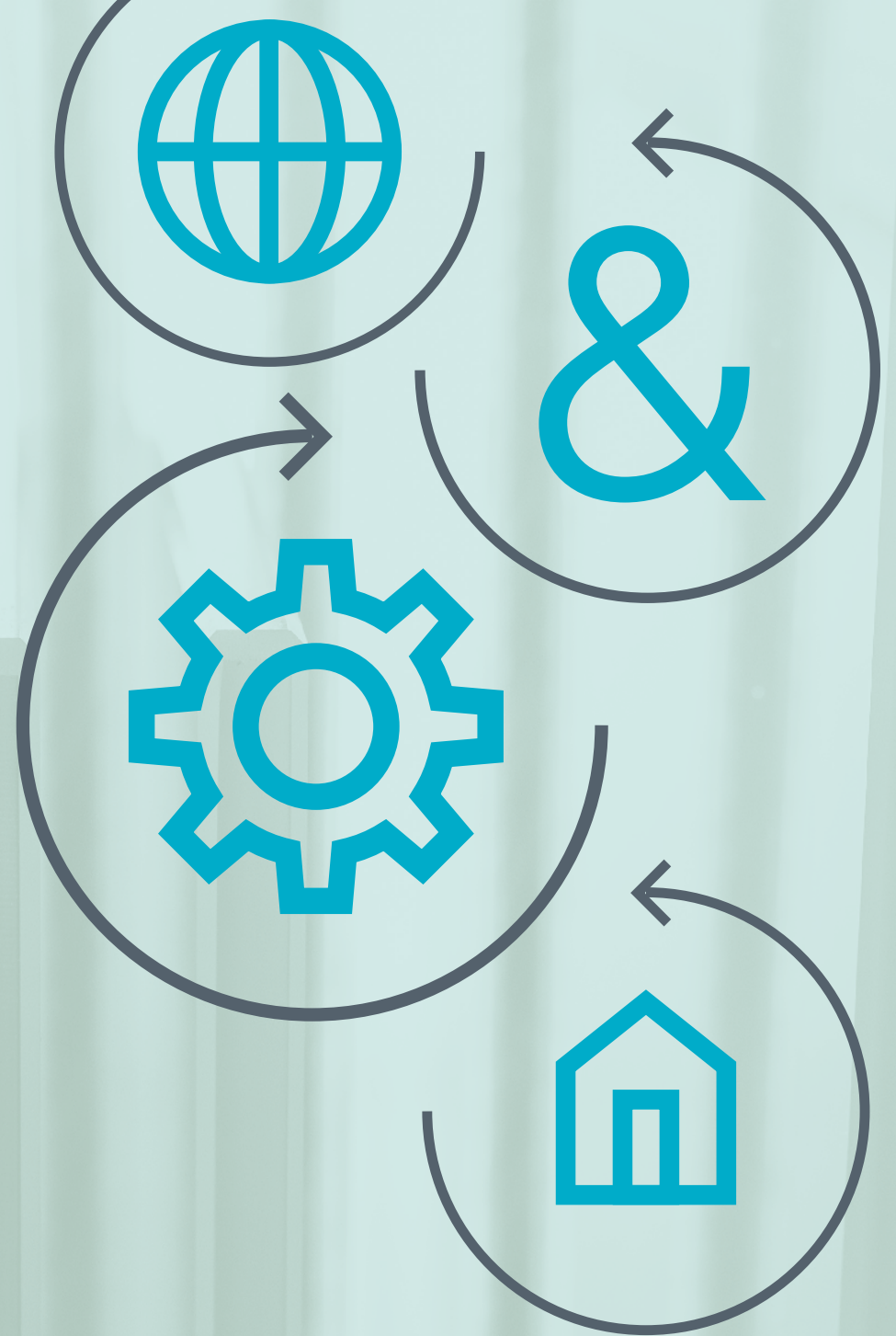


**glaston**

Annual Review  
2019



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# The frontrunner in glass processing

Glaston's purpose is to build a better tomorrow through safer, smarter, and more energy-efficient glass solutions. As environmental awareness increases, demand for more energy-efficient and environmentally sustainable glass solutions is growing. Energy-efficient double- or triple-glazed insulating glass units and coated, low-emissivity glass processed with Glaston's technology meet the energy-saving needs of buildings. Greater attention is being paid to the safety of buildings, and for glazing solutions this means increasing use of tempered and laminated glass. Tempering, laminating and insulating glass units are Glaston's core expertise, and in these we offer the most advanced technology.

The debate on climate change is also strongly reflected in the glass industry. This has led to rapid development in smart glass, ultra-thin glass and glass used in solar energy solutions. As our industry's innovative technology leader, we are strongly involved in this development, and we are continually launching more advanced technology to meet the changing needs of the market.



### A significant acquisition

In 2019, the scope of Glaston's operations changed significantly when, in line with its strategy, the company strengthened its position as a leading player in the glass processing market by acquiring the German-Swiss company Bystronic glass. The acquisition expanded the Glaston's offering from heat treatment technologies and services to insulating glass

technologies in the architectural market and to pre-processing in the automotive and display markets. Glaston has production in Finland, Switzerland, Germany and China as well as sales and service points in eleven countries. From these locations, Glaston serves its customers, who operate in over one hundred countries.

Glaston's factories in Finland and China assemble machines, while its factories in Switzerland and Germany manufacture machines. Of Glaston's purchases, approximately 75% come from EMEA based goods suppliers, 15% from Asian goods suppliers and 10% from American goods suppliers. The most significant materials purchased for machine manufacturing include steel structures, electrical and automation components, power centers and process blowers. Glaston is committed to responsible procurement practices. In accordance with its Code of Conduct, Glaston acts fairly towards its suppliers, service providers and subcontractors. Glaston, in turn, requires its suppliers to respect the principles outlined in the company's Code of Conduct.

### Continuous dialogue

Glaston's goal is to be a reliable and responsible partner for its stakeholders. The most significant stakeholders are current and potential customers, current and potential employees, shareholders and investors, suppliers and subcontractors, the media, public authorities and local communities as well as research institutes and universities. Glaston

engages in constant dialogue with its stakeholders on topics of current interest.

Glaston Corporation's share (GLA1V) is listed on the main list of Nasdaq Helsinki Ltd. At the end of 2019, Glaston had 7,112 shareholders. At the end of the year, the company's largest shareholders were AC Invest Eight B.V. (26.39%), Hymy Lahtinen Oy (12.22%), Varma Mutual Pension Insurance Company (7.50%), Ilmarinen Mutual Pension Insurance Company (7.31%) and OP-Finland Small Firms Mutual Fund (6.07%).

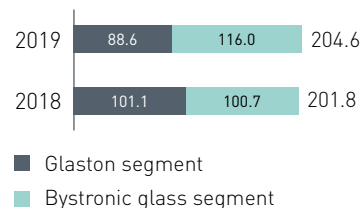
### Corporate responsibility management

Glaston is committed to doing business in a responsible and sustainable way. Glaston's day-to-day activities are guided by the Code of Conduct and Glaston's other Group-level policies and local guidelines. Corporate responsibility and its management are the responsibility of the CEO and the company's Executive Management Group and they report to Glaston's Board of Directors on the topic. Information on the members of the Board of Directors and the Executive Management Group can be found on Glaston's website [glaston.net/governance/](https://glaston.net/governance/).

Glaston's Communications and Marketing coordinates responsibility measures and communications. The goal is to set up during 2020 a corporate responsibility task force comprising experts from various functions to promote Glaston's sustainability agenda within their own organizations.

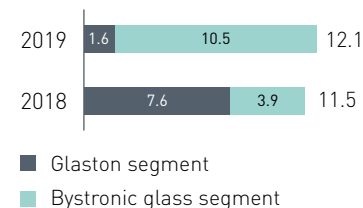
## Key figures 2019

### NET SALES, EUR MILLION



Figures are pro forma figures

### COMPARABLE EBITA, EUR MILLION



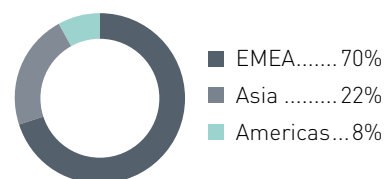
### ORDER BOOK, EUR MILLION



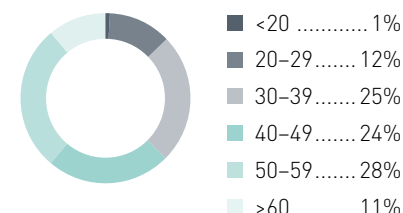
### ORDERS RECEIVED, EUR MILLION



### PERSONNEL PER REGION



### AGE DISTRIBUTION OF PERSONNEL



### Scope of the report

This report describes Glaston Group's operations in 2019. It focuses on reporting material issues, based on a materiality analysis conducted in autumn 2019. The report covers the entire Group and is therefore much broader than the previous year's report, which focused on operations in Finland.

## PRESIDENT & CEO'S GREETING

# A historic year

**T**he year 2019 was a historic year for Glaston, with the acquisition of Bystronic glass, the largest acquisition in the company's history.

In terms of employee numbers, the size of the company more than doubled, and the company's product portfolio expanded into insulating glass technology and automotive industry pre-processing technology. The acquisition supports our goal of further strengthening our position in the glass processing value chain. Through the acquisition, we have a unique product offering that generates added value for our customers. In addition, the acquisition provides us with excellent opportunities for cross-selling new equipment, providing services directly from a single supplier, and the joint development of integrated production lines. The Bystronic glass acquisition was well received by our customer base, and we have already been successful in cross-selling our products. The integration of Bystronic glass with Glaston has continued well and we have

succeeded in combining our operations faster than expected.

### **In the spring, we updated our strategy**

In the spring, we updated our strategy to reflect the company's expanded operations. The foundation of the strategy remains unchanged: we will continue to seek growth in our core business and services through digitalization. Combining the strengths of Bystronic glass and Glaston, as well as leveraging the expertise brought by Bystronic glass, creates for us unique opportunities to further strengthen our machines and services offering and grasp new growth opportunities. Implementing a joint operating model will support us in reaching the strategic goals and in realizing the full synergy potential of combining Glaston and Bystronic glass. The overall goal of our strategy remains the same: our ambition is to be the industry's innovative technology leader, realizing its customers' highest ambitions in glass.



### **Net sales and profitability developed as expected**

In 2019, the market was double-edged. Economic uncertainty continued throughout the year and this was also reflected in the investment willingness of glass processing customers. Activity on the heat treatment machines market, particularly in the EMEA area, continued to be subdued throughout the year.

Energy efficiency and the need to improve the energy performance of buildings is supporting demand for insulating glass, while demand for insulating glass machines, related services and spare parts also continued to be good during the year. Demand for heat treatment machine services was also good. Despite market and other challenges, our pro forma net sales remained at the previous year's

# Glaston's purpose is to build a better tomorrow through safer, smarter, and more energy-efficient glass solutions.

level, while comparable (pro forma) EBITA improved in line with expectations.

## Climate change and the need for energy-efficient solutions create opportunities

Climate change is a megatrend that also affects Glaston, and through our comprehensive technology offering we have better opportunities to meet global environmental challenges. Improving the energy performance of buildings is one of the driving forces behind the company's business, and this is strongly supporting demand for insulating glass machines in the USA and Europe. We have a strong position in the market, and the Bystronic glass TPS® (Thermo Plastic Spacer) technology promotes the achievement of energy-efficiency targets. In addition, as environmental awareness grows, there is

growing demand for solar energy and smart glass. In addition to solar panels and cells, new applications of the future may include solar panels integrated into façades or windows to provide energy for buildings. In smart glass applications, windows that react to fluctuations in light or temperature, for example, improve the energy performance of buildings. Glaston is strongly involved in this development via our Emerging Technologies unit, which provides engineering and consulting services for the production of smart glass and energy glass windows as well as solar energy applications.

I would like to thank all of our employees for their contribution throughout the year. Last year was a year of change. Our personnel responded well to the challenge and are committed to our success. I also want to

thank our customers for their trust in us and for their positive response to the acquisition. At the same time, thanks are also due to you, our shareholders, for your trust during 2019.

## Glaston's anniversary year 2020

### – development continues

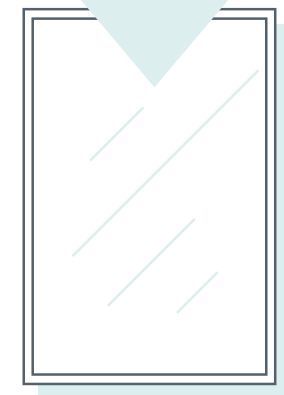
The current year is equally significant for the company, as we celebrate our 150th anniversary. We will continue to develop our business for the benefit of our customers by investing heavily in innovation and sustainability while enhancing our operating earnings performance.

**Arto Metsänen**  
CEO

## Energy savings potential in windows

37%

decrease in  
CO<sub>2</sub> emissions  
thanks to high  
performance  
glazing



Source: Glass For Europe



# Megatrends supporting Glaston's business

The following megatrends have a particular impact on Glaston's development:

- Urbanization
- Safety
- Energy-efficiency and environmental awareness
- Trends in the automotive industry

Urbanization is one of the world's most powerful forces of change. The UN has estimated that by 2050 nearly 70% of the world's population will live in cities. At the same time, cities will become larger and more densely populated and, particularly in developing countries, megacities with over 10 million inhabitants will arise. Through urbanization, the need for new construction will grow, and the existing building stock, too, will be developed, which will increase demand for glass.

The use of glass in buildings has clearly increased; well-designed use of glass can reduce the energy consumption of buildings, improve their sound insulation and at the same time increase interior brightness. People's preferences are also increasing the use of glass as a building material. This development will create increasing demand for energy-saving glass, smart insulating glass units and solar energy solutions.

As environmental awareness grows and construction laws and regulations become stricter, the energy-saving requirements for buildings will tighten. Insulating and energy-efficient glass is increasingly being used to meet energy-saving targets, and more safety glass is being used due to tighter safety regulations. In addition, various smart glass applications that improve energy performance, for example, are being developed for buildings. Utilization of solar energy in buildings is also on the increase, resulting in growing demand for the glass needed in solar cells. In general, the size, coating and bendability requirements for glass are increasing and the need for highly processed glass is growing.

In the automotive industry, too, requirements for the properties of glass are constantly increasing. In vehicles, the relative proportion of glass is on the rise, and large, panoramic windshields, in particular, are making their way onto the market. Head-up windshield displays and interactive windshields present new opportunities for glass processing. As the proportion of glass grows, however, there is a trend towards minimizing the weight of glass, with the thinness of glass playing a key role. This development is driving the growing demand for glass in the automotive and display glass industry.

# Material aspects of Glaston's responsibility

In 2019, Glaston reviewed the most material aspects of its responsibility in collaboration with the company's main external stakeholders and its own personnel. Based on this, the key issues of responsibility were identified, with the most material themes being: responsible own activities (personnel, environment, responsible business), responsible purchases, responsible partner and responsible member of society. The company's Executive Management Group approved Glaston's Responsibility Agenda in December 2019.

## Responsible own activities



### Human resources

- Health & safety and risk prevention
- Competencies and skills, development and trainings
- Equality, anti-discrimination, anti-harassment
- Anti-corruption and fair competition practices
- Responsible sales



### Environment

- Climate impact oversight and scenarios
- Risks and possibilities related to tightening emissions regulation



### Responsible Business

- Financial responsibility ensuring competitiveness and profitability

## Responsible sourcing



### Suppliers

- Supplier requirements, assessments and audit
- Human rights and work place safety within the supply chain
- Anti-corruption in supply chain and sourcing

## Responsible partner



### Customer

- User experience and customer satisfaction



### Products & Services

- Machine quality, reliability and longevity, life-cycle management
  - Machine safety and advising customers in operating the machines
  - Data safety and security
  - Energy / material efficiency and sustainability of the machines and products
- End-product quality, safety and recyclability

## Responsible member of the society



### Sustainable tomorrow

- Indirect impacts on energy efficient cities and societies
  - Indirect energy and emission reductions
  - Indirect material reductions
- Sustainable end-product applications
- Development of the industry, research co-operation

Some of the Responsibility Agenda topics are still at the development stage and the aim is for them to be reported more comprehensively in subsequent reports. The key indicators of responsibility have been identified and their target setting will be developed in 2020.

#### Responsibility in Glaston 2020

Development of responsibility work will con-







tinue in 2020 with the implementation of the Responsibility Agenda. Glaston will set up a corporate responsibility task force and create for responsibility work consistent company-wide processes and tools. Information on the themes of the Responsibility Agenda, and on related measures and their progress, will be regularly disseminated via the company's communications channels.

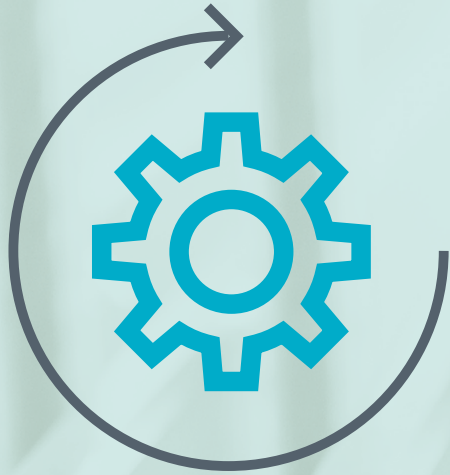
Topic	Indicator	Objective	Timetable
<b>Responsible business</b>	Training of personnel in the Code of Conduct	Training coverage 100%	Continuous
<b>Safe workplace</b>	Number of accidents	No accidents	Continuous
	Reports of workplace harassment	No reports	Continuous
<b>Impacts on the environment</b>	Energy consumption in production units	Decreasing energy consumption, %	Determining starting level and setting savings target in 2020
	Energy efficiency of glass processing machines	Loading capacity and yield +10%	By 2030
<b>Responsible purchases</b>	Responsible procurement training	Training coverage 100%	Continuous
<b>Responsible partner</b>	Industry's best customer experience	Customer satisfaction measurement	Target setting 2020, continuous



# UN Sustainable Development Goals

Glaston supports the United Nations Sustainable Development Goals (SDGs), which will guide the sustainable development actions of member states, companies and other organizations up to 2030. Glaston has identified six goals that also emerge from our own strategy and are most relevant to us. These provide a broader frame of reference for our work and support the achievement of these goals in our own activities.

Glaston responsibility theme	UN Sustainable Development Goals	Implementation in Glaston
<b>Responsible operations</b>	 <b>Goal 3:</b> Ensure healthy lives and promote well-being for all at all ages   <b>Goal 4:</b> Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	<ul style="list-style-type: none"> <li>· occupational health care in all operating countries according to local needs and requirements</li> <li>· minimizing health risks: e.g. in Finland enhanced health checks for the over 50-year-olds, hobby sessions and exercise benefits</li> <li>· eSkills online learning system for all personnel</li> <li>· summer work, diploma work and trainee positions for young people</li> </ul>
<b>Responsible member of society</b>	 <b>Goal 7:</b> Ensure access to affordable, reliable, sustainable and modern energy for all   <b>Goal 11:</b> Make cities and human settlements inclusive, safe, resilient and sustainable	<ul style="list-style-type: none"> <li>· reducing the harmful environmental impact of cities with new glass technology, such as smart glass</li> <li>· Emerging Technologies unit, which provides engineering and consulting services for the production of smart glass and energy glass windows and solar energy applications</li> <li>· GlastonAir™ air flotation technology for glass tempering meets the needs of solar panels and solar cells</li> <li>· Enabling the introduction of resource-efficient, clean and environmentally friendly technologies and processes</li> <li>· Participating in the development of society by paying taxes, wages and dividends</li> </ul>
<b>Responsible partner</b>	 <b>Goal 9:</b> Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation   <b>Goal 12:</b> Ensure sustainable consumption and production patterns	<ul style="list-style-type: none"> <li>· Efficient use of energy and materials and minimizing waste and material waste</li> <li>· ISO 9001 quality management system and ISO 14001 environmental management system</li> <li>· glass processing machine energy-efficiency at heart of product development, long life cycle, high utilization rate and real-time quality control iLook</li> <li>· proactive and regular maintenance by utilizing cloud services and opportunities offered by IOT</li> </ul>



## Responsible own activities

# Professional and devoted personnel foundation for success

### A responsible employer

Professional, committed and healthy personnel are the foundation of Glaston's success. Glaston is committed to continuously evolving the skills of its personnel and providing its personnel with an inspiring work environment where they have the opportunity to learn and develop. In accordance with its operating principles, the company pursues equality and diversity.

In 2019, Glaston's personnel grew by 121%, and there were 790 (357) Glaston employees at the end of the year. The increase was due, in particular, to the acquisition of Bystronic glass in April 2019. At the end of 2019, Glaston had operations in 11 countries, of which the three largest, by employee numbers, were Germany, Finland and China.

At Glaston, employee turnover is low and most employment relationships are permanent.

Of Glaston's personnel, 83% were men and 17% were women. At the end of the year, 20% of Glaston's Executive Management Group were women.

### Towards a common corporate culture

With the acquisition of Bystronic glass, Glaston's employee numbers have more than doubled. The

integration of Bystronic glass into Glaston began at a brisk pace. Operations have been combined efficiently, and in 2019, for example, sales and service points were merged, overlapping operations were removed, integration of various IT and customer management systems was launched, and the foundation was laid for a common digital product platform. The merger of operations did not result in many redundancies.

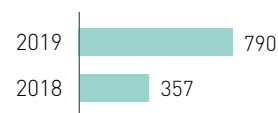
Creating a common corporate culture and identity requires long-term work. Glaston's values were renewed in May. Via training and communications, information on the products, business policies and practices of Glaston and Bystronic glass has been disseminated throughout the company. In addition, cooperation has been promoted at joint service locations, for example in the UK, Singapore and Russia. Comprehensive product training has been arranged for sales, service and production personnel.

In 2020, the integration of information management systems used by HR will continue.

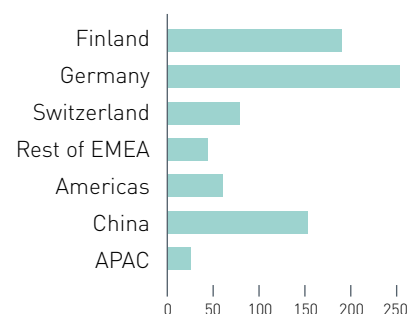
### Skills development

In Glaston, personnel training is mainly organized internally and according to local needs. In 2019, due to the acquisition of Bystronic glass, one area of focus in training was cross-selling of products. Another

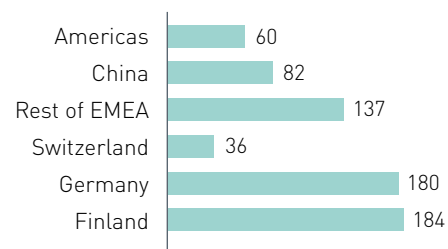
## EMPLOYEES AT END OF YEAR



## EMPLOYEES PER COUNTRY 2019



## TRAINING DAYS 2019



## SICKLEAVE AND ACCIDENTS 2019

Alue	Sickleave	Accidents
Glaston total	5,221	22 <sup>*)</sup>
Per employee	7	

<sup>\*)</sup>The accidents figure covers both accidents resulting in an absence and accidents not resulting in an absence. The most common accidents are hand injuries, such as cuts.

## FIXED-TERM AND PART TIME EMPLOYEES

### The share of fixed-term employees among all employees, %

Finland	11%
Germany	3%
Switzerland	0%
Rest of EMEA	0%
Americas	5%
China	0%
APAC	0%

### The share of part time employees among all employees, %

Finland	4%
Germany	11%
Switzerland	25%
Rest of EMEA	1%
Americas	5%
China	0%
APAC	0%

## EMPLOYEE AGE DISTRIBUTION 2019

	<30	30-49	>50
Finland	14%	46%	40%
Germany	18%	36%	46%
Switzerland	8%	46%	46%
Rest of EMEA	-	76%	24%
Americas	8%	58%	34%
China	13%	81%	6%

area of focus was various IT, software and digitalization training, which took place extensively throughout the organization. In addition, team development workshops were organized in Finland and supervisor training arranged in Switzerland.

The company's eSkills online learning platform was expanded in the autumn, both in terms of target group and content, to include Bystronic glass. Thanks to eSkills, training is flexibly available online, and all our personnel can develop their skills independently. The eSkills platform provides training related to products, processes and operating practices.

Performance appraisals are conducted annually within Glaston and all employees are covered by the appraisal process. In the development appraisals, targets are jointly agreed for the coming year and an evaluation is made of performance during the previous year and of the achievement of targets set for the previous year. Particular attention is paid to the planning of each person's own skills development.

Bystronic glass has previously applied its own performance appraisal model. During 2020, the intention is to implement a joint performance appraisal model.

## Wellbeing and safety at work

At Glaston, we invest in the health, working capacity and safety of our personnel in many ways, and we actively monitor occupational safety. Our target is zero accidents at work. The day-to-day management and development of occupational safety is the

responsibility of the company's various units in line with local legislation. Occupational safety training primarily takes place in the company's assembly and production units. On average, occupational safety reviews are conducted every three months and, based on them, development measures are agreed upon. Occupational safety training is regularly arranged in all production units. Occupational safety issues are discussed in local occupational safety committees. In Germany, supervisors arrange annual safety training for their subordinates. The most common injuries are hand injuries, such as cuts.

The company encourages its personnel to exercise. In Finland, Glaston offers its employees joint activities and exercise benefits. In Germany, personnel have an opportunity to use a company bicycle.

## Remuneration

As a rule, all of Glaston's personnel are covered by an annual bonus scheme and, in addition, the reward scheme also includes Glaston Way awards. The annual bonus is based on Glaston's financial performance, and the Glaston Way monetary awards are based on good work performance supporting the achievement of strategic goals in line with the company's values. Since 2014, the company has had a share-based incentive scheme for the Group's key personnel. The scheme is linked to the company's financial performance.

Glaston renewed values:  
We are committed to our customers,  
We share the passion for glass,  
Together we build the future and  
We learn from each other.

#### Anti-corruption work and responsible sales

Glaston has operating locations in eleven countries, and from these we serve our customers in over 100 countries. The company's own operations are complemented by a global agent network. Glaston recognizes that there is a risk of corruption and fraud in some of the company's operating areas.

Glaston's activities are guided by our Code of Conduct, which specifies how the company conducts its business ethically and responsibly. Responsible sales and anti-corruption work are important issues for Glaston, and the company ensures that the principles described in the Code of Conduct are implemented in practice.

Glaston regularly arranges training on its fair business issues (bribery, conflicts of interest, fair competition) to ensure compliance with its Code of Conduct. In addition, the training materials are always available on the company's intranet. In 2020, Glaston will update its Code of Conduct in relation to bribery, corruption and money laundering, and training in the updated Code of Conduct will be arranged for all of the company's personnel during the year.

#### Sustainable development as an opportunity

Promoting sustainable development has become a global norm. Discussions on measures to combat climate change are also under way in the glass industry. Glaston views the promotion of sustainable development as a business opportunity, and as a frontrunner in our industry the company is involved in creating the corporate responsibility standards and practices of our industry.

Of Glaston's customer segments, the architectural and construction segment is the biggest. New energy standards, stricter legislation and supranational programs such as the EU's Green Deal and campaigns such as Renovate Europe, for example, are steering societies towards more environmentally-friendly and energy-efficient solutions.

Buildings will play a significant role in combating climate change. In the EU, for example, buildings account for 40%\*) of total energy consumption, and 36% of carbon dioxide emissions come from buildings. The greatest potential for reducing energy consumption lies in the renovation of existing buildings. If, for example, windows

of buildings in the EU were replaced by energy-efficient window units by 2030, the energy consumption and carbon dioxide emissions of the buildings would be approximately 30% lower than today\*\*).

The glass processing industry has actively developed types of glass that can be used effectively to optimize the need for heating and cooling in buildings and thereby reduce energy consumption. Of these, energy-saving glass causes heat radiation to be largely reflected back indoors, while solar protection glass reduces the transmission of solar energy and thus reduces the need for cooling. In addition, double or triple insulating glass units further improve the energy efficiency of windows. Large glass surfaces also facilitate the use of daylight in buildings, reducing the need for artificial lighting.

Glaston contributes to the construction of a more energy-efficient society by offering its customers a wide range of products and services that enable them to manufacture more energy-efficient windows and insulating glass units. In 2019, Glaston's offering expanded into insulating glass technology through the acquisition of Bystronic glass.

As environmental awareness grows, demand for solar energy and smart glass is growing. In addition to solar panels and cells, new applications of the future may include solar panels integrated into façades or windows to provide energy for buildings. In smart glass applications, windows that react to fluctuations in light or temperature, for example, improve the energy performance

of buildings. Glaston is strongly involved in this development, providing via its Emerging Technologies unit engineering and consulting services for the production of smart glass and energy glass windows as well as solar energy applications.

#### Impact on the environment

Glaston continuously strives to reduce the environmental impacts arising from its activities, use of machines on customers' premises, and its end products. Glaston's most significant environmental impacts in its own activities come mainly from energy consumption, waste and transportation. In the use of machines, the main environmental aspect is the energy consumption of the machines.

Glaston's continually develops the quality, reliability and energy-efficiency of its products. At Glaston's assembly and production units, the company operates in accordance with the ISO 9001 quality management system. In Finland, Glaston manages environmental issues in accordance with the ISO 14001 environmental management system.

Glaston is constantly improving the energy efficiency of its properties, and these measures are also assessed from the perspective of environmental impact. During 2019, the Tampere property managed to reduce oil consumption by approximately 70% when heat pumps were installed instead of oil as a heating source. An energy review conducted in autumn 2019 highlighted the replacement of lighting as having significant

\*) Source: Renovate Europe \*\*) Source: Glass for Europe

energy-saving potential, and the gradual renewal of lighting with LEDs will begin in 2020. In Germany, part of premises lighting was replaced with LEDs during the year. Thanks to the new LED lights, energy costs fell by 50% and carbon dioxide emissions were reduced. In 2020, the light replacement project will continue in Germany. In Germany, the compressed air system is inspected annually for possible leaks, thereby preventing unnecessary carbon dioxide emissions. The introduction of solar energy is being explored in both Germany and Finland.

In its waste management, Glaston's goal is to keep environmental loading as low as possible, which in turn correlates positively with waste costs. Sorting and recycling of waste is arranged taking into account the activities of each operating location. The aim is to keep to a minimum the amount of waste in general as well as the amount going to landfill. Much waste arises from packaging materials; this is sorted and either recycled or used as energy waste. In Germany, however, goods suppliers' packaging materials are recovered and suppliers make very effort to reuse them. In China, recyclable material is sold to an external recycling company. In Finland, Glaston's waste volumes increased in 2019. The proportion of metal waste, in particular, grew due to the decommissioning of large old machines used in product development. The metal waste was sold for recycling.

## TIANJIN FINANCE CENTER

# Creating a sustainable masterpiece in glass

The recently opened Tianjin Finance Centre in China's northeast port city stands tall as the 7th highest building in the world. Not only is it a work of art in glass, steel and design, it is a tribute to how skyscrapers can promote sustainability.

The architecture and engineering firm Skidmore, Owings and Merrill LLP (SOM) was awarded the work to make a truly memorable building and one that could positively contribute to sustainability.

Sustainability lies at the core of the Tianjin Finance Centre's design. The choice of materials, its engineering prowess and glass glazing solutions create an architectural masterpiece that combines carbon emissions reduction with stunning innovation.

With its curved, tapering form, the original plan was to include over 1,000 unique glass panels. However, the design team cut this back to 476 to facilitate manufacturing efficiency and ease of

replacement. This same optimized approach with structural design also saved 19,000 tons of steel, 10,500 cubic meters of concrete and 3,900 tons of rebar, significantly minimizing the overall environmental impact of the building with its lighter footprint, over an earlier design of the same size.

The glass windows provide expansive views and maximize daylighting to save on energy costs for the building. To further cut back on emissions, SOM utilized high-performance, double-glazing with a low-E coating and incorporated an insulated panel, integrated with the mullions between each glass pane, thereby cutting heating and air-conditioning costs.

The glass for the façade was supplied by CSG Holding, the largest manufacturer of architectural glass in China, using high-quality glass processing technology from Glaston.



©Seth Powers

The transport of machines to customers is done either by land or sea. Transports are handled by forwarding companies by the shortest routes.

Glaston's glass processing machines have operating lives. The machines are designed to withstand constant use at high utilization rates. Glaston pays special attention to the quality and durability of the materials used in its machines. Glaston's production and assembly processes and installation methods are designed to promote product quality and reliability as well as the safety of installers and customers.

### Energy-efficient technology

In Glaston's operations, the most significant environmental impacts arise when customers use machines purchased from Glaston. The operating life of Glaston's tempering machines is fairly long, up to more than 20 years. A significant part of the operating costs of the machines comes from the price of energy. Glaston's product development has therefore long focused on improving the energy-efficiency of the machines. As a result of this work, we have been able to substantially reduce the energy consumption of the most significant products in our tempering machine portfolio. For example, in the tempering process of low-emissivity glass, energy consumption has been reduced by around 30% over the last decade.

Electricity consumption in the manufacturing of glass pre-processing machines and insulating glass units is low and, as a

result of product development, consumption has been reduced even further. Development has focused on, for example, conveyor control and optimization of washing machine ventilation.

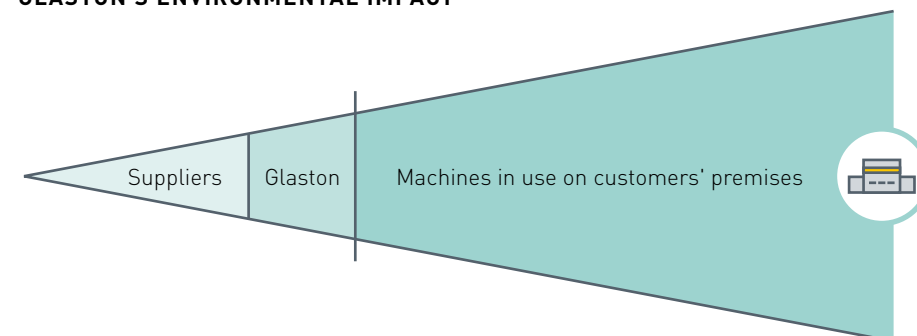
In product development, Glaston utilizes new technology and the opportunities created by digitalization. With the aid of cloud services and the industrial internet, the company helps its customers to use their machines as efficiently as possible. A real-time quality measurement system detects deviations in the quality of processed glass immediately, thereby minimizing material waste.

### Energy saving opportunity

The architectural and construction industry is Glaston's largest customer segment. Therefore, the environmental impact of the glass installed in buildings is highly important for Glaston.

Energy is the biggest cost item in the lifetime of buildings, and heat generation and loss through windows accounts for 25–30% of the energy used for heating and cooling buildings. New energy standards and stricter legislation are driving demand for more energy-efficient and environmentally conscious solutions in both new and renovation construction. The energy-saving potential is enormous, because in the EU area up to 86% of buildings' glass surfaces consist of outdated and less energy-efficient single or double glazing. The glass processing industry has actively developed types of glass that can be used to optimize the need for heating

## GLASTON'S ENVIRONMENTAL IMPACT



### WASTE PROCESSING 2019



### WASTE, TONS <sup>1\*</sup>



### ENERGY CONSUMPTION, KWH <sup>1\*</sup>



<sup>1\*</sup> Germany, Finland, China, comparable

and cooling in buildings and thereby reduce energy consumption.

Through its Emerging Technologies unit, Glaston provides engineering and consulting services for the production of intelligent glass and energy glass windows. Demand for solar energy is growing, and strict quality

requirements, for example in relation to glass thickness and curved surfaces, are set for the glass used in solar panels and cells. In smart glass applications, windows that react to fluctuations in light or temperature, for example, improve the energy performance of buildings.

## Responsible business

Glaston's financial responsibility is centered on maintaining the company's profitability and competitiveness, and its key objective is to ensure profitable growth.

Financial responsibility is reflected in Glaston's responsible, long-term and sound financial management. In addition, responsibility from a financial perspective means that the Group's operational and financial risks are recognized and managed so that business targets are achieved and continuity of the company's operations is safeguarded. Glaston applies a risk management policy approved by the company's Board of Directors.

Glaston is committed to complying with local tax laws and regulations as well as the OECD Transfer Pricing Guidelines. Glaston is committed to pay direct and indirect taxes and other tax-like charges based on current laws and to report and disclose its tax information in accordance with applicable legislation.

### Professional operations

Glaston strives to ensure high quality management of its tax affairs in all countries of operation and to maintain accounting systems and controls that support tax compliance. The company operates transparently, professionally and appropriately with all tax authorities.

Through profitable operations, Glaston ensures that the company is able to fulfill its obligations towards its key stakeholders. Personnel salaries, payment of goods and

service providers, social taxes, and potential dividends and returns of capital for shareholders are our most important obligations.

In 2019, Glaston's pro forma net sales totaled EUR 204.6 million and comparable EBITA was EUR 12.1 million. In financial year 2019, Glaston paid interest and financial

expenses totaling EUR 2.6 million. Based on the decision of the Annual General Meeting, a return of capital of EUR 0.014 (share issue adjusted) per share was paid to the company's shareholders for financial year 2018.

Glaston paid EUR 0.6 million in income taxes during financial year 2019. Salaries

and bonuses paid to personnel totaled EUR 42.3 million and pension expenses EUR 4.2 million. Glaston had an average of 689 employees in 2019. Glaston's investments in tangible and intangible assets totaled EUR 4.6 million in 2019.

### Distribution of economic impact

EUR million		2019	2018	2017	2016
Customers	Profits	181.0	101.1	109.7	107.1
Suppliers	Purchases, materials and services	130.9	68.8	67.6	68.1
Employees	Salaries, bonuses and other social costs	51.4	23.4	24.4	26.2
Financiers	Financial costs	2.7	0.7	0.8	1.0
Owners	Dividend/Return of capital	1.7	1.2	1.9	0.0
Public sector	Taxes	0.9	0.2	0.2	0.4
Community investments	Benefications	0.0	0.0	0.0	0.0
Investments to the development of business	R&D	6.4	4.1	3.8	2.5

EUR million	Purchases				R&D				Salaries				Taxes			
	2019	2018	2017	2016	2019	2018	2017	2016	2019	2018	2017	2016	2019	2018	2017	2016
Finland	47.8	47.3	47.6	43.9	4.3	4.0	3.6	1.3	14.9	13.1	12.8	12.8	0.0	0.0	0.2	0.0
Other EMEA	50.3	4.0	2.9	3.8	2.0	0.1	0.1	0.1	23.7	3.2	3.5	3.4	0.5	0.2	0.1	0.1
Americas	20.2	9.3	9.3	14.0	0.0	-0.2	-0.2	0.9	6.5	3.8	4.7	6.0	0.4	0.0	0.0	0.3
Asia	12.7	8.2	7.7	6.3	0.2	0.2	0.3	0.3	6.3	3.2	3.4	3.9	0.1	-0.1	0.0	0.0



## Responsible purchases

## Fair and honest business

### Responsible procurement

Suppliers of goods and services play an important role in Glaston's value chain. Glaston selects its sub-contractors carefully; the selection criteria are quality, reliability, security of supply and price. Glaston seeks close, long-term and good relationships with its most important suppliers. In this way, Glaston ensures that our partners understand and comply with our requirements, in relation to both processes and products.

Most of Glaston's approximately 2,500 active sub-contractors operate in Europe, where the company's largest assembly and production units are located.

Only companies that have not violated the law are selected as suppliers in Europe. Suppliers are selected so that they have the right, under EU law, to supply products and services and are not subject to sanctions of any kind. Quality and purchasing organizations audit the most significant suppliers regularly in order to monitor the safety and quality of supplied parts and products. In 2019, 55 suppliers were audited. All new suppliers go through an audit process before being approved. In addition, visits are made to suppliers, if necessary.

Glaston's Code of Conduct includes a commitment to respect human rights. In accordance with its Code of Conduct, Glaston acts fairly towards its suppliers, service providers and subcontractors. Glaston, in turn, requires its suppliers to respect the principles outlined in the company's Code of Conduct.

### Fair business

In its Code of Conduct, Glaston undertakes to promote fair competition and to comply with the law in all of its activities. No direct or indirect payments can be made, nor can the company's funds be conveyed directly or indirectly to any party to gain an inappropriate advantage. The Code of Conduct requires the avoidance of conflicts of interest and the refusal of any inappropriate payments or benefits.

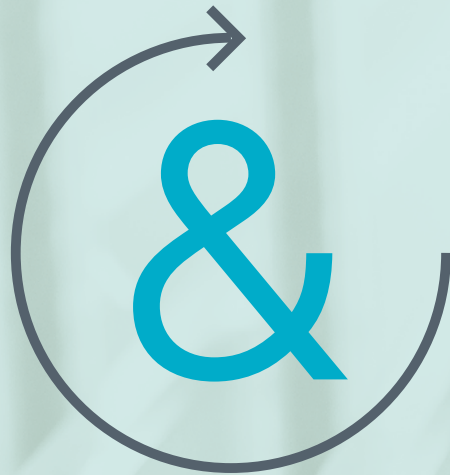
Glaston regularly arranges training for its personnel on its Code of Conduct and fair business issues to ensure compliance with guidelines. In addition, the training materials are always available on the company's intranet.

### Purchases by supplier operating country

EUR million	2019	2018	2017	2016
Finland	49.8	42.1	44.7	41.6
Germany	37.7	3.2	0.8	1.3
Switzerland	13.3	0.1	0.0	-
United States	4.3	7.5	6.0	6.1
Italy	4.3	3.3	3.6	5.4
China	4.4	4.2	3.5	2.7
Others	17.2	8.5	9.0	10.9
<b>Total</b>	<b>130.9</b>	<b>68.8</b>	<b>67.6</b>	<b>68.1</b>

### Active suppliers by operating country

	2019	2018	2017	2016
Finland	784	772	792	731
Germany	914	33	21	31
Switzerland	254	2	2	-
United States	181	200	225	215
Italy	264	112	138	132
China	62	211	222	200
Others	194	159	155	143
<b>Total</b>	<b>2,653</b>	<b>1,489</b>	<b>1,555</b>	<b>1,452</b>



## Responsible partner

# Industry's best customer experience

### Customer experience

Glaston wants to be the most customer-oriented, reliable and high-quality player in the industry. By creating more customer-oriented operating practices, the company adds customer value, thereby continuously improving the customer experience. As the operating environment changes, the requirements of production technologies also increase.

