Embodied Carbon

Opportunities to Reduce Climate Impacts of Buildings
Embodied Carbon

The sum impact of all the greenhouse gas emissions attributed to materials throughout their life cycle.

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Embodied Carbon: Beyond the Building Lifecycle

D REUSE | RECOVER | RECYCLE
New Construction: Eliminating Operational Carbon
Decarbonization = Operational and Embodied Carbon
Total Carbon Emissions of Global New Construction

The Time Value of Carbon

The Time Value of Carbon

![Graph showing the time value of carbon]

- Operational Carbon
- Embodied Carbon

The Time Value of Carbon

Embodied Carbon: Places to Intervene in a System*

* Donella Meadows: http://donellameadows.org/archive/leverage-points-places-to-intervene-in-a-system
Embodied Carbon: Opportunities for Intervention
Material Reuse

photos courtesy of Nicole Tai, GreenLynx
Adaptive Reuse

Photos by Michael David Rose
Deconstruction
Refresh Activities and Occupancy Churn Rates
Reducing Embodied Carbon in New Construction
Next Steps

• Continue to draft policy requirements for municipal projects to be included in Environment Code Chapter 7 update (Fall 2021)

• Continue to research existing markets, sector activities, and potential infrastructure for material reuse/redistribution toward Pilot project (2022)
  • e.g., Surplus Study (Phase 1 Fall 2021) | All For Reuse workshops (early 2021)

• Convene a Technical Advisory Committee to inform future deconstruction and salvage material policy requirements (early 2021)
Questions?

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