table below:

	Shareholding ownership requirement	Build-up period
CEO	200% of annual fixed base salary	5 years
Other members of the Executive Committee	100% of annual fixed base salary	5 years

To calculate whether the minimum holding requirement is met, all vested shares are considered regardless of whether they are blocked or not. Unvested PS are excluded. The Compensation Committee reviews compliance with the share ownership guideline on an annual basis.

Compensation for the financial year 2022

Audited by PwC Switzerland

Board of Directors

The members of the Board of Directors received cash compensation of CHF 1.131 million in the year under review (previous year: CHF 1.070 million). In addition, a total of 26'084 GF registered shares with a total market value of CHF 1.477 million were allocated (previous year: 24'940 GF shares with a market value of CHF 1.729 million; in April 2022, a 1:20 share split was conducted and previous year figures have been adjusted accordingly). Together with other benefits, the total compensation paid to the Board of Directors in 2022 amounted to CHF 2.736 million (previous year: CHF 2.934 million).

Compensation of the members of the Board of Directors 2022

	Cash compensation		Share-based compensation			Total compensation 2022 ⁶	Total compensation 2021 ⁶
	Basis fee	Committee fees	Number of shares	Share-based compensation ⁴	Other benefits ⁵		
Yves Serra	70	290	6'000	339	32	731	781
Chairman Board of Directors							
Chairman Nomination and Sustainability Committee							
Hubert Achermann	70	128	3'000	170	16	384	432
Vice-Chairman Board of Directors							
Independent Lead Director							
Chairman Audit Committee							
Member Nomination and Sustainability Committee							
Member Compensation Committee ¹							
Riet Cadonau	70	20	3'000	170	14	274	313
Member Compensation Committee							
Peter Hackel	70	30	3'000	170	14	284	324
Member Audit Committee							
Roger Michaelis	70	20	3'000	170	14	274	313
Member Compensation Committee ²							
Member Nomination and Sustainability Committee ¹							
Eveline Saupper	70	60	3'000	170	15	315	349
Chairwoman Compensation Committee							
Jasmin Staiblin	70	30	3'000	170	14	284	324
Member Audit Committee							

Ayano Senaha²	49	14	2'084	118	9	190	
Member Nomination and Sustainability Committee							
Zhiqiang Zhang³							98
Member Compensation Committee							
Total	539	592	26'084	1'477	128	2'736	2'934

All in CHF 1'000 and stated in gross amounts, except "Number of shares" column.

1 Until 20 April 2022.

2 As of 21 April 2022.

3 Former member of the Board of Directors until 21 April 2021.

4 The share-based compensation consists of the allocation of a fixed number of shares. The amount of the share-based compensation is calculated based on the share value on 31 December 2022, ie CHF 56.60.

5 Other benefits represent employer contributions to social insurance funds.

6 The total compensation includes the cash compensation (basis and committee fees), the share-based compensation and the contribution to social insurance funds.

The total compensation paid to the Board of Directors in 2022 was lower compared with the previous year. This change was due to the following factor:

- Although the number of Board members increased by one compared to the previous year, the decrease in the value of the shares (CHF 56.60 on 30 December 2022 compared with CHF 69.25 on 30 December 2021) resulted in a lower compensation overall.

The compensation system for the Board of Directors was unchanged compared with the previous compensation period.

At the 2021 Annual Shareholders' Meeting, shareholders approved a maximum aggregate compensation amount of CHF 3.140 million (based on a share value of CHF 80.00) for the Board of Directors for the compensation period from the 2021 Annual Shareholders' Meeting until the 2022 Annual Shareholders' Meeting. For this period, the effective compensation amounted to CHF 2.781 million (based on a share value of CHF 69.25 for the period in 2021 and CHF 56.60 for the period in 2022), and is thus within the approved limits.

At the 2022 Annual Shareholders' Meeting, shareholders approved a maximum aggregate compensation amount of CHF 3.600 million for the Board of Directors for the compensation period from the 2022 Annual Shareholders' Meeting until the 2023 Annual Shareholders' Meeting. This compensation period has therefore not yet been completed, and a conclusive assessment will be provided in the 2023 Compensation Report.

In the reporting year, no further compensation was paid to members of the Board of Directors and no compensation was paid to parties closely related to members of the Board of Directors.

Executive Committee

The members of the Executive Committee received cash, share-based compensation, and social security and pension contributions amounting to CHF 9.418 million for the year under review (previous year: CHF 8.697 million), compared with a total amount of CHF 10.829 million approved by the shareholders at the 2021 Annual Shareholders' Meeting.

Under the LTI plan, 31'040 performance shares with a total value at grant of CHF 2.160 million were granted to members of the Executive Committee for the year under review (previous year: 39'760 performance shares with a total value of CHF 2.055 million; in April 2022, a 1:20 share split was conducted and previous year figures have been adjusted accordingly).

Compensation of the members of the Executive Committee 2022

	Fixed base salary in cash	Short-term incentive (STI) in cash ¹	EPS dependent performance shares PS(EPS) ²	rTSR dependent performance shares PS(rTSR) ²	Share-based compensation (LTI) ²	Social insurance funds ³	Pension funds ⁴	Other compensation ⁵	Total compensation 2022 ⁶	Total compensation 2021
Executive Committee	3'128	3'060	15'520	15'520	2'160	506	552	12	9'418	8'697
Of whom										
Andreas Müller, CEO ⁷	920	1'266	5'960	5'960	830	176	148	0	3'340	3'142

All in CHF 1'000 and stated in gross amounts, except the "EPS dependent performance shares" and "rTSR dependent performance shares" columns, which are stated as number of shares.

1 The STI is based on the STI plan. The STI for the 2022 business year was approved by the Board of Directors on 23 February 2023. Payment will be made in March 2023.

2 The share-based compensation is based on the LTI plan. The number of PS granted corresponds to the target LTI amount (90% of the annual fixed base salary for the CEO, 60% of the annual fixed base salary for the other members of the Executive Committee) divided by the average Georg Fischer share closing price of the last 60 trading days prior to the grant date on 1 January 2022, ie CHF 69.59. In April 2022, a 1:20 share split was conducted. The figures have been adjusted accordingly.

3 The social insurance funds expenses represent employer contributions to social security. The amounts indicated are based on the compensation amounts disclosed in the table (including the value at grant of the share-based remuneration).

4 The pension funds expenses represent employer contributions to pension funds.

5 Based on the company's regulation for all employees, two members of the Executive Committee received a jubilee gift that is reflected in the table based on its fair value.

6 The total compensation includes the fixed base salary, the STI, the share-based compensation, social and pension contributions, as well as other compensation.

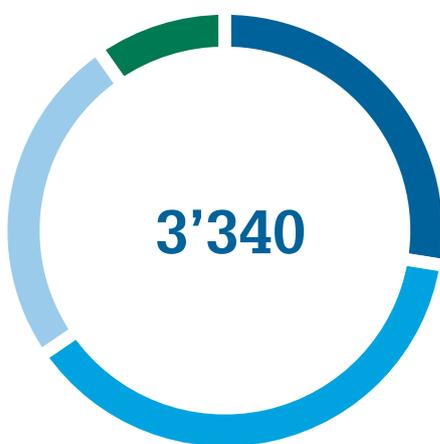
7 Highest individual compensation.