Higher quality and more versatile features are continually required from customers' end products. Glass processing machines must be able to produce larger, more uniform and thinner glass surfaces. Production must also be able to adapt flexibly to making different types of glass. As a glass industry frontrunner, Glaston develops technologies and solutions that meet these changing customer needs, and product development is often done in partnership with customers.

Glaston uses customer satisfaction surveys to determine how successful the company has been in its deliveries and service visits. Customer surveys are currently being conducted in heat treatment machine delivery projects and service visits, but the goal is to extend surveys to the other main product groups.

### Customer support throughout the life cycle

Glass processing machines are long-term investments for their owners as, depending on the machine, they have fairly long operating lives, of up to 20 years. The machines are designed to withstand constant use

Glaston has approximately

# 4,500

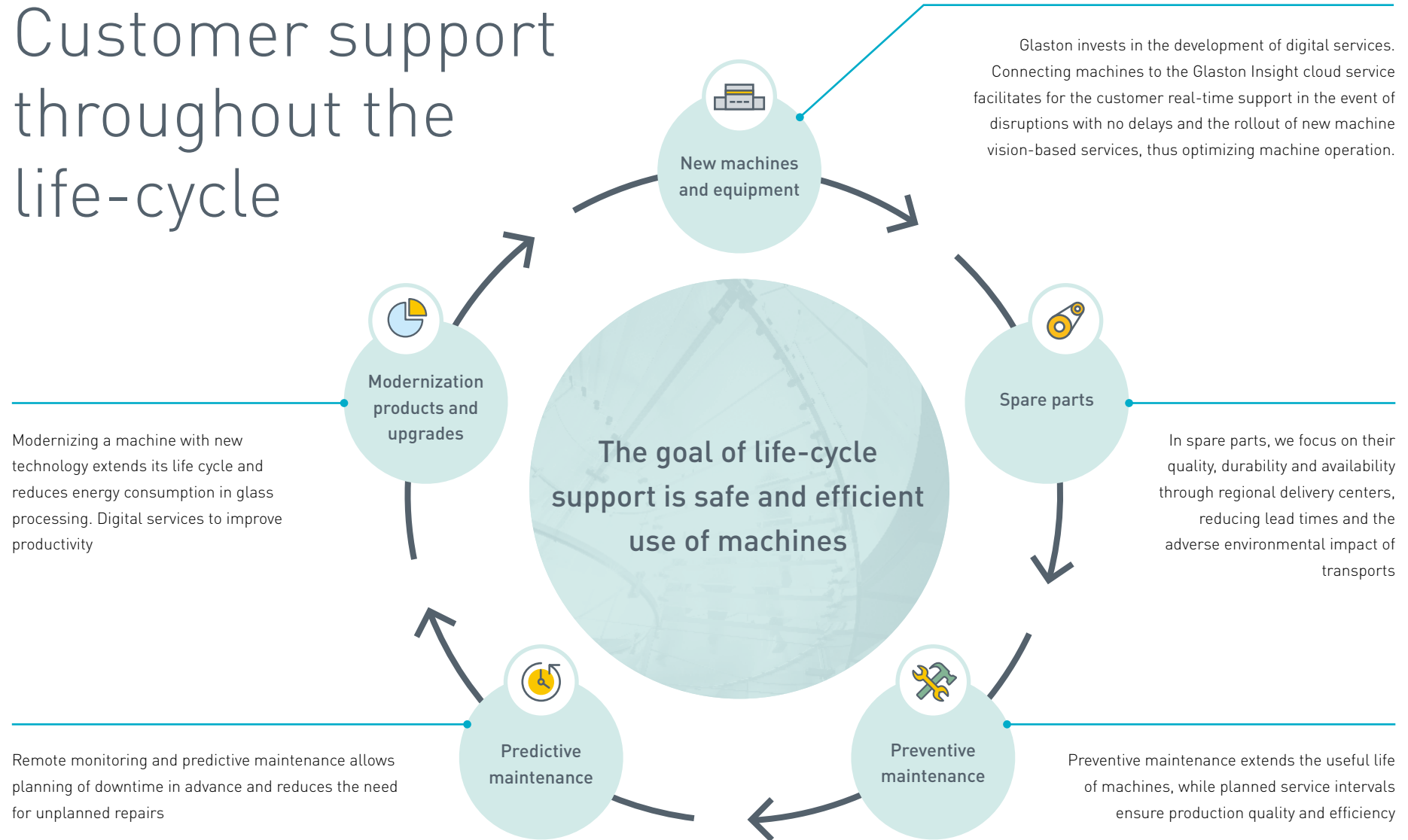
installed and operating machine lines

at high utilization rates. Glaston pays special attention to the quality and durability of the materials used in its machines.

Glaston's production and assembly processes and installation methods are designed to promote product quality and reliability as well as the safety of installers and customers.

Safety in the use of Glaston machines delivered to Europe is based on the EU Machinery Directive and the EN standards mentioned therein. The Directive requires manufacturers to carry out, among other things, a risk analysis of the machine, describing possible risks to personnel during the various stages of using the machine, and measures to reduce risks as well as information on any residual risk, which must be mentioned in operating instructions and in which the user must be trained. In addition, the company is also responsible for ensuring that the machine is constructed of items and components according to a parts list, for which specific requirements are set.

# Customer support throughout the life-cycle





I was very impressed at how quickly we were able to install the new ProL-zone upgrade on our existing lamination line – only 3.5 days – and I’ve been equally impressed with the high-quality output. And energy savings with the new oven has been phenomenal. With our old line, we were running at 350 amps, whereas we’re now down to 44 amps with our new one.

– **Rob Carlson**, Mechanical Engineer at Tristar Glass, Inc.’s Tulsa, Oklahoma facility.  
Tristar Glas installed a ProL-zone upgrade on their exiting laminating line.

In accordance with its life cycle model, Glaston has been actively developing its maintenance services, as regular service intervals increase product life and safety. Glaston has a total of approximately 4,500 installed and operating machine lines. Glaston has over 100 different upgrade products for different machine models. Modernizing machines with new technology, such as a new control system, a new tempering chamber or the ability to process low-emissivity glass, extends the life of the machines and reduces energy consumption in the glass processing process. In 2019, around 100 customers ordered upgrade solutions for their heat treatment machines. During 2020, the range of upgrade and modernization products will be expanded, particularly with regard to digital services.

Preventive maintenance extends the useful life of machines, while planned service intervals ensure production quality and efficiency. In addition, Glaston is investing in the development of digital services. The MyGlas-

ton customer portal contains all information between Glaston and the customer, such as project tracking, machine service reports, technical manuals and operating instructions, and links to the Glaston Insight cloud service. Connecting machines to Glaston Insight enables the customer to monitor and report on production in real-time, provides real-time customer support in the event of disruptions with no delays or travel that burdens the environment, and facilitates the rollout of new machine vision-based services.

At the end of 2019, more than 150 tempering machines had been connected to the Insight service, and more than 2.5 million glass processing loads had been registered. The first laminating machines were also connected to the Insight ecosystem, and the first test connections of insulating glass machines to the cloud service were made.

#### Developer of demanding products

Glaston is a frontrunner in its field, and known in the glass industry for its technology

leadership and high quality. The company’s position is particularly strong in developing technologically demanding products. Glaston invests in continuous customer-oriented product development, emerging glass technologies and new business opportunities brought by digitalization. During 2019, the company purposefully set out to strengthen its product development investments in the Bystronic glass segment. The company carries out product development in close cooperation with its customers and partners, such as research institutes, universities and other higher education institutions.

At the forefront of Glaston’s product development are new digital and IoT-based products that enable the optimization of machine performance and the transition to fully automated glass processing. By utilizing cloud services and the opportunities provided by IoT, Glaston helps its customers use their machines as efficiently as possible. As a by-product of efficiency and reliability, optimized energy consumption is also achieved.

As part of the MIDAS project, Finland’s first machine learning project in the industry, Glaston succeeded in 2019 in introducing several artificial intelligence applications to improve the quality and control of the tempering process.

The increasingly visible consequences of climate change will also affect the glass industry and demand for different kinds of products. The demand for solar energy is growing, and the glass used in solar cells and panels is subject to exacting quality requirements, for example with respect to glass thickness and curved surfaces. Glaston has taken this into account in its product development, and the GlastonAir™ tempering machine developed by Glaston responds well to this need. In 2019, Glaston delivered a GlastonAir™ machine to a Chinese customer for solar power production.

Emerging glass technologies and glass products providing added value, such as smart glass, are also increasingly entering the market, and the energy-saving potential of smart glass products, for example, is boosting demand for them. In 2017, Glaston established the Emerging Technologies unit, which provides consulting and planning services for smart glass and energy glass window production as well as solar energy applications.

Glaston has been involved in a nanotechnology project in California since the latter part of 2015. Glaston’s partner is developing for the market a new electrochromic smart glass technology that adjusts the thermal and light transmittance of glass precisely and quickly.



## Responsible corporate citizen

# Technology leader, developing the glass industry

Glaston is actively and diversely involved in developing its industry. We promote the development of both the industry and its technologies in our operations and with our partners.

Glaston is actively participating in international glass industry organizations:

- NGA/GANA in the United States
- China Glass Association in China
- ABRAVIDRO in Brazil
- Verband Deutscher Maschinen- und Anlagenbau glass technology forum in Germany
- Flat glass associations in Germany and Finland

In addition, Glaston is an active member, authorized by the Finnish national working group, in glass industry committees of CEN (European Committee for Standardization) and ISO (International Organization for Standardization) as well as in working groups preparing safety glass (tempered and laminated glass) standards. Through these, the company's representatives can influence the creation of industry standards and communicate through their practical experience the needs and requirements that the standards should cover.

Glaston works closely with various research institutes and higher education institutions. Key partners

include VTT Technical Research Center of Finland, University of Tampere, Business Finland, Fraunhofer Institute in Germany, and universities in Switzerland. The company also actively offers summer, graduate thesis and trainee job positions. The German unit operates an apprenticeship program, in which 20-25 young students are participating. The program lasts 3-4 years, depending on the training. During the program, students complete the theoretical part of





their training in an educational institution and practical work training takes place in the company.

In product development, Glaston actively utilizes new technology and the opportunities created by digitalization. As a result, the company's partner network has expanded. In 2018, Glaston joined the MIDAS project on industrial artificial intelligence, led by DIMECC. In 2019, Glaston and the University of Tampere received the DIMECC Prize for exemplary cooperation between an industrial company and a university.

Glaston's Emerging Technologies unit conducts development and engineering

projects in emerging glass technologies. Companies operating in this area are typically frontrunners in their field, which means that requirements for new glass technology and its development and application in practice are very high. Through its technological expertise and extensive contact network, Glaston has achieved the status of a reliable partner for companies developing and commercializing smart glass inventions.

To boost the industry's development and increase innovation, Glaston has twice organized a start-up event for the glass industry, Step Change. The event is a forum for innovators, potential partners, customers

and investors. The event is organized in conjunction with the Glass Performance Days (GPD) conference.

The GPD expert conference, organized by Glaston, brings together all of the various stakeholders in the glass processing chain, and it is the glass industry's most prestigious event. The conference aims to gather together and disseminate the latest information among sector actors and to promote the development of new areas of application and technological features. The conference has been organized since 1992 and over the years it has attracted more than 15,000 glass industry professionals.

# Corporate Governance Statement 2019

Glaston Corporation's administration and management are based on the Company's Articles of Association, the Finnish Companies Act and Securities Markets Act, and the rules and guidelines of NASDAQ Helsinki Ltd. In addition, Glaston complies with the Finnish Corporate Governance Code 2020, which is publicly available at the address [www.cgfinland.fi](http://www.cgfinland.fi).

This statement has been approved by the Company's Board of Directors. The Corporate Governance Statement is issued as a

separate report and is published together with the financial statements, the Report of the Board of Directors and a salaries and remuneration statement on the Company's website at the address <https://glaston.net/governance/>. The information is also included in the Annual Review 2019.

## Duties and Responsibilities of Governing Bodies

The General Meeting of Shareholders, the Board of Directors and the President &

CEO, whose duties are determined mainly in accordance with the Finnish Companies Act, are responsible for the management of Glaston Group. The General Meeting of Shareholders elects the Board of Directors and the Auditors. The Board of Directors appoints the President & CEO, who is responsible for the Company's daily operational management. The President & CEO is supported by the Executive Management Group.

## General Meeting of Shareholders

The General Meeting of Shareholders is the Company's ultimate decision-making body. It decides on the duties for which it is responsible in accordance with the Finnish Companies Act and the Articles of Association, which include the adoption of the financial statements and the consolidated financial statements contained therein, the distribution of profits, and the discharge of the Members of the Board of Directors and the President & CEO from liability. In addition, the General Meeting of Shareholders elects the Board of Directors and the Auditors. The Annual General Meeting decides on the remuneration paid to the Members of the Board and the Auditors. The Annual General Meeting, furthermore, may decide on, for example, amendments to the Articles

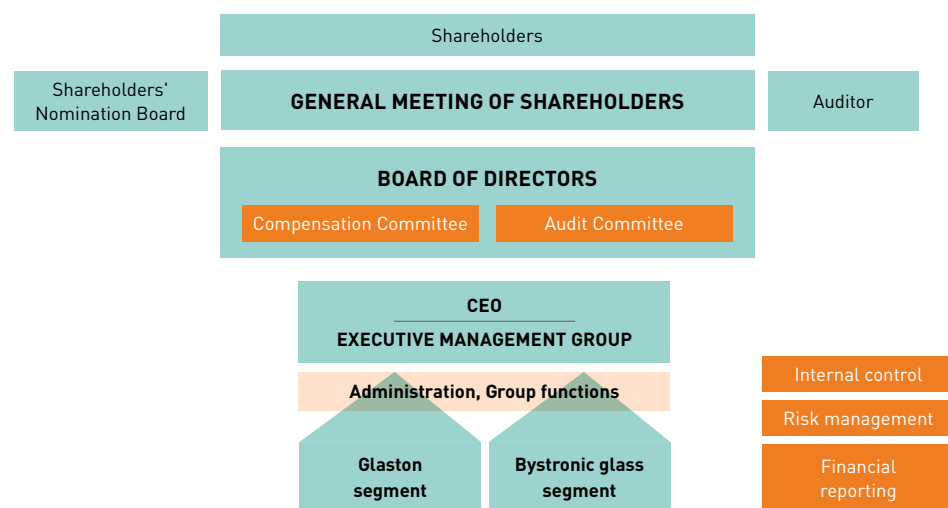
of Association, issuances of shares, and the acquisition of the Company's own shares.

Glaston Corporation's General Meeting of Shareholders meets at least once per year. The Annual General Meeting must be held at the latest by the end of May. In accordance with the Articles of Association, the notice to attend a General Meeting of Shareholders must be published on the Company's website no earlier than two (2) months before the last day of registration and no later than three (3) weeks before the General Meeting, but at least nine (9) days before the record date of the General Meeting. The Board of Directors may also decide to publish the notice of the General Meeting in one or more Finnish- or Swedish-language national newspapers. In addition, Glaston publishes the notice to the General Meeting of Shareholders as a stock exchange release.

The agenda of the General Meeting, draft resolutions on the composition of the Board of Directors, the remuneration of the Members of the Board, and the Auditors as well as other meeting documents are published on the Company's website at least three (3) weeks before the General Meeting.

The minutes of the General Meeting, including the voting results and the appendices of the minutes that are part of the resolutions made by the meeting, are posted on

## Glaston Corporation Governance Model 1 April-31 December 2019 \*)



\*) A new group structure was came into effect on 1 January 2020.

the Company's website within two (2) weeks of the meeting.

The President & CEO, the Chairman of the Board and the Members of the Board shall attend the General Meeting of Shareholders. In addition, the Auditor shall be present at the Annual General Meeting.

### **Extraordinary General Meeting**

An Extraordinary General Meeting of Shareholders is convened when the Board of Directors considers there is good cause to do so, or if the Auditor or shareholders who control one tenth of all the shares so demand in writing for the consideration of a certain issue.

### **Shareholders' Rights**

In accordance with the Finnish Companies Act, a shareholder shall have the right to have a matter falling within the competence of the General Meeting dealt with by the General Meeting, if the shareholder so requests in writing from the Board of Directors well in advance of the meeting, so that the matter can be mentioned in the notice to attend. Glaston shall publish on its website, at the latest by the end of the financial year preceding the Annual General Meeting, the date by which a shareholder must notify the Board of Directors of his/her request. In 2019, the said date was 6 February 2019. At a General Meeting, shareholders shall have the right to make proposals and ask questions on the matters on the agenda of the meeting.

A shareholder shall have the right to participate in a General Meeting if the shareholder is registered in the Company's register of shareholders eight (8) days before the General Meeting. Owners of nominee-registered shares may be temporarily registered in the Company's list of shareholders for participation in a General Meeting. A shareholder may attend a General Meeting personally or through an authorized representative. A shareholder may also have an assistant at a General Meeting.

### **General Meetings in 2019**

An Extraordinary General Meeting of Glaston Corporation was held on 26 February 2019 and the Annual General Meeting on 4 April 2019.

### **Extraordinary General Meeting**

Glaston's Extraordinary General Meeting was attended by 41 shareholders, representing a total of 65% of the Company's voting rights.

The Extraordinary General Meeting also resolved to merge the shares (reverse split) such that each five (5) shares in the Company be merged into one (1) share and to redeem the shares related to this, as proposed by the Board of Directors. Following the reverse split, the number of Glaston shares was 38,726,627. Trading with the merged shares commenced on 1 March 2019.

To finance the acquisition of Bystronic glass, the Extraordinary General Meeting resolved, as proposed by the Board of Directors, to authorize the Board of Directors

to resolve on the issuance of shares for the implementation of a directed share issue and rights issue.

The shares issued in the directed share issue were directed to anchor shareholders in accordance with their respective subscription undertakings and the total number of shares could not exceed 7,600,000 shares.

Based on the authorization, a total of 7,407,405 new shares were issued on 1 April 2019 to AC Invest Eight B.V., Hymy Lahtinen Oy, Ilmarinen Mutual Pension Insurance Company and Varma Mutual Pension Insurance Company in derogation from the shareholders' pre-emptive subscription right. The subscription price was approximately EUR 2.025 per share and was based on the volume-weighted average closing price of the Glaston share on Nasdaq Helsinki Ltd in the five trading days immediately preceding the announcement of the acquisition on 25 January 2019, adjusted with the reverse share split registered on 1 March 2019.

The Extraordinary General Meeting authorized the Board of Directors, conditional upon the completion of the acquisition, to resolve on the issuance of new shares or treasury shares held by the company pursuant to the shareholders' pre-emptive subscription right in such a manner that the shareholders have a primary right to subscribe for new shares pro rata to their existing holding in the company. As a result of the offering implemented from 5 June to 19 June 2019, the total number of shares in the Company increased by 38,313,595 from

45,976,316 to 84,289,911. Glaston received proceeds amounting to approximately EUR 34 million from the offering, before taking into account any transaction costs related to the offering, which were used to finance part of the acquisition of Bystronic glass.

All documents relating to the Extraordinary General Meeting are available on the Company's website at the address [www.glaston.net](http://www.glaston.net)

### **Annual General Meeting**

Glaston's Annual General Meeting was attended by 43 shareholders, representing a total of 66% of the Company's voting rights. The Annual General Meeting adopted the financial statements and discharged the President & CEO and the Members of the Board of Directors from liability for financial year 2018. In accordance with the proposal of the Board of Directors, the Annual General Meeting resolved that a return of capital of EUR 0.03 per share be paid for the financial year 2018. The return of capital was paid on 25 April 2019.

In accordance with the proposal of the Shareholders' Nomination Board, the Annual General Meeting resolved that the annual remuneration of the Members of the Board of Directors be increased, and therefore that the Chairman of the Board of Directors be paid an annual fee of EUR 60,000, the Deputy Chairman EUR 40,000 and the other Members of the Board EUR 30,000. In addition, in accordance with the proposal of the Shareholders' Nomination Board, the Annual

General Meeting resolved that the Members of the Audit and Remuneration Committees to be established be paid a meeting fee of EUR 500 for each meeting that the members have attended. In addition to the meeting fee, the Chairman of the Audit Committee will be paid an annual fee of EUR 10,000 and the Chairman of the Remuneration Committee will be paid an annual fee of EUR 7,500.

The Annual General Meeting authorized the Board of Directors to decide on the issuance of shares as well as the issuance of options and other rights granting entitlement to shares. The authorization covers a maximum of 20,000,000 shares. The authorization is valid until 30 June 2020.

In accordance with the proposal of the Board of Directors, the Annual General Meeting resolved that the share premium account, as stated on the parent company's balance sheet on 31 December 2018, that belongs to restricted equity, will be reduced by transferring all funds in the account, EUR 25,269,825, to the company's reserve for invested unrestricted equity.

All documents relating to the Annual General Meeting are available on the Company's website at the address [www.glaston.net](http://www.glaston.net).

## Board of Directors

The Board of Directors is responsible for the appropriate arrangement of the Company's administration and operations. The Board of Directors consists of minimum of five (5) and a maximum of nine (9) members elected by a General Meeting of Shareholders. The

term of office of Members of the Board of Directors expires at the end of the next Annual General Meeting that follows their election. According to the Articles of Association, a person who has reached 67 years of age cannot be elected a Member of the Board of Directors.

Under Recommendation 10 of the Finnish Corporate Governance Code, a majority of Members of the Board shall be independent of the Company, and at least two (2) Members who are independent of the Company shall also be independent of the Company's significant shareholders. The Nomination Board prepares proposals on the nomination and remuneration of Members of the Board of Directors to be dealt with by a General Meeting of Shareholders. In the selection of members, attention shall be paid to the diversity of the Board of Directors, which means, among other things, that the members' experience and competence in the Company's field of business and development stage are mutually complementary. In addition, education, age and gender shall be taken into account. Both genders must be represented on Glaston's Board of Directors.

The notice to attend an Annual General Meeting shall include a proposal on the composition of the Board of Directors. The personal information of the candidates shall be published on Glaston's website in connection with the notice to attend an Annual General Meeting.

The Board of Directors shall elect from among its members a Chairman and a

Deputy Chairman to serve for one year at a time. The Board of Directors has a quorum if more than half of its members are present at the meeting.

The Board of Directors' tasks and responsibilities are determined primarily by the Company's Articles of Association, the Finnish Companies Act and other legislation and regulations. It is the responsibility of the Board of Directors to further the interests of the Company and all of its shareholders.

The main duties and operating principles of the Board of Directors are defined in the board charter approved by the Board. It is the Board's duty to prepare the matters to be dealt with by a General Meeting and to ensure that the decisions made by a General Meeting are appropriately implemented. It is also the Board's task to ensure the appropriate arrangement of the control of the Company's accounts and finances. In addition, the Board directs and supervises the Company's executive management, appoints and dismisses the President & CEO and decides on the President & CEO's employment and other benefits. In addition, the Chairman of the Board approves the salary and other benefits of the Executive Management Group. The Board approves the Executive Management Group's charter.

The Board of Directors also decides on far-reaching and fundamentally important issues affecting the Group. Such issues are the Group's strategy, approving the Group's action plans and monitoring their implementation, monitoring the Group's financial

development, acquisitions and the Group's operating structure, significant capital expenditures, internal control systems and risk management, key organizational issues and incentive schemes.

The Board of Directors is also responsible for monitoring the reporting process of the financial statements, the financial reporting process and the efficiency of the Company's internal control, internal auditing, if applicable, and risk management systems pertaining to the financial reporting process, monitoring the statutory audit of the financial statements and consolidated financial statements, evaluating the independence of the statutory auditor or audit firm, particularly with respect to the provision of services unrelated to the audit, and preparing a proposal for resolution on the election of the auditor. The Board of Directors also regularly evaluates its own actions and working practices.

Meetings of the Board of Directors are held as a rule in the Company's head office in Helsinki. The Board of Directors also endeavors each year to visit the Group's other operating locations and hold meetings there. The Board of Directors may also, if necessary, hold telephone conferences. The Board of Directors meets according to a timetable agreed in advance, generally 7–10 times per year and additionally, if necessary. The Company's President & CEO and Chief Financial Officer generally attend the meetings of the Board. The Company's General Counsel acts as Secretary to the Board. If necessary, such

as in connection with the handling of strategy or the annual plan, other Members of the Executive Management Group may also attend meetings of the Board. The Auditor attends at least two meetings per year.

### **Board of Directors in 2019**

At the Annual General Meeting, held on 4 April 2019, the Members of the Board of Directors Teuvo Salminen, Kai Mäenpää, Sarlotta Narjus, Antti Kaunonen, Sebastian Bondestam and Tero Telaranta were re-elected for a term of office ending at the closing of the next Annual General Meeting.

The Board membership of Anu Hämäläinen ended on 4 April 2019. She served on Glaston's Board of Directors from 27 March 2012 to 4 April 2019.

Teuvo Salminen has served as Chairman of the Board, and Sebastian Bondestam as Deputy Chairman, since 10 April 2018.

In 2019, the Board evaluated its performance through a self-evaluation questionnaire. The evaluation process consisted of a numerical evaluation of different areas of Board work. The results of the evaluation were discussed and analyzed by the Board and improvement proposals were agreed based on these discussions.

In 2019, among the most important

issues dealt with by the Board of Directors were those related to the acquisition of the company Bystronic glass, for example the financing of the transaction and integration. Following the acquisition, the company announced in May its revised strategy and updated financial targets for 2018–2021. In addition, the foundations for the Company's growth were further strengthened and growth opportunities were reviewed for, among other things, potential industry cooperation projects and emerging technologies. Projects related to the digitalization of operations continued to be an area of focus. The Board also monitored the Company's development in improving operational activities and profitability.

### **Independence of Members of the Board**

According to an independence assessment performed by the Company's Board of Directors, all of the Members of the Board are independent of the Company. Member of the Board Tero Telaranta is dependent on a significant shareholder of the Company, AC Invest Eight B.V., whose ownership was 26.39% at 31 December 2019.

The Members of the Board have no conflicts of interest between the duties they have in the Company and their private interests.

# Information on Members of the Board of Directors

Member of the Board	Member since	Independence	Year of birth	Share ownership on 31 December 2019	Education	Main occupation
Teuvo Salminen	Member since 2010, Chairman since 2018	Independent of the company and significant shareholders	1954	206,165	M.Sc.(Econ.), APA	Professional Board Member
Sebastian Bondestam	2018, Deputy Chairman since 2018	Independent of the company and significant shareholders	1962	21,344	M.Sc.(Eng.)	Uponor Infra Oy, President; Uponor Corporation, Deputy to the CEO
Antti Kaunonen	2018	Independent of the company and significant shareholders	1959	3,665	D.Sc.(Tech), MBA	Cargotec Corporation, President of Kalmar Business Area
Kai Mäenpää	2017	Independent of the company and of significant shareholders	1960	15,000	M.Sc.(Eng.)	Valmet Technologies Oy, Vice President, Energy Sales and Services Operations, EMEA
Sarlotta Narjus	2016	Independent of the company and of significant shareholders	1966	no shares	M.Sc. Architecture SAFA	SARC Architects Ltd, CEO
Tero Telaaranta	2017	Independent of the company, dependent on a significant shareholder.	1971	376	M.Sc.(Eng.), M.Sc.(Econ.)	Ahlström Capital, Director, Industrial Investments
Anu Härmäläinen *)	2012	Independent of the company and of significant shareholders	1965	52,407	M.Sc.(Econ.)	Wärtsilä Corporation, Vice President, Group Control

More detailed information about the members of the Board of Directors is available on Glaston's website [www.glaston.net/Governance](http://www.glaston.net/Governance).

\*) Until 4 April 2019

## Attendance of Members of the Board at meetings 2019

	Meetings of the Board	Compensation Committee meetings	Audit Committee meetings	Attendance, %
Teuvo Salminen, Chairman	16		6	100
Sebastian Bondestam, Deputy Chairman	16	4		100
Anu Hämäläinen*)	7			100
Antti Kaunonen	16	4		100
Kai Mäenpää	16			100
Sarlotta Narjus	16	4		100
Tero Telaranta	16		6	100

\*) member until 4 April

## Attendance of Members of the Board at meetings of the Board 2019

In 2019 Glaston's Board of Directors held 16 meetings. The attendance of Members of the Board at the meetings was 100%.

## Committees of the Board of Directors

Glaston's Board of Directors has two committees: an Audit Committee and a Compensation Committee. The Board of Directors appoints the members and chairman of the committees, taking into account the expertise and experience required for the duties of the committees. The members of the committees are appointed for the term of office of the Board of Directors. The committees are preparatory bodies of the Board of Directors and do not have their own decision-making power.

## Audit Committee

The Audit Committee assists the Board of Directors by preparing matters within the competence of the Board of Directors. The Committee reports to the Board of Directors on matters discussed and measures taken at least four times a year and makes proposals to the Board for decision-making, as necessary.

The Board of Directors specifies the duties of the Audit Committee in a charter confirmed by the Board of Directors. The Audit Committee monitors the financial reporting process, oversees the financial reporting process and monitors the effectiveness of internal control, internal audit and risk management systems. In addition, the Committee reviews the description of the main features of the internal control and risk management systems associated with

the financial reporting process, monitors the statutory audit of the financial statements and the consolidated financial statements, evaluates the independence of the statutory audit firm and prepares a proposal for the election and remuneration of the auditor. Other duties include evaluating compliance with laws, regulations and corporate practices, overseeing significant litigation concerning Group companies, and performing any other duties assigned to the Committee by the Board of Directors.

The Audit Committee regularly carries out self-evaluation of its work, and the Chairman of the Committee reports the results to the Board of Directors.

## Audit Committee in 2019

Teuvo Salminen served as Chairman, and Tero Telaranta as a member, of the Audit Committee. The members of the Audit Committee are independent of the Company. Tero Telaranta is dependent on a significant shareholder of the Company. The Audit Committee convened six (6) times in the period 4 April–31 December 2019. The average attendance rate of members was 100%.

## Compensation Committee

The Compensation Committee assists the Board of Directors by preparing matters within the competence of the Board of Directors. The Committee is not autonomous in decision-making; the Board of Directors makes decisions collectively within

its competence. The Board of Directors is responsible for the duties it assigns to the Committee.

The Board of Directors specifies the duties of the Compensation Committee in a charter confirmed by the Board of Directors. Key duties of the Compensation Committee include preparing the remuneration and other benefits of Glaston's President & CEO and other members of the Executive Management Group, preparing the appointment of the President & CEO and other members of the Executive Management Group and their successors, and preparing proposals for Glaston's short- and long-term incentive schemes. In addition, the Committee's duties include carrying out all other duties assigned to the Committee by the Board of Directors.

The Compensation Committee convenes at the invitation of the Chairman, as necessary and at least twice a year. The Members of the Board of Directors and the President & CEO have the right to attend the meetings of the Committee.

The Compensation Committee regularly carries out self-evaluation of its work, and the Chairman of the Committee reports the results to the Board of Directors.

## Compensation Committee in 2019

Sebastian Bondestam served as Chairman, and Sarlotta Narjus and Antti Kaunonen as members, of the Compensation Committee.

The Compensation Committee convened

four (4) times in the period 4 April–31 December 2019. The average attendance rate of members was 100%.

### **Shareholders' Nomination Board**

The Nomination Board's task is to prepare and present annually for the Annual General Meeting and, if necessary, for an Extraordinary General Meeting, a proposal concerning the number of Members of the Board of Directors, a proposal on the identities of the Members of the Board, and a proposal on the remuneration of the Members of the Board. An additional task of the Nomination Board is to seek candidates as potential Members of the Board of Directors.

In its activities, the Nomination Board complies with current legislation, stock exchange rules applicable to the Company, and the Finnish Corporate Governance Code.

The Nomination Board consists of four (4) members, all of whom are appointed by the Company's four largest shareholders, who appoint one member each. The Chairman of the Company's Board of Directors serves as an advisory member of the Nomination Board.

The Company's largest shareholders entitled to appoint members to the Nomination Board is determined annually on the basis of the registered holdings in the company's shareholder register held by Euroclear Finland Ltd on the first working day in September of the year in question. The Nomination Board elects a Chairman from among its members.

The Nomination Board is established to serve until a General Meeting of Shareholders decides otherwise. The members of the Nomination Board are appointed annually and the term of office of the members expires when new members are appointed to the Board.

The members of the Nomination Board shall be independent of the company, and no person belonging to the Company's executive management shall be a member of the Nomination Board.

The Nomination Board shall submit its proposals to the Company's Board of Directors annually by the end of the January preceding the Annual General Meeting. Proposals for an Extraordinary General Meeting shall be submitted to the Company's Board of Directors so that they can be included in the notice to attend the meeting.

A decision of the Nomination Board shall be the opinion of a majority of the members of Nomination Board. If the votes are tied, then the Chairman's vote shall be decisive. If the votes are tied in the election of the Chairman, the member candidate for Chairman nominated by the shareholder who had the largest number of shares when the Nomination Board was established shall be elected as Chairman.

A report on the activities of the Nomination Board shall be presented at the Annual General Meeting and published on the Company's website.

### **Shareholders' Nomination Board 2019**

Until 31 August 2019, the Shareholders' Nomination Board comprised Lasse Heinonen (Chairman), as the representative nominated by AC Invest Eight B.V., Jaakko Kurikka, as the representative nominated by Hymy Lahtinen Oy, Sami Jormalainen, as the representative nominated by OP-Finland Small Firms Fund, and Esko Torsti, as the representative nominated by Imarinen Mutual Pension Insurance Company.

Based on ownership on 2 September 2019, the Shareholders' Nomination Board comprised Lasse Heinonen (Chairman), as the representative nominated by AC Invest Eight B.V., Jaakko Kurikka, as the representative nominated by Hymy Lahtinen Oy, Pekka Pajamo, as the representative nominated by Varma Mutual Pension Insurance Company, and Esko Torsti, as the representative nominated by Imarinen Mutual Pension Insurance Company. Teuvo Salminen, Chairman of the Glaston Corporation's Board of Directors, served as an advisory member of the Nomination Board.

In its organizing meeting held on 10 September 2019, the Nomination Board elected Lasse Heinonen from among its members to be Chairman. The Board met three (3) times during 2019 and the average attendance of members was 100%. No fees were paid to the members of the Nomination Board. In accordance with its charter, the Nomination Board focused in its activities on preparing a proposal on the composition of the Board of Directors and on remuneration issues

pertaining to the Members of the Board of Directors.

### **President & CEO**

The President & CEO handles the operational management of the Company in accordance with instructions issued by the Board of Directors. He is responsible to the Board of Directors for fulfilling the targets, plans and goals that the Board sets. The President & CEO is responsible for ensuring that the Company's accounting is in compliance with the law and that financial management has been arranged in a reliable manner. The President & CEO is supported by the Executive Management Group.

Arto Metsänen has served as President & CEO since 1 September 2009.

### **Deputy to the CEO**

Sasu Koivumäki, COO and Head of Integration, has served as Deputy to the CEO since 1 January 2015. The Deputy to the CEO carries out the duties of the CEO after the termination of his/her service or when he/she is temporarily prevented from performing his/her duties.

### **Executive Management Group**

The Chairman of the Company's Board of Directors appoints, on the proposal of the President & CEO, the Members of the Executive Management Group and confirms their remuneration and other contractual terms. The Company's President & CEO acts as the Chairman of the Executive Management

Group. The Executive Management Group handles the Group's and business areas' strategy issues, capital expenditure, financial development, product policy, Group structure and control systems, and supervises the Company's operations.

The Members of the Executive Management Group report to the President & CEO and assist him in implementing the Company's strategy, operational planning and management, and in reporting the development of business operations. The Executive Management Group meets under the direction of the President & CEO.

Until 31 March 2019, the Company's Executive Management Group comprised Arto Metsänen (President & CEO), Päivi Lindqvist (Chief Financial Officer), Sasu Koivumäki

(SVP Machines), Artturi Mäki (SVP Services), Frank Zhang (SVP Asia), Pekka Hytti (SVP EMEA), Juha Liettyä (SVP Emerging Technologies) and Taina Tirkkonen (General Counsel & SVP Human Resources).

Following the completion of the Bystronic glass acquisition, the composition of the Executive Management Group changed, and as of 1 April 2019, the Executive Management Group consisted of the President & CEO Arto Metsänen, Chief Financial Officer Päivi Lindqvist, the COO & Head of Integration Sasu Koivumäki, the SVP Bystronic glass Dietmar walz, and the SVP Glaston Technologies Juha Liettyä.

The Executive Management Group convened eight (8) times in 2019.

# Composition of the Executive Management Group 31.12.2019

	Area of responsibility	Member since	Year of birth	Education	Share ownership on 31.12.2019
Arto Metsänen	President & CEO	Employed by the Company and Chairman of the Executive Management Group since 2009	1956	M.Sc.(Eng.)	490,000 shares
<b>Other Members of the Executive Management Group</b>					
Sasu Koivumäki	Chief Operating Officer, Head of Integration. Deputy to the President & CEO since 2015	Employed by the Company since 2002 and member of the Executive Management Group since 2012	1974	M.Sc.(Econ.)	89,979 shares
Päivi Lindqvist	Chief Financial Officer	Employed by the company and member of the Executive Management Group since 2016	1970	M.Sc.(Econ), MBA	38,680 shares
Juha Liettyä	SVP Glaston Technologies business	Member of the Executive Management Group since 2007 and employed by the company since 1986	1958	B.Sc.(Eng.)	91,665 shares
Dietmar Walz	SVP Bystronic glass business	Member of the Executive Management Group since 27 May 2019. Employed by Bystronic Lenhardt GmbH from 2014 and by Glaston since 1 April 2019	1960	M.Sc.(B.Admin)	No shares
<b>Until 31.3.2019</b>					
Taina Tirkkonen	General Counsel and SVP Human Resources	Member of the Executive Management Group since 2013 and employed by the company since 2011	1975	LL.M, M.Sc.(Admin), MBA	27,500 shares
Artturi Mäki	Senior Vice President, Services	Employed by the company and Member of the Executive Management Group since 2016	1969	M.Sc.(Eng.)	4,731 shares
Pekka Hytti	Senior Vice President, EMEA	Member of the Executive Management Group since 2015 and employed by the company since 2010	1955	M.Sc.(Eng.)	36,665 shares
Frank Zhang	Senior Vice President, Asia	Member of the Executive Management Group since 2010 and employed by the company since 2008	1968	B.Sc. (Power Machinery Engineering)	No shares

Burghard Schneider, (b. 1966, Ph.D. (Mech. Eng.)) was a member of Glaston's Executive Management Group from 1 April 2019 to 27 May 2019. Schneider was employed by Bystronic Lenhardt GmbH from 2014 to 27 May 2014.

As of 1 April 2019, the Steering Management Group comprised, in addition to the above-mentioned members of the Executive Management Group, Artturi Mäki (Services), Robert Prange (Automotive), Miika Äppelqvist (Emerging Technologies), Pekka Hytti (SVP Sales, EMEA), Scott Knisely (SVP Sales, Americas), Frank Zhang (SVP Sales, APAC), Taina Tirkkonen (General Counsel and SVP, Human Resources), Jens Mayr (VP Business Control) and Joséphine Mickwitz (VP Investor Relations, Communications and Marketing). The Steering Management Group met once in 2019.

### **Main Features of Internal Control and Risk Management Pertaining to the Financial Reporting Process**

Internal control is an essential part of the Company's administration and management. Its aim is to ensure that the Group's operations are efficient, productive and reliable and that legislation and other regulations are complied with. The Group has specified for the main areas of its operations Group-wide principles that form the basis for internal control.

The Group's internal control systems serve to provide reasonable assurance that the financial reports published by the Group

give reasonably correct information about the Group's financial position. The Board of Directors and the President & CEO are responsible for arranging internal control. A report covering the Group's financial situation is supplied monthly to each Member of the Board of Directors. The Group's internal control is decentralized to different Group functions, which supervise compliance with instructions approved by the Board of Directors within their areas of responsibility. The Group's financial management and operational control are supported and coordinated by the Group's financial management and controller network.

The Group's financial reporting process complies with the Group's operating guidelines and standards relating to financial reporting. The interpretation and application of financial reporting standards has been concentrated in the Group's Financial Management organization, which maintains operating guidelines and standards relating to financial reporting and is responsible for internal communication relating to them. The Group's Financial Management organization also supervises compliance with these guidelines and standards. The Company has no separate internal auditing organization. The Group's Financial Management organization regularly monitors the reporting of the Group's units and addresses deviations perceived in reporting and, if necessary, performs either its own separate internal auditing or commissions the internal auditing from external experts. Control of report-

ing and forecasting processes is based on the Group's reporting principles, which are determined and centrally maintained by the Group's Financial Management organization. The principles are applied consistently throughout the Group and a consistent Group reporting system is in place.

### **Risk Management**

Risk management is an essential part of Glaston's management and control system. The purpose of risk management is to ensure the identification, management and monitoring of risks relating to business targets and operations. Risk management principles and operating practices have been specified in a risk management policy approved by the Company's Board of Directors.

The principle guiding Glaston's risk management is the continuous, systematic and appropriate development and implementation of the risk management process, with the objective being the comprehensive recognition and appropriate management of risks. Glaston's risk management focuses on the management of risks relating to business opportunities and of risks that threaten the achievement of Group objectives in a changing operating environment. From the perspective of risk management, the Company has divided risks into four different groups: strategic risks, operational risks, financial risks and hazard risks. Risks relating to property, business interruption as well as liability arising from the Group's operations have been covered by appropriate

insurances. Management of financial risks is the responsibility of the Group Treasury in the Group's parent company.

