

R&D PROJECT



Title of the project

A Territorial Construction System for a Circular Low-Carbon Built Environment

Acronym

RECONSTRUCT

Content of the Project

Cement and Steel are responsible for most of the embodied GHGs, representing >80% of the total. With recycling of cement and steel having a limited potential for further improving material efficiency. **RECONSTRUCT will develop low-carbon alternatives to Ordinary Portland Cement (OPC) and using them together with recycled and bio-based materials to produce in-situ components, precast components and sandwich panels designed to be removable, repairable and reusable.**

General Objectives

RECONSTRUCT will demonstrate its approach through the construction of two real-scale demonstrators and set up regional Circular Construction Clusters incorporating all the local value chain. By doing so, **RECONSTRUCT aims to achieve a step-change in material consumption and carbon footprint by reducing waste generated during construction by 90%, developing materials with up to 0% virgin content, reducing the carbon footprint of buildings by 50% and increasing recycling to 90%.**

COMSA leads the planning and construction activities of the Spanish demonstrator.

Work Packages

- WP1 AI-based sourcing and characterization of materials and waste
- WP2 Circular construction materials & components
- WP3 Tracking, tracing and digital twinning of construction elements
- WP4 Construction of circular demo buildings
- WP5 Monitoring & Assessment of Impacts
- WP6 Social Innovation and Replication Strategies
- WP7 Dissemination, Exploitation and Communication
- WP8 Project Coordination & Management

PROJECT PARTNERS

ITEC
HOLLAND COMPOSITES BV
CTC
SIMBIOSY INDUSTRIAL SL
U.P. DELLE MARCHE
COMSA SAU
TESSIDE UNIVERSITY
IRIS TECH. SOLUTIONS
ACSA
BRUNEL UV. LONDON
VRIJE UV. BRUSSEL
SOCIETAT ORGÀNICA
ICCS
FONDAZIONE ICONS
INSTITUT CATALA DEL SOL
GREEN ENERGY PARK

BUSINESS AREAS

INFRASTRUCTURE AREA

DURATION

2023-2027

COMSA BUDGET

COMSA
591.250€

PARTNERS BUDGET

6.694.967 €

KEYWORDS

[#Reconstruct_EU](#)
[#circularidad](#)
[#construcción](#)

COMSA COORDINATOR

Mireia Fernandez



UNIÓN EUROPEA