Commercial Clean Gypsum Wallboard Waste Diversion

The First Step Towards Circular C&D Decarbonization

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A Changing Market

- Landfilled C&D Waste = Carbon Emissions
 - Among many other problems...
 - ► How many landfills are left?
- The Rise of ESG
 - Owners beginning to prioritize carbon
 - Evolving project specifications
- Waste Audits?!?
 - The need for transparency
- Shifting Policy
 - ▶ Isn't clean GWB banned from landfill in MA?
 - The growth of EPR legislation





Summary

This section details specific Minimum Requirements and Targeted Ambitions for project teams to consider related to Waste. Some specific high impact-strategies for design and construction partners to incorporate include:

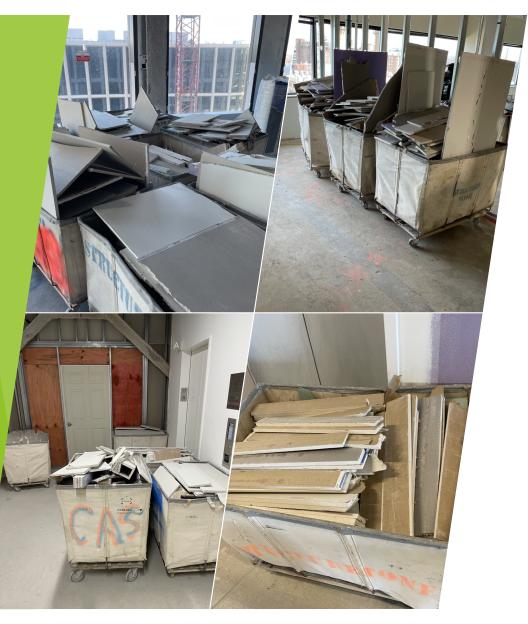
- ✓ Set *construction waste* diversion goals for projects early in design.
- ✓ Minimize construction and demolition waste through design strategies and utilizing fewer materials, where possible.
- ✓ Consider the project's end-of life deconstruction during the design phase.
- ✓ Coordinate materials circularity through reuse and salvaging materials.

Required Recycling, Salvage, and Reuse: The following may not be disposed of in landfills or by incineration:

Site Separation of C&D Waste

- Pilot to Process
- Project Types
 - ► Interiors vs. ground up
- Owner Buy-In
 - ► Here's how it can help you...
 - Corporate sustainability requirements?
- Starting Small
 - ▶ What can be diverted?
 - Signage
- ► Learning as we go
 - When in doubt, throw it out





Site Separating Clean Gypsum Wallboard

Is it Really That Much Harder?

- ▶ No, but it's different...
- Early Action
 - Contract development
 - ▶ Plan for logistics
- Field Staff Education
 - ▶ Supers, laborers, subcontractors, haulers
 - Explaining the "why" and asking "how?"
- Contamination
 - ► Reversing automatic tendencies
 - ▶ The continual need for commingled
- ▶ Hauler Communication
 - ▶ Where can this all go?
 - "I have a full load of GWB for pickup"



One Year of Results + Lessons Learned

- 2023 Stats
 - ▶ 5 Projects separating GWB offcuts
 - ▶ 133.89 Tons GWB diverted
 - ▶ 3.89* MTCO2e
- Lessons Learned
 - ► Field staff owns the process
 - ▶ How many hampers?!
 - ► Early education/planning are key
 - "Don't let perfect be the enemy of good"
- Cost impacts?
 - ▶ No labor premiums?
 - Bolstering hamper numbers



*Calculated using **EPA WARM Tool** - Version 15

Future Plans

- Refinement
 - ► Signs vs. flags
 - ► Are hampers the right choice?
 - ▶ Why is there **SO MUCH** GWB waste?
- Expansion
 - ▶ More than just LEED/sustainability projects
 - Additional waste streams
- Collaboration
 - ▶ Designing for waste reduction + deconstruction
 - Increased hauler awareness
 - ► Partnerships + Manufacturer EPR
 - More secondary markets/outlets



Thank you!

- Contact info
 - ► Michael Orbank Michael.Orbank@STOBuildingGroup.com
- Groups
 - ► Mass DEP Deconstruction Group
 - ► CLF Boston/NE Reuse Group clfbostonreuse@gmail.com
- Resources
 - ▶ <u>Interior Construction Site Separation</u> Article for Construction Super Magazine
- Questions?

"Waste is a lack of creativity"

"The landfill doesn't deserve these materials, our communities do"