Glaston's risk management policy includes guidelines relating to the Group's risk management. Risk management policy also specifies the risk management processes and responsibilities. Glaston's risk management consists of the following stages: risk recognition, risk assessment, risk treatment, risk reporting and communication, control of risk management activities and processes, business continuity planning and crisis management. As part of the risk management process, the most significant risks and their possible impacts are reported to the Company's management and the Board of Directors regularly, based on which management and the Board can make decisions on the level of risk that the Company's business functions are possibly ready to accept in each situation or at a certain time.

It is the duty of Glaston's Board of Directors to supervise the implementation of risk management and to assess the adequacy and appropriateness of the risk management process and of risk management activities. In practice, risk management consists of appropriately specified tasks, operating practices and tools, which have been adapted to Glaston's business functions and Group-level management systems. Risk management is the responsibility of the SVP of each segment and Group-level function. Risk recognition is in practice the responsibility of every Glaston employee.

The Group Legal function is responsible for guidelines, support, control and monitoring of risk management measures. In addition, the function consolidates segment and Group-level risks. The Group Legal function reports on risk management issues to the President & CEO and the Executive Management Group and assesses in collaboration with them any changes in the probabilities of the impacts of identified risks and in the level of their management. The Group Legal function also reports the results of risk management processes to the Board of Directors.

Segment and Group-level risk management is included in the regularly repeated Group-wide risk management process. The process can also always be initiated when required if substantial strategic changes requiring the initiation of the risk management process take place in a certain segment.

The management group of each segment and function identifies and assesses its operational risks and specifies risk management measures by which an acceptable level of risk can be achieved.

With the aid of the risk management process, risks are systematically identified and assessed in each segment and at Group level. In addition, at each level measures are specified which, when implemented, will achieve an acceptable level of risk. Risks are consolidated at Group level. Action plans are prepared at each level of operations to ensure risks remain at an acceptable level.

The Group's risks are covered in more de-

tail in the Report of the Board of Directors on page 27. The management and organization of the Group's financial risks are presented in more detail in Note 3 of the consolidated financial statements on page 54.

### **Information and Communications**

An effective internal control system requires sufficient, timely and reliable information to enable management to assess the achievement of the company's goals. There is a need for both financial and other information on the Company's internal and external events and activities. Employees have the opportunity to report, through a whistleblowing service, any questionable activity they observe. All external communications are handled in accordance with the Group's communication policy.

### **Auditing**

The Company has one Auditor, which must be an auditing firm authorized by the Finnish Patent and Registration Office. The Annual General Meeting elects the Auditor to audit the accounts for the financial year, and the Auditor's duties cease at the close of the subsequent Annual General Meeting. It is the Auditor's duty to audit the consolidated and parent company financial statements and accounting as well as the parent company's governance, and to give reasonable assurance that the financial statements as a whole are free from material misstatement. The Company's Auditor presents the audit report required by law to the Company's

shareholders in connection with the annual financial statements and reports regularly to the Board of Directors. The Auditor, in addition to fulfilling general competency requirements, must also comply with certain legal independence requirements guaranteeing the execution of an independent and reliable audit.

### **Audit 2019**

At the 2019 Annual General Meeting, the accounting firm Ernst & Young Oy was elected as the Company's Auditor.

The auditor with principal responsibility was Kristina Sandin APA. Auditing units representing Ernst & Young have served as the auditors of the Company's subsidiaries in most operating countries. In 2019 the Group's auditing costs totaled approximately EUR 430,000, of which Ernst & Young received approximately EUR 394,000. Ernst & Young Oy's auditing expenses for the audit for financial year 2019 totaled approximately EUR 130,000. In addition, auditing units belonging to Ernst & Young have provided other advice to Group companies to a total value of EUR 152,000.

### **Principles for Related Party Transactions**

Glaston complies with legislation concerning related party transactions and, in accordance with legislation and the Corporate Governance Code, ensures that requirements related to monitoring, assessing, decision-making and disclosure of related party transactions are complied with. Glaston's

Board of Directors monitors and assesses the transactions of the Company and its related parties.

Glaston has defined the parties that are related to the Company, and Glaston's Communications Department maintains a list of individuals and legal persons who are considered to be related parties. Glaston maintains up-to-date guidelines on related party regulation and the monitoring thereof. Requirements regarding related party transactions have also been taken into account in Glaston's Code of Conduct.

Glaston may enter into transactions with its related parties as long as the transactions are part of Glaston's ordinary business operations and made on ordinary commercial terms and conditions. In such situations, Glaston's internal guidelines and decision-making processes are complied with. Related party transactions that deviate from Glaston's normal business operations or are not made on ordinary commercial terms are decided on by Glaston's Board of Directors, respecting provisions on disqualification.

Related party transactions are regularly monitored in Glaston's business and support units and through surveys conducted on related parties. Management personnel belonging to the Glaston's related parties are obliged to notify Glaston's Related Party Administration without undue delay about related party transactions or planned related party transactions that they become aware of. Potential conflicts of interest are monitored through internal audits. Results of the

monitoring of related party transactions are reported regularly to the Audit Committee of the Board of Directors.

Glaston reports on related party transactions regularly in its financial statements. Related party transactions which are material to shareholders and which deviate from normal business or are not made according to ordinary commercial terms and conditions are published in accordance with the Securities Market Act and the rules of Nasdaq Helsinki Ltd stock exchange.

### **Insider Administration**

In addition to the statutory insider regulations, Glaston complies with the insider guidelines of NASDAQ Helsinki Ltd as well as the internal guidelines adopted by Glaston at any given time.

In accordance with the EU's Market Abuse Regulation, Glaston prepares and maintains a list of persons discharging managerial responsibilities as well as persons and entities closely associated with them. In Glaston Corporation, the persons discharging managerial responsibilities are the Members of the Board of Directors, the President & CEO, the Deputy CEO, and the Chief Financial Officer. At least once a year, Glaston checks the information of persons discharging managerial responsibilities that have a duty to declare as well as persons and entities closely associated with them. Glaston re-

ports the securities transactions of persons discharging managerial responsibilities and their related parties in accordance with the Market Abuse Regulation.

Glaston does not maintain an insider list relating to permanent insiders. During the preparation of significant projects and events, the Company maintains project- and event-specific lists of insiders. Insiders are given a written statement of their inclusion in an insider register as well as guidelines on insider obligations.

The Company's persons discharging managerial responsibilities, persons serving in certain key positions and persons participating in the preparation of financial reports must not trade in the Company's financial instruments during the 30-day period before the publication of interim reports and financial statement releases. With respect to project-specific insiders, trading in the Company's financial instruments is prohibited until the cancellation or publication of the project.

The Company's insider administration, its implementation and supervision are the responsibility of Group Legal function and the Communications Department. Glaston's General Counsel is responsible for the Company's insider issues. The Company's Communications Department is responsible for maintaining the list of insiders and for overseeing the restriction on trading and duty to declare.

# The Board of Directors' Review 2019

Glaston Corporation's acquisition of Bystronic glass was completed on 1 April 2019. This review includes comparison data for Glaston Corporation historical numbers as well as for numbers for the combined company. To improve the comparability of the financial information the report includes separately marked unaudited, comparable financial information for the combined company to illustrate the impact of the acquisition would it have been already completed on 1 January 2018. Unless otherwise specified, the information in brackets refers to the same period of the previous year.

## Review Period in Brief

On 25 January 2019, Glaston signed an agreement to acquire Swiss-German Bystronic glass for an enterprise value of EUR 68 million. The globally operating company offers high-end machinery, systems and services for the processing of glass. The acquisition was completed on 1 April 2019.

The Extraordinary General Meeting held on 26 February 2019, resolved to merge each five shares in the company to one share (reverse split). Trading with the new total number of the Company's shares, 38,726,627, commenced on 1 March 2019.

At the end of March, in connection with the Bystronic acquisition, Glaston signed a

new long-term financing agreement, which was used for financing the acquisition, refinancing Glaston's existing loan facilities as well as general working capital and guarantee needs.

Based on the Authorization granted by the Extraordinary General Meeting, the Board of Directors' resolved to issue a total of 7,407,405 new shares in a share issue directed to the anchor investors at a subscription price of EUR 2.025. The proceeds from the Directed Share Issue, EUR 15 million, was used to finance part of the acquisition of Bystronic glass.

Upon completion of the acquisition the company refined its strategy and financial targets and renewed its company structure and Executive Management Group.

In June, Glaston launched a Rights offering, that was oversubscribed. Glaston received a gross amount of approximately EUR 34 million through the offering. With the proceeds the company paid back the acquisition's bridge financing at the beginning of July.

In June, Glaston organized the glass industry's leading conference, Glass Performance Days, in Tampere. GPD's ambition is to bring together glass industry experts from all around the world and the conference is a forum dedicated to the development of the global glass industry. The 2019 conference

was attended by more than one thousand experts. To boost innovation and create new business opportunities offered by digitalization, Glaston organized, already for the second time, the glass industry's start-up event Step Change. Step Change aims to promote the development of the industry and meetings between new innovators, potential partners, customers and investors. Approximately 40 start up companies attended the event.

During autumn 2019, the focus was on integrating Bystronic glass into Glaston by among other things combine operational activities, merge overlapping operations and renew the company structure.

## Operating Environment

Glaston Corporation is a glass industry technologies and services frontrunner. Glass processed with Glaston's processing machines is supplied to the architectural glass, automotive glass, solar energy and appliance industries. Most of the glass produced with the company's technology is supplied to the construction industry (measured by volume). Glaston operates in a global market, and the company's business is to a large extent linked to trends in global investment demand and therefore to demand for glass and glass processors' capacity utilization rates,

which in turn impact investment needs and demand for services and spare parts. At the same time, however, increasing environmental awareness and investments in improving energy performance support the growth of insulating and smart glass and other energy-efficient glass solutions, reducing the company's dependence on business cycles.

Glaston Group's market areas are EMEA (Europe, Middle East and Africa), the Americas (North, Central and South America) and Asia-Pacific (China and the rest of the Asia and Pacific area).

## Architectural glass

Glaston Group's architectural glass machines market consists of many different market areas and countries, whose stage of development and political situation may vary significantly. Moreover, demand for product solutions between the company's different business operations may vary from one period to another, due to differences in drivers of product demand.

The economic uncertainty in the EMEA area, and particularly in Europe, continued throughout the year and this was also reflected in the investment willingness of European glass processing customers. Market activity in the EMEA area for heat treatment machines continued to be subdued through-

out the year, although in some European countries such as Germany, Austria and France, the bottom appears to have already been reached and a pick-up in demand was evident in the fourth quarter. Energy efficiency and the need to improve the energy performance of buildings is supporting demand for insulating glass, while demand for machinery, related services and spare also continued to be good throughout the reporting period. Demand for heat treatment machine services was also good.

The overall market situation in North America has remained good, and the heat treatment machine, insulating glass machine and services markets were buoyant all year. In the USA, stricter building regulations and higher quality requirements for glass supported demand throughout the year. Central and South American markets remained volatile due to political unrest in a number of countries.

Political and economic uncertainty negatively impacted on Asia-Pacific customers' willingness to invest during the end of 2019. The trade disputes between the USA and China affected demand, for example in Australia and New Zealand. In China, competition continued to be intense in the heat treatment machines market in 2019, but demand for mid-range segment insulating glass machines was good.

### Automotive glass

The market downturn that began in mid-2018, trade policy tensions between the USA and China, and anticipation of new emission regulations that will come into force in 2020 are negatively impacting automotive glass market activity, particularly in China. At the same time, however, automotive glass requirements are increasing and presenting new challenges for glass processing, bringing new players to the market and creating new opportunities for glass processing technology suppliers.

## Financial Development of the Group

Orders received and order book, EUR million	1-12/19	1-12/18
Orders received	162.2	107.6
Orders received, excluding divested Tools business*	162.2	103.6
Order book at end of period	79.5	38.2

\* In December 2018, Glaston sold its Tools business in Italy and the USA.

Glaston Group's order book stood at EUR 79.5 (38.2) million at the end of the review period.

### Orders received and order book by product area (pro forma)

Orders received by product area, EUR million	1-12/19	1-12/18
Heat Treatment Technologies	48.3	73.6
Bystronic glass Technologies	57.9	70.1
Emerging Technologies	3.7	-
Services	68.3	64.2
Other	6.3	8.8
<b>Total</b>	<b>184.6</b>	<b>216.7</b>

Order book by product area, EUR million	31.12.2019	31.12.2018
Heat Treatment Technologies	31.2	35.2
Bystronic glass Technologies	41.8	57.0
Emerging Technologies	1.8	5.1
Services	3.9	2.6
Other	0.7	0.1
<b>Total</b>	<b>79.5</b>	<b>99.9</b>

Orders received in January–December 2019 totaled EUR 184.6 (216.7 pro forma) million. Of the orders, 26% were received for the Heat Treatment Technologies product area, 31% for the Bystronic glass Technologies product area and 37% for the Services product area, 2% for the Emerging Technologies product area and 3% for the Other product area.

## Net sales

Net sales, EUR million	1-12/19	1-12/18
Glaston	88.6	101.1
Bystronic glass	92.4	-
<b>Glaston Group</b>	<b>181.0</b>	<b>101.1</b>

Net sales in January–December totaled EUR 181.0 (101.1) million. Geographically, of the company's net sales, the EMEA area accounted for 42%, the Americas for 37%, and Asia and Pacific (APAC) for around 21%.

## Net sales by product area

Pro forma Net sales by product area, EUR million	1-12/19	1-12/18
Heat Treatment Technologies	56.0	64.9
Bystronic glass Technologies	72.0	62.2
Emerging Technologies	6.0	0.7
Services	66.6	63.8
Other	3.9	10.2
<b>Total</b>	<b>204.6</b>	<b>201.8</b>

January–December pro forma net sales grew by 1% to EUR 204.6 (201.8 pro forma) million. Services business accounted for 33 (32)% of Glaston Group's net sales.

## Operating result and profitability

Comparable EBITA, EUR million	1-12/19	1-12/18
Operating result (EBIT)	-1.3	3.8
Items affecting comparability	7.2	1.8
Comparable operating result (EBIT)	5.9	5.7
Depreciation of intangible assets and PPA	3.8	1.9
Comparable EBITA	9.7	7.6

In January–December 2019, the comparable operating result was EUR 5.9 (5.7) million, i.e. 3.3 (5.6)% of net sales. The Group's operating result was EUR -1.3 (3.8) million. Items affecting comparability totaled EUR -7.2 (-1.8) million in January–December, of which EUR -4.3 million was integration expenses, EUR -1.9 million transaction costs affecting the result, EUR -1.0 million other expenses affecting comparability, for example related to legal proceedings. Financial income and expenses amounted to EUR -2.6 (-0.7) million, of which EUR -0.9 million was non-recurring expenses for financial arrangements

related to the acquisition. The result before taxes was EUR -4.4 (2.6) million. The result for the review period was EUR -6.4 (1.9) million. Income statement taxes were high, despite the loss-making result, mainly due to the fact that no deferred tax assets have been recognized for company-specific losses for the reporting period.

January–December earnings per share were EUR -0.089 (0.041) and comparable earnings per share EUR 0.011 (0.076), excluding items affecting comparability of the operating result, but including financing arrangement expenses.

## Operating result and profitability

Pro forma Comparable EBITA, EUR million	1-12/19	1-12/18
Operating result (EBIT)	0.3	4.4
Items affecting comparability	7.2	2.3
Comparable operating result (EBIT)	7.5	6.7
Depreciation of intangible assets and PPA	4.5	4.8
Comparable EBITA	12.1	11.5

In January–December 2019, Glaston Group's comparable pro forma operating result was EUR 7.5 (6.7) million, i.e. 3.6 (3.3)% of net sales. The Glaston segment's comparable operating result was EUR 0.0 (5.7) million and the Bystronic glass segment's comparable operating result was EUR 7.4 (1.1) million. In January–December, the Group's pro forma operating profit was EUR 0.3 (4.4) million. Financial income and expenses were EUR -2.7 (-2.7) million. The result before taxes was EUR -3.0 (1.1) million. The result for the review period was EUR -5.6 (0.9) million. The comparable earnings per share for January–December were EUR 0.021 (0.064).

## Financial Development of the Reporting Segments

### Glaston reporting segment

Glaston's business includes a wide and technologically advanced range of heat treatment machines, maintenance, upgrade and modernization services, and spare parts for glass flat tempering, bending, bending tempering and laminating. Glaston also offers digital services, such as glass processing machine remote monitoring and fault analysis services, and consulting and engineering services for new areas of glass technology. The Glaston segment includes the Heat Treatment Technologies product area and related heat treatment machine services as well as the Glaston Emerging Technologies and Other product areas.

### Glaston segment's year 2019 in brief:

- During 2019, demand for heat treatment machines in the EMEA area was weak. Market uncertainty in these markets continued throughout the year and delayed decision-making. In North America, the market continued on a good level for sales of both equipment and services. In the APAC area, uncertainty adversely affected willingness to invest in machines, but demand for services was good.
- Order intake was clearly lower compared with the high level of the previous year. The industry's largest event, the Glasstec Fair, which is held every other year, took place in the comparison year.
- The decline in net sales was due, in particular, to the low number of heat treatment machine projects recognized as revenue as well as the divestment of tools and pre-processing operations in 2018 and in late-2019.
- At the beginning of October, adjustment measures were launched in the Glaston segment's units in Finland due to weaker demand for heat treatment machines.

### Key Figures Glaston, EUR million

	1-12/19	1-12/18
Orders received	85.7	107.6
Order book at end of period	37.6	38.2
Net sales	88.6	101.1
Net sales (comparison figure excludes divested Tools business)	88.6	97.0
Comparable EBITA	1.6	7.6
PPA depreciation	-	-
Comparable operating result (EBIT)	0.1	5.7
Operating result (EBIT)	-4.6	3.8
Net working capital	-12.0	-7.1
Employees at end of period	382	357

### Bystronic glass reporting segment

Bystronic glass provides services, machines, systems and software for cutting, grinding, drilling, processing and insulating flat glass globally for the architectural, automotive, appliance and display glass markets. The Bystronic glass segment consists of Bystronic glass's Machines business, Service and Spare Parts business, and Display business.

### Bystronic glass segment's year 2019 in brief:

- Good activity in the insulating glass machines market, while the challenges in automotive glass machines market remained.

### Key Figures Bystronic Glass, EUR million

	4-12/19
Orders received	76.4
Order book at end of period	41.8
Net sales	92.4
PPA	2.8
Comparable operating result (EBIT)	5.8
Operating result (EBIT)	3.4
Employees at end of period	408

## Financial position, cash flow and financing

At the end of December, Glaston Group's balance sheet total was EUR 216.7 (98.9) million. Intangible assets amounted to EUR 78.1 million, of which EUR 58.3 (30.6) million was goodwill. At the end of the period, property, plant and equipment amounted to EUR 25.0 (7.7) million and inventories to EUR 42.6 (5.8) million.

The comparable return on capital employed (ROCE) was 8.7 (9.6)%. The decline from the comparison period of the previous year is due to lower 12-month annualized earnings as well as the Bystronic glass acquisition and related financing, which increases the company's equity and debt. Glaston Group's target is to achieve a comparable return on capital employed of 14% by the end of the strategy period, i.e. the end of 2021. Return on equity was -11.6 (5.3)%. The company's equity ratio was 41.6% (44.4%).

Glaston's cash flow from operating activities was EUR 10.8 (0.0) million in January–December. Cash flow from investing activities was EUR -72.5 (-1.5) million and cash flow from financing activities was EUR 75.1 (-3.0) million. The exceptionally high levels are explained by the Bystronic glass acquisition and its financing.

At the end of March, in connection with the Bystronic acquisition, Glaston signed a new long-term financing agreement, which was used for financing the acquisition, refinancing Glaston's existing loan facilities as well as general working capital and

guarantee needs. The package consists of borrowings by Glaston under senior secured credit facilities in an aggregate amount of EUR 75 million, comprising a term loan amounting to EUR 40 million and a revolving credit facility amounting to EUR 35 million, each with 3-year maturity from the closing of the acquisition. The financial covenants used in the financing agreement are gearing (net debt/equity) and leverage (net debt/EBITDA).

In addition to the long-term financing agreement, Glaston raised EUR 32 million in bridge financing for equity financing to be raised through a rights offering. In June, Glaston arranged a rights offering, which was fully subscribed. In the offering, the company received a gross amount of approximately EUR 34 million and paid back the bridge financing at the beginning of July.

At the end of the reporting period, the Group's cash and cash equivalents totaled EUR 19.9 (7.9) million. Interest-bearing net debt totaled EUR 33.0 (13.9) million and net gearing was 45.0 (38.2)%.

## Capital expenditure, depreciation and amortization

Glaston Group's January–December gross capital expenditure totaled EUR 63.1 million, of which EUR 56.7 million related to the acquisition of Bystronic glass and the remainder mainly to product development. Depreciation and amortization of property, plant and equipment, and of intangible assets totaled EUR 5.6 (3.0) million.

## Personnel

In 2019, the company's employee numbers more than doubled, due to the acquisition of Bystronic glass. Glaston Group had a total of 790 (357), employees on 31 December 2019.

In the review period, many personnel measures related to the integration of Bystronic glass. Cross-sales and technology training for sales and services personnel was arranged throughout the year. In addition, overlapping activities were discontinued and offices were merged, for example in China, Singapore, Russia and the UK. In the autumn, a new product development unit was established in Neuhausen, Germany, while efforts were also made to strengthen the Bystronic glass segment's product management and resourcing of modernization products.

In the spring, new values were created for the merged company: "Committed to our customers", "We share the passion for glass", "We learn from each other" and "Together we build the future". The values were introduced in connection with the rollout of the updated strategy, for example in the first joint senior management strategy workshop, held in May.

Capacities for common HR principles, policies and processes were created during autumn 2019.

In the fourth quarter, Glaston Corporation announced that it would initiate cooperation discussions concerning measures to adjust the Glaston segment's operations to lower-than-expected demand for heat treatment

machines. As a result of the discussions, the number of personnel in the company's Finnish units were reduced by a total of 12 people, of whom 8 were made redundant. In addition, operations in Finland will be adjusted to the decrease in the order book for heat treatment machines and the resulting production and financial situation. Temporary layoffs affecting all Finnish personnel will be implemented in two stages from December 2019, mainly utilizing a shorter working week, but so that deliveries in the order bank and customer work are not jeopardized. The amount of work purchased externally will also be minimized. As a result of the aforementioned measures, the company will achieve savings of approximately EUR 2 million, of which approximately EUR 1 million will be permanent annual savings. Most of the cost savings will be realized in 2020.

The Glaston segment had 382 employees at the end of 2019. The Bystronic glass segment had 408 employees and the company had operations in 11 countries. Glaston Group had production plants in five localities in four countries: assembly of tempering and laminating machines in Tampere, Finland, and in Tianjin, China; manufacturing of insulating glass machines in Neuhausen, Germany, and in Shanghai, China; and manufacturing of automotive pre-processing machines and display glass machines in Bützberg, Switzerland. Of the Group's personnel, 29%, i.e. 228 employees, worked in Germany and 22%, i.e. 177, worked in Finland, while 16% worked elsewhere in the EMEA area,

25% worked in Asia and 8% in the Americas. In January-December, the average number of employees was 689 (379).

## Strategic Development

### Strategy

Glaston reviewed its strategy and updated its financial targets for the strategy period 2018–2021 as a result of its acquisition of Bystronic glass.

The company will continue to seek growth in its core business and services through digitalization. Combining the strengths of Bystronic glass and Glaston as well as leveraging the expertise brought by Bystronic glass creates for the company unique opportunities to build a strong machinery and services offering as well as the ability to capture new growth opportunities. Implementing a joint operating model will support the companies in reaching the strategic goals and in realizing the full synergy potential of combining Glaston and Bystronic glass.

### Updated financial targets

In connection with the strategy update, the company also revised its financial targets. The updated targets for 2018–2021 are:

- Annual growth of net sales exceeding market growth\* (CAGR).
- Comparable operating margin before depreciation of intangible assets and excluding purchase price allocation (EBITA) above 8% at the end of the strategy period.

- Comparable return on capital employed (ROCE) of more than 14% at the end of the period.

\* Flat glass market growth over the cycle.

### Synergy benefits of Bystronic glass acquisition, cost savings and integration costs

The combination of Glaston and Bystronic glass is expected to result in significant benefits for stakeholders of the combined company. Significant added value for shareholders will be created through synergies in services sales and cross-selling new equipment as well as estimated annual cost synergies of approximately EUR 4 million by 2021. The cost synergies will come mainly from acquisition costs of goods sold, sales & marketing, and administration. The transaction also provides additional synergy potential related to product development, procurement, fixed cost leverage and best practice sharing. Costs and capital expenditure affecting comparability related to the achievement of synergies are estimated at approximately EUR 7 million over the same period. Most of the one-time costs are expected to occur during the first year of integration.

### Investments in Product Development, Digitalization and Innovation

Glaston Group's research and development activity significantly improves the company's competitiveness. The company invests

in continuous customer-driven product development, emerging glass technologies and new business opportunities brought by digitalization and aims to consistently bring to the market more advanced technology to meet customers' changing needs, in line with the company's strategy. The Group carries out product development in close cooperation with its customers and partners, such as research institutes, universities of technology and other higher education establishments.

In the review period, Glaston continued investing in product development and emerging glass technologies in line with the company's growth strategy. New digital and IoT-based products that facilitate the transition to fully automated glass processing continue to be at the forefront of product development.

By the end of the year, more than 150 tempering machines had been connected to the Insight services, and more than 2.5 million glass processing loads had been registered. In addition, the first laminating machines have been connected to the Insight ecosystem and the first insulating glass machine test connections have been made to the company's cloud service. During the period under review, several artificial intelligence applications to improve the quality and control of the tempering process were implemented within the scope of the Midas project, led by Dimecc.

Glaston has already for a longer period focused on improving the energy efficiency of

its heat treatment machines, and the energy consumption of the most relevant products in its heat treatment portfolio has significantly decreased. For instance the energy consumption in the heat treatment process of Low-e glass has decreased by approximately 30% over a 10 year period.

To boost innovation and create new business opportunities offered by digitalization, Glaston organized in summer 2019 the glass industry's start-up event Step Change in conjunction with the Glass Performance Days (GPD) conference. Step Change aims to promote the development of the industry and meetings between new innovators, potential partners, customers and investors. GPD is a forum dedicated to the development of the global glass industry.

At the 2019 GPD, Glaston launched the new, unique Siru application, which enhances the quality control of tempering processes with an AI-based glass fragment counter.

In the Glaston segment, many product development projects entered the production phase in 2019, and the company delivered, for example, the first FC VP and Edge Control products to its customers. The company also delivered a machine to China for the manufacture of fire resistant glass, and the first GlastonAir™ line for the production of thin solar panels was commissioned in China.

Product development investments in the Bystronic glass segment were strengthened during 2019, and investments on the insulating glass side focused on the development of

the new multi'arriesser sharp-edge arriissing machine intended for high quality grinding of straight glass edges. The machine utilizes technology that individually adapts to rectangular and shaped glass edges. Premium low-E glass can be treated entirely without touching the coated surface. The machine can be used as a stand-alone solution or integrated with an insulating glass line, while offering a wide range of applications for tempering, laminating or insulating glass processing. In the review period, development of the B-Compare software also continued. The software supports the customer in identifying and optimizing the correct production process.

Product development in 2019 of automotive glass pre-processing machines related to improving productivity of pre-processing machines and integrating equipment into the customer environment.

In January–December, research and product development expenditure, excluding depreciation, totaled EUR 8.2 (5.1) million, of which EUR 1.8 (1.0) million was capitalized. Research and product development expenditure amounted to 4.5 (3.8)% of net sales.

## Governance

### Shares and shareholders

Glaston Corporation's share is listed on the Nasdaq Helsinki Small Cap list. The trading code for the share is GLA1V and the ISIN code is FI4000369657. Each share entitles its holder to one vote and voting right. Glaston Corporation's share capital on 31 December 2019 was EUR 12.7 (12.7) million.

### Shares on Nasdaq Helsinki

	<b>No. of shares and votes</b>		<b>Share turnover, EUR million</b>	
<b>GLA1V</b>	84,289,911		10.9	
	Highest	Lowest	Closing	Average price <sup>*)</sup>
<b>Share price</b>	1.82	1.05	1.26	1.25
	<b>31.12.2019</b>		<b>31.12.2018</b>	
Market value	105.8		73.7	
Number of shareholders	7,112		5,876	
Foreign ownership, %	27.2		19.2	

<sup>\*)</sup> trading-weighted average

At the end of the review period, Glaston Corporation's largest shareholders were AC Invest Eight B.V. 26.4%, Hymy Lahtinen Oy 12.2%, Varma Mutual Pension Insurance Company 7.5%, Ilmarinen Mutual Pension Insurance Company 7.3% and OP-Finland Small Firms Mutual Fund 6.1%.

## 20 largest shareholders 31 December, 2019

	Number of shares	% of shares and votes
<b>Shareholder</b>		
1 Ac Invest Eight B.V.	22,245,716	26.4%
2 Hymy Lahtinen Oy	10,300,161	12.2%
3 Varma Mutual Pension Insurance Company	6,318,061	7.5%
4 Ilmarinen Mutual Pension Insurance Company	6,162,502	7.3%
5 OP-Finland Small Firms Fund	5,119,819	6.1%
6 Evli Finnish Small Cap Fund	2,977,263	3.5%
7 Hulkko Juha Olavi	1,825,000	2.2%
8 Päivikki and Sakari Sohlberg Foundation	1,454,055	1.7%
9 Kirkon Eläkerahasto	1,167,423	1.4%
10 Säästöpankki Pienyhtiöt	969,012	1.1%
11 Oy Investsum Ab	918,153	1.1%
12 Op-Suomi Mikroyhtiöt -Erikoissijoitusrahasto	591,417	0.7%
13 Sijoitusrahasto Taaleritehdas Mikro Markka	511,868	0.6%
14 Metsänen Arto Juhani	490,000	0.6%
15 Apteekkien Eläkekassa	440,000	0.5%
16 Lahtinen Jeppe Juhani Urponpoika	440,000	0.5%
17 Nelimarkka Heikki Antero	427,172	0.5%
18 Sumelius Birgitta Christina	388,946	0.5%
19 4capes Oy	340,000	0.4%
20 Von Christierson Charlie	320,000	0.4%
<b>20 largest shareholders total</b>	<b>63,406,568</b>	<b>75.2%</b>
Nominee registered shareholders	296,595	0.4%
Other shares	20,586,748	24.4%
<b>Total</b>	<b>84,289,911</b>	<b>100.0%</b>
Treasury shares	0	0.0%
<b>Total excluding treasury shares</b>	<b>84,289,911</b>	<b>100.0%</b>

## Ownership distribution 31 December, 2019

	Shares total	% of shares and votes
Households	19,916,159	23.6%
Public sector institutions	12,924,563	15.3%
Financial and insurance institutions	11,136,111	13.2%
Corporations	15,398,794	18.3%
Non-profit institutions	1,653,451	2.0%
Foreign countries	22,964,238	27.2%
<b>Total</b>	<b>83,993,316</b>	<b>99.7%</b>
Nominee registered	296,595	0.4%
<b>Total</b>	<b>84,289,911</b>	<b>100.0%</b>
<b>Total</b>	<b>84,289,911</b>	<b>100.0%</b>

## Shareholders by share ownership 31 December, 2019

	Number of shareholders	% of shareholders	Shares total	% of shares and votes
<b>Number of shares</b>				
1 - 100	1,498	21.06%	75,769	0.1%
101 - 1,000	3,278	46.09%	1,448,422	1.7%
1,001 - 10,000	1,993	28.02%	6,157,201	7.3%
10,001 - 100,000	296	4.16%	8,313,944	9.9%
100,001 - 99,999,999	47	0.66%	68,294,575	81.0%
<b>Total</b>	<b>7,112</b>	<b>100%</b>	<b>84,289,911</b>	<b>100.0%</b>
<b>Total number of shares</b>			<b>84,289,911</b>	<b>100.0%</b>

## Governance

### General Meetings of Shareholders

#### *Extraordinary General Meeting*

An Extraordinary General Meeting of Glaston Corporation was held in Helsinki on 26 February 2019. The Extraordinary General Meeting resolved, as proposed by the Board of Directors, to authorize the Board of Directors to resolve on the issuance of shares for the implementation of a directed share issue and rights offering. The Extraordinary General Meeting also resolved to combine the shares and to redeem the shares related to this, as proposed by the Board of Directors.

#### *Annual General Meeting*

The Annual General Meeting of Glaston Corporation was held in Helsinki on 4 April 2019. The Annual General Meeting adopted the financial statements and consolidated financial statements for the financial year 1 January – 31 December 2018 and discharged the Members of the Board of Directors and the President & CEO from liability for the financial year 1 January – 31 December 2018.

In accordance with the proposal of the Board of Directors, Annual General Meeting resolved that, based on the balance sheet adopted for financial year 2018, a return of capital totaling approximately EUR 1,157,067, i.e. EUR 0.03 per share, be distributed. The return of capital was paid from the reserve for invested unrestricted equity to shareholders who were registered in the company's

register of shareholders, maintained by Euroclear Finland Ltd, on the record date for payment, 8 April 2019. The return of capital was paid on 25 April 2019.

#### *Composition of the Board of Directors*

In accordance with the proposal of the Shareholders' Nomination Board, the number of the members of the Board of Directors was resolved to be six. The Annual General Meeting resolved, in accordance with the proposal of the Shareholders' Nomination Board, to re-elect the current members of the Board of Directors, Teuvo Salminen, Sebastian Bondestam, Antti Kaunonen, Sarlotta Narjus, Kai Mäenpää and Tero Telaranta for a term of office ending at the close of the next Annual General Meeting. More information on the members of the Board of Directors is available on Glaston Corporation's website at [www.glaston.net](http://www.glaston.net).

#### *Remuneration of the Board of Directors*

The Annual General Meeting resolved, in accordance with the proposal of the Shareholders' Nomination Board, that the annual fees of the members of the Board of Directors be increased so that the Chairman of the Board of Directors will be paid an annual fee of EUR 60,000, the Deputy Chairman an annual fee of EUR 40,000 and the other members of the Board of Directors an annual fee of EUR 30,000. In addition, in accordance with the proposal of the Shareholders' Nomination Board, the Annual General Meeting resolved that the Members of the Audit and Remuner-

ation Committees to be established be paid a meeting fee of EUR 500 for each meeting that the members have attended. In addition to the meeting fee, the Chairman of the Audit Committee will be paid an annual fee of EUR 10,000 and the Chairman of the Remuneration Committee will be paid an annual fee of EUR 7,500.

#### *Auditor*

In accordance with the proposal of the Board of Directors, the Annual General Meeting re-elected the authorized public accounting firm Ernst & Young Oy as the company's auditor, with Authorized Public Accountant Kristina Sandin as the main responsible auditor.

#### *Authorization to the Board of Directors*

In accordance with the proposal of the Board of Directors, the Annual General Meeting authorized the Board of Directors to decide on one or more issuances of shares, including the right to issue new shares or dispose of the shares in the possession of the company and to issue options or other rights entitling to shares pursuant to Chapter 10 of the Finnish Companies Act. The authorization consists of a total of up to 4,000,000 shares, representing approximately 10 per cent of the current total number of shares in the company. The authorization does not exclude the Board of Directors' right to decide on a directed share issue. The authorization may be used for material arrangements from the company's point of view, such as financing

or implementing business arrangements or investments or for other such purposes determined by the Board of Directors in which case a weighty financial reason for issuing shares, options or other rights and possibly directing a share issue would exist.

The Board of Directors is authorized to resolve on all other terms and conditions of the issuance of shares, options and other rights entitling to shares as referred to in Chapter 10 of the Companies Act, including the payment period, grounds for the determination of the subscription price and the subscription price or allocation of shares, options or other rights without payment or that the subscription price may be paid besides in cash also with other assets either partially or entirely (contribution in kind).

The authorization is effective until 30 June 2020 and it revokes earlier corresponding authorizations. In contrast, the authorization does not revoke the authorizations given by the Extraordinary General Meeting of the company on 26 February 2019 to the Board of Directors for share issues of 7,600,000 shares and 46,000,000 shares as set out in more detail in the resolution of the aforementioned General Meeting.

#### *Reduction of the share premium account*

In accordance with the proposal of the Board of Directors, the Annual General Meeting resolved that the share premium account, as stated on the parent company's balance sheet on 31 December 2018, that belongs to restricted equity, will be reduced by

transferring all funds in the account, EUR 25,269,825, to the company's reserve for invested unrestricted equity. A significant amount of funds has accumulated in the company's share premium account based on entries made until 2004 in accordance with the so-called old Limited Liability Companies Act (734/1978), and particularly due to a share issue related to the listing of the company in 1997, when the part of the subscription price of the new shares exceeding the nominal value of the share of that time was entered in the company's share premium account. The entry into force of the reduction of the share premium account is subject to the completion of the creditor protection procedure set out in Chapter 14 of the Limited Liability Companies Act.

#### **Composition of the Nomination Board**

Based on the ownership situation on 2 September 2019, the following were selected as members of Glaston's Nomination Board: Lasse Heinonen (AC Invest Eight B.V.), Jaakko Kurikka (Hymy Lahtinen Oy), Pekka Pajamo (Varma Mutual Pension Insurance Company) and Esko Torsti (Ilmarinen Mutual Pension Insurance Company). In its organiz-

ing meeting held on 10 September 2019, the Nomination Board elected Lasse Heinonen from among its members to be Chairman. Teuvo Salminen, Chairman of the Glaston Corporation's Board of Directors, serves as an advisory member of the Nomination Board.

#### **Flagging notifications**

9 April 2019: Glaston Corporation received a notification, pursuant to Chapter 9 Section 5 of the Finnish Securities Market Act, that AC Invest Eight B.V.'s holding of shares and votes in Glaston Corporation had exceeded 25%.

#### **Changes in the Executive Management Group**

In connection with the completion of the Bystronic glass acquisition, Glaston made the following changes to its Executive Management Group. As of 1 April 2019, the Executive Management Group consists of CEO Arto Metsänen, COO and integration lead Sasu Koivumäki, CFO Päivi Lindqvist, as of 27 May 2019 Dietmar Walz, who is responsible for the operations of Bystronic glass, and as of 1 May 2019 Juha Liettyä, who is responsible for operations of Glaston Technologies.

# Report on Non-Financial Information 2019

In autumn 2019, Glaston reviewed the key responsibility themes related to its business operations in collaboration with the company's main external stakeholders and its own personnel. The following report describes Glaston's responsibility via the Group's five key responsibility themes. Glaston's most important non-financial issues relate to employee skills development and a safe working environment, product quality and safety throughout the life cycle of products, responsible business operations and behavior, responsible procurement and the company's climate impacts.

Responsibility issues will be discussed in more detail in Glaston's annual report, which will be published in week 11.

#### **Responsibility in Glaston**

Glaston's purpose is to build a better tomorrow through safer, smarter, and more energy-efficient glass solutions. As environmental awareness increases, demand for more energy-efficient and environmentally sustainable glass solutions is growing. As a frontrunner in its industry, Glaston has taken this into account in product development and will continue to focus on this in the future.

Coated low-emissivity glass processed with Glaston's technology as well as

energy-efficient double- or triple-glazed insulating units meet the energy-saving needs of buildings. Greater attention is being paid to the safety of buildings, and for glazing solutions this means increasing use of tempered and laminated glass. Tempering and laminating processes are Glaston's core expertise, and in these the company offers the most advanced technology.

The debate on climate change is also strongly reflected in the glass industry. This has led to rapid development in smart glass, ultra-thin glass and glass used in solar energy solutions. As our industry's innovative technology leader, Glaston is strongly involved in this development, and is continually launching more advanced technology to meet the changing needs of the market.

#### **Glaston's business model**

Glaston provides glass processing machines and related services to the architectural glass, automotive glass, solar energy glass and appliance industries. In April, in line with its strategy, Glaston strengthened its position as a leading player in the glass processing market by acquiring the German-Swiss company Bystronic glass (Bystronic Maschinen AG and Bystronic Lenhardt GmbH and its subsidiaries). The acquisition expanded the company's offering from heat treatment

technologies and services to insulating glass in the architectural market and to pre-processing in the automotive and display industries. Glaston has sales and services offices as well as production in 11 countries around the world. At the end of 2019, the company had five production plants: in Tampere, Finland; in Neuhausen, Germany; in Bützberg, Switzerland; and in Shanghai and Tianjin, China.

At the end of 2019, Glaston had 790 employees.

### Value Creation

Glaston seeks to make a positive influence in the societies in which it operates. In addition to the value it creates for its customers, Glaston also creates values as an employer by providing jobs and therefore a livelihood for its employees. The company strengthens operating conditions for local companies by purchasing their goods and services. The company also offers summer work, thesis work and training positions, and works closely with various research institutes and universities. In addition, the company creates economic value as a taxpayer.

Glaston designs and builds its machines to withstand use at high utilization rates. Preventive maintenance and the company's extensive range of upgrade products extend the operating lives of machines. Product quality, producibility and energy efficiency are always being improved, as higher quality and more versatile characteristics are constantly demanded of glass processed with

Glaston's machines.

Glaston is actively involved in developing technologies for the needs of both the solar energy industry and emerging glass technologies, and our Emerging Technologies unit provides consulting and engineering services for smart glass and energy glass window production as well as solar energy applications.

To maintain our value creation in the future, Glaston must succeed in engaging and developing the best talent, deploying intelligent technology in product and service offerings, developing new business models, further improving product characteristics and reliability, and understanding the needs of present and future customers.

### Policies And Due Diligence

At Glaston, responsibility is part of our everyday activities. The company is committed to complying in full with national and international laws, regulations, and generally accepted operating practices in all of its operations. Furthermore, in our everyday activities, Glaston is committed to combating bribery and corruption.

