



# Markets for Recycled Organics in New South Wales

## FACT SHEET

In NSW increasing quantities of organic material are successfully being recycled into a range of horticultural and related products for use in landscaping, viticulture, erosion control, mine site rehabilitation, energy generation and others.

A study has been undertaken<sup>1</sup> to see how markets have been growing over the past five years since the last study in 1998<sup>2</sup>. For the first time this study has included regions outside of the Greater Sydney Region, including the Mid-North Coast and the South East.

The Greater Sydney Region includes metropolitan Sydney and surrounding council areas including Wyong, Gosford, Blue Mountains and Wollondilly. The Mid-North Coast includes council areas extending from the central coast (Cessnock and Lake Macquarie) up north as far as Copmanhurst and Maclean; and the

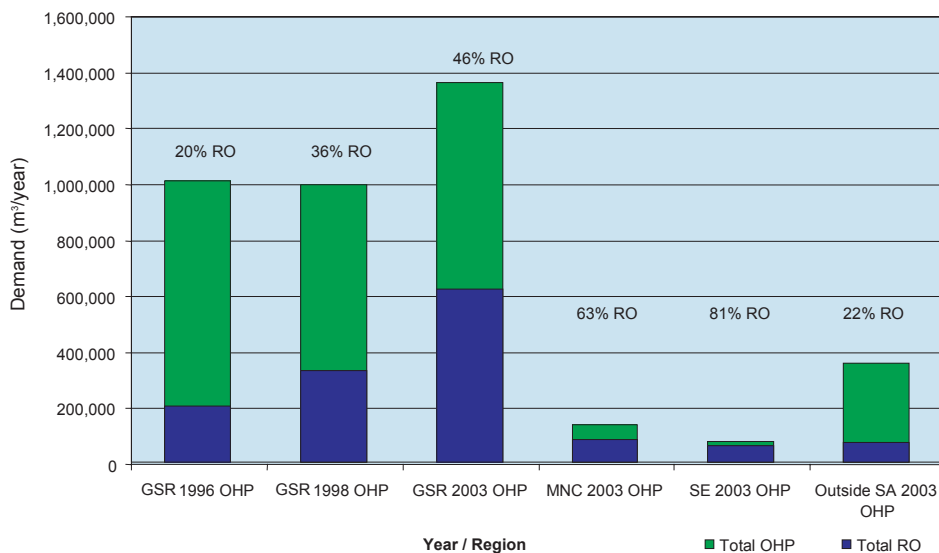


Landscaping of public areas with composted mulch in a new residential development in north-west Sydney.

South East includes all council areas within the south eastern statistical division, as well as the council areas in the Illawarra south of Sydney.

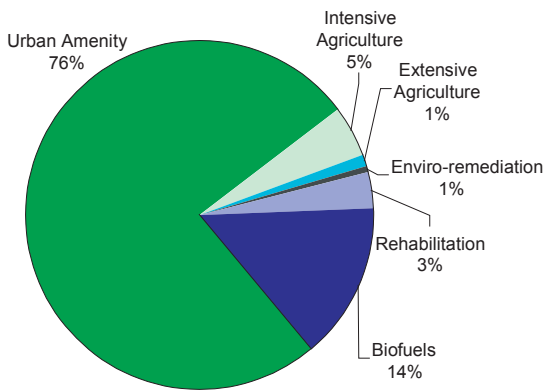
### Location of recycling facilities

Organic materials diverted from landfill are generally processed by licensed composting and related facilities. The study found that there are currently 61 licensed facilities in NSW – 24 in Greater Sydney Region, 11 in Mid-North Coast, 6 in South East and 20 outside of the study area.

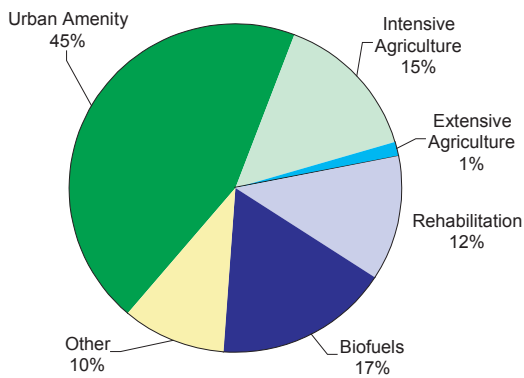


**Figure 1.** Demand for recycled organics (RO) and organic horticultural products (OHP) in the Greater Sydney Region (GSR), Mid-North Coast (MNC) and South East (SE) NSW between 1996 and 2003.

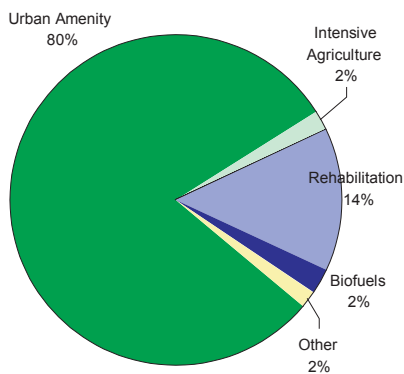




**Figure 2.** Demand for recycled organics in the Greater Sydney Region in 2003 (total demand is 630,000 m<sup>3</sup>/yr).



**Figure 3.** Demand for recycled organics in the Mid-North Coast in 2003 (total demand in this region is 73,000 m<sup>3</sup>/yr).



**Figure 4.** Demand for recycled organics in the South East in 2003 (total demand in this region is 68,000 m<sup>3</sup>/yr).

