

## **Innovation Fund Programme**

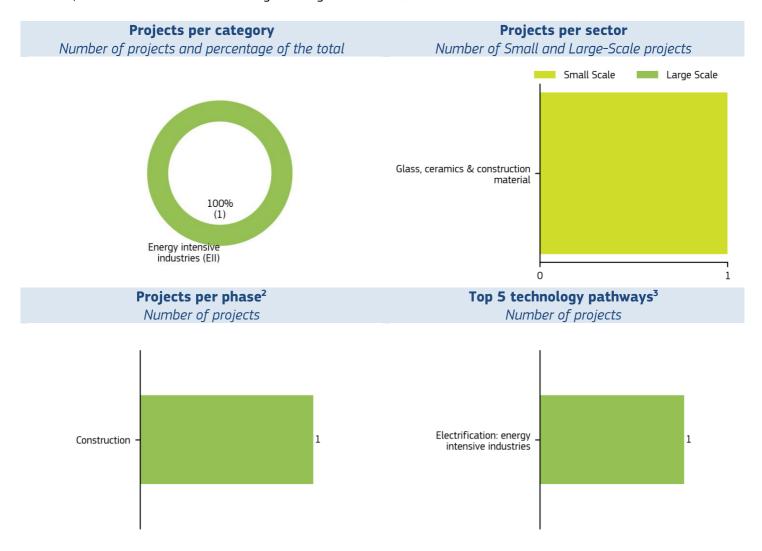


## Overview of awarded projects in Slovenia

Funded by the revenue of the EU Emissions Trading System, the Innovation Fund's goal is to help businesses investing in innovative low-carbon technologies with significant GHG emissions reduction potential.

The Innovation Fund currently supports **1 project** located in Slovenia, which will contribute to the decarbonisation of European industries with a total expected GHG emission reduction of **96,384 t CO₂ equivalent in the first 10 years of operation.** 

The total Innovation Fund grant in Slovenia is of EUR 2.2 million, out of the total relevant costs of EUR 4.1 million, as defined in Art 5 of the Delegated Regulation 2019/856 on the Innovation Fund<sup>1</sup>.



<sup>&</sup>lt;sup>1</sup> OJ L 140, 28.5.2019, p. 9.

<sup>&</sup>lt;sup>2</sup> Preparation means the period before financial close is reached; construction means the period between financial close and entry into operation; operation means that the construction is finished and the project has already started production.

<sup>&</sup>lt;sup>3</sup> Projects may employ several technological pathways, only the top 5 per country are kept in the graph. State of play: 08/04/2024

## List of awarded Innovation Fund projects in Slovenia

Acronym	Title	Sector	Start date	Project phase	Beneficiaries	Innovation Fund grant (EUR million)	Expected GHG emission avoidance (t CO2eq)
Small Scale						2.2	96,384
BEAR	BEAR: HyBrid rEgenerative glAss fuRnace	Glass, ceramics & construction material	01/09/2022	Construction	Steklarna   NIC	2.2	96,384

## Project overview

Acronym	Title	Abstract
BEAR	BEAR: HyBrid rEgenerative glAss fuRnace	The end-fired regenerative furnace is a widely used technology in the glass industry and accounts for 75% of global production of container glass. However, it is not a very energy efficient process and has a high carbon footprint due to its reliance on fossil fuels. Less carbon intensive technologies are available, such as electric furnaces, however these have major limitations that hinder an industry-wide uptake across the European container glass sector, such as limited pull flexibility and short furnace lifespan. To address this issue, the BEAR project aims to demonstrate a new hybrid regenerative furnace that combines the energy efficiency of all-electric furnaces with the operational flexibility of conventional regenerative furnaces.  With the envisioned hybridisation, the project aims the increase energy share of electrical boosting from the conventional 5-10% of end-fired regenerative furnaces to beyond 40%. This will enable SH's production site to reduce its natural gas consumption by more than 50% and avoid 0.1 million tonnes CO2 equivalent of greenhouse gas emissions over the first ten years of operation. This is greater than the total yearly household GHG emissions of the Zasavje region (>20 000 inhabitants), where SH resides, for more than one year.  Through the introduction of the hybrid regenerative furnace, the electrification of the container glass sector will allow the glass melting process to align with the availability of renewable energy sources (RES). Moreover, with the proposed solution, local RES can be coupled directly to the melting process. A sector wide uptake of the hybrid regenerative furnace would therefore significantly increase the resilience and security of the glass manufacturing process in terms of energy supply.  With BEAR, SH aims to replace the existing regenerative furnace for extra-white flint glass production at one of its two sites. Both production sites are in Zasavje, a Slovenian coal region in transition, with a high unemployment rate. SH accounts for roughly 5% of j