Glaston's operations are guided by our Code of Conduct, which is approved by the company's Board of Directors. The Code of Conduct describes the company's requirements and expectations regarding responsible and ethical conduct. In addition, the Code of Conduct guides Glaston's employees in their daily work with colleagues and with customers, suppliers and other stakehold-

ers. The topics covered include workplace conduct and responsible business practices as well as the environment and sustainable development. The Code of Conduct is complemented by other Group-level policies approved by the Board of Directors. Local policies on occupational health and safety, for example, complement the Group-level guidelines.

Quality issues are central to Glaston's operations and are addressed in accordance with the ISO 9001 quality management system. This means, among other things, that the operating environment, stakeholders and risk management are taken into account in all that we do. We aim for close and rewarding relationships with our major suppliers. We choose our subcontractors carefully, and our selection criteria are quality, reliability, security of supply and price. New suppliers are audited by our quality and procurement organization.

Safety in the use of Glaston's machines is based on the EU Machinery Directive and the EN standards mentioned therein. The Directive requires manufacturers to carry out, among other things, a risk analysis of the machine, listing possible risks to personnel during the various stages of using the machine, and measures to reduce risks as well as information on any risk, which must be mentioned in operating instructions and in which the user must be trained. The company is also responsible for ensuring that the machine is constructed of items and components according to a parts list, for

which specific requirements are set. An EU certificate of conformity is signed for every machine. Once the machine has been installed, tested, the users trained, and it is in all respects ready for production, a CE-plate is affixed to the machine.

Glaston has a whistleblowing system, which allows personnel to report anonymously any violations of the Code of Conduct and other guidelines. Group-level guidelines are available on the company's intranet. Local guidelines are available on operating locations' intranet sites and shared networks. If necessary, guidelines are issued to personnel in printed form (personnel manual).

The Code of Conduct will be updated in 2020 to take better into account human rights, corruption and bribery issues. In addition, the goal is for all personnel to participate in training on the updated Code of Conduct during 2020.

Glaston's Executive Management Group approved the company's corporate responsibility agenda in December 2019, and its implementation will begin in 2020. As part of this work, a Group-wide non-financial information management system and related operating policies will be developed.

### Risk Management

A survey of strategic risks is part of the Group's strategic planning process. Glaston has assessed its responsibility risks, including risks related to climate change, in both its strategic and operational risk

assessments. The risks were not found to be significant, however.

The Group's risks are described in more detail in the Business risks section of this report.

### Material Aspects Of Responsibility

In 2019, Glaston reviewed the most material aspects of its responsibility in collaboration with the company's main external stakeholders and its own personnel. Based on this, the key issues of responsibility were identified, with the material themes being: responsible own activities (personnel, environment, responsible business), responsible purchases, responsible partner and responsible member of society. The company's Executive Management Group approved Glaston's responsibility agenda in December 2019.

### The key objectives and indicators are as follows:

Topic	Indicator	Objective	Timetable
Responsible business	Training of personnel in the Code of Conduct	Training coverage 100%	Continuous
Safe workplace	Number of accidents Reports of workplace harassment	No accidents No reports	Continuous
Impacts on the environment	Energy consumption in production units	Decreasing energy consumption, %	Determining starting level and setting savings target in 2020 By 2030
	Energy efficiency of glass processing machines	Loading capacity and yeald +10%	
Responsible purchases	Responsible procurement training	Training coverage 100%	Continuous
Responsible partner	Industry's best customer experience	Customer satisfaction measurement	Target setting for 2020, continuous

### Environment

Glaston's environmental impacts are on three dimensions: own activities, use of machines on customers' premises, and end-product environmental impacts. The environmental impact of Glaston's own production activities is small, and the largest environmental impacts arising from the company's own activities come from the energy consumption of its properties and from transport. Glaston is constantly improving the energy performance of its properties, and during 2020 the company will set its target for a reduction in energy consumption. Most of Glaston's impact on the environment arises when customers use Glaston technologies throughout their life cycle. Improving the environmental performance of products is largely achieved

through product development and continuous improvement of products.

Glaston develops and designs its machines to withstand use at high utilization rates. Preventive and regular maintenance as well as a wide range of upgrade products boost production and extend the operating lives of machines. The long operating lives of Glaston's glass processing machines, up to 20 years, support the environmental goals of sustainable development. With the acquisition of Bystronic glass, Glaston's product range expanded to insulating glass unit technology. These double- or triple-glazed units with their energy-efficient glass improve the energy performance of buildings.

A key focus of Glaston's product development work is the energy-efficiency of prod-

ucts, and as a result customers can process their glass more energy-efficiently than before. In addition, the company will focus in its product development on digital and IoT-based solutions and services. These enable the optimization of machine performance as well as real-time customer support without the need for travel that adversely impacts the environment.

As a frontrunner of its industry, Glaston is actively involved in developing the glass technologies of the future, such as smart glass solutions, and the company's Emerging Technologies unit provides consulting and engineering services for the production of smart glass and energy glass windows as well as solar energy applications.

## Social responsibility and personnel

Glaston's strength lies in its expert, healthy employees. In 2019, Glaston's employee numbers grew by 121%, mainly due to the acquisition of Bystronic glass.

Personnel costs totaled EUR 51.4 million, i.e. 28% of net sales. Salaries and bonuses totaled EUR 42.3 million, pension expenses EUR 4.2 million and other personnel expenses EUR 4.9 million.

At the end of 2019, Glaston had operations in 11 countries, of which the three largest, by employee numbers, were Germany, Finland and China.

Glaston actively monitors the development of occupational safety. Our target is zero accidents at work. The day-to-day management and development of occupational safety is the responsibility of the company's various units in line with local legislation. Occupational safety training is given primarily in the company's assembly and production units. On average, occupational safety reviews are conducted every three months and, based on them, development measures are agreed upon. Occupational safety training is organized on a regular basis, and workers' councils participate in planning them. In Germany, supervisors arrange annual safety training for their subordinates.

## Human rights

Glaston respects and complies with internationally accepted principles on human rights, which are based, for example, on the UN Universal Declaration on Human Rights, the

International Labor Organization Declaration on Fundamental Principles and Rights at Work, and the UN Global Compact corporate responsibility initiative.

Glaston operates globally and therefore in a multicultural environment. Glaston's Code of Conduct includes a commitment to respect human rights. Employees and job applicants must be treated and evaluated in accordance with their work-related abilities, and no-one should be treated less favorably than others due to race, color, nationality, ethnicity, religion, gender, sexual orientation, disability, trade union membership or political affiliation. Harassment of any kind in the working environment is strictly prohibited.

In accordance with its Code of Conduct, Glaston acts fairly towards its suppliers, service providers and subcontractors. Glaston, in turn, requires them to respect the principles outlined in the company's Code of Conduct.

Harassment of any kind in the working environment is strictly prohibited. All cases reported are investigated and, if deemed appropriate, the necessary action is taken. The parties concerned are informed of the outcome of the process. In 2019, one case of suspected workplace harassment was reported to the company.

## Action against bribery and corruption

In Glaston's Code of Conduct, the company undertakes to promote fair competition and to comply with the law in all of its activities. The Code of Conduct states that business

relationships must be based on objective criteria. No direct or indirect payments can be made, nor can the company's funds be conveyed directly or indirectly to any party to gain an inappropriate advantage. The Code of Conduct requires personnel to avoid conflicts of interest and to refuse all inappropriate payments and benefits.

Glaston regularly arranges training on its Code of Conduct and fair business issues (bribery, conflicts of interest, fair competition) to ensure compliance with guidelines. In addition, the training materials are always available on the company's intranet.

In 2019, no suspicions of bribery or corruption arose in the company. In 2020, the Code of Conduct will be updated with regard to bribery, corruption and money laundering. Code of Conduct training will be extended to include personnel who joined the company as a result of the acquisition of Bystronic glass in April 2019.

## Business Risks

### Strategic risks

A survey of strategic risks is part of the Group's strategic planning process. A risk is defined as strategic where, if realized, it may have long-term effects on business.

### Business environment risks

The company operates worldwide and changes in the global economy and business cycles have a direct impact on the company's operating conditions. The company's business

is to a large extent linked to trends in global investment demand. Demand for the company's products is influenced by global, regional and national macroeconomic conditions, which affect the end users of its products. As a result, Glaston is exposed to business cycles in its customers' industries, such as the construction, solar energy, automotive and appliance industries. In recent years, general economic and financial market conditions in Europe and elsewhere in the world have fluctuated significantly, and the general increase in uncertainty has reduced willingness to invest and therefore had a negative impact on Glaston's order intake, net sales and earnings in certain product areas.

With the acquisition of Bystronic glass, completed in spring 2019, the company's dependence on the business cycles of any one industry has decreased slightly during the review period. Bystronic glass's business consists primarily of the production, sales and services of insulating glass technologies. Demand for insulating glass machines is currently driven by the widespread global need to improve the energy performance of buildings and is therefore less dependent on the global economic cycle. This brings stability to the company alongside the more cyclical heat treatment and automotive glass businesses.

Due to rising costs caused by increasing global environmental requirements and environmental pollution, vehicle manufacturers need to invest in more low-emission and energy-efficient technologies and products.

Changing consumer behavior, stricter requirements and tighter regulation have led to a shift in the investments of automotive industry customers. Longer-term disruption could impact demand for the Group's automotive glass machines more negatively. Increasing automotive glass requirements present new challenges for glass processing, bringing new players to the market and creating new opportunities for glass processing technology suppliers. From a technical standpoint, environmental requirements will be met by, among other things, lighter structures for vehicles, on which thin glass, in particular, will have a positive impact.

Heat treatment and automotive glass machines accounted for 37% of the company's 2019 pro forma net sales in 2019.

In addition to sales of new machines, the company is investing heavily in its services, with the aim of partially balancing its cyclically sensitive business and improving its profitability. The Emerging Technologies business, which operates partly in different cycles, will contribute to the stability of the company's operations in the future.

### **Competitive situation and price risks**

Competition in the glass processing machines and services market is intense, and Glaston is in competition with several multinational companies and regional manufacturers and service providers, and indirectly also with its customers' operations. An intensification of competition may lead to a deterioration of order intake, project margins

or terms of payment, and therefore adversely impact Glaston's business. Existing or new competitors may expand into one or more of the company's key markets, or may seek to increase their market share through aggressive pricing strategies or other means. For example in China, which is the largest market for the glass processing industry in the Asia and Pacific area, purchasing behavior is more cost-conscious than in other market areas. As a result, price competition is intense and local players have a significant competitive advantage in the market. The company's position in the Chinese market as well as its success in launching and increasing the sales of new products developed for the market are important factors in the company's long-term growth.

Combining the strengths of Bystronic glass and Glaston and leveraging the expertise brought by Bystronic glass will create opportunities for the company to develop its markets and cost competitiveness as well as to seek growth by developing its product range to better meet the needs of mid-range segment customers in the glass processing market, particularly in Asia's architectural market.

### **Technology risks**

One of Glaston's most significant strategic risks is technology risk, namely the entry into the market of a competing machine and glass processing technology, which would result in a reduction of Glaston's currently high market shares and require the company to make considerable product development

investments. There is also a technology risk, associated with the entry into the market of competing technologies, for the projects of the Glaston Emerging Technologies unit, which focuses on Glaston's new technologies. The unit invests in new, early-stage technologies whose viability on a commercial scale is uncertain. Glaston mitigates these risks by making larger product development investments than other players in the market and by striving to be at the forefront of technology development. The product portfolio of the Emerging Technologies unit will be expanded into many new technologies, which will contribute to reducing the impact of the risk associated with any single technology.

### **Integration risk**

Achieving the expected benefits of the Bystronic glass acquisition depends to a large extent on the timely and effective integration into the company of the business, processes and practices of the acquired units, which in turn depends on the time and resources of the acquired companies' management. The integration of Bystronic glass into Glaston's existing business involves risks and uncertainties, and one cannot be sure that Glaston will achieve all of the benefits expected from the Bystronic glass acquisition.

The integration of Bystronic glass with Glaston has progressed well during 2019, and the company has succeeded in integrating functions faster than expected. All mergers of operational functions have already been completed and overlapping activities

have been removed. In addition, longer-term projects, such as the merging of various IT and customer management systems, the integration of the Bystronic glass brand with Glaston, and the development of a common digital product platform, have begun but will take time to complete. The annual cost savings of measures undertaken by the end of 2019 will be more than EUR 4 million. In connection with the acquisition, the company expected to achieve these savings by 2021.

### **Responsibility and climate change risks**

Glaston has assessed its responsibility risks, including risks related to climate change, in both its strategic and operational risk assessments. The risks were not found to be significant, however. The potential risks associated with responsibility, climate change and Glaston's products include regulatory changes, environmental protection and rising operating costs due to environmental taxation.

Glaston's position as a frontrunner in technology development reduces the company's responsibility risks and supports the exploitation of the opportunities provided by tightening environmental requirements, for example through the insulating glass and smart glass solutions offered by the company. In addition, a key focus of Glaston's product development work is the energy-efficiency of products, and as a result customers can process their glass more energy-efficiently than before.

### ***Changes in the climate***

As a result of climate change, changes in annual rainfall and extreme weather conditions are becoming more common. Floods or unusual snow and ice conditions, for example, could jeopardize the continuity of Glaston's operations. None of Glaston's production facilities are located in such a way that there is a significant risk that flooding would jeopardize their activities. Glaston manages these risks at the Group level and takes the necessary preventive measures for its production facilities and their machinery and equipment.

### ***Compliance and corruption risk***

Glaston recognizes the risk of becoming the target of fraud by third parties and that the risk of corruption and fraud is possible in some of the company's operating areas. With the acquisition of Bystronic glass, the company's employee numbers have doubled and it is possible that not all of the new employees have yet become familiar with the company's ethical operating principles. Glaston's operations are guided by our Code of Conduct, which is approved by the company's Board of Directors. The company always adheres to high ethical operating principles and requires strict compliance with its strict anti-corruption procedures. The Code of Conduct describes the company's requirements and expectations regarding responsible and ethical conduct. In addition, the Code of Conduct guides Glaston's employees in their daily work with colleagues and with

customers, suppliers and other stakeholders. The topics covered include workplace conduct and responsible business practices as well as the environment and sustainable development. The Code of Conduct will be updated in 2020 to take better into account human rights, corruption and bribery issues. All personnel will be trained in the updated Code of Conduct during 2020. The Code of Conduct is complemented by other Group-level operating guidelines approved by the Board of Directors. Local guidelines, on occupation health and safety, for example, supplement the Group-level guidelines.

Glaston has a whistleblowing system, which allows personnel to report anonymously any violations of the Code of Conduct and other guidelines. Group-level guidelines are available on the company's intranet. Local guidelines are available on either operating locations' intranet sites or shared networks.

### **Operational risks**

Operational risk management is part of the daily work of business areas. Opportunities and risks are identified, assessed and managed on a daily basis; they are reported and assigned to the appropriate level of management. The status of opportunities and threats is regularly assessed, and appropriate measures are taken if necessary.

Glaston's most significant operational risks include management and possible quality problems related to demanding customer projects, availability of components, management of the contractual partner and

subcontractor network, product development, succeeding in the protection and efficient production of intellectual property rights as well as the availability and permanence of expert personnel. In some cases, the possible failure of a single project may have significant financial implications if its size or contractual terms and conditions are exceptional.

The successful growth of the Group's operations requires successful management and controlled growth of resources. In addition, digitalization and emerging technologies are bringing requirements for technological and business management expertise. The Group's ability to attract new types of expertise and maintain a high level of job satisfaction among its employees is further emphasized.

Glaston's balance sheet contains a substantial amount of goodwill. A prolonged period of low demand may lead to a situation in which Glaston's recoverable amounts are insufficient to cover the carrying amounts of asset items, particularly goodwill. If this happens, it will be necessary to recognize an impairment loss, which, when implemented, will weaken the result and equity.

Glaston continually develops its information systems and, despite careful planning, temporary disruptions to operations might be associated with the introduction stages. Due to the industrial internet, the significance of information security risks has increased, and the management of such risks is a subject of particular attention.

### **Financial risks**

The Group's most significant financial risks are foreign exchange, credit and refinancing risks. Financial risks and their management are described in the section Management of Financial Risks of the Annual Review.

The Group's risk management processes are described in the Corporation Governance Statement.

### **Legal Proceedings and Arbitration**

In August, Glaston announced that a dispute between Glaston and a customer regarding a heat treatment machine acquired by the customer from the company was proceeding to arbitration. The parties have reached a mutually satisfactory agreement and the arbitration procedure was suspended in January 2020.

### **Events After the Closing Date**

On 13 January 2020, Glaston Corporation announced that it had made changes to its Group structure to better reflect its business dynamics and market drivers. As of 1 January 2020, the company has three business areas: Glaston Heat Treatment Technologies, Glaston Insulating Glass Technologies and Glaston Automotive & Emerging Technologies. The business areas also form the company's three reporting segments, in which Services business is included. Machine and services sales, order intake and order book will also be reported separately as additional information. Glaston will publish comparative figures for the new

segments before the publication of the interim report for the first quarter of 2020. In connection with the organizational change, the following appointments have been made to the Executive Management Group: Artturi Mäki (SVP, Services), Robert Prange (SVP, Glaston Automotive and Emerging Technologies) and Taina Tirkkonen (General Counsel and SVP, Human Resources). As of 1 January 2020 the Executive Management Group consists of CEO Arto Metsänen, COO, Sales & Integration Sasu Koivumäki, CFO Päivi Lindqvist, SVP Glaston Heat Treatment Technologies Juha Liettyä, SVP Glaston Insulating Glass Technologies Dietmar Walz, SVP Glaston Automotive and Emerging Technologies Robert Prange, SVP Services Artturi Mäki and General Counsel and SVP, Human Resources Taina Tirkkonen.

### **Uncertainties and Factors Affecting Near Future Development**

In the fourth quarter of 2019 uncertainty continued, particularly in the European heat treatment machines market, but a slight recovery in demand was apparent. Demand for insulating glass machines has continued to be good in all market areas and this is also expected to continue into 2020. Challenges remain in the automotive glass market and the same trend is expected to continue, at least in the short term.

The coronavirus epidemic that began in China at the end of 2019 is causing uncertainty for the market outlook and, if prolonged and extended, it might affect the company's development.

Due to the project nature of the company's business, the number of orders might fluctuate significantly from one quarter to the next, impacting the company's net sales and earnings with a delay of approximately 3–6 months. The company's after-sales services, which account for over 30% of the company's net sales, are less cyclical and provide stability to the business.

### **Glaston's Outlook for 2020**

Glaston Corporation expects that 2020 comparable EBITA will improve from the 2019 level (2019 comparable pro forma EBITA EUR 12.1 million).

### **Board of Directors' Proposal on the Distribution of Profits**

The distributable funds of Glaston Corporation amount to EUR 75,298,315, of which EUR 12,208,041 represents the loss for the financial year. The company has no funds available for dividend distribution. The Board of Directors proposes to the Annual General Meeting, to be held on 2 April 2020, that the loss for the financial year 2019 be added to retained earnings and that no

dividend be paid. The Board of Directors proposes that, based on the balance sheet adopted for 2019, a return of capital of EUR 1,685,798 be distributed, which is EUR 0.02 per share. The return of capital will be paid from the reserve for invested unrestricted equity to shareholders who are registered in the company's register of shareholders, maintained by Euroclear Finland Ltd, on the record date for payment, 6 April 2020. The Board of Directors proposes to the Annual General Meeting that the return of capital be paid on 23 April 2020. On the day that the proposal for the return of capital was made, the number of shares entitling to a return of capital was 84,289,911, which means that the total amount of the return of capital would be EUR 1,685,798. EUR 73,612,517 will be left in distributable funds. No substantial changes in the company's financial position have taken place after the end of the financial year. In the view of the Board of Directors, the proposed distribution of profits does not jeopardize the company's solvency.

Helsinki, 11 February 2020  
Glaston Corporation  
Board of Directors

# Financial Ratios

EUR thousand	2019	restated** 2018	restated* 2017
<b>Income statement and profitability</b>			
Net sales	181,018	101,139	109,665
Operating result	-1,270	3,833	5,074
% of net sales	-0.7%	3.8%	4.6%
Comparable operating result	5,937	5,663	5,449
% of net sales	3.3%	5.6%	5.0%
Financial income and expenses (net)	-3,084	-1,239	-1,434
% of net sales	1.7%	1.2%	1.3%
Result before income taxes and non-controlling interests	-4,354	2,594	3,640
% of net sales	-2.4%	2.6%	3.3%
Income taxes	-2,042	-671	-1,144
Net profit / loss attributable to owners of the parent	-6,393	2,083	2,532
% of net sales	-3.5%	2.1%	2.3%
Return on capital employed (ROCE), %	-1.3%	6.5%	9.5%
Return on equity, %	-11.6%	5.3%	6.9%
Research and development expenses	6,437	4,098	3,848
% of net sales	3.6%	4.1%	3.5%
Gross capital expenditure	63,081	2,020	2,300
% of net sales	34.8%	2.0%	2.1%
Order book, EUR million	79.5	38.2	34.1
<b>Comparable operating result (EBIT)</b>			
Operating result	-1,270	3,833	5,074
Items affecting comparability	7,206	1,830	375
Comparable operating result	5,937	5,663	5,449
% of net sales	3.3%	5.6%	5.0%

EUR thousand	2019	restated** 2018	restated* 2017
<b>Statement of financial position and solvency</b>			
Property, plant and equipment and intangible assets	53,216	21,493	24,259
Goodwill	58,327	30,551	30,551
Non-current assets total	118,418	58,837	51,087
Equity attributable to owners of the parent	73,429	36,332	36,162
Equity (includes non-controlling interest)	73,429	36,399	36,390
Liabilities	143,244	62,473	69,595
Total assets	216,671	98,872	105,984
Capital employed	126,322	58,152	59,885
Net interest-bearing debt	33,032	13,902	11,109
Equity ratio, %	41.6%	44.4%	38.5%
Gearing, %	72.0%	59.8%	64.6%
Net gearing, %	45.0%	38.2%	30.5%
<b>Personnel</b>			
Personnel, average	689	379	409
Personnel, at the end of the period	790	357	402

\*Glaston is applying the new revenue recognition standard 'IFRS 15 Revenue from Contracts with Customers' fully retrospectively from 1 January 2018 and has restated the comparable figures accordingly for 2017.

\*\*Glaston is applying the new leasing standard 'IFRS 16 Leases' fully retrospectively from 1 January 2019 and has restated the comparable figures accordingly for 2017 and 2018.

# Per Share Data

		restated**	restated*			restated**	restated*
	2019	2018	2017		2019	2018	2017
Earnings per share, adjusted with share issue EUR <sup>(1)</sup>	-0.089	0.041	0.049	<b>Share price and turnover</b>			
Return of capital per share, EUR <sup>(2)</sup>	0.02	0.03	0.05	Share price, year high, EUR <sup>(1)</sup>	1.82	1.89	2.09
Return of capital ratio, % <sup>(2)</sup>	-22.5%	73.9%	101.3%	Share price, year low, EUR <sup>(1)</sup>	1.05	1.38	1.46
Return of capital yield <sup>(2)</sup>	1.6%	2.1%	2.9%	Share price, volume-weighted year average, EUR <sup>(1)</sup>	1.25	1.65	1.62
Adjusted equity attributable to owners of the parent per share, EUR <sup>(1)</sup>	0.87	0.94	0.94	Share price, end of year, EUR <sup>(1)</sup>	1.26	1.44	1.75
Price per earnings per share (P/E) ratio <sup>(1)</sup>	-14.1	35.4	35.4	Number of shares traded (1.000) <sup>(1)</sup>	10,878	4,307	16,279
Price per equity attributable to owners of the parent per share <sup>(1)</sup>	1.44	1.53	1.86	% of average number of registered shares <sup>(1)</sup>	15.1%	8.4%	31.7%
Capital repayment, EUR million <sup>(2)</sup>	1.7	1.2	1.9	Market capitalization of registered shares, end of year, treasury shares excluded, EUR million <sup>(1)</sup>	105.8	55.4	67.4
Number of shares at the end of the year, adjusted with share issue <sup>(1)</sup>	84,289,911	38,726,627	38,726,627				
Number of shares at the end of the year, adjusted with share issue, treasury shares excluded <sup>(1)</sup>	84,289,911	38,568,911	38,568,911				
Number of shares, average, adjusted with share issue, treasury shares excluded <sup>(1)</sup>	72,071,521	51,302,265	51,302,265				

<sup>(1)</sup> A Reverse share split was implemented on 1 March 2019. A Rights issue was implemented during the second quarter in 2019. The number of shares and the share price and key ratios based on these for the comparative periods has been restated accordingly.

<sup>(2)</sup> Board of Directors' proposal to Annual General Meeting

\*Glaston is applying the new revenue recognition standard 'IFRS 15 Revenue from Contracts with Customers' fully retrospectively from 1 January 2018 and has restated the comparable figures accordingly for 2017.

\*\*Glaston is applying the new leasing standard 'IFRS 16 Leases' fully retrospectively from 1 January 2019 and has restated the comparable figures accordingly for 2017 and 2018.

# Definitions of Key Ratios

## Financial ratios

### EBITDA

Profit / loss before depreciation, amortization and impairment

### Operating result (EBIT)

Profit / loss after depreciation, amortization and impairment

### Cash and cash equivalents

Cash + other financial assets (includes cash and cash equivalents at amortized cost)

### Net interest-bearing debt

Interest-bearing liabilities (includes interest-bearing liabilities at amortized cost)  
- cash and cash equivalents

### Financial expenses

Interest expenses of financial liabilities + fees of financing arrangements + foreign currency differences of financial liabilities

### Equity ratio, %

Equity (Equity attributable to owners of the parent  
+ non-controlling interest) x 100

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Total assets - advance payments received

### Gearing, %

Interest-bearing liabilities x 100

---

Equity (Equity attributable to owners of the parent  
+ non-controlling interest)

### Net gearing, %

Net interest-bearing debt x 100

---

Equity (Equity attributable to owners of the parent  
+ non-controlling interest)

### Return on capital employed, % (ROCE)

Profit / loss before taxes + financial expenses x 100

---

Equity + interest-bearing liabilities (average of 1 January and end of the reporting period)

### Return on equity, % (ROE)

Profit / loss for the reporting period x 100

---

Equity (Equity attributable to owners of the parent + non-controlling interest)  
(average of 1 January and end of the reporting period)

## Alternative performance measures

### Comparable EBIT

Operating result before amortization, impairment of intangible assets and purchase price allocation +/- items affecting comparability

### Comparable EBITA

Operating result before amortization, impairment of intangible assets and purchase price allocation +/- items affecting comparability

### Items affecting comparability:

Items affecting comparability are adjusted for non-business transactions or changes in valuation items when they arise from restructuring, acquisitions and disposals, related integration and separation costs, sale or impairment of assets. These may include staff reductions, rationalization of the product range, restructuring of the production structure and reduction of premises.

Impairment losses on goodwill, gains or losses on disposals due to changes in the group structure, exceptionally large gains or losses on tangible and intangible assets, exceptional compensations for damages and legal proceedings are restated as an item affecting comparability.

## Per share data

### Earnings per share (EPS)

Net result attributable to owners of the parent

Adjusted average number of shares

### Dividend per share\*

Dividends paid

Adjusted number of issued shares at end of the period

### Dividend payout ratio\*

Dividend per share x 100

Earnings per share

### Dividend yield per share\*

Dividend per share x 100

Share price at end of the period

### Equity attributable to owners of the parent per share

Equity attributable to owners of the parent at end of the period

Adjusted number of shares at end of the period

### Average trading price

Shares traded (EUR)

Shares traded (volume)

### Price per earnings per share (P/E)

Share price at end of the period

Earnings per share (EPS)

### Price per equity attributable to owners of the parent per share

Share price at end of the period

Equity attributable to owners of the parent per share

### Share turnover

The proportion of number of shares traded during the period to weighted average number of shares

### Market capitalization

Number of shares at end of the period x share price at end of the period

### Number of shares at period end

Number of issued shares - treasury shares



# Consolidated Financial Statements

# Consolidated Statement of Financial Position

EUR thousand	at 31 December			restated*
	Note	2019	2018	
<b>Assets</b>				
<b>Non-current assets</b>				
Goodwill	13,14	58,327	30,551	
Other intangible assets	14	19,729	5,763	
Property, plant and equipment	15	25,040	7,730	
Right-of-use assets	23	8,448	7,999	
Financial assets measured at fair value through other comprehensive income	17	3,078	3,015	
Loan receivables	19	2,541	3,162	
Deferred tax assets	12	1,256	617	
<b>Total non-current assets</b>		<b>118,418</b>	<b>58,837</b>	
<b>Current assets</b>				
Inventories	18	42,556	5,774	
<b>Receivables</b>				
Trade and other receivables	19	22,971	15,716	
Contract assets	7	12,647	10,315	
Assets for current tax	12	219	377	
Total receivables		35,836	26,409	
Cash equivalents		19,861	7,852	
<b>Total current assets</b>		<b>98,253</b>	<b>40,035</b>	
<b>Total assets</b>		<b>216,671</b>	<b>98,872</b>	

\*Glaston is applying the new leasing standard 'IFRS 16 leases' fully retrospectively from 1 January 2019 and has restated the comparable figures accordingly for 2018. Restatement is described in following notes: 3,4,6,8,11,12,13,15,18,19,20,22 and 23.

EUR thousand	at 31 December			restated*
	Note	2019	2018	
<b>Equity and liabilities</b>				
<b>Equity</b>				
Share capital		12,696	12,696	
Share premium account		0	25,270	
Other restricted equity reserves		23	70	
Reserve for invested unrestricted equity		109,549	39,628	
Treasury shares	4	-	-3,308	
Fair value reserve		164	122	
Other unrestricted equity reserves		53	2	
Retained earnings and exchange differences		-42,663	-40,230	
Net result attributable to owners of the parent		-6,393	2,083	
<b>Equity attributable to owners of the parent</b>		<b>73,429</b>	<b>36,332</b>	
Non-controlling interest		-0	67	
<b>Total equity</b>		<b>73,429</b>	<b>36,399</b>	
<b>Non-current liabilities</b>				
Non-current interest-bearing liabilities	22	39,320	8,089	
Non-current lease liabilities	23	8,230	7,552	
Non-current non interest bearing liabilities and provisions	21,24,25	2,380	716	
Deferred tax liabilities	12	6,669	164	
<b>Total non-current liabilities</b>		<b>56,599</b>	<b>16,521</b>	
<b>Current liabilities</b>				
Current interest-bearing liabilities	22	3,644	4,644	
Current lease liabilities	23	1,700	1,469	
Current provisions	24	3,916	1,681	
Trade and other current interest-free payables	25	72,186	37,321	
Contract liabilities	7	4,845	657	
Liabilities for current tax	12	354	180	
<b>Total current liabilities</b>		<b>86,644</b>	<b>45,952</b>	
<b>Total liabilities</b>		<b>143,244</b>	<b>62,473</b>	
<b>Total equity and liabilities</b>		<b>216,671</b>	<b>98,872</b>	

# Consolidated Statement of Profit or Loss

		1 January - 31 December		restated*
EUR thousand	Note	2019	2018	
Net sales	7	181,018	101,139	
Other operating income	8	1,844	2,243	
Changes in inventories of finished goods and work in progress	18	4,441	-1,656	
Own work capitalized		1,332	348	
Materials	9	-92,875	-49,225	
Personnel expenses	10	-51,374	-23,351	
Other operating expenses	9	-37,507	-20,809	
Depreciation, amortization and impairment	13	-5,581	-3,021	
Depreciation of right-of-use assets	13	-2,567	-1,835	
Operating result		-1,270	3,833	
Financial income	11	188	117	
Financial expenses	11	-2,750	-810	
Financial items, net		-2,562	-693	
Interest expenses on lease liabilities		-522	-546	
Result before income taxes		-4,354	2,594	
Income taxes	12	-2,042	-671	
Profit / loss for the period		-6,396	1,923	
Attributable to:				
Owners of the parent		-6,393	2,083	
Non-controlling interest		-2	-160	
Total		-6,396	1,923	
Earnings per share, EUR <sup>1)</sup>		-0.089	0.041	
Earnings per share, EUR, basic and diluted		-0.089	0.041	

<sup>(1)</sup> A Reverse share split was implemented on 1 March 2019. A Rights issue was implemented during the second quarter in 2019. The number of shares and the share price and key ratios based on these for the comparative period has been restated accordingly.

\*Glaston is applying the new leasing standard 'IFRS 16 leases' fully retrospectively from 1 January 2019 and has restated the comparable figures accordingly for 2018. Restatement is described in following notes: 3, 4, 6, 8, 11, 12, 13, 15, 18, 19, 20, 22 and 23.

# Consolidated Statement of Comprehensive Income

EUR thousand	restated*	
	1 January - 31 December 2019	2018
<b>Profit / loss for the period</b>	<b>-6,396</b>	<b>1,923</b>
<b>Other comprehensive income that will be reclassified subsequently to profit or loss:</b>		
Exchange differences on translating foreign operations	-361	53
Fair value changes of financial assets measured at fair value through profit or loss	63	11
Cash flow hedges	42	-90
Income tax on other comprehensive income	-12	2
<b>Other comprehensive income that will not be reclassified subsequently to profit or loss:</b>		
Exchange differences on actuarial gains and losses arising from defined benefit plans	-1	-3
Actuarial gains and losses arising from defined benefit plans	-1,232	41
Taxes on actuarial gains and losses arising from defined benefit plans	268	-
<b>Other comprehensive income for the reporting period</b>	<b>-1,234</b>	<b>14</b>
<b>Total comprehensive income for the reporting period</b>	<b>-7,629</b>	<b>1,937</b>
<b>Attributable to:</b>		
Owners of the parent	-7,627	2,098
Non-controlling interest	-2	-161
<b>Total comprehensive income for the reporting period</b>	<b>-7,629</b>	<b>1,937</b>

\*Glaston is applying the new leasing standard 'IFRS 16 leases' fully retrospectively from 1 January 2019 and has restated the comparable figures accordingly for 2018. Restatement is described in following notes: 3, 4, 6, 8, 11, 12, 13, 15, 18, 19, 20, 22 and 23.

# Consolidated Statement of Changes in Equity

EUR thousand											
	Note	Share capital	Share premium account	Reserve for invested unrestricted equity	Treasury shares	Fair value and other reserves	Retained earnings	Cumulative exchange difference	Attributable to owners of the parent	Non-controlling interest	Total equity
2018											
<b>Equity 1 January</b>		<b>12,696</b>	<b>25,270</b>	<b>41,556</b>	<b>-3,308</b>	<b>272</b>	<b>-44,066</b>	<b>4,465</b>	<b>36,885</b>	<b>228</b>	<b>37,112</b>
Restate: IFRS 16		-	-	-	-	-	-723	-	-723	-	-723
<b>Restated equity 1 January</b>		<b>12,696</b>	<b>25,270</b>	<b>41,556</b>	<b>-3,308</b>	<b>272</b>	<b>-44,788</b>	<b>4,465</b>	<b>36,162</b>	<b>228</b>	<b>36,390</b>
Total comprehensive income for the period	20	-	-	-	-	-78	2,122	54	2,098	-160	1,938
Return of capital		-	-	-1,928	-	-	-	-	-1,928	-	-1,928
<b>Equity 31 December</b>		<b>12,696</b>	<b>25,270</b>	<b>39,628</b>	<b>-3,308</b>	<b>194</b>	<b>-42,667</b>	<b>4,519</b>	<b>36,332</b>	<b>67</b>	<b>36,399</b>

2019											
<b>Equity 1 January</b>		<b>12,696</b>	<b>25,270</b>	<b>39,628</b>	<b>-3,308</b>	<b>194</b>	<b>-42,667</b>	<b>4,519</b>	<b>36,332</b>	<b>67</b>	<b>36,399</b>
Total comprehensive income for the period	20	-	-	-	-	93	-7,358	-362	-7,627	-2	-7,629
Changes in non-controlling interest		-	-	-	-	-	-	-	-	-65	-65
Share-based incentive plan		-	-	-	-	-	-	12	12	-	12
Share-based incentive plan, tax effect		-	-	-	-	-	-	-2	-2	-	-2
Change in treasury shares		-	-	-	3,308	-	-3,308	-	0	-	0
Return of capital		-	-	-1,157	-	-	-	-	-1,157	-	-1,157
Share issue		-	-	45,808	-	-	-	-	45,808	-	45,808
Dissolution of share premium account		-	-25,270	25,270	-	-	-	-	-	-	-
Other changes		-	-	-	-	-	63	-	63	-	63
<b>Equity 31 December</b>		<b>12,696</b>	<b>0</b>	<b>109,548</b>	<b>-</b>	<b>287</b>	<b>-53,270</b>	<b>4,167</b>	<b>73,428</b>	<b>-0</b>	<b>73,428</b>

\*Glaston is applying the new leasing standard 'IFRS 16 leases' fully retrospectively from 1 January 2019 and has restated the comparable figures accordingly for 2018. Restatement is described in following notes: 3, 4, 6, 8, 11, 12, 13, 15, 18, 19, 20, 22 and 23.

# Consolidated Statement of Cash Flows

EUR thousand	restated*	
	1 January - 31 December	2018
<b>Cash flows from operating activities</b>		
Net result attributable to owners of the parent	-6,393	2,083
Adjustments to net result attributable to owners of the parent	3,706	-908
Depreciation, amortization and impairment	8,148	4,855
Interest received	75	112
Interest paid	-1,597	-341
Dividends received	8	8
Other financing items	-1,073	-394
Income taxes paid	-595	-382
<b>Cash flows from operating activities before change in net working capital</b>	<b>2,279</b>	<b>5,034</b>
<b>Change in net working capital</b>		
Change in inventories	-10,056	3,547
Change in current receivables	5,746	-8,159
Change in interest-free current liabilities	12,866	-462
<b>Change in net working capital, total</b>	<b>8,556</b>	<b>-5,074</b>
<b>Cash flows from operating activities</b>	<b>10,835</b>	<b>-40</b>
<b>Cash flows from investing activities</b>		
Acquisition of subsidiaries less cash at the date of acquisition	-51,659	-
Purchase of loan receivables of subsidiaries acquired	-16,938	-
Other purchases of non-current assets	-4,586	-1,846
Proceeds from sale of business	530	143
Proceeds from sale of other non-current assets	202	211
<b>Cash flows from investing activities</b>	<b>-72,451</b>	<b>-1,492</b>
<b>Cash flow before financing</b>	<b>-61,615</b>	<b>-1,531</b>

EUR thousand	restated*	
	1 January - 31 December	2018
<b>Cash flows from financing activities</b>		
Share issue, net	45,808	-
Draw-down of non-current loans	40,073	20
Repayments of non-current loans	-5,000	-
Change in loan receivables (decrease +, increase -)	-	-492
Draw-down of current loans	33,000	9,000
Repayments of current loans	-37,644	-9,644
Return of capital	-1,157	-1,928
<b>Cash flows from financing activities</b>	<b>75,081</b>	<b>-3,045</b>
<b>Effect of exchange rate fluctuations</b>	<b>-1,457</b>	<b>41</b>
<b>Net increase (- decrease) in cash and cash equivalents</b>	<b>12,009</b>	<b>-4,535</b>
Cash and cash equivalents at beginning of period	7,852	12,386
Cash and cash equivalents at end of period	19,861	7,852
<b>Net increase (- decrease) in cash and cash equivalents</b>	<b>12,009</b>	<b>-4,535</b>

The above figures cannot be directly derived from the statements of financial position.

\*Glaston is applying the new leasing standard 'IFRS 16 leases' fully retrospectively from 1 January 2019 and has restated the comparable figures accordingly for 2018. Restatement is described in following notes: 3, 4, 6, 8, 11, 12, 13, 15, 18, 19, 20, 22 and 23.

# Supplemental Information for Statement of Cash Flows

EUR thousand	1 January - 31 December	
	2019	2018
Cash and bank	19,757	7,725
Other securities	104	127
<b>Total cash and cash equivalents</b>	<b>19,861</b>	<b>7,852</b>
<b>Disposal of subsidiaries</b>		
Proceeds from sale of investments	1,304	300
Expenses related to the sale, paid during the year	-30	0
Cash and cash equivalents of divested subsidiaries	-744	-257
<b>Net cash flow</b>	<b>530</b>	<b>43</b>
<b>Net assets disposed</b>		
Net working capital	175	990
Property, plant, equipment, intangible assets, shares and other long-term investments	16	208
Other interest-free liabilities	-140	-357
<b>Total disposed net assets</b>	<b>51</b>	<b>841</b>

Glaston Mexico S.A. de C.V. , Glaston's subsidiary in Mexico was sold in October 2019 from which EUR 0.1 million was booked as loss. The company's external revenue for the financial year 2019 was EUR 2.2 million and the loss for the financial year was EUR 0.1 million. Glaston Tools s.r.l. , Glaston's subsidiary in Italy was sold in December 2018 from which EUR 0.4 million was booked as loss. The company's external revenue for the financial year 2018 was EUR 3 million and the loss for the financial year was EUR 0.2 million.

EUR thousand	1 January - 31 December	
	2019	2018
<b>Business combinations</b>		
Purchase price of the shares	-56,720	0
Purchase price of loan receivables of subsidiaries acquired	-16,938	0
Cash at the date of acquisition	5,061	0
<b>Cash flow from acquisition of subsidiaries less cash at the date of acquisition</b>	<b>-68,596</b>	<b>0</b>
The net assets of acquired businesses are presented in note 5.		restated*
	<b>2019</b>	<b>2018</b>
Total cash outflow for leases	-3,017	-2,587

# Summary of Significant Accounting Policies

## – Consolidated Financial Statements

The financial statements have been prepared on a going concern basis.

### Basic Information

Glaston Corporation is a public limited liability company organized under the laws of the Republic of Finland and domiciled in Helsinki, Finland. Glaston's shares are publicly traded in NASDAQ Helsinki Ltd. Small Cap in Helsinki, Finland. Glaston Corporation is the parent of Glaston Group and its registered office is at Lönnrotinkatu 11, 00120 Helsinki, Finland.

