

+GF+



# Acting sustainably

Sustainability Report 2018

Our performance

# Key figures at a glance

## Economic performance indicators

### 2018 sales with social and environmental benefits

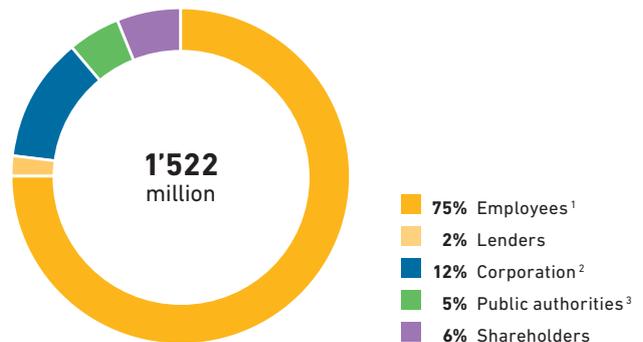
% of total GF sales

**47%**

Examples of identified benefits include but are not limited to: ensuring safe and hygienic potable water in buildings; safe and leak-free distribution of gas and chemicals to ensure fewer human and environmental accidents; light metals components, including components for electric or plug-in hybrid vehicles, helping to reduce the weight and CO<sub>2</sub> footprint of vehicles; solutions for our machining customers to produce their products in a more energy-efficient way.

### Net value added 2018

CHF 1'522 million

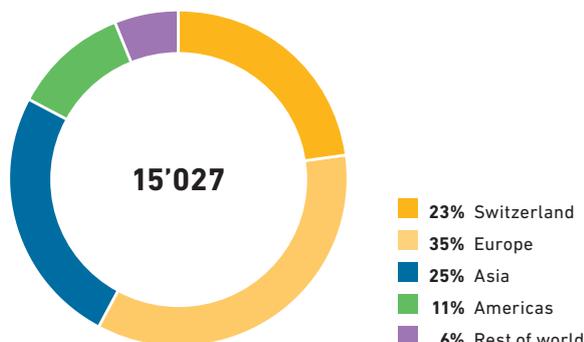


1 Salaries and wages, employee benefits and social security  
 2 Retained earnings  
 3 Income taxes

## Social performance indicators

### Employees by region

% of headcount (100% = 15'027)



### Accident rate GF employees

**15.9** per 1 million working hours

### Absence rate GF employees

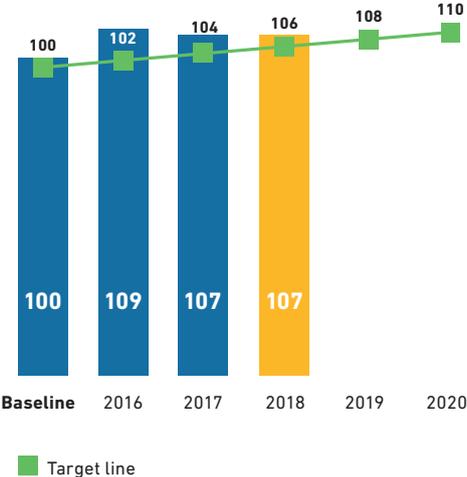
**4.1%** of total work days

### Total employee fluctuation

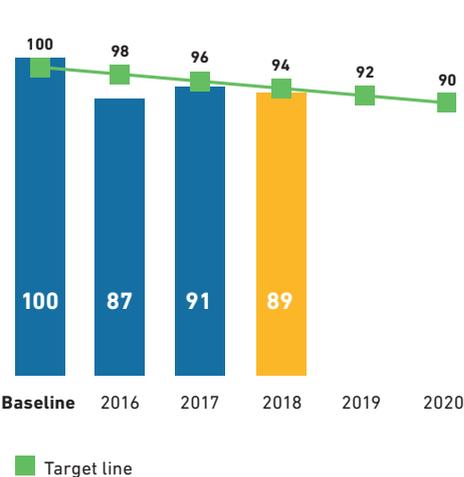
**11.9%**

### Environmental performance indicators

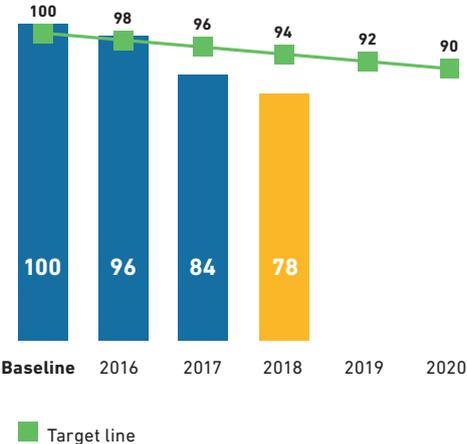
**Energy efficiency index**  
(production volume/energy consumption) in %



