



Volume 4 | Issue 1
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Circular B

Implementation of the Circular Economy to the Built Environment

Welcome to the fourth newsletter from *CircularB*.

Two years have passed since our first meeting in Brussels in October 2022. We are halfway! Throughout these two years, we have published three books, held eight face-to-face meetings (and many online meetings), two Workshops, two Stakeholders Days, one Training School, a Webinar Series... We have awarded nine STSMs grants, two ITC Grants and three Dissemination Conference Grants.

What have been done so far?

Just published!

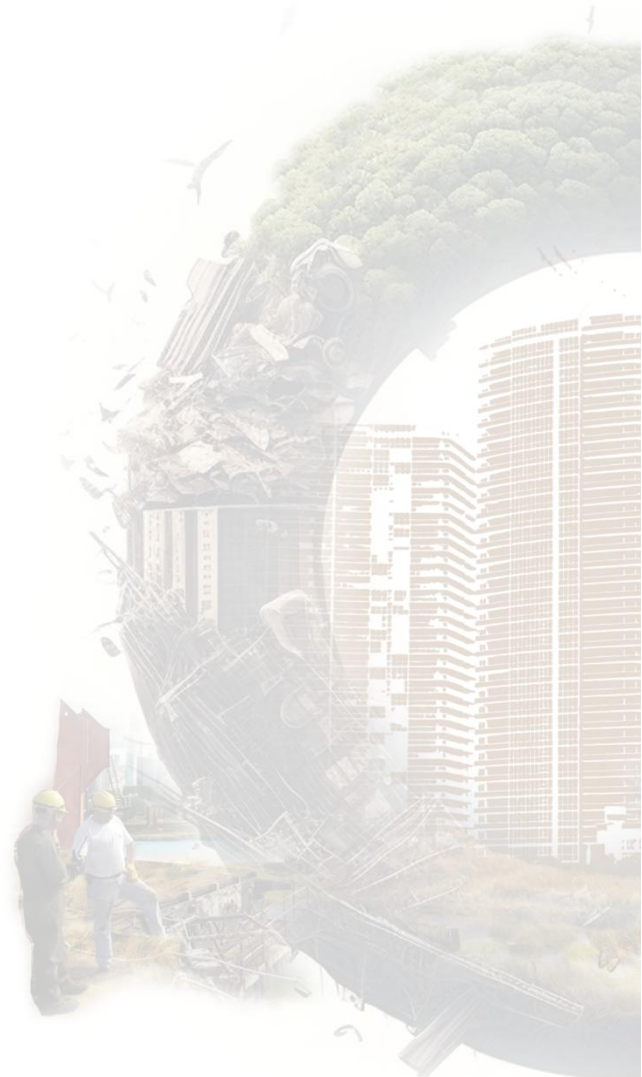
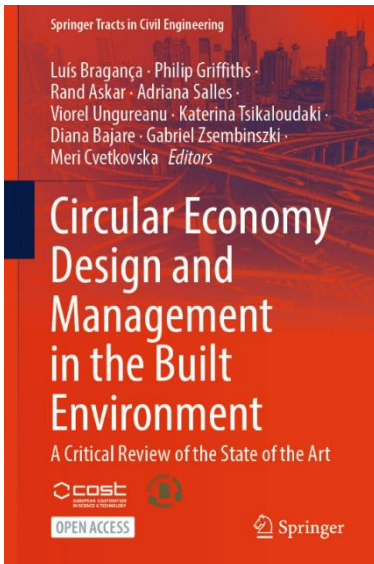
At the end of October, we published our [Critical Review of the State of the Art](#). This open-access book offers a comprehensive exploration of Circular Economy Design and Management within the Built Environment, presenting a critical review of the current state of the art. Going through multi-level approaches from material usage to urban planning, it meticulously examines strategies for circular building design, criteria, and indicators for circularity.

We would like to **THANK** all the authors, editors and contributors. It is a huge work and definitely a landmark in the literature on Circular Economy in the Built Environment.

Just launched!

Our e-Learning Section is **OPEN!** Visit our website to learn more about Circular Economy: <https://circularb.eu/e-learning/>.