Glaston Group is an international glass technology company. Glaston is a one of the leading manufacturers of glass processing machines globally. Its product range and service network are the most extensive in the industry. The operations of Glaston Group are organized in two reportable segments that consists of operating segments.

The Board of Directors of Glaston Corporation has in its meeting on 11 February 2020, approved these financial statements to be published. According to the Finnish Companies' Act, the shareholders have a possibility to approve or reject or make a decision on altering the financial statements in a General Meeting to be held after the publication of the financial statements.

### Basis of Presentation

The consolidated financial statements of Glaston Group are prepared in accordance with International Financial Reporting Standards (IFRS), including International Accounting Standards (IAS) and Interpretations issued by the International Financial Reporting Interpretations Committee (SIC and IFRIC). International Financial Reporting Standards are standards and their interpretations adopted in accordance with the procedure laid down in regulation (EC) No 1606/2002 of the European Parliament and of the Council. The Notes to the Financial Statements are also in accordance with the Finnish Accounting Act and Ordinance and the Finnish Companies' Act.

The consolidated financial statements include the financial statements of Glaston Corporation and its subsidiaries. The functional and reporting currency of the parent is euro, which is also the reporting currency of the consolidated financial statements. Functional currencies of subsidiaries are determined by the primary economic environment in which they operate.

The financial year of Glaston Group as well as of the parent and subsidiaries is the calendar year ending 31 December.

The financial statements have been prepared under the historical cost conven-

tion except as disclosed in the accounting policies below.

The figures in Glaston's consolidated financial statements are mainly presented in EUR thousands. Due to rounding differences the figures presented in tables do not necessarily add up to the totals of the tables.

### Applied New and Amended Standards and Interpretations

In addition to the standards and interpretations presented in the financial statements for 2019, the Group will adopt IFRS standards, IFRIC interpretations and changes to existing standards and interpretations that enter into effect in 2020. Management estimates that these will have no material effect on Glaston's consolidated financial statements.

### Consolidation Principles

The consolidated financial statements include the parent and its subsidiaries. Subsidiaries are companies in which the parent has, based on its holding, more than half of the voting rights directly or via its subsidiaries or over which it otherwise has control. Divested subsidiaries are included in the consolidated financial statements until the control is lost, and companies acquired during the reporting period are

included from the date when the control has been transferred to Glaston. Acquisitions of subsidiaries are accounted for under the purchase method.

Associates, where the Group has a significant influence (holding normally 20 - 50 per cent), are accounted for using the equity method. The Group's share of the associates' net results for the financial year is recognized as a separate item in profit or loss. The Group's interest in an associate is carried in the statement of financial position at an amount that reflects its share of the net assets of the associate together with goodwill on acquisition, if such goodwill exists. When the Group's share of losses exceeds the carrying amount of associate, the carrying amount is reduced to nil and recognition of further losses ceases unless the Group is committed to satisfy obligations of the associate by guarantees or otherwise.

Other shares, i.e. shares in companies in which Glaston owns less than 20 per cent of voting rights, are classified as assets recognized at fair value through other comprehensive income, or if the fair value cannot be measured reliably, at acquisition cost, and dividends received from them are recognized in profit or loss.

All inter-company transactions are eliminated as part of the consolidation process.

Unrealized gains arising from transactions with associates are eliminated to the extent of the Group's interest in the entity. Unrealized losses are eliminated in the similar way as unrealized gains, but only to the extent that there is no evidence of impairment.

Non-controlling interests are presented separately in arriving at the net profit or loss attributable to owners of the parent. They are also shown separately within equity. If the Group has a contractual obligation to redeem the share of the non-controlling interest with cash or cash equivalents, non-controlling interest is classified as a financial liability. The effects of the transactions made with non-controlling interests are recognized in equity, if there is no change in control. These transactions do not result in goodwill or gains or losses. If the control is lost, the possible remaining ownership share is measured at fair value and the resulting gain or loss is recognized in profit or loss. Total comprehensive income is attributed also to non-controlling interest even if this will result in the non-controlling interest having a deficit balance.

### **Foreign Subsidiaries**

In the consolidated financial statements, statements of profit or loss, statements of comprehensive income and statements of cash flows of foreign subsidiaries have been translated into euros using the average exchange rates of the reporting period and the statements of financial positions have been translated using the closing exchange rates at the end of the reporting period.

The exchange difference arising from translating the statements of profit or loss, statements of comprehensive income and statements of financial position using the different exchange rates is recognized as other comprehensive income and included in equity as cumulative exchange difference. Exchange differences arising from the translation of the net investments in foreign subsidiaries and associates in non-euro-area are also recognized in other comprehensive income and included in equity as cumulative exchange difference.

On the disposal of all or part of a foreign subsidiary or an associate, the cumulative amount or proportionate share of the exchange difference is reclassified from equity to profit or loss as a reclassification item in the same period in which the gain or loss on disposal is recognized.

### **Transactions in Foreign Currency**

In their own day-to-day accounting the Group companies translate transactions in foreign currencies into their own reporting or functional currency at the exchange rates prevailing on the dates of the transactions. At the end of the reporting period, the unsettled balances of foreign currency transactions are measured at the exchange rates prevailing at the end of the reporting period. Foreign exchange gains and losses arising from trade receivables are entered as adjustments of net sales and foreign exchange gains and losses related to trade payables are recorded as adjustments of

purchases. Foreign exchange gains and losses arising from financial items are recorded as financial income and expenses.

### **Financial Assets and Liabilities**

Glaston's financial assets have been classified into three categories: as assets recognized at amortized cost, at fair value through other comprehensive income and at fair value through profit or loss. The classification depends on the business model under which the financial assets are managed as well as the characteristics of the instrument's cash flows. A financial asset item is derecognized from the statement of financial position when Glaston's contractual right to the cash flows from the financial asset item expire or the financial asset item is transferred to an external party and the transfer fulfills the asset derecognition requirements of IFRS 9.

Financial liabilities are classified at amortized cost using the effective interest method, or at fair value through profit or loss. A financial liability or part of a financial liability is derecognized from the statement of financial position when the liability has ceased to exist, i.e. when the obligation specified in the contract has been discharged or canceled or has expired.

### **Derivative Contracts Recognized at Fair Value through Profit or Loss, And Hedge Accounting**

Derivative contracts are entered in the statement of financial position at the time of acquisition at fair value and remeasured at

fair value in the financial statements using the market prices at the end of the reporting period. Entries of the changes of derivatives are influenced by whether a derivative contract falls within the scope of hedge accounting. Derivatives that do not meet the hedge accounting conditions are financial assets and liabilities acquired for trading and entered at fair value through profit or loss, and whose changes of value are recognized immediately through profit or loss.

When a hedging arrangement is entered into, the relationship between the item being hedged and the hedging instrument, as well as the objectives of the Group's risk management are documented. The IFRS 9 standard requires an economic relationship between the hedged item and the hedging instrument as well as the same hedge ratio that management actually uses in risk management.

If the hedging accounting conditions are met, cash flow hedge accounting under IAS 9 is applied with respect to foreign exchange derivatives. If the hedge accounting conditions are not met, the result of hedging instruments when hedging a commercial foreign exchange risk are recognized in profit or loss within other operating income or expenses.

Derivative instruments are included in the statement of financial position in current assets and liabilities. Trade date accounting is used in recognizing sales and purchases of derivatives.

In reporting periods 2019 and 2018, hedge accounting was used in hedging the trade

receivables of projects. At the end of reporting periods 2019 and 2018, Glaston had open foreign exchange forward contracts.

#### **Other Assets Recognized at Fair Value through Profit or Loss**

Other assets recognized at fair value through profit or loss may include current investments that are acquired and held for trading, i.e. acquired or incurred for the main purpose of selling them in the short term. Other assets recognized at fair value through profit or loss are included in current assets in the statement of financial position.

Fair values of other financial assets recognized at fair value through profit or loss are estimated to correspond to their carrying amounts because of their short maturities. Trade date accounting is used in recognizing purchases and sales of other assets recognized at fair value through profit or loss.

#### **Loans and Other Receivables**

Loans and other receivables are assets which are not included in derivative assets. Loans and other receivables arise when money, goods or services are delivered to a debtor. They are not quoted in an active market and payments related to them are either fixed or determinable. Loans and receivables granted by the Group are measured at amortized cost.

Loan receivables, trade receivables and other receivables have been classified as loans and other receivables. They are included in current or non-current financial

assets in accordance with their maturity. Loan and trade receivables falling due after 12 months are discounted, if no interest is charged separately, and the increase in the receivable which reflects the passage of time is recognized as interest income in financial income and expenses.

Trade receivables are carried at the original invoice amount less the share of the discounted interest and an estimate made for doubtful receivables. The estimate made for doubtful receivables is based on a review of all trade receivables outstanding on the reporting date as well as on an assessment of the impairment of financial assets based on expected credit losses. Impairment losses of trade receivables are recorded in a separate allowance account within trade receivables, and the impairment losses are recognized in profit or loss as other operating expenses. If the impairment loss is final, the trade receivable is derecognized from the allowance account. If a payment is later received from the impaired receivable, the received amount is recognized in profit or loss as a deduction of other operating expenses. If no impairment loss has been recognized in allowance account and the impairment loss of the trade receivable is found to be final, impairment loss is recognized directly as deduction of trade receivables.

Loan receivables are carried at the original amount less an estimate made for doubtful receivables. The estimate made for doubtful receivables is based on a separate review of all loan receivables outstanding

on the reporting date as well as on an assessment of the impairment of financial assets based on expected credit losses. For example, payment defaults or late payments are considered as indications of impairment of the receivable. Impairment losses of loan receivables are recognized in profit or loss as financial expenses. If a payment is later received from the impaired receivable, the received amount is recognized in profit or loss in financial items.

#### **Financial Assets Valued at Fair Value through other comprehensive income**

Financial assets measured at fair value through other comprehensive income are financial assets not included in derivative assets, assets or liabilities recognized at fair value through profit or loss, or other receivables.

Listed investments included in financial assets measured at fair value through other comprehensive income are valued at the market price at the end of the reporting period. Investments whose fair value cannot be reliably determined, such as unlisted shares and other investments, are stated at acquisition cost or lower if an impairment loss is recognized for the investment.

Unrealized changes in the fair value of financial assets measured at fair value through other comprehensive income are recognized in other comprehensive income less tax effects and are included in the fair value reserve in equity.

Financial assets at fair value through

other comprehensive income are included in non-current assets in the statement of financial position.

#### **Cash and Cash Equivalents**

Cash and cash equivalents comprise cash and other financial assets. Other financial assets are highly liquid investments with remaining maturities at the date of acquisition of three months or less. Bank overdrafts are included in current interest-bearing liabilities.

#### **Financial Liabilities Measured at Amortized Cost**

On initial recognition financial liabilities are measured at their fair values that are based on the consideration received. Subsequently, financial liabilities are measured at amortized cost using the effective interest method. Transaction costs are included in the acquisition cost.

Financial liabilities measured at amortized cost include convertible bond, pension loans, loans from financial institutions, finance lease liabilities, debenture bond, trade payables and advances received. They are included in current or non-current liabilities in accordance with their maturity.

Interest expenses are accrued for and mainly recognized in profit or loss for each period. If an asset is a qualifying asset as defined in IAS 23 Borrowing Costs, the borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized to the

acquisition cost of the asset. The capitalization applies mainly to property, plant and equipment and intangible assets.

At the end of 2019 and 2018 Glaston had no convertible bond.

### Revenue Recognition

Net sales include the total invoicing value of products sold and services provided less discounted interest and sales tax, cash discounts and rebates. Foreign exchange differences arising from trade receivables are recognized as sales adjustments.

Revenue from the sale of goods is recognized at a specific date or within a certain period, according to when the buyer receives the goods or gains control. Normally, this takes place at the date of the delivery in accordance with the terms of delivery. Revenue from services rendered and repair work is recognized when the service has been rendered or the work has been completed. Revenue is recognized in an amount that reflects the consideration to which the entity expects to be entitled in exchange for goods delivered or services rendered.

In satisfying the terms of IFRS 15, Glaston recognizes the revenue from tailor-made glass processing machine deliveries over time (partial revenue recognition). As a revenue recognition practice, Glaston applies the cost-to-cost method, i.e. the share of accumulated project costs compared to total estimated costs is used as the degree of completion. Revenue recognition takes place over time, according to when costs accumu-

late and are recognized for the project. Costs attributable to a project for which revenue is not yet recognized are included in inventories as unfinished construction contracts.

### Pensions and Other Long-term Employee Benefits

The Group has various pension plans in accordance with the local conditions and practices in the countries where it operates. The pension plans are classified as defined contribution plans or defined benefit plans. The payments to the schemes are determined by actuarial calculations.

The contributions to defined contribution plans are charged to profit or loss in the period to which the contributions relate.

In addition to defined benefit pensions, Glaston has other long-term employee benefits, such as termination benefits. These benefits are accounted for as post-employment benefits, and they are presented separately from defined benefit pensions.

The obligations for defined benefit plans have been calculated separately for each plan. Defined benefit liabilities or assets, which have arisen from the difference between the present value of the obligations and the fair value of plan assets, have been entered in the statement of financial position.

The defined benefit obligation is measured as the present value of the estimated future cash flows using interest rates of government securities that have maturity terms approximating the terms of related liabilities

or similar long-term interests.

For the defined benefit plans, costs are assessed using the projected unit credit method. Under this method the cost is charged to profit or loss so as to spread over the service lives of employees.

Glaston records actuarial gains and losses in other comprehensive income. Only current and past service costs as well as net interest on net defined benefit liability can be recorded in profit or loss. Other changes in net defined benefit liability are recognized in other comprehensive income with no subsequent recycling to profit or loss.

### Share-based Payments

Glaston Corporation has share-based incentive plans for the Group's key personnel. Depending on the plan, the reward is settled in shares, cash, or a combination thereof, provided that the key employee's employment or service with the Group is in force and the criteria for the performance is fulfilled. If a key employee's employment or service with the Group ends before the payment of a reward, the main principle is that no reward will be paid.

The granted amount of the incentive plans settled in shares is measured at fair value at the grant date, and the cash-settled part of the plans is measured at fair value at the reporting or payment date.

The expenses arising from the incentive plans are recognized in profit or loss during the vesting periods. The cash-settled portion of the incentive plans is recorded as a liability

in the statement of financial position, if it has not been paid, and the portion settled in shares is recorded in retained earnings in equity net of tax. Glaston records the personnel costs arising from the share-based incentive plans to the extent it is liable to pay them. The share-based incentive plans are described in Note 30 to the consolidated financial statements.

### Current and Deferred Taxes

The consolidated financial statements include current taxes, which are based on the taxable results of the group companies for the reporting period together with tax adjustments for previous reporting periods, calculated in accordance with the local tax rules, and the change in the deferred tax liabilities and assets.

Income taxes which relate to items recognized in other comprehensive income are also recognized in other comprehensive income.

The Group's deferred tax liabilities and assets have been calculated for temporary differences, which have been obtained by comparing the carrying amount of each asset or liability item with their tax bases. Deferred tax assets are recognized for deductible temporary differences and tax losses to the extent that it is probable that taxable profit will be available, against which tax credits and deductible temporary differences can be utilized. In calculating deferred tax liabilities and assets, the tax rate used is the tax rate in force at the time of preparing

the financial statements or which has been enacted by end of the reporting period.

Principal temporary differences arise from depreciation and amortization of property, plant and equipment and intangible assets, defined benefit plans, recognition of net assets of acquired companies at fair value, through other comprehensive income and derivative instruments at fair value, inter-company inventory profits, share-based payments and confirmed tax losses.

### Items Affecting Comparability

Items affecting comparability are adjusted for non-business transactions or changes in valuation items when they arise from restructuring, acquisitions and disposals, related integration and separation costs, sale or impairment of assets. These may include staff reductions, rationalization of the product range, restructuring of the production structure, and reduction of premises.

Impairment losses on goodwill, gains or losses on disposals due to changes in the group structure, exceptionally large gains or losses on tangible and intangible assets, exceptional compensations for damages and legal proceedings are restated as an item affecting comparability.

### Intangible Assets

Intangible asset is recognized in the statement of financial position if its cost can be measured reliably and it is probable that the expected future economic benefits attributable to the asset will flow to the Group.

Intangible assets are stated at cost and amortized on a straight line basis over their estimated useful lives. Intangible assets with indefinite useful life are not amortized, but tested annually for impairment.

Acquired intangible assets recognized as assets separately from goodwill are recorded at fair value at the time of the acquisition of the subsidiary.

The estimated useful lives for intangible assets are as follows:

Computer software, patents, licenses, trademarks, product rights .....	3-10 years
Capitalized development expenditure .....	5-7 years
Other intangible assets .....	5-10 years

Research costs are expensed as incurred. Expenditure on development activities, whereby research findings are applied to a plan or design for the production of new or substantially improved products, is capitalized if the product is technically and commercially feasible and the Group has sufficient resources to complete development and to use or sell the intangible asset. Amortization of the capitalized expenditure starts when the asset is available for use. The intangible assets not yet available for use are tested annually for impairment. Research expenditure and development expenditure recognized in profit or loss are recognized in operating expenses.

Borrowing costs are capitalized as part

of the acquisition cost of intangible assets if the intangible assets are qualifying assets as defined in IAS 23 Borrowing Costs. In 2019 or 2018 Glaston did not have any qualifying assets.

### Goodwill

Goodwill represents the excess of the acquisition cost over fair value of the assets less liabilities of the acquired entity. Goodwill arising from the acquisition of foreign entities of acquisitions made after 1 January 2004, is treated as an asset of the foreign entity and translated at the closing exchange rates at the end of the reporting period. Goodwill arising from the acquisitions of foreign entities made before 1 January 2004, has been translated into euros at the foreign exchange rate prevailing on the acquisition date.

Acquisitions made after 1 January 2004, have been recognized in accordance with IFRS 3. Purchase consideration has been allocated to intangible assets, if they have met the recognition criteria stated in IAS 38 (Intangible Assets). Acquisitions made before 1 January 2004, have not been restated to be in accordance with IFRS-standards. The revised IFRS 3 standard has been applied for business combinations made after 1 January 2010.

In accordance with IFRS 3 Business Combinations, goodwill is not amortized. The carrying amount of goodwill is tested annually for impairment. The testing is made more frequently if there are indications of

impairment of the goodwill. Any possible impairment loss is recognized immediately in profit or loss.

Glaston's goodwill has been allocated to the cash generating units of the group.

### Property, Plant and Equipment

Property, plant and equipment are stated at historical cost less accumulated depreciation and impairment losses. The cost of self-constructed assets includes the cost of materials, direct labor and an appropriate proportion of production overheads. When an asset consists of major components with different useful lives, they are accounted for as separate items. Assets from acquisition of a subsidiary are stated at their fair values at the date of the acquisition.

Depreciation is recorded on a straight-line basis over expected useful lives. Land is not depreciated since it is deemed to have indefinite useful life.

The most common estimated useful lives are as follows:

Buildings and structures .....	25-40 years
Heavy machinery .....	10-15 years
Other machinery and equipment .....	3-5 years
IT equipment .....	3-10 years
Other tangible assets .....	5-10 years

Gain on the sale of property, plant and equipment is included in other operating income and loss in operating expenses.

The costs of major inspections or the

overhaul of property, plant and equipment items, that occur at regular intervals and are identified as separate components, are capitalized and depreciated over their useful lives. Ordinary maintenance and repair charges are expensed as incurred.

Borrowing costs are capitalized as part of the acquisition cost of tangible assets if the tangible assets are qualifying assets as defined in IAS 23 Borrowing Costs. In 2019 or 2018 Glaston did not have any qualifying assets.

#### **Discontinued Operations and Assets and Liabilities of Disposal Group Classified as Held for Sale**

A discontinued operation is a segment or a unit representing a significant geographical area, which has been disposed of or is classified as held for sale. The profit for the period attributable to the discontinued operation is presented separately in the consolidated statement of profit or loss. Also post-tax gains and losses recognized on the measurement to fair value less costs to sell or on the disposal of the asset or disposal group are presented in the statement of profit or loss as result of discontinued operations. Comparative information has been restated.

Non-current assets or disposal groups are classified as held for sale and presented separately in the statement of financial position if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. In order to be classified as held for sale the asset or disposal group must be available for

immediate sale in its present condition and the sale must be highly probable. In addition, the sale should qualify for recognition of a complete sale within one year from the date of the classification.

An asset classified as held for sale is measured at the lower of its carrying amount and fair value less costs to sell and it is not depreciated or amortized.

Also liabilities of a disposal group classified as held for sale are presented separately from other liabilities in the statement of financial position.

IFRS 5 Non-current Assets Held for Sale and Discontinued Operations is not applied retrospectively if the valuations and other information required by the standard were not obtainable at the time the classification criteria were met.

#### **Impairment of Assets**

Annual impairment tests for goodwill are performed during the fourth quarter of the year. If there is, however, an indication of impairment of goodwill, the impairment tests for goodwill are performed earlier during the financial year. Other assets of the Group are evaluated at the end of each reporting period or at any other time, if events or circumstances indicate that the value of an asset has been impaired. If there are indications of impairment, the asset's recoverable amount is estimated, based on the higher of an asset's fair value less costs to sell and value in use. An impairment loss is recognized in profit or loss whenever the carrying amount of an asset or cash generating unit exceeds

its recoverable amount. If subsequently recording the impairment loss a positive change has occurred in the estimates of the recoverable amount, the impairment loss made in prior years is reversed no more than up to the value which would have been determined for the asset, net of amortization or depreciation, had not impairment loss been recognized in prior years. For goodwill, a recognized impairment loss is not reversed.

Cash flow projections have been calculated on the basis of reasonable and supportable assumptions. They are based on the most recent financial plans and forecasts that have been approved by management. Estimated cash flows are used for a maximum of five years. Cash flow projections beyond the period covered by the most recent plans and forecasts are estimated by extrapolating the projections. The discount rate is the weighted average cost of capital. It is a pre-tax rate and reflects current market assessments of the time value of money at the time of review and the risks related to the assets. Impairment of assets has been described in more detail in Note 13 to the consolidated financial statements.

#### **Inventories**

Inventories are reported at the lower of cost and net realizable value. Cost is determined on a first in first out (FIFO) basis, or alternatively, weighted average cost. Net realizable value is the amount which can be realized from the sale of the asset in the normal course of business, after allowing for the estimated costs of completion and the costs

necessary to make the sale.

The cost of finished goods and work in process includes materials, direct labor, other direct costs and a systematically allocated appropriate share of variable and fixed production overheads. As Glaston's machine projects are usually not considered to be qualifying assets as defined in IAS 23, borrowing costs are not included in the cost of inventory in normal machine projects.

Used machines included in the inventory are measured individually so that the carrying amount of a used machine does not exceed the amount that is expected to be received from the sale of the machine. In this measurement the costs arising from converting the used machine back to saleable condition are taken into account.

Prototypes of new machines included in inventory are measured at the lower of cost and net realizable value.

#### **Government Grants**

Government or other grants are recognized in profit or loss in the same periods in which the corresponding expenses are incurred. Government grants received to acquire property, plant and equipment are reduced from the acquisition cost of the assets in question.

#### **Accounting for Leases**

All leases over 12 months in length are recognized in the lessee's statement of financial position. The lessee recognizes in the statement of financial position a right-of-use asset item, based on its right to use the said asset, and a lease liability item corresponding

to the present value of the asset, based on the obligation to make the lease payments. The lessor's leases are subdivided into finance leases and other leases. IFRS 16 Leases contains exemptions for leases of 12 months or less and for assets of low value. Glaston adopts the exemptions permitted by IFRS 16 for leases of 12 months or less and for assets of low value and continues to treat them as other leases, and their costs are recognized as an expense on a straight-line basis.

Glaston has leased machinery and equipment for production use, which have been treated as finance leases and for which a finance lease receivable has been recognized in the Group.

### Provisions

A provision is recognized when as a consequence of some previous event there has arisen a legal or constructive obligation, and it is probable that this will cause future expenses and the amount of the obligation can be evaluated reliably.

A restructuring provision is booked only when a detailed and fully compliant plan has been prepared for it and implementation of the plan has been started or notification of it has been made known to those whom the arrangement concerns. The amount recognized as a provision is the best estimate of the expenditure required to settle the present obligation at the end of the reporting period. If the time value of money is material, provisions are discounted.

A provision for warranties is recognized

when the underlying products are sold. The provision is estimated on the basis of historical warranty expense data. Warranty provision is presented as non-current or current provision depending on the length of the warranty period.

The amount and probability of provision requires management to make estimates and assumptions. Actual results may differ from these estimates.

### Segment Information

Glaston's reportable segments are Glaston and Bystronic glass. The reportable segments comply with the group's accounting and valuation principles. In inter-segment transactions, Glaston complies with the same commercial terms and conditions as in its third party transactions.

The reportable segments consist of operating segments, which have been aggregated in accordance with the criteria of IFRS 8.12. Operating segments have been aggregated, when the nature of the products and services is similar, the nature of the production process is similar as well as the type or class of customers. Glaston Group's business consists of the manufacture and sale of glass processing machines as well as the service operations for these machines. There is a high level of integration between glass machines and maintenance. Their customers are the same, as is their market development, which is linked to the general development of the global market.

The reportable segment is disclosed in

more detail in the Note 6 to the consolidated financial statements.

### Critical Accounting Estimates and Judgments

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the end of the reporting period and the recognized amounts of revenues and expenses during the reporting period. Actual results may differ from these estimates.

In addition, management uses judgment in applying the accounting principles and in choosing the applicable accounting policies, if IFRS allow alternative methods.

The following items include critical accounting estimates: impairment testing of assets; estimated fair values of property, plant and equipment and intangible assets acquired in an acquisition and their estimated useful lives; useful lives of other intangible assets and property, plant and equipment; future economic benefits arising from capitalized development cost; measurement of inventories and trade and loan receivables; recognition and measurement of deferred taxes; estimates of the amount and probability of provisions and actuarial assumptions used in defined benefit plans.

The critical accounting estimates and judgments are described in more detail in Note 2 to the consolidated financial statements.

### Dividends and Return of Capital

Dividends or return of capital proposed by the Board of Directors are not recorded in the financial statements until they have been approved by the shareholders at the Annual General Meeting.

### Treasury Shares

Treasury shares acquired by the company and the related costs are presented as a deduction of equity. Gain or loss on surrender of treasury shares are recorded in reserve for invested unrestricted equity net of tax.

### Earnings per Share

Basic earnings per share are calculated by dividing the net result attributable to owners of the parent by the weighted share-issue adjusted average number of shares outstanding during the year, excluding shares acquired by the Group and held as treasury shares.

### Order Book

Glaston's order book includes the binding undelivered orders of the Group at the end of the reporting period. Orders for new machines and machinery upgrades are recognized in the order book only after receiving a binding agreement and either a down payment or a letter of credit.

### Orders Received

Glaston's orders received include the binding orders received and recognized in the order book during the reporting period as well as net sales of the service business, including

net sales of spare parts. Machine upgrades, which belong to the service business, are included in orders received based on the binding orders received and recognized in the order book during the reporting period.

## **Changes in Accounting Policies in 2019**

### **IFRS 16 Leases**

Glaston Group applies the leases standard IFRS 16 Leases fully retrospectively from 1 January 2019 and has prepared a restated statement of profit and loss for 2018 and a restated statement of financial position for 1 January 2018.

Under IFRS 16, all leases over 12 months in length are recognized in the lessee's statement of financial position. The lessee recognizes in the statement of financial position a right-of-use asset item, based on its right to use the said asset, and a lease liability item corresponding to the present value of the asset, based on the obligation to make the lease payments. The lessor's reporting remains unchanged, namely leases are still subdivided into finance leases and other leases. IFRS 16 Leases contains exemptions for leases of 12 months or less and for assets of low value. Glaston adopts the

exemptions permitted by IFRS 16 for leases of 12 months or less and for assets of low value and continues to treat them as other leases, and their costs are recognized as an expense on a straight-line basis.

IFRS 16 has a significant impact on the statement of profit and loss and the statement of financial position, as well as on some key ratios. The application of the standard increases EBITDA and comparable EBITDA and slightly improves operating profit and comparable operating profit, when the lease expenditure recognized in the statement of profit and loss is cancelled. Leases are discounted and an expense is recognized in depreciation of right-of-use assets and in interest expenses on financial items. In addition, the change in deferred tax is recognized in income taxes. Assets in the statement of financial position are increased by the right-of-use asset calculated at the inception of each lease, which is amortized over the lease term. The amount of interest-bearing debt is increased significantly by the discounted amount of the lease liability.

Under IFRS 16 Leases, the amount of the right-of-use asset and the liability is calculated by discounting future minimum lease payments. The discount rate will primarily

be the interest rate implicit in the lease, if available. In leases where the implicit interest rate is not specified, the discount rate used is the lessee's incremental borrowing rate, the components of which are the currency-specific reference rate, the interest margin and any country or currency risk premium. In the case of retrospective application, the lessee's incremental borrowing rate is determined for the inception of the lease and the minimum lease payments are discounted from the commencement date of each lease.

Glaston has leases that, prior to the entry into effect of IFRS 16 Leases, have been classified as other leases and recognized as lease expenditure in the statement of profit and loss based on the passage of time. Under the new standard, which became effective from 1 January 2019, for some of these leases an asset and liability equivalent to the present value of the minimum lease payments at the inception of the lease is recognized in the statement of financial position, thereby significantly increasing the assets and liabilities presented in the statement of financial position.

**Glaston Group's restated comparative information for 2018 and on 1 January 2018 according to IFRS 16 Leases**

Consolidated Statement of  
Financial Position

	restated	reported	restated	reported
EUR million	31.12.2018	31.12.2018	1.1.2018	1.1.2018
<b>Assets</b>				
<b>Non-current assets</b>				
Goodwill	30.6	30.6	30.6	30.6
Other intangible assets	5.8	5.8	6.5	6.5
Property, plant and equipment	15.7	7.7	17.7	8.4
Financial assets measured at fair value through other comprehensive income	3.0	3.0	3.0	3.0
Loan receivables and other non-current receivables	3.2	3.2	1.6	1.6
Deferred tax assets	0.6	0.6	1.0	1.0
<b>Total non-current assets</b>	<b>58.8</b>	<b>50.8</b>	<b>60.4</b>	<b>51.1</b>
<b>Current assets</b>				
Inventories	5.8	5.8	11.0	11.0
Receivables				
Trade and other receivables	15.7	15.7	22.1	22.1
Contract assets	10.3	10.3	-	-
Assets for current tax	0.4	0.4	0.1	0.1
Total receivables	26.4	26.4	22.2	22.2
Cash equivalents	7.9	7.9	12.4	12.4
<b>Total current assets</b>	<b>40.0</b>	<b>40.0</b>	<b>45.6</b>	<b>45.6</b>
<b>Total assets</b>	<b>98.9</b>	<b>90.9</b>	<b>106.0</b>	<b>96.7</b>

Equity and Liabilities

	restated	reported	restated	reported
EUR million	31.12.2018	31.12.2018	1.1.2018	1.1.2018
<b>Equity and liabilities</b>				
<b>Equity</b>				
Share capital	12.7	12.7	12.7	12.7
Share premium account	25.3	25.3	25.3	25.3
Other restricted equity reserves	0.1	0.1	0.1	0.1
Reserve for invested unrestricted equity	39.6	39.6	41.6	41.6
Treasury shares	-3.3	-3.3	-3.3	-3.3
Fair value reserve	0.1	0.1	0.1	0.1
Other unrestricted equity reserves	0.0	0.0	0.1	0.1
Retained earnings and exchange differences	-40.2	-39.5	-42.9	-42.2
Net result attributable to owners of the parent	2.1	2.2	2.5	2.6
<b>Equity attributable to owners of the parent</b>	<b>36.3</b>	<b>37.1</b>	<b>36.2</b>	<b>36.9</b>
<b>Non-controlling interest</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>
<b>Total equity</b>	<b>36.4</b>	<b>37.2</b>	<b>36.4</b>	<b>37.1</b>
<b>Non-current liabilities</b>				
Non-current interest-bearing liabilities	15.6	8.1	18.8	10.6
Non-current non-interest-bearing liabilities and provisions	0.7	0.7	2.1	2.1
Deferred tax liabilities	0.2	0.4	0.1	0.3
<b>Total non-current liabilities</b>	<b>16.5</b>	<b>9.2</b>	<b>20.9</b>	<b>12.9</b>
<b>Current liabilities</b>				
Current interest-bearing liabilities	6.1	4.6	4.7	2.6
Current provisions	1.7	1.7	2.4	2.4
Trade and other current non-interest-bearing payables	37.3	37.3	39.4	39.4
Contract liabilities	0.7	0.7	2.0	2.0
Liabilities for current tax	0.2	0.2	0.2	0.2
<b>Total current liabilities</b>	<b>46.0</b>	<b>44.5</b>	<b>48.7</b>	<b>46.6</b>
<b>Total liabilities</b>	<b>62.5</b>	<b>53.7</b>	<b>69.6</b>	<b>59.6</b>
<b>Total equity and liabilities</b>	<b>98.9</b>	<b>90.9</b>	<b>106.0</b>	<b>96.7</b>

## Consolidated Statement of Profit and Loss

EUR million	restated 1-12/2018	reported 1-12/2018
<b>Net sales</b>	<b>101.1</b>	<b>101.1</b>
Other operating income	2.2	2.2
Changes in inventories of finished goods and work in progress	-1.7	-1.7
Own work capitalized	0.3	0.3
Materials	-49.2	-49.2
Personnel expenses	-23.4	-23.4
Other operating expenses	-20.8	-23.8
Depreciation, amortization and impairment	-3.0	-3.0
Depreciation of right-of-use assets	-1.8	-
<b>Operating result</b>	<b>3.8</b>	<b>3.4</b>
Financial income	0.1	0.1
Financial expenses	-0.8	-0.8
Financial income and expenses, net	-0.7	-0.7
Interest expenses on lease liabilities	-0.5	-
<b>Result before income taxes</b>	<b>2.6</b>	<b>2.7</b>
Income tax expense	-0.7	-0.7
<b>Profit / loss for the period</b>	<b>1.9</b>	<b>2.0</b>
<b>Attributable to:</b>		
Owners of the parent	2.1	2.2
Non-controlling interest	-0.2	-0.2
<b>Total</b>	<b>1.9</b>	<b>2.0</b>
Earnings per share, EUR	0.041	0.041

## Critical Accounting Estimates and Judgments

The most significant management estimates relate to impairment tests, which require use of estimates in the calculations. In impairment testing management estimates recoverable amount of an asset or a cash generating unit. Recoverable amount is the higher of fair value less costs to sell and value in use. When calculating value in use, management estimates the future cash flows as well as the discount rates used in discounting the cash flows. Discount rates reflect current market assessments of the time value of money at the time of impairment testing and the risks related to the tested assets. Estimated cash flows include assumptions of, among other things, future prices, production levels, costs and development of the markets. Impairment loss is recorded if the carrying amount exceeds recoverable amount. The sensitivity analyses related to the impairment tests performed are described in Note 13 to the consolidated financial statements.

Useful lives of intangible assets and property, plant and equipment are based on management's best estimate of the period the asset is expected to be available for use by Glaston. Customer relationships, trademarks, product development assets and other intangible assets acquired in a business combination are measured at fair value at the acquisition date and subsequently am-

ortized over their estimated useful lives. The actual useful life can, however, differ from the expected useful life resulting in adjustment of annual depreciation or amortization of the asset or in recording of impairment loss.

Glaston capitalizes development costs of new products. In addition to other capitalization criteria, management has to estimate the future economic benefits arising from the development cost. If management estimates that there will not be future economic benefits, the development cost is recognized in profit or loss. Whether a development cost is capitalized or recognized immediately in profit or loss can have an effect on the result of the reporting period. At the end of the reporting period of 2019, Glaston had EUR 4.9 (4.1) million of capitalized development expenditure on its statement of financial position.

Measurement of inventories and trade and loan receivables includes some management estimates. Inventories are measured at lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. Net realizable value is used in testing the recoverable amount of inventories in order to avoid the inventories being carried

in excess of amount expected to be realized from their sale or use. If management estimates that carrying amount of a trade or loan receivable exceeds its fair value, an impairment loss is recognized. For example, payment defaults or late payments are considered as indications of impairment of the receivable. The carrying amount of inventory at the end of the reporting period was EUR 42.6 (5.8) million, the carrying amount of trade receivables was EUR 18.5 (12.7) million and the carrying amount of loan receivables was EUR 1.8 (1.7) million.

Recognition and measurement of deferred tax liabilities and assets include management estimates, especially deferred tax assets arising from confirmed tax losses of group companies or from other temporary differences. Deferred tax assets are recognized for deductible temporary differences and tax losses to the extent that it is probable that taxable profit will be available against which tax credits and deductible temporary differences can be utilized. All tax liabilities and assets are reviewed at the end of the reporting period and changes are recognized in profit or loss. At the end of the reporting period, Glaston's had deferred tax assets of totaling EUR 1.3 (0.6) million and deferred tax liabilities totaling EUR 6.7 (0.2) million.

If Glaston's management has assessed that as a result of a past event Glaston has a legal or constructive obligation, and that it is probable, that an outflow of resources will be required to settle the obligation, the management has estimated the amount of provision recognized from the obligation. The amount of the provision is the management's best estimate of the amount required to settle the obligation at the end of the reporting period. Glaston's most significant provision at the end of the reporting period was the warranty provision of totaling EUR 3.6 (2.1) million. The management's estimate of the warranty provision is based on previous experience. The estimate of the restructuring provision is based on the restructuring plan in which the locations and personnel concerned have been identified. If possible, external experts have been used in estimating the amount of the provision. If the management has estimated that it is unlikely, that Glaston has an obligation, a contingent liability is presented in the notes to the consolidated financial statements.

Calculation of defined benefit pensions and other defined long-term employee benefits requires choosing certain assumptions which actuaries use in calculation of the obligations arising from defined benefit plans. These assumptions include, among other

things, discount rates used in the measurement of plan assets and liabilities as well as other actuarial assumptions such as future salary increases and mortality rate.

In satisfying the terms of IFRS 15, Glaston recognizes the revenue from tailor-made glass processing machine deliveries over time (partial revenue recognition). As a revenue recognition practice, Glaston applies the cost-to-cost method, i.e. the share of accumulated project costs compared to total estimated costs is used as the degree of completion. Revenue recognition takes place over time according to when costs accumulate and are recognized for the project. Costs attributable to a project for which revenue is

not yet recognized are included in inventories as construction contracts. Estimates are monitored and updated monthly and changes in revenue recognition are recognized in the same month as a forecast is changed. Forecasts are related to material and wage costs and to project overheads, which may result in a risk of a greater increase in a project's overall costs than forecast. Other risks related to the project and its profitability are unforeseen technical problems with supplied and installed equipment, which may give rise to repair costs. If project costs exceed the revenue of a project subject to partial revenue recognition, the loss is recognized for the period in which it is identified.

# Management of Financial Risks

## Financial Risk Management

The main objectives for financial risk management within Glaston are to secure operational continuity, support the achievement of operational objectives and to implement treasury functions cost-effectively utilizing the Group's economies of scale.

The Group's treasury functions have been centralised to the parent which is responsible for relations with financial institutions, long-term financing arrangements and the investment of liquid assets as well as the Group's internal funding allocations according to the liquidity needs of different group companies. Group Treasury cooperates with the group companies to identify the risks and provides financial services for the group companies in order to manage these identified risks.

The management of financial risks in Glaston Group is conducted in accordance with the Glaston Group's Treasury Policy approved by the Board of Directors of Glaston Corporation. It is the responsibility of the CFO and Group Treasury to propose amendments to this policy as conditions within the Group and on the financial markets change. Group Treasury is responsible for monitoring compliance with the Treasury Policy as well as for presenting the need for changes to Treasury Policy to the parent's Board of Directors.

The Group's financial risks consist of foreign exchange, interest rate, credit, counterparty and liquidity risks. Due to its international operations the Group is exposed to risks arising from foreign exchange rate fluctuations. The effects of interest rate changes on the Group's annual result create an interest rate risk. Credit and counterparty risk primarily consists of risk related to credit granted to customers. Liquidity risk is defined as the risk that the Group's funds and borrowing facilities become insufficient to meet the needs of the business or that extra costs are incurred in order to arrange the financing needed.

Also investment of liquid funds is managed in accordance with the Treasury Policy. Liquid assets are invested in low risk instruments and only counterparties that possess good credit-worthiness are accepted.

## Market Risks

### Foreign Exchange Risk

The Group operates internationally and is therefore exposed to transaction and translation risks arising from fluctuations in foreign exchange rates which may have an effect on profit or loss and financial position. Transaction risks arise from cash flows generated by purchase and sales activities while

translation risks arise from converting items in the statements of profit or loss and the statements of financial position of non-euro subsidiaries into the Group's reporting currency.

The invoicing currency for a large proportion of the Group's deliveries is the euro, which is also the Group's reporting currency. The most significant foreign exchange risk arises from exchange rate fluctuations between the euro and the US dollar, but the Group may also have significant exposures in Chinese Yuan, English Pound, Brazilian Real and Swiss Franc. The US dollar accounted for approximately 32 per cent of the net sales of in 2019 (21 per cent). The Euro and US dollar together accounted for approximately 83 per cent of the invoicing in 2019 (87 per cent).

The Group did not have foreign currency denominated loans. The Group's internal loans are either short-term working capital credit facilities or subordinated long-term loans denominated on a case-by-case basis either in the local currency of the foreign subsidiary or in the reporting currency of the Group.

The objective for foreign exchange risk management is primarily to secure the planned result of group companies from unexpected currency fluctuations. Possible

hedging of foreign exchange risk is conducted in accordance with the Treasury Policy and the group companies are responsible for reporting their respective foreign currency items. In 2019, large orders in USD and the percentage of the most probable 18-month orders defined in Treasury Policy were hedged by currency forward contracts. Cash flow hedging was based on IFRS 9 hedge accounting in 2019. The Group has not hedged net investments in foreign entities nor internal loans.

