



Reuse Innovation Center

Completing the Cycle:
Building UP an Industry That Takes DOWN
Buildings

Dave Bennink

Owner

Image: Reuse of a
reuse store

- 100,000,000 pounds
- 10,000 acres forest preserved
- 5000 projects
- 500 jobs
- 44 States/4 Provinces
- 36 reuse operations
- 1 mission



Section 1: 30 years of taking buildings apart and selling the parts

5 Focus Areas:

- Historic Preservation
- Environment / Climate
- Affordable housing / materials
- Job creation (NEW green jobs)
- Equity / Sustainability

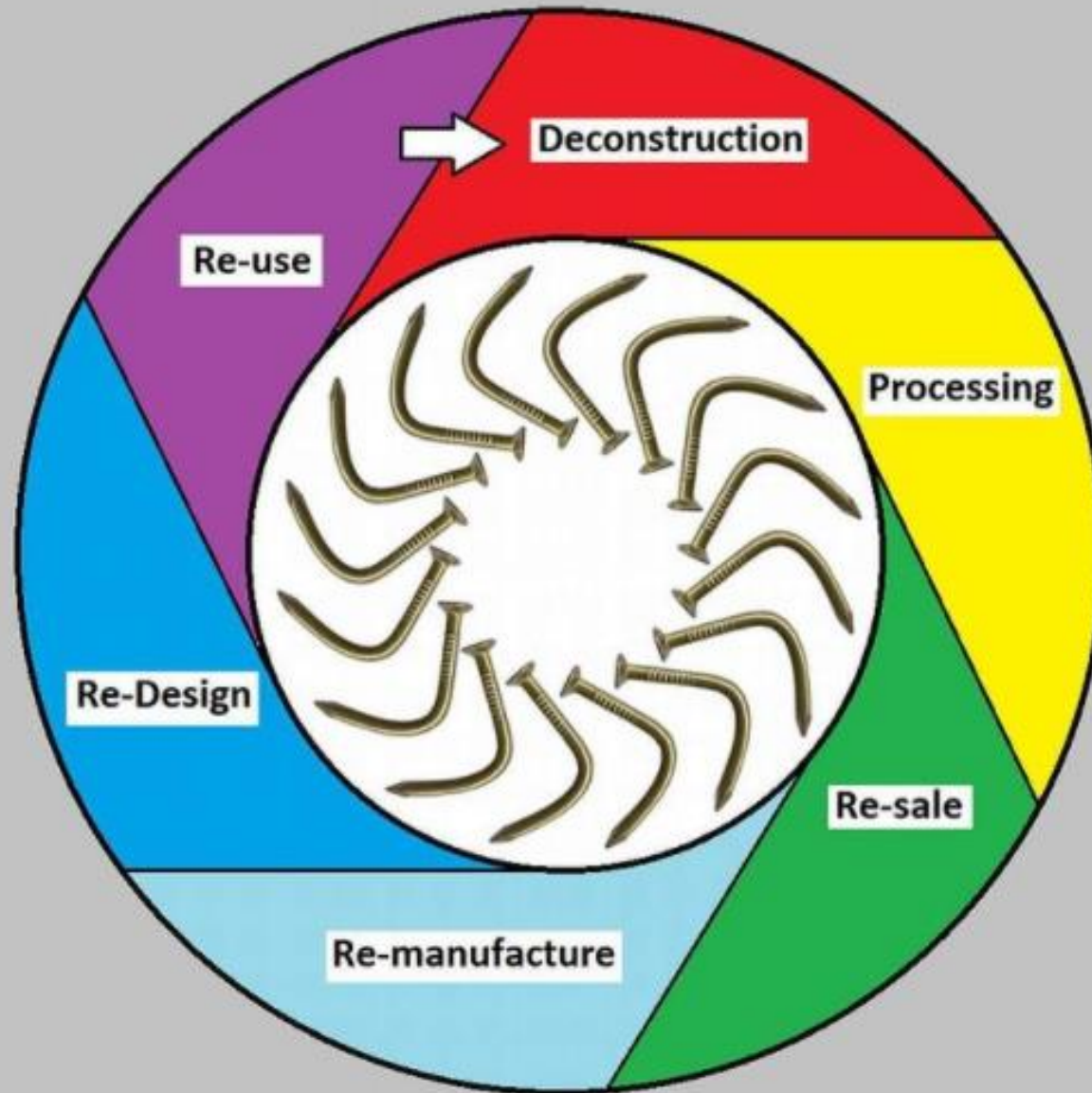


#1 SCALE and Equity



Section 2: Deconstruction 101

Building Deconstruction Institute
CIRCULAR WORKFORCE
Building Material Reuse



A LIFETIME'S WORTH OF WASTE

BUILDING DECONSTRUCTION INSTITUTE
www.reuseconsulting.com



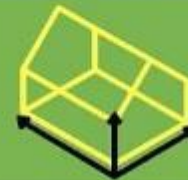
The EPA states that Americans produce an average of 4.40 pounds of waste a day

This adds up to about
120,000 pounds of waste in
75 years, or one average
lifetime



The average American home is 2,400 square feet and weighs about 50 pounds per square foot

