

Lumber Reimagined: The Future of Reclamation

Presenter: Ashley Yanda of Urban Machine

Q&A to follow

1.0 LUS



Monterey Bay

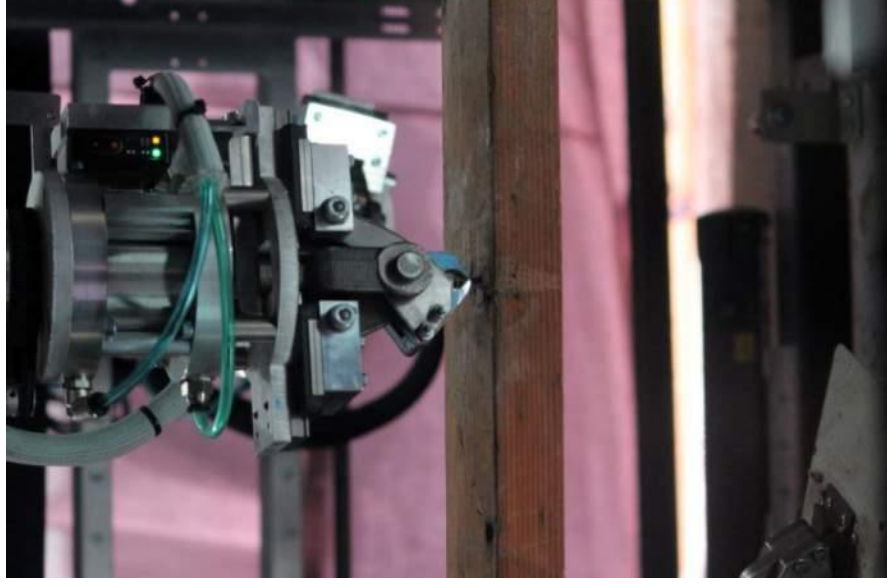
COMMITTEE ON THE ENVIRONMENT

Learning Objectives

1. Identify the detrimental environmental when buried landfilling dimensional lumber from Construction and demolition debris.
2. Explore a technology-enabled greener construction, leveraging cutting-edge robotics and wood REuse.
3. Understand building circularity to encourage deconstruction as well as the benefits of lumber in lieu of virgin materials.
4. Understand the role of circularity in supporting a circular economy. Pledge in supporting a circular economy by reusing and improving building materials for resiliency, adaptability, reuse, aspiring to a zero-waste construction activities. Share how participants will see how the benefits of a circular economy in buildings' role in fighting climate change by monetizing carbon storage and building more eco-friendly built environment.

Introduction

Urban Machine, a company based in Oakland California, is the latest in robotics and AI applied to the lumber waste so it can be used again at a price comparable to new lumber. This approach to local economic opportunity shortens the lumber supply chain, reduces embodied carbon, and alleviates pressure on the forest. The webinar will address how this technology is changing the way lumber is handled, opening up opportunities for deconstruction and reuse. The talk will also cover the Urban Machine Materials Pledge commitment to a circular economy, showing how the company is leading and reusing waste to a new level for construction activity.



AIA Materials



Human Health

Support **Human Health** by preferring products which support and foster life throughout their life cycles and seek to eliminate the use of substances that are hazardous.



Climate Health

Support **Climate Health** by preferring products which reduce carbon emissions and ultimately sequester more carbon than emitted.



Social Health + Equity

Support **Social Health + Equity** by preferring products from manufacturers who secure human rights in their own operations and in their supply chains, and which provide positive impacts for their workers and the communities where they operate.



Ecosystem Health

Support **Ecosystem Health** by preferring products which support and regenerate the natural air, water, and biological cycles of life through thoughtful supply chain management and restorative company practices.



Circular Economy

Support a **Circular Economy** by reusing and improving buildings and by designing for resiliency, adaptability, disassembly and reuse aspiring to a zero-waste goal for global construction activities.