For the sensitivity analysis as defined in IFRS 7, a possible +/- 10 per cent change in the main currencies was assessed, with all other factors remaining unchanged. The sensitivity analysis is based on the foreign currency denominated assets and liabilities as of 31 December 2019. The analysis takes into consideration the impact of foreign exchange derivatives, if such instruments have been used, which offsets the effects of changes in foreign exchange rates.

In the table below, the effect of the main currencies on consolidated result before taxes has been analysed. Only risks that are related to financial instruments are included in the analysis.

EUR thousand	Gross position	Change in currency rate	
		-10 per cent	+ 10 per cent
USD/EUR	-1,805	-201	164
BRL/EUR	-740	-82	67
CHF/EUR	-503	-56	46
CNY/EUR	-3,518	-391	320
GBP/EUR	565	63	-51
	-6,001		

### Interest Rate Risk

Possible changes in the interest rates cause a risk that will affect the result of the Group. The objective of interest risk management is to minimize, if necessary, the effect of interest rate fluctuations on the Group's annual result.

As measurement for the management of interest rate risk, the effect of an 1 percentage point change of interest rate on interest expenses for the coming 12 months is used. At the end of 2019 this effect was EUR 400 thousand (EUR 70 thousand). The increase is due to a increase in loan capital compared to the previous year.

On 31 December 2019, the Group's interest-bearing net debt mainly consisted of loans agreed with lenders in the financing agreement signed in April 2019 as well as a TYEL loan, signed in 2016.

For the sensitivity analysis as defined by IFRS 7, a possible +1 / -0.5 percentage point change in the interest rates was assessed. The effect of the change on the Group's re-

sult before taxes given the level of debt with floating interest rates on 31 December 2019 is EUR -0.40 / +0.20 (-0.07 / +0.04) million.

### Credit and Counterparty Risk

The Group becomes exposed to credit and counterparty risks when it grants payment time to the customers. The credit worthiness of these counterparties may decrease and affect Group's result. Credit risk management is conducted in accordance with the Group's Credit Management Policy.

The objective for credit risk management is to reduce this risk as much as possible without compromising the flexibility needed by different business areas. Risk management is performed together with the business management with the objective to avoid major credit risk concentrations and to verify, that sufficient guarantees and collaterals are received. The Group reduces its credit risk by using letters of credit and various types of guarantees received from

the customers to secure the receivables. In addition, the Group uses advance payments to reduce risk and to accelerate fund inflows.

At the end of 2019 12.7 (8.7) per cent of Group's trade receivables were secured by various types of guarantees.

The Group's client base is diversified over several different geographical areas and customer segments which reduces major concentrations of credit risk. The largest single customer's share of the Group's receivables is not significant in terms of risk management. Significant unfavourable changes in the level of investment demand might, however, cause changes in the development of the Group's credit risk.

The Group's liquid funds are invested to mitigate risk and only counterparties with high credit rating are accepted. Investment portfolio consist mainly of money market deposits or commercial papers.

### Trade receivables

The quality of trade receivables is assessed by each group company based on the Group's Credit Management Policy. Based on these assessments, impairment losses on trade receivables are recognized in accordance with the Credit Policy.

The total carrying amount of trade receivables on 31 December 2019 was EUR 18.5 million (EUR 12.7 million).

Ageing analysis and changes in allowance account of trade receivables are presented in Note 19 to the consolidated financial statements.

### Liquidity Risk

Liquidity risk is defined as the risk that the Group's funds and borrowing facilities become insufficient to meet the business needs or that significant extra costs are incurred in order to arrange the financing needed.

Liquidity risk is managed through effective use of advance payments in order to reduce the amount of working capital tied up in the operations. A special focus is set on the working capital management and the development is monitored regularly. Short- and long-term cash planning is part of group companies' operational activity together with the Group Treasury. As a measurement for the liquidity risk are the Group's liquid funds and unused credit facilities. Group Treasury reports the Group's liquidity position regularly to the management and to the Board of Directors of Glaston Corporation

The Group's funding is mainly organized by using the approximately EUR 75 million facilities agreement signed 2019 from which EUR 35 million is committed credit facilities.

### Committed credit facilities

EUR million	In use	Unused	Total
Committed credit facilities 31.12.2019	10.6	24.4	35.0
Committed credit facilities 31.12.2018	5.3	19.7	25.0

### Maturity analysis of financial liabilities 31 December 2019

EUR thousand

Maturity of financial liabilities	Carrying amount	Contractual cash flows	Maturing in		
			< 12 months	1-2 years	> 2 years
<b>Financial liabilities</b>					
Commercial papers	-	-	-	-	-
Interest bearing loans	40,873	45,038	4,825	5,720	34,494
Other interest-bearing loans	2,090	2,215	21	42	2,152
Lease liabilities	9,930	11,684	1,700	1,442	6,788
Trade payables	14,608	14,608	14,608	-	-

### Maturity analysis of financial liabilities 31 December 2018

EUR thousand

Maturity of financial liabilities	Carrying amount	Contractual cash flows	Maturing in		
			< 12 months	1-2 years	> 2 years
<b>Financial liabilities</b>					
Commercial papers	2,000	2,000	2,000	-	-
Interest bearing loans	8,716	9,153	2,795	5,360	998
Other interest-bearing loans	2,017	2,097	20	371	1,706
Lease liabilities	9,021	11,625	1,469	1,807	5,746
Trade payables	11,072	11,072	11,072	-	-

## Management of Capital

The objective for management of capital is to secure the continuation of operations at all times and to maintain appropriate capital structure. In the capital management planning process, both current and future needs of the business are taken into consideration together with securing flexibility and competitive pricing of financing.

The primary measure for the Group's capital structure is net gearing. It is calculated as the ratio between net interest-bearing debt to equity. The Group's equity ratio is also used as a measure for the capital structure. It is calculated as the ratio between equity to the total assets adjusted with advance payments received. Addition-

ally, the Group's liquid funds are monitored regularly.

The Group's loan agreements include covenants and other terms and conditions which are linked to consolidated key figures. If the covenant terms are not fulfilled, negotiations with the lenders will be initiated. These negotiations may lead to notice of termination of financial agreements. The covenants in use are net interest-bearing debt to equity (gearing ratio) and interest-bearing debt to EBITDA (leverage). Group treasury is responsible for monitoring the covenants and reports the situation regularly to management and the Board of Directors of Glaston Corporation. All covenant terms during the financial year have been met.

EUR thousand	restated*	
	31 December, 2019	31 December, 2018
<b>Interest-bearing net debt</b>		
Non-current interest-bearing liabilities	47,550	15,641
Current interest-bearing liabilities	5,344	6,113
Cash and cash equivalents	-19,861	-7,852
<b>Total</b>	<b>33,032</b>	<b>13,902</b>
<b>Equity</b>		
Attributable to owners of the parent	73,429	36,332
Non-controlling interest	-0	67
<b>Total</b>	<b>73,429</b>	<b>36,399</b>
Total assets	216,671	98,872
Advances received	-40,302	-16,977
<b>Total</b>	<b>176,370</b>	<b>81,895</b>
Equity ratio, %	41.6%	44.4%
Net gearing, %	45.0%	38.2%

The consolidated equity and thus the capital structure is decreased by dividends and return of capital paid and acquisition of Glaston Corporation's own shares. The equity can be increased by disposal of own shares and share issues. The authorizations of the Board of Directors to acquire and dispose

own shares, and to issue new shares, are disclosed in Note 4 to the consolidated financial statements. Equity is also affected by the result for the reporting period, as well as by changes in fair value reserve and exchange differences included in equity.

# Shares and Shareholders

## Shares and Voting Rights

Glaston Corporation has one class of shares. The number of outstanding shares is 84 289 911 and each share carries one vote at general meetings of shareholders. There are no limitations to transfer the shares. At the end of 2019 and 2018, Glaston Corporation's share capital amounted to EUR 12,696,000. The share has no nominal value. The share's counter book value is EUR 0.15 per share. Glaston's shares are registered in the book-entry securities system maintained by Euroclear Finland Ltd.

According to the Articles of Association of Glaston Corporation, a shareholder whose proportion of all the company's shares or the votes conferred by the shares - either alone or together with other shareholders as defined hereinafter - reaches or exceeds 33 1/3 per cent or 50 per cent is obligated, upon a demand by the other shareholders, to redeem their shares and the securities entitling their holders to shares under the Companies Act according to the provisions of this article.

According to the Articles of Association of Glaston Corporation the redemption price in respect of shares shall be the higher of the following:

- a) the weighted average price of trading in the share during the last ten (10) trading days on the NASDAQ Helsinki Ltd. before the

day when the company received from the Redeeming Shareholder a notification that the shareholding or voting rights limit as set forth above had been reached or exceeded or, should such notification be lacking or fail to be received by the deadline, when the company's Board of Directors otherwise received knowledge of it;

- b) the average price, weighted by the number of shares, which the Redeeming Shareholder has paid for the shares which he has purchased or otherwise received during the last twelve (12) months before the day specified in paragraph a) above.

The redemption obligation set forth in the Articles of Association does not pertain to a shareholder who can prove that the shareholding or voting rights limit entailing a redemption obligation was reached or exceeded before the relevant provision of these Articles of Association was entered in the Trade Register.

## Reverse share split

The Extraordinary General Meeting of Glaston Corporation held on 26 February 2019 resolved that the number of shares in Glaston Corporation will be reduced without reducing the share capital by merging each five shares in the company to one share.

## Directed share issue

Based on the authorization granted by Glaston's Extraordinary General Meeting on 26 February 2019, the Board of Directors resolved on 1 April 2019 has on the directed share issue of approximately EUR 15 million. In the Directed Share Issue, the Board of Directors resolved to issue a total of 7,407,405 new shares to AC Invest Eight B.V., Hymy Lahtinen Oy, Ilmarinen Mutual Pension Insurance Company, and Varma Mutual Pension Insurance Company (the "Anchor Investors") in deviation from the pre-emptive subscription right of the shareholders. The shares subscribed for in the Directed Share Issue have been registered with the Finnish Trade Register on 9 April 2019.

## The cancellation of the treasury shares

Pursuant to an old arrangement between the Company and Evli Awards Management Oy, Evli held 157,716 shares, which have been considered, financially and in respect of shareholder rights, as treasury shares held by the company. The said arrangement has been terminated and thus the shares held by Evli have become redundant. In accordance with a consent by Evli, the Board of Directors of Glaston on 1 April 2019 resolved to cancel, pursuant to Chapter 15 Section 12 of the Finnish Limited Liability Companies Act (624/2006, as amended), 157,716 shares of

the Company registered in Evli's book-entry account. The cancellation of shares does not affect Glaston's results of operations, cash flow or equity. The cancellation of the shares have been registered with the Finnish Trade Register on 9 April 2019.

## Rights offering

The Board of Directors of the Company resolved on 29 May 2019, based on the authorization granted by the Extraordinary General Meeting of Glaston held on 26 February 2019, to carry out carry out a Rights Offering of approximately EUR 34 million with pre-emptive subscription rights to shareholders of the company. The proceeds received by the Company were used for the repayment of the outstanding bridge facility. The final result of Glaston Corporation's rights offering shows that 37,236,320 shares, corresponding to approximately 97.19 percent of the new shares offered were subscribed for pursuant to the exercise of subscription rights. The remaining 1,077,275 Offer Shares have been allotted to subscribers who have subscribed for Offer Shares without subscription rights. The subscription price was EUR 0.89 per Offer Share. Glaston received approximately EUR 34 million through the Offering before taking into account any transaction costs in relation to the offering.

As a result of the share issue the num-

ber of shares increased with 38,313,597 shares from 45,976,316 shares to a total of 84,289,911 shares.

The Offer Shares were registered with the Finnish Trade Register on 27 June 2019.

Number of shares and treasury shares	2019	2018
<b>Number of shares (registered)</b>		
Number of shares 1 January	193,633,136	193,708,336
Cancellation of shares 27.4.2018	-	-75,200
Reverse split 1.3.2019	-154,906,509	-
Directed share issue 9.4.2019	7,407,405	-
Cancellation of the treasury shares 9.4.2019	-157,716	-
Rights offering 27.6.2019	38,313,595	-
Number of shares 31.12.	84,289,911	193,633,136
Treasury shares 31.12.	-	-788,582
<b>Number of shares without the treasury shares 31.12.</b>	<b>84,289,911</b>	<b>192,844,554</b>
<b>Average number of shares 31 December, excluding treasury shares</b>	<b>72,071,521</b>	<b>192,844,554</b>
<b>Acquisition and disposal of treasury shares</b>	<b>2019</b>	<b>2018</b>
Treasury shares 1 January, shares	788,582	788,582
Reverse split 1.3.2019	-630,866	-
Cancellation of treasury shares 9.4.2019	-157,716	-
<b>Treasury shares 31 December, shares</b>	<b>-</b>	<b>788,582</b>
Treasury shares 1 January, EUR thousand	3,308	3,308
Cancellation of treasury shares 9.4.2019	-3,308	-
<b>Treasury shares 31 December, EUR thousand</b>	<b>-</b>	<b>3,308</b>

#### Share-based incentive plan and management's shareholding

Share-based incentive plan is presented in detail in Note 30.

The Board of Directors' and Executive Management Group's share ownership is presented in detail in Note 31.

		restated*
<b>Equity attributable to owners of the parent per share</b>	<b>2019</b>	<b>2018</b>
Equity attributable to owners of the parent, EUR thousand	73,429	36,332
Number of shares	84,289,911	38,726,627
<b>Equity attributable to owners of the parent per share, EUR</b>	<b>0.87</b>	<b>0.94</b>
<b>Distribution of profit</b>		
Return of capital per share, EUR <sup>1)</sup>	0.02	0.03

\* Reverse share split was implemented on 1 March 2019. A Rights issue was implemented during the second quarter in 2019. The number of shares and the share price and key ratios based on these for the comparative period have been restated accordingly.

<sup>1)</sup> The Board of Directors' proposal to the Annual General Meeting.

# Business combinations

On 1 April 2019, Glaston Corporation completed the acquisition of the Swiss-German company Bystronic glass for an enterprise value of EUR 68 million.

Glaston Services Ltd Oy acquired 100% of the shares of Bystronic Maschinen AG and Bystronic Lenhardt GmbH and their subsidiaries. The purchase price of shared acquired was EUR 56.7 million. The purchase price does not include a conditional share. Goodwill recognized on the acquisition is EUR 27.7 million, with no tax deductible expense.

Bystronic glass provides globally high-end machinery, systems and services for glass processing.

The acquisition is in line with Glaston's strategy and supports Glaston's objective of further strengthening its position in the glass processing value chain, expanding Glaston's offering in terms of insulating

glass for the architectural market and in pre-processing for the automotive and display industry markets.

Through the acquisition, Glaston has a unique and value-adding offering benefiting its customers. The acquisition provides excellent opportunities for cross-selling of new equipment, for providing services directly from one supplier and for the joint development of integrated production lines. In addition, Bystronic glass will support the company's growth targets in emerging glass technologies. As a result of the acquisition, Glaston Corporation will grow substantially, and this will also offer a platform for growth and consolidation in the future.

If the acquisition had taken place on January 1, 2019, the Group's net sales would have been EUR 204.6 million and operating profit EUR 0.3 million.

## Bystronic glass purchase price allocation

### Acquired assets and liabilities, fair value

#### Non-current assets

Intangible assets	14.9
Tangible assets	17.4
Right-of-use assets	1.3
Deferred tax assets	1.8
<b>Total non-current assets</b>	<b>35.5</b>

#### Current assets

Inventory	30.3
Trade and other receivables	16.8
Bad debt provision	-1.4
Cash and cash equivalents	5.1
<b>Total current assets</b>	<b>50.8</b>
<b>Total assets</b>	<b>86.3</b>

#### Non-current liabilities

Non-current lease liabilities	1.2
Non-current interest-free liabilities and provisions	0.1
Deferred tax liabilities	6.6
Defined benefit pensions and other long-term employee benefits liabilities	0.2
<b>Total non-current liabilities</b>	<b>8.1</b>

#### Current liabilities

Current interest-bearing liabilities	16.9
Current lease liabilities	0.3
Current provisions	3.5
Trade and other payables	25.0
Contract liabilities	3.2
Liabilities for current tax	0.3
<b>Total current liabilities</b>	<b>49.2</b>
<b>Total liabilities</b>	<b>57.3</b>
<b>Total net assets acquired</b>	<b>29.0</b>
<b>Goodwill</b>	<b>27.7</b>
<b>Consideration paid</b>	<b>56.7</b>

<b>Fair value adjustments</b>	<b>Fair value adjustments EUR million</b>	<b>Estimated useful life (years)</b>	<b>Depreciation/ amortization/ year EUR million</b>
Buildings	4.8	20	0.2
Land	5.4	N/A	-
Trademark	3.1	3	1
Customer relationships	11.4	10	1.1
Inventory	0.7	2	0.4
<b>Total</b>	<b>25.4</b>		<b>2.8</b>

Related deferred tax liability 5.9

#### **Financing of the Bystronic glass acquisition**

The purchase price was paid in full on 1 April 2019. The Board of Directors of Glaston Corporation decided on a directed share issue of approximately EUR 15 million, based on the authorization granted by Glaston's Extraordinary General Meeting held on 26 February 2019. The proceeds of the directed share issue were used to finance part of the acquisition of Bystronic glass. In the directed share issue, the Board of Directors resolved to issue a total of 7,407,405 new shares to AC Invest Eight B.V., Hymy Lahtinen Oy, Ilmarinen Mutual Pension Insurance Company and Varma Mutual Pension Insurance Company in deviation from the pre-emptive subscription right of the shareholders. The number of shares represented approximately 19.1% of all the shares in Glaston immediately before the completion of the directed share issue.

The subscription price was approximately EUR 2.025 per share and was based on the volume-weighted average closing price of the Glaston share on Nasdaq Helsinki Ltd in the five trading days immediately preceding the announcement of the acquisition on 25 January 2019, adjusted with the reverse share split registered on 1 March 2019. The subscription price for the new shares were recorded in the reserve for invested unrestricted equity. In connection with the Bystronic acquisition, Glaston signed a new long-term financing agreement, which was used for financing the transaction, for refinancing Glaston's existing loan facilities as well as general working capital and guarantee needs. The package consists of borrowings by Glaston under senior secured credit facilities in an aggregate amount of EUR 75 million, comprising (i) a term

loan amounting to EUR 40 million and (ii) a revolving credit facility amounting to EUR 35 million, each with 3-year maturity from the closing of the acquisition. The financial covenants used in the financing agreement are gearing (net debt/equity) and leverage (net debt/EBITDA). Transaction costs arising from the acquisition were recognized as items affecting comparability in 2019 of totaling EUR 1.9 million. Transaction costs are included in other operating expenses in the income statement.

On the basis of the authorization given by the Extraordinary General Meeting on 26 February 2019, Glaston's Board of Directors decided on a rights issue of EUR 34 million with pre-emptive subscription rights to existing shareholders of the Company. The purpose of the share issue was to repay the remaining bridge loan. The subscription rights issue of Glaston on 19 June 2019, was subscribed with subscription rights using 37,236,320 shares, which corresponds to approximately 97.19 percent of the new shares offered. The remaining shares offered were subscribed in the secondary issue. The subscription price was EUR 0.89 per offer share. Glaston received approximately EUR 34 million from the offering before taking into account the transaction costs associated with the offering. As a result of the share issue, the number of Company's shares increased by 38,313,595 shares from 45,976,316 shares to a total of 84,289,911 shares. The new shares have been registered in the Trade Register on 27 June 2019.

# Segment Information

Glaston's reportable segments as of April 1, 2019 are Glaston and Bystronic glass. The reportable segments comply with the group's accounting and valuation principles. In inter-segment transactions, Glaston complies with the same commercial terms and conditions as in its third party transactions.

The reportable segments consist of operating segments, which have been aggregated in accordance with the criteria of IFRS 8.12. Operating segments have been aggregated, when the nature of the products and services is similar, the nature of the production process is similar as well as the type or class of customers. Glaston Group's business consists of the manufacture and sale of glass processing machines as well as the service operations for these machines. There is a high level of integration between glass machines and maintenance. Their customers are the same, as is their market development, which is linked to the general development of the global market.

Glaston's highest operative decision maker (CODM, Chief Operating Decision Maker) is Glaston Corporation's President & CEO, supported by the Executive Management Group. The President & CEO assesses the Group's financial position and its overall development.

## Reportable segment

EUR thousand

2019	Glaston	Bystronic glass	Total segment	Unallocated and eliminations	Total
External net sales	88,615	92,403	181,018	-	181,018
Internal net sales	-	44	44	-44	-
<b>Total net sales</b>	<b>88,615</b>	<b>92,447</b>	<b>181,062</b>	<b>-44</b>	<b>181,018</b>
<b>Comparable operating result of the segment</b>	<b>93</b>	<b>5,844</b>	<b>5,937</b>	<b>-</b>	<b>5,937</b>
Items affecting comparability	-4,742	-2,464	-7,206	-	-7,206
<b>Operating result</b>	<b>-4,649</b>	<b>3,380</b>	<b>-1,270</b>	<b>-</b>	<b>-1,270</b>
Financial items				-3,084	-3,084
Income taxes				-2,042	-2,042
<b>Result for the reporting period</b>	<b>-4,649</b>	<b>3,380</b>	<b>-1,270</b>	<b>-5,126</b>	<b>-6,396</b>
Segment assets	83,362	106,985	190,347	-	190,347
Other assets	-	-	-	26,325	26,325
<b>Total assets</b>	<b>83,362</b>	<b>106,985</b>	<b>190,347</b>	<b>26,325</b>	<b>216,671</b>
Segment liabilities	42,235	41,093	83,328	-	83,328
Other liabilities	-	-	-	59,915	59,915
<b>Total liabilities</b>	<b>42,235</b>	<b>41,093</b>	<b>83,328</b>	<b>59,915</b>	<b>143,243</b>
<b>Operative net working capital</b>	<b>-12,045</b>	<b>8,042</b>	<b>-4,003</b>	<b>-</b>	<b>-4,003</b>

The items affecting comparability of January-December 2019, in total EUR 7.2 million negative, mostly consist of integration and transaction costs of the acquisition.

Segment assets include external trade receivables and inventory, and segment liabilities include external trade payables and advance payments received. In addition, segment assets and liabilities include business related prepayments and accruals as well as other business related receivables and liabilities. Segment assets and liabilities do not include loan receivables, prepayments and receivables related to financial items, interest-bearing liabilities, accruals and liabilities related to financial items, income and deferred tax assets and liabilities nor cash and cash equivalents.

# Segment Information

restated* 2018	Glaston	Bystronic glass	Total segment	Unallocated and eliminations	Total
External net sales	100,991	-	100,991	148	101,139
Internal net sales	1,850	-	1,850	-1,850	-
<b>Total net sales</b>	<b>102,840</b>	<b>-</b>	<b>102,840</b>	<b>-1,701</b>	<b>101,139</b>
<b>Comparable operating result of the segments</b>	<b>5,663</b>	<b>-</b>	<b>5,663</b>	<b>-</b>	<b>5,663</b>
Items affecting comparability	-1,830	-	-1,830	-	-1,830
<b>Operating result</b>	<b>3,833</b>	<b>-</b>	<b>3,833</b>	<b>-</b>	<b>3,833</b>
Financial items		-		-1,239	-1,239
Income taxes		-		-671	-671
<b>Result for the reporting period</b>	<b>3,833</b>	<b>-</b>	<b>3,833</b>	<b>-1,910</b>	<b>1,923</b>
Segment assets	85,285	-	85,285	-	85,285
Other assets	13,587	-	13,587	-	13,587
<b>Total assets</b>	<b>98,872</b>	<b>-</b>	<b>98,872</b>	<b>-</b>	<b>98,872</b>
Segment liabilities	40,317	-	40,317	-	40,317
Other liabilities	22,156	-	22,156	-	22,156
<b>Total liabilities</b>	<b>62,473</b>	<b>-</b>	<b>62,473</b>	<b>-</b>	<b>62,473</b>
<b>Operative net working capital</b>	<b>-7,077</b>	<b>-</b>	<b>-7,077</b>	<b>-</b>	<b>-7,077</b>

The items affecting comparability of January-December 2018, in total EUR 1.8 million negative, consist of personnel and other costs related to business restructuring in Italy, United States, China and Brazil.

## Non-cash income and expenses included in operating result<sup>1)</sup>

	2019	2018
Segment total	-2,123	-1,036
Unallocated	-	-22
<b>Total non-cash expenses and income</b>	<b>-2,123</b>	<b>-1,059</b>

<sup>1)</sup> Excluding impairment.

Non-cash income and expenses in 2019 included the following items: impairment losses of trade receivables EUR 0.4 million, impairment losses of inventory EUR 1.66 million, changes in provisions EUR 0.0 million.

Non-cash income and expenses in 2018 included the following items: impairment losses of trade receivables EUR -0.7 million, impairment losses of inventory EUR -0.7 million, changes in provisions EUR 0.4 million.

## Orders received and order book

EUR million	2019	2018
<b>Orders received</b>		
Glaston	85.7	107.6
Bystronic glass	76.4	-
<b>Total</b>	<b>162.2</b>	<b>107.6</b>
<b>Order book</b>		
Glaston	37.6	38.2
Bystronic glass	41.8	-
<b>Total</b>	<b>79.5</b>	<b>38.2</b>

## Personnel

Number of personnel at the end of the year by segment	2019	2018
Glaston	382	357
Bystronic glass	408	-
<b>Total</b>	<b>790</b>	<b>357</b>

Number of personnel at the end of the year by geographical location		
Finland	177	193
Other EMEA*	355	28
Americas*	64	48
APAC*	194	88
<b>Total</b>	<b>790</b>	<b>357</b>

## Entity-wide disclosures

EUR thousand	2019	2018
<b>Net sales by product groups</b>		
Goods sold	170,989	97,467
Services rendered	10,029	3,673
<b>Total</b>	<b>181,018</b>	<b>101,139</b>
<b>Net sales by country by destination</b>		
Finland	7,251	7,065
Other EMEA*	69,224	47,215
Americas*	66,499	27,658
APAC*	38,044	19,201
<b>Total</b>	<b>181,018</b>	<b>101,139</b>
<b>Assets by country</b>		
Finland	78,576	86,327
Other EMEA*	100,584	1,500
Americas*	18,514	6,614
APAC*	18,997	4,430
<b>Total</b>	<b>216,671</b>	<b>98,872</b>

\*)

EMEA = Europe, the Middle East and Africa

Americas = North, Central and South America

APAC = China and the rest of the Asia-Pacific area

Glaston's revenues from any single external customer do not exceed 10 per cent of Glaston's total revenue.

# Revenue from contracts with customer

Classification of net sales

EUR thousand

2019	Glaston	Bystronic glass	Total segment	Unallocated and eliminations	Total
External net sales	88,615	92,403	181,018	-	181,018
Internal net sales	-	44	44	-44	-
<b>Total net sales</b>	<b>88,615</b>	<b>92,447</b>	<b>181,062</b>	<b>-44</b>	<b>181,018</b>
<b>Timing of revenue recognition</b>					
Over time	57,777	888	58,665	-	58,665
At a point in time	30,837	91,559	122,397	-44	122,353
<b>Total net sales</b>	<b>88,615</b>	<b>92,447</b>	<b>181,062</b>	<b>-44</b>	<b>181,018</b>

2018	Glaston	Bystronic glass	Total segment	Unallocated and eliminations	Total
External net sales	100,991	-	100,991	148	101,139
Internal net sales	1,850	-	1,850	-1,850	-
<b>Total net sales</b>	<b>102,840</b>	<b>-</b>	<b>102,840</b>	<b>-1,701</b>	<b>101,139</b>
<b>Timing of revenue recognition</b>					
Over time	70,785	-	70,785	-	70,785
At a point in time	32,055	-	32,055	-1,701	30,354
<b>Total net sales</b>	<b>102,840</b>	<b>-</b>	<b>102,840</b>	<b>-1,701</b>	<b>101,139</b>

## Contract assets and liabilities

EUR thousand	31.12.2019	31.12.2018
<b>Contract assets</b>		
Trade receivables	4,860	4,939
Project income receivables	12,647	10,315
<b>Contract assets total</b>	<b>17,506</b>	<b>15,254</b>
<b>Contract liabilities</b>		
Advance payments	-17,280	-11,149
Project expense liabilities	-2,485	-657
<b>Contract liabilities total</b>	<b>-19,765</b>	<b>-11,806</b>
<b>Gross contract assets/liabilities</b>	<b>-2,258</b>	<b>3,448</b>

Contractual receivables are recognized when project billing is lower than revenue recognized based on the progress of the project and, similarly, advances received and contractual liabilities are recognized if project billing exceeds the revenue recognized on the basis of the project. Contractual liabilities are recognized as revenue as the project is completed. Projects subject to partial revenue recognition are, as a rule, completed in less than a year from start-up. Due to the short-term nature of the projects, the relief afforded by IFRS 15.120 has been applied in reporting.

Terms of payment are generally 14-30 days from billing.

Glaston has applied IFRS 15 partial revenue recognition retrospectively for all projects and has not utilized the reliefs afforded by IFRS 15.C5.

	31.12.2019	31.12.2018
<b>Transaction price allocated to performance obligations that are partially or fully unsatisfied at the end of the reporting period</b>		
Allocated transaction price expected to be recognised as revenue	36,885	24,791

# Other Operating Income

## Other operating income

EUR thousand	2019	2018
Capital gains on sale of property, plant and equipment	39	276
Capital gains on sale of intangible assets	1	-
Rents	1,007	984
Government grants	8	22
Insurance compensation	14	659
Other income	776	302
<b>Other operating income total</b>	<b>1,844</b>	<b>2,243</b>

Government grants are essentially related to regional headquarter compensation.

# Materials and Other Operating Expenses

EUR thousand	restated*	
	2019	2018
Materials		
Materials and supplies, purchases during the period	-91,954	-48,789
Change in inventories of materials and supplies	-921	-436
<b>Total materials</b>	<b>-92,875</b>	<b>-49,225</b>
Other operating expenses		
Leases	-3,017	-2,587
Losses on sale of property, plant and equipment	-6	-63
Losses from sale of investment	-	-398
Subcontracting and maintenance	-5,202	-3,095
Commissions	-1,920	-492
Freight expenses	-4,030	-2,671
Travel expenses	-6,614	-3,856
External services, not production related	-5,535	-2,006
IT, internet and phone	-4,984	-3,203
Electricity, heating	-1,157	-991
Marketing expenses	-2,145	-1,001
Other expenses	-2,899	-445
<b>Total other operating expenses</b>	<b>-37,507</b>	<b>-20,809</b>
Fees for professional services rendered by auditors		
Auditing, EY	-394	-262
Other services, EY	-152	-70
Auditing, other companies	-36	-25
Other services, other companies	-35	-
Tax advisory, other companies	-122	-121
<b>Total</b>	<b>-739</b>	<b>-478</b>

EUR thousand	2019	2018
Research and development costs		
Recognized in profit or loss	-5,318	-2,769
Amortization, impairment losses and reversals of impairment losses of capitalized development costs during the reporting period, net	-1,119	-1,330
<b>Total</b>	<b>-6,437</b>	<b>-4,098</b>
As a percentage of net sales	3.6%	4.1%
Capitalized development costs during the reporting period	1,753	967
<b>Capitalized development costs during the reporting period, total</b>	<b>1,753</b>	<b>967</b>

The principal auditor of Glaston Group during the financial years of 2019 and 2018 has been Ernst & Young.

# Employee Benefits and Number of Personnel

EUR thousand	2019	2018
Employee benefits		
Wages and salaries	42,341	18,780
Pension expenses	4,152	2,421
Other personnel expenses	4,512	2,135
Other post-employment benefits	369	15
<b>Total personnel expenses</b>	<b>51,374</b>	<b>23,351</b>

Share-based incentive plans are described in more detail in Note 30 to the consolidated financial statements.

Pension expenses		
Defined benefit plans	28	71
Defined contribution plans	4,123	2,350
<b>Total pension expenses</b>	<b>4,152</b>	<b>2,421</b>

Pension benefits are presented in more detail in Note 21 to the consolidated financial statements.

Number of personnel		
Number of personnel, average	689	379
Personnel in Finland, end of the period	177	193
Personnel outside Finland, end of the period	613	164
<b>Total</b>	<b>790</b>	<b>357</b>

# Financial Income and Expenses

EUR thousand	2019	2018
Recognized in profit or loss		
<b>Interest income</b>		
Interest income on loans and receivables	179	109
Total interest income	179	109
<b>Dividend income</b>		
Dividend income measured at fair value through other comprehensive income	8	8
<b>Interest expenses</b>		
Interest expenses on financial liabilities measured at amortized cost	-1,512	-339
Other interest expenses	-602	-547
Total interest expenses	-2,115	-887
<b>Other financial expenses</b>		
On financial liabilities measured at amortized cost	-322	-239
On bank fees	-145	-91
Currency derivatives financial	-1	-1
Other financial expenses	-617	-72
Total other financial expenses	-1,085	-402
<b>Foreign exchange differences, net</b>		
On financial liabilities measured at amortized cost	-217	-12
On loans and receivables	-29	-54
Other foreign exchange gains and losses	175	-1
Total foreign exchange differences	-72	-67
<b>Total financial income and expenses in financial items</b>	<b>-3,084</b>	<b>-1,239</b>

restated\*

EUR thousand	2019	2018
<b>Net foreign exchange differences in operating result</b>		
Net sales	-318	-161
Purchases	48	-136
Other operating expenses	1	4
<b>Total</b>	<b>-269</b>	<b>-292</b>
Derivatives recognized in profit or loss		
<b>Currency derivatives, hedge accounting</b>		
Realized currency derivatives recognized in net sales	-248	-45
<b>Total</b>	<b>-248</b>	<b>-45</b>
Recognized in other comprehensive income		
Fair value changes of financial assets measured at fair value through other comprehensive income	63	16
<b>Total in other comprehensive income</b>	<b>63</b>	<b>16</b>

Borrowing costs were not capitalized in Glaston Group in 2019 or 2018 as Glaston has not had any qualifying assets as defined in IAS 23 Borrowing Costs.

Impairment losses on trade receivables are presented in Note 18.

# Income Taxes

EUR thousand	restated*	
	2019	2018
Income tax charge in income statement		
Current income tax charge	-871	-246
Adjustments in respect of current income tax of previous years	32	92
Deferred tax charge	-1,114	-511
Other	-88	-6
<b>Total income tax charge</b>	<b>-2,042</b>	<b>-671</b>
Income taxes recognized in other comprehensive income and in equity		
Deferred taxes		
Share-based incentive plan recognized in equity	-2	-
Actuarial gains and losses arising from defined benefit plans	268	-
Fair value changes of financial assets measured at fair value through other comprehensive income	-12	2
<b>Total taxes recognized in other comprehensive income and in equity</b>	<b>254</b>	<b>2</b>

EUR thousand	restated*	
	2019	2018
Reconciliation of income tax expense calculated at statutory tax rates with income tax expense in the income statement		
Profit before taxes	-4,354	2,594
Tax at the tax rate applicable to the parent	871	-519
Difference due to different tax rates of foreign subsidiaries	-625	205
Tax exempt income and non-deductible expenses	57	-623
Losses, where no deferred tax benefit is recognized	-3,159	-498
Deferred taxes recognized during the reporting period in respect of previous years' temporary differences	18	6
Withholding taxes and adjustments in respect of current income tax of previous periods	-56	86
Use of losses for which deferred tax has not been recognized	852	672
<b>Income taxes in the income statement</b>	<b>-2,042</b>	<b>-671</b>
Effective tax rate	-47%	-26%

The Group companies have tax losses totalling EUR 46,4 (33.0) million, which can be applied against future taxable income. A deferred tax asset has not been recognized for all tax losses, due to the uncertainty regarding the extent to which they can be used. There are several years before the tax losses expire.

Deferred tax assets are recognized for deductible temporary differences and tax losses to the extent that it is probable that taxable profit will be available, against which

tax credits and deductible temporary differences can be utilized. Changes in tax rates have been taken into account when calculating deferred taxes. Corporate tax rate in Finland is 20.0 percent.

Deferred tax liability has not been recognized in 2019 or 2018 of the undistributed earnings of Finnish or foreign subsidiaries as the majority of such earnings can be transferred to the owner without any tax consequences.

EUR thousand	restated*	
	2019	2018
Tax assets and tax liabilities		
Deferred tax assets	1,256	617
Assets for current tax	219	377
Deferred tax liabilities	6,669	164
Liabilities for current tax	354	180

# Reconciliation of deferred tax assets and deferred tax liabilities 2019

<b>Deferred tax assets</b>	<b>1 January</b>	<b>Exchange difference</b>	<b>Change in income statement (- tax expense)</b>	<b>Acquisition of business</b>	<b>Recognized in equity</b>	<b>Recognized in other comprehensive income</b>	<b>31 December</b>
Defined benefit employee benefits	-	-	-	-	-	-	-
Unrealized internal profits, inventory	135	-	-44	-	-	-	91
Unrealized internal profits, property, plant and equipment and intangible assets	- 0	-	-	-	-	-	-0
Confirmed tax losses carried forward <sup>†</sup>	128	-	800	-	-	-	928
Share-based payments	-	-	0	-	-	-	0
Other temporary differences	354	14	-404	272	-	-	237
<b>Deferred tax assets in statement of financial position</b>	<b>617</b>	<b>14</b>	<b>353</b>	<b>272</b>	<b>-</b>	<b>-</b>	<b>1,256</b>

<sup>†</sup>\* Deferred tax asset from losses of the reporting period has been recognized during the reporting period 0,8 EUR million.

Other temporary differences consist of expenses which were not tax deductible in the reporting period, but will be tax deductible in future.

<b>Deferred tax liabilities</b>	<b>1 January</b>	<b>Exchange difference</b>	<b>Change in income statement (+ tax expense)</b>	<b>Acquisition of business</b>	<b>Recognized in equity</b>	<b>Recognized in other comprehensive income</b>	<b>31 December</b>
Untaxed reserves	-388	-	-23	-	-	-	-411
Defined benefit employee benefits	17	-	-114	-35	-	-268	-401
Intangible assets recognized at fair value	0	-	-	-	-	-	0
Fair value changes of financial assets	35	-	-	-	-	12	47
Share-based payments	0	-	-	-	-2	-	-2
PPA allocation	-	-	-	5,871	-	-	5,871
Other temporary differences	499	13	1,604	-677	125	-	1,563
<b>Deferred tax liabilities in statement of financial position</b>	<b>164</b>	<b>13</b>	<b>1,467</b>	<b>5,159</b>	<b>123</b>	<b>-256</b>	<b>6,669</b>

Other temporary differences consist of, among other things, differences between local and IFRS accounting principles, which create timing differences in recognizing revenue and expenses.

<b>Total change in deferred taxes in income statement (- tax expense)</b>	<b>-1,114</b>
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# Reconciliation of deferred tax assets and deferred tax liabilities 2018

<b>Deferred tax assets</b>	<b>1 January</b>	<b>Exchange difference</b>	<b>Change in income statement (- tax expense)</b>	<b>Recognized in other comprehensive income</b>	<b>31 December</b>
Defined benefit employee benefits	-	-	-	-	-
Unrealized internal profits, inventory	193	-	- 58	-	135
Unrealized internal profits, property, plant and equipment and intangible assets	-0	-	-	-	-0
Confirmed tax losses carried forward <sup>†</sup>	453	-	-325	-	128
Share-based payments	-	-	-	-	-
Other temporary differences	365	-	- 11	-	354
<b>Deferred tax assets in statement of financial position</b>	<b>1,011</b>	<b>-</b>	<b>- 394</b>	<b>-</b>	<b>617</b>

<sup>†</sup> No deferred tax asset from losses of the reporting period has been recognized during the reporting period.

Other temporary differences consist of expenses which were not tax deductible in the reporting period, but will be tax deductible in future.

<b>Deferred tax liabilities</b>	<b>1 January</b>	<b>Exchange difference</b>	<b>Change in income statement (+ tax expense)</b>	<b>Recognized in other comprehensive income</b>	<b>31 December</b>
Untaxed reserves	-435	-	47	-	-388
Defined benefit employee benefits	17	-	-	-	17
Intangible assets recognized at fair value	0	-	-	-	0
Fair value changes of financial assets measured at fair value through other comprehensive income	32	-	-	3	35
Share-based payments	-	-	-	-	-
Other temporary differences	653	10	-164	-	499
<b>Deferred tax liabilities in statement of financial position</b>	<b>267</b>	<b>10</b>	<b>-117</b>	<b>3</b>	<b>164</b>

Other temporary differences consist of, among other things, differences between local and IFRS accounting principles, which create timing differences in recognizing revenue and expenses.

<b>Total change in deferred taxes in income statement (- tax expense)</b>	<b>-511</b>
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# Depreciation, Amortization and Impairment of Assets

EUR thousand	restated*	
	2019	2018
Depreciation and amortization		
Intangible assets		
Intangible rights	2,230	554
Capitalized development expenditure	1,131	1,338
Property, plant and equipment		
Buildings and constructions	2,689	1,940
Machinery and equipment	1,853	866
Other tangible assets	190	157
<b>Total depreciation and amortization</b>	<b>8,094</b>	<b>4,855</b>
Impairment losses		
Intangible assets		
Goodwill	-	-
Intangible rights	-	-
Capitalized development expenditure	-	-
Property, plant and equipment		
Machinery and equipment	55	-
<b>Total impairment losses</b>	<b>55</b>	<b>-</b>
<b>Total depreciation, amortization and impairment</b>	<b>8,148</b>	<b>4,855</b>

## Impairment of assets

Goodwill and intangible assets with indefinite useful life are tested for impairment annually in accordance with IAS 36. Glaston does not have other intangible assets than goodwill with indefinite useful life and which are not amortized. Intangible assets not yet in use are also tested during the reporting period for impairment. Impairment testing

is performed also always when there is indication that the recoverable amount of an asset or cash generating unit is lower than its carrying amount.

