

**THE PACKAGING
SUMMIT**
EXPO AND CONFERENCE

BIG BENEFITS IN SMALL PACKAGING . . .
Unilever's strategy for sustainable packaging



Humberto Garcia

Packaging Manager for Environmental
Sustainability, Unilever

PRESENTED BY:





Packaging as part of the overall sustainability strategy

Packaging Summit – May 14th, 2008
Humberto Garcia



Unilever



\$55 Billion
400 brands
174,000 employees

**160 million times a day, someone
somewhere is buying a Unilever brand**



Our Mission

Unilever's mission is to **add vitality to life..** We meet everyday needs for nutrition, hygiene and personal care with brands that **help people feel good, look good and get more out of life.**

Social responsibility and environmental sustainability are core business competencies – opportunities for innovation and product development.



Framework for Action



Sustainable Development
Nutrition
Hygiene
Social Innovation



WAL*MART



unicef 

SUSTAINABLE PACKAGING COALITION



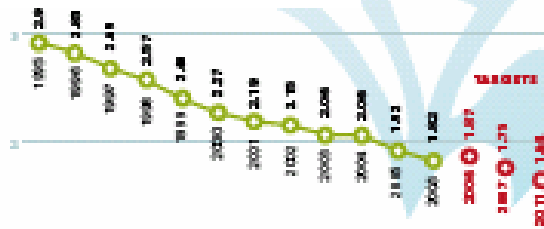
Eco-Efficiency Improvements



1995 - 2006

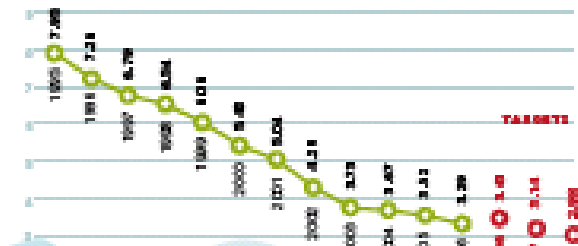
Down 38%

Energy



More than halved

Water

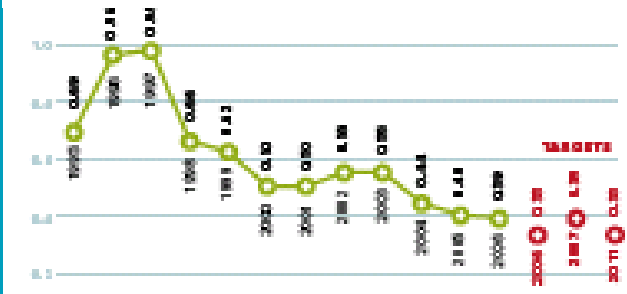


CO₂ from Energy



Down by > a third

Hazardous Waste

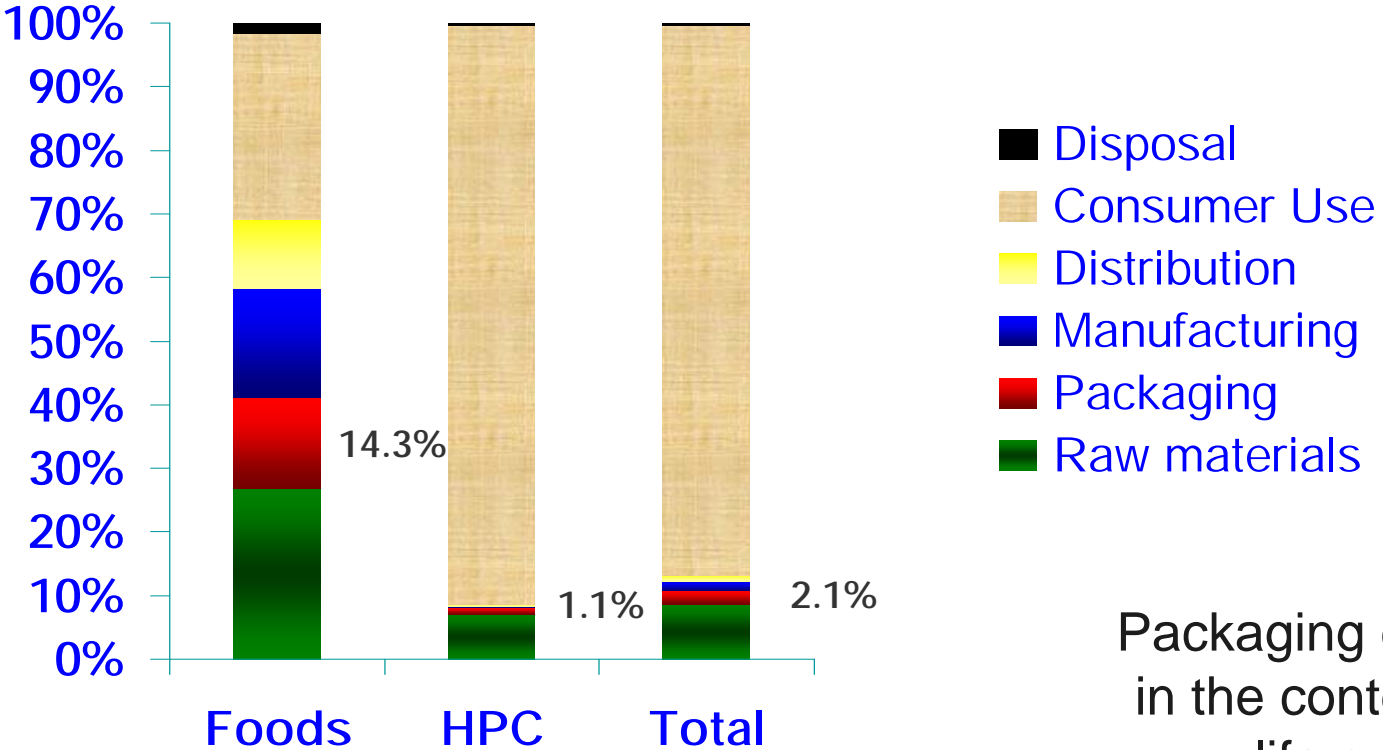


Down by > 75%

Unilever Greenhouse Gases



We have estimated Unilever's total emissions of greenhouse gases. Depending on the assumptions, the consumer use phase can account for 30-80% of the total, while packaging represents 2.1%



Packaging evaluated in the context of full life cycle.



