Now

5. RECONCRETE

CIRCULOOS

Re concrete

Turning mineral waste into 3D-printed urban furniture

ParaStruct
enabling circular materials

Bridge the gap

aridditive

Funded by the European Union

Powered by Mobile WorldCapital Barcelona

The challenge

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The linear problem

≈8%

of global CO_2 emissions come from cement production

Conventional casting is cement-intensive and mould-dependent.

Source: UNIDO, 2023

Two mineral streams still lose value



EAF (electric arc furnace) steel slag

Often downcycled or landfilled



Construction & demolition waste

A valuable mineral stream is lost

The challenge: reduce dependence on cement use and keep both streams in circulation.

This project has received funding from the European Union's "Horizon Europe" programme under grant agreement 101092295

Meet the ReConcrete Consortium

CIRCULOOS

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ariddditive

Concrete 3D printing manufacturer

ParaStruct
We enable Circular Solutions

Sustainable materials innovation



Consortium meeting – Innsbruck, March 2026

Bridge the gap

Business, impact & market adoption

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Value proposition

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Circular value chain for urban furniture



EAF slag + CDW

Secondary inputs



ParaStruct enabling circular materials

Printable formulation



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Large-scale 3D printing



Urban furniture

Customised, mould-free

Waste-derived minerals become customised, mould-free urban furniture.

Bridge the gap

Assess impact and shapes the route to market.

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Circularity impact

Measured impact

71.7%



lower GWP per SICURTA unit

140.73 conventional
39.89 ReConcrete
kg CO_2e per unit



24 of 25

environmental indicators show the lowest impact

78.6%

of the dry formulation is waste-derived

≈56%

less cement than the mould-cast benchmark

GRETA LCA, EF 3.1. Conventional mould-based production vs ReConcrete TO-BE.

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Business potential

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A pilot-led path to market

CATALONIA

Real-environment pilot



The consortium has the capabilities needed to bring ReConcrete to market.

SPAIN

Repeat public-space projects

€30.5M

serviceable market in Spain

EUROPE

Replication with local partners

≈€430M

estimated EU opportunity

Customers: municipalities, urban developers and construction companies

Next step: a real-environment pilot that becomes a procurement reference.

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