

The Circular Economy - A Pathway to Net Zero

June 20, 2024 | Session Overview

Speakers

August Nazareth, Global Director of Built Environment, Americas, BSI Group

Rabia Charef, Architect and Researcher

Moderator

Sarah Swango, Vice President, Corporate and Foundation Relations, National Institute of Building Sciences

The Circular Economy Overview

The built environment consumes 40 percent of all resources globally, generally following the take-make-waste linear economy.

By contrast, the circular economy in the built environment is a systems-based industrial framework designed to tackle global sustainability challenges, such as climate change, waste, and biodiversity loss. In a circular economy, products and materials are reused, repaired, recycled, or repurposed to create new products, contributing to a more sustainable and resource-efficient economy.

A circular economy is a crucial component of the pathway to net zero. It's being used by several companies, including Desso, Interface Carpet, IKEA, and Patagonia. It's also been a long-standing pathway for William McDonough's Cradle to Cradle concept for architectural design.

In this webinar, attendees learned about the elements of the

circular economy and why it's a resilient and timely system that is good for business, people, and the environment.

Speakers included August Nazareth, Global Director of Built Environment, Americas, BSI Group, and Rabia Charef, Architect and Researcher. The session was moderated by Sarah Swango, Vice President, Corporate and Foundation Relations, NIBS.

Materials Should Have a Planned Future

The idea of the Cradle to Cradle concept for architectural design is that "all materials should have a planned future" in a continuous, sustainable cycle, said BSI's Nazareth.

Other circular economy influencers and schools of thought include:

 The Performance Economy by architect and economist Walter Stahel



- Biomimicry by Janine Benyus, author of Biomimicry: Innovation Inspired by Nature
- Industrial Ecology the study of material and energy flows through industrial systems
- Blue Economy "100 innovations that can create 100 million jobs within the next 10 years"

Circularity: Why Now

Circularity is included in several recent U.S. legislative acts, including the Inflation Reduction Act, CHIPS and Science Act, and the Bipartisan Infrastructure Law.

These acts include circular economy goals as a way to:

- Recirculate critical materials
- Federal Buy Clean initiative
- Extend product lifecycles
- · Reduce greenhouse gas emissions
- Create new industries and jobs
- Avoid unnecessary disposal of products and materials to mitigate emissions associated with embodied carbon

A couple of case studies highlighted in the session include Circl, a bank project in Amsterdam that did a really good job with circularity, and Ford Rouge Center – a large historic site in Dearborn, Michigan.

Building Innovation Webinar Series

As part of our mission to continue conference education, NIBS launched a webinar series to reach more professionals on new technology, trends, groundbreaking tools, best practices, and workforce solutions.

It's our way of extending the Building Innovation annual conference beyond the in-person meeting.

The next webinar – Fostering Collaboration for Climate Adaptation and Decarbonization in the Built Environment – takes place July 9. Learn more about NIBS events.