

## Case Study: Tweed City Shopping Centre 2010/11

### Tweed City Shopping Centre

Tweed City Shopping Centre is located in Tweed Heads South. The centre is owned and managed by Dexis Property Group and is home to 165 specialty stores including a food court with 23 eating and takeaway outlets, major stores Coles, Woolworths, Kmart, Big W and Best & Less and an Australian Multiplex Cinema complex. It covers an area of 48,000sqm and provides parking for 2352 vehicles.



With assistance from the North East Waste Forum's Business Waste Reduction Project, Tweed City Shopping Centre worked with Tweed Shire Council to improve its waste management systems and implement more sustainable practices. A waste audit and survey of retail operators was conducted in March/April 2010 to assess the existing waste practices and the attitudes of shopping centre tenants. The project did not include the major retail outlets such as Woolworths, who manage their own waste.

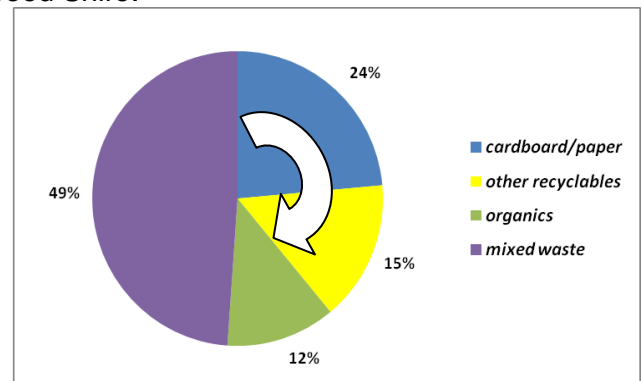
### The Challenge

The greatest challenge for the shopping world so far has been getting co-operation from the 165 tenants to use the bins correctly. Tenants were not always keen to walk further distances to separate cardboard from other waste or to put wet (organic) waste into the wet compactor. Getting waste on the management's agenda and keeping the project moving forward was also challenging. Increases in waste charges are proving to be a motivating factor in the push to further reduce waste by increasing cardboard separation rates and introducing a system to collect and recycle plastic containers from retail outlets.

### Waste Characterisation

Tweed City Shopping Centre contracts Solo Resource Recovery to provide four mixed trade waste bins emptied daily; one 17m<sup>3</sup> refrigerated 'wet' compactor (located closest to the food court) emptied Fridays or on demand during holidays; and one 38m<sup>3</sup> 'dry' compactor emptied on demand (approximately once per month). Eight 7m<sup>3</sup> cardboard cages are contracted to Visy and emptied three times per week. Cooking oil is also retained in two receptacles and pumped once per month on average by Auscol Pty Ltd. In high season (Christmas period), bins are often emptied more frequently.

An estimated 197m<sup>3</sup> of waste is generated each week of which 132m<sup>3</sup> of cardboard & paper is successfully recycled. The graph below provides an overall view of the total waste (approx 65m<sup>3</sup> per week), which goes to landfill and incorporates the waste that is disposed of in both compactors and the 4 trade waste bins. The arrow indicates the components of the waste stream that are recoverable through existing recycling services in Tweed Shire.



The major finding was the significant quantity of cardboard & paper that was being dumped into the waste skips and compactors. This alone has great implications for saving on waste charges and diversion from landfill. The location of cardboard cages, the distance retailers need to walk to access the cages and a lack of awareness regarding the recycling of clean paper items in the cages are all contributing factors.

The large dry compactor was being incorrectly used for the dumping of wet (food organics) waste, mainly from the food court area, resulting in odour and vermin problems. The smaller wet compactor is provided for this purpose and is emptied on a daily basis.

## Outcomes and Opportunities

**A Waste Reduction Action Plan has resulted in the following outcomes to date:**

- 1. Maximised collection of cardboard recycling.** This was achieved through targeted awareness raising by centre management and the adoption of strategies as indicated below.
- 2. Improved separation of waste to compactors.** Surveillance by security staff assisted in the identification of businesses not placing wet waste in the correct compactor or cardboard into the recycling cages. This problem was resolved by Management liaising with businesses to increase awareness and compliance in the correct use of facilities and provide wheelie bins at source to assist in more easily moving waste to the correct location.
- 3. Reduced organics in the waste stream.** A list of local food bank charities was provided to management for circulation to relevant food outlets to encourage collaboration in creating arrangements for food collection.

