

URBAN MACHINE WOOD WITHOUT THE WASTE



urbanmachine.build

NAILING WOOD RECYCLING

Wood accounts for 20-30% of the nationwide C&D related debris on an annual basis, but unlike the two other largest contributors, concrete and steel, it has a very low respective recycling rate. One of the largest barriers to wood recycling is the residual metal left in the lumber from nails, staples, etc. Often used by our self-perform division for temp construction, lumber is a large area of waste that could have a high potential for reclamation. Reclaimed wood aligns with the goals in LEED v5 to decarbonize through the reduction of carbon emissions from harvesting new wood.



A LOCAL PIONEER

Urban Machine, a local Bay Area company, sought to “pioneer sustainable wood reclamation.” Though the use of AI and robotic technology, they have created a machine that is able to extract metal pieces from the pieces of lumber on all four planes.



STEP 1

The wood is placed in the machine and clamped while a precise “claw” within the machine uses AI technology to sense and pick out the nails. The wood around the fasteners is heated to facilitate ease of removal which decreases the impact of the machine on the lumber.

STEP 2

The wood is rotated and clamped along another plane, until nearly free from metal residuals.

Urban Machine’s robot is mobile and sustainable! By deploying robots at resource facilities and job sites across North America, they aim to reclaim 50% of the 37 million tons of wood waste produced each year, ensuring that valuable resources avoid landfills.



WHAT DOES THIS MEAN FOR OUR JOBSITES?

This is an amazing resource for R&S jobsites.

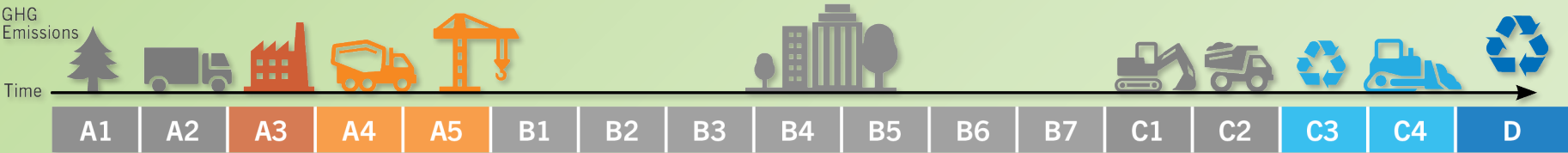
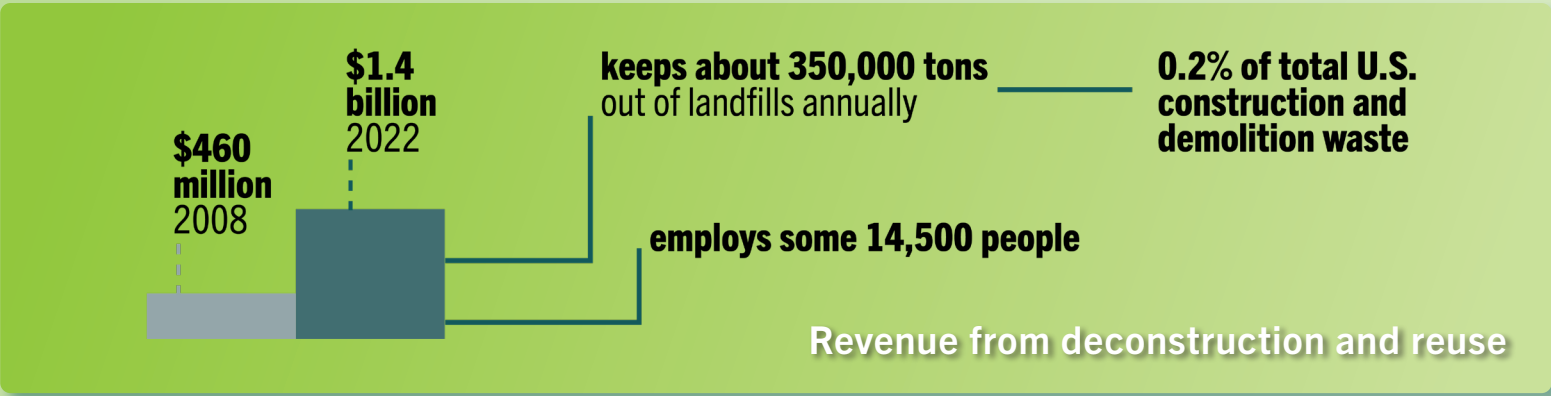
Urban Machine can:

- Bring the machine on a trailer onsite to reclaim the lumber directly from the jobsite
- Create a revenue stream from the project by using the reclaimed lumber for sale or reuse
- Provide locally sourced, reclaimed lumber to projects
- Greatly reduce wood waste from temp construction on the project.



GETTING STARTED

Urban Machine can be contacted at info@urbanmachine.build for information about the process and for scheduling or renting Urban Machine’s robot. Dimensional lumber (from 2X4 up to 6X18), Glulam, and heavy timber can all be locally sourced and reused. There is no reason the wood on your project should go to waste.



*colorized section of the carbon lifecycle analysis are relevant to the content on this poster

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