







GBB's Sustainable Materials Management Hierarchy THE FOCUS We have developed our own Sustainable Materials Management Hierarchy in order to push our industry forward to prioritize keeping materials at their highest and best use. **FOR THE** Prevent, Rethink, Redesign **LONG HAUL** Reduce, Conserve, Minimize Reuse, Repair, Maintain The Priorities: **REDUCE** Recycle **REUSE Material Conversion RECYCLE** Thermal Processing with Energy Recovery • big vs. small Residuals · heavy vs. light • valuable vs. costly Figure A.1 GRB

"The Most Sustainable Building is One that is already Built"

Reduce . Reuse . Recycle

- ✓ Reduce construction waste
- ✓ Reuse materials already slated for demolition
- ✓ Recycle: PAPER, METAL, PLASTIC create a stronger Domestic market

Protect . Preserve . Profit

- ✓ <u>Kent Sustainable</u>
 <u>Business Park Domestic</u>
 <u>manufacturing</u>
- ✓ Savannah, GA Historical buildings renovated for a modern campus
- ✓ Company relationships (LIDAR/GIS)

Deconstruct over Demolish

- ✓ U.S. Department of Energy's Bioenergy Technologies Office
- ✓ EPA via Eastern Research Group

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2 2 2 0 REDUCE LANDFILL WASTE 20% by 2020 | 90% by 2030

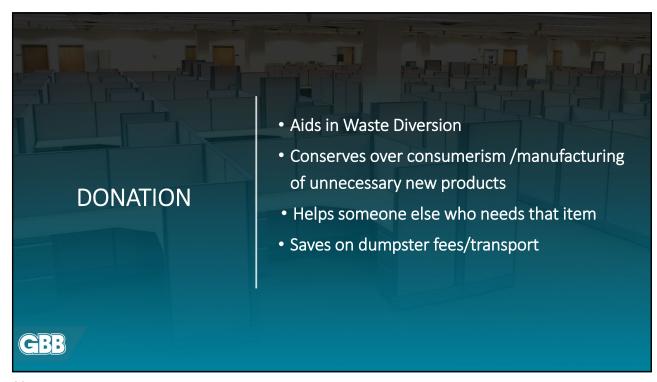
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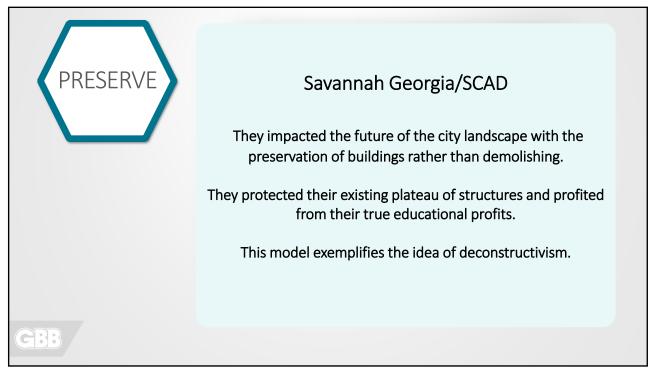
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Kent Sustainable Business Park

In the wake of China's National Sword Policy implementation there is a renewed interest in redesign our domestic facilities to manage ALL of waste that we generate to protect our natural resources.

- •Expedite permitting to allow/promote adaptive reuse.
- •Develop the local deconstruction market through municipal procurement, contracting and training (supporting workforce deconstruction training.)
- •Update building codes to allow new structures to use salvaged materials & establish requirements to address hazardous dust pollution in demolition projects.







Preserve all you can (SAVE \$\$\$)
 Promote voluntary deconstruction with grants
 Adopt a mandatory deconstruction ordinance, building on voluntary programs
 Through the deconstruction and adaptive reuse of buildings, cities can preserve valuable materials, create jobs, spur local industry, maintain local character, reduce landfill costs and curtail the need for virgin materials.



COMMUNITY The principles of equality, solidarity, and cooperation between residents and business owners through MARKET community design supports increased social equity and local economic development. Customer preferences are shifting demand toward more resource-efficient and sustainable products that are more durable, repairable and recyclable The Circular Economy looks to maintain the value of products, materials, and resources as long as possible, including by minimizing the generation of waste throughout supply chains. Resource losses are partly recoverable through symbiosis between businesses Pack of Goods and Materials and organizations. MANUFACTURING At the production stage, there are opportunities to use fewer raw materials, consume less energy, and generate less waste by ensuring more sustainable material **EXTRACTED RESOURCES** The rates of raw resource use and pollution are

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decoupled from the rate of growth