The total compensation for the CEO and the other members of the Executive Committee in 2022 was higher than in 2021. The change in the compensation was due to the following factors:

- **Fixed base salary:** The fixed base salaries of the CEO and members of the Executive Committee were appropriately increased in line with market practice and the result of the benchmark analysis conducted in 2021. Taking the increase for the year under review into consideration, fixed base salary is at mid-market benchmark level, while total direct compensation (including variable compensation elements STI and LTI on target level) is slightly below;
- **STI:** The financial performance of the Corporation and the divisions was higher in 2022 compared with 2021, which resulted in a higher STI payout, despite raised targets (see details in the section [Performance in 2022](#)). For the year under review, the STI payout for the CEO was CHF 1'266'000 (STI for the CEO in 2021 was CHF 1'146'000) and CHF 3'060'000 for the Executive Committee (incl. CEO; STI for the Executive Committee incl. CEO in 2021 was CHF 2'674'000). The overall payout for the Executive Committee is based on target achievements in the range from 130.2% to 139.1% (84% to 136.5% in 2021);
- **LTI:** The overall value of the share-based remuneration increased from last year in line with the fixed base salary increase as the grant amount is linked to the fixed base salary;
- Please note that a significant portion of the social security payments of the employer to the Swiss social security system represents a solidarity payment, as the individuals will never get any return or benefit due to these payments.

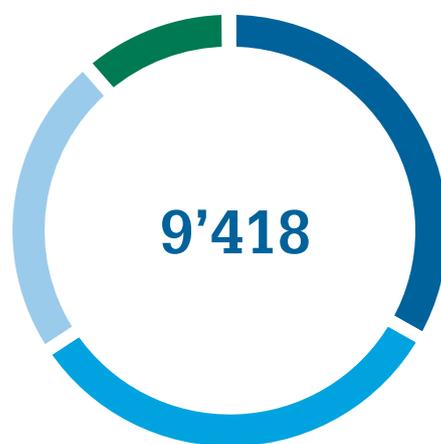
The ratio between fixed and awarded variable compensation in 2022 was as follows:

CEO compensation for 2022
in CHF 1'000



- Fixed base salary
- Short-term incentive
- Long-term incentive
- Benefits

Executive Committee compensation (incl. CEO) for 2022
in CHF 1'000



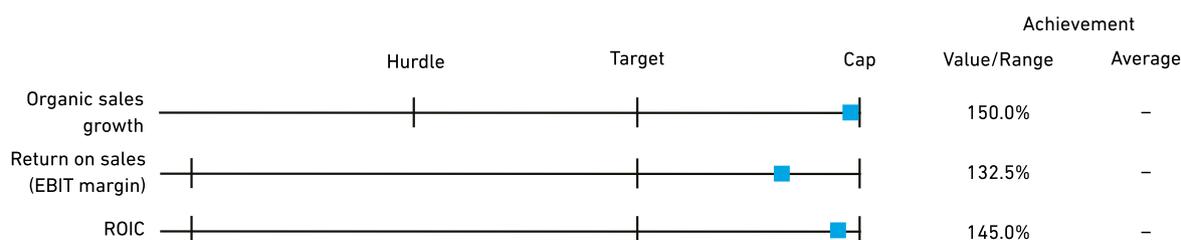
- Fixed base salary
- Short-term incentive
- Long-term incentive
- Benefits
- Other

No compensation was paid to parties closely related to members of the Executive Committee.

Performance in 2022

Short-term incentive – Business objectives

Corporation level



Division level



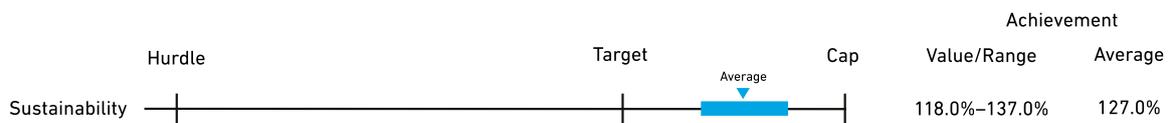
Short-term incentive – Sustainability

Sustainability measures have been implemented successfully during 2022 and the organization has made significant progress on the roadmap to achieve its long-term goals. The following are examples of some of the most important achievements with regard to the sustainability measures (see further details in the section [Sustainability key figures 2022](#) of the Sustainability Report):

- 63% of sales delivered social or environmental benefits to GF's customers (see details in the section [Product portfolio](#) of the Sustainability Report);
- The science-based targets initiative has validated GF's GHG emission reduction targets and the measures for scope 1 and 2 emissions were implemented successfully (see details in the section [Science Based Targets initiative \(SBTi\)](#) of the Sustainability Report);
- In addition, the accident rate target was achieved due to a reduction in the number of accidents (see details in the section [Safety and well-being](#) of the Sustainability Report);
- Furthermore, GF increased the amount of renewable energy at its facilities to 31%, which contributed significantly to the reduction of scope 1 and 2 emissions (see details in the section [Actions for managing energy and mitigating climate impact](#) of the Sustainability Report).

GF's global operations have been assessed according to the TCFD (Task Force on Climate-related Financial Disclosures). The TCFD report quantifies GF's exposure to physical risks such as rising sea levels, severe drought, heavy precipitation, etc. and identifies major transition risks and opportunities. In 2022, GF further improved the TCFD-aligned risk assessment, adding a financial quantification to material climate-related risks and opportunities.

Overall, the achievement of the individual sustainability objectives exceeded the ambitious targets and ranged from 118.0%–137.0% of target.



Short-term incentive – Individual objectives

The targets of the individual objectives for the members of the Executive Committee set for the year 2022 have been surpassed and reached 125.2% of target on average. Key individual achievements have been:

Strategic objectives

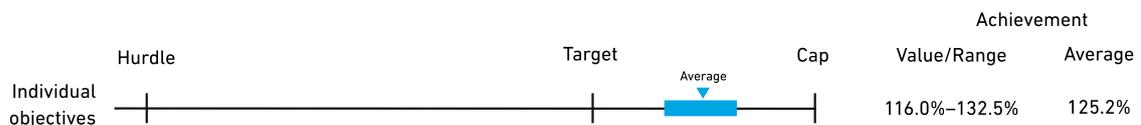
- Strengthening of the North American presence;
- Successful integration and further development of recently acquired businesses;
- Increase of businesses in resilient end markets, eg share of e-mobility orders and non-revenue water applications;
- Development of new business segments.

Operational objectives

- Product launches on time and reaching set sales targets in time;
- Implementation of lean management initiative with clear operational benefits;
- Successful ramp-up of new facilities within budget and on time;
- Significant improvements in challenging operation and production facilities;
- Further improvement of ERP and IT systems.

Value and culture change initiative

- Evolving culture to further strengthen GF's learning and performance capabilities;
- Diversity and inclusion activities reaching pre-set targets.



Short-term incentive – Overall payout

The overall payout of the business, sustainability and individual objectives amounts to 130.2% to 139.1% of target for the Executive Committee (incl. CEO). No discretionary adjustments have been made.



Long-term incentive vesting overview

LTI 2019

The performance period for the LTI 2019 ended at the end of 2022 with the following vesting levels of the performance measures:

- The performance factor calculated based on the average EPS in the years 2020, 2021, 2022 (performance period) and the average EPS in 2017, 2018, 2019, resulted in a ratio of 71.46%, which corresponds to a vesting level of 0%;
- With regard to the rTSR performance, Georg Fischer ranked at 7th for 2020 and at 7th for 2021 and at 17th for 2022 in the SMI MID. The rTSR average percentile ranking of Georg Fischer in 2020, 2021 and 2022 (performance period) in the SMI MID was 65.37% (Georg Fischer outperformed 65.37% of peers) and resulted in a vesting level of 130.73% of target;
- This resulted in an overall vesting level of 65.37%.



