PRESS RELEASE

CONTAINER GLASS TO REDUCE CO₂ BY 50%

FOR THE FIRST TIME EVER, EUROPEAN CONTAINER GLASS MANUFACTURERS COME TOGETHER TO BUILD THE FIRST LARGE SCALE HYBRID ELECTRIC FURNACE TO RUN ON 80% GREEN ELECTRICITY.

Brussels, 16 March 2020

The ‘Furnace of the Future’ is a fundamental milestone in the industry’s decarbonisation journey towards climate-neutral glass packaging. It will be the first large-scale hybrid oxy-fuel furnace to run on 80% renewable electricity in the world. It will replace current fossil-fuel energy sources and cut CO₂ emissions by 50%.

For the very first time, the industry has adopted a collaborative approach where 20 glass container producers have mobilised resources to work on and fund a pilot project to prove the concept.

“We are extremely proud to announce this joint-industry project”, comments Michel Giannuzzi, President of FEVE. “The hybrid technology is a step-change in the way we produce and will enable us to significantly reduce the carbon footprint of glass packaging production. The move marks an important milestone for the glass sector in implementing our decarbonisation strategy”.

The industry already works with electric furnaces in several of its 150 glass manufacturing plants across Europe, but they are small scale and exclusively used to produce flint (colourless) glass with virgin raw materials, therefore using very little or no recycled glass content. With this new technology, the industry will be able to produce more than 300 tonnes per day of any glass colour, using high levels of recycled glass.

Ardagh Group – the second largest glass packaging manufacturer in the world – has volunteered to build the furnace in Germany. It will be built in 2022, with an assessment of first results planned for 2023.

“With this new technology we are embarking on the journey to climate-neutral glass packaging, and ensuring the long-term sustainability of manufacturing”, states Martin Petersson, CEO of Ardagh Group, Glass Europe. “We aim to demonstrate the viability of electric melting on a commercial scale, which would revolutionise the consumer glass packaging market”.

Bringing the ‘Furnace of the Future’ to life is an extremely ambitious project requiring significant financial and human resources and a wide range of expertise. For this reason, the industry has committed to work together. By adopting a sectoral approach, it also intends to gain the support of the European Commission through the ETS Finance for Innovation Fund Programme. Despite its key importance, this project is not the only one the industry is working on. Other pathways towards clean production technologies and climate-neutral glass packaging are already implemented and others are also being explored.
END NOTES

1. About the project

Why it matters:

Today, the use of electricity as the main energy source in the container glass industry is limited to small-scale furnaces for flint (white) glass without the use of recycled glass. The new technologies will address these limitations.

By replacing 80% of the natural gas with green electricity, the technology reduces the furnace emissions by 60% or 50% of the total CO₂ emissions of a container glass factory.

For the first time ever, this project will bring together the best engineers from 20 glass container manufacturers to demonstrate that this can be done.

The technology will allow the industry to use high rates of recycled glass which is currently not possible with electric furnaces. For each additional 10% of recycled glass in the furnace, there is an additional reduction of CO₂ emissions by 5% and energy consumption by 3%.

The hybrid technology flexibility can switch to other sources of energy in case of supply issues. This will guarantee no disruption to production.

The additional cost (Capital Expenditure and Operational Expenditure) of a hybrid furnace compared to a conventional furnace are estimated to be up to 40 MEur over the 10 Year lifetime of the furnace. This is mainly due the cost of electricity compared to natural gas (about three times higher per MWh).

See more on:
- Web section: https://feve.org/about-glass/furnace-of-the-future/
- Press release: https://feve.org/container-glass-to-reduce-co2/
- Fast facts content: https://feve.org/fast-facts/

Timeline:

The Demonstration Project will be built in 2022 with first results in 2023. The next steps will be to select a furnace supplier, to apply for a grant to the EC Innovation Fund and set up a new legal entity to manage the project.
2. **List of the 20 “The Furnace of the Future” Founding Member Companies (as of 16 March 2020)**

Allied Glass  
www.alliedglass.com  

Ardagh Group  
www.ardaghgroup.com  

BA Glass  
www.baglass.com  

Beatson Clark  
www.beatsonclark.co.uk  

Bormiol Luigi  
www.bormioliluigi.com  

Gerresheimer  
www.gerresheimer.com  

GCA Gürallar Cam Ambalaj  
www.gca.com  

O-I Europe  
www.o-i.com  

Pochet  
www.groupe-pochet.fr  

Saverglass  
www.saverglass.com  

SGD  
www.sgd-pharma.com  

Steklarna Hrastnik  
www.hrastnik1860.com  

Stoelzle  
www.stoelzle.com  

Verallia  
www.verallia.com  

Verescence  
www.verescence.com  

Vettreria Etrusca  
www.vetreriaetrusca.it  

Vetropack  
www.vetropack.com  

Vidrala  
www.vidrala.com  

Wiegand- Glashüttenwerke GmbH  
www.wiegand-glas.de  

Zignago Vetro  
www.zignagovetro.com  

---

**About FEVE**

FEVE is the Federation of European manufacturers of glass containers for food and beverage and flacons for perfumery, cosmetics and pharmacy markets. Its members produce over 80 billion glass containers per year. The association has some 60 corporate members belonging to approximately 20 independent corporate groups. Their 160 manufacturing plants are located across 23 European States and maintain 125,000 direct and indirect jobs along the total supply chain. See more at [www.feve.org](http://www.feve.org).

**For further information, please contact:**

Fabrice Rivet, Technical Director, FEVE, [f.rivet@feve.org](mailto:f.rivet@feve.org), Direct Line: +32 (0)2 536 00 83,

Michael Delle Selve, Senior Communication Manager, FEVE, [m.delleselve@feve.org](mailto:m.delleselve@feve.org), Direct Line: +32 (0)2 536 00 82, Mobile +32 475 52 24 58