46th LCA Discussion Forum, Zürich, Switzerland End-of-life and waste management in life cycle assessment December 6th, 2011

# Food Waste and the Myth of Packaging Impact

Anne Himeno Bluehorse Associates anne.himeno@bluehorseassociates.com



- Packaging often seen as a big contributor to the environmental impact of food products
- But LCA studies have shown that for most food products and most environmental indicators, the negative impact of packaging production and disposal is often negligible compared to the positive impact from preventing food loss
- Sustainable packaging design should aim at finding packaging solutions that will decrease the total environmental impact of packaged goods

## Food loss vs. packaging impact



- The impact of food waste occurs both through additional volume of waste to treat and additional food volume to produce
- Between a quarter and a half of the global food supply is wasted
- Roughly 1 in every 3 calories produced in the world ends up being wasted
- Totally avoidable waste in the European Union's 27 represents about 10-15% of total waste in the supply chain
- Manufacturing food waste was estimated at almost 35 million tons per year in the EU27 (70kg per capita)

# Quantifying global food waste



- Waste reduction is more and more considered a strategic issue by the private food sector
  - Directly linked to resource management and cost savings
- In order to optimize waste reduction efforts, it is important to measure waste hotspots along the supply chain
- There is also an urgent need to better model food loss in life cycle studies
- Carbonostics, the smart lifecycle tool for food products, allows users to capture waste at every stage of a product's lifecycle and to assess the impact of food loss along the supply chain

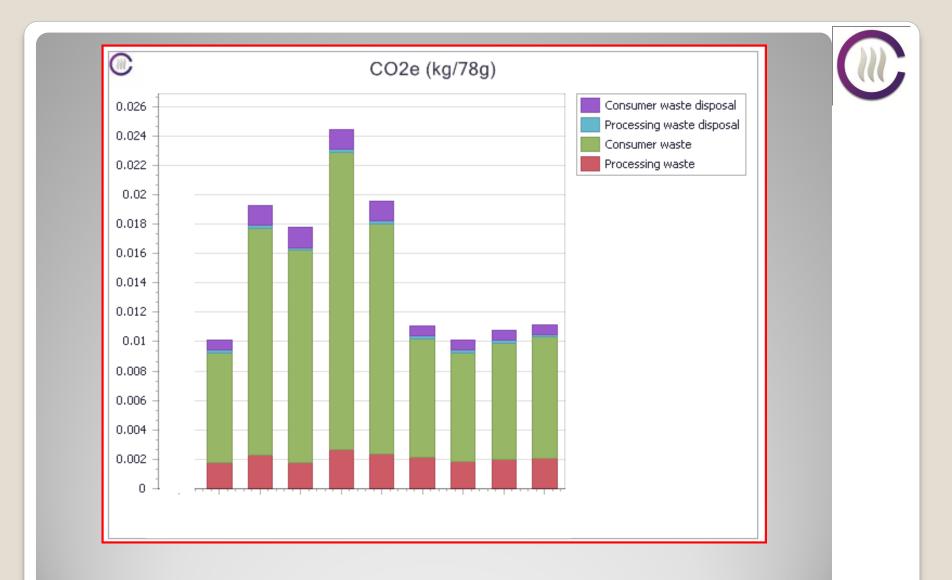
#### Waste measurement strategic for food industry

A C	CARBONOS	TICS RESOURCES	COMPANY			YOUR ACCOUNT START NEW ANALYSIS		
board > Pât	és de c	ampagne Hé	enaff					
ita Entry	Table	CCN Viewer	Graphs	Benchmarks	Methodology	Feedback		
ph Setting	IS ?							
	·							
Chart Style	art Style				Group By	Group By		
			1		🔘 Raw r	naterial catego	ries (dairy, fruit, e	etc.)
				••			sourcing, shipping	g, etc)
Stacked Bar	1	Grouped Bar	0	Pie 🔿 Poi	iits	rom waste only		
						-	s (protein, fat, car	·bs)
leasures to Gra	ph				O No ca	tegory		
CO2e em	issions	Options:			Scenarios	Scenarios		
Cost		Show percent	s					
✓ Calories								
Protein	Combine CO2e and Cost							
🗹 Fat	Orientation: <ul> <li>Normal</li> <li>Flipped</li> </ul>							
Carbs								
Sodium								

#### **Carbonostics: waste graph option**



### Total footprint vs. waste footprint



### **Categories in waste footprint**

# Thank you for your attention. Questions ?

Contact: anne.himeno@bluehorseassociates.com +33.1.47.38.22.64 www.carbonostics.com

Anne Himeno, VP Innovation & Development Bluehorse Associates