This adds up to about
120,000 pounds per home

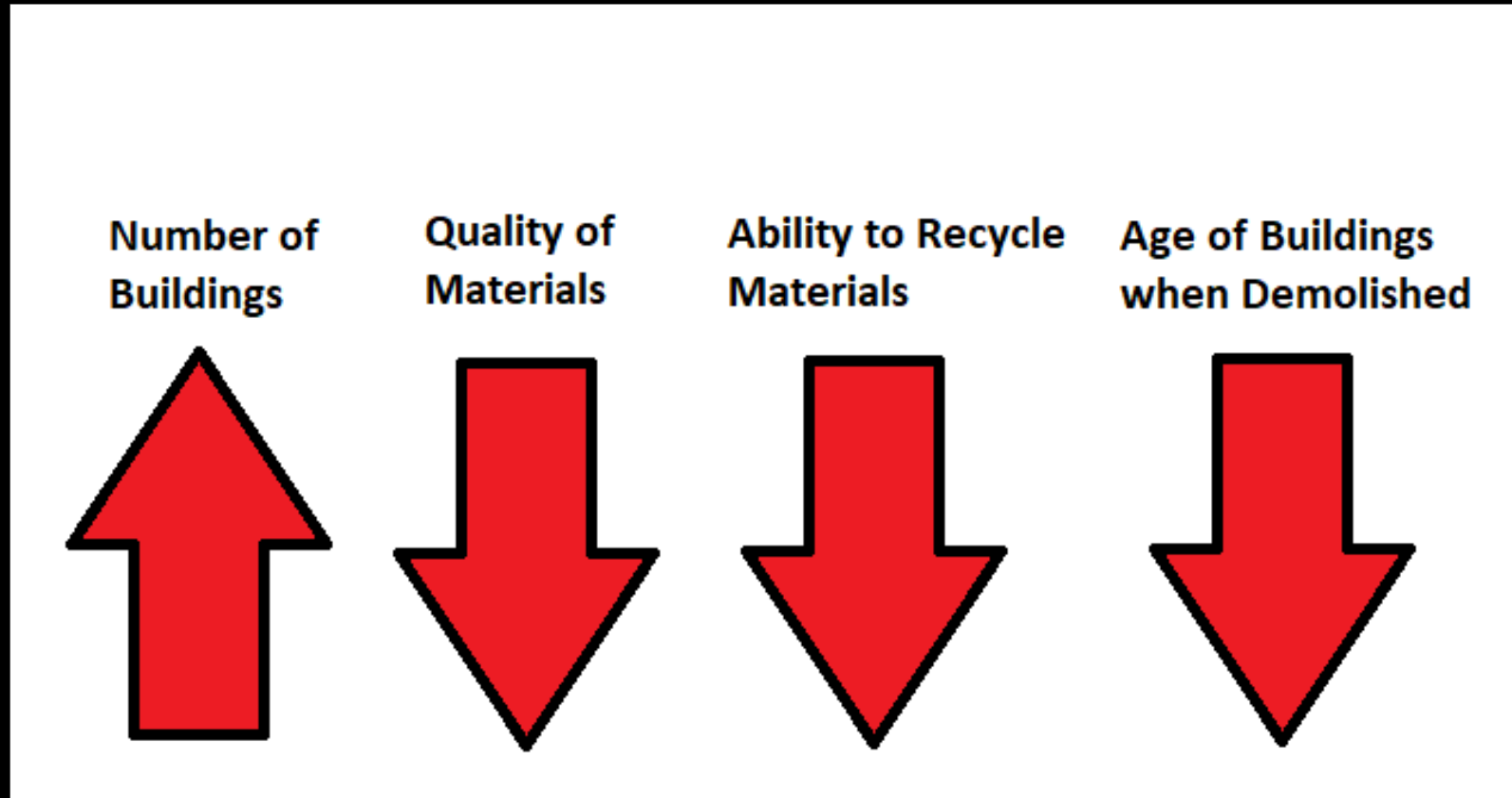


**DEMOLITION OF ONE AMERICAN
HOME IS EQUIVALENT TO A
LIFETIME'S WORTH OF WASTE**

Consider Building Deconstruction and ReUse to support an impactful circular and sustainable system



The Cycle of Waste is Accelerating



Challenges



25 Categories of materials – from 1800s to 2022

- 1. Doors
- 2. Windows
- 3. Household
- 4. Hardware
- 5. Electronics
- 6. Lumber
- 7. HVAC
- 8. Flooring
- 25. Miscellaneous
- 9. Plumbing
- 10. Yard/Garden
- 11. Sheet goods
- 12. Roofing
