



Carpet Recycling Presentation for:

NEWMOA

April 11th, 2013

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CarpetCycle, LLC**



Carpet Cycle, L.L.C.

Founded in 1999 - Dover, NJ

2001, Moved to Elizabeth, ~18,000 SF facility for 11+ years

CarpetCycle Canada (Toronto) opened August 2011

Moved to 50,000+SF Newark facility March 1st 2012

**Provide PCC and ACT recycling services –
collection/sortation/baling**

**Provide interior demolition service which earns LEED credits
for your project**

We employ 50 full time employees

Have diverted over 200MM lbs since inception

Over 15 million pounds PCC reclaimed in 2012

Target goal is 30 MM pounds PCC reclaim in 2013



WE NEED MORE RESIDENTIAL CARPET:

Current Municipal Procedure for old carpet collections:

Trash trucks pick-up at curbside

Carpets and underlayment comingled with other wastes

Carpets susceptible to foul weather

Wet carpets are difficult to handle and hard to recycle

Currently collection rates <20% in NJ...

Even less recovery in New England states



Where carpet types do we encounter in the US?

1) Residential Broadloom:

~60% Nylon Face Fiber Content

~15% Polypropylene

~20%+ PET

~5% Other types; Acrylics, PTT, Wool

2) Commercial Broadloom

~95%+ Nylon Face Fiber Content

~5% PP and other

3) Carpet Tiles (Backing type important)

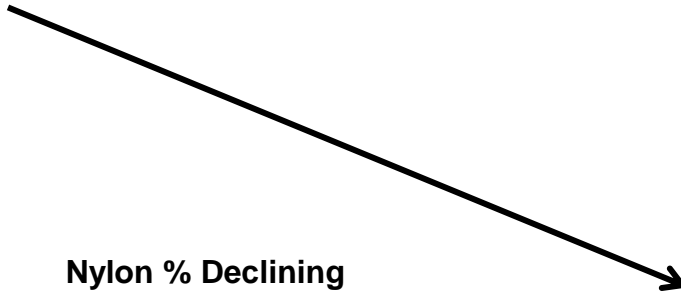
~75% PVC Backed, close loop recycled

~25% Other, Urethane Cushion, bitumen etc

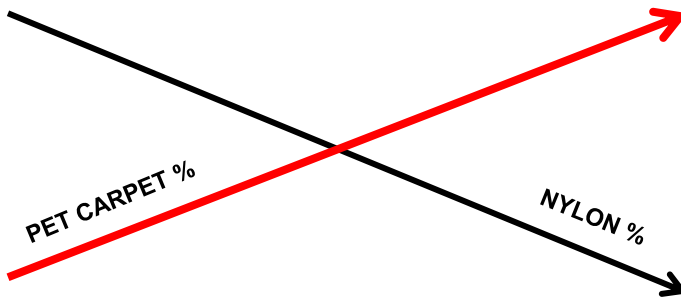
--Typically some donation but mostly WTE disposition



Our target is always changing.....



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PET % CONSISTENTLY INCREASING



Where does the carpet go???

Donation for Re-Use

Carpet Tile to Carpet Tile

Carpet Yarn to Recycled Content Yarn

Engineered Resins

Injected Molded Parts

Auto-Industry

Plastic Lumber: Mostly PP residue

Energy from Waste “EFW”

Displaces coal to fuel cement production



Cost to Recycle

Recycling Service is “Cost Neutral” with respect to traditional demolition and landfill

