Introduction

Daniel Mohs
CEO, Placon Corporation
Headquarters: Madison, Wisconsin
• Over 45 years of thermoforming design/manufacturing experience and materials expertise

• 3 Primary Packaging Markets
  • **Consumer Products** – Custom retail packaging, food and foodservice
  • **Medical Packaging** – Medical devices, surgical procedure kits and OTC products
  • **EcoStar** – Recycling and sheet extrusion; used internally and sold to outside thermoform customers
Packaging and the Retail Revolution
More than a Silent Salesperson
With Success Comes Setbacks

From “Man vs. Clamshell: A Lopsided Fight” – David Segal, New York Times, September 27, 2009

- Well organized groups including environmentalists and trade organizations attack the package
- “You’re going to need to stab me,” every clamshell says.
- “We actually had a manufacturer test one of our designs by giving it to a wrestling team.”
Why the Bad Rap?

Klockner hired Clemson to conduct an eye movement study comparing customers’ reaction to thermoform packaging vs. printed paper board

Findings

- Results indicated a strong preference for clear plastic clamshells over printed paperboard boxes, with 402% more purchases
- Results also showed clear plastic clamshell packages were found 40% faster than paperboard packages
- The results were clear – transparent packaging sells more
MISSED ELEGANCE - Designed for Recycling
Our vision is to produce consumer packaging that is used for its intended purpose, collected, recycled, and reused for the same purpose… truly closing the loop!
Thermoforms = New Volume + Revenue
MORE THAN A PACKAGE – More Volume Means More Revenue for MuRFs

- Thermoforms are a ubiquitous and growing packaging segment
- Food packaging categories thrive
  - Deli, Produce and Bakery
- These segments are forecasted for continued growth
Thermoforms “Weigh-in”

87 g

84 g

28 g

*Based on water bottle weight of 12 grams
Thermoforms – A Sustainable Packaging Option

• PET reclamation industry has developed significant infrastructure
  • Collection systems deliver 1.6 billion lbs of recyclate in North America
  • In 2011 there were 27 reclaimers in business with the capacity to recycle 2.2 billion pounds of PET

• The reclamation industry continues to invested significantly in washing lines and they are hungry for additional supply
  • Thermoforms are the fastest growth opportunity to address this shortfall of supply

• In 2011 PET thermoforms represent approximately 5 to 10% of total weight
## Reclaimers Embrace Thermoforms

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PET Thermoforms – The Largest Supply of New Recyclate Volume In North America

- Napcor estimates that there are approximately one billion lbs of thermoforms available in the North American market – 2011
- In 2011 Napcor calculated that 45 million lbs of thermoforms were recycled – first time ever tabulated
- Current estimates for 2012 hover around 100 million lbs
  - Fastest growth segment for PET recyclate
Accomplishments Towards the Vision

- We are buying bales of 100% thermoforms from Canada and U.S.-based MuRFs
- We have recycled nearly 2.5 million lbs of thermoforms
- We can produce food grade thermoform flake for use in all of our extruded sheet products
- We have manufactured sheet from recycled PET flake with a thermoform content as high as 80%
- Able to produce flake with varying amounts of thermoforms at the same rate as our standard flake
- Continuing to develop improvements in thermoform-to-thermoform extruded sheet
- T2T™ blend is currently used to manufacture the BlisterBox® line
- Educating customers and promoting our work in closed loop recycling
Case Study Based on Volume in Madison, Wisconsin

- 101,000 households served
- 250k lbs of PET thermoforms annually
- Market value:
  - Co-mingled 1-7 – between $.04-$.06/lb
  - PET only – between $.17-$.20/lb
- Different between co-mingled (1-7) and PET only = 13-14 cents/lb
- Total additional revenue up to $50,000

*Placon estimate only
The Ask

- The time is now to incorporate PET thermoforms into your recycling systems
- Make thermoforms part of your evolving profit improvement focus for 2013
- Start today!
Thank you!

ecostar
recycle | replastic | results