

Newsletter

No. 1 2024

► A circular building sector will drastically reduce its energy use, carbon dioxide emissions, generation of waste and use of virgin materials. [Profile Area Website](#)

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The past year marks the ramp up of the profile area for Circular Buildings Sector. We have held internal events for members, hosted and joined external events, started a research school, and developed education to name a few. This newsletter offers a recap of the past year and introduces opportunities to engage going forward.

Last June, the profile area joined Almedalen in Visby to organize a panel discussion at the popular Lund University stage. Anna Denell from Vasakronan, Gunilla Holmberg from Skanska Industrial Solutions, and Madeleine Nobis from Liljewall joined our coordinator Ulla Janson to discuss possibilities for a circular future in the building sector. [A recording of the panel discussion is available here.](#)

Our internal Competence Day was held on 19 October 2023 at AF Borgen in Lund and online. Kristine Nore from Omtre, Norway opened the day with an inspirational keynote. Research talks by profile area members followed. Rebecka Lundgren presented her



Panel at Almedalen 2023: Circular building industry – how do we get there? Photo: Riikka Kyrö

work in adaptive reuse and sharing as circular business models and Margherita Lisco presented ideas of the new role of architects. After a delicious lunch, Margaret McNamee shared insights on reuse and fire safety requirements, Kent Persson talked about the reuse of windows, and Ulla Janson about energy and carbon impact. Finally, the municipality of Lund presented a case study, and the day was wrapped up by workshopping around the case. *Note that you can find internal presentations on the profile area Teams page.*

The profile area has initiated a course in lifelong learning, an introductory course on Circularity in the Building Sector. The course coordinator is Ulla Janson, and several profile areas members have guest lectured on the course this spring. The course attendance was high with 52 participants representing different fields, including architects, facility managers and engineers from different fields. The online course gathered

participants from around Sweden. This fall, the introductory course will be followed by a project course, [Circular Building Sector](#), also given within the scope of Lifelong Learning. The project course will have a more practical approach on circularity and focus on real-life case studies. A version of the project course will be offered fall 2024 to the A, V and L students (course code ABKN10)

The research school Adaptation of urban Space through SUsustainable Regeneration (ASSURE) was kicked off in 2023 and will run until at least 2027. The research school, funded by the Swedish Research Council for Sustainable Development Formas, is run by LTH and a joint effort with Malmö University, RISE and Uppsala University/Campus Gotland. The coordinator is Adjunct Professor Kristina Mjörnell. In total, ten doctoral students are connected, and the main focus is on transformation, adaptive reuse and circular aspects of buildings from both technical and human perspectives. Several PhD courses will be developed. Two doctoral students have been employed at LTH. Iliia Iarkov's research focuses on the role of technical building services in adaptive reuse, while Oscar Palmgren is focusing on different aspects of building physics in adaptive reuse projects.

Recently on 11 April 2024 the profile area co-organized a seminar during Lund Sustainability Week. Lund University hosted several events within the Sustainability Week agenda. Our event, co-hosted by the LU Agenda 2030 research school, started with talks by researchers Karin Farsäter, Marcus Utterström, Ulla Janson, and Riikka Kyrö. A panel discussion with participants from Link Arkitektur, Skanska, City of Lund, Boverket and LU followed. The event was fully booked and sparked great discussion.

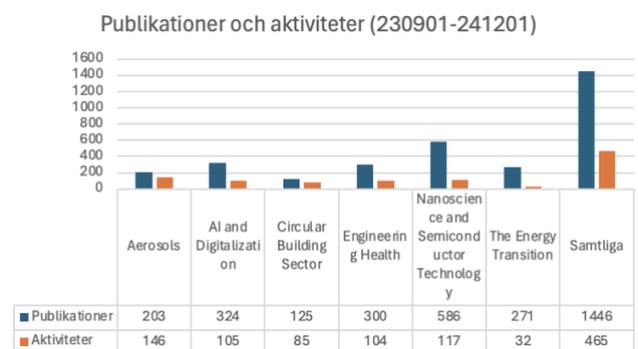
Throughout the year, the steering group of the profile areas has met monthly to discuss the strategy and to decide in which activities to engage. The steering group comprises the profile area coordinators Ulla

Janson (Building Services) and Dennis Johansson (Building Services), as well as Erik Serrano (Structural Mechanics), Jonas Niklewski (Structural Engineering), and Riikka Kyrö (Real Estate Science). *The steering group warmly welcomes all input and suggestions regarding joint activities and events in 2024-2025.*

Did you notice? Profile area member Konrad Wilkens has kindly set up a [LinkedIn page for the profile area](#). *Be sure to follow and feel free to tag whenever you are posting or sharing something related to circularity and buildings!*

EVALUATION BY LTH

Our first evaluation by LTH was conducted at the end of the year 2023, and the results were communicated in March 2024. With only 61 members, we are the smallest profile area within LTH. Considering that, our results are very good. In terms of number of publications and activities we are not much behind the larger profile areas, as shown in the figure below.