We would like to grow this method of dissemination, please **follow us** and activate the “Notifications” to stay tuned to our updates.

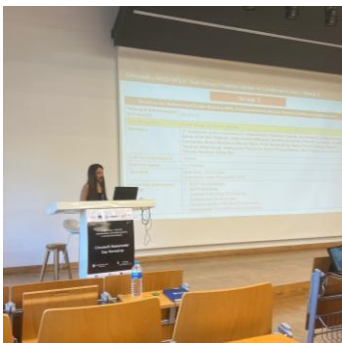


Working Group and MC Meetings and Stakeholders Workshop Day, Istanbul, Türkiye

From the 11th to the 13th of September, the Faculty of Architecture of the Istanbul Technical University hosted CircularB Meetings and a Stakeholder Workshop. For two days, the meetings focused on the Working Groups' ongoing activities and the next steps and deliverables. A truly big **THANK YOU** to our Local Organiser and esteemed member, Elif Kuracor! We really appreciate your efforts and hospitality to make this meeting unforgettable.



WG1 presented the main outcomes from D3 (Technical Barriers on Circular Economy Implementation) and the plans for the next deliverable – D4 (Circular Building Design Strategies) and the collaborative work (joint publications).



WG2 discussed the following deliverables: D6 (Report on Business Models and Financial Studies) and D7 (Circular Management Model and Case Studies Report). The WG Leader, Diăna Bajăre, presented the plan for the Training School on Circular Business Models to be held in Riga from the 8th to the 11th of September 2025 ([Save the date!](#)).



WG3 presented the work plan for D8 (Circular KPIs). Also, the sub-groups under this WG presented their ongoing work, strategies and collaborative papers. The WG co-Leader, Rand Askar, highlighted the responsibilities of tasks coordinators and members for a collaborative work, and the authorship rules and guidelines established for the Action.

WG4 discussed the e-Learning Section, Annual Report, and called attention to the participation within the Action activities, especially dissemination activities. “Ask not what your **COST Action** can do for you – ask what you can do for your **COST Action!**” – was the message WG4 left to all members.

It was a good opportunity to have a face-to-face MC meeting. Our Action Chair, Luís Bragança, went through the main activities of our Action and raised important points to discuss with our MC Members.

During the Stakeholders Workshop Day, we had the opportunity to hear from the industry and practitioners about their understanding of the challenges and barriers to the circular economy. We also had the opportunity to listen to two inspiring presentations that could give us the vision of the European Commission. Our most sincere thanks to **Philippe Moseley** and **Barbara Widera**.

“In September, I had the privilege of visiting the Faculty of Architecture at Istanbul Technical University, Türkiye for the CircularB working group (WG) meetings and stakeholder day. The visit was nothing short of inspiring!

Set in a beautifully repurposed 19th-century Ottoman building, the faculty offered a perfect blend of tradition and modernity, reflecting İstanbul's unique character. The 3-day event began with progress updates from various WGs. I also presented my now-published research on applying circular economy principles in building services—complex, ever-evolving systems critical to making buildings safe and comfortable.

The final stakeholder day featured engaging discussions and keynote presentations by Philippe Moseley from the European Commission and Barbara Widera of the New European Bauhaus, who highlighted the necessity and opportunities of a circular built environment. Talks on ongoing initiatives by various Turkish institutions further enriched the dialogue. Meeting passionate researchers and stakeholders was the key highlight of my trip, sparking collaborations that I'm eager to see flourish."

Moses Itanola, Belfast School of Architecture + The Built Environment.



Stakeholders Webinar Series

Launched in April, our webinar series covered six main groups of Stakeholders of the Circular Economy: Academia and Research; Policy Shapers and Regulators; Investor, Developers, and Insurance Providers; Building Design Teams & Users, Facility Managers and Owners; Contractors, Builders and Manufacturers of Construction Products; Deconstruction and Demolition Teams & Waste Management Industry. With three great speakers in each session, this webinar series provides an overview of the different stakeholders from different countries around Europe.

A great big **THANK YOU** to our Webinar and Stakeholder Outreach Coordinator, **Ana Andabaka**. We really appreciate your efforts in making this series possible.