**Packaging which, as part of a whole product system,
minimizes the environmental impact of our
products**



***CREATE MORE SOCIAL VALUE, WITH LESS
ENVIRONMENTAL IMPACT***



CREATE MORE SOCIAL VALUE, WITH LESS ENVIRONMENTAL IMPACT

Packaging must be functional and attractive, while keeping the impact on the environment as minimal as possible.

Packaging must be evaluated with life cycle in mind.

The Unilever Responsible Packaging Steering Team leads development and delivery of strategies for responsible packaging



Packaging Approach



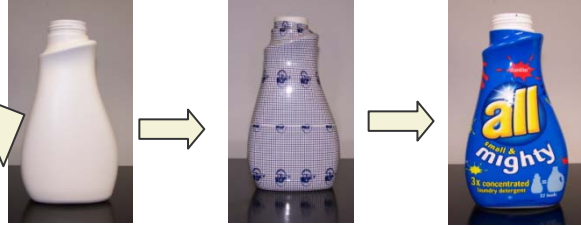
- **Remove** where possible, **unnecessary layers of packaging** such as outer cartons and shrink-wrap film
- **Reduce packages** to the optimal size and weight through the use of best in class technologies and product innovation.
- **Reuse packaging** from the materials we receive at our factories.
- **Recycle:** Increase the use of **recycled, recyclable and single-material components** in packaging for easy sorting and recycling at the end of its use.
- **Renew:** Maximize the proportion of packaging from sustainable resources sourced responsibly.

Always applying life-cycle thinking to minimize the environmental impact of the product in all phases.

Packaging Design Tools

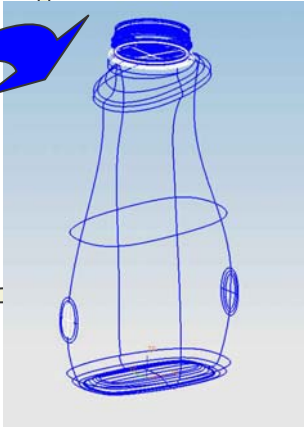


Prototyping and Testing



Benefits of Design
Improved consumer interaction
Faster product development
Up front testing and development
Better decision making
Improved risk management
Environmental Optimisation