LTI 2018

For reference, the LTI 2018 (performance period ended at the end of 2021) resulted in an overall vesting level of 65.37%.



Audited by PwC Switzerland

Shareholdings of the members of the Board of Directors and of the Executive Committee

The information on shareholdings of the members of the Board of Directors and of the Executive Committee is included in the notes to the financial statements of Georg Fischer Ltd under [4.5 Shareholdings of members of the Board of Directors and Executive Committee](#).

As at 31 December 2022, a total of 392'684 shares (previous year adjusted for share split: 356'540 shares) were held by the Board of Directors and the Executive Committee, corresponding to 0.5% of issued shares (previous year: 0.4%).

The shares of the share-based compensation program are either treasury shares or repurchased on the market.

There are no outstanding convertible bonds, and GF has issued no options.

Loans to members of the governing bodies

Neither Georg Fischer Ltd nor its GF Corporate Companies granted any guarantees, loans, advances or credit facilities to members of the Board of Directors or the Executive Committee, or related parties in the year under review. As of 31 December 2022, no loans to members of the Board of Directors or the Executive Committee, or related parties were outstanding.

Functions of the members of the Board of Directors

Further activities and functions of the members of the Board of Directors are listed in the [Members of the Board of Directors](#) section in the Corporate Governance Report.

Functions of the members of the Executive Committee

Further activities and functions of the members of the Executive Committee are listed in the [Members of the Executive Committee](#) section in the Corporate Governance Report.

Equal pay analyses

Information about equal pay analyses can be found in the [Nomination and Sustainability Committee](#) section in the Corporate Governance Report.

Outlook

Changes in compensation for the Board of Directors

The Compensation Committee conducted a benchmarking analysis in 2022 for the Board of Directors compensation on the same basic structures as in prior years. Feedback from exchanges with investors and proxy advisors was also taken into consideration. The results showed that total compensation levels are at market level. However, the Board membership basis cash fee was found to be significantly lower, while the share-based compensation was determined to be higher compared to the peer group. This leads to volatility in total compensation when the share price fluctuates significantly. To better balance cash and share-based compensation and to reduce the volatility of total compensation, from the Annual Shareholders' Meeting 2023, the following changes will become effective for all members of the Board of Directors, including the Chair:

Responsibility	Fee	Restricted shares
Basis fee		
Board membership	Currently: CHF 70'000 Change to: CHF 100'000	Currently: 3'000 shares Change to: 2'500 shares
Additional fees		
Board chairmanship ¹	Currently: CHF 290'000 Change to: CHF 260'000	Currently: 3'000 shares Change to: 3'500 shares
Independent Lead Director	CHF 22'500	
Audit Committee chairmanship	CHF 80'000	
Audit Committee membership	CHF 30'000	
Compensation Committee chairmanship	CHF 60'000	
Compensation Committee membership	CHF 20'000	
Nomination and Sustainability Committee chairmanship	CHF 60'000	
Nomination and Sustainability Committee membership	CHF 20'000	

¹ The Chairman of the Board of Directors is not eligible for additional committee fees.

Based on an estimated share price of CHF 60.00, the reduction by 500 shares in the Board membership basis fee reflects an approximate value of CHF 30'000. Consequently, the cash component will be increase by that amount. As a result, total compensation levels will be more stable in the future. With respect to the Board chairmanship fee, the aforementioned benchmarking analysis showed that the total compensation level is adequate. The fee for the Board chairmanship will therefore be adjusted in line with the change for the basis Board membership fee, in order to keep the total Board chairmanship compensation unchanged. No further fees will be changed.

Report of the statutory auditor

to the General Meeting of Georg Fischer Ltd

Schaffhausen

Report on the audit of the compensation report

Opinion

We have audited the compensation report of Georg Fischer Ltd (the Company) for the year ended 31 December 2022. The audit was limited to the information on compensation, loans and advances pursuant to Art. 14 to 16 of the Ordinance against Excessive Remuneration in Listed Companies Limited by Shares (Ordinance) in the tables marked 'Audited by PwC Switzerland' on pages 358 to 360 and page 365 of the compensation report.

In our opinion, the information on compensation, loans and advances in the compensation report complies with Swiss law and article 14 to 16 of the Ordinance.

Basis for opinion

We conducted our audit in accordance with Swiss law and Swiss Standards on Auditing (SA-CH). Our responsibilities under those provisions and standards are further described in the 'Auditor's responsibilities for the audit of the compensation report' 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.

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 tables marked 'Audited by PwC Switzerland' in the compensation report, the consolidated financial statements, the financial statements and our auditor's reports thereon.

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

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

The Board of Directors is responsible for the preparation of a compensation report 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 a compensation report that is free from material misstatement, whether due to fraud or error. The Board of Directors is also responsible for designing the compensation system and defining individual compensation packages.

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Telefon: +41 58 792 44 00, www.pwc.ch

PricewaterhouseCoopers AG is a member of the global PricewaterhouseCoopers network of firms, each of which is a separate and independent legal entity.

Auditor's responsibilities for the audit of the compensation report

Our objectives are to obtain reasonable assurance about whether the information on compensation, loans and advances pursuant to article 14 to 16 of the Ordinance is 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 this compensation report.

As part of an audit in accordance with Swiss law and SA-CH, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement in the compensation report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

PricewaterhouseCoopers AG



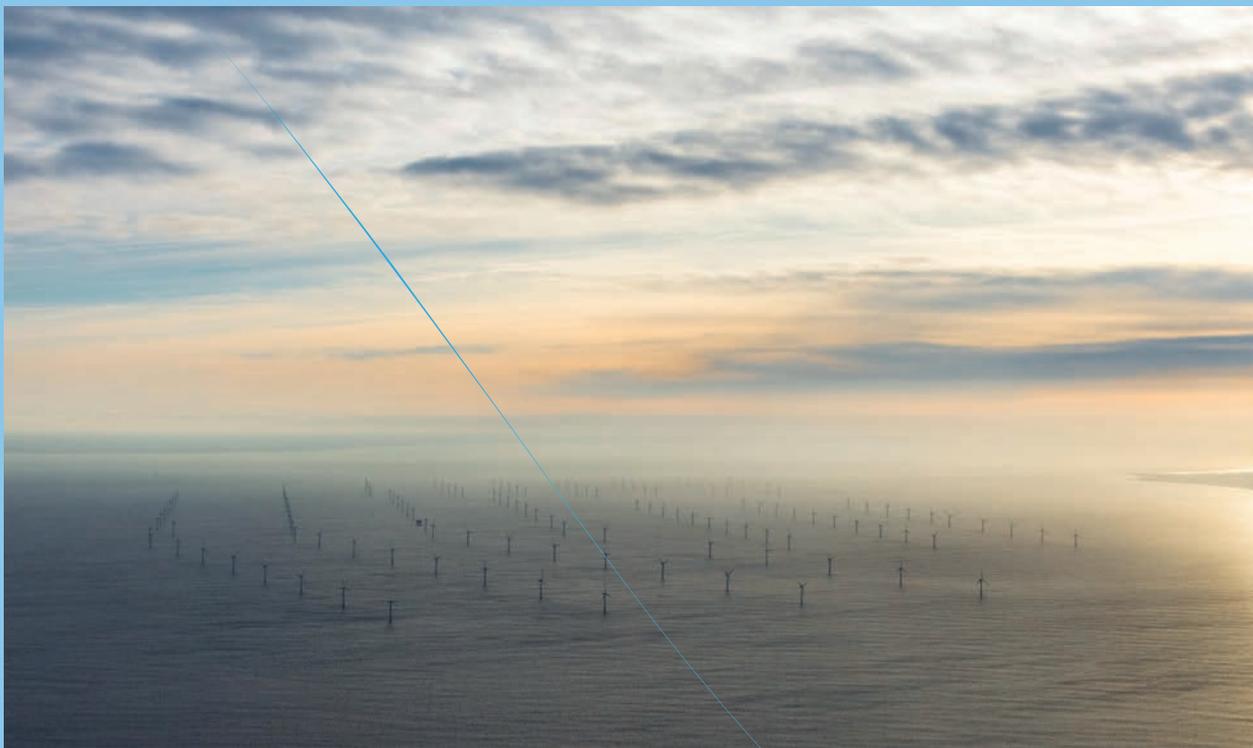
Beat Inauen
Audit expert
Auditor in charge