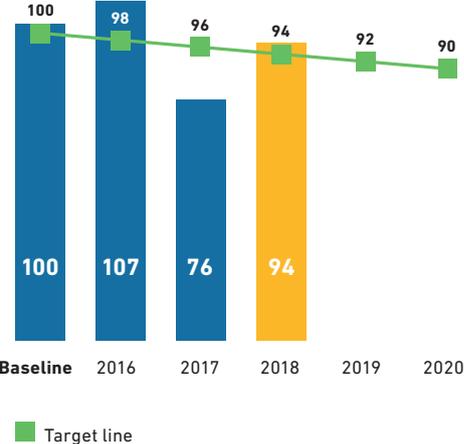
**Emissions intensity index**  
(CO<sub>2</sub>e emissions/production volume) in %



**Non recycled waste intensity index**  
(non-recycled waste/production volume) in %



**Water intensity index**  
(water consumption/production volume) in %



Retrospective

# Highlights 2018

## Eco-design in GF products and solutions

Staying true to our commitment to increasing the energy efficiency of machines for our customers, during 2018 GF Machining Solutions introduced a number of eco-design features across the entire product range. First, our specialists conducted an assessment of the biggest levers for energy optimization in machine design and usage.

The resulting measures included but were not limited to:

- a new spark generator on EDM machines, reducing energy consumption by over 30% at the same performance levels
- the reduction of up to 50% energy usage for part pro-

- duction in laser machines due to the optimization of axis movements
- 50% reduction of high energy compressed air usage in milling models through new and patented developments
- rollout of the EconoWatt application for all new models to help save energy when the machine is idle



## Energy-efficient cooling technology

In January 2018, a new cooling infrastructure was installed at GF Piping Systems in Schaffhausen. Used to chill injection molding

other measures, is expected to save as much energy per year as would be needed to provide electricity and heating to 950 single family households (about 7 million kWh) on an annual basis.



## LEED Silver certification for a GF Casting Solutions site

In June 2018, the new GF Linamar site in Mills River (USA) achieved Silver certification under the LEED 2009 New Construction and Major Renovations rating system (Leadership in Energy and Environmental Design). This is the first such case for a high-pressure die-casting facility in the world.

## Intelligent use of resources

A new heat recovery system went into effect in early 2018 at the site of GF Casting Solutions in Leipzig (Germany). The installed air compressors are now able to process waste heat for warming of the production hall areas. As a result, approx. 422'000 kWh of heating power was provided during 2018 by applying this process instead of using fossil fuels.

## Getting the safety culture anchored from an early age

As part of the broader Zero Risk campaign, the GF Casting Solutions site in Herzogenburg (Austria) conceptualized and conducted a pilot course for its trainees. In November, 23 youngsters participated in an interactive week-long program, which made them aware of the fundamentals of GF's safety standards and expectations of safe behavior at work and beyond. As part of the training, the apprentices conducted a project to eval-

uate safety-related measures on site and to provide fresh independent input for potential improvements.

The successful pilot training had an impact at the location, and it is aimed to be repeated on an annual basis, as well as rolled out at other locations.





### Working together to achieve common goals

In September 2018, about 50 environmental managers and safety specialists from the European locations of GF came together at the Sustainability Conference 2018.

Over two days, they concentrated on three topics: 1) how to increase energy efficiency in our operating processes, 2) required and possible

measures to prevent the generation of waste that cannot be recycled or reused, and 3) how to establish a culture of safety at our sites.

This event fostered cross-site and cross-divisional knowledge sharing and dialogue to help GF as a whole come closer to achieving our Sustainability Targets 2020.



### Celebrating significant anniversaries

In 2018, GF was proud to celebrate two important jubilees:

- 100 years of GF at Klostergut Paradies – a cultural site that originally served as a convent and nowadays is a modern training center and an event venue open to the public.
- 100 years of vocational training at GF – a tradition that started in

Schaffhausen and nowadays extends to GF locations in the US. In June 2018, the unwavering commitment of GF to in-depth dual education of young talents was recognized with the “Prix Vision Spezial” prize awarded annually in the Swiss canton of Schaffhausen.

### Well-being and motivation of employees in focus

In December 2018, the Shawnee plant of GF Piping Systems became the first manufacturer in the State of Oklahoma (USA) to become a Blue Zones Project Approved™ Worksite.

To receive the Blue Zones certification, an important criterion is, for example, to create an environment in the community that promotes healthy living, meaningful work and an overall supportive social framework.



### Strong support of UN Global Compact

GF has been a signatory of UN Global Compact since 2015. As a sign of our commitment to working on developing solutions to the existing societal issues and our belief in the power of multi-stakeholder collaboration, GF upgraded its engagement with Global Compact to Participant level in 2018.



