

PLACON[®]

WHEN PACKAGING MATTERS

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Wisconsin DNR Webinar 8/05/13
Retail Thermoforms – A Never Ending Story

Introduction

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Placon Overview

- 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



EcoStar Vision

“

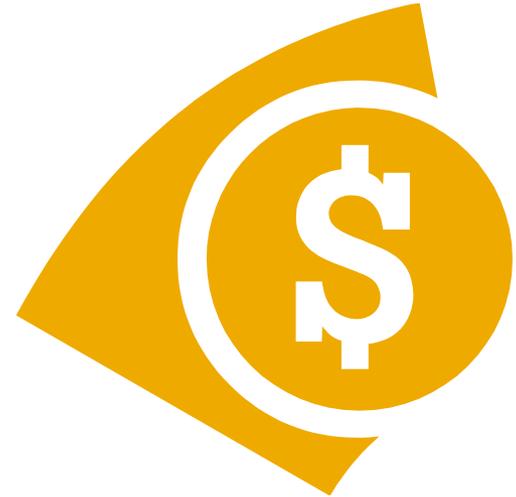
Our vision is to produce consumer packaging that is used for its intended purpose, collected, recycled, and reused for the same purpose... truly closing the loop! ”



Thermoforms = New Volume + Revenue



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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 invest 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

Thermoforms and Bales	Reclaimers
Buying T-form with Bottles Bales	15
Buying Sorted T-form Bales	4
Processing T-forms with Bottles	13
Processing T-forms Separately	6
Storing Retroactively	3
Selling to Other Reclaimers	1
Not Sorting/Not Processing	4

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 US-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!



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