- 13. Insulation
- 14. Cabinets
- 15. Appliances
- 16. Antiques
- 17. Masonry
- 18. Architectural salvage
- 19. Furniture
- 20. Finish wood
- 21. Post-Fabs
- 22. Shelving/Garage
- 23. Building Materials
- 24. Plants/Landscaping

Introduction to Deconstruction – Help Wanted



'Designed for Demolition'

- Construction Adhesive
- Spray-Foam Insulation
- Fasteners
- Other challenges we face



Commercial Building Materials

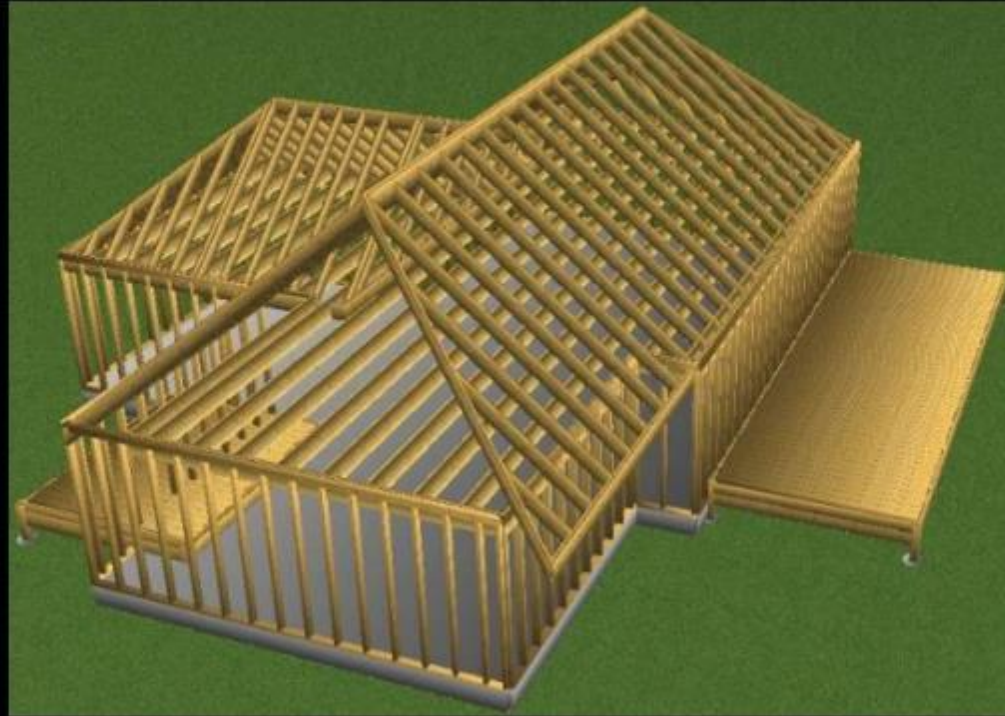
Generally higher value
Generally in larger quantities
Specialized
Demand must match supply