Tobias Handschin
Audit expert

Zürich, 27 February 2023

+GF+



TCFD Report

Going forward and shaping the future

TCFD Report

TCFD Report.....370

GF aligns its reporting with the requirements of the Task Force on Climate-related Financial Disclosures (TCFD), reflecting the growing importance of these disclosures among investors and businesses. GF has committed to disclosing its climate-related financial reporting annually and aligned its enterprise risk management process with the recommendations of the TCFD. In 2022, we further improved our TCFD-aligned risk assessment, adding a financial quantification to material climate-related risks and opportunities.

For more information on the TCFD, visit www.fsb-tcfid.org

This report presents the 11 disclosures recommended by the TCFD in the sections governance, strategy, risk management, and metrics and targets. For more detailed information, please follow the links provided as they refer to GF's existing disclosures in its annual and sustainability reports, including its response to the 2022 climate change questionnaire of CDP, formerly known as the Carbon Disclosure Project.

Governance

1.1 Describe the board's oversight of climate-related risks and opportunities

GF believes sustainability is a topic of critical importance. GF therefore formed a Sustainability Committee in 2020 to support the Board of Directors in strengthening the company's focus on environmental, social and governance (ESG) topics. The Sustainability Committee is part of the Nomination Committee. The Charter of the Nomination and Sustainability Committee defines that regular meetings are held at least twice a year. In 2022, the committee met three times to discuss, among others, climate-related issues. The Sustainability Committee's agenda explicitly refers to eight GF sustainability goals for 2025, which include climate change. Climate change has been discussed at every meeting since the committee's founding. GF's overall progress is monitored against a predefined timeline and the 2021–2025 strategy cycle.

An essential role of the Sustainability Committee is to ensure that executive remuneration is linked to ESG targets and aligns with the eight goals of the GF Sustainability Framework 2025. Accordingly, each Executive Committee member has the company-wide CO₂e target as a remuneration incentive. GF also defined the target to implement the TCFD's recommendations and publish the company's first TCFD report in March 2022, which was included in its Annual Report 2021.

The Executive Committee has direct oversight over the progress made towards strategic goals and targets, including those that are climate related. In addition, the committee conducts performance reviews on a regular basis (two to four times a year) and at its management meetings with each division. These reviews enable the committee to take the necessary strategic and operational actions to ensure that target achievement remains on track.

Sustainability remained a strategic topic in 2022. For the roll-out of the Sustainability Framework 2025, GF established the Corporate Sustainability Council (CSC) at the Executive Committee level. The CSC coordinates and oversees all activities relating to sustainability. It is headed by the CSC Chairperson, advises the committee, and consists of the CEO, CFO, divisional presidents, corporate and divisional sustainability teams, and other members of GF's top management. The CSC's key responsibilities include tracking and reporting the progress and measures of the framework; supporting the committee on decisions on cross-divisional, strategic sustainability projects and initiatives; coordinating and supervising sustainability projects and initiatives and reporting on their progress to the Executive Committee. The CSC meets at least biannually.

For more information, see:

- + [Sustainability Report 2022: Sustainability governance](#)
- + [Corporate Governance Report 2022](#)
- + [CDP Climate Change, Questionnaire 2022, Georg Fischer, C1.1a/C1.1b/C1.2/C1.2a](#)

1.2 Describe management's role in assessing and managing risks and opportunities

GF has a clear governance structure in place to assess and manage risks related to sustainability. As already mentioned, GF formed the Sustainability Committee in 2020 and the Corporate Sustainability Council in 2021. Their roles and responsibilities are described above.

The wider GF sustainability organization includes Corporate Sustainability, which is led by the Head of Corporate Sustainability, who reports to the CFO. The department oversees strategic, cross-functional sustainability projects and initiatives globally, and is responsible for sustainability reporting as well as dialogue with external stakeholders, such as ESG rating agencies. The Head of Corporate Sustainability participates in Sustainability Committee meetings.

Corporate Sustainability works closely with the three divisions' sustainability teams to ensure they track the progress of the divisions' facilities and business units toward their respective 2025 sustainability targets. The department is responsible for raising the organization's awareness of sustainability and thus of climate-related risks.

The sustainability teams evaluate their division's sustainability performance on a quarterly basis and present their findings to their respective management teams. The following aspects are reviewed: the achievement of sustainability targets and the implementation status of agreed-on actions, the monitoring of the sustainability performance of business partners, and the development and marketing of products and solutions offering sustainability benefits to GF customers.

The divisions define a set of measures each year to achieve GF's sustainability targets. Each divisional sustainability manager is responsible for ensuring that the individual facilities define and implement measures to meet their respective targets, for compiling an aggregated overview for their division to track progress, and for coordinating with Corporate Sustainability on status, experience-sharing across divisions and, where needed, for escalation.

Target achievement – including the achievement of sustainability-related targets, such as the reduction of greenhouse gas emissions – is incentivized at various levels. For example, individual targets are defined for Executive Committee members as well as for the corporate and divisional sustainability teams.



For more information, see:

- + [Sustainability Report 2022: Sustainability governance](#)
- + [Corporate Governance Report 2022](#)
- + [CDP Climate Change, Questionnaire 2022, Georg Fischer, C1.2a](#)

Strategy

2.1 Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term

GF has identified hazards in categories relevant to its business model and in the context of climate-related risks and opportunities. These risks include both acute and chronic physical risks, transition risks and opportunities.

Physical risks include tropical cyclones, sea level rise, river flooding, precipitation, fire, drought and heat. For more information, please refer to the in-depth analysis and conclusions drawn from this report.

Transition risks include GHG prices, the security of energy and processes, regulations and taxes, litigation, consumer preferences, the availability of capital, the energy transition and raw materials. More information is available in section 3.1. and the in-depth analysis of financial quantification.

Opportunities include transportation, production and distribution processes, recycling, low-emissions energy sources, the carbon market, growing consumer demand, the diversification of business activities, availability of capital and substitutes for existing resources. More information is available in section 3.1.

For more information, see:

[+ CDP Climate Change, Questionnaire 2022, Georg Fischer, C2.2a/C2.3a/C2.4a](#)

2.2 Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

The GF product portfolio includes many solutions that help customers mitigate their climate impacts. All three GF divisions have significant opportunities because changing consumer preferences and growing investor focus require their product portfolios to become more energy-efficient and sustainable. GF provides its customers with sustainable products and enters new markets with increased demand for sustainable alternatives.

