

# *Responsible Packaging Forum*

September 23<sup>rd</sup>, 2009





# A little background

- First Responsible Packaging Forum 2005?
- Expo East 2006, "By next year's RPF, either virgin PET is gone from EBF or I'm gone."
- Expo East 2007: "I need more time"
- Expo East 2008: "Ditto"
- May 1<sup>st</sup>, 2009, all EBF "rigid" packaging made from 100% PCR PET.
- Expo East 2009: Now what???





# What took so long?

- Developing the supply chain
  - Material supply
  - Converter capacity
- Getting comfortable
  - FDA regulations for recycled plastics in food packaging
  - Testing for compounds of concern



# Is it a big deal?

	<u>Percentage of Stage</u>	<u>Percentage of Entire Footprint</u>			
<b>UPSTREAM</b>					
<b>Non-consumables</b>					
<b>PET Clamshell</b>					
Production	27.7%	7.6%			
Transportation	0.5%	0.1%			
<b>Cardboard</b>					
Production	12.4%	3.4%			
Transportation	0.5%	0.1%			
<b>PVC Shrink Band</b>					
Production	3.3%	0.9%			
Transportation	0.0%	0.0%			
<b>Paper</b>					
Production	2.6%	0.7%			
Transportation	0.1%	0.0%			
<b>Wood</b>					
Production	2.2%	0.6%			
Transportation	0.0%	0.0%			
<b>PVC Pallet Stretchwrap</b>					
Production	1.2%	0.3%			
Transportation	0.0%	0.0%			
<b>Adhesive</b>					
Production	0.8%	0.2%			
Transportation	0.0%	0.0%			
<b>Consumable Product</b>					
<b>Lettuce Seeds</b>					
Seed Production (incl priming)			6.0%		1.6%
Transplant Greenhousing			0.7%		0.2%
Transportation			0.1%		0.0%
<b>Cover Crop</b>					
Cover Crop			17.2%		4.7%
Electricity on Farm			2.1%		0.6%
<b>Lettuce</b>					
Field Prep, Planting, Harvesting			9.6%		2.6%
Irrigation			1.7%		0.5%
Fertilizer/Soil Amendments			3.5%		1.0%
Pesticides			0.0%		0.0%
Soil Emissions			2.5%		0.7%
Transport			1.2%		0.3%
Fugitive during Transport			0.0%		0.0%
Electricity on Farm			4.2%		1.2%
<b>UPSTREAM TOTAL</b>			<b>100.0%</b>		<b>27.3%</b>



# With PCR PET

	<u>Percentage of Stage</u>	<u>Percentage of Entire Footprint</u>			
<b>UPSTREAM</b>					
<b>Non-consumables</b>					
<b>PET Clamshell</b>					
Production	3.8%	0.8%			
Transportation	0.6%	0.1%			
<b>Cardboard</b>					
Production	16.6%	3.6%			
Transportation	0.7%	0.1%			
<b>PVC Shrink Band</b>					
Production	4.4%	1.0%			
Transportation	0.0%	0.0%			
<b>Paper</b>					
Production	3.5%	0.8%			
Transportation	0.1%	0.0%			
<b>Wood</b>					
Production	3.0%	0.7%			
Transportation	0.0%	0.0%			
<b>PVC Pallet Stretchwrap</b>					
Production	1.5%	0.3%			
Transportation	0.0%	0.0%			
<b>Adhesive</b>					
Production	1.0%	0.2%			
Transportation	0.0%	0.0%			
<b>Consumable Product</b>					
<b>Lettuce Seeds</b>					
Seed Production (incl priming)	8.0%	1.8%			
Transplant Greenhousing	0.9%	0.2%			
Transportation	0.1%	0.0%			
<b>Cover Crop</b>					
Cover Crop	22.9%	5.0%			
Electricity on Farm	2.8%	0.6%			
<b>Lettuce</b>					
Field Prep, Planting, Harvesting	12.8%	2.8%			
Irrigation	2.2%	0.5%			
Fertilizer/Soil Amendments	4.6%	1.0%			
Pesticides	0.0%	0.0%			
Soil Emissions	3.3%	0.7%			
Transport	1.6%	0.3%			
Fugitive during Transport	0.0%	0.0%			
Electricity on Farm	5.6%	1.2%			
<b>UPSTREAM TOTAL</b>				<b>100.0%</b>	<b>22.0%</b>