Section 3: Successful Approaches/Strategies

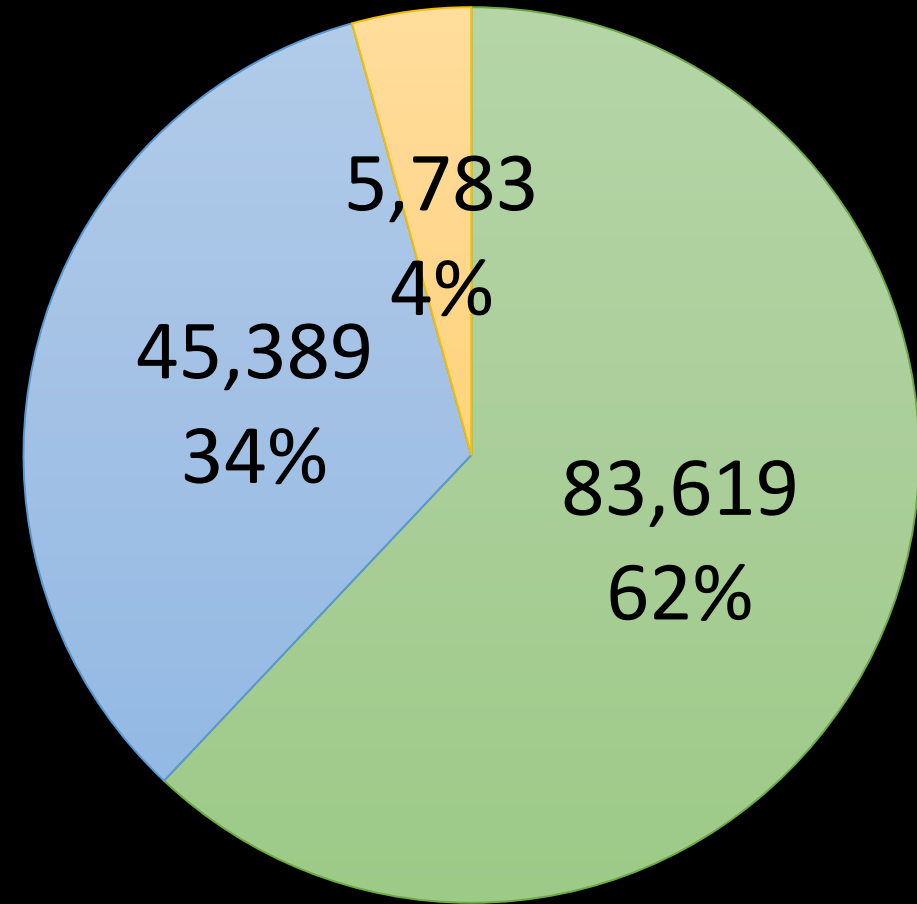
How to Structure a Reuse Business

Focus on what we want



Materials Destination (lbs.)

