



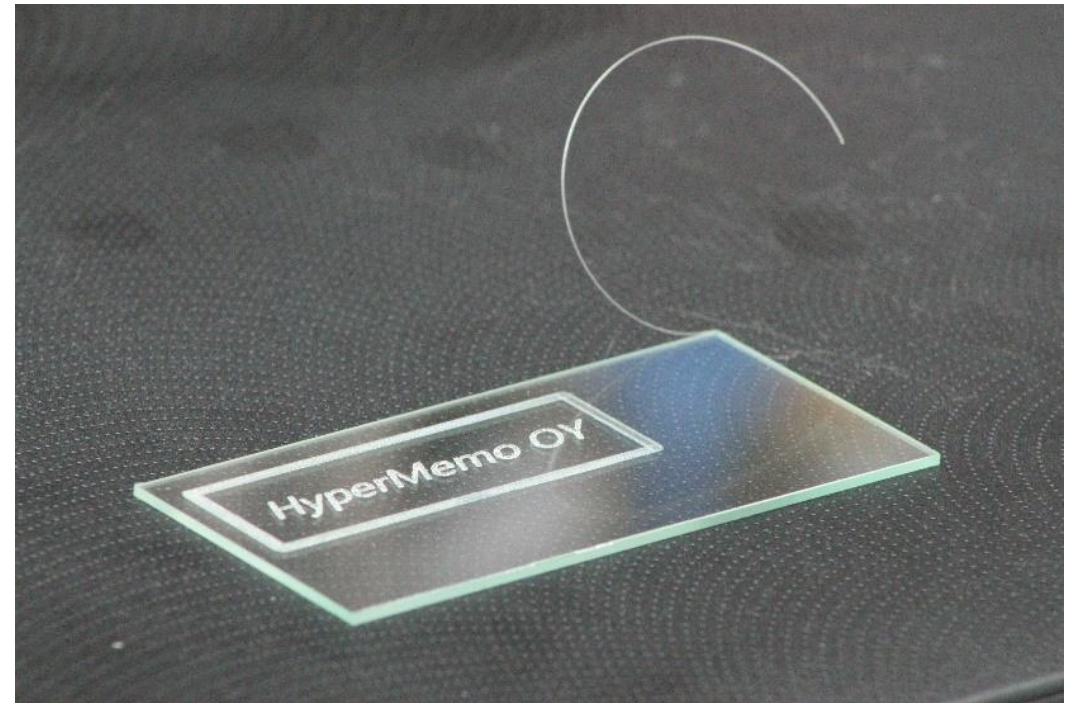
**EIC-rahoitus tuotekehitysinnovaatioiden edistäjänä**

Erik Raita

**Enabling technology:** potential to transform the traditional industry

**Proven performance:** validated in industrial environment

**High impact:** sustainability + proven cost benefits



# MISSION

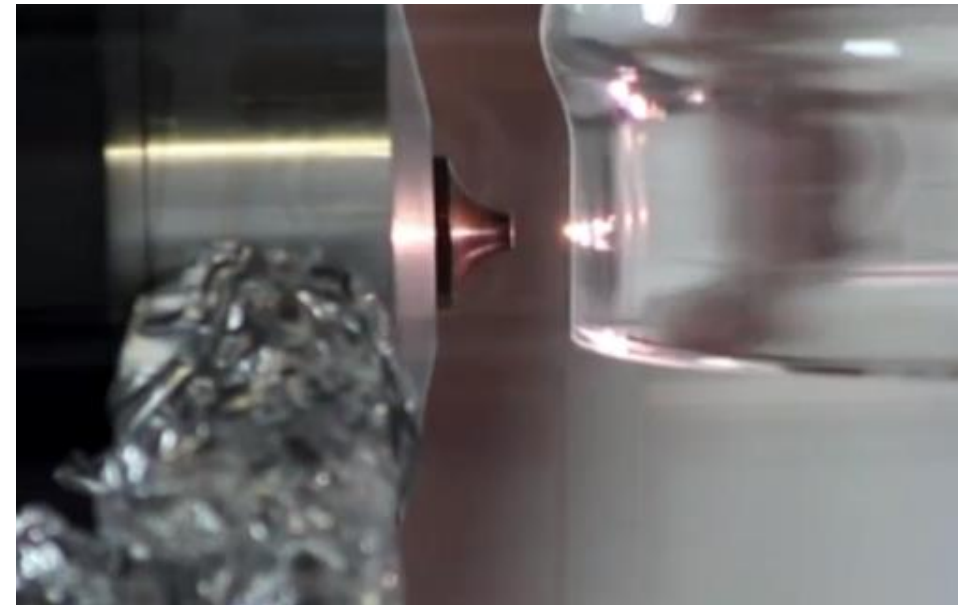
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Transform the very conservative “dirty” industry and make it more sustainable

Glass processing now



Future of glass processing



**Huge impact:**

**$41 \times 10^{12}$  Wh** yearly energy saving potential

**$5 \times 10^6$  tonnes of CO<sub>2</sub>-eq.** yearly reduction of GHG emissions

**HYPERMEMO**

# PROBLEM

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- ☹ There's no sustainable technology for glass processing
- ☹ Industry is VERY capital intensive
- ☹ Machinery is outdated and becomes a bottleneck for the glass industry
- ☹ Environmental hazards and extensive carbon footprint



