

Sustainable Choice Kicks Off 2007 With a Bang!

Congratulations to the 15 councils who have joined the program to date.

Sustainable Choice councils across the State are:

Penrith Council
Kogarah Council
Rockdale Council
Palerang Council
Lane Cove Council
Marrickville Council
Mosman Council
Dubbo City Council
Cowra Shire Council
Warringah Council
Forbes Shire Council
North Sydney Council
Bellingen Shire Council
Coolamon Shire Council
Bathurst Regional Council
Port Macquarie-Hastings Council



It's great to see so many councils recognising the potential of purchasing to help deliver sustainability outcomes.



Allan Smith, Mayor of Dubbo, shakes hands with Seb Crawford, the face of Sustainable Choice.

There are more going through the process as we go to press. Membership is free and all NSW councils and related local government organisations are encouraged to join.

To find out more about membership please visit our website:
www.lgsa-plus.net.au/sustainablechoice

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Upcoming Events...

- 1... Sustainable Choice Expo & Workshops - Bathurst

Introduction to sustainable Procurement and sustainable suppliers.
Wed 23 May 2007
10 am – 3 pm
Memorial Entertainment Centre
Bathurst
Call Seb on 92424000 or
Kristy on 63336217 for details.

- 2... Compost Awareness Week

6-12 May, including the Compost Ball on 11 May.
For more details see:
www.corebusinessnet.com

Marrickville Council Biodiesel Trial

As part of its plan to reduce greenhouse emissions by 20% by 2010, Marrickville Council is currently conducting a trial of biodiesel in four of its medium sized trucks.

The trial will be held from 16 January to 18 May 2007, after which a full cost and feasibility analysis will be conducted.

“Our experience so far has been positive, with the only problem being security of fuel supply;” said Marrickville Council’s Environmental Systems Coordinator, Shannon Larkin.

“When the trial was planned, we had a biodiesel fuel station a few blocks away, but that closed down. So we now refuel

on a weekly basis with a visiting tanker. We will assess the refuelling issue at the end of the trial, however refuelling at the depot has not posed too many problems to date.”

The trial involves a small garbage compactor, an eight tonne tip truck and two, two-tonne tippers. All have made the switch to a B20 blend (20% biodiesel, 80% regular diesel) with no change in performance or reliability detected so far.

The biodiesel source material is a mix of tallow and used cooking oil.



SustainableNEWS is produced quarterly.

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Sporting Clubs Score with Compost

Sustainable Choice members Port Macquarie-Hastings and Penrith Councils have been exploring new ways to help keep sporting grounds open during water restrictions and drought.

Both councils have been participating in a trial run by the Department of Environment and Conservation NSW (see box) designed to develop markets for recycled organic products such as compost and top dressing – all made from garden organics collected through council's kerbside collection service. The preliminary results have been excellent, demonstrating;

- ✓ improved turf cover
- ✓ improved quality and durability of sports playing fields
- ✓ reduced water demand
- ✓ cost saving through reduced water and fertilizer use
- ✓ reduction of organics going to landfill
- ✓ improved economics of council's waste contracts
- ✓ broader sustainability benefits, returning organic nutrients back to the soil.

Making Compost

Port Macquarie-Hastings Council has a contract with Remondis to process organic waste. Recyclable glass, paper, plastic and metals are collected, sorted and sent to recyclers. Garden material such as leaves, grass clippings and prunings are turned into compost, and non-recyclable waste goes to landfill.

A custom built Organic Resource Recovery Facility (ORRF) at Cairncross was developed five years ago to handle all of the garden organics from council's 75,000 residents. The plant, which takes 19,000 tonnes of organic material to produce 10,000 tonnes of compost per annum, has been so successful that Remondis are about to embark on a \$2 million expansion.

This is how the system works. Most ratepayers have a garden organics bin which is collected weekly. The contents of this bin, which may include household kitchen scraps (see box), are shredded and mixed with chipped green material from



the landscape industry, and treated bio solids from council's sewerage treatment plant. It is then fed into composting chambers in a mix of approximately 30% garden organics, 30% kitchen scraps, and 30% bio-solids.

The material decomposes over a period of four weeks, reaching a maximum temperature of 55 degrees. This ensures any harmful bacteria are killed, along with plant propagules such as seeds. During this process the material loses approximately 30% of its weight and 45% of its volume. The end product is high quality compost suitable for all landscaping applications. The Cairncross plant sells compost to landscapers, the public, the intensive agriculture industry and to council.

Recycling Kitchen Scraps

In July 2006 Port Macquarie-Hastings Council took organic waste collection right up to the kitchen bench. 5000 residents signed up for a new 'kitchen tidy' to collect all food scraps - only large pieces of meat products and bones are banned. The kitchen tidy is made from recycled plastic and has a flip top lid for easy use. About the size of a small bucket, it contains a fully biodegradable corn starch bag. The bags can be replaced daily, or when full, and are deposited directly into the resident's garden organics bin. From there, the bags go directly into the

composting facility and break down in a matter of days.