Our progress

# Developments in 2018 and outlook

Being half-way in the five-year cycle of Sustainability Targets 2020, 2018 was the year to do a “health check”, identify areas for improvement, and create momentum to reach the set goals.



GF Machining Solutions implemented a range of measures to increase the energy efficiency of its machines (as for EDM machines pictured here in the facility in Losone, Switzerland).

In 2018, we placed our focus on strengthening cross-functional and cross-divisional collaboration on sustainability topics and on increasing transparency to external and internal stakeholders on the relevant activities of GF.

At the start of the year, we rolled out a state-of-the-art software tool for reporting and analysis of environmental and social KPIs. The goal is to progressively establish this information system as a central platform for op-

erational and strategic data management on sustainability.

### Upstream activities

Reviewing the topics of material relevance for GF along its value chain, we identified engagement with our supply chain as one of the key areas for development. We thus kicked-off a process in 2018 to set up a system that will allow GF to gain transparency on and to manage envi-

ronmental, social and governance risks as well as opportunities in sourcing. The initial concept will be formalized during the first half of 2019.

### Our employees

At the end of 2018, GF employed 15'027 people<sup>1</sup>, which was 5% below the level of 2017. This was primarily due to the divestments<sup>2</sup> of the Singen and Mettmann (Germany) iron casting plants of GF Casting Solutions. At the same time, the number of female employees increased to 2'512 headcounts (or about 17% of the total workforce). Around 77% of GF employees participated in various professional development courses, on average 2.5 days per employee. Worldwide, 469 apprentices were employed and trained by GF in 2018.

### Health and safety in the workplace

Workplace health and safety remained a key item on our agenda in 2018. During the reporting year, we observed a decrease in the number of severe cases, but unfortunately saw a rise in the overall number of accidents (425 compared to 407 in 2017). However, as the number of working hours performed in 2018 increased as well, the accident rate per one million working hours remained unchanged at 15.9 on a Corporation-wide level.

To facilitate a better overview of accidents that still happen at GF and to be able to quicker identify areas requiring safety improvement, we rolled out a Corporation-wide accident-reporting

platform. Additionally, during 2018, all sites of GF Piping Systems organized safety events focusing on firefighting training, hand and finger safety as well as other site-specific safety topics.



Safety event at GF Piping Systems in Sissach (Switzerland)

Besides raising awareness, all three Divisions conducted cross-site-safety audits at the vast majority of GF production plants. One of the benefits of this process is the exchange of best practice examples among the locations. The audit findings will serve as a basis for defining specific forward-looking actions to improve workplace safety.

The absence rate increased in 2018 to 4.1% compared to 3.96% in 2017. The majority of absence days were due to non-work-related illness, with only 6% having work-related causes.

<sup>1</sup> Headcount figure

<sup>2</sup> This was partially counter-balanced by the addition of new employees from the new facilities in Mills River (USA) and the acquisition of Precicast (Switzerland).



Ambient air cooler installation on the roof of the GF Piping Systems plant in Dautphetal (Germany).

energy<sup>4</sup> was 8.76% of the total energy consumption of GF, slightly below the 2017 level (10%).

In the coming years, GF's focus in the sphere of environmental management will be on further reducing its energy consumption and the resulting GHG emissions. Some of the areas that we are already reviewing are possible energy efficiency improvements for casting machines used by GF Casting Solutions<sup>5</sup>, as well as solutions for green electricity for GF Piping Systems and GF Machining Solutions.

### Environmental efficiency

As a result of a solid order pipeline, production ran at full capacity in many of our factories in 2018, and sales grew organically by 7%. At the same time, this growth was accompanied by a relatively small increase in GF's net energy consumption (2.5%). Total waste was the same as in 2017, and water consumption for the year decreased by 5.1%.

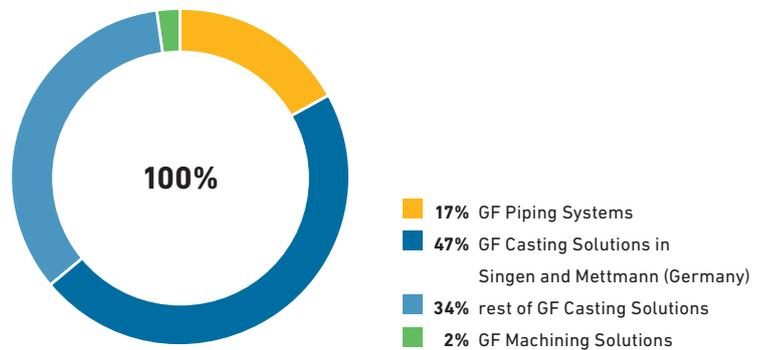
Due to the continuous implementation of smaller-to-medium-impact efficiency measures at our production plants worldwide, GF maintained its energy efficiency rate in 2018 at 107<sup>3</sup>, which resulted in a seamless achievement of the level expected for 2018. GF Piping Systems stood out among the three Divisions by systematically screening their production processes in order to find potential optimization measures, such as cooling with ambient air or investments in new more efficient machines.

