

From modelling to impact

CIRCULAR ECONOMY PATHWAYS TOWARDS A CARBON-NEUTRAL EUROPE

MESSAGE FROM THE PROJECT COORDINATOR

Four years on — from ambition to evidence

After four years of collaboration across Europe, CO2NSTRUCT has reached its final stage. What began as an ambitious effort to understand how circular economy strategies can contribute to climate neutrality has grown into a comprehensive modelling framework — supported by new datasets, policy insights, stakeholder engagement activities and practical tools to support decision-making across the construction sector.

Throughout the project, our consortium has explored how circular strategies — reducing material demand, extending product lifetimes, increasing reuse and recycling, and introducing innovative construction materials — can cut greenhouse-gas emissions while maintaining societal well-being. These are no longer abstract concepts: they are now backed by evidence, quantified across six carbon-intensive materials and embedded in the climate-mitigation models that inform European policy.

The final year has been particularly exciting. We moved from model development to the validation, communication and dissemination of results through workshops, stakeholder dialogues and policy engagement activities across Europe. In Brussels we presented our findings, together with our sister projects, to more than 160 policymakers and practitioners; across six countries, our partners are now bringing the results home through national workshops tailored to local priorities.

As the project draws to a close, our focus turns to legacy — ensuring that the knowledge, tools and networks created during CO2NSTRUCT continue to support researchers, policymakers and industry long after the funding ends. My thanks go to every partner, stakeholder and participant who has shaped this journey. Together we have shown that a circular, carbon-neutral construction sector is not only necessary, but achievable.



Ana Teresa Macas Lima

Project Coordinator · DTU

4

years of research
2022–2026

6

carbon-intensive
materials

7

partner
institutions

160+

Brussels policy-event
participants

MAJOR PROJECT HIGHLIGHT

Final policy event in Brussels — modelling to policy

On **28 May 2026**, CO₂NSTRUCT joined its sister projects CircEular and CIRCOMOD in Brussels for the final joint policy event, bringing together more than 160 participants from academia, industry, public authorities and civil society. The event focused on translating modelling evidence into actionable policy recommendations for achieving climate neutrality through circular economy strategies.

- The strong climate-mitigation potential of circular economy measures across the construction, mobility and housing sectors.
- The importance of sufficiency-oriented approaches such as reducing material demand and extending asset lifetimes.
- The need for improved data, transparency and harmonised modelling assumptions.
- The role of digitalisation, behavioural change and service-based solutions in supporting circular transitions.
- Opportunities for circular economy to reduce dependence on resource-intensive mitigation technologies and strengthen European resilience.

Watch the plenary session online: youtube.com/watch?v=QabmYEGjiX8.

EVENTS & DISSEMINATION

Annual consortium meeting in Madrid

In **March 2026**, project partners gathered in Madrid for the penultimate annual consortium meeting hosted by CIEMAT. The meeting brought together 20 researchers from across Europe for five days of intensive collaboration — reviewing final modelling results, aligning policy recommendations, planning national workshops, testing the project's serious game and exploring exploitation opportunities beyond the project's lifetime.

A major focus was the integration of results across work packages.

Integrated work-package results

- Circular economy scenarios & narratives
- Building-stock modelling
- Material flow analysis
- Life Cycle Assessment
- Social & rebound effects
- Offshore-wind circularity pathways
- Policy briefs & dissemination



Figure 1. The CO₂NSTRUCT consortium at the annual meeting in Madrid, March 2026. Source: CO₂NSTRUCT.

NATIONAL WORKSHOPS ACROSS EUROPE

Bringing the results home

A major dissemination activity in the project's final phase is a series of national workshops organised by partners — highlighting national priorities, showcasing project outcomes and encouraging dialogue on how circular economy strategies can accelerate the transition towards a carbon-neutral built environment.

COMPLETED WORKSHOPS

Greece



12 Jun 2026 • CRES • Athens

Presented key findings from citizen-behaviour and stakeholder surveys, exploring how societal preferences and engagement can influence circular economy implementation.

Portugal



23 Jun 2026 • LNEG • Lisbon

Presented overall project outcomes — circular economy scenarios, policy implications and stakeholder engagement — with interactive sessions on practical national pathways.

Italy



25 Jun 2026 • UNIPI • Pisa

Focused on value chains and the transformation required across construction supply chains to enable circular economy practices at scale.

Three national workshops completed across Southern Europe, gathering stakeholder perspectives from research, industry and policy.

UPCOMING WORKSHOPS

Spain



2 Jul 2026 • CIEMAT • Madrid

Project results alongside live demonstrations of CO2NSTRUCT tools and discussions on circular economy and climate mitigation in buildings and infrastructure.

Germany



6 Jul 2026 • RUB • Bochum

Showcasing the modelling framework and the CO2NSTRUCT webtool — how data and visualisation can support evidence-based decisions for circular construction.

Denmark



25 Aug 2026 • DTU • Copenhagen

Advancing Circular Construction Towards Carbon Neutrality: Insights from the CO2NSTRUCT Project. Presentations of project outcomes and a stakeholder panel discussion on the future of circular construction and Denmark's climate ambitions.

KEY SCIENTIFIC & PROJECT ACHIEVEMENTS

Agendas and registration: co2nstruct.dtu.dk/Events

What four years delivered

- Comprehensive datasets covering construction materials, building stocks and circular economy practices.
- Integrated modelling frameworks combining material flows, energy systems, life-cycle assessment and socio-economic dimensions.
- New evidence on the climate-mitigation potential of circular economy strategies.
- Insights into rebound effects, behavioural dimensions and policy interactions.
- Interactive decision-support tools and visualisation platforms.
- Policy recommendations to support Europe's transition towards climate neutrality.

Browse the full list of publications: co2nstruct.dtu.dk/Dissemination

LOOKING AHEAD

A lasting legacy beyond 2026

While CO2NSTRUCT officially concludes in 2026, its impact will continue through the knowledge, tools and networks created during the project. Over four years the consortium has developed new datasets, modelling approaches, policy recommendations and stakeholder engagement activities that advance the integration of circular economy principles into climate-mitigation modelling — and strengthened collaboration between researchers, policymakers, industry and civil society across Europe.

RESOURCES & TOOLS

Explore CO2NSTRUCT results & tools

To support continued knowledge sharing and evidence-based decision-making, several project outputs are publicly available:

- Interactive visualisation & webtool for exploring building stock, material flows and circular economy pathways.
- Scientific publications and reports.
- National workshop outcomes and stakeholder feedback collected across Europe.
- Policy briefs translating scientific findings into actionable recommendations.
- The CO2NSTRUCT Serious Game, engaging stakeholders and citizens in circular economy strategies.
- Datasets and modelling frameworks for future research and policy development.

About CO2NSTRUCT

CO2NSTRUCT investigates how circular economy strategies can be integrated into climate-mitigation modelling to support Europe's transition towards carbon neutrality. The project focuses on six carbon-intensive construction materials: cement, steel, brick, glass, wood and insulation.

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PROJECT DURATION

June 2022 – September 2026

STAY IN TOUCH

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CONSORTIUM

DTU · RUB · University of Sheffield · University of Pisa · LNEG · CIEMAT · CRES



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