Across its diverse product portfolio and operations, GF procures the majority of its raw materials, goods and services locally. This approach aims to ensure that the company's raw material deliveries reduce the impact of intercontinental distribution networks, while recognizing the consequences of these activities and the effect that a changing climate may have on the supply chain. In addition, GF's manufacturing facilities are in close proximity to their customers and strive to continually optimize their logistics footprints. Examples include GF's two new factories in China – namely, GF Piping Systems in Yangzhou and GF Casting Solutions in Shenyang. GF heavily relies on the timely delivery of raw materials, goods and services. Acute physical risks, such as heavy rain, wildfires or floods, can lead to the destruction of key infrastructure, thereby impeding transportation and potentially resulting in product supply shortages.

The GF Code for Business Partners, which defines strict environmental, social and compliance standards, is mandatory for suppliers to all three GF divisions.

GF is committed to delivering solutions that help customers mitigate their contribution to climate change and enhance their resilience and adaptation to it. GF also emphasizes innovation and R&D, and therefore invests in R&D to create innovative new products and solutions that provide customers with environmental, climate and social benefits during the products' use phase. In 2022, GF's overall R&D expenses were at CHF 120 million.

For more information, see:

[+ CDP Climate Change, Questionnaire Georg Fischer, C3.3/C3.4](#)

[+ Sustainability Report 2022: Product portfolio](#)

[+ GF website: Value chain](#)

2.3 Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

The resilience of GF’s future strategy is affected by the transition to a low-carbon economy, which presents both opportunities and risks. GF has therefore analyzed a range of climate scenarios that show possible outcomes under different climatic conditions. To project a scenario aligned with the Paris Agreement’s goal of limiting global warming to 2°C or a lower scenario, the International Energy Agency’s (IEA’s) Sustainable Development Scenario was used. At the time of GF’s assessment, this was the IEA’s best and most recent well-below-2-degree scenario. GF’s assessment analyzes various factors that could impact GF’s future business strategy and its ability to achieve long-term profitability.

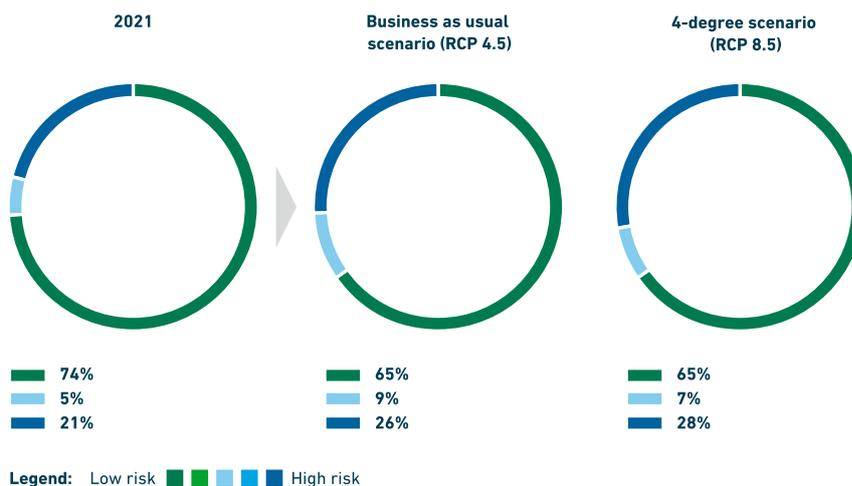
Furthermore, to assess GF’s exposure to physical risks, the Intergovernmental Panel on Climate Change’s (IPCC’s) representative concentration pathways (RCP) were used in a business-as-usual scenario (RCP 4.5) and a 4°C scenario (RCP 8.5) by 2050. In the analysis, 2050 was used as a reference year in line with the Paris Agreement’s 2050 target for net-zero emissions. The Sustainability Committee made a conscious decision not to use climate scenarios that go beyond 2050.

In-depth analysis: Physical climate risks

This climate risk analysis was prepared using the Climate Change Edition of reinsurer Munich Re’s Location Risk Intelligence software. It found that physical risks such as tropical cyclones and sea level rise are immaterial to GF’s operations, whereas river flooding and precipitation posed a high risk to some operations. The percentages below refer to the proportion of GF’s global production facilities that are exposed to a specific risk category.

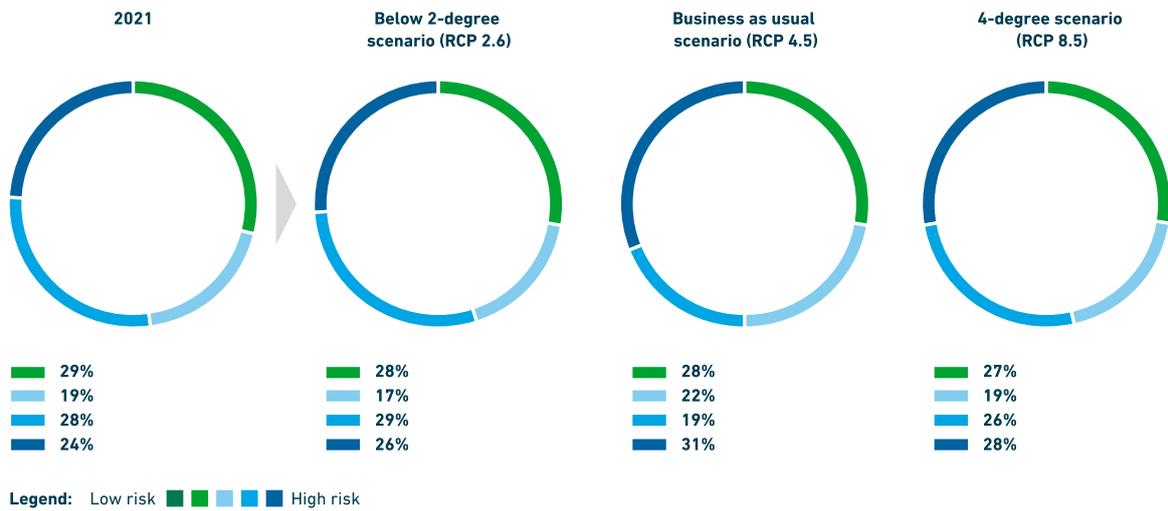
Undefended River Flood

Undefended river flood describes the risk of flooding in areas where no flood protection systems or defense structures (such as dams) are in place. Under a 4°C scenario in 2050, the share of high-risk flood sites increases from 21% in 2021 to 28%. River flood is a particularly strong hazard in the majority of Chinese sites of all divisions.