Labor and trucking equal

Added handling cost offset by landfill savings

Synergy with carpet and ceiling removal

VCT and gyp board recycling in development





From This



To This





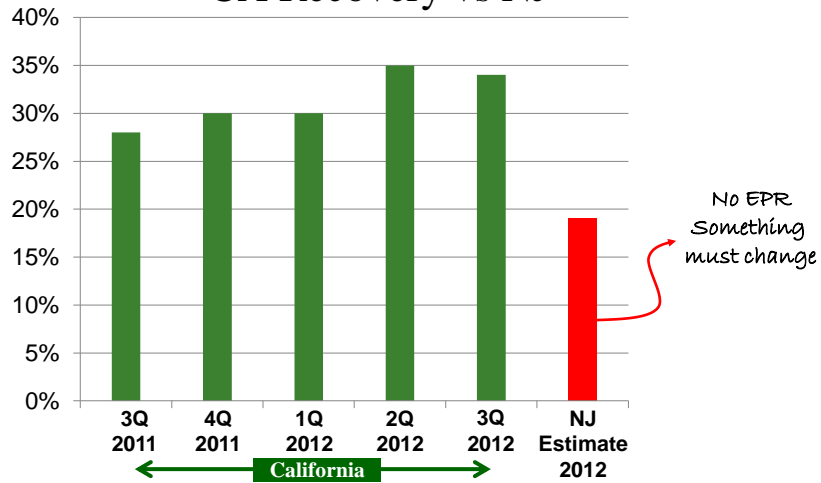
To This



California AB 2398

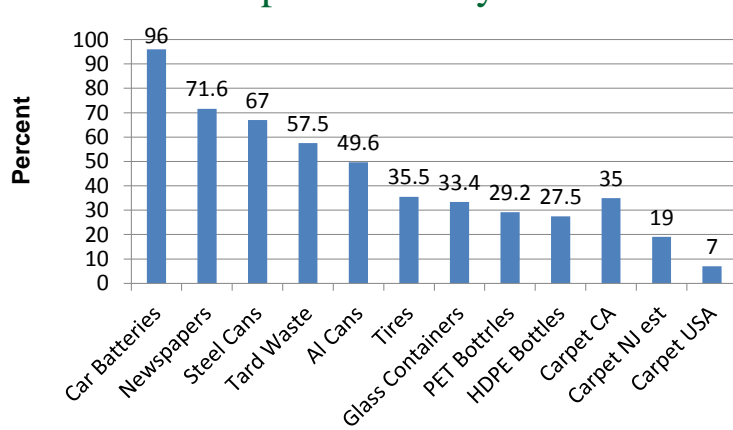
- First state to legislate carpet recycling program
- CA is at a 35%+ landfill recovery rate
- CA population: 37,691,912 (July 2011)
- Annual CA recovery over 5 quarters = 113.3M lb
- Diverting 3.4 lb/capita/year
- We have picked the low hanging fruit
- Cost to increase diversion is escalating
- Based on an EPR model
- Prior to AB 2398 Recovery was est'd 19%

CA Recovery vs NJ



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Comparative Recycle Rates



Source: U.S. EPA 2010

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NJ Situation

- Currently estimate diversion is 20M lb/year
- Estimated landfill flow is 105M lb/year
- Collecting ~19% of all PCC
- 3.4lb/capita/year* = 30M lb w no EPR
- Could process 2-3x but not available
- Need something new to increase flow

Can we use a different model for NJ to get to 35% like CA

* Using CA estimate actual recovery

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Waste Carpet Flow Shift: Eliminate Public Landfilling of Recyclable Carpet, Implement Comprehensive Private Collection

- CARE promotes carpet recycling to cities & towns directly citing the “win-win” of saving money on municipal waste budget, while diverting recyclable carpet from landfills. Encourage a change in Standard Operating Procedures so that carpet no longer ends up in the mixed waste stream via curbside collection.
- Educate and encourage towns to add carpet recycling to other recycling programs.
- Facilitate further cooperation between CARE collectors and town/city/municipal governments.
- Take proactive approach to carpet diversion, on CARE’s terms: engage small governments rather than waiting for the legislative rule changes (EPR) to come into play.
- Helps eliminate the unsafe practice of ‘scavenging, & poaching’ of nylon carpets from the waste stream while increasing the quality and quantity of the feedstock carpet recyclers receive.

A BETTER ALTERNATIVE!

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FUTURE CARPETCYCLE EMPLOYEE??



THANKS FOR LISTENING
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