FROM INDUSTRIAL GOODS TO TECHNOLOGY COMPANY
through Innovation, Cooperation and breakthrough Transformation
President & CEO Arto Metsänen, Glaston Corporation
Our transformation journey

- **Focus on core Investments in Emerging Technologies and Digitalization**
- **Economic turnaround begins, major restructuring and divestments**
- **Profitable growth supported by M&A**

*2018 figures are pro forma and 2018 profitability is described by comparable EBITA (operating profit before amortization of intangible assets) and excluding purchase price allocation*
Glaston Today

12 Countries
Sales and Services offices

5 manufacturing sites in Europe and Asia

4,500 Machines in installed base

808 Employees

HQ in Helsinki
Our Business

- Digitalization and growth of intelligent **smart glass solutions** are re-shaping the glass industry. We respond to the growing role of glass.

- Glaston’s core competence is in **glass processing** technology. We develop, design and manufacture glass processing machinery and equipment.

- Our **services** meet globally to the most demanding needs of our clients and guarantee the sustainable long life cycles of our products.

- Our leadership in technology is based on both our own **research & development** as well as our understanding of **emerging new technologies**.
Our purpose

GLASTON BUILDS A BETTER TOMORROW THROUGH SAFER, SMARTER, MORE ENERGY EFFICIENT GLASS SOLUTIONS
GLASTON ENABLES THE DEVELOPMENT AND COMMERCIALIZATION OF NEW GLASS TECHNOLOGIES
Emerging Technologies

- In 2017 Glaston established the **Glaston Emerging Technologies unit**
- The unit offers consulting and planning services for smart glass and energy glass production as well as solar energy applications
- The unit also sells and delivers the production lines in question

- In 2015, Glaston made an investment in the Californian nanotechnology company Heliotrope Technologies Inc. Heliotrope develops electrochromic smart glass technology that regulates the heat and light transmissivity of glass precisely and quickly
GLASTON HAS THE HIGHEST SHARE OF R&D IN ITS INDUSTRY

Innovation has never been compromised
Customer focused innovations
Towards automated processing

Strategic partnership with Tieto to increase the level of digitalization and automation of Glaston’s products and services.

Business Intelligence
- Predictive maintenance
- Recipes & automation
- Online real time reports
- Quality data
- Product data
- Raw material data
- Maintenance data

Artificial Intelligence Development
- Machine learning for industry applications (MIDAS) project

More than 100 Glaston machines connected to the cloud so far – Bystronic glass equipment integration will start by year-end.

Big Data Sources:
- Process data
- Quality data
- Product data
- Raw material data
- Maintenance data

MIDAS - project
- More than 100 Glaston machines connected to the cloud so far – Bystronic glass equipment integration will start by year-end.
Customer focused innovations
Improved productivity, uptime and quality control

GLASTON SUPPORT ROOM FOR REAL-TIME CUSTOMER SUPPORT

ARTIFICIAL INTELLIGENCE FOR AUTOMATED PROCESSES
Open innovation – co-creation

GPD Step Change

Step Change and GPD in numbers:
- 764 participants (+ High Rise n. 100 participants)
- 59 Step Change participants, presenting 40 teams
- 20 Step Change exhibitors
- 6 Step Change reverse pitching
- 19 Workshops with 304 participants
- 405 One-to-One meeting participants

Hack the Glass!

Prize: 10,000 euros up to 3 winning teams for R&D piloting project

72 SW developers
24 Teams innovating
9 Teams to continue with Glaston
3 Days of Innovation
2 New Product Ideas
1 Winner - TUT Machine Vision

2nd most start-up friendly company in Finland
Lessons learned

FOCUS

HAVE THE COURAGE TO BE IN THE FOREFRONT OF THE INDUSTRY

NEVER COMPROMISE ON INNOVATION