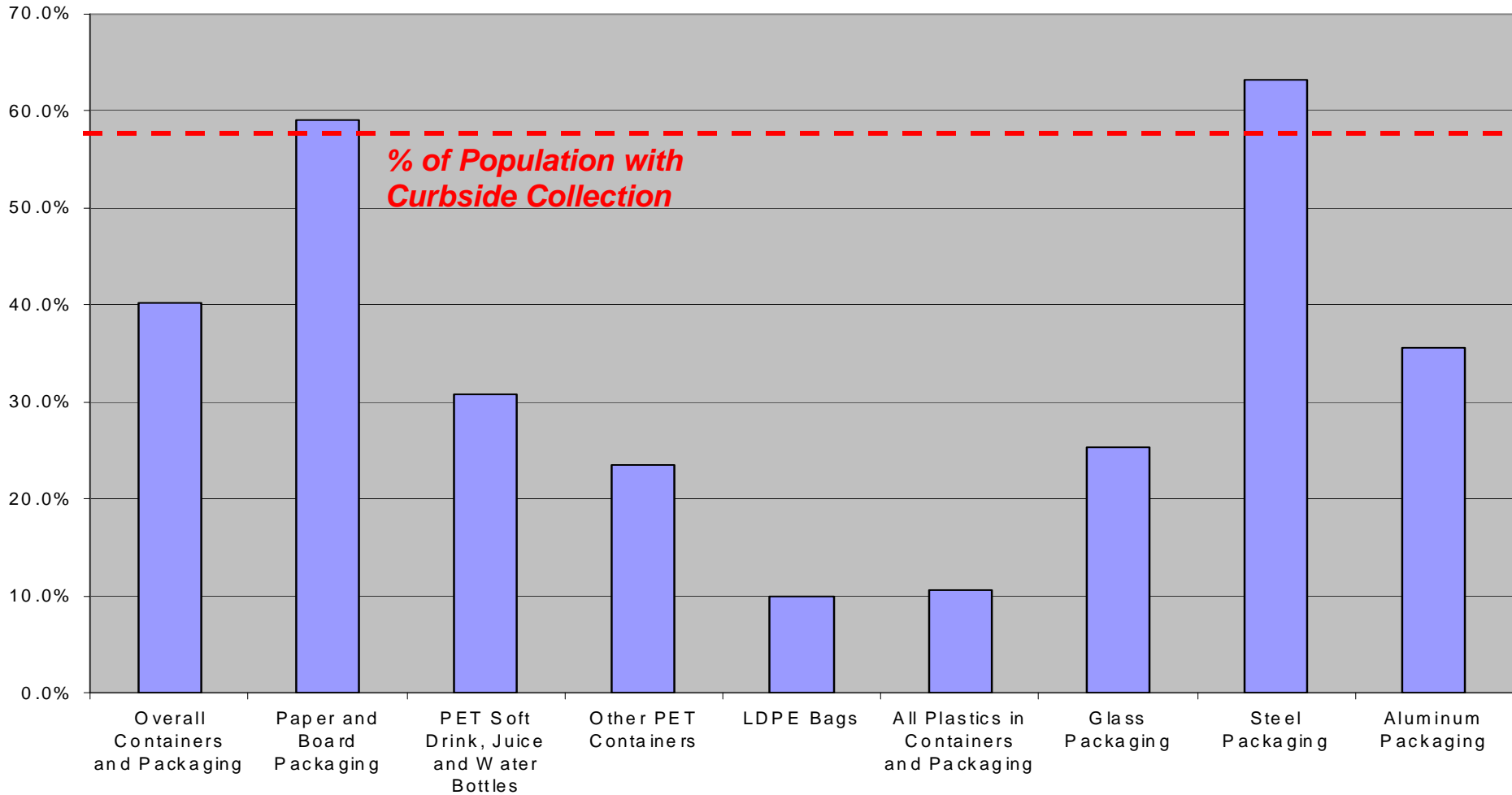


# PCR is less than half the battle

- Recycling still an open loop...



# U.S. Recycling Rates 2007 \*



\* United States EPA 2007 Facts and Figures



# RPF 2009: What's Next?

- Definition of Sustainable Packaging (Sustainable Packaging Coalition):
  - A. Is beneficial, safe & healthy for individuals and communities throughout its life cycle;
  - B. Meets market criteria for performance and cost;
  - C. Is sourced, manufactured, transported, and recycled using renewable energy;
  - D. Maximizes the use of renewable or recycled source materials;
  - E. Is manufactured using clean production technologies and best practices;
  - F. Is made from materials healthy in all probable end-of-life scenarios;
  - G. Is physically designed to optimize materials and energy;
  - H. Is effectively recovered and utilized in biological and/or industrial cradle to cradle cycles.