Pressing Carpet Industry
Environmental Issue
What is the Answer for This?
Technology Changes

- Encycle - Thermoplastic tile
  - Indicative of new trends
  - tiles 50% of Commercial Market

- New Broadloom coming
  - Similar Technologies
  - Commercial & Residential
Proof of Concept

✓ Initial Capacities filled
✓ Economic Viabilities verified
✓ Output products Refined
✓ Process refinements Determined
The Mohawk Materials Center

Key Elements

✓ Patent Pending Process System
✓ Flexible Processes
✓ Processes All types of Materials
✓ Scaleable
✓ Portable
✓ End Products
✓ Efficiency of Materials transformation
Key Processes

What it does

- Carpet De-Construction
- Component Purification
The Mohawk Materials Center

Processes

✓ Unique Process Sequencing
  - Patent Pending Processes
  - Uses Equipment in unique sequence
  - Allows process of all fiber types
Flexibility

 ✓ Multiple Staged processing steps

- Produces various value products
  - Output Stage 1 - $X$
  - Output Stage 2 - $X + Y$
  - Output Stage 3 - $X + Y + Z$
Material Types

✓ All Carpet fiber types

- Nylon 6.6
- Nylon 6
- Polypropylene
- PET (Polyester), PTT, 3GT
Scalability

- Small footprint for Multimillion pound output
- Increased Output with Equipment adds
- Increased Output with multiple lines
Portable

- Easily Set up in any region
- Takes process to the Carpet Supply
- Minimizes Recycling costs
  - Increased return on Investment
  - Allows for more viable Economics for Recycling
Mohawk Materials Center

Mohawk Materials Transformation Center

- Purified Nylon 6.6 Stream
  - Or
  - Nylon 6.6/Nylon 6 Alloy

- Purified Nylon 6 Stream

- Post Consumer Calcium Carbonate

- Polyester Stream

- Polypropylene Stream

- Post Consumer Carpet
Closed Loop Carpet to Carpet System

Polypropylene Stream

Compounded Thermoplastic PC Pellet

Outside Consumer Products

Carpets Backings

Post Consumer Back

New Carpet Back w/ another life

Post Consumer Products

New Product w/ another life
P. Consumer Streams: Carp.Comp. to Carp.Comp.

Conversion To Usable stream

P. Consumer: Commercial Products

Post Consumer Calcium Carbonate

P. Consumer: Residential Products
Efficiency

✓ **High Material Conversion Efficiency**

- 100 lbs P.C. Carpet yields 90 lbs of New materials.
- Only 10% of all streams not usable