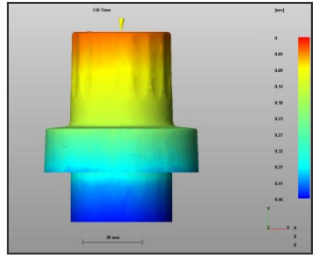
Early Concept



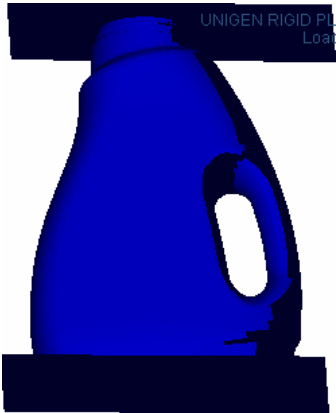
CAD model



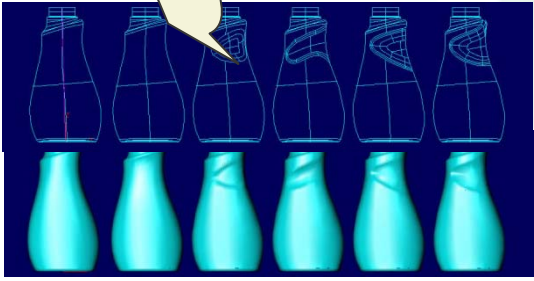
Ideas to life



Part & Process optimization



Functional optimisation



Fast tooling

Packaging Reduction



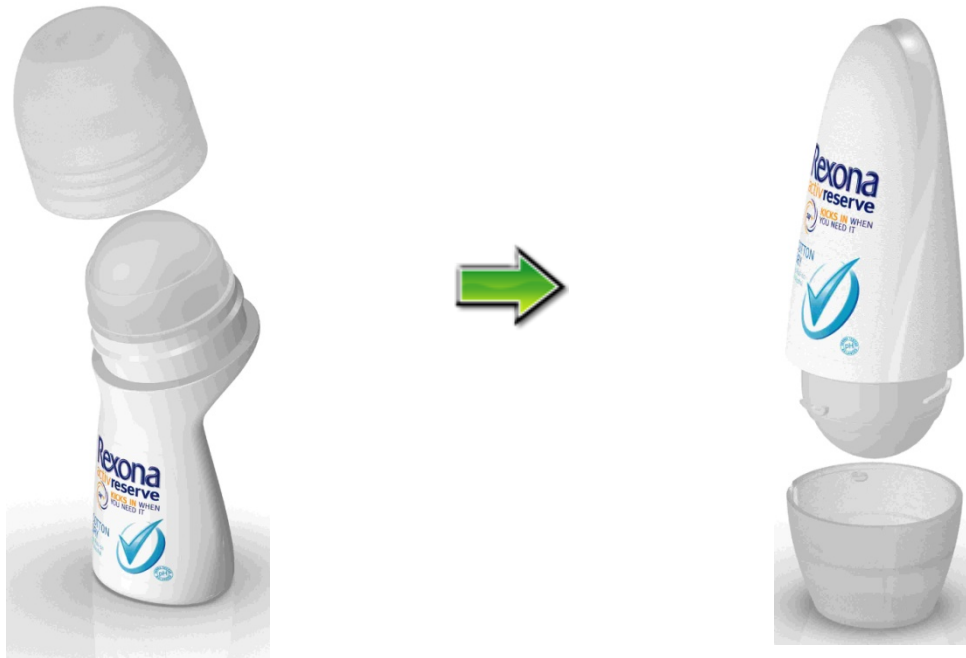
- Wish-Bone Salad dressing
Shipper redesign to Tray/Shrink
2,100 tons fewer corrugated
11,000 fewer pallets
almost 500 fewer truck loads



- Knorr Recipe Mix
Replace pouch/carton with pouch
50% reduction!



Material reduction in metric tons



■ Rexona Roll-on

- 15% weight reduction (1260 fewer metric tons of resin globally)
- 40% cycle time reduction (Reduction of ~6MM of kWh globally)
- 10x Top load (Reduce outer packaging and increase stack height)

Packaging Reduction



▪ Suave Naturals Shampoo

Bottle: 16% weight reduction

Closure 12% weight reduction

607 tons of resin annual savings

Increased top load strength

.... And a consumer preferred design!

Equivalent to 16 million bottles not entering the waste stream



▪ Hellmann's Mayonnaise glass to plastic

44,300 tons weight reduction

2,442 fewer pallets (cube efficiency)

1,700 fewer truck loads

Less breakage

Material reduction in metric tons

Packaging Reduction through Product Innovation

Unilever is leading the conversion of liquid laundry detergents around the world from dilute formulations to concentrated formulations



Gallons of water saved in production:	24 million (70%)
Gallons of diesel saved:	1.3 million (66%)
Reduced # of trucks:	6,000 (66%)
Plastic resin reduction:	10 million lbs
Reduced # of out of stocks:	50%

Annual savings 3x – US only



Canada



Argentina



UK



France

Packaging Reduction through Product Innovation

In the US, Unilever markets 3x and 2x concentrates.

3x concentrates offer more benefits for business, for consumers and for the environment.



