

# Carpet Recycling in the UK

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Carpet Recycling UK



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## Overview

- Carpet Recycling UK
- Carpet Waste Arisings
- Drivers for Carpet Recycling
- Case studies
- Pieces of the Jigsaw we have
- Pieces of the Jigsaw we don't have

## Carpet Recycling UK

- Membership Association
- Aim to maximise diversion of post consumer carpet v
- End market development and lobbying role
- Successes to date
- Increased capacity to 10,000 tonne

**Brintons**  
FINE CARPET



**MILLIKEN**<sup>®</sup>

Good basis for continued development

## The Mohawk Group



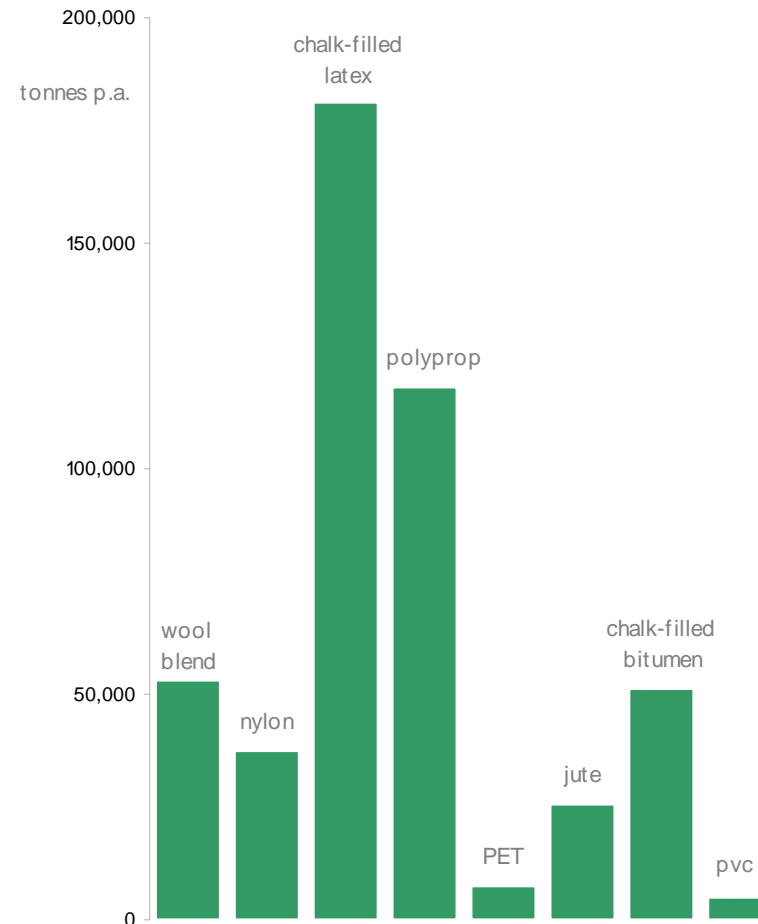
*Interface* **FLOR**<sup>™</sup>



## Carpet Waste Arisings

- 500,000 tonnes of carpet waste pa
- Spread of face fibre types
- Bitumen backing of carpet tile
- Majority materials are low-value

Complex composite material streams



## Drivers for Carpet Recycling

- Targets and Taxes
  - EU Landfill Directive 1999 → UK L.A.T.S
  - Landfill tax escalator at £8/tonne (\$11.50/tonne)
  - Material specific legislation
  - Site Waste Management Plans
- Competitive advantage in public sector and large corporate contracts



Drivers are targets, taxes and market pressure

## Case Study: Greenback Recycling Ltd



Local authority contracts

Gatefee at £70/tonne (\$100/t)

Sorting with carpet analyser

Size-reducing synthetic material

Supplying equestrian fibre

## Case study: Econpro Ltd

Product has been patented

Fibre enriched bitumen feedstock

Strong track record

Partnership with end user

Stakeholder involvement

Technical optimisation



## Case study: Wool-rich carpet



Good fertilising properties

Weed suppressant mats

Initial 15,000 mats sold

Strategic partnership with end user

Supplied in other forms

## Pieces of the Jigsaw we have

Residential carpet collection and sorting

Limited end use for mixed synthetic fibre

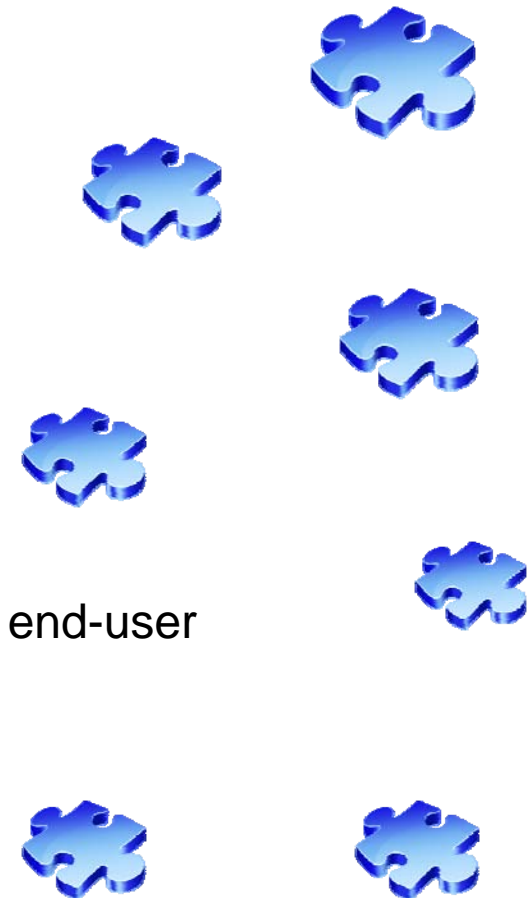
Refuse-derived fuel at additional cost

Commercial carpet take-back programmes with fee to end-user

High volume end use in road surface application

Polymer reprocessing of event carpet

Reuse initiatives



## Pieces of the Jigsaw we are missing.....

Higher volume end use for wool-rich carpet

Higher volume end use for polymer

Separation and cleaning technologies for face fibre and backing

Collection system for commercial carpets via contractors

Cradle-to-cradle or higher value end uses

## Conclusions

- Carpet Recycling UK provides good platform for future developments
- Material streams are complex and composite
- Key drivers are targets, taxes and competitive pressures
- Innovation phase with many isolated initiatives, no cohesive overall
- Opportunities for technology transfer

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