■ Reuse ■ Recycling ■ Disposal



Total House Weight:
= **134,790 lbs.**
= **51 lbs. per sq ft**

Average lifetime worth of
waste for one person:
= **134,411 lbs.**

Green-Collar Jobs

Inner-city youth
Homeless vets
Previously
incarcerated

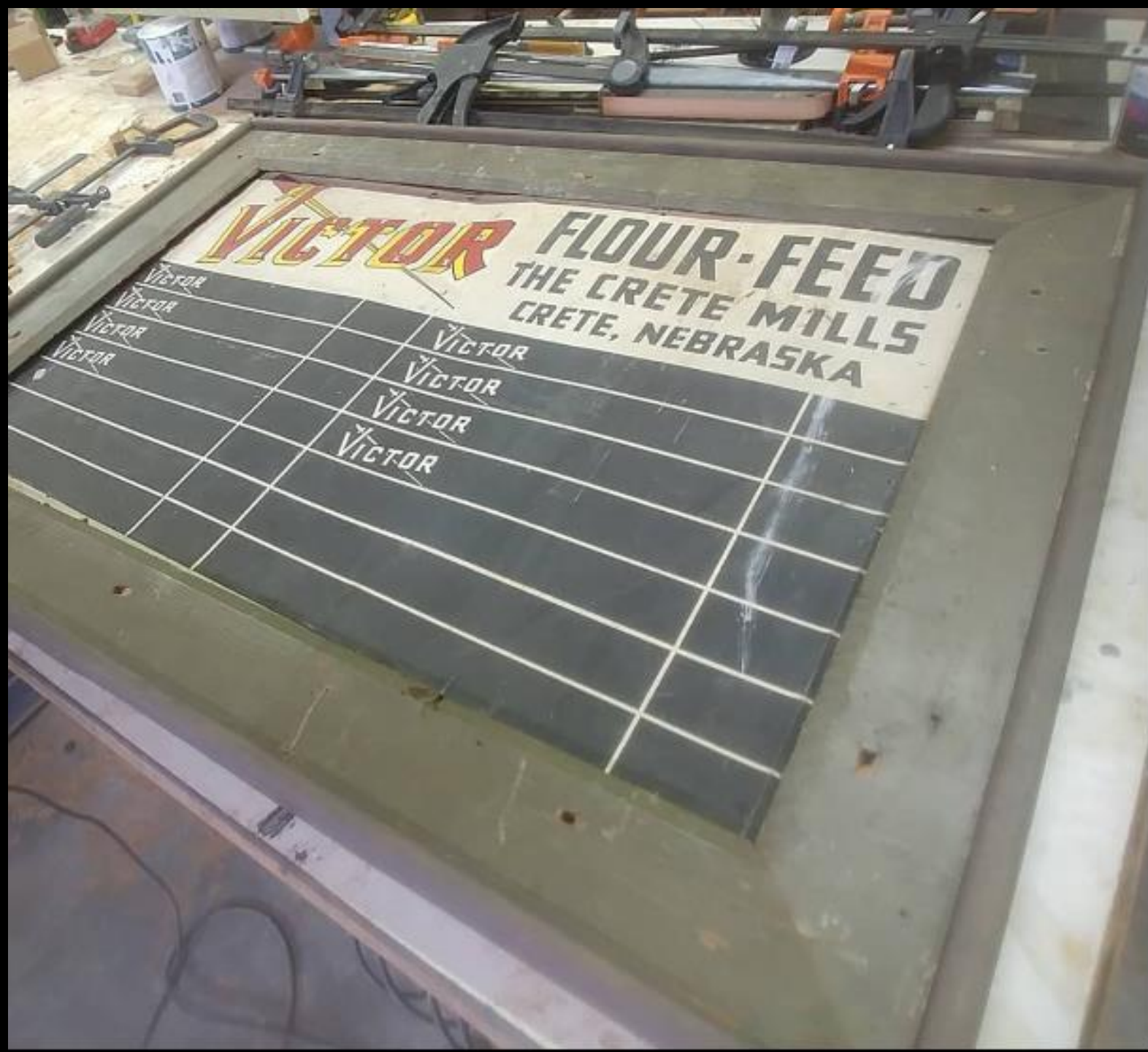
Training business