All the webinars are available here: <https://circularb.eu/e-learning/>



Grants

We awarded nine grants during our second year to provide support for research, collaboration, and dissemination of our activities. Five were given to Short-Term Scientific Missions (STSMs), enabling our members to undertake important research trips and collaborations with colleagues in different countries. We also awarded one ITC grant and three Dissemination Conference grants.

Let's see what the grant recipients shared about their experience:

Rida Jbr:

- From: Università Politecnica delle Marche, Italy
- Host Institution (STSM): Chalmers University of Technology, Gothenburg, Sweden
- From 25/04/2024 to 25/06/2024
- Project Title: Studying the obstacles of commercialising food waste materials in construction industry.

"During the STSM, a comprehensive literature review and laboratory investigation were conducted to assess the feasibility and challenges of using seashell waste from food and hardened properties of mortar with 30% of cement substitution by seashell powder. Results indicated that seashell mortar had lower density, modulus of elasticity and compressive strength after 28 days of curing. In addition, the higher quantity of water in the pretreatment process did not play a vital role in the results when the percentage substitution was 30% of seashells. Moreover,



addressing market availability, production scale, and regulatory compliance is essential for successful commercialisation. The research conducted during this STSM represents a good example of building materials' circularity and fulfil the fundamental principles of CircularB COST Action. CircularB granted me the opportunity to work with one of the most qualified researchers I have ever met during my academic career which consolidated my scientific background and reflected positively on my professional and personal life mentality. In addition, this experience gave me the possibility to use developed and high-quality laboratory equipment as well as laboratory systematic organisation. Last but not least, a new collaboration has been initiated between the candidate and the Building Technology research group at Chalmers University by starting to write a review paper titled: 'The Leaching Risk of Common Supplementary Cementitious Materials: A Critical Review', which creates a promising cooperation future between us."

Olivera Bukvic:

- From: Faculty of Technical Sciences, University of Novi Sad, Serbia
- Host Institution (STSM): Faculty of Economics and Business, University of Zagreb, Croatia
- From 26/05/2024 to 09/06/2024
- Project Title: Turning agricultural waste into valuable resource in the construction industry.

"My experience during the STSM was incredibly enriching. The main goal was to develop an innovative circular business model for the alkali-activated concrete, which incorporates sunflower husk ash as an activator. I was engaged in various activities, from research to delivering a lecture to students of the Faculty of Economics and Business, entitled: "Synergy between civil engineering and agriculture: turning agricultural waste into valuable construction material." The insights and results I gained, guided by my host, Professor Ana Andabaka, will play a significant role in my PhD thesis, particularly in a chapter focused on the sustainable potential of alkali-activated concrete with sunflower husk ash. The best and most inspirational part of this experience was the networking and new collaborations I established, for which I am extremely grateful."



Marta Maria Sesana:

- From: Università Degli Studi Di Brescia, Italy
- Host Institution (STSM): University of Coimbra, Portugal
- From 30/06/2024 to 05/07/2024
- Project Title: Identification of Circular Key Performance Indicators (KPIs) and dashboard development.

"My first thank you goes to Helena Gervasio, because, as responsible of the Sustainable Construction Cluster of the Group Functional Performance Group of ISISE - Institute for Sustainability and Innovation in Structural Engineering, you organized everything in detail, to make perfect my visiting period at ISISE that unfortunately ends today. We worked intensively this week on the development of a new dedicated methodology to assess the buildings' circularity under the Cost Action CircularB project."

It was a pleasure and an honour also to share knowledge and visions on respective research with your colleagues to identify possible future challenges and collaboration between our universities (Università degli Studi di Brescia; Universidade de Coimbra)."



