



HORIZON-CL4-2022-TWIN-TRANSITION-01-07

H2GLASS

Full Title: advancing Hydrogen (H2) technologies and smart production systems TO decarbonise the GLass and Aluminium SectorS

Aim:

H2GLASS aims to create the technology stack that glass manufacturers need to (a) realize 100% H2 combustion in their production facilities, (b) ensure the required product quality, and (c) manage this safely. H2GLASS will address the challenges related to NOx emissions and high flame propagation speed, process efficiency, and supply of H2 for on-site demonstrations.

Concept:

The H2GLASS technologies and design solutions will be validated up to TRL 7 on 5 industrial demonstrators from 3 segments (container glass, flat glass and glass fibre), which together represent 98% of the current glass production in the EU. A demonstrator for the aluminum industry (HYDRO) will prove the transferability of the basic solutions and underlying models to energyintensive industries that have similarities with the glass manufacturing process, thus strengthening the impact of the project. The innovations generated by H2GLASS will potentially create 10.000 new jobs and unlock 1 - 5B€ revenues for glass technology deployment, >17B investments and 200.000 new jobs for green H2, and cut emissions by ca.80%.

Start date: 01/01/2023

End date: 31/12/2026