owners



Salvage Only



Value-Added Antiques



Portland, OR Deconstruction Ordinance

Trained all the
contractors

Consulting

Infrastructure



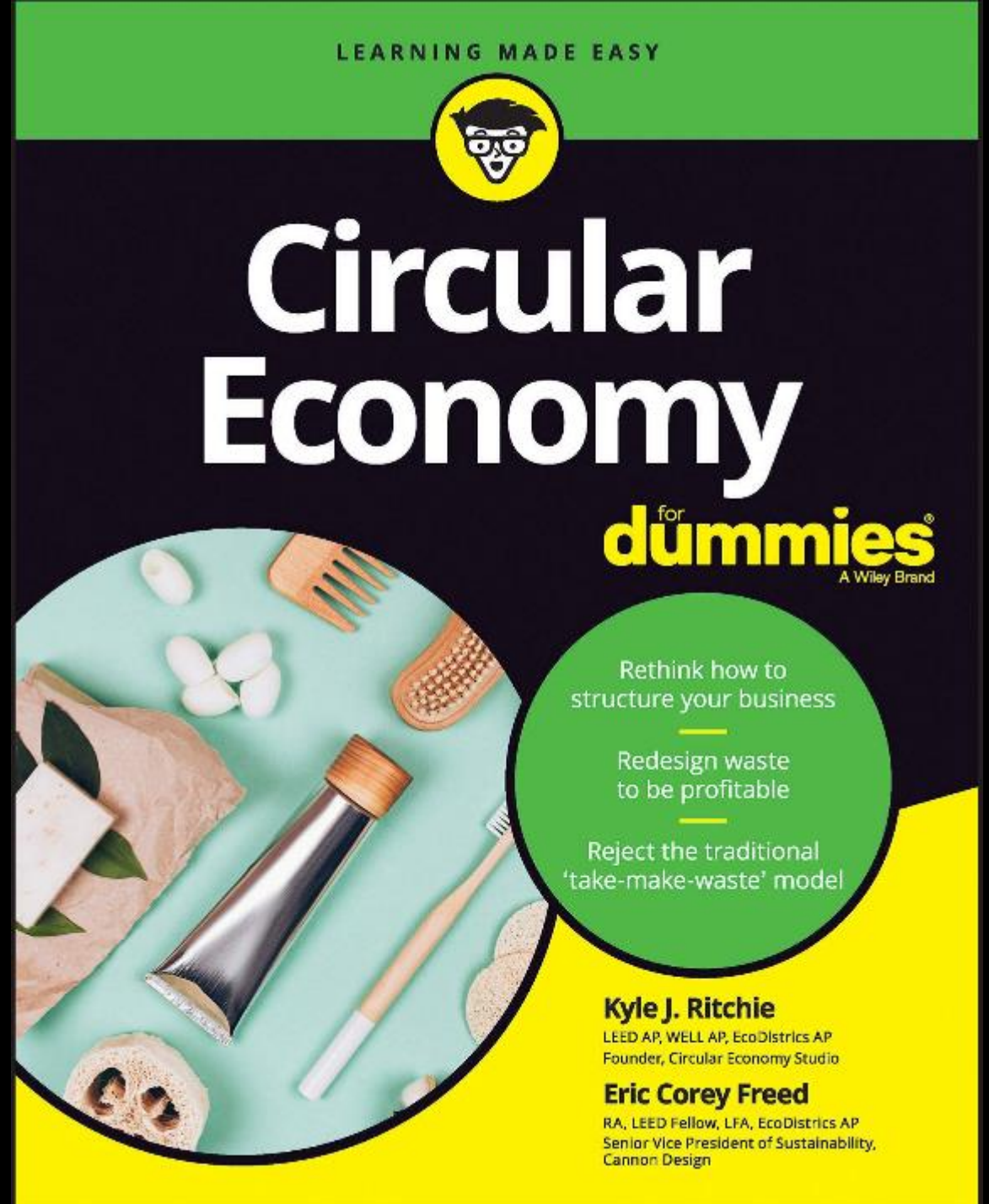
Section 5: The future of reuse/deconstruction

DFD/Future.



Deconstruction and the Circular Economy...