Ratepayers wanting to participate simply phone council and the kitchen tidy along with a years supply of bags are delivered free.

Nicole Julian, council's Waste Strategies & Education Officer says, "the introduction of the new kitchen tidy, along with the switch to a weekly garden organics collection and a community education campaign have together contributed to an estimated 30% increase in the volume of



organic material collected. So far the scheme has been very popular with ratepayers and we've had few complaints, but we will be monitoring the organics levels and surveying residents over the next few months to help determine the success of the program."



Applying top dressing to the Penrith fields

Rejuvenating Sports Fields

But making the compost is only half the story. To fully close the loop, councils are using the compost made from garden organics to improve parks and garden management. Port Macquarie-Hastings Council have used compost to construct the playing surface of the new Port Macquarie Regional Stadium.

In addition Port Macquarie-Hastings Council's 'Reclaimed Water Scheme' means that within the next few months water to the site will be supplied via purple pipes separate to the town water supply - from the new Reclaimed Water Treatment Plant. A 13 km pipe network now extends through the inner urban area of Port Macquarie to supply drought proof reclaimed water to other parks, sports fields and the Town Green.

Penrith Council, grappling with the problem of seriously degraded sports grounds after 5 years of drought, have been using recycled organic compost to give stressed playing fields a new lease of life.

Penrith chose three different sites at Ched Towns, Glenmore Park and Cranebrook for a trial. All three were heavily used by local sporting clubs, and were in poor condition due to heavy usage and water restrictions.

The Ched Towns site was fully rebuilt with 150mm of soil improver and

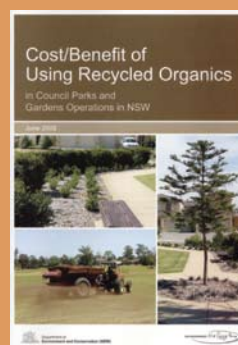
organic top mix. The other two sites were developed using an earth quake machine then top dressed.

Water availability played a critical role in the final outcome, with the irrigated site, Ched Towns responding much better than the other two which were not irrigated. But for all three sites, the results were impressive. Turf cover increased from 83% to 97% at Ched Towns. Organic matter increased from 3.4% - 9.5%

and surface hardness decreased by up to 40%. In the longer term, Raphael Collins, Parks Construction & Maintenance Manager, believes that healthier turf will help the fields cope better during the dry weather. "Overall we are thrilled with the outcome. It has helped to keep the fields open, improved surface quality for the clubs, reduced cost for council, and returned nutrients to the soil," he said.

DEC Recycled Organics Program

The Department of Environment and Conservation (DEC) NSW has produced a kit to help councils conduct a cost benefit analysis on using recycled organics. The DEC estimates councils can save up to 30% on irrigation and mineral fertilizer costs. Other sustainability benefits include healthier turf, improved playing



surface, closing-the-loop on garden organics, supporting local jobs and businesses, and even improving the economics of council's waste contract. For more information see Cost/Benefit of Using Recycled Organics in Council Parks and Gardens Operations in NSW http://www.environment.nsw.gov.au/education/spd_org_pubs.htm

See the front page for more information about activities planned during International Compost Awareness Week (ICAW).

SustainableNEWS showcases green purchasing initiatives being undertaken in councils throughout NSW.

Please call Seb Crawford on (02) 9242 4053 or email seb.crawford@lgsa.org.au if your council has a story to tell.

Remanufactured Toner Cartridges

Each year Australians purchase approximately 4 million toner cartridges and 12 million ink cartridges. Laid end to end they would stretch from Sydney to Hobart!

Toner cartridges can be remanufactured to Original Equipment Manufacturer (OEM) specifications, making them as good as new. Yet each year, around 3 million end up in landfill. Once there, it is estimated a cartridge takes approximately 450 years to decompose.* Remanufactured cartridges can be up to 50% cheaper and offer significant environmental benefits.

On average each remanufactured cartridge diverts from landfill:

- 1kg of plastic - recycling plastic uses only 30% of the energy required to produce the same product from virgin material.



A remanufactured cartridge ready for reuse, and another at the end of its life, chipped and ready for recycling

- 250g of aluminium - recycled aluminium takes only 10% of the energy to produce the same component from virgin material.*
- 3.4 litres of 'embedded' oil (used in the manufacture and transport of virgin cartridges).

All new cartridges are imported, so apart from saved fossil fuels associated with long distance travel,

local remanufacturing can also stimulate local employment.

So you see, remanufactured toner cartridges can offer triple bottom line benefits – financial, social, and environmental!

Make sure you use a reputable supplier able to offer guarantees and quality assurances. See the Sustainable Choice website for more information.

**Australian Cