

Pathway to Zero Waste



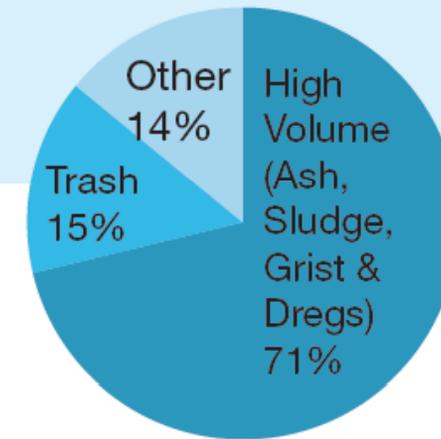
Why Zero Waste?

MWV Sustainability Targets: Finding outlets for recyclable materials in “trash” is an easier and more cost-effective way to help us toward our 70% beneficial reuse target than creating markets for high volume streams

Employee Engagement : “Many companies are finding that actively involving employees in sustainability programs leads to higher levels of engagement on the job” – Bain & Company

Pure Economics: Landfilling waste costs MWV up to \$300 per ton, while recycling can generate revenues of up to \$200 per ton

2012 Landfill Waste



Lean Manufacturing: Bringing attention to waste streams highlights opportunities to improve operations

Customer Engagement: Waste reduction is a top priority for our strategic customers



Number of Strategic Customers with a specific target, goal or program

MWV Sustainability Targets

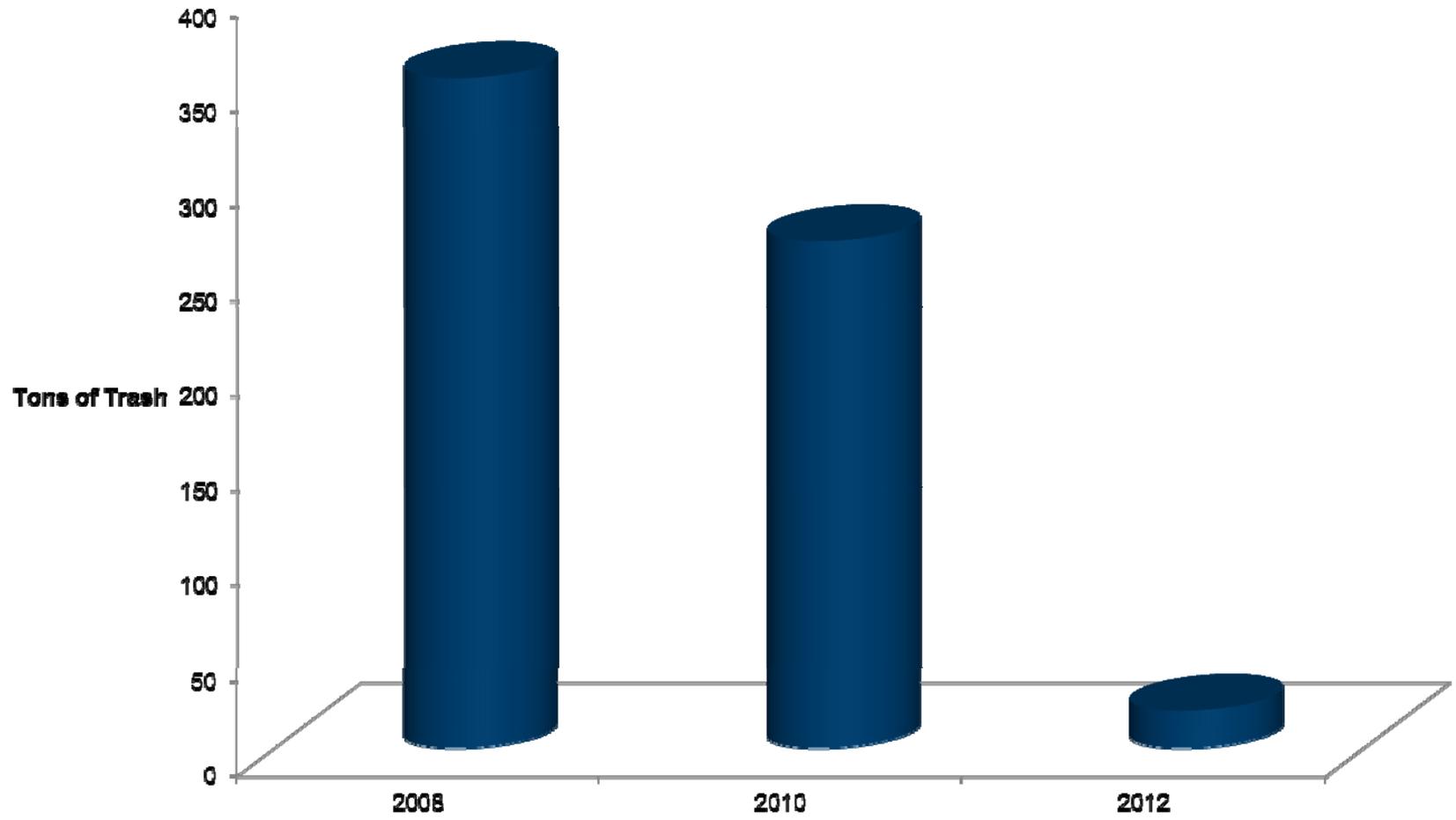
We have made an every day commitment to ...