Since the last study, additional facilities have been established in Port Stephens (Bedminster), Port Macquarie (Rethmann), Camellia (Earthpower), and Moss Vale (Wingecarribee Shire Council).

## Current demand

Results indicate that markets have grown substantially since 1998. Demand in the Greater Sydney Region has increased from 370,000 m<sup>3</sup>/yr in 1998 to 630,000 m<sup>3</sup>/yr in 2003, indicating that markets have been growing at a rate of 14% per year (Fig. 1).

Most market growth has occurred in urban amenity, biofuels and rehabilitation (Fig. 2). The biofuel market segment includes anaerobic digestion of food organics and co-firing of mainly wood and timber in power plants.

In 2003, demand in the Mid-North Coast was ~73,000 m<sup>3</sup>/yr, with urban amenity and intensive agriculture being the most important markets (Fig. 3). In the South East, demand was ~68,000 m<sup>3</sup>/yr, with urban amenity and rehabilitation being the main users of recycled organics (Fig. 4).

Overall, the market for recycled organics in NSW is estimated to be ~860,000 m<sup>3</sup>/yr.

## Change in markets

Urban amenity (e.g. landscaping) continues to grow as a market and is the most important market for recycled organics in NSW. A major change since the 1998 study is that more landscaping is being conducted by commercial enterprises purchasing on behalf of consumers.

Moderate growth has occurred in intensive agriculture in the Greater Sydney Region, and substantial growth in biofuels has occurred since the 1998 study. Biofuels are materials that can be anaerobically digested to produce biogas or materials that can be combusted for energy recovery. State and Federal incentives for renewable energy production is creating demand for use of wood, timber and food organics as feedstocks.

## Forecast market growth

The study assessed potential demand across all the market sectors to highlight potential growth opportunities for recycled organics (Fig. 5). Demand forecasts are based on:

- Potential for replacement of "virgin" materials
- Market needs and capacity to pay
- Competing products
- Changes in the market environment (regulations, policy, environmental constraints etc.)

- Market size, geographic location and soil improvement value
- Availability of recycled organics
- Distance from composting and related facilities (~150 km radius)

In the Greater Sydney Region moderate growth can be expected in the urban and amenity market of approximately 30,000 m<sup>3</sup>/yr by 2006, arising from increased use of recycled organics in major development and construction projects. Significant growth is expected in the rehabilitation market, mainly in catchment works. This market could grow to approximately 161,000 m<sup>3</sup>/yr by 2006.

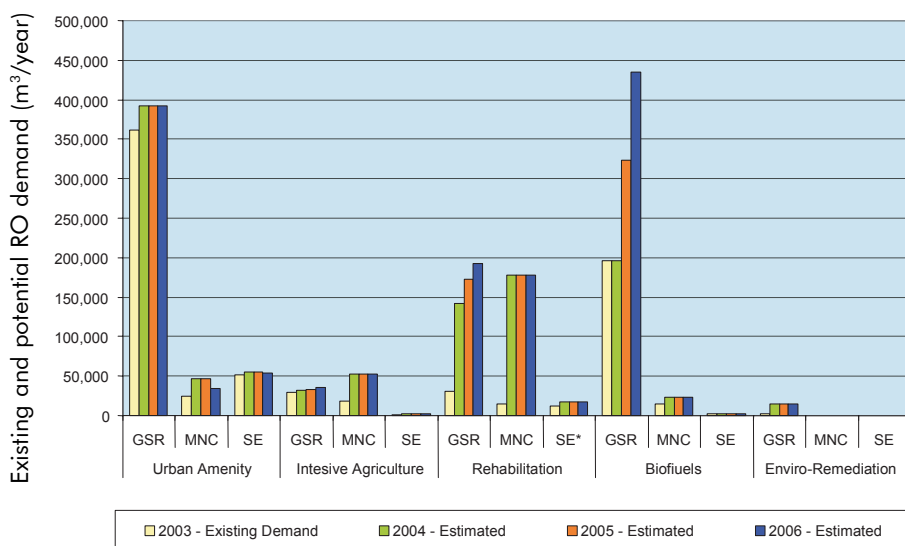
In the Mid-North Coast, moderate growth is forecast in intensive agriculture such as viticulture and fruit/orchard production. The viticulture market is expected to grow by approximately 34,200 m<sup>3</sup>/yr by 2006. Significant growth in the rehabilitation market is anticipated,

specifically in catchment works. This market is expected to grow to 156,000 m<sup>3</sup>/yr by 2006. In the South East, some growth is forecasted in rehabilitation again, such as in catchment works. This market is expected to grow by approximately 6,000 m<sup>3</sup>/yr by 2006.

Growth in the use of compost in catchment rehabilitation works will be assisted by successfully demonstrating the use of compost in erosion control and re-vegetation projects currently underway. It will also be dependant on work by the Catchment Management Authorities as they implement their catchment action plans.

Forecast growth in markets will also rely on reprocessing facilities manufacturing product that meet the needs and sensitivities of individual consumers and markets.

The full market study report is available from:  
[www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)



**Figure 5.** Current and forecast growth for recycled organics across markets and regions.

## References

1. Department of Environment and Conservation (2004). Analysis of Markets for Recycled Organic Products – Update Report. Report prepared by GHD Pty Ltd, June 2004.  
<http://www.environment.nsw.gov.au>

2. NSW Waste Boards (1999). Markets for Products Containing Recycled Organic Materials. Report prepared by EC Sustainable Environment Consultants, March 1999.

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