Glaston's cash generating units are Heat Treatment Machines, Services, Insulating Glass Technologies and Automotive Glass Technologies

Goodwill has been tested for impairment

by comparing the recoverable amount of the cash generating unit, to which the goodwill has been allocated, with the carrying amount of the cash generating unit. Impairment loss is recorded if the recoverable amount is lower than the carrying amount. Consistent methods have been used in testing property, plant and equipment and intangible assets. If the asset has been classified as held for sale, the recoverable amount used is the fair value of the asset less costs of sale.

The recoverable amount of a cash generating unit is its value in use, based on its discounted future cash flows. These cash flows are based on the forecasts approved by the management. Forecasts are used as a basis of the future cash flows for a maximum of five years. Cash flows have, however, been adjusted so that the future cash flows used in impairment testing exclude any cash flows from uncommitted future restructuring and cash flows arising from improving or enhancing the asset's performance. The cash flows of restructuring programs, in which the Group was committed at the date of the testing, are included in testing.

Subsequent cash flows are estimated by extrapolating the cash flow estimates. Terminal values have been calculated using Western European long-range growth rate if Western Europe has been considered to be the main market area of the cash-generating unit. If the main market areas are considered

to have moved or to move over to other areas, such as Asia or other emerging markets, this growth have been taken into account in terminal value.

The assumptions used in impairment calculations are mainly the same as in estimates. The assumptions, such as for example market development on short term and price development of products, are based on past experience and information gathered from external sources. Assumptions on market development on longer term are based on external sources, such as market studies on development of flat glass consumption. The new products are expected to receive good response from customers and this is expected to give Glaston better position on the market compared to competitors. Restructuring measures to improve cost structure have already improved and will further improve profitability.

The discount rate used in arriving at the recoverable amount is the pre-tax weighted average cost of capital, which reflects the current market assessment of time value of money and of risks related to the assets and the countries of operation. Also the industry's median capital structure has been taken into account in determining the discount rate as well as Glaston's cost of debt.

There are no changes in the sources of information used in determining the discount rates. The importance of the different ge-

ographical areas has slightly changed due to the change in the geographical focus of business. This has had an impact on defining the risk-free interest rates and country risk premiums. The impact of the global economic uncertainty on the level of interest rates in different geographical areas has affected the determination of the discount rate.

Discount rates have been calculated separately for each cash generating unit and they can vary between the units. The discount rate depends, among other things, on the geographical allocation of cash flows as well as the relative importance of these cash flows. These can differ between the cash generating units.

#### The most significant assumptions used in value in use calculations in 2019

	Heat Treatment Machines	Services	Insulating Glass Technologies	Automotive Glass Tehcnologies
Pre-tax discount rate	11.4%	11.4%	10.7%	11.1%
Long-term growth rate	2.0%	2.0%	2.0%	2.0%

#### The most significant assumptions used in value in use calculations in 2018

Pre-tax discount rate	12.1%	12.6%
Long-term growth rate	2.0%	2.0%

#### Impairment testing of goodwill

##### Goodwill

EUR million

Cash generating unit	1 January, 2019	Aquisition of business	Impairment loss	31 December, 2019
Heat Treatment Machines	4.1	-	-	4.1
Services	26.5	-	-	26.5
Insulating Glass Technologies	-	19.4	-	19.4
Automotive Glass Tehcnologies	-	8.3	-	8.3
<b>Total</b>	<b>30.6</b>	<b>27.7</b>	<b>-</b>	<b>58.3</b>

Cash generating unit	1 January, 2018	Acquisition of business	Impairment loss	31 December, 2018
Heat Treatment Machines	4.1	-	-	4.1
Services	26.5	-	-	26.5
<b>Total</b>	<b>30.6</b>	<b>-</b>	<b>-</b>	<b>30.6</b>

#### Sensitivity analysis

The recoverable amounts used in impairment testing are subject to change if the assumption used in calculation of the recoverable amounts changes.

The management estimates, that in most cases, a reasonably possible change in a key

assumption do not cause the cash generating unit's carrying amount to exceed its recoverable amount. The cases in which a reasonably possible change in a key assumption would cause the carrying amount of a cash generating unit to exceed its recoverable amount are presented in the table on page 77.

The recoverable amounts of these cash generating units exceed their carrying amounts by 46 per cent in the Heat Treatment Machines business, by 60 per cent in the Service business, by 115 in the Insulating Glass Technologies business and by 30 per cent in the Automotive Glass Technologies business.

A change in an assumption which, other things being equal, would cause the recoverable amount to equal the carrying amount:

<b>Post-tax discount rate</b>	<b>Value assigned to the assumption</b>	<b>Value Change</b>
Heat Treatment Machines	9.6%	13.1%
Services	9.2%	13.7%
Insulating Glass Technologies	9.0%	16.5%
Automotive Glass Tehcnologies	8.8%	10.7%

<b>Long-term growth rate</b>	<b>Value assigned to the assumption</b>	<b>Value Change</b>
Heat Treatment Machines	2.0%	-3.2%
Services	2.0%	-4.9%
Insulating Glass Technologies	2.0%	-11.1%
Automotive Glass Tehcnologies	2.0%	-0.5%

The costs of Heat Treatment Machines business are estimated to be 96 per cent of the estimated net sales during the testing period. Should the costs be 1 percentage points higher, the recoverable amount, other things being equal, would equal the carrying amount.

The costs of Services business are estimated to be 85 per cent of the estimated net sales during the testing period. Should the costs be 6 percentage points higher, the recoverable amount, other things being equal, would equal the carrying amount.

The costs of Insulating Glass Technologies business are estimated to be 93 per cent of the estimated net sales during the testing period. Should the costs be 5

percentage points higher, the recoverable amount, other things being equal, would equal the carrying amount.

The costs of Automotive Glass Technologies business are estimated to be 91 per cent of the estimated net sales during the testing period. Should the costs be 2 percentage points higher, the recoverable amount, other things being equal, would equal the carrying amount.

#### **Impairment of property, plant and equipment and intangible assets and reversal of impairment loss**

In 2019 or in 2018 Glaston had no impairment losses.

# Intangible Assets

Glaston has no other intangible assets than goodwill with indefinite useful life.

All intangible assets with the exception of goodwill are amortized over their useful lives.

EUR thousand	Capitalized development expenditure	Intangible rights	Goodwill	Other capitalized expenditure	Advances paid	Total
<b>2019</b>						
Acquisition cost at beginning of year	21,877	4,320	24,291	503	1,040	52,032
Increase, business acquisition	-	20,063	27,776	-	84	47,924
Other increases	15	175	-	-	2,146	2,335
Decreases	-	-138	-	-	-	-138
Reclassifications and other changes	862	148	-	-	-934	76
Exchange differences	5	-2	-	-	-	3
<b>Acquisition cost at end of year</b>	<b>22,759</b>	<b>24,566</b>	<b>52,067</b>	<b>503</b>	<b>2,336</b>	<b>102,232</b>
Accumulated amortization and impairment at beginning of year	-18,722	-2,750	6,260	- 503	-	- 15,715
Accumulated amortization relating to business acquisition	-	-5,233	-	-	-	-5,233
Accumulated amortization relating to decreases and transfers	-	137	-	-	-	137
Amortization during the reporting period	-1,131	-2,230	-	-	-	-3,361
Reclassifications and other changes	-	0	-	-	-	0
Exchange differences	-4	2	-	-	-	-2
<b>Accumulated amortization and impairment at end of year</b>	<b>-19,857</b>	<b>-10,074</b>	<b>6,260</b>	<b>-503</b>	<b>-</b>	<b>-24,173</b>
<b>Carrying amount at end of year</b>	<b>2,902</b>	<b>14,492</b>	<b>58,327</b>	<b>0</b>	<b>2,336</b>	<b>78,058</b>
<b>2018</b>						
Acquisition cost at beginning of year	21,340	4,291	24,291	503	615	51,039
Other increases	-	64	-	-	1,067	1,132
Decreases	-	-103	-	-	-	-103
Reclassifications and other changes	540	103	-	-	-643	0
Exchange differences	-3	-35	-	-	2	-37
<b>Acquisition cost at end of year</b>	<b>21,877</b>	<b>4,320</b>	<b>24,291</b>	<b>503</b>	<b>1,039</b>	<b>52,030</b>
Accumulated amortization and impairment at beginning of year	-17,386	-2,335	6,260	-503	-	-13,963
Accumulated amortization relating to decreases and transfers	-0	103	-	-	-	103
Amortization during the reporting period	-1,338	-554	-	-	-	-1,893
Exchange differences	3	35	-	-	-	37
<b>Accumulated amortization and impairment at end of year</b>	<b>-18,721</b>	<b>-2,752</b>	<b>6,260</b>	<b>-503</b>	<b>-</b>	<b>-15,716</b>
<b>Carrying amount at end of year</b>	<b>3,156</b>	<b>1,568</b>	<b>30,551</b>	<b>0</b>	<b>1,039</b>	<b>36,314</b>

# Property, Plant and Equipment

Glaston has given liens on chattel as security for liabilities. These are presented in Note 28. At the end of 2019 and 2018 Glaston did not have any pledged property, plant and equipment or intangible assets as security for liabilities.

At the end of 2019 and 2018 Glaston had not contractual commitments for the acquisition of property, plant and equipment.

In 2019 or 2018, Glaston did not receive any material third party compensation for items of property, plant and equipment that were impaired, lost or given up.

EUR thousand 2019	Land and water areas	Buildings and constructions	Investment property	Machinery and equipment	Right-of-use assets	Other tangible assets	Advances paid and assets under construction	Total
Acquisition cost at beginning of year	474	4,761	2,583	7,572	13,694	343	1,187	30,613
Increase, business acquisition	5,436	23,545	-	11,146	2,496	-	-	42,623
Other increases	-	115	-	591	1,262	89	1,327	3,384
Decreases	-	-	-	-843	-	-81	-	-924
Reclassifications and other changes	-	-	-	1,290	249	235	-1,423	352
Exchange differences	-	27	18	13	-	3	-	61
<b>Acquisition cost at end of year</b>	<b>5,910</b>	<b>28,448</b>	<b>2,601</b>	<b>19,769</b>	<b>17,702</b>	<b>588</b>	<b>1,092</b>	<b>76,109</b>
Accumulated depreciation and impairment at beginning of year	-	-2,868	-375	-5,988	-5,696	42	-	-14,885
Accumulated depreciation relating to business acquisition	-	-13,646	-	-8,988	-996	-	-	-23,629
Accumulated depreciation relating to decreases and transfers	-	-	-	795	-	78	-	873
Depreciation during the reporting period	-	-672	-137	-1,167	-2,563	-190	-	-4,728
Impairment losses (Note 13)	-	-	-	-55	-	-	-	-55
Reclassifications and other changes	-	-	-	0	-	-	-	0
Reclassified to assets held for sale (Note 13)	-	-	-	-158	-	-	-	-158
Exchange differences	-	-16	-1	-21	-	-3	-	-40
<b>Accumulated depreciation and impairment at end of year</b>	<b>-</b>	<b>-17,201</b>	<b>-513</b>	<b>-15,580</b>	<b>-9,254</b>	<b>-73</b>	<b>-</b>	<b>-42,621</b>
<b>Carrying amount at end of year</b>	<b>5,910</b>	<b>11,247</b>	<b>2,088</b>	<b>4,188</b>	<b>8,448</b>	<b>516</b>	<b>1,092</b>	<b>33,488</b>

restated\*

EUR thousand	Land and water areas	Buildings and constructions	Investment property	Machinery and equipment	Right-of-use assets	Other tangible assets	Advances paid and assets under construction	Total
<b>2018</b>								
Acquisition cost at beginning of year	474	4,784	2,606	10,142	14,551	339	684	33,580
Other increases	-	13	-	363	434	-	513	1,323
Decreases	-	-	-	-2,868	-	-	-	-2,868
Reclassifications and other changes	-	-	-	10	-	0	- 10	0
Exchange differences	-	-35	-23	-75	78	4	-	-51
<b>Acquisition cost at end of year</b>	<b>474</b>	<b>4,761</b>	<b>2,583</b>	<b>7,572</b>	<b>15,064</b>	<b>343</b>	<b>1,187</b>	<b>31,984</b>
Accumulated depreciation and impairment at beginning of year	-	-2,652	-243	-7,920	-5,228	203	-	-15,841
Accumulated depreciation relating to decreases and transfers	-	-	-	2,472	-	-	-	2,472
Depreciation during the reporting period	-	-237	-135	-598	-1,837	-157	-	-2,965
Exchange differences	-	21	3	59	-	- 3	-	80
<b>Accumulated depreciation and impairment at end of year</b>	<b>-</b>	<b>-2,868</b>	<b>-375</b>	<b>-5,988</b>	<b>-7,065</b>	<b>42</b>	<b>-</b>	<b>-16,254</b>
<b>Carrying amount at end of year</b>	<b>474</b>	<b>1,893</b>	<b>2,207</b>	<b>1,584</b>	<b>7,999</b>	<b>385</b>	<b>1,187</b>	<b>15,729</b>

Carrying amount of machinery and equipment used in production 31 December, 2019

2,549

Carrying amount of machinery and equipment used in production 31 December, 2018

1,144

## Subsidiary, with material non-controlling interest ownership

In 2018, the Group had a 70 per cent ownership in Chinese Glaston Tools (Sanhe) Co., Ltd. The remaining 30 per cent of the company was held by Sanhe New Stone Tools Super Hard Materials Co., Ltd. The Group had the right to nominate two out of three directors to the Board of Directors, including the chairman, who had a casting vote in case of equality of votes at the board meeting. Consequently, the entity was fully consolidated by the group, the part of the investor companion was reported as non-controlling interest.

Glaston made the decision in January 2018 to discontinue the production operations of its Chinese joint venture and Glaston Tools (Sanhe) Co. Company was liquidated in May 2019.

Included in the consolidated financial statements are the following items, that represent the Group's interest in the asset and liabilities, revenue and expenses of the subsidiary. The financial information presented in the table is based on the financial statements of the subsidiary, prepared in accordance with IFRS.

EUR thousand	2019	2018
Non-current asset	-	- 0
Current assets	-	231
Equity and long-term liabilities	-0	223
Short-term liabilities	-	8
Turnover	-	364
Expenses	-8	-834
Profit / Loss for the period	-8	-533
Profit / Loss attributable to parent company shareholders	-6	-373
Profit / Loss attributable to non-controlling interest	-2	-160
Dividends paid to non-controlling interest	-	-
Net cash flow from operating activities	-65	-69

## Other investments

### Financial assets measured at fair value through other comprehensive income

EUR thousand

#### 2019

	Shares and other long-term investments
Carrying amount 1 January	3,015
Fair value changes recognized in other comprehensive income	63
<b>Carrying amount 31 December</b>	<b>3,078</b>

#### 2018

	Shares and other long-term investments
Carrying amount 1 January	2,999
Fair value changes recognized in other comprehensive income	16
<b>Carrying amount 31 December</b>	<b>3,015</b>

Glaston's long term financial assets have been classified into assets recognized at fair value through other comprehensive income. The classification depends on the business model under which the financial assets are managed as well as the characteristics of the instrument's cash flows. A financial as-

set item is derecognized from the statement of financial position when Glaston's contractual right to the cash flows from the financial asset item expire or the financial asset item is transferred to an external party and the transfer fulfills the asset derecognition requirements of IFRS 9.

# Inventories

EUR thousand	restated*	
	2019	2018
<b>Inventories</b>		
Materials and supplies	15,493	2,617
Work in process	18,373	1,251
Finished goods	8,641	1,584
Advances paid	48	322
<b>Total inventories</b>	<b>42,556</b>	<b>5,774</b>
Impairment losses of inventory during the period	-2,605	-672
Reversals of impairment losses of inventory during the period	950	-
<b>Total</b>	<b>-1,655</b>	<b>-672</b>

# Receivables

Receivables	restated*	
EUR thousand	2019	2018
Trade receivables	18,460	12,316
Trade receivables, falling due after 12 months	7	413
Total trade receivables	18,468	12,729
Finance leasing receivables	85	79
Finance leasing receivables, falling due after 12 months	645	732
Prepaid expenses and accrued income	2,013	1,467
Prepaid expenses and accrued income, falling due after 12 months	135	138
Other receivables	2,187	1,628
Other receivables, falling due after 12 months	223	393
Current loan receivables	226	226
Non-current loan receivables <sup>(1)</sup>	1,531	1,485
<b>Total receivables</b>	<b>25,512</b>	<b>18,878</b>

Prepaid expenses and accrued income consist mainly of accruals of financial items, fair values of derivative instruments, accruals related to sales, accruals related to insurances and other accruals.

Prepaid expenses and accrued income related to derivative instruments are disclosed in more detail in Note 27.

Credit quality of other receivables is based on the debtors' payment history. Other receivables are not past due nor impaired.

Each loan receivable has been individually analyzed for a possible impairment loss. These analyses are based on the financial position and future cash flows of the debtor. Debtors have no external credit rating. In 2019, no impairment losses were recognized.

<sup>(1)</sup> In non-current assets

Ageing analysis of trade receivables at 31 December

	Carrying amount of trade receivables after recognizing allowance account	Past due				
		Not past due	< 30 days	31-180 days	181-360 days	> 360 days
2019	18,468	12,412	2,789	1,742	717	808
2018	12,729	7,762	1,204	2,077	1,139	548

Allowance account of trade receivables is used based on expected credit losses. These impairment losses are recognized in profit or loss. If the impairment loss recognized in the allowance account becomes final, trade receivables are decreased with the amount of the impairment loss and allowance account is adjusted respectively.

The counterparties of trade receivables do not normally have external credit rating. The credit quality of these receivables is assessed based on assessment of the impairment of financial assets based on expected credit losses and on the payment history of the customers and third party credit reports.

Also the trade receivables past due are analyzed both in reporting unit level and individually. If the days past due exceed the

time limits set in the Group's credit policy, an impairment loss is recognized of the trade receivable. The estimate made for doubtful receivables is based on a review of all trade receivables outstanding on the reporting date as well as on an assessment of the impairment of financial assets based on expected credit losses. The gross amount of impaired trade receivables at the end of the reporting period was EUR 3.7 (3.6) million, and the impairment loss of these receivables was EUR 2.4 (1.9) million.

If the counterparty of a trade receivable is insolvent, the trade receivable is individually determined to be impaired even though the trade receivable were not past due. Otherwise the trade receivables not past due are not determined to be impaired.

Impairment losses of trade receivables and changes in allowance account of trade receivables

EUR thousand

<b>Allowance account 1 January, 2018</b>	<b>1,754</b>
Exchange difference	-87
Charge for the year	891
Utilized	-453
Unused amounts reversed	-223
<b>Allowance account 31 December, 2018</b>	<b>1,881</b>
Exchange difference	20
Addition, acquisition of companies	1,372
Charge for the year	155
Utilized	-484
Unused amounts reversed	-585
<b>Allowance account 31 December, 2019</b>	<b>2,359</b>

Impairment losses of trade receivables recognized in profit or loss, net (- income)

<b>2019</b>	<b>433</b>
<b>2018</b>	<b>744</b>

Finance lease receivables	2019		2018	
	Minimun lease receivables	Unearned finance income	Minimun lease receivables	Unearned finance income
Finance lease receivables are due as follows				
No later than 1 year	85	23	79	24
Later than 1 year and no later than 5 years	368	64	356	75
Later than 5 years	276	13	376	30
<b>Total finance lease receivables</b>	<b>729</b>	<b>100</b>	<b>811</b>	<b>129</b>
<b>Present value of minimum lease receivables</b>	<b>745</b>		<b>825</b>	

# Total Comprehensive Income Included in Equity

2019	Other restricted			Cumulative	Non-controlling	
EUR thousand	equity reserves	Fair value reserve	Retained earnings	exchange difference	interest	Total
<b>Total other comprehensive income</b>						
Total exchange differences on translating foreign operations	0	-	-1	-362	0	-362
Change in actuarial gains and losses	-	-	-1,232	-	-	-1,232
Taxes on actuarial gains and losses arising from defined benefit plans	-	-	268	-	-	268
Fair value changes of financial assets measured at fair value through comprehensive income	-	63	-	-	-	63
Hedging	-	42	-	-	-	42
Income taxes on fair value changes of financial assets measured at fair value through comprehensive income	-	-12	-	-	-	-12
<b>Other comprehensive income</b>	<b>0</b>	<b>92</b>	<b>-964</b>	<b>-362</b>	<b>0</b>	<b>-1,234</b>
<b>Gain</b>	<b>-</b>	<b>-</b>	<b>-6,393</b>	<b>-</b>	<b>-2</b>	<b>-6,396</b>
<b>Total comprehensive income</b>	<b>0</b>	<b>92</b>	<b>-7,358</b>	<b>-362</b>	<b>- 2</b>	<b>-7,629</b>

restated\*

## 2018

<b>Total other comprehensive income</b>						
Total exchange differences on translating foreign operations	-1	-	-3	54	-1	51
Change in actuarial gains and losses	-	-	41	-	-	41
Fair value changes of financial assets measured at fair value through comprehensive income	-	11	-	-	-	11
Hedging	-	-90	-	-	-	-90
Income taxes on fair value changes of financial assets measured at fair value through comprehensive income	-	2	-	-	-	2
<b>Other comprehensive income</b>	<b>-1</b>	<b>-77</b>	<b>38</b>	<b>54</b>	<b>-1</b>	<b>14</b>
<b>Gain</b>	<b>-</b>	<b>-</b>	<b>2,083</b>	<b>-</b>	<b>-160</b>	<b>1,923</b>
<b>Total comprehensive income</b>	<b>-1</b>	<b>-77</b>	<b>2,122</b>	<b>54</b>	<b>-161</b>	<b>1,937</b>

# Pensions and Other Defined Long-term Employee Benefits

The Group has a defined benefit pension plan in Finland and in Bystronic Maschinen AG, Switzerland, acquired in 2019. The Group has also defined contribution pension plans, of which the charge to the income statement was EUR 3,4 (2.4) million.

In addition to defined benefit pensions, Glaston has no other long-term defined employee benefits in 2019. In 2018 Glaston had statutory defined benefit severance pay schemes in Mexico.

EUR thousand	2019	2018
Amounts in the statement of financial position relating to defined benefit pension plans		
Present value of unfunded obligations 1.1.	16	16
Business acquisition	18,497	-
Fair value of plan assets	16,720	-
Total deficit of defined benefit pension plans	-1,793	16
<b>Difference</b>	<b>-1,793</b>	<b>16</b>
Amounts in the statement of financial position		
Liabilities	1,793	16
Assets	-	-
<b>Net liability (asset -)</b>	<b>1,793</b>	<b>16</b>
Amounts in the statement of financial position relating to benefit pension plans		
Defined benefit obligation 1.1.	16	16
Business acquisition	19,126	-
Interest expense	164	-
Current service cost	746	-
Past service cost	455	-
Employee contributions	548	-
Benefits paid	-3,169	-
Actuarial gains (-) / losses (+)	888	-
Others	-261	-
<b>Defined benefit obligation</b>	<b>18,513</b>	<b>16</b>

	2019	2018
Reconciliation of the fair value of plan assets		
Fair value of plan assets 1.1., business acquisition	18,963	-
Interest income	162	-
Employer contributions	711	-
Employee contributions	548	-
Benefits paid	-3,169	-
Other gains (-) / losses (+) on settlement	-270	-
Return on plan assets (excluding amounts included in the net interest expense)	-225	-
<b>Fair value of plan assets</b>	<b>16,720</b>	<b>-</b>
Plan asset classes		
Cash and cash equivalents	502	-
Equity instruments	5,852	-
Debt instruments	7,524	-
Real estate	2,842	-
<b>Total plan assets</b>	<b>16,720</b>	<b>-</b>
Amounts in the statement of financial position relating to other long-term employee benefits		
Fair value of plan assets	-	-
Present value of unfunded obligations	-	142
Total deficit of defined benefit pension plans	-	-
<b>Difference</b>	<b>-</b>	<b>142</b>
Amounts in the statement of financial position		
Liabilities	-	142
Assets	-	-
<b>Net liability (asset -)</b>	<b>-</b>	<b>142</b>

## Changes of defined benefit pension

	Present value of obligation	Fair value on plan assets	Total
<b>1 January, 2018</b>	17	-	17
Current service cost	-	-	-
Interest expense / income	-	-	-
Past service cost	-	-	-
<b>Total</b>	<b>17</b>	<b>-</b>	<b>17</b>
<b>Remeasurements</b>			
Return on plan assets excluding amounts included in interest expense / income	-	-	-
Gain (-) / loss (+) from change in financial assumptions	-	-	-
Experience gain (-) / loss (+)	-	-	-
<b>Total</b>	<b>17</b>	<b>-</b>	<b>17</b>
Exchange differences	-	-	-
Contributions:			
Employers (+)	-	-	-
Plan participants (+)	-	-	-
Benefit payments (-)	-1	-	-1
<b>31 December, 2018</b>	<b>16</b>	<b>-</b>	<b>16</b>

	Present value of obligation	Fair value on plan assets	Total
<b>1 January, 2019</b>	<b>16</b>	<b>-</b>	<b>16</b>
Business acquisition	164	-	164
Current service cost	746	-	746
Interest expense / income	11	-	11
Past service cost	455	-	455
<b>Total</b>	<b>1,392</b>	<b>-</b>	<b>1,392</b>
<b>Remeasurements</b>			
Return on plan assets excluding amounts included in interest expense / income	-	-	-
Gain (-) / loss (+) from change in financial assumptions	1,113	-	1,113
Experience gain (-) / loss (+)	-	-	-
<b>Total</b>	<b>1,113</b>	<b>-</b>	<b>1,113</b>
Exchange differences	-1	-	-1
Contributions:			
Employers (+)	-711	-	-711
Plan participants (+)	-	-	-
Benefit payments (-)	-	-	-
<b>31 December, 2019</b>	<b>1,793</b>	<b>-</b>	<b>1,793</b>

Changes of other long-term employee benefit plans	Present value of obligation	Fair value on plan assets	Total
<b>1 January, 2018</b>	477	-	477
Divestments of business	-354	-	-354
Current service cost	7	-	7
Interest expense / income	8	-	8
Past service cost	-	-	-
<b>Total</b>	<b>138</b>	<b>-</b>	<b>138</b>
<b>Remeasurements</b>			
Return on plan assets excluding amounts included in interest expense / income	-	-	-
Gain (-) / loss (+) from change in financial assumptions	-11	-	-11
Experience gain (-) / loss (+)	-	-	-
<b>Total</b>	<b>-11</b>	<b>-</b>	<b>-11</b>
Exchange differences	15	-	15
Contributions:			
Employers (+)	-	-	-
Plan participants (+)	-	-	-
Benefit payments (-)	-	-	-
<b>31 December, 2018</b>	<b>142</b>	<b>-</b>	<b>142</b>

Changes of other long-term employee benefit plans	Present value of obligation	Fair value on plan assets	Total
<b>1 January, 2019</b>	142	-	142
Divestments of business	-142	-	- 142
Current service cost	-	-	-
Interest expense / income	-	-	-
Past service cost	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Remeasurements</b>			
Return on plan assets excluding amounts included in interest expense / income	-	-	-
Gain (-) / loss (+) from change in financial assumptions	-45	-	-45
Experience gain (-) / loss (+)	-	-	-
<b>Total</b>	<b>-45</b>	<b>-</b>	<b>-45</b>
Exchange differences	-	-	-
Contributions:			
Employers (+)	-	-	-
Plan participants (+)	-	-	-
Benefit payments (-)	-	-	-
<b>31 December, 2019</b>	<b>-45</b>	<b>-</b>	<b>-45</b>

The Group expects to contribute EUR 640 thousand to its other long-term employee benefit plans in 2020.

Actuarial assumptions	2019		2018	
	Defined pension plans <sup>1)</sup>	Other plans	Defined pension plans	Other plans
Discount rate, %	0.30-1.00%	0.00%	1.00%	9.10%
Future salary increase, %	1.50%	0.00%	-	5.50%
Future pension increases, %	0.00%	0.00%	1.85%	-
Inflation, %	0.00%	0.00%	1.60%	4.00%
Expected remaining service period, years	18	0	-	10

<sup>1)</sup> applied to benefit pension plan in Switzerland

Amounts for the current and previous periods, defined benefit pensions

	2019	2018	2017	2016
Defined benefit pension obligation	1,793	16	17	17
Plan assets	-	-	-	-
<b>Surplus / deficit (-)</b>	<b>-1,793</b>	<b>-16</b>	<b>-17</b>	<b>-17</b>
Experience adjustments on plan liabilities (gain -)	-	-	-	-

Amounts for the current and previous periods, other long-term employee benefit plans

Defined benefit obligation	-	142	477	476
Plan assets	-	-	-	-
<b>Surplus / deficit (-)</b>	<b>-</b>	<b>-142</b>	<b>-477</b>	<b>-476</b>
Experience adjustments on plan liabilities (gain -)	-	-	-	-

# Interest-bearing Liabilities

EUR thousand	2019	2018
Non-current interest-bearing liabilities		
Loans from financial institutions	39,320	8,089
Lease liabilities	8,230	7,552
Other non-current liabilities	-	-
<b>Total non-current interest-bearing liabilities</b>	<b>47,550</b>	<b>15,641</b>

## Maturity of long term interest bearing liabilities

	1-2 years	2-3 years	3-5 years	> 5 years	Total
Loans from financial institutions	4,230	33,000	-	2,090	39,320
Lease liabilities	1,442	1,140	2,152	3,496	8,230
Other non-current liabilities	-	-	-	-	-
<b>Total</b>	<b>5,672</b>	<b>34,140</b>	<b>2,152</b>	<b>5,586</b>	<b>47,550</b>

## Non-current liabilities by currency

EUR	39,320	8,089
Other currencies	-	-
<b>Total</b>	<b>39,320</b>	<b>8,089</b>

## Current interest-bearing liabilities

Loans from financial institutions	3,644	2,644
Lease liabilities	1,700	1,469
Other current interest-bearing liabilities	-	2,000
<b>Total current interest-bearing liabilities</b>	<b>5,344</b>	<b>6,113</b>

EUR thousand	2019	2018
Interest-bearing net liabilities		
Non-current interest-bearing liabilities	47,550	15,641
Current interest-bearing liabilities	5,344	6,113
Cash	-19,861	-7,852
<b>Total</b>	<b>33,032</b>	<b>13,902</b>

Group's funding is mainly organized by using the Facilities Agreement signed in March 2019.

Some of the Group's loan agreements include covenants and other terms and conditions which are linked to consolidated key figures. If the covenant terms are not fulfilled, negotiations with the lenders will be initiated. These negotiations may lead to notice of termination of financial agreements. Covenant terms are described in more detail in Note 3.

The liquidity and currency risk related to interest-bearing debt is described in more detail in Note 3.

	1.1.2019	Cash flow*	Effective rate and Exchange differences	Reclassification	31.12.2019
Non-current interest-bearing liabilities	15,641	35,751	-199	-3,644	47,550
Current interest-bearing liabilities	6,113	-4,413	-	3,644	5,344
<b>Total</b>	<b>21,754</b>	<b>31,339</b>	<b>-199</b>	<b>0</b>	<b>52,893</b>

\* Cash flow includes the changes of leasing agreements

# Leases

## Leases in the balance sheet

EUR million

Right-of-use assets	Buildings	Vehicles	Others	Total
Carrying amount at 1 January 2018	8.9	0.4	-	9.3
Additions	0.4	0.2	-	0.5
Decrease	-	0.0	-	0.0
Depreciation expense	-1.6	-0.3	-	-1.8
Carrying amount at 31 December 2018	7.7	0.3	-	8.0
Additions	2.0	1.1	1.0	4.0
Decrease	-	0.0	-	0.0
Depreciation expense	-2.2	-0.8	-0.6	-3.6
Carrying amount at 31 December 2019	7.5	0.6	0.4	8.4

EUR million

Lease Liabilities	2019	* restated 2018
Carrying amount at beginning of the period	9.0	10.2
Additions	3.1	0.5
Interest expense	0.5	0.5
Rental payment	-2.7	-2.3
Carrying amount at end of the period	9.9	9.0

The rate applied to lease liabilities recognized in the statement of financial position is the weighted average lessee's incremental borrowing rate at the initial application date, 2.79%. Maturity of lease liabilities is shown in note 22.

## Leases in profit and loss statement

EUR million	2019	* restated 2018
Depreciation of right-of-use assets	-2.6	-1.8
Interest expense on lease liabilities	-0.5	-0.5
Low value lease expense	0.0	-0.1
Short-term lease expense	-0.1	-0.1
<b>Total amounts recognised in profit or loss</b>	<b>-3.3</b>	<b>-2.6</b>

# Provisions

## Non-current provisions

EUR thousand

	Warranty provision	Other provisions	Total
<b>2019</b>			
Carrying amount 1 January	567	-	567
Reclassification	-573	-	-573
Increase in provisions	362	9	372
Group restructuring	-	156	156
Provisions released during the period	-	-6	-6
<b>Carrying amount 31 December</b>	<b>357</b>	<b>160</b>	<b>517</b>
<b>2018</b>			
Carrying amount 1 January	1,560	-	1,560
Reclassification	-1,201	-	-1,201
Increase in provisions	208	-	208
<b>Carrying amount 31 December</b>	<b>567</b>	<b>-</b>	<b>567</b>

### Warranty provisions

Glaston grants to its machine deliveries a guarantee period of 1 to 2 years. During the guarantee period Glaston repairs the defects, if any, of the machines and carries the costs of the repairing. The warranty provisions are expected to be realized within the next two years.

### Restructuring provisions

Glaston has recorded restructuring provisions for rationalization measures by closing production units or reducing activities at the units. Restructuring provisions only include expenses that are necessarily entailed by the restructuring, and which are not associated with the on-going activities. The restructuring

## Current provisions

	Warranty provision	Restructuring provision	Other provisions	Total
<b>2019</b>				
Carrying amount 1 January	1,521	156	3	1,681
Exchange difference	27	-3	-0	24
Reclassification	520	-	-	520
Increase in provisions	1,610	277	382	2,269
Group restructuring	3,393	-	66	3,459
Provisions used during the period	-1,198	-173	-31	-1,401
Provisions released during the period	-2,603	-	-33	-2,637
<b>Carrying amount 31 December</b>	<b>3,270</b>	<b>258</b>	<b>387</b>	<b>3,916</b>
<b>2018</b>				
Carrying amount 1 January	2,074	192	116	2,382
Exchange difference	-9	-21	-7	-37
Reclassification	1,201	-	-	1,201
Increase in provisions	850	53	0	904
Provisions used during the period	-1,197	-67	-36	-1,299
Provisions released during the period	-1,399	-	-70	-1,469
<b>Carrying amount 31 December</b>	<b>1,521</b>	<b>156</b>	<b>3</b>	<b>1,681</b>

ing provision includes, but is not limited to, estimated provisions for employee benefits related to personnel whose employment has been terminated. For some of the provisions it is not possible to estimate timing of the outflow of economic benefits, for example due to the timing of such outflows are dependent on the actions of an external party.

### Other provisions

Other provisions include, among other things, litigation provisions and provisions for costs, for which third party compensation has not yet been recognized.

# Interest-free Liabilities

EUR thousand	2019	2018
Current interest-free liabilities		
Trade payables	14,608	11,072
Advances received	40,302	16,977
Accrued expenses and deferred income	14,744	7,459
Other current interest-free liabilities	2,533	1,813
<b>Total current interest-free liabilities</b>	<b>72,186</b>	<b>37,321</b>

Accruals mainly consist of cost accruals for machinery deliveries, accrued personnel expenses, accruals related to net sales and purchases, accruals of interests and other accruals.

# Financial Assets and Liabilities

EUR thousand		Financial assets measured at fair value through other comprehensive income <sup>*)</sup>	Financial assets and liabilities at fair value through profit and loss <sup>*)</sup>	Loans and receivables	Financial liabilities at amortized cost	Total carrying amounts	Total fair value
<b>31.12.2019</b>	<b>Note</b>						
Cash	3	-	-	19,861	-	19,861	-
Trade receivables	19	-	-	18,468	-	18,468	-
Other interest-free receivables	19	-	-	2,506	-	2,506	-
Receivables related to financial liabilities		-	-	-	47	47	-
Current loan receivables	19	-	-	226	-	226	-
Other non-current interest-free receivables	19	-	-	223	-	223	-
Non-current loan receivables	19	-	-	1,531	-	1,531	-
Derivatives		-	-	-	-	-	-
Shares and other long-term investments	17	3,078	-	-	-	3,078	-
Non-current interest-bearing liabilities	22	-	-	-	-47,550	-47,550	-46,789
Current interest-bearing liabilities	22	-	-	-	-5,344	-5,344	-5,322
Trade payables	25	-	-	-	-14,608	-14,608	-
Other current interest-free liabilities	25	-	-	-	-2,533	-2,533	-
<b>Total</b>		<b>3,078</b>	<b>-</b>	<b>42,815</b>	<b>-69,987</b>	<b>-24,094</b>	<b>-52,111</b>

<sup>\*)</sup> If the fair value is not mentioned separately, the carrying amount is equal to fair value.

<b>31.12.2018</b>	<b>Note</b>	<b>Financial assets measured at fair value through other comprehensive income <sup>*)</sup></b>	<b>Financial assets and liabilities at fair value through profit and loss <sup>*)</sup></b>	<b>Loans and receivables</b>	<b>Financial liabilities at amortized cost</b>	<b>Total carrying amounts</b>	<b>Total fair value</b>
Cash	3	-	-	7,852	-	7,852	-
Trade receivables	19	-	-	12,729	-	12,729	-
Other interest-free receivables	19	-	-	1,847	-	1,847	-
Receivables related to financial liabilities		-	-	-	13	13	-
Current loan receivables	19	-	-	226	-	226	-
Other non-current interest-free receivables	19	-	-	393	-	393	-
Non-current loan receivables	19	-	-	1,485	-	1,485	-
Derivatives		-	-	-	-	-	-
Shares and other long-term investments	17	3,015	-	-	-	3,015	-
Non-current interest-bearing liabilities	22	-	-	-	-8,089	-8,089	-7,803
Current interest-bearing liabilities	22	-	-	-	-4,644	-4,644	-4,648
Trade payables	25	-	-	-	-11,072	-11,072	-
Other current interest-free liabilities	25	-	-51	-	-1,762	-1,813	-
<b>Total</b>		<b>3,015</b>	<b>-51</b>	<b>24,533</b>	<b>-25,555</b>	<b>1,942</b>	<b>-12,451</b>

<sup>\*)</sup> If the fair value is not mentioned separately, the carrying amount is equal to fair value.

Fair value measurement hierarchy, Level 3, changes during the reporting period

	2019	2018
1 January	2,842	2,842
Additions	-	-
Disposals	-	-
Impairment losses	-	-
Reclassification	-	-
<b>31 December</b>	<b>2,842</b>	<b>2,842</b>

	31.12.2019				31.12.2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Assets</b>								
Listed shares	236	-	8	244	173	-	8	181
Other long-term investments	-	-	2,834	2,834	-	-	2,834	2,834
Currency forward contracts	-	-	-	-	-	-	-	-
<b>Total</b>	<b>236</b>	<b>-</b>	<b>2,842</b>	<b>3,078</b>	<b>173</b>	<b>-</b>	<b>2,842</b>	<b>3,015</b>
<b>Liabilities</b>								
Financial liabilities	-	-52,111	-	-52,111	-	-12,451	-	-12,451
Currency forward contracts	-	-	-	-	-	-51	-	-51
<b>Total</b>	<b>-</b>	<b>-52,111</b>	<b>-</b>	<b>-52,111</b>	<b>-</b>	<b>-12,502</b>	<b>-</b>	<b>-12,502</b>

Fair value measurement hierarchy:

Level 1 = quoted prices in active markets

Level 2 = other than quoted prices included within Level 1 that are observable either directly or indirectly

Level 3 = not based on observable market data, fair value equals cost or cost less impairment

# Derivative Instruments

Glaston hedges foreign currency-denominated sales and cash flows of binding orders received with currency forwards. In fulfilling the conditions of hedge accounting, cash flow hedge accounting under IFRS 9 is applied with respect to currency derivatives.

Derivative instruments are used only for hedging purposes. Nominal values of derivative instruments do not necessarily correspond with the actual cash flows between the counterparties and do not therefore give a fair view of the risk position of the Group. The fair values are based on market valuation on the date of reporting. Maturity of the agreement is under 12 months.

Valuation methods of derivative instruments are presented in the Summary of Significant Accounting Policies and hedging principles in Note 3.

## Nominal and fair values of derivative instruments

EUR thousand	2019		2018	
	Nominal value	Fair value	Nominal value	Fair value
<b>Currency forwards</b>	11,987	9	11,914	-51

EUR thousand	2019	2018
Derivative instruments in the income statement		
Items included in net sales	-248	-45
Items included in operating expenses	-	-
Financial items	-1	-1
Derivative instruments in the statement of financial position, receivables and liabilities		
Accrued expenses and deferred income		
Currency forwards	-	51
Accrued income		
Currency forwards	-	-

# Contingencies

EUR thousand	2019	2018
Loans secured with mortgages or pledges		
Loans from financial institutions	40,000	6,785
Mortgages given	-	-
Liens on chattel	487,500	143,000
Carrying amount of pledged securities	23,944	23,941
<b>Total loans secured with mortgages, liens on chattel and pledged assets</b>	<b>40,000</b>	<b>6,785</b>
<b>Total mortgages, liens on chattel and pledged assets</b>	<b>511,444</b>	<b>166,941</b>
Contingent liabilities		
Liens on chattel		
On behalf of own commitments	487,500	143,000
Securities pledged		
On behalf of own commitments	23,944	23,941
<b>Total</b>	<b>511,444</b>	<b>166,941</b>
Liens on chattel are related to companies: Glaston Services Ltd. Oy, Glaston Finland Oy, Glaston Emerging Technologies Oy and Uniglass Engineering Oy. All companies are jointly responsible for the debt.		
Guarantees		
On behalf of own commitments	12,367	6,216
On behalf of others	100	123
Repurchase obligation	-	-
<b>Total</b>	<b>12,467</b>	<b>6,339</b>
<b>Total contingent liabilities</b>	<b>523,910</b>	<b>173,280</b>

## Operating leases

Glaston has various non-cancellable operating leases. The minimum future payments of these leasing contracts are presented in the table below.

