

WasteWise
Helping industry profit by reducing waste.



WASTEWISE

Case study
Industry partnerships

WasteWise

Textile manufacturing industry

Reducing manufacturing costs by reducing waste



Company profile

Northstate Carpet Mills has been manufacturing quality tufted carpets since 1970. The company is a specialist manufacturer of commercial synthetic carpets. The company is located on Queensland's Gold Coast and services Australia, New Zealand, Asia and the Pacific region.

New packaging solutions reduce waste

Packing of imported synthetic carpet yarns in strapped cardboard cartons generated 63,000 kg of waste cardboard and 420 kg of strapping per year. Although these packaging materials can be recycled, Northstate Carpet Mills went one step further by deciding to reduce packaging materials at the source.

Through an agreement with the supplier, yarn is now delivered wrapped in recyclable plastic pallet wrap with stabilising cardboard dividers.

Challenge: Store personnel were concerned that cardboard cartons would no longer be available to store unused yarn stocks.

Solution: Northstate Carpet Mills approached Visy Recycling who provided three 15 cubic metre cages for alternative storage.

- Since becoming a partner in the Environmental Protection Agency's WasteWise program, Northstate carpet Mills has reduced annual imported packaging cardboard by 60 percent while strapping waste has been totally eliminated. This represents an annual saving of 37,000 kg of cardboard or 740 trees.

New products from offcuts

Annual wastage of discarded natural and synthetic carpet backing was estimated to be 3600 lineal metres or 2200 kg.

Carpet backing is now used in a variety of applications such as weed matting, or carpet underlay.

"Focusing on waste gets results. With the support of the EPA WasteWise team, we at Northstate Carpet Mills are demonstrating that waste reduction and recycling improve the environment and the bottom line"

Mike Davis, Inventory Controller,
Northstate Carpet Mills



Queensland Government
Environmental Protection Agency

Challenge: Locating suitable buyers or recyclers for carpet backing has been one of the most difficult barriers to overcome.

Solution: An extensive search for new business opportunities yielded a range of potential customers.

- Since becoming *WasteWise*, Northstate Carpet Mills has turned scrap, with its associated waste disposal costs, into an income generating resource.

New markets for scrap yarns

Unusable discontinued yarn stocks totalled 80,000 kg. New products were developed to more effectively utilise the discontinued yarns. Excess yarns are sold to carpet overlappers throughout Australia and exported overseas.

Challenge: The sheer volume of discontinued yarn was a major issue.

Solution: Sales, Financial, Marketing & Production personnel worked together to develop alternative products and outlets for otherwise wasted yarn.

- Since becoming *WasteWise*, Northstate Carpet Mills has recycled over 60,000 kg of discontinued yarn lines.

Summary of savings

Since becoming *WasteWise*, Northstate Carpet Mills has reduced the annual costs of packaging and waste disposal by 75 percent.

Packaging cost savings

Yarn packaging cartons	\$112,000
+ strapping	\$1050
– Plastic wrap	(\$2600)
– Cardboard dividers	(\$28,000)
Net Saving (annually)	\$82,450

Use of offcuts

Sale of carpet backing	\$1800
Disposal cost saving (12 cubic metres diverted from landfill)	\$176

Use of 60,000 kg of discontinued yarn

Disposal cost saving (300 cubic metres diverted from landfill)	\$4400
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Future savings goals

1. Sale of yarn tubes back to appropriate manufacturers to eliminate cardboard waste and generate additional income.
2. Purchase yarn and carpet ripping machinery, to produce fibres that can be used in bedding, as a binding component in the carpet underlay, or possibly in building/road construction. These higher value products have the potential to generate additional sales income.
3. Increase reuse or recycling of materials to reduce current annual waste disposal costs to \$3000 within two years.

By becoming *WasteWise* Northstate Carpet Mills has drastically reduced packaging and waste disposal costs, freed up valuable warehouse space, and discovered innovative ways to turn waste into resources. Northstate Carpet Mills has demonstrated that it pays to be *WasteWise*.



New packaging solutions reduce waste at the source.

Partnership contractor information

Northstate Carpet Mills

Mike Davis, Inventory Controller
Northstate Carpet Mills
Telephone (07)5539 3144

Visy Recycling (Molendinar, QLD):

Provides storage and recycling solutions to Northstate Carpet Mills.

Sealy of Australia (Wacol, QLD):

Investigates and utilises suitable recycled fibres to manufacture bedding.

This is one of a series of case studies that has emerged from the *WasteWise* industry waste reduction program. It is published in partnership with individual companies to demonstrate their commitment to making environmental improvements through *WasteWise*.

For more information on *Wastewise*

visit www.epa.qld.gov.au/sustainable_industries

email WasteWise@epa.qld.gov.au

call (07) 3227 6078



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