

Civil Engineering



A-12: Renewal and Regeneration in the Built Environment

Bio-Mimicry Nature-Based **Deep Retrofits Evaluation**

Summary

We will work with the lead partner to understand the lessons that can be derived from the processes of renewal and regeneration found in nature and to systematically relate them to processes of urban renewal. It will address issues such as implementing and incentivizing concepts like 'un-building" (dismantling and recycling old buildings), the concept of the environment as a stakeholder in project decision-making, how buildings can embody the principles of equity and fairness, the role of bio-mimicry in delivering and inspiring sustainable design, and the way architectural practices must evolve to meet the challenges.

Partners

Christine Lintott Architects are experts in bio-mimicry and incorporating elements of local climate and landscape into architecture.

Researchers

Under development.

METHODS AND DATA USED

Under development.

Final Outcomes

This activity will couple these softer aspects of the building design and regeneration process with the technical methods from other ReBuild activities. The output will be a methodology grounded in a systems thinking approach and drawing upon concepts from industrial ecology. This will inform the preservation and rehabilitation of existing built structures in a manner that allows for their extended life through new or reimagined use and regenerative design that sees the built environment as a part of a complex ecosystem and seeks to repair past damage.