	2019	2018
<b>Minimum future payments of operating lease commitments</b>		
Maturity within one year	2,244	1,970
Maturity later than one year and not later than five years	6,919	6,057
Maturity later than five years	2,521	3,597
<b>Total minimum future payments of operating lease commitments</b>	<b>11,684</b>	<b>11,625</b>

## Operating leases as a lessor

Glaston has some operating lease agreements in which the Group acts as a lessor. The minimum future payments to be received from non-cancellable operating lease agreements are presented in the table below.

<b>Minimum future payments of operating leases</b>		
Maturity within one year	877	801
Maturity later than one year and not later than five years	2,167	2,898
Maturity later than five years	408	405
<b>Total minimum future payments of operating leases</b>	<b>3,452</b>	<b>4,104</b>

## Other contingent liabilities and litigations

Glaston Group has international operations and can be a defendant or plaintiff in a number of legal proceedings incidental to those operations. The Group does not expect the outcome of any unmentioned legal proceedings currently pending, either individually or in the aggregate, to have material adverse effect upon the Group's consolidated financial position or result.

# Shares and Holdings

Group companies			Group holding %	Parent holding %
Glaston Oyj Abp	Helsinki	Finland		
Uniglass Engineering Oy	Tampere	Finland	100.0%	100.0%
Glaston Services Ltd. Oy	Tampere	Finland	100.0%	100.0%
Glaston Emerging Technologies Oy	Tampere	Finland	100.0%	
Glaston Finland Oy	Tampere	Finland	100.0%	
Glaston International Oy	Tampere	Finland	100.0%	
Glaston Germany GmbH **	Nürnberg	Germany	100.0%	
Glaston America, Inc.	Mount Laurel, NJ	United States	100.0%	
Glaston UK Ltd. *	Derbyshire	United Kingdom	100.0%	
Glaston France S.A.R.L.	Paris	France	100.0%	
Glaston Singapore Pte. Ltd.	Singapore	Singapore	100.0%	
Glaston Tianjin Co. Ltd.	Tianjin	China	100.0%	
Glaston Management (Shanghai) Co. Ltd.	Shanghai	China	100.0%	
Glaston China Co. Ltd.	Tianjin	China	100.0%	
LLC Glaston	Moscow	Russia	100.0%	
Glaston Brasil Ltda	São Paulo	Brazil	100.0%	
Glaston Hong Kong Ltd.	Hong Kong	China	100.0%	
Bystronic Lenhardt GmbH **	Neuhausen-Hamberg	Germany	100.0%	
Bystronic Maschinen AG	Bützberg	Switzerland	100.0%	
Bystronic Glass UK Ltd.	Shropshire	United Kingdom	100.0%	
Bystronic Asia Pte. Ltd.	Singapore	Singapore	100.0%	
Bystronic Glass Inc.	Aurora, CO	United States	100.0%	
OOO Bystronic Steklo RUS	Moscow	Russia	100.0%	
Bystronic Glass Machinery (Shanghai) Co. Ltd.	Shanghai	China	100.0%	
Bystronic Glass (Shanghai) Co. Ltd.	Shanghai	China	100.0%	

\* For the year ending 31 December 2019, Glaston UK Ltd. was entitled to exemption from audit under section 479A of the UK Companies Act 2006.

\*\* Pursuant to Sec. 291 German Commercial Code, all EU subsidiaries included in these consolidated financial statements are exempt from the duty to prepare their own consolidated financial statements and group management report for the subgroups in question. For the following German corporations, the exempting provision pursuant to Sec. 264 (3) German Commercial Code applies in addition: Bystronic Lenhardt GmbH, Glaston Germany GmbH

## Changes in subsidiaries in 2019

Acquisition of shares of Bystronic Lenhardt GmbH, Bystronic Maschinen AG and their subsidiaries in April 2019.

Glaston Tools (Sanhe) Co, Ltd. was liquidated in May 2019.

Glaston Mexico S.A. de C.V. was sold in October 2019 to Bavelloni S.p.A.

## Changes in subsidiaries in 2018

Glaston Tools s.r.l. was sold in December 2018 to Bavelloni S.p.A.

# Share-based Incentive Plans

## Share-based incentive plans

Glaston's share-based incentive plans are directed to the Group's key personnel as part of the Group's incentive schemes. The plans aim to align the interests of the company's shareholders and key personnel in the Group in order to raise the value of Glaston.

The expenses arising from the incentive plans have been recognized in profit or loss during the vesting periods. The cash-settled portion of the incentive plans is recorded as a liability in the statement of financial position, if it has not been paid. Glaston has recorded the personnel costs arising from the share-based incentive plans to the extent it is liable to pay them.

## Share-based incentive plan 2019

On 8 August 2019 the Board of Directors of Glaston Corporation has approved a new share-based incentive plan for the Group key employees. The aim of the new incentive plan is to align the objectives of the shareholders and the key employees in order to increase the value of the company in the long-term, to retain the key employees at the company and to offer them a competitive incentive plan that is based on earning and accumulating the company's shares.

The Performance Share Plan 2019–2023 comprises three performance periods,

calendar years 2019–2021, 2020–2022 and 2021–2023. The Board of Directors resolves on the plan's performance criteria and on the performance levels at the beginning of each performance period. The key employees will receive the company's shares as a reward, if the performance levels of the performance criteria, set by the Board of Directors, are achieved. As a rule, no reward will be paid, if a key employee's employment or service terminates before the reward payment.

The CEO and each member of the Executive Management Group of the Company must hold 50% of the net number of shares he or she has received on the basis of the plan, until the number of the company's shares he or she holds corresponds to the value of his or her gross annual base salary. Such number of shares must be held as long as such person's employment or service in a company belonging to the Group Company continues.

## Performance Period 2019–2021

The potential reward of the performance period 2019–2021 will be based on the Glaston Group's comparable EBITA\*) and average gearing during a period of 1 January 2019–31 December 2021. If the performance levels of the performance criteria for the

performance period 2019–2021 are achieved in full, the payable rewards correspond to a maximum total of 500,000 Glaston Corporation shares, including also the proportion to be paid in cash.

The potential reward from the performance period 2019–2021 will be paid in 2022 in a manner resolved by the Board of Directors, either partly in the company's shares and partly in cash, in which case the cash proportion is intended to cover taxes and tax-related costs arising from the reward to the key employee, or fully in cash.

The reward to be paid on the basis of the plan may be reduced, if the reward cap set by the Board of Directors is reached. Approximately 15 key employees, including the CEO and members of the Executive Management Group, belong to the target group of the plan in the performance period 2019–2021.

## Share-based incentive plan 2018

On 8 February 2018, Glaston's Board of Directors approved a new period for the long-term incentive and commitment plan for the Group's key personnel including senior management of the Group and its subsidiaries.

The incentive plan is based on the development of Glaston's share price. The plan covers the years 2018–2020 and the possible

rewards will be paid in spring 2021. The incentive plan for 2018 covers 20 key persons of Glaston.

## Share-based incentive plan 2017

On 18 January 2017, Glaston's Board of Directors approved a new period for the long-term incentive and commitment plan for the Group's key personnel including senior management of the Group and its subsidiaries.

The incentive plan is based on the development of Glaston's share price. The plan covers the years 2017–2019 and the possible rewards will be paid in spring 2020. The incentive plan for 2017 covers 18 key persons of Glaston.

\*) Comparable EBITA:

operating result before amortization, impairment and intangible assets and purchase price allocation excluding items affecting comparability.

<b>Basic information of the share-based plans</b>	<b>2019–2021</b>	<b>2018–2020</b>	<b>2017–2019</b>
Grant date	13 September 2019	8 February, 2018	18 January, 2017
Nature of the plan	Shares/cash	Cash	Cash
Target group	Key personnel	Key personnel	Key personnel
Maximum amount of cash	500,000 shares	1,820,000	1,740,000
Total amount of cash at the end of the performance period, EUR thousand	-	-	-
Performance period begins	1 January, 2019	1 January, 2018	1 January, 2017
Performance period ends	31 December, 2021	31 December, 2020	31 December, 2019
End of restriction period/ payment	1 April, 2022	1 April, 2021	1 April, 2020
Vesting conditions	Group's comparable EBITA and average net gearing	Share price	Share price
	Service period	Service period	Service period
Maximum contractual life, years	3	3	3
Remaining contractual life, years	2	1	0
Number of persons involved 31 December 2019	15	20	18

**Effect on the profit or loss for the period and on  
financial position**

	<b>2019</b>	<b>2018</b>
Effect on the result of the reporting period, EUR thousand	12	-

The fair value of the share-based reward is defined on the date when the company and the target group have agreed on the plan (grant date).

As the persons involved in the plan are not entitled to dividends during the performance period, the fair value of the equity-settled reward accounts for the share price at the grant date deducted by the dividends expected to be paid during the performance period.

# Related Parties

Parties are considered to be related parties if a party is able to exercise control over the other or substantially influence its decision-making concerning its finances and business operations. Glaston Group's related parties include the parent of the Group (Glaston Corporation), subsidiaries and associates. Also the shareholders, which have significant influence in Glaston through shareholding, are considered to be related parties, as well as the companies controlled by these shareholders.

Related parties also include the members of the Board of Directors, the Group's Executive Management Group, the CEO and their family members.

Glaston follows the same commercial terms in transactions with associates and other related parties as with third parties.

Total accrual based remuneration of the Board of Directors and the Executive Management Group was EUR 2,005 (1,985) thousand.

## Remuneration of the Executive Management Group, accrual based

EUR	2019	2018
<b>CEO Arto Metsänen</b>		
Salaries	405,646	428,461
Bonuses	40,000	-
Share based benefit	-	-
Total	445,646	428,461
Fringe benefits	1,432	1,242
<b>Total</b>	<b>447,078</b>	<b>429,703</b>
Statutory pension payments (Finnish TyEL or similar plan)	86,167	77,316
Voluntary pension payments	48,960	57,460
<b>Other members of the Executive Management Group</b>		
Salaries	1,023,373	1,137,079
Bonuses	168,188	34,776
Share based benefit	-	-
Total	1,191,561	1,171,855
Fringe benefits	83,207	146,475
<b>Total</b>	<b>1,274,768</b>	<b>1,318,330</b>
Statutory pension payments (Finnish TyEL or similar plan)	124,114	149,075
Voluntary pension payments	37,114	22,369

The remuneration includes salaries only for the period of membership of the Executive Management Group.

The CEO's period of notice is 3 months. In the event the company would give notice to the CEO, he will receive an additional remuneration equaling 12 months' salary. If there is a change in control of the company where more than 50 per cent of the company's shares are transferred to a new owner, the CEO has the right to terminate his employment with 1 month's period of notice, in which case he would receive EUR 200,000 as compensation for termination of employment.

Compensation of the CEO and other members of the Executive Management Group consists of a fixed monthly salary, an annual bonus and a share-based incentive plan intended as a long-term incentive (described in more detail in Note 30). The criteria for bonus payments are consolidated result, result of the business area or business unit as well as functional targets. The maximum annual bonus of the CEO is 50 per cent of the annual salary. The maximum annual bonus of the other members of the Executive Management Group is 40 per cent of the annual salary.

The CEO of Glaston Corporation is entitled to retire at the age of 63. The retirement age of other members of the Executive Management Group is according to the normal local legislation, ie. 63-68 years.

## Remuneration of the Board of Directors, accrual based

	2019		2018	
	annual fee	meeting fee	annual fee	meeting fee
EUR				
Teuvo Salminen, Chairman of the Board of Directors	64,000	12,700	42,000	7,900
Sebastian Bondestam, Deputy Chairman of the Board of Directors <sup>(1)</sup>	44,250	8,600	25,875	4,000
Sarlotta Narjus	28,250	8,600	22,250	5,500
Kai Mäenpää	28,250	6,850	22,250	5,500
Tero Telaranta	28,250	8,600	22,250	5,500
Antti Kaunonen <sup>(2)</sup>	28,250	8,600	17,250	4,000
Andreas Tallberg <sup>(3)</sup>	-	-	10,000	2,400
Claus von Bonsdorff <sup>(4)</sup>	-	-	5,000	1,500
Pekka Vauramo <sup>(5)</sup>	-	-	5,000	1,500
Anu Hämäläinen <sup>(6)</sup>	5,750	2,600	22,250	5,500
<b>Total</b>	<b>227,000</b>	<b>56,550</b>	<b>194,125</b>	<b>43,300</b>

The members of Glaston Corporation's Board of Directors were paid an annual remuneration and a meeting fee; other compensation was not paid. The Chairman of Glaston Corporation's Board of Directors was paid EUR 60,000 (46,000) annually, the Deputy Chairman EUR 40,000 (34,500) annually and each of the members EUR 30,000 (23,000) annually. In addition, a meeting fee of EUR 800 per meeting in Finland and EUR 1,500 per meeting abroad were paid to the chairman of the meeting and EUR 500 per meeting in Finland and EUR 1,000 per

meeting abroad to the other participants of the meeting. For the Board Meeting, which is held per capsulam, will be paid half of the regular fee.

The members of Glaston Corporation's Committees are paid for every meeting, that member has participated, EUR 500. In addition, to the Chairman of Audit Committee an annual fee of EUR 10,000 has been paid and to the Chairman of the Compensation Committee an annual fee of EUR 7,500 has been paid.

## Board of Directors, share ownership\*

	Glaston shares	
	31 December 2019	31 December 2018
Teuvo Salminen, Chairman of the Board of Directors	206,165	562,277
Sebastian Bondestam, Deputy Chairman of the Board of Directors <sup>(1)</sup>	21,344	-
Sarlotta Narjus	-	-
Kai Mäenpää	15,000	12,500
Tero Telaranta	376	1,000
Antti Kaunonen <sup>(2)</sup>	3,665	10,000
Andreas Tallberg <sup>(3)</sup>	-	1,500,000
Claus von Bonsdorff <sup>(4)</sup>	-	172,600
Pekka Vauramo <sup>(5)</sup>	-	-
Anu Hämäläinen <sup>(6)</sup>	52,407	150,000

Share ownership includes also the ownership of Glaston Corporation shares by the related parties of the person in question and entities controlled by the person in question.

Executive Management Group, share ownership\*

	Glaston shares	
	31 December 2019	31 December 2018
Arto Metsänen, CEO	490,000	1,750,000
Sasu Koivumäki	89,979	300,000
Juha Liettyä <sup>17</sup>	91,665	250,000
Frank Chengdong Zhang <sup>18</sup>	-	-
Taina Tirkkonen <sup>19</sup>	27,500	75,000
Pekka Hytti <sup>10</sup>	36,665	100,000
Artturi Mäki <sup>11</sup>	4,731	12,531
Päivi Lindqvist	38,680	60,000
Dietmar Walz <sup>12</sup>	-	-
Burghard Schneider <sup>13</sup>	-	-

<sup>11</sup> Member of the Board of Directors from 10 April 2018

<sup>12</sup> Member of the Board of Directors from 10 April 2018

<sup>13</sup> Member of the Board of Directors until 10 April 2018

<sup>14</sup> Member of the Board of Directors until 10 April 2018

<sup>15</sup> Member of the Board of Directors until 10 April 2018

<sup>16</sup> Member of the Board of Directors until 4 April 2019

<sup>17</sup> Member of the Executive Management Group from 1 May 2019

<sup>18</sup> Member of the Executive Management Group until 1 April 2019

<sup>19</sup> Member of the Executive Management Group until 1 April 2019

<sup>10</sup> Member of the Executive Management Group until 1 April 2019

<sup>11</sup> Member of the Executive Management Group until 1 April 2019

<sup>12</sup> Member of the Executive Management Group from 27 May 2019

<sup>13</sup> Member of the Executive Management Group from 1 April until 27 May 2019

\* Reverse share split was implemented on 1 March 2019. A Rights issue was implemented during the second quarter in 2019.

## Events after End of the Reporting Period

On 13 January 2020, Glaston Corporation announced that it had made changes to its Group structure to better reflect its business dynamics and market drivers.

As of 1 January 2020, the company has three business areas: Glaston Heat Treatment Technologies, Glaston Insulating Glass Technologies and Glaston Automotive & Emerging Technologies. The business areas also form the company's three reporting segments, in which Services business is included. Machine and services sales, order intake and order book will also be reported separately as additional information.

Glaston will publish comparative figures for the new segments before the publication of the interim report for the first quarter of 2020.

In connection with the organizational change, the following appointments have been made to the Executive Management Group: Artturi Mäki (SVP, Services), Robert Prange (SVP, Glaston Automotive and Emerging Technologies) and Taina Tirkkonen (General Counsel and SVP, Human Resources).

As of 1 January 2020 the Executive Management Group consists of CEO Arto Metsänen, COO, Sales & Integration Sasu Koivumäki, CFO Päivi Lindqvist, SVP Glaston Heat Treatment Technologies Juha Liettyä, SVP Glaston Insulating Glass Technologies Dietmar Walz, SVP Glaston Automotive and Emerging Technologies Robert Prange, SVP Services Artturi Mäki and General Counsel and SVP, Human Resources Taina Tirkkonen.

# Income Statement Of The Parent Company (FAS)

EUR thousand	1 January - 31 December		
	Note	2019	2018
<b>Net sales</b>	2	<b>3,436</b>	<b>2,859</b>
Other operating income	3	3,091	2,773
Personnel expenses	4	-1,889	-1,562
Depreciation, amortization and impairment losses	5	-494	-581
Other operating expenses	6	-7,990	-4,332
<b>Operating profit / loss</b>		<b>-3,847</b>	<b>-843</b>
Net financial items	7	-8,260	-626
<b>Net financial items</b>		<b>-12,107</b>	<b>-1,469</b>
Appropriations	8	-85	1,459
Income taxes	9	-16	-15
<b>Profit / loss for the financial year</b>		<b>-12,208</b>	<b>-24</b>

# Balance Sheet Of The Parent Company (FAS)

EUR thousand	31.12.		
	Note	2019	2018
<b>Assets</b>			
<b>Non-current assets</b>			
Intangible assets	10	1,199	1,135
Tangible assets	10	314	276
Subordinated loan receivable Group Companies	12.13	36,846	36,846
Investments	11.12	17,218	17,218
<b>Non-current assets, total</b>		<b>55,576</b>	<b>55,475</b>
<b>Current assets</b>			
Non-current receivables	13	77,700	3,574
Current receivables	13	22,579	25,747
Cash and bank		2,898	4,570
<b>Current assets, total</b>		<b>103,177</b>	<b>33,891</b>
<b>Total assets</b>		<b>158,753</b>	<b>89,366</b>

EUR thousand	31.12.		
	Note	2019	2018
<b>Equity and liabilities</b>			
<b>Equity</b>			
Share capital		12,696	12,696
Share premium account		-	25,270
Reserve for invested unrestricted equity		114,270	41,059
Treasury shares		-	-3,308
Retained earnings		-26,764	-23,431
Profit / loss for the financial year		-12,208	-24
<b>Total equity</b>	14	<b>87,994</b>	<b>52,261</b>
<b>Accumulated appropriations</b>	15	<b>100</b>	<b>14</b>
<b>Liabilities</b>			
Non-current liabilities	16	37,128	5,250
Current liabilities	17	33,531	31,842
<b>Total liabilities</b>		<b>70,659</b>	<b>37,091</b>
<b>Total equity and liabilities</b>		<b>158,753</b>	<b>89,366</b>

# Parent Company Cash Flow Statement (FAS)

EUR thousand	2019	2018
<b>Cash flow from operating activities</b>		
Profit / loss for the financial period	-12,208	-24
Adjustments:		-
Income taxes for the period	16	15
Deferred taxes	85	-3
Group contribution	-	-1,456
Financial income and expenses	4,591	626
Depreciation, amortization and impairment	494	581
Proceeds from disposal of investments	3,669	-
Other adjustments	1,965	21
Cash flow before change in net working capital	-1,387	-241
Change in net working capital		
Change in current interest-free receivables	-2,505	2,817
Change in current interest-free liabilities	2,424	-3,999
Cash flow from operating activities before financial items and taxes	-1,467	-1,424
Interests paid and payments made for other financial items and income taxes		
Interests and other financial expenses paid	-5,544	-987
Dividends received	3	3
Interest received	-228	396
Income taxes paid	-	-184
Cash flow from operating activities before extraordinary items	-7,237	-2,196
<b>Cash flow from operating activities</b>	<b>-7,237</b>	<b>-2,196</b>

EUR thousand	2019	2018
<b>Cash flow from investing activities</b>		
Investments in tangible and intangible assets	-595	-259
<b>Cash flow from investing activities</b>	<b>-595</b>	<b>-259</b>
<b>Cash flow from financing activities</b>		
Drawn-down of non-current loans	40,000	-
Repayment of non-current loans	-5,000	-
Change in non-current intra-group receivables	-77,795	1,592
Change in current intra-group receivables	5,135	-
Drawn-down of current loans	33,000	9,000
Repayments of current loans	-37,121	-9,121
Return of capital	-1,157	-1,928
Share issue	49,099	-
<b>Cash flow from financing activities</b>	<b>6,160</b>	<b>-457</b>
<b>Change in cash and cash equivalents</b>	<b>-1,672</b>	<b>-2,912</b>
Cash and cash equivalents at the beginning of the period	4,570	7,482
Cash and cash equivalents at the end of the period	2,898	4,570
<b>Change in cash and cash equivalents</b>	<b>-1,672</b>	<b>-2,912</b>

# Summary of Significant Accounting Policies

Glaston Corporation is a public limited liability company organized under the laws of the Republic of Finland. Glaston's shares are publicly traded in the NASDAQ Helsinki Ltd. Small Cap in Helsinki, Finland. Glaston Corporation is domiciled in Helsinki, Finland and its registered office is Lönnrotinkatu 11, 00120 Helsinki, Finland. Glaston Corporation is the parent of Glaston Group.

The financial statements of Glaston Corporation are prepared in accordance with Finnish Accounting Standards (FAS). The consolidated financial statements of Glaston Group are prepared in accordance with International Financial Reporting Standards (IFRS), and Glaston Corporation applies in its separate financial statements the same accounting principles as Glaston Group to the extent it is possible within the framework of Finnish accounting practice. The accounting principles of Glaston Group are presented in the Notes to the Consolidated Financial Statements (Note 1).

The main differences in the accounting principles between Glaston Corporation separate financial statements and Glaston Group's consolidated financial statement are presented in the following texts.

## Pension Arrangements

Glaston Corporation has a pension arrangement, which is classified as a defined benefit plan in the IFRS financial statements.

The obligation arising from this pension as well as the pension expense differ from the obligation and expense recognized in the consolidated financial statements.

## Financial Assets and Liabilities and Derivative Instruments

Financial assets and liabilities with the exception of derivative instruments are recorded at cost or at cost less impairment losses. Fair value changes of derivatives are recognized in financial items. Valuation methods of derivatives are presented in the accounting policies of Glaston Group.

## Finance Leasing

Lease payments are recognized as lease expenses. Leasing obligations are presented as contingent liabilities.

## Appropriations

The parent's appropriations consist of group contributions received from and given to subsidiaries.

## Untaxed Reserves

The difference between scheduled depreciation and amortization and the depreciation and amortization deducted in arriving to taxable profit is presented as a separate item in the income statement and in the balance sheet.

# Net Sales

EUR thousand	2019	2018
<b>Net sales by business</b>		
Manufacturing industry	3,436	2,859
<b>Net sales by country by destination</b>		
Finland	2,411	2,359
Other EMEA	550	-
Americas	434	449
APAC	41	51
<b>Total</b>	<b>3,436</b>	<b>2,859</b>

EMEA = Europe, the Middle East and Africa

Americas = North, Central and South America

APAC = China and the rest of the Asia-Pacific area

# Other Operating Income

EUR thousand	2019	2018
Charges from group companies	3,091	2,773
<b>Other operating income, total</b>	<b>3,091</b>	<b>2,773</b>

## Personnel Expenses

EUR thousand	2019	2018
Salaries and fees	-1,628	-1,226
Pension expenses	-242	-315
Other personnel expenses	-19	-21
<b>Total</b>	<b>-1,889</b>	<b>-1,562</b>
Salaries and remuneration paid to members of the Board of Directors and Managing Director	-731	-667
Employees during financial year, average		
White collar	10	9
<b>Total</b>	<b>10</b>	<b>9</b>

### Notes to Parent Company Financial Statements (FAS) / Note 5

## Depreciation, Amortization and Impairment Losses

EUR thousand	2019	2018
<b>Depreciation and amortization according to plan</b>		
Intangible assets		
Intangible rights	-336	-422
Other capitalized expenditure	-21	-23
Tangible assets		
Machinery and equipment	-137	-136
<b>Total depreciation and amortization according to plan</b>	<b>-494</b>	<b>-581</b>
<b>Total depreciation and amortization according to plan and impairment losses</b>	<b>-494</b>	<b>-581</b>

## Other Operating Expenses

EUR thousand	2019	2018
Rents	-131	-127
Information and communications technology expenses	-3,827	-2,727
Travel expenses	-162	-111
Credit losses	27	-26
Intra-group credit loss	-1,993	-
Other expenses	-1,904	-1,342
<b>Other operating expenses, total</b>	<b>-7,990</b>	<b>-4,332</b>

### Fees paid to auditors

Fees paid to principal auditors for audit	-72	-64
Fees paid to principal auditors for other services	-152	-66
<b>Total</b>	<b>-224</b>	<b>-130</b>

## Net Financial Items

EUR thousand	2019	2018
<b>Dividend income</b>		
From external parties	3	3
<b>Dividend income, total</b>	<b>3</b>	<b>3</b>
<b>Interest and other financial income</b>		
From group companies	1,459	560
From external parties	45	201
<b>Interest and other financial income</b>	<b>1,504</b>	<b>761</b>
<b>Interest and other financial income, total</b>	<b>1,507</b>	<b>764</b>
<b>Interest and other financial expenses</b>		
To group companies	-555	-307
Impairment losses of of intra-group receivables	-3,669	-
To external parties	-5,543	-1,083
<b>Interest and other financial expenses, total</b>	<b>-9,767</b>	<b>-1,390</b>
<b>Net financial items, total</b>	<b>-8,260</b>	<b>-626</b>
Other financial income and expenses include foreign exchange gains and losses (net)	91	121

## Appropriations

EUR thousand	2019	2018
Received group contributions	-	1,456
Difference between depreciation and amortization according to plan and depreciation and amortization in taxation	-85	3
<b>Total</b>	<b>-85</b>	<b>1,459</b>

## Income Taxes

EUR thousand	2019	2018
Income taxes for operations	-16	-15
<b>Total</b>	<b>-16</b>	<b>-15</b>

# Fixed Assets

## Intangible assets

EUR thousand

	Intangible rights	Other capitalized capitalized	Advance payments and investments in progress	Total
Acquisition cost 1 January, 2019	5,107	630	50	5,788
Additions	25	-	395	420
Reclassifications	133	-0	-133	-0
<b>Acquisition cost 31 December, 2019</b>	<b>5,147</b>	<b>630</b>	<b>313</b>	<b>6,089</b>
Accumulated amortizations and impairment losses 1 January, 2019	-4,070	-583	-	-4,653
Accumulated amortizations of disposals and transfers	119	-	-	119
Amortization of the period	-336	-21	-	-357
<b>Accumulated amortizations and impairment losses 31 December, 2019</b>	<b>-4,286</b>	<b>-604</b>	<b>-</b>	<b>-4,891</b>
<b>Carrying amount at 31 December, 2019</b>	<b>860</b>	<b>26</b>	<b>313</b>	<b>1,199</b>
Carrying amount at 31 December, 2018	1,038	47	50	1,135

## Tangible assets

EUR thousand

	Tangible assets and equipment	Other tangible assets	Advance payments and investments in progress	Total
Acquisition cost 1 January, 2019	1,130	-29	-0	1,101
Additions	153	-	22	175
Acquisition cost 31 December, 2019	-367	-	-	-367
Accumulated depreciations and impairment losses 1 January, 2019	0	-	-	0
<b>Accumulated depreciations of disposals and transfers</b>	<b>916</b>	<b>-29</b>	<b>22</b>	<b>909</b>
Depreciation for the period	-864	39	-	-825
Accumulated depreciations and impairment losses 31 December, 2019	367	-	-	367
Amortization of the period	-137	-	-	-137
<b>Accumulated amortizations and impairment losses 31 December 2019</b>	<b>-634</b>	<b>39</b>	<b>-</b>	<b>-595</b>
<b>Carrying amount 31 December, 2019</b>	<b>282</b>	<b>10</b>	<b>22</b>	<b>314</b>
Carrying amount at 31 December, 2018	266	10	-0	276

# Investments

EUR thousand	Shares Group companies	Shares Others	Subordinated loan receivable Group companies	Total
Carrying amount at 1 January, 2019	17,204	14	36,846	54,064
<b>Carrying amount at 31 December, 2019</b>	<b>17,204</b>	<b>14</b>	<b>36,846</b>	<b>54,064</b>

# Shares and holdings owned by the Parent

## Subsidiary shares

EUR thousand	Ownership %	Number of shares	Nominal value	Carrying amount
Uniglass Engineering Oy, Tampere, Finland	100%	20,000	400	2,351
Glaston Services Ltd. Oy, Tampere, Finland	100%	1,800,000	3,600	14,853
<b>Total</b>				<b>17,204</b>

## Other

Other shares and holdings	14
<b>Total</b>	<b>14</b>

# Receivables

EUR thousand	2019	2018
<b>Non-current receivables</b>		
<b>Receivables from group companies</b>		
Loan receivables	77,700	3,574
Total	77,700	3,574
<b>Non-current receivables, total</b>	<b>77,700</b>	<b>3,574</b>
<b>Current receivables</b>		
<b>Receivables from external parties</b>		
Trade receivables	-	12
Other receivables	33	33
Prepaid expenses and accrued income	649	356
Total	682	401
<b>Receivables from group companies</b>		
Trade receivables	5,156	4,944
Loan receivables	15,213	18,892
Group Contribution receivables	-	1,456
Other receivables	3	-
Accrued interest receivables	1,006	-
Prepaid expenses and accrued income	519	54
Total	21,897	25,346
<b>Current receivables, total</b>	<b>22,579</b>	<b>25,747</b>
<b>Prepaid expenses and accrued income</b>		
Personnel expenses	1	8
Indirect taxes	-	25
Financial items	597	151
Other	569	226
<b>Prepaid expenses and accrued income, total</b>	<b>1,167</b>	<b>410</b>

# Equity

EUR thousand	2019	2018
Share capital 1 January	12,696	12,696
Share capital 31 December	12,696	12,696
Share premium account 1 January	25,270	25,270
Dissolution of share premium account	-25,270	-
Share premium account 31 December	-	25,270
Reserve for invested unrestricted equity 1 January	41,059	42,987
Share issue	49,099	-
Capital repayment	-1,157	-1,928
Dissolution of share premium account	25,270	-
Reserve for invested unrestricted equity 31 December	114,270	41,059
Treasury shares 1 January	-3,308	-3,308
Return / disposal of treasury shares	3,308	-
Treasury shares 31 December	-	-3,308
Retained earnings 1 January	-23,455	-23,431
Cancellation of treasury shares	-3,308	-
Retained earnings 1 January	-26,764	-23,431
Profit / loss for the financial year	-12,208	-24
<b>Equity at 31 December</b>	<b>87,994</b>	<b>52,261</b>
<b>Distributable funds at 31 December</b>		
Reserve for invested unrestricted equity	114,270	41,059
Treasury shares	-	-3,308
Retained earnings	-26,764	-23,431
Profit / loss for the financial year	-12,208	-24
<b>Distributable funds</b>	<b>75,298</b>	<b>14,295</b>

## Accumulated Appropriations

EUR thousand	2019	2018
Accumulated depreciation difference 1 January	14	18
Increase (+) / decrease (-)	85	- 3
<b>Accumulated depreciation difference 31 December</b>	<b>100</b>	<b>14</b>

## Non-current Liabilities

EUR thousand	2019	2018
<b>Liabilities to external parties</b>		
Loans from financial institutions	37,121	5,243
Other liabilities	7	7
Liabilities to external parties, total	37,128	5,250
<b>Non-current liabilities, total</b>	<b>37,128</b>	<b>5,250</b>

## Current Liabilities

EUR thousand	2019	2018
<b>Liabilities to external parties</b>		
Loans from financial institutions	3,121	4,121
Trade payables	657	431
Other liabilities	182	214
Accrued expenses and deferred income	754	512
Liabilities to external parties, total	4,715	5,279
<b>Liabilities to group companies</b>		
Other interest-bearing liabilities	28,810	26,533
Trade payables	7	8
Accrued expenses and deferred income	-	21
Liabilities to group companies, total	28,817	26,562
<b>Current liabilities, total</b>	<b>33,531</b>	<b>31,842</b>
<b>Accrued expenses and deferred income</b>		
Salary and other personnel expense accruals	312	233
Interests	300	26
Income taxes	-	9
Other	142	265
<b>Accrued expenses and deferred income, total</b>	<b>754</b>	<b>533</b>

# Contingent Liabilities

EUR thousand	2019	2018
<b>Leasing liabilities</b>		
Maturity within one year	30	18
Maturity later than one year	8	-
<b>Total</b>	<b>38</b>	<b>18</b>
The leasing agreements have normal terms.		
<b>Other rental liabilities</b>		
Maturity within one year	97	93
Maturity later than one year	40	210
<b>Total</b>	<b>137</b>	<b>304</b>
<b>Pledges</b>		
On behalf of group companies	8,839	4,652
<b>Loans secured with pledged assets and mortgages</b>		
Loans from financial institutions	40,000	7,000
Liens on chattel		
On own behalf	97,500	50,000
Carrying amount of pledged securities	17,204	17,204

Mortgages and pledged assets are given on own and other group companies behalf.

Liens on chattel are given jointly with Glaston Services Ltd. Oy, Glaston Finland Oy, Glaston Emerging Technologies Oy and Uniglass Engineering Oy.

# Board of Directors' Proposal for Distribution of Profits

The distributable funds of Glaston Corporation are EUR 75,298,315 of which EUR 12,208,041 represents the loss for the financial year. The company has no funds available for dividend distribution.

The Board of Directors proposes to the Annual General Meeting to be held on 2 April 2020 that the loss for the financial year 2019 be placed in retained earnings and no dividend be paid.

The Board of Directors proposes to the Annual General Meeting that based on the balance sheet to be adopted for financial

period 2019, a return of capital of a total of EUR 1,685,798 be distributed., i.e. EUR 0.02 per share.

The return of capital will be paid from the reserve for invested unrestricted equity to shareholders who are registered in the company's register of shareholders, maintained by Euroclear Finland Ltd, on the record date for payment, 6 April 2020. The Board of Directors proposes to the Annual General Meeting that the return of capital be paid on 23 April 2020.

The number of shares entitled to a return of capital on the date of the proposal on the

distribution of profits is 84,289,911, corresponding to a total return of capital of EUR 1,685,798.

EUR 73,612,517 will be left in distributable funds.

No substantial changes in the company's financial position have taken place after the end of the financial year. In the view of the Board of Directors, the proposed distribution of profits does not jeopardize the company's solvency.

Helsinki, 11 February 2020

Teuvo Salminen  
Chairman of the Board

Sarlotta Narjus

Antti Kaunonen

Sebastian Bondestam  
Deputy Chairman of the Board

Kai Mäenpää

Tero Telaranta

Arto Metsänen  
CEO

# Auditor's report

[Translation of the Finnish original]

To the Annual General Meeting of  
Glaston Corporation

## Report on the Audit of Financial Statements

### Opinion

We have audited the financial statements of Glaston Corporation (business identity code 1651585-0) for the year ended 31 December, 2019. The financial statements comprise the consolidated balance sheet, income statement, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies, as well as the parent company's balance sheet, income statement, statement of cash flows and notes.

### In our opinion

- the consolidated financial statements give a true and fair view of the group's financial position as well as its financial performance and its cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU.
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

Our opinion is consistent with the additional report submitted to the Board of Directors.

### Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of Financial Statements section of our report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

In our best knowledge and understanding, the non-audit services that we have provided to the parent company and group companies are in compliance with laws and regulations applicable in Finland regarding these services, and we have not provided any prohibited non-audit services referred to in Article 5(1) of regulation (EU) 537/2014. The non-audit services that we have provided have been disclosed in note 9 to the consolidated financial statements and note 6 to the parent company financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Key Audit Matters

Key audit matters are those matters that, in our professional judgment, 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.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the financial statements section of our report, including in relation to these matters. Accordingly, our audit included

the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

We have also addressed the risk of management override of internal controls. This includes consideration of whether there was evidence of management bias that represented a risk of material misstatement due to fraud.

## Key Audit Matter

## How our audit addressed the Key Audit Matter

### Acquisition of Bystronic glass

We refer to note 5. Business combinations

The Group acquired the Bystronic glass business during the financial year. The acquisition date was determined to be April 1, 2019. The purchase consideration of 56.7 million euro was paid in cash. Assets acquired and liabilities assumed in a business combination are measured at acquisition-date fair value. Management judgment relates specifically to determining the fair value of acquired assets and liabilities, in particular determining the fair values of separately identifiable intangible assets such as customer contracts and trademarks.

The significant business combination is a key audit matter as it involves valuation processes and –methods, and judgments made by management.

Our audit procedures included amongst other:

- Assessing the acquisition date and the consideration transferred
- Assessing together with our valuation specialists the valuation processes and methodologies to identify acquired assets and liabilities and to determine the fair value of these.
- Assessing the disclosures in respect of business combinations

### Revenue recognition of tailor-made glass processing machines

We refer to the Summary of significant accounting policies, Critical accounting estimates and judgments and Note 6 (Construction contracts)

Glaston recognized revenue from tailor-made glass processing machine deliveries over time (percentage of completion). Net sales for the reporting period includes 59 million euros revenue recognized over time, 32% of total net sales (2018: 71 million euros or 70% of net sales).

The percentage of completion is determined based on the cost-to-cost method, where accumulated costs for the machines are compared with estimated total costs. The percentage of completion method involves the use of significant management judgment related to estimated costs of the machines and assessing the stage of completion, due to which is a key audit matter.

Revenue recognition from tailor-made glass processing machines was also a significant risk of material misstatement referred to in EU Regulation No 537/2014, point (c) of Article 10(2).

Our audit procedures to address the risk of material misstatement in respect of revenue recognition of tailor-made glass processing machines included among other things:

- Assessing the Group's accounting policies over revenue recognition of tailor-made glass processing machines;
- Gaining an understanding of the percentage of completion revenue recognition process;
- Examination of the project documentation and testing the percentage of completion –calculations;
- Analytical procedures throughout the audit period;
- Assessing management's estimates based on an examination of the project documentation, and discussion on the status of projects under construction with finance and project managers of the Company; and .
- Assessing the Group's disclosures in respect of revenue recognition.

**Valuation of goodwill**

We refer to the Summary of significant accounting policies, Critical accounting estimates and judgments and Notes 13 (Depreciation, Amortization and Impairment of Assets) and 14 (Intangible Assets)

As of balance sheet date December 31, 2019, the value of goodwill amounted to 58 million euros representing 27% of the total assets and 79% of equity (2018: 31 million euros, 34% of the total assets and 84% of equity). Valuation of goodwill was a key audit matter because

- The assessment process related to the annual impairment test is complex and judgmental;
- It is based on assumptions relating to market or economic conditions; and
- Because of the significance of the goodwill to the financial statements.

The recoverable amount of a cash generating unit is based on value-in-use calculations, the outcome of which could vary significantly if different assumptions were applied. There are a number of assumptions used to determine the value in use, including the revenue growth, the operating margin and the discount rate applied. Changes in the above-mentioned assumptions may result in an impairment of goodwill.

Our audit procedures included, among others, assessing the assumptions and methodologies used by the Group. A valuation specialist assisted us in evaluating the assumptions relating to the weighted average cost of capital. We focused on the sensitivity in the available headroom by Cash Generating Unit and whether any reasonably possible change in assumptions could cause the carry amount to exceed its recoverable amount. We also assessed the historical accuracy of managements' estimates. We assessed the adequacy of the Group's disclosures in note 13 in the financial statements about the assumptions to which the outcome of the impairment tests were more sensitive.

## **Responsibilities of the Board of Directors and the Managing Director for the Financial Statements**

The Board of Directors and the Managing Director are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine 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 and the Managing Director are responsible for assessing the parent company's and the group's ability to continue as going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

## **Auditor's Responsibilities for the Audit of Financial Statements**

Our objectives are to obtain reasonable assurance on whether the financial state-

ments 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 good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and 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.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, 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 effec-

tiveness of the parent company's or the group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within

the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance 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 those charged with governance 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, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

## Other Reporting Requirements

### Information on our audit engagement

We were first appointed as auditors by the Annual General Meeting on 13 April 2010, and our appointment represents a total period of uninterrupted engagement of 10 years.

### Other information

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises the report of the Board of Directors and the information included in the Annual Report, but does not include the financial statements and our auditor's report thereon. We have obtained the report of the Board of Directors prior to the date of this auditor's report, and the Annual Report is expected to be made available to us after that date.

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

In connection with our audit of the financial statements, our responsibility is to read the other information identified above 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. With respect to report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, 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.

Helsinki February 11, 2020

Ernst & Young Oy  
Authorized Public Accountant Firm

Kristina Sandin  
Authorized Public Accountant

**glaston**