70 Reuse businesses started...and counting



Design For Disassembly

99% saved for reuse



Post-Fab Panels: Zero Waste



Design For Disassembly – modules/kits



Reuse Innovation Center

Process:

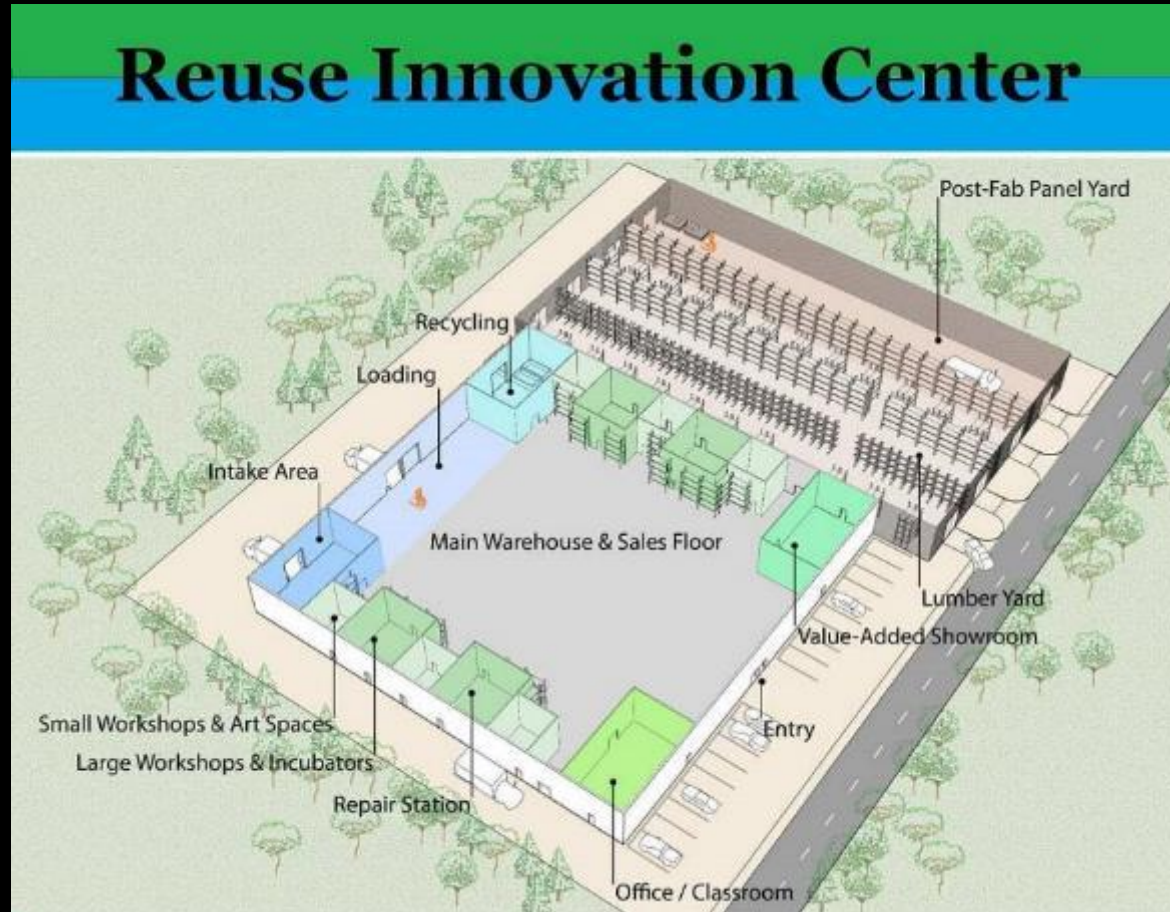
Collect Materials

Transport to RIC

Remanufactured

Placed in Showroom

Trainees involved in every step



Innovation:

Modular Buildings

Post-Fab Panels

Reclaimed content CLT

CLT building blocks

Wishlist / Brokering



JOIN OUR TEAM – START A REUSE INNOVATION CENTER NEAR YOU

360-201-6977 - re-use@comcast.net

www.reuseconsulting.com

Linkedin: Dave Bennink; FB: Re-Use Consulting; IG: Deconstruction Dave

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