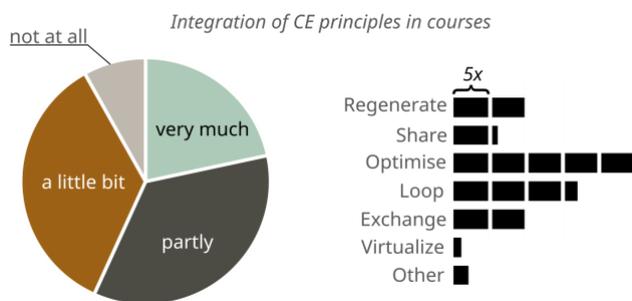


Results of the evaluation of the profile areas by LTH

One place for improvement are our members' profiles on Lucris, as we have only 35% completed profiles. *We kindly ask you to update Lucris with your picture and a brief description of your research profile.*

SURVEY – CIRCULARITY IN EDUCATION

At the end of 2023 we launched an education survey about circularity aspects in the V program. Many of you took part in the survey, for which we are very thankful. The findings indicate that our courses already incorporate elements of the circular economy, with a particular emphasis on optimization.



Survey answers from 38 courses included in the V-program.

Nevertheless, there is an opportunity to enhance our impact by better coordinating these efforts at the program level. Furthermore, there seems to be great interest among educators to develop their courses to incorporate circular economy. For more information, contact [Jonas Niklewski](#).

PROJECTS

The profile areas members are engaged in over 150 externally funded research projects covering a wide range of topics within circularity and the built environment. The following is a selection of interesting examples picked out from the Lucris database. Would you like to see your project featured in the next Newsletter? Contact: [Riikka Kyrö](#).

Recently completed projects:

- ▶ LO-CI: Pre-study for a fully circular facade system for locally-sourced building materials (LOCI), 2022-2024, PI Jouri Kanters.
- ▶ BRIC: Building Right - Innovative Approaches for a Circular Building Sector, 2023-2024, Swedish Energy Agency, PI Anders Warell.
- ▶ Reducing water damage costs in buildings by an holistic approach to technology, users and risks, 2020-2023, Formas, PI Birgitta Nordqvist.

Recently started projects:

- ▶ Strength and fracture analysis of laminated wood-based structural elements, 2024-2027, Formas, PI Henrik Danielsson

- ▶ A framework for predicting traffic-induced vibrations and structure-borne sound in lightweight buildings using machine learning approaches, 2024-2027, Formas, PI Peter Persson
- ▶ HempFab Nordic - Hempcrete prefab panels for the Nordic environment, 2023-2025, PI Paulien Strandberg

UPCOMING EVENTS

▶ Master's thesis presentations 30 May 2024 (online event)

The [LFM30](#) network's Working Group 2: Circular Economy and Resource Efficiency wants to acknowledge Master's theses focusing on circularity in the building sector. Selected theses will be presented at a webinar hosted by Ulla Janson. Are you currently supervising a *Master's thesis that could be a good candidate?* Contact [Ulla Janson](#).

▶ Ystad Summit 4-6 September 2024

[Ystad Summit](#) is a politically independent and democratic event promoting dialog, exchange of ideas, and chance encounters between the civil society, business, politics, and research. The profile area will host a session at the summit, details to be announced. The event has free entrance, welcome!



Ystad Summit will be held in September. Photo: Riikka Kyrö

▶ *Save-the-date* Circular Building Conference 1-3 June 2025

We are planning our very own international conference for next year. We are of course hoping for many contributions from our own researchers. *Call for Abstracts is coming out soon - please help spread in your extensive networks!*

UPCOMING CALLS

Several upcoming calls for proposals may be interesting to profile area members. As always, you are encouraged to link your proposal to the profile area. For transparency and keeping track of proposals, do discuss with a steering group member first.

- ▶ **EC Horizon: Design for adaptability, re-use and deconstruction of buildings, in line with the principles of circular economy.** Call closes 21 January 2025.

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-cl5-2024-d4-02-04>

- ▶ **Energy Agency: Klimatneutrala städer 2030 - 3.0.** Min. four partners, consortium leader should be a Swedish municipality. Call closes 5 June 2024.

<https://www.energimyndigheten.se/utlysningar/klimatneutrala-stader-2030---3.0/>

- ▶ **Formas: Klimatneutrala och socialt hållbara kommuner 2024.** Max. 18 months and 1,5 Mio SEK, main applicant should be a Swedish municipality. Call closes 4 September 2024.

<https://formas.se/arkiv/alla-utlysningar/utlysningar/2024-02-05-klimatneutrala-och-socialt-hallbara-kommuner-2024.html>

- ▶ **Hectors Hållbara Hus.** Scholarship (300 000 SEK) to develop a tool or product to reduce the resource dependency of the built environment. Call closes 1 June 2024.

<https://hectorshallbarahus.se/>

FOCUS AREAS

This year, we aim to activate the focus areas within the profile area. Possible activities could be webinars, joint research proposals, or co-authorship. If you are interested in contributing to these types of activities, or have ideas for more, do contact the focus area leads.

- ▶ **Circular Materials and Components.** Research on building materials and components from the circularity perspective. Research is conducted on the micro and macro level, using laboratory experiments, field experiments, and theoretical analyses. Contact: [Erik Serrano](#)

- ▶ **Circular Design and Buildings.** Research on circular design in both new and existing buildings. Design for deconstruction, design for flexibility, easy maintenance and repair, and replacement of existing components are specific research foci. Contact: [Pieter de Wilde](#)

- ▶ **Circular Use and Business Models.** Research on circular use of the existing building stock. This includes, e.g., sharing and multifunctionality, hybrid spaces, and flexible leases. Business models rooted in circularity principles, such as, access/functionality over ownership and product-service systems are central to the research. Contact: [Riikka Kyrö](#)

DO YOU HAVE A COLLEAGUE WHO WOULD LIKE TO BECOME A MEMBER?

All researchers within circular economy and buildings at Lund University are welcome to apply for membership in the profile area by sending a short CV and a list of relevant publications to [Riikka Kyrö](#)