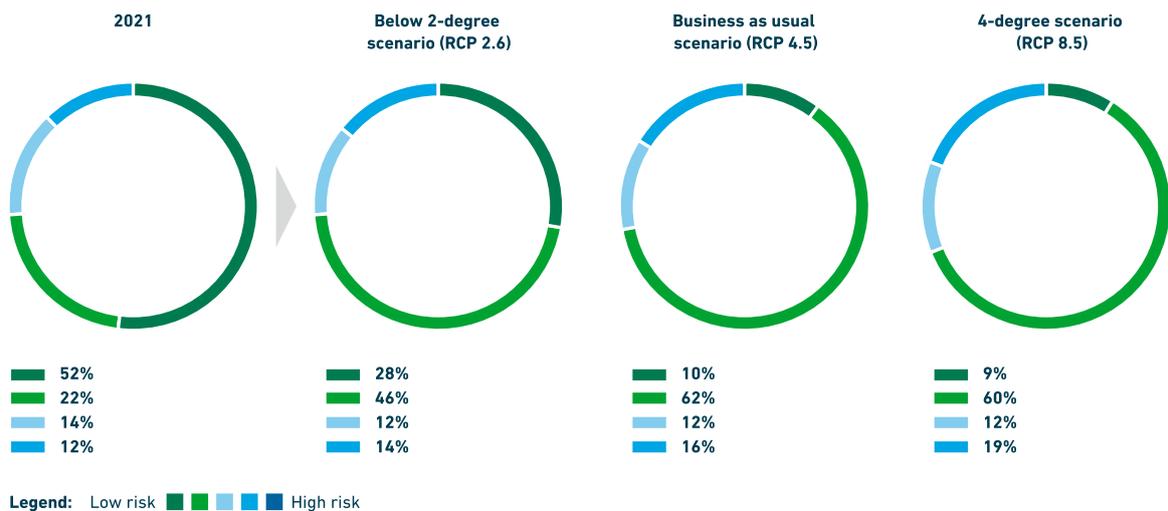
Precipitation Stress Index

Due to global warming and rising ocean temperatures, air contains more moisture, which leads to an increase in heavy precipitation events. Heavy rainfall increases the risk of floods, which often lead to the destruction of infrastructure. The share of high-risk sites for heavy rain increases from 24% in 2021 to 28% in 2050 under a 4°C scenario, with a strong impact projected on sites in China, Switzerland and the United States.



Fire Weather Stress Index

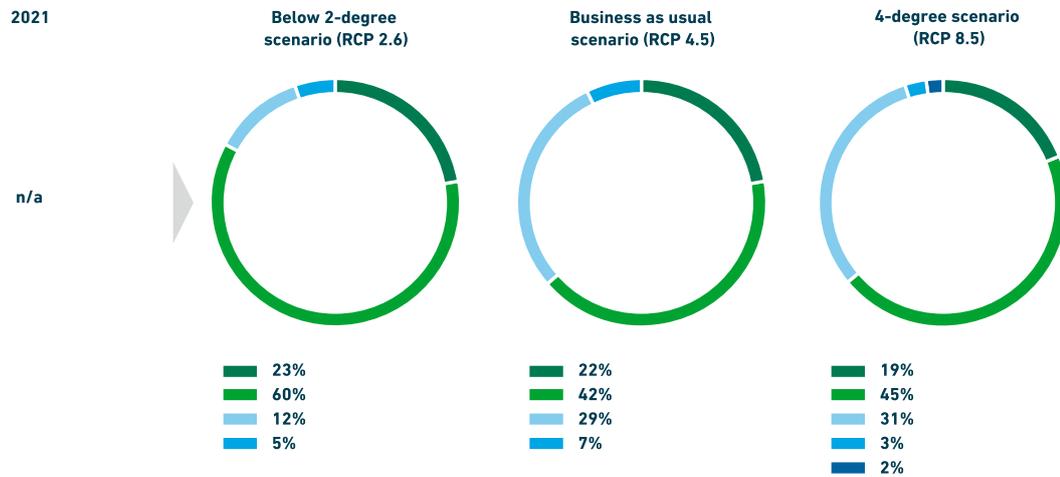
Wildfires are destructive hazards that can occur naturally or be caused by humans. Fires destroy vegetation and lead to the destruction of infrastructure and economic resources. No GF sites fall into the high-risk category, but the share of medium-to-high risk sites at GF increases from 12% in 2021 to 19% in 2050 under a 4°C scenario. All other sites face only minor hazards.



Drought Stress Index

Increasing temperatures combined with changes in precipitation patterns could cause drier weather conditions and more frequent and intense droughts that have severe economic, environmental and social impacts. Bakersfield, CA

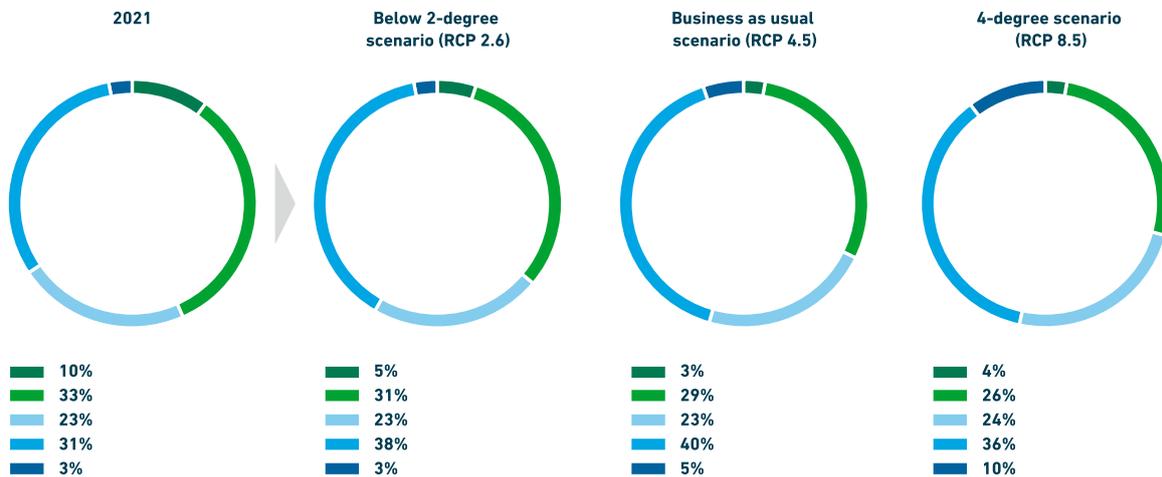
(US) was identified as the only high-risk site for drought, but the number of medium-risk sites increases from 12% in 2021 to 31% in 2050 under a 4°C scenario.



Legend: Low risk (dark green), Medium risk (light green), High risk (blue)

Heat Stress Index

Global warming leads to increasing temperatures and more intense and frequent heatwaves. Heat stress affects humans, infrastructure and ecosystems. In 2021, only 3% of GF sites are in the high-risk range, but this increases to 10% in 2050 under a 4°C scenario. GF’s projections show heat stress is of particular significance for Chinese sites in all divisions.



Legend: Low risk (dark green), Medium risk (light green), High risk (blue)

Risk management

3.1 Describe the organization's processes for identifying and assessing climate-related risks

Risks identified at GF are based on a biannual risk mapping analysis and assessed for their likelihood of occurrence and potential impacts. Where possible and appropriate, the consequences of the identified risks are quantitatively evaluated, taking into consideration the frequency of consequences and any mitigation measures already implemented (alternatively, a qualitative assessment of the risk exposure is applied). As a result, the risk consequences are classified in terms of their potential financial cost to the business:

- minor (less than CHF 10 million)
- major (between CHF 10 million and CHF 50 million)
- critical (between CHF 50 million and CHF 150 million)
- catastrophic (more than CHF 150 million)

To also account for financial impacts arising from climate-related opportunities, the same classification has been applied, but with different labels: minor, major, large, and extreme. GF determines the potential overall impact of identified risks by combining their likelihood of occurrence with their potential financial cost and factoring in any other relevant concerns, such as reputational damage or legal impacts. Material impacts are evaluated based on a tiered system of threshold values, depending on the risk scope. Risks at the corporate, divisional and facility level have different sets of thresholds, since facilities vary in size.