Overall CO<sub>2</sub>-equivalent (CO<sub>2</sub>e) emissions dropped by 1.7%, thereby enabling GF to achieve its emission intensity target for 2018. This was possible due to a combination of more efficient energy consumption and the purchase of green energy certificates for selected locations of GF Casting Solutions and GF Machining Solutions. For the reporting year, the share of green

3 Calculated as a % of production volume over energy consumption  
 4 Including green electricity  
 5 Workshops with key direct suppliers of GF Casting Solutions are being organized for 2019

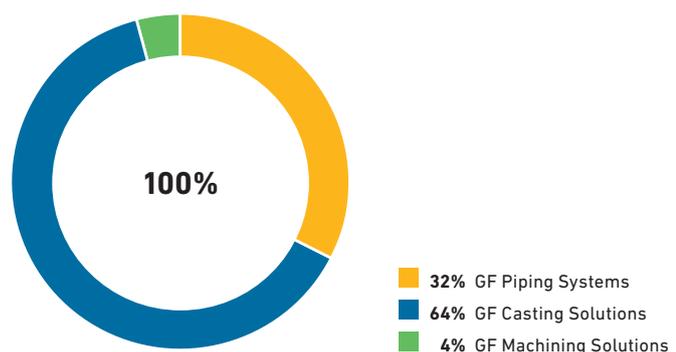
### Divisional share of net energy consumption in 2018

in %



### Divisional share of net energy consumption after divestment of Singen and Mettmann

in %



With the divestment of two iron-casting sites of GF Casting Solutions in Germany, the divisional share of the environmental footprint of GF will change. Due to the nature of its production processes, GF Casting Solutions will still account for the largest share of GF's energy consumption, while the share accounted for by GF Piping Systems and GF Machining Solutions will increase.

#### Management involvement

As a crucial measure to further integrate sustainability into the daily activities of GF, at the end of 2018, we defined specific targets in the 2019 personal goals of each member of the Executive Committee of the Corporation. The specific points match and support the strategic efforts of each Division and are being cascaded into the organization.

#### Outlook

As an outlook for the next year and preparing for the new business strategy cycle, we will define a long-term aspiration level (2030+) for sustainability at GF as well as specific goals for the years 2021-2025 on integrating the sustainability topic into the respective strategies of GF and its Divisions.



Andreas Müller, CFO of GF, opening the Sustainability Conference Europe in Zurich (Switzerland) in September 2018.

Sustainability Targets 2020

# Status of achievement

Products and innovations

Modules and targets	Targets 2020	Level of achievement	Progress status (year-end 2018)
<p><b>Product responsibility</b> GF products support the customer in saving energy and reducing CO<sub>2</sub>-emissions during use of products.</p>	<p>GF provides CO<sub>2</sub>-efficient and safe products to the customer.</p>		<p>All Divisions place a strong focus on innovation and continuously work on developing new solutions that provide CO<sub>2</sub>-efficiency benefits for our customers.</p>
<p><b>Ecodesign</b> GF products are optimized with regard to their environmental friendliness, resource efficiency, and durability.</p>	<p>Systematic introduction of ecodesign measures in product development in order to promote energy- and resource-efficient products.</p> <p>Each Division monitors its environmentally friendly products, which enable reduced energy consumption and/or CO<sub>2</sub>-emissions.</p> <p>GF Piping Systems optimizes its products regarding their environmental friendliness, resource efficiency, and durability.</p> <p>GF Casting Solutions focuses on bionic design and lightweight construction.</p> <p>GF Machining Solutions joins the Blue Competence Initiative and reduces average energy consumption by 15% for milling machines and by 20% for EDM machines.</p>		<p>GF's product and solutions range already offers a variety of social and environmental benefits to its customers and end consumers. In 2018, 47% of GF's sales could be attributed to products with such features. All Divisions reinforced their commitment to increasing their focus on the sustainability of their offerings and to positioning them as such for their respective customer segments.</p> <p>One example was GF Piping Systems' launch of a research project to identify the opportunities and challenges of applying a circular economy approach to its product portfolio. As a participant of the Blue Competence initiative, GF Machining Solutions introduced a number of eco-design features across its entire product range (see dedicated segment in the section "Highlights 2018").</p>

## Procurement and logistics

Modules and targets	Targets 2020	Level of achievement	Progress status (year-end 2018)
<p><b>Procurement</b> GF suppliers demonstrably comply with GF's Supplier Code for eco-friendly and socially responsible supply.</p>	<p>All key suppliers have signed the GF Supplier Code.</p>		<p>As of the end of 2018, the majority of GF suppliers had signed the Supplier Code. The target is on track to being achieved.</p>
	<p>Systematically integrate sustainability aspects into supplier audits. At least ten audits focused on sustainability are carried out every year per Division.</p>		<p>During 2018, a project was launched to create transparency in GF's supply chain in the areas of environmental and social compliance. A high-level approach was defined, with further conceptual work to last into 2019. A number of pilot audits are planned to be conducted during Q1-Q2 2019 with lessons learned to be translated into a broader rollout. The Supplier Code was also adapted, with the updated document planned for release in April 2019.</p>
<p><b>Logistics</b> GF optimizes its logistics in terms of energy consumption, emissions, and packaging.</p>	<p>Systematically measure and analyze key transport and environmental figures together with the most important transport service providers in Europe.</p> <p>Define and implement improvement measures together with transport service providers.</p>		<p>GF works closely with its logistics partners to evaluate and implement improvement measures. Therefore, target achievement was on track in 2018.</p>
	<p>Reduce GF product deliveries by air freight by 20% worldwide.</p>		<p>Efforts are being made to continuously decrease the share of transportation by air. In 2018, the measures implemented by GF Piping Systems resulted in an increased percentage of transportation by ocean freight. The Division also started with the rail shipment of containers between Europe and China.</p>

## People and safety<sup>1</sup>

Modules and targets	Targets 2020	Level of achievement	Progress status (year-end 2018)
<b>Accidents at work</b> GF strives to reduce its severe accidents to zero and to bring down the accident rate by at least 20% in every Division by the end of 2020.	Zero severe accidents		As a result of continuous efforts to reduce incidents of work-related accidents, we registered a significant drop in the number of severe injuries. 25 severe accidents took place in 2018, compared to 38 in 2017 (34% less). To achieve the ambitious goal of decreasing this number to zero, further efforts are needed to continuously reduce the probability of such cases.
	Reduce accident rate by 20 %		Accident rate reduced by 33% from the baseline of 25.0 to 15.9 accidents per one million working hours in 2018 – significantly below the set target rate. However, we saw a slight increase in accidents from 2017 to 2018. Therefore, further corrective measures and efforts are being evaluated to promote behavioral change towards a safety culture.
	All companies comply with GF safety standards		As accidents continue to happen, we are aware of the need to ensure compliance with GF safety standards. Using findings from on-site safety audits conducted across GF's locations, we are defining the necessary improvements and consider our target achievement to be on track.
<b>Safety audits</b> GF regularly conducts cross-site safety audits in order to constantly improve its safety culture.	Cross-site safety audits are performed per production plant and warehouse at least once a year		In 2018, safety audits were conducted at most of the production locations of GF. The lessons learned from the assessments are being analyzed to ensure that the necessary improvements are put in place. Target achievement is on track.

<sup>1</sup> In order to provide companies with a realistic timeframe for target achievement, those that commenced sustainability reporting after 2017 are not included in the calculation of the achievement of the Sustainability Targets 2020. Instead, they have individual targets.

Modules and targets	Targets 2020	Level of achievement	Progress status (year-end 2018)
<p><b>Employer responsibility</b> GF strives to be an attractive employer to be able to attract talents, retain our high-performing employees, and develop our workforce. Furthermore, GF acts as a respectful and socially responsible employer.</p>	Be recognized in our industry as an attractive employer		In 2018, GF was again listed among the “Most attractive employers of Switzerland”. Having targeted collaborations with universities in Switzerland, the US and China, we strive to ensure that GF is known and considered by students and experienced professionals to be an attractive potential employer.
	Fill 70% of vacant leadership positions with internal candidates		Finding suitable internal candidates for 70% of available senior management positions in 2018, we have precisely achieved the set target. We can thus see that our investment in our employees’ development is bearing fruit, and we will continue to foster their professional growth opportunities.
	Take action to increase and promote diversity in terms of gender, age, and origin		GF sees diversity as an important topic for the organization, especially in the context of boosting innovation potential. Measures launched to promote greater flexibility at work and thus enhance GF’s attractiveness as an employer, especially for women, are being pushed forward. We are also using targeted networks to strengthen career development opportunities for women in the organization.
<p><b>Absences</b> GF strives to lower the absence rate by implementing supportive measures.</p>	Reduce absence rate by 10% across the organization		The absence rate slightly increased in 2018 to 4.1% compared to 3.96% in 2017. A detailed review and analysis of further action is necessary to ensure we can achieve the target in a timely manner.

## Environment and energy<sup>1</sup>

Modules and targets	Targets 2020	Level of achievement	Progress status (year-end 2018)
<p><b>Energy</b> GF production companies actively apply energy efficiency measures and define local targets in order to realize the Corporate goal of increasing energy efficiency by 10% in every Division by the end of 2020.</p>	Increase energy efficiency by 10 %		On the Corporation level, energy efficiency exceeded the expected index target line (at 107). The main driver of this result was the continuous implementation of efficiency measures in the GF Piping Systems and GF Casting Solutions Divisions.
<p><b>CO<sub>2</sub>e</b> GF strives to reduce its CO<sub>2</sub>e emissions from production by at least 10% in every Division by the end of 2020.</p>	Reduce CO <sub>2</sub> e emissions by 10%		CO <sub>2</sub> e intensity in 2018 was better than the index target line (at 89). It was strongly influenced by the development of energy consumption and the purchase of Guarantees of Origin for the sites of GF Casting Solutions and GF Machining Solutions in China.
<p><b>Materials and waste</b> GF strives to reduce its non-recycled waste from production by at least 10%.</p>	Reduce non-recycled waste by 10 %		As a result of implemented measures, we see a continuous decline in the share of non-recycled waste from our operations. In 2018, GF clearly reached the defined non-recycled waste intensity target (at 78%). On a Corporation-wide level, we recycled 85% of total waste.
<p><b>Water</b> GF strives to reduce its volume of fresh water consumption in water-scarce and water-stressed areas by at least 10% in every Division by the end of 2020.</p>	Reduce fresh water consumption in water-scarce and water-stressed areas by 10%		In 2018, the six GF sites in water-stressed areas reached the targeted water intensity index rate (94%).

<sup>1</sup> In order to provide companies with a realistic timeframe for target achievement, those that commenced sustainability reporting after 2017 are not included in the calculation of the achievement of the Sustainability Targets 2020. Instead, they have individual targets.

### Scope of data collection and reporting

In the year under review, a few adjustments were made to the reporting scope:

- To place a stronger focus on light metal casting, GF Casting Solutions divested (as of 1 December 2018) its two iron-casting plants in Singen and Mettmann (Germany). These two sites contributed a significant share of GF's environmental footprint. Therefore, in order to ensure data consistency and comparability over time, the environmental performance figures are presented in the text of the report as well as in the KPI tables according to their effective consumption (11 months of 2018) as well as applying the respective 11/12th ratio for the target-relevant environmental indicators for the previous years in review.
- Three companies acquired by GF in the previous years (GF Linamar and Microlution in the US and GF Urecon in Canada) were included in sustainability reporting in 2018 for the first time at 100% consolidation.
- The upgrade in sustainability reporting software (implemented in early 2018) enabled us to apply more precise (local electricity supplier-specific) factors for calculating GHG emissions. As a result, we recalculated historical GHG emissions for the locations where this was necessary.

– Slight corrections were made to the following figures as a result of improved measurement methods:

- water consumption information of one of the GF Piping Systems' sites located in a water-stressed area, which resulted in the amendment to water intensity index figures from 2013 onwards.

In all other regards, the same recording limits for social and environmental data are valid as in the previous reporting period. Similarly, consolidation of the individual companies under the Corporation's control has been carried out in keeping with the approach used in financial data reporting.

## Economic performance indicators

CHF million	2018	2017	2016	2015	2014
Order intake	4'521	4'274	3'749	3'662	3'836
Orders on hand at year-end	623	773	614	612	634
<b>Income statement</b>					
Sales	4'572	4'150	3'744	3'640	3'795
EBITDA	529	491	443	422	399
Operating result (EBIT)	382	352	311	296	274
Net profit/loss after minorities	281	252	216	188	184
<b>Cash flow</b>					
Cash flow from operating activities	397	410	400	328	248
Cash flow from investing activities	-404	-280	-265	-140	-158
Free cash flow before acquisitions/divestitures	147	204	231	190	110
Free cash flow	-7	130	135	188	90
<b>Balance sheet</b>					
Assets	3'444	3'610	3'202	3'083	2'989
Liabilities	2'016	2'241	2'002	1'953	1'885
Equity	1'428	1'369	1'200	1'130	1'104
Net working capital	926	899	838	819	864
Invested capital (IC)	1'494	1'466	1'333	1'279	1'354
Net debt	238	183	214	238	354
<b>Key figures</b>					
Return on equity (ROE) %	19.9	20.1	19.3	17.7	18.7
Return on invested capital (ROIC) %	22.4	20.3	19.3	18.9	17.9
Return on sales (EBIT margin) %	8.4	8.5	8.3	8.1	7.2
Asset turnover	3.1	3.0	2.9	2.8	2.9
Cash flow from operating activities in % of sales	8.7	9.9	10.7	9.0	6.5
<b>Employees</b>					
Employees at year-end	15'027	15'835	14'808	14'424	14'140
Europe	8'721	9'658	8'845	8'783	8'676
Asia	3'725	3'807	3'713	3'502	3'455
Americas	1'740	1'503	1'348	1'262	1'259
Rest of world	841	867	902	877	750

# Environmental performance indicators<sup>1</sup>

	Unit	2018 <sup>2</sup>	2017 pro rata <sup>2</sup>	2017	2016	2015	2014
<b>Energy</b>							
Gross energy consumption	1'000 GJ	6'823	6'670	6'941	6'605	6'392	6'317
Electricity	1'000 GJ	3'249	3'239	3'296	3'168	2'878	2'835
Natural gas, biogas, fuel oil	1'000 GJ	1'363	1'218	1'247	1'205	1'262	1'186
Coke, lignite	1'000 GJ	2'092	2'084	2'265	2'121	2'156	2'192
Fuel use (for internal transportation)	1'000 GJ	97	106	110	92	80	72
Other energy sources	1'000 GJ	22	23	23	19	16	30
Energy sold	1'000 GJ	-82	-95	-103	-96	-105	0
Net energy consumption	1'000 GJ	6'742	6'575	6'838	6'509	6'287	6'317
Renewable energy (incl. green electricity)	%	9	10	10	11	11	11
Target line energy efficiency index <sup>3</sup> (production volume/energy consumption <sup>4</sup> )		106	104		102	100	
Energy efficiency index <sup>2</sup> (status at year-end)		107	107		109	100	
<b>GHG emissions (in CO<sub>2</sub>e)<sup>5</sup></b>							
Total CO <sub>2</sub> e emissions	1'000 tonnes	630	641	668	610	580	580
Scope 1 (Direct emissions: energy consumption)	1'000 tonnes	312	304	325	307	313	313
Scope 2 (Indirect emissions: electricity and district heating)	1'000 tonnes	312	330	337	299	264	264
Scope 3 (Indirect emissions: business travel)	1'000 tonnes	6	7	7	4	3	3
Target line GHG emission intensity index <sup>3</sup> (CO <sub>2</sub> e emissions/production volume <sup>4</sup> )		94	96		98	100	
GHG emission intensity index <sup>2</sup> (status at year-end)		89	91		87	100	
<b>Air emissions</b>							
Nitrogen oxides (NO <sub>x</sub> )	1'000 tonnes	0.05	0.04	0.04	0.03	0.03	0.03
Sulphur oxides (SO <sub>x</sub> )	1'000 tonnes	0.01	0.01	0.01	0.01	0.01	0.01
<b>Water and wastewater</b>							
Total water consumption	1'000 m <sup>3</sup>	2'759	2'907	2'966	2'808	2'875	2'712
City water from public supply	1'000 m <sup>3</sup>	697	657	662	633	653	596
Ground and rain water	1'000 m <sup>3</sup>	2'062	2'250	2'304	2'175	2'222	2'116
Wastewater volume	1'000 m <sup>3</sup>	1'961	2'077	2'098	1'977	1'961	878
Wastewater to sewage systems	1'000 m <sup>3</sup>	814	926	944	897	890	830
Wastewater returned to nature, unpolluted	1'000 m <sup>3</sup>	1'147	1'151	1'153	1'081	1'071	47
Target line water intensity index <sup>3</sup> (water consumption/production volume <sup>4</sup> )		94	96		98	100	
Water intensity index (status at year-end)		94	76		107	100	

	Unit	2018 <sup>2</sup>	2017 pro rata <sup>2</sup>	2017	2016	2015	2014
<b>Waste and recycling</b>							
Total waste	1'000 tonnes	306	306	326	314	309	315
Normal waste, recycling	1'000 tonnes	245	246	263	249	233	250
Normal waste, landfill or incineration	1'000 tonnes	43	43	44	45	54	43
Hazardous waste	1'000 tonnes	18	17	18	20	22	21
Hazardous waste, recycling	1'000 tonnes	16	15	16	14	15	15
Hazardous waste, storage or incineration	1'000 tonnes	2	2	2	6	6	6
Target line non-recycled waste intensity index <sup>2</sup> (non-recycled waste/production volume <sup>4</sup> )		94	96		98	100	
Non-recycled waste intensity index <sup>2</sup> (status at year-end)		78	84		96	100	
<b>Business trips</b>							
Air travel	1'000 pkm	31'379	36'850	36'872	31'863	14'305	22'342
<b>Monetary values</b>							
Expenditure for environmental protection	CHF million	18	16	18	15	16	13
Energy costs	CHF million	130	124	128	103	118	131
Water and wastewater costs	CHF million	4	3	3	3	3	3
Waste disposal costs and recycling credits	CHF million	9	7	8	8	7	9

1 The environmental performance indicators include all GF production companies.

2 Due to the divestment (as of 1 December 2018) of the Singen and Mettmann plants of GF Casting Solutions, the 2018 environmental performance figures here are presented according to the effective consumption at these sites while part of the GF Corporation (11 months of 2018). To ensure data consistency and comparability over time, the pro-rata 2017 data column shows how comparable consumption would have been in 2017. In the calculation of the target-relevant environmental indicators for all the years in this overview, we applied the respective 11/12th ratio for the two divested sites.