- Reduce our use of fossil fuels by 25% by 2015
- Reduce our CO2 emissions by 25% by 2015
- Reduce our water use by 15% per net ton of paperboard by 2015
- Ship 90% of our U.S. freight with EPA SmartWay carriers by 2015
- Involve 100% of our suppliers in a Principles of Conduct program by 2015
- Reuse 70% of our solid waste for beneficial purposes by 2020
- Maintain our commitment to get 100% of our paperboard fiber from responsible sources, and get 50% from certified sources by 2020

We are building together with customers by ...

- Becoming an industry-leading source of consumer insights about sustainable packaging
- Playing a leading role in relevant advocacy organizations and associations
- Developing renewable and recyclable materials, including our 100% renewable position for paperboard packaging and the exploration of biopolymers as a material for plastic packaging
- Creating innovative packaging solutions that reduce waste through recycled raw materials, light-weighting, recyclability, composting, and other “end-of-life” alternatives
- Designing packaging that engages consumers in sustainable practices, such as recycling

PPO Grandview Waste Reduction



Folding Carton Operations



Folding Carton Operations



Specialty Chemicals

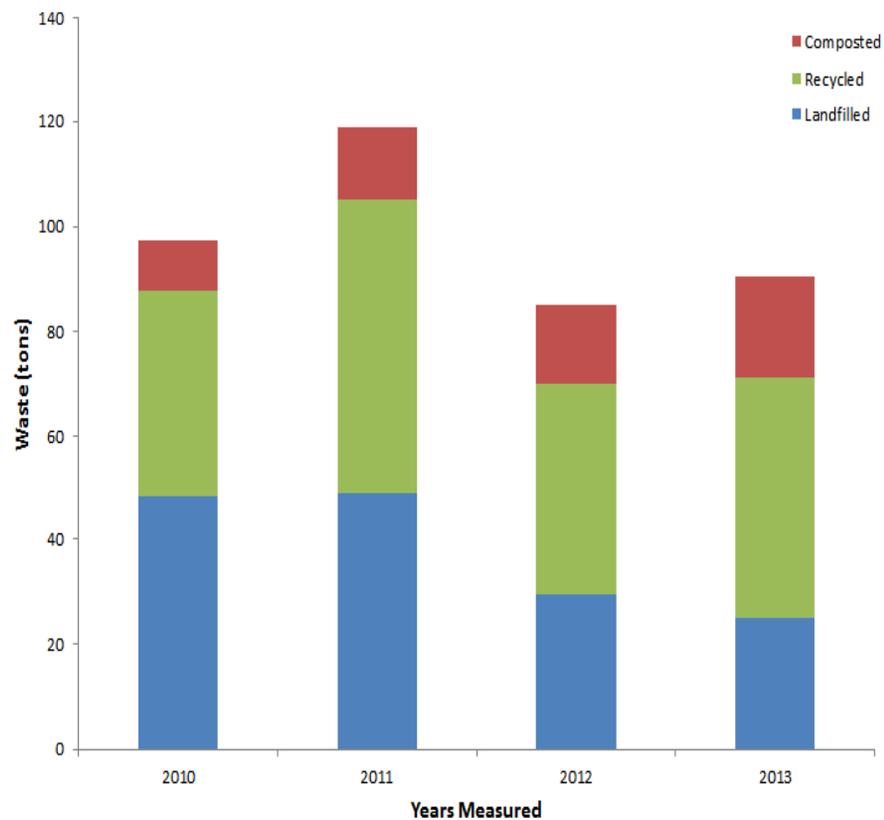


Mills

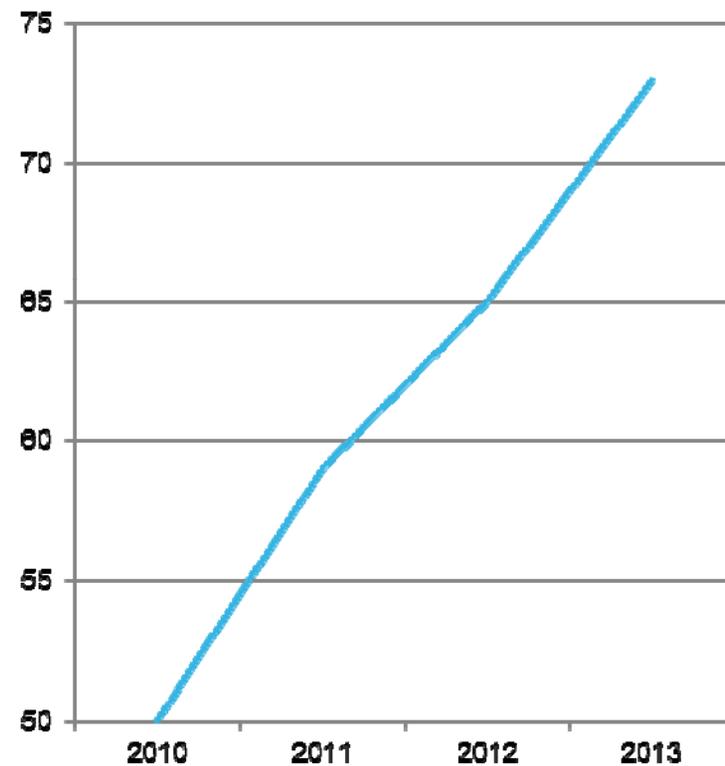




Our Journey



Richmond HQ % Diverted from Landfills



Richmond Local Partners - bioRide



How? Framework for Zero Waste Pilot

Step	Resources Required	Timing (variation depending on facility size and complexity)
Engage local leadership		<ul style="list-style-type: none"> Establish before initiating pilot