**Opportunities exist for further improvements as follows:**

- 4. Plastic Recycling (trial is pending).** Visy have provided collection bales and clear bags for the separation of plastics containers. The bags will then be placed in the 38m<sup>3</sup> 'plastics only' dry compactor. It will be trialled initially with a few larger stores.
- 5. Improved Signage.** On all waste and recycling bins to encourage correct use.
- 6. Improved Security of Compactors & Bins.** To prevent illegal dumping and reduce contamination.
- 7. Increase Staff & Tenant's Waste Awareness.** Inclusion of waste & sustainability issues into a regular newsletter. Promotion and reward program for businesses demonstrating best practice waste management.
- 8. Public Place Recycling.** An unsuccessful attempt at PPR in the past has made management wary. External funding may be sourced for a future trial.

## Savings!

*Savings are being achieved through:*

- ✓ *the increased diversion of cardboard – recycling it costs significantly less than sending it to landfill;*
  - ✓ *Less contamination of the 38m<sup>3</sup> dry compactor with wet waste so fewer pickups required to control hygiene risk.*
- Future savings can be made by recovering some or all of the recyclable containers (estimated 10m<sup>3</sup> per week) and potentially, organics (estimated 8m<sup>3</sup>) from the waste stream.*

## Contacts

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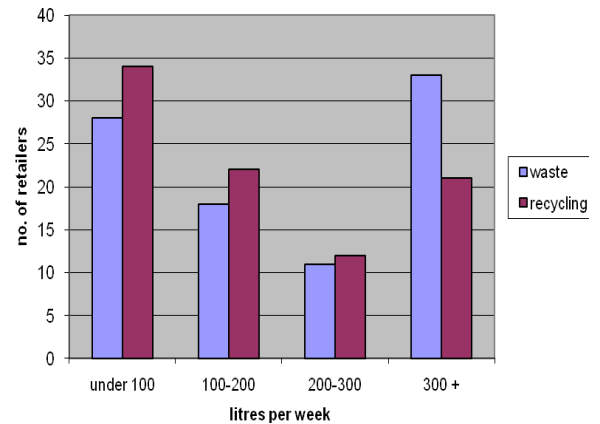
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## Tenancy Survey Outcomes

A total of 92 surveys were completed, covering 56% of centre specialty shops (major retailers were not included). The results indicated that all retailers separated cardboard/paper for recycling. As there were no facilities available for the recycling of containers, most end up in the waste stream. Volumes of onsite waste disposal and cardboard recycling are displayed in the graph below.



A number of retailers reported their own separate and proactive recycling, reuse or other sustainable practices including: shredding paper for use as animal bedding; recycling plastic medical needle caps; reduced paper use and reuse as scrap; energy conservation initiatives; purchase of recycled content products; No plastic bags supplied; enviro bags offered. Several retailers were implementing schemes to reduce plastic packaging such as replacing with paper; attaching handles to boxes so they could be carried; and receiving items packaged in bulk rather than individual wrapping.

The main perceived obstacle to individual retailers improving their sustainable practices was their own head office management (most were part of a national or multinational company). Reducing packaging, particularly plastic and offering alternatives were the main actions that individual businesses believed they could achieve.

A large number of retailers supported the provision of recycling facilities at the Tweed City Shopping Centre for both retailer and public use, particularly for plastic containers.

## BACKGROUND

The BWRP works with local businesses to assist them in developing waste management strategies that promote waste reduction and resource recovery. An integral part of the project is to transfer information from participating businesses to other similar operations within the region. The project also works with industry organisations and networks, such as Chambers of Commerce, to further disseminate information on commercial waste reduction and sustainable business practices. For further information on the NEWF or the BWRP check online at: [www.northeastwasteforum.org.au](http://www.northeastwasteforum.org.au)