In general, GF considers an impact to be substantive, if:

- a catastrophic risk is possible, probable or likely
- a critical risk is probable or likely
- a major risk is likely

In 2021, GF conducted a workshop attended by experts from all three divisions, Corporate Risk Management and Corporate Sustainability. Its purpose was to define the main climate-related risks and opportunities and assess their possible impacts. The workshop considered impacts on GF's business activities that could result from the physical effects of climate change and transition risks such as political, technological, market and reputational developments. It also identified relevant climate-related opportunities resulting from resource efficiencies, energy sources, products and services, and market demands.

For more information, see:

- ✚ [CDP Climate Change, Questionnaire 2022, Georg Fischer, C2.1b/C2.2](#)

In-depth analysis: Quantification of transitory risks and opportunities

In 2022, GF's material transitory risks and opportunities were financially quantified and classified as described above. This enables the company to prioritize defined climate-related risks and opportunities and compare their impact with that of other risk categories.

The security of the energy supply and energy prices are two risks deemed to have a major to critical financial impact. Some of GF's business is energy intensive, and energy costs are therefore critical. Although energy price fluctuations are normal, sustained higher prices would challenge GF's competitiveness. Analyses of historical energy prices, such as the IEA's Energy Prices Data Explorer, do not indicate any clear price trends. In 2022, for example, Europe experienced an unprecedented energy crisis due to Russia's war of aggression against Ukraine. The war's repercussions have caused energy prices to increase by more than 100%. An increase of just 25% would result in about CHF 17 million in additional costs for GF and thus constitute a critical financial impact.

The automotive industry is currently shifting to more sustainable forms of mobility, by transitioning from internal combustion engines (ICEs) to electric and other alternative drivetrains like fuel cells. For GF's Casting Solutions division, this will lead to a shift in demand of automotive customers. If consumers embrace alternative forms of mobility, products for ICE-powered vehicles will most likely decline, whereas new components for electric drivetrains are increasingly in demand. GF quantified these changes using different scenarios for the period 2021 to 2030, which are based on governments' e-mobility targets or a net-zero world.

However, most of GF's automotive products are independent to the drivetrain and hence not effected by the change in customer demand. The shift to e-mobility creates an increased business opportunity from contributing to the automotive industry's low-emission products, specifically products that propel the growth of e-mobility. GF Casting Solutions long-term expertise on lightweight design and functional integration strongly supports automotive customers towards sustainable mobility.

Financial quantification of risks and opportunities is GF's preferred approach. For some impacts, however, much less data is available, and the assumptions regarding them are highly uncertain. In these cases, GF adopts a qualitative approach. One example is the opportunity to diversify business activities, such as entering or expanding GF's position in markets for sustainable products. These include e-mobility, lightweight products, carbon blades and hydrogen products.

Hydrogen is seen as a key energy carrier that is supporting the energy transition worldwide. GF Piping Systems is constantly innovating its solutions to support this growing industry along the entire hydrogen value chain, from production and storage to distribution and use. Its hydrogen expertise is founded on decades of experience in gas supply, industrial water treatment and the general transport of substances in multiple industrial applications. While the growth of hydrogen presents numerous and promising opportunities, the pace of growth is still uncertain. It is therefore currently not possible to quantify these opportunities.

Transition risk	Impact on GF	Significance for GF	Financial impact
GHG price	Increasing energy and electricity usage costs decrease GF's competitiveness.	The potential costs of GF's carbon-neutral transition are being considered due to the diverse locations of production sites and operating in different regulatory markets.	Major
Security of energy supply and prices	Fluctuations in energy prices and abrupt and unexpected shifts in energy costs	Some of GF's business is energy-intensive and consequently energy costs are critical. Although energy price fluctuations are normal, sustained higher prices might challenge GF's competitiveness.	Minor-major
Regulations and taxes	Regulations on limits for GHG emissions and/or higher taxes on energy sources such as non-renewable electricity or fuels	Energy efficiency standards are already commonplace in all countries where GF has operations. However, it is anticipated that standards will continue to become stricter in the future.	Minor
Litigation	Involvement in litigations may result in higher costs and reputational damage.	GF can be involved in litigation at times, especially through its production sites. Climate-related litigation is expected to increase, thus increasing GF's risk exposure.	Rather minor
Consumer preferences	Changes in demand, especially in products considered "unsustainable"	As a B2B manufacturer, GF's demand originates from changing demand in various markets, such as currently observed in the automotive industry's transition from internal combustion engines to e-mobility.	Major
Reduced capital availability	Due to the requirements of the EU taxonomy, the availability of capital is becoming increasingly dependent on a company's climate performance.	The GF product portfolio will be screened for eligibility for the EU taxonomy to indicate its contribution to the six environmental objectives, identify the share of turnover contributing to socially or environmentally beneficial activities and how much of GF's operating expenses are devoted to it.	Minor
Energy transition	Research and development expenditures in new and alternative low-carbon technologies	One-quarter of GF's business is energy-intensive and requires a variety of energy sources to function. Switching to renewable energy will amount to a CAPEX investment of over CHF 52 million over the next five years to transition to lower-carbon energy sources.	Critical
Raw materials	Fluctuations in raw material prices as well as abrupt and unexpected shifts in raw material costs lead to unreliable supply chains.	As a manufacturer, shifts in raw materials are a high risk for GF that can impact supply chain stability. The increasing costs and scarcity of some raw materials may pose a risk to all three GF divisions.	Rather minor
Low-emissions sources of energy	Additional costs for buying renewable electricity	In 2022, renewable energy met 31% of GF's total energy consumption. Substituting electricity from fossil fuels with renewable sources will be a high priority for GF in the coming years, which in turn will increase operating costs.	Minor

Opportunity	Impact on GF	Significance for GF	Financial impact
Modes of transportation	Reduction of fuel consumption by replacing fleets with more fuel-efficient vehicles and using fuel-efficient modes of transport	As a manufacturer, GF depends on reliable transportation. GF launched an e-mobility policy in 2021 to transition its car fleet to an electrified fleet while also utilizing subsidies in selected markets.	Minor
Production and distribution processes	Efficiency gains in production processes and logistics	As a manufacturer using heavy machinery for production, there are many opportunities for efficiency gains across all divisions. For example, GF identified several opportunities to make its production capacity more energy-efficient by replacing extruders and molding machines with more economical units.	Major
Recycling	Purchase of alternative materials or reuse of existing materials	GF is currently embarking on a circular economy program that identifies products reusing materials from other processes, such as bio-based PVC. The program is currently being trialed in projects in the UK.	Rather minor
Low-emissions energy sources	Switching to renewable electricity and energy sources	Low-emissions energy sources and renewable electricity lead to reduced exposure in fossil fuel markets.	Minor-major
Carbon market	Participation in carbon market reduces exposure to GHG emissions.	Participation in carbon markets can reduce CO ₂ emissions and generate income when CO ₂ emissions are decreased.	Major-large
Consumer preferences	Attracting and retaining customers with preferences for low-emission products while gaining a competitive advantage.	Stronger demand for GF's sustainable products reflects consumers' low-emission preferences and leads to a more competitive market position, such as GF's hydrogen shipping project in the Netherlands or its lightweight components for the automotive industry.	Major to extreme
Ability to diversify business activities	Establishing a foothold and expanding GF's position in future-oriented markets for sustainable products	The development of new products and services leads to a diversification of the GF product portfolio and attracts new customer segments. Increasing demands for e-mobility products/lightweight products, new turbines and carbon blades diversify the GF product portfolio.	Rather large
Capital availability	Demands from investors in line with the EU taxonomy increase investment in companies with sustainable products.	The relevance of the EU taxonomy is expected to increase in the future. GF believes EU taxonomy-aligned products will increase investment attractiveness and lead to increased capital availability.	Minor-major
Resource substitutes or diversification	Increased supply chain reliability and the ability to maintain operation in various conditions	The diversification of GF's energy supply and the decentralization of its power generation increase supply chain reliability and improve flexibility in cases of natural disasters.	Rather major