Adriana Salles:

- From: University of Minho, Portugal
- Host Institution (STSM): Cardiff University, Wales
- From 24/06/2024 to 12/07/2024
- Project Title: City Information Modelling (CIM) for Assessing Urban Circularity and Overcoming Barriers

“This STSM was a great opportunity to advance my PhD research and contribute to developing and finalising Deliverable 3 – Literature Review on Technical Barriers to implementing CE. Professor Marianna Marchesi, also a member of our COST Action, provided valuable insights and guidance on the current research on CE and sustainable urban development. She introduced me to specialists on one of the tools I’m researching, GIS, and we had a great discussion about using GIS tools in the built environment. Through this STSM, it was possible to establish a foundation for further research and collaboration with the host institution. I would like to say a big THANK YOU to Professor Marianna. Her hospitality, guidance, and insights were fundamental to enhancing my knowledge of the field. It was really good to know her better and share these days with her. An STSM is an amazing opportunity for collaboration, to enhance the scientific network, and to open horizons. I do recommend this experience to researchers. This is the spirit of a COST Action. I am truly grateful to CircularB for providing me with this opportunity.”



Gerald Leindecker:

- From: Institut für Analytische Strukturentwicklungsplanung IAPL, Austria
- Host Institution (STSM): ETH Zurich & EMPA, Switzerland
- From 15/08/2024 to 30/08/2024
- Project Title: Aspect of indicators and assessment methods for circularity in buildings and materials

“I received a nice welcome of the Host, Prof Professor Catherine De Wolf, Deputy head of Inst. Construction and her team. The facilities at the department of Inst. Construction represented perfect conditions for the STSM in Zürich. Furthermore, the LASS Symposium and the Keynote by John Ochsendorf were a great opportunity for reaching out to new ideas. The scientific exchange with Heidi Maria Silvennoinen, Katarina Slavkovic and during the time between 15.8 and 30.8 made my stay very effective and was also supported by Mr.Knecht. Further potential collaboration and potential publications will continue the fruitful exchange.”



In addition, we have also been awarded one grant for an Inclusiveness Target Countries Conference (ITC) grant and three Dissemination Conference (DCG) grants. Please refer to our last version of the [Newsletter](#) to check Rand Askar’s testimonial as a DCG grantee. Let’s see how their experience was.

Camila Cervantes (ITC):

- From: University of Minho, Portugal
- Conference: Sustainable Places 2024, Luxembourg
- From 23 to 25 September 2024
- Presentation Title: AI for Sustainability in the Construction Industry.

“Attending the Sustainable Places 2024 conference, with support from the ITC grant provided by COST Action CA21103, was an enriching experience. I had the opportunity to present my research on using artificial intelligence (AI) to promote sustainability in the construction industry. The conference, which brought together experts from fields such as construction, energy, and environmental engineering, provided valuable feedback that broadened the scope of my research. The insights gained from this experience will help advance the role of AI in fostering sustainability in the built environment. This opportunity has been improving in advancing sustainability in construction, and I look forward to utilizing the knowledge and connections gained to drive my research forward.”



Ana Andabaka (DCG):

- From: University of Zagreb Faculty of Economics and Business, Croatia
- Conference: 5th Symposium on Circular Economy and Sustainability; 26th INFER Annual Conference, Greece
- From 17 to 20 June 2024
- Presentation Title: Advancing Circular Economy in Construction: A Comparative Analysis of National Policies and Regulations.

“The 5th Symposium on Circular Economy and Sustainability and 26th INFER Annual Conference were incredible networking opportunities, bringing together a diverse group of researchers, practitioners, entrepreneurs, and policymakers. The presentation of joint work within Working Group 1 reached over 200 participants from 50 countries, sparking significant interest and productive discussions on national strategies for circular economies. Many attendees were keen to join the CircularB Action, boosting engagement with our Stakeholder Webinar Series. Some participants even offered to introduce our activities to their colleagues at their universities, which was incredibly encouraging. I also had the pleasure of exchanging experiences and discussing progress with the leader of another COST Action group. These conversations were enriching and underscored the value of such networking opportunities.”

These events significantly raised the profile of CircularB’s research, attracting more participants and stakeholders, and promoting best practices. The Dissemination Conference Grant helped align our efforts with the CircularB Action’s Science Communication Plan, maximising the impact of our research, increasing visibility and credibility, and facilitating valuable networking and learning opportunities. These achievements have strengthened our foundation for future advancements in the implementation of circular economy principles and reinforced my commitment to promoting sustainable practices in the built environment.”



