

Carpet Recycling 101

Post Consumer Carpet Recycling



Carpet Collectors
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Overview

- Waste Stream
- Process Technology
- Challenges
- Opportunities/Benefits

Waste Stream

- ◎ Carpet America Recovery Effort (CARE)
- ◎ 5.8 Billions pounds of carpet is landfilled
 - > 4% of all waste
 - > 18-20 pounds per person
- ◎ Only 243.4 Millions pounds were recycled
 - > 4.2%
- ◎ 670 million pounds in California



General Categories of Carpet Recycling & Diversion

○ Recycling Types/Classifications:

- Chemical Recycling
- Mechanical Recycling – Wet/Dry Systems, Shearing Systems, Grinding system
- CAAF/WTE - Carpet as Alternate Fuel or Waste to Energy

Processing the Carpet

Collecting

- > Landfills
- > MRF's
- > Transfer stations
- > Installers/carpet stores
- > Individuals

Sorting

- > Nylon 6 and Nylon 66
- > PET
- > Polypropylene
- > Other



Processing the Carpet

○ Harvesting

- Carpet
 - 40% Nylon
 - 45% Calcium Carbonate
 - 15% Polypropylene
- Sheared - Grade A
- Separated – Grade B & C



Challenges

● Collecting

- Bulky
- Hard to handle
- Few recyclers
- Expensive to ship
- Understanding the benefits
- Collecting from all sources



Challenges

◎ Sorting

- Percentage of unusable material
 - PET, Commercial, Polypropylene, Pad
- Expensive equipment
- Low tolerance for error (mixing products)
- Labor intensive

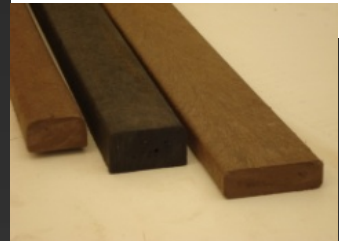
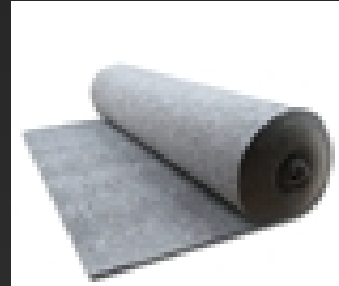
◎ Processing

- Carcass after shearing
- Developing buyers for new products
- Inconsistency of Post Consumer carpet



Opportunities/Benefits

- ◎ What carpet might become
 - Automotive – Largest
 - Carpet Industry
 - Nylon/Plastics
 - Wood/Plastic Composites (Trex, Nylaboard)
 - Lawn & Garden furniture
 - Railroad ties
 - Furniture Industry
 - Energy Producers



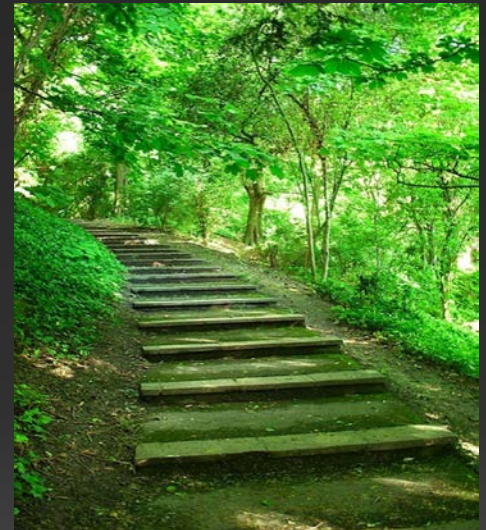
Opportunities/Benefits

● What is the Future Potential

- Great source of Material for Nylon/Plastics
- Relieves landfill burdens Nationally
- Develops an entire new industry with jobs
- New products

● Working together

- AB2398
- Plant in Sacramento with a capacity of 30,000,000 lbs per year growing to 60,000,000 lbs in 2012
- Developed a proprietary carcass line



Thank You

Questions