3.2 Describe the organization's processes for managing climate-related risks

GF employs various tools to manage internal and external risks, including those directly related to climate change. For example, Thomson Reuters Accelus, an enterprise risk management (ERM) tool, is used at the corporate and facility/asset level and along the value chain to assess specific upstream and downstream risks. The assessment encompasses the systematic identification, evaluation and reporting of strategic, operational, financial, social, environmental and climate-related risks as well as the maintenance of commensurate insurance coverage.

GF also identifies climate-related risks, particularly physical risks, using the aforementioned Munich Re tool. In addition, Corporate Sustainability at GF conducts independent research in collaboration with consulting firms.

For more information, see:

[+ CDP Climate Change, Questionnaire Georg Fischer, C2.2](#)

3.3 Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management

Climate-related risks are integrated into GF's risk management system via its combined ERM process. The clear organization of climate activities and governance roles ensures that GF works efficiently and improves continually. In the future, GF plans to further align its on-site risk management process to the TCFD risk management process in order to adopt a single approach for all risk categories. This consolidation will ensure the complete integration of climate-related risks and opportunities into GF's ERM system.

Metrics and targets

4.1 Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process

GF believes it must take great care to avoid potentially adverse environmental impacts and has identified "climate and energy" as one of its most relevant material topics. GF therefore intends to reduce its GHG emissions across the value chain and decrease energy consumption throughout its global operations. In practical terms, this means improving energy efficiency, promoting the use of renewable energy sources, evaluating measures to self-generate renewable energy on-site and procuring renewable energy certificates.

In addition, GF assessed the environmental impact of its direct operations and found that waste generated during production is one of the largest components of its environmental footprint. Although the majority of GF's waste is non-hazardous, the company has a responsibility to minimize both hazardous and non-hazardous waste. GF therefore continually monitors waste-related KPIs and strives to implement circular economy principles wherever possible, including finding new and effective ways to reuse and recycle materials.

From a manufacturing perspective, GF's water consumption has a smaller impact on its environmental footprint than GHG emissions and waste generation, as most of its processes are not water intensive. Nonetheless, GF's latest materiality analysis indicated that sustainably managing its water footprint is a growing priority for its stakeholders and customers.

In 2022, GF continued its quarterly sustainability reporting (internally only) and, since October 2021, it has included specific references to its progress in reducing its CO₂e footprint. GF's quarterly reporting focuses on approximately 37 production sites responsible for over 90% of total CO₂e emissions (scope 1 and 2).

For more information, see:

[+ Sustainability Report 2022: Environmental performance indicators](#)

4.2 Disclose scope 1, scope 2, and, if appropriate, scope 3 greenhouse gas (GHG) emissions, and their related risks

In '000 tonnes of CO ₂ e emissions	2022	2021
Total CO ₂ e emissions (market-based approach)	1'802	1'975
Scope 1 (fuel-related energy consumption)	82	84
Scope 2 market-based (electricity and district heating from site-specific energy mix)	153	189
Scope 2 location-based (electricity and district heating from country grid)	272	293
Scope 3* total	1'567	1'702
Purchased goods and services	1'001	1'176
Energy and fuel-related activities	59	55
Upstream transportation and distribution	46	43
Business travel	4	2
Employee commuting	19	17
Downstream transportation and distribution	35	32
Processing of sold products	17	16
Use phase of sold products	373	349
End-of-life treatment of sold products	13	12

* Four scope 3 categories deemed to be irrelevant to GF are excluded: leased assets (both upstream and downstream), franchises and investments.

Scope 3 emissions data were calculated using a combination of methods for each category as prescribed by the GHG Protocol. Primary supplier data (if available) were used for those categories that contribute most to emissions, whereas secondary data were used for those activities that contribute least to emissions. For "purchased goods and services," supplier-specific data based on GHG inventory sources for raw materials were obtained. For the "use phase of sold products," activity data were used based on the electricity consumed during operating hours for each type of machine.

For more information, see:

[+ Sustainability Report 2022: Environmental performance indicators](#)

4.3 Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets

In October 2021, the GF Nomination and Sustainability Committee (NSC) approved a more ambitious science-based target aligned with the 1.5°C warming scenario. This target was validated by the Science Based Targets Initiative (SBTi) in 2022. This decision aligns GF's ambition level with the latest climate science and the IPCC's recommendation.

By 2026, GF commits to reducing its scope 1 and 2 GHG emissions by 30% in absolute terms. The company also commits to reducing its scope 3 GHG emissions from purchased goods and services and from the use of sold products by 34.6% per tonne of processed material by 2030. Both targets are relative to 2019. These targets are fully aligned with the Paris Agreement to limit global warming to 1.5°C.

GF will reduce its scope 3 emissions by working closely with its suppliers to implement dedicated CO₂e reduction measures and transition its energy portfolio to renewable energy. GF's product portfolio offers clear advantages to customers, as it provides numerous sustainable products that can help them reduce their CO₂e footprint. In addition, GF has set a target for its product portfolio to generate 70% of sales with social and environmental benefits by 2025, compared with 58% in 2020. For GF Piping Systems, this target includes replacing raw materials with bio-based alternatives, deploying automated flow solutions to reduce non-revenue water and maintaining leakage-free piping systems for the safe transport of water, gases and chemicals. GF Casting Solutions' focus remains on manufacturing lightweight mobility and energy components. For GF Machining Solutions, milling and electrical discharge machining (EDM) will become even more energy-efficient, and it will employ laser technology to replace hazardous chemical etching.

In 2022, energy-efficiency measures were identified for all production sites and typically involved replacing or retrofitting equipment in cases where it is possible to achieve energy reductions of up to 20%. Other measures include upgrading heating, cooling, and compressed air systems, insulating equipment, and reducing the energy consumption of buildings and production sites. GF has also placed significant focus on installing solar panels on its sites. Initial estimates indicate that this will yield energy savings that correspond to a reduction of roughly 2% to 5% in scope 2 CO₂e emissions.

GF is currently also evaluating the implications of the SBTi's Net Zero Standard of 28 October 2021, to assess the options and roadmap for setting a net-zero target.

For more information, see:

- [+ Sustainability Report 2022: Climate and energy](#)
- [+ GF website](#)

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All photos for the GF Corporate Reports 2022 were taken in strict compliance with the locally applicable COVID-19 protection regulations.

Disclaimer

The statements in this publication relating to matters that are not historical facts are forward-looking statements that are not guarantees of future performance and involve risks, uncertainties, and other factors beyond the control of the company.

The Corporate Reports 2022 of GF are also available in German. In the event of any discrepancy, the English version shall prevail.

We thank our customers for their consent to publish the joint success stories.

Company information

Represented by Andreas Müller, CEO

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