

PROYECTO I+D+i



Project title

Ecosystem development for monitoring railway infrastructure dimensioned from waste priorities of the Basque Country

Acronym

Dig2Rail

Project content

The Dig2Rail project arises from the need to look for new alternatives with high added value for waste management, particularly in relation to those that are, by volume, the main currents in the CAPV: Construction Waste and Demolition (RCD) and black steel slag. In addition, it is intended to provide the market with instruments to help monitor and control this type of infrastructure (monitoring ecosystem), thus facilitating the adoption of the solutions developed.

General objectives

The final objective of the Dig2Rail project is to research and develop new and more sustainable products for digitalized railway infrastructure, analyzing the technical feasibility of using the main DCW substreams (concrete, brick, ceramics, road milling) and black steel slag. , as secondary aggregate in the sizing of complete sections for railway infrastructure, promoting synergies between materials and undertaking the necessary actions in the upstream and/or recovery processes that guarantee compliance with the requirements in all phases of development: raw materials, ballast and subballast solutions and integral platforms in a specially controlled environment for monitoring

Project phases

- PT1: Specifications for the design of developments
- PT2: Research in materials such as ECO-aggregate for the development of secondary products
- PT3: Research in sensor solutions
- PT4: Laboratory-scale development and validation of railway layer prototypes
- PT5: Development and validation at laboratory scale of the developments of the measurement system and the advanced monitoring SW
- PT6: Pilot tests and integration of final prototypes
- PT7: Validation of suitability for use and Life Cycle Analysis
- PT8: Feasibility study and dissemination of the project
- PT9: Project management and monitoring

Business Areas

Área técnica de Innovación I+D+i
COMSA

PARTNERS

- TEKNES INNOVACIÓN, S.L.
- CAMPEZO O. Y S. S.A.
- COMSA, S.A.U.
- BIZKAIKO TXINTXOR SA.
- GIPUZKOAKO ZEPA SIDE SL.
- IRONTEC

DURATION

2024 - 2026

BUDGET

TOTAL: 2.161.094,71 €

KEYWORDS

Railway infrastructure
Slags
Steelworks
Ballast
Waste

COORDINATOR

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(COMSA)