The Concentration Effect - For each 1 million 32 load bottles:

	50 fl oz (2x)	32 fl oz (3x)
Resin savings	64,000 Kg	88,000 Kg
Corrugate reduction (lbs)	49% less	45% less
Cases handled	33% fewer	55% fewer
Units per truck	Almost double	Triple
Truck loads	74 fewer truck loads	114 fewer trucks loads
Fuel Savings	19,000 gallons	26,000 gallons
Shelf Efficiency	Almost double	Triple

When comparing to dilute 32 loads bottle

Packaging Reduction through Product Innovation

A new packaging format for pasta sauce

Glass



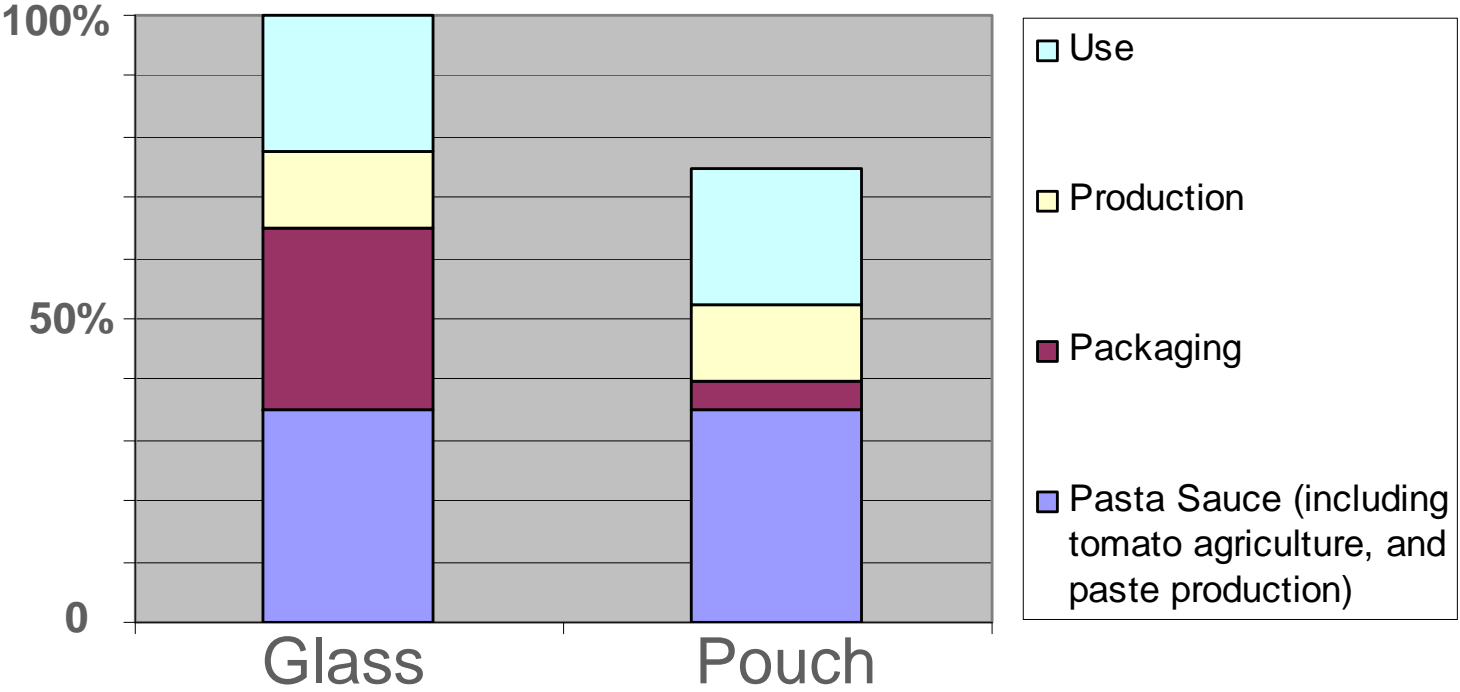
Pouch



	Glass jar 26oz	Pouch 13.5oz
Weight of primary packaging	376 g	8.8 g
Weight of secondary packaging	124 g	304 g
Units per case	12	6
Total packaging weight per unit	386.3 g	59.5 g
Packaging / oz of product	14.9 g	4.4 g
		70% reduction

Packaging Reduction through Product Innovation

As it relates to energy use, packaging represents ~30% of the full life cycle of the pasta sauce in glass, compared to ~6% of the full life cycle of the pasta sauce in pouch



The over-riding issue is what happens to the glass and pouch at the end of life – increasing recycling for the glass jar would have a positive contribution, although several recycle loops would have to be performed to arrive at parity with the pouch.

Summary



Unilever's mission is to add vitality to life. We meet everyday needs for nutrition, hygiene and personal care with brands that help people feel good, look good and get more out of life.

Packaging which, as part of a whole product system, minimizes the environmental impact of our products

Packaging must be evaluated with life cycle in mind.

We have made progress in terms of packaging reduction, reducing the overall impact.



- **Carbon Disclosure Project**

- Rated *Best in Class* in Climate Change Disclosure

- **Dow Jones Sustainability Indexes**

- Rated #1 in the Food & Beverage Sector for the 9th consecutive year

- **Wal-Mart**

- Supplier of the Year for Sustainable Engagement





Thank You