

GIFFT



Sustainable Glass Industry

Revolutionizing the Glass Industry with Sustainable Technology

Transforming
Glass Production for a
Greener Tomorrow

Join Us in
Our Mission



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What is GIFFT?

GIFFT (Sustainable Glass Industry with Fuel-Flexible Technology) is an innovative project aimed at drastically reducing CO₂ emissions in the glass industry. Utilising advanced plasma-assisted combustion and gasification systems, GIFFT integrates low-value biogenic residues and wastes into the glass manufacturing process, paving the way towards a sustainable and eco-friendly glass production.

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Why GIFFT

The glass industry, a significant contributor to CO₂ emissions, is in urgent need of sustainable solutions.

Current glass production techniques are reaching their thermodynamic limits, making further CO₂ reductions challenging.

The GIFFT project aligns with the European Green Deal's objective of cutting carbon emissions and achieving EU climate neutrality.



Our Innovative Approach

Novel Heat Generation Process: A sustainable hybrid and fuel-flexible low-CAPEX technology for the glass industry.

Biomass E-Gasification: Converts biogenic waste into biomass-derived gas (syngas), reducing reliance on natural gas and other fossil fuels.

Plasma-Assisted Combustion: Enhances process heat production, ensuring cleaner syngas with higher calorific value.

Utilisation of Ash Materials: Ash from biomass gasification is repurposed as raw material for glass manufacturing, reducing waste and further CO₂ emissions.

Project Impact

Decarbonization: Aims for a 75% reduction in CO₂ emissions per tonne of glass produced. **Energy Efficiency:** Improves overall energy efficiency in glass production. **Economic and Environmental Benefits:** Utilizes low-cost, locally available biogenic residues, contributing to circular economy principles.

Join Us in Our Mission

GIFFT is not just a project; it's a vision for a cleaner, greener, and more sustainable future in glass production. Be a part of this revolutionary change. Let's make a difference together!

Partners

