



Net Zero Waste

Tools & Technical Support ...and other observations

Net Zero Pilot – Training

15 Jun 2011

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Net Zero Waste, Big Picture

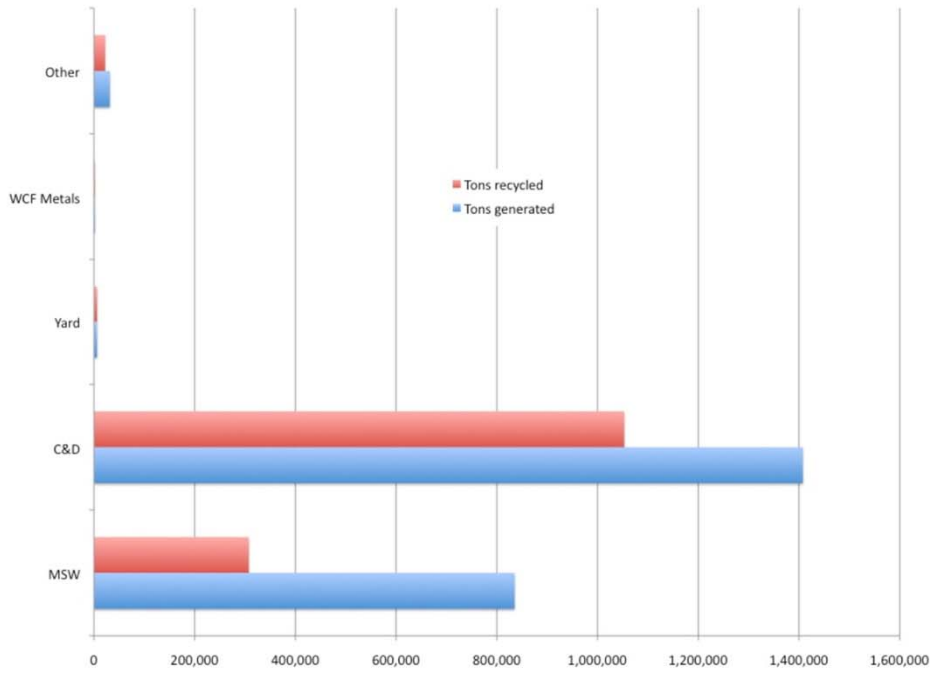


- Procurement reform essential first step
 - Should recycled content purchases balance disposal?
- Diversion of common wastes: C&D, organics, packaging, common recyclables
 - Achievable
 - No tech. breakthroughs required
 - WTE for the rest (digesters, gasification, pyrolysis, combustion)

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SWAR 2010



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Construction Materials



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Building Reconstruction



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Organics



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Packaging



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Reuse, On-post



- **Compare to commercial recycling**
 - **Waste diversion**
 - **...plus displace purchase**
 - **Must consider net costs across Directorates**

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Reuse, On-post



Example cost consideration

Scenario	DPW \$	Range Mgt \$
Standard demolition and landfill	Landfill mgt.	Purchase of new aggregate
Crush concrete	Recycling costs	Free aggregate!

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Reuse, On-post examples



- Processed tires to ranges for small arms target back stops
- Compost for revegetation
- Tank tracks to harden water crossings
- Concrete or asphalt pavement to harden firing points



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Alternative Financing



- Little available info.
- ACSIM evaluating “performance based” waste management contracting, similar to ESPC
 - Hard to achieve due to multiple customers and processes
- WTE could take advantage of DOE programs
- Consider demonstrations through ESTCP

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Resources, Organizations



- USACE labs
- HNC
- Public Health Command
- NREL
- Universities
- Any number of private consultants
- (Recycling coordinators!)
- Institution Recycling Network, <<http://www.ir-network.com/>>

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Resources, State



- Beneficial reuse determination
 - <http://www.epa.gov/osw/conservation/rrr/imr/like.htm>
- State gov't or non-profit groups
 - e.g., P2Pays, P2AD
 - state recycling coalitions
 - good sources for outreach material, understanding markets
 - Waste exchanges

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Resources, Trade Groups



- SWANA, <<http://swana.org/>>
- Construction Materials Recycling Assoc., <<http://www.cdrecycling.org/>>
- Building Materials Reuse Assoc., <<http://brma.org/>>
- US Composting Council, <<http://compostingcouncil.org/>>
- Paper recycling, steel recycling, etc.
- Zero landfill industries, automotive

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Resources, Documents



- USACE Public Works Technical Bulletins
 - <http://www.wbdg.org/ccb/browse_cat.php?o=31&c=215>
- Construction waste management resources
 - <<http://www.wbdg.org/resources/cwmgmt.php>>
- USEPA WasteWise program
 - <<http://www.epa.gov/epawaste/partnerships/wastewise/wrr/index.htm>>

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