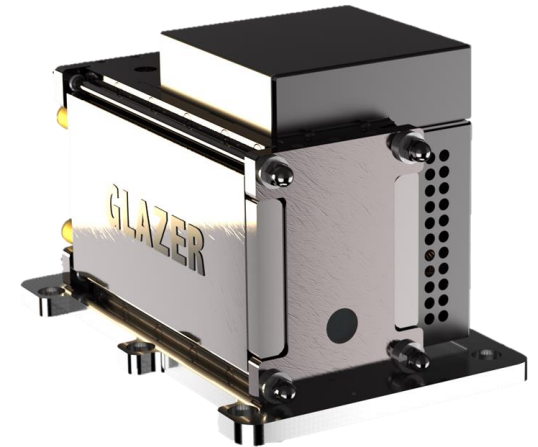
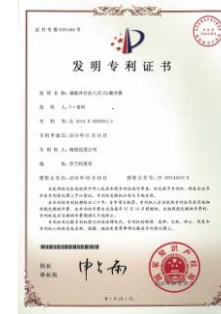
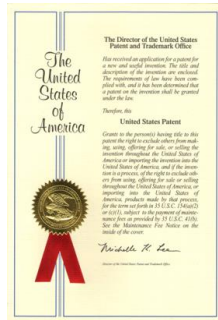


## Core innovation:

- unique high-power Q-switched ns-pulsed CO2 laser

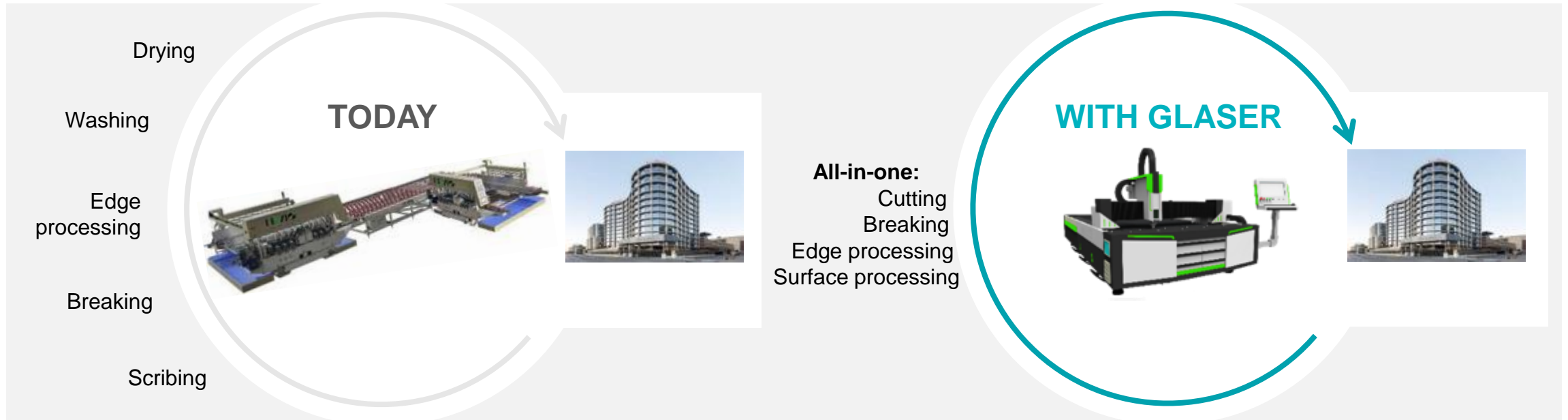
## IPR:

- patents in Finland, US, Russia, and China
- EU patent pending



## Product offering:

- all-in-one machinery for clean and sustainable glass processing



## Boosting:

- Quality
- Agility of production
- Processes variety
- Applications variety
- Energy efficiency

## Reducing:

- Machinery footprint
- CAPEX
- Processing time
- Consumables usage
- Environmental footprint
- Glass waste

- Hypermemo Oy was established in Joensuu, Finland, in 2009
- First 5 years developing optical memories
- New start in 2014 with Tekes-funded Glascut project after ownership change
- Breakthrough in 2020 after successful PoC trial with industrial customer in Turkey
- No recurring revenue so far
- Backed-up by 2 private VC funds
  - Butterfly VC
  - Joensuu Startup Development Investment Fund
- SME Instrument Phase 1 funding in 2019: €50k
- Supported by European Innovation Council through EIC Accelerator blended finance scheme (2020): €6.8m
- EIC-funded Glazer project started in July 2020

	Prior to EIC	With EIC
Angel and VC capital invested	€900k	€4,75m + expected private co-funding €3-5m
Public R&D funding	€320k	€2,1m
Headcount (FTE)	5	15
Annual R&D expenditures	€150k (2019)	€1,1m (2021)
Premises	150 sq.m. office and clean room	450 sq.m. office, clean room and prototyping (2020) => 5000 sq.m. office, clean room and production (2022)



