ENQ Special Edition: The ARCC Journal

Architecture, Waste, and the Circular Economy

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Call for Articles

Waste is a global crisis. The world is drowning in an unprecedented amount of waste due to an increasing linear economy model that drive humanity to consume more every day. It was reported that the average American citizen consume nearly 32 times more that the average Indian citizen. Companies, businesses, and corporates are continuously racing to deplete the planet's natural resources in an astonishing rate. The design and construction sector alone are responsible for 30-40% of total solid waste worldwide, yet as architects, designers, and planners the waste problem is almost absent from the current discourse, both in practice and academia. Beyond sustainability, and as ideas such as the Dutch "CircularCity" become more appealing to architects and designers, the architectural education must adopt a transformational shift in the design thinking process to prepare a more responsible future architect. A shift from goal-oriented design to means-oriented design requires a shift in the design studio pedagogy. A transformation is needed in education, practice, research, and related professions to address the current and emerging economic challenges post pandemics, and through the built environment lens. It is time to define the role of architecture and design in the circular economy paradigm shift. What is the role of the architect and architectural education in the waste problem? How design thinking can address the unavoidable crisis? Could the design studio be activated as a catalyst to provide holistic solutions to the problem? This call is intended to push the research agenda and to highlight the possibilities for scholars, designers, academics, and architects for research, teaching, and scholarship on the role of both the Higher Education and practice in the Circular Economy.

With this special edition of ENQ: The ARCC Journal, we invite submissions of manuscripts that address research questions that encompass the broad issues of the relationship between architecture, design, and the circular economy. Articles addressing the broad topic in the built environment across different theoretical perspectives, epistemologies, and methodological approaches are encouraged. Scales addressed could be from the detail to the building to the city. We welcome also empirical research, literature reviews, theoretical arguments, and methodological outlines.

This issue of **ENQ** is open to contributions that reflect upon (but not limited to) the following questions:

- **Design thinking**: Redefining the architectural design framework and design process for a circular economy paradigm. How does architecture contribute by humanistic approaches adding the sublime and poetry, instead of basic pragmatic expectations?
- **Materiality**: Mapping and engagement in a resource-based project delivery system. How does architecture contribute to synergies between industries for circular economy material choices?
- **Design validation**: Adding value to waste streams from manufacturers and industries. Quantifying value by data analysis for material efficiency. Generating awareness for the potential of data driven design for a CE approach.
- **Interdisciplinary studies**: integrating ideas by collaborating across disciplines at early design stage. What are the possible disciplines the architect could partner with for CE design approach?
- **Design efficacy**: Introducing methodologies to address untapped opportunity in design within a CE paradigm. Can architecture lead to new methodologies for sustainability? What new methods could arise from engaging architects in the circular economy paradigm?

Calendar

- January 15, 2021: Announcing the call for articles
- May 1, 2021. Deadline for submission of articles
- October 30, 2021. Publication of the Special Edition

Submit articles to : https://arcc-journal.org/index.php/arccjournal/about/submissions

To be considered for the special edition, select "Special Edition: *Architecture, Waste, and the Circular Economy*" under "section" in the first phase of the submission process.

More information for authors: https://www.arcc-journal.org/index.php/arccjournal/information/authors

References

THE EMERGENCE OF THE MODERN CIRCULAR ECONOMY

The modern view of a circular economy differs from the past. It has started in the second half of the 20th Century and is a case for the simultaneous and uncorrelated emergence of an idea: The following is a selection of articles on the circular economy, including those related to industrial ecology, urban metabolism and **especially the built environment**. The latter has tended to be overlooked, with most attention being focused on the manufacturing sector. (The Product-Life Institute, David Ness 2017).

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