Adriana Salles (DCG):

- From: University of Minho, Portugal
- Conference: Sustainable Places 2024, Luxembourg
- From 23 to 25 September 2024
- Presentation Title: Data management for enhanced circularity in the Built Environment

“Participation in the Sustainable Places 2024 conference was an excellent experience. I achieved my objectives of disseminating research findings, increasing visibility, and engaging stakeholders. The conference also provided valuable networking opportunities and insights into the broader landscape of sustainable urban development and circular economy initiatives, allowing us to learn from other projects, identify best practices, and benchmark our progress. The collaborative environment and diverse audience made it an ideal platform for showcasing our work.”

and building partnerships. Along with five other EU funding projects (Drastic, SUM4RE, Liaison, Reincarnate, and Regen), the participation in the Workshop “Data management for enhanced circularity in the built environment” was an excellent opportunity to showcase CircularB's research and contributions to the circular economy in the construction sector. I would like to express my sincere gratitude for speaking on behalf of our Action and for helping to disseminate our work. Thank you, CircularB, for this great opportunity”.



We would like to extend our warmest congratulations to all the grant recipients and wish them every success in their research and collaborations. We are proud to support the work of our members in this way and look forward to seeing the results of their efforts.

CircularB members participation in events

Science and Stormont, 2024

Each year, the UK's Royal Society of Chemistry (RSC) organise an opportunity for academics and researchers to address members of Northern Ireland's legislative assembly. This year's event was entitled 'The Green Economy'. Philip Griffiths of Ulster University, and WG4 leader, was asked to present on the Circular Economy. He introduced to those present the need for everyone to widen their recycling vocabulary by thinking wider about what we can do with products when someone deems their useful life to have ended. Instead of seeing *Recycling* as the main end-of-use route, using 10R thinking and considering refit, repurpose, remanufacture, etc., we have opportunities to reduce energy use, maintain value, and return resources to use quicker. He used lighting as an example of where technical progress has actually seen a backwards step in material use and outlined what was being done to reverse this.

There was widespread interest in the 10R principles in conversations after the talk, and the Chief Executive of the RSC said it was her main take-away from the event.



Philip speaking in the Long Room at Stormont to an audience of members of the legislative assembly, civil servants, policymakers, academics and researchers.



Moses Itanola and Philip Griffiths, CircularB members, meeting with Stephen Aitken MLA, chair of the NI Assembly All-Party Group on Science, Technology, Engineering and Mathematics.

CIBSE's Build2Perform



Philip Griffiths and Moses Itanola were invited to speak at the 2024 Build2Perform event, organised by the Chartered Institution of Building Services Engineers (CIBSE), held in London's Excel exhibition centre in November. Build2Perform is attended by over 2000 persons, ranging from consulting engineers, architects, developers, contractors, specifiers and government policy makers and officials. Philip and Moses spoke on the work of the CircularB COST Action, introducing the 10R principles to the audience and Moses outlined the findings he published in a recent paper. [Closing the loop in building services: A systematic review of circular economy applications - Moses Itanola, Philip Griffiths, Ibrahim Motawa, 2024](#). This was a great opportunity to widen awareness of CircularB and circular economy principles to building services engineering professionals. A number of contacts were made at the event and Philip Griffiths has been asked to chair a sub-group of CIBSE's Sustainability Interest Committee on the circular economy.

Many thanks to Philip and Moses for spreading CircularB's word!

What comes next?

Training School 2025

Circular Businesses On-Site Training School for Professionals

We are excited to announce a Circular Businesses Training School, designed for professionals aiming to advance their expertise in circular economy practices. This in-person training school will bring together 15 trainees from diverse professional backgrounds, offering a collaborative and interdisciplinary approach.

Program Details:

Dates: 8–10 September 2025

- **Focus:** Business courses, Circular Business Models, advanced Life Cycle Assessment (LCA), and group work.
- **Structure:**
 - **Theory & Practice:** Sessions on developing new circular business models tailored to the building environment.
 - **Group Work:** Participants will work in interdisciplinary teams (economics, architecture, environment, civil engineering, material science, etc.) to create innovative solutions.
- **Individual Guidance:** Teachers will be on-site throughout the training school for individual group consultations.