Enlist local team	<ul style="list-style-type: none"> 3 people representing different parts of operation 	<ul style="list-style-type: none"> Establish before initiating pilot 1 day intro/set-up
Review data	<ul style="list-style-type: none"> Environmental measurements database Invoices 	<ul style="list-style-type: none"> 2-4 days
Understand current system	<ul style="list-style-type: none"> Process maps, incl streams and existing infrastructure Costs 	<ul style="list-style-type: none"> 1-2 weeks
Inventory, segment and prioritize waste streams	<ul style="list-style-type: none"> Create template for waste audit and inventory, and framework for prioritization –debrief after audit 	<ul style="list-style-type: none"> 1-2 weeks
Survey local partners	<ul style="list-style-type: none"> ~100 mile radius Categories of vendors by stream 	<ul style="list-style-type: none"> 3-4 weeks
Set goals/targets and timetables	<ul style="list-style-type: none"> Create dashboard for metrics 	<ul style="list-style-type: none"> 3 days
Enlist local leadership support	<ul style="list-style-type: none"> Economic case Specific proposal(s) 	<ul style="list-style-type: none"> 1+ meeting
Define accountability and incentives	<ul style="list-style-type: none"> Leadership support Strategic bin placement and tracking 	<ul style="list-style-type: none"> 1-2 weeks
Communicate and inform	<ul style="list-style-type: none"> Signs, posters Emails and meeting agendas, newsletter updates, social media Employee recognition 	<ul style="list-style-type: none"> 1 week initial + ongoing
Follow up/follow through	<ul style="list-style-type: none"> Monitor KPIs / metrics Procurement support (vendors) Characterize remaining waste and next steps 	<ul style="list-style-type: none"> Ongoing