<https://www.aia.org/materials-pledge-s>

<https://www.aia.org/pages/6351155-materials-pledge>

Circular Economy



The Ellen MacArthur Foundation outlines three principles for a circular economy: **eliminating waste and pollution**, **circulating products and materials at their highest value**, and **regenerating nature**. As it is structured today, the construction and demolition industry is intractable on all three principles. It is estimated that about 30 percent of all construction waste is recycled globally. This suggests two avenues for the building industry: decommissioning processes or assemblies or systems in them intact for other immediate applications. The second horizontal integrations with other sectors we can become part of the circular economy, and they can be ours.

UJEM
urban
machine





\$1500

The Problem

We are So

- **37M Tons** of lum



How?

Make it Circular

A circular economy focused
on materials—giving that reso

U **urban**
M **machine**

Human
Environment

Sequester CO₂ by keeping



Robotics & AI

The Machine



Nail Removal

Music to Our Ears

What's in a Sound?



Reclaimed, Premium
Locally Sourced



Reclaiming the Past To **Build** the

Our reclaimed lumber gets
life while keeping its histo



What Can Designers

Specify DECO

By Designing a building



What Can Designers Do
Specify Recycled



What Can Designers Do Design to be



How to Easily

Specify DECO

**Scan QRs for guidelines on d
buildings that consider the e**

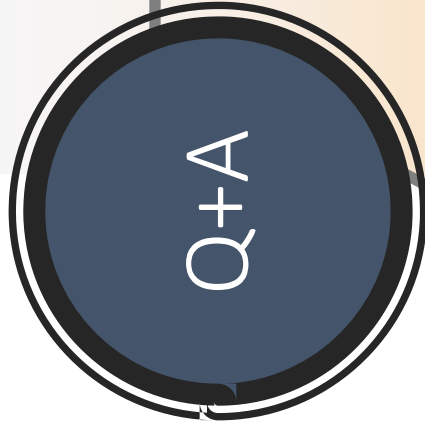


The benefits of Dowel Laminir

Thank you!



Thank you for participating!



PRESENTER

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Become an AIAMB COTE member!

Contact: Libby Barnes: libby@workbenchbuilt.com

Monter

AIA California resources

'WHAT YOU CAN DO NOW'



Together We Are

Climate Actions

Our Actions

Advocate

// DEDICATED
RESILIENT FUTURE //

Climate Advocacy

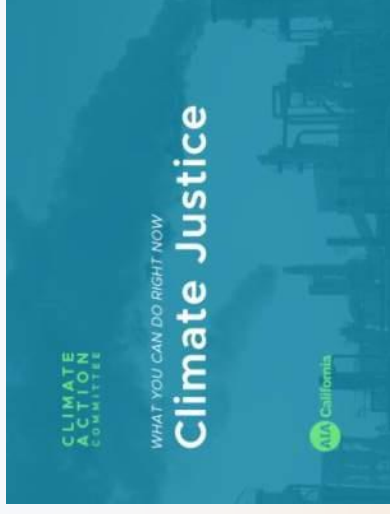
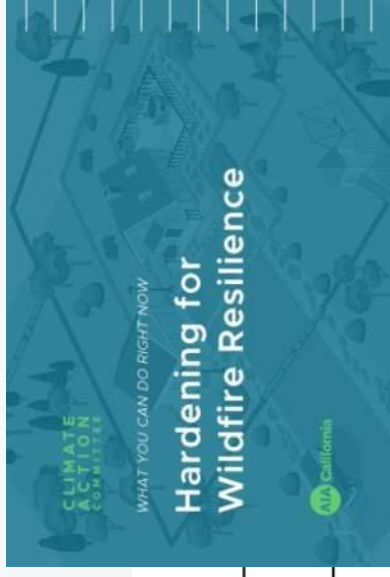
Climate Action Resources

What You Can Do Right Now

MEMBERS AND THOSE WHO SUPPORT THEM



Climate Action in the
Built Environment:
2023 Bills Signed by
Governor Newsom



Metropolis Magazine/Deep Green Podcasts

<https://metropolismag.com/deep-green-podcast/>

The Ellen Macarthur Foundation

<https://www.ellenmacarthurfoundation.org/>