11 September 2025:

- Workshop at the 6th International Conference “Innovative Materials, Structures, and Technologies” (IMST 2025).
- **Highlight:** Presentation of circular business models developed during the training.

Eligibility Criteria:

1. Application Requirements:

- CV
- Motivation Letter
- Submission of an extended abstract for the IMST 2025 conference (10–12 September).

2. **Selection:** Professionals and PhD students with diverse expertise to ensure interdisciplinary collaboration.

Special Section at IMST 2025:

A dedicated session, “**Circular Business Models**”, will showcase insights and innovations, featuring contributions from the training school participants.

This programme offers a unique opportunity for professionals and PhD students to deepen their knowledge of circular business practices while networking with experts across various disciplines, including LCA. Join us in shaping sustainable solutions for the built environment!

Stay tuned to our social media channels and website so you do not miss this opportunity!

Calls



The 3rd Call of our CA21103 CircularB, which supports networking activities organised through a Grant Awarding Process, will be open for submissions in 2025!

This year, we have additional opportunities available for **Virtual Mobility Grants** and the newly introduced **Young Researcher and Innovator (YRI) Conference Grants**, designed to support and encourage the involvement of early-career researchers.

More precisely, networking activities include:

Call for Applications for Short-Term Scientific Missions (STSMs):

- Application period from **6th January to 7th February**
- Results disclosure **25th February**
- Must take place between **3rd March and 15th September 2025**

Short-Term Scientific Missions (STSMs) within CircularB are designed for young and experienced researchers seeking mentoring and lifelong learning opportunities. These missions involve visiting a host organisation in a different country for a specific work plan. Applicants must be involved in an official research programme or affiliated with an institution with a clear research mandate. Host institutions provide the necessary infrastructure capacity and knowledge support for grant beneficiaries to complete the proposed STSM.

Up to EUR 4 000,00 per grant

Call for Applications for Virtual Mobility (VM):

- Activity Period - The call is open year-round **from 8th January 2025 to 15th September 2025** (the last activity day).

The Virtual Mobility grant allows researchers or innovators within the COST Action to collaborate online, exchange knowledge, and learn new techniques. It benefits the COST Action by implementing flexible online activities, increasing their impact and reach, and contributing to European leadership in knowledge creation and innovation. The grantee can perform virtual mentoring schemes, support harmonisation and standardisation of methods, and implement research coordination activities without in-person presence. Examples include virtual mentoring, surveying, protocol coordination, and data analysis.

Up to EUR 1,500 per grant

Call for ITC Conference Grants:

- Activity Period - The call is open year-round **from 8th January 2025 to 15th September 2025** (the last activity day).

The ITC Conference Grants provide financial support grant funds for an oral presentation of their own work within the scope of the Action by an Action Participant affiliated to a legal entity located in an Inclusiveness Target Country / Near Neighbour Country in a high-level conference fully organised by a third party, i.e. not organised nor co-organized by the COST Action.

Up to EUR 2,500 for in-person conferences.

Call for Applications for Young Researcher and Innovator (YRI) Conference Grants:

- Activity Period - The call is open year-round **from 8th January 2025 to 15th September 2025** (the last activity day).

YRI Conference grant funds a presentation (poster/oral presentation) of their own work by a Young Researcher and Innovator (YRI) in a high-level conference fully organised by a third party, i.e. not organised nor co-organised by the COST Action.

Grant Amount is up to EUR 2,500 for in-person conferences.

Important dates and notes

- For **STSM** grants, application from **6th January to 7th February**, results disclosure **25th February**. All must take place **between 3rd March and 15th September 2025**.
- For all other grants (VM, ITC Conference, and YRI Conference), the call is open year-round from **8th January 2025 to 15th September 2025**.
- **Reports deadlines** - must be submitted within **30 days after the activity ends or by 15th September 2025, whichever comes first**.

Next Newsletter

Our next newsletter is due to be circulated in June 2025. If you have an item for the newsletter, please get in contact with us, via the website, www.circularB.eu. We welcome notices of conferences, seminars, and special focus journal editions, which have a focus upon the circular economy in the built environment.

Editors:

Philip Griffiths and Adriana Salles – WG4