3 The target line is calculated linearly based on the standardized baseline consumption (=100) and according to the defined target.

4 The production volume is defined based on the specifics of the businesses of the individual Divisions: as "produced tonnes" for GF Piping Systems, as "gross value added" for GF Casting Solutions and as "hours worked" for GF Machining Solutions.

5 CO<sub>2</sub>-equivalents is a unit used to transform other greenhouse gases into CO<sub>2</sub>e (CO<sub>2</sub>=1) according to their global warming potential. The applied emission factors are based on the GHG Protocol 2016.

## Social performance indicators<sup>1</sup>

	Unit	2018 <sup>2</sup>	2017	2016	2015	2014
<b>Employees</b>						
Number of employees	Headcount	15'027	15'835	14'808	14'424	14'140
	FTE <sup>3</sup>	14'413	15'163	14'105	13'783	13'518
Female employees	Headcount	2'512	2'347	2'245	2'162	2'045
	FTE	2'397	2'213	2'055	1'805	
Student interns	Headcount	174	145	182	154	213
Apprentices	Headcount	469	525	540	509	506
Women in management positions <sup>4</sup>	FTE	88	90	95	87	84
	% of total management positions	15	14	17	15	15
Women on the Executive Committee	Number	0	0	0	0	0
Women on the Board of Directors	Number	2	2	2	2	2
	%	22	22	22	22	22
Total departures	Headcount	1'796	1'603	1'512	1'127	1'393
Total employee fluctuation	%	11.9	11.3	11.6	8.9	11.0

	Unit	2018 <sup>2</sup>	2017	2016	2015	2014
Employee fluctuation, unwanted by GF	%	4.0	4.1	3.7	3.1	3.7
Part-time employees	Headcount	457	373	398	363	336
	%	3.0	2.4	2.7	2.5	2.4
Employees with disabilities	Headcount	280	298	308	290	291
	%	1.9	1.9	2.1	2.0	2.1
Employee surveys <sup>5</sup>	Number of employees surveyed	6'341	6'987	1'300	8'000	7'400
Investigated incidents of discrimination <sup>6</sup>	Number	3	1	1	2	0
<b>Training and professional development</b>						
Training and professional development	Number of GF employees with training (headcount)	11'558	12'192	10'635	10'125	9'377
	%	77	77	72	70	66
Training days	Work days	36'974	38'822	33'160	34'264	32'833
	Days per employee	2.5	2.5	2.2	2.4	2.3
<b>Health and safety</b>						
Work-related accidents involving injury	Number	425	407	468	447	541
Accident rate	per 1'000'000 working hours	15.9	15.9	19.7	20.8	25.2
Target line accident rate <sup>7</sup>	per 1'000'000 working hours	22.0	23.0	24.0	25.0	
Fatalities, work-related	Number	0	0	0	1	1
Absence days due to work-related accidents or illness	Work days	8'675	6'750	7'542	7'676	7'750
Absence rate due to work-related accidents or illness	% of total work days	0.2	0.2	0.2	0.3	0.3
Total absence days	Work days	148'361	139'407	133'383	121'142	121'309
Total absence rate	% of total work days	4.1	4.0	4.1	4.1	4.2
Target line absence rate <sup>7</sup>	% of total work days	4.2	4.2	4.3	4.4	
<b>Community</b>						
Order volume from workshops employing disabled people	CHF million	2.9	2.4	2.2	2.1	2.7
Charitable donations	CHF million	4.0	4.5	4.0	3.6	4.8

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

2 Due to the divestment (as of 1 December 2018) of the Singen and Mettmann plants of GF Casting Solutions, the 2018 information covers the data for these two sites for the corresponding period of 1 January to 30 November 2018.

3 The abbreviation FTE stands for Full Time Equivalent.

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

5 Figure shows the number of employees who were requested to participate in the survey.

6 All three cases addressed by the relevant parties. Two of the cases were resolved with appropriate measures taken and one case is still under review.

7 The target line is calculated linearly based on the baseline data and according to the defined target.

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Learn more about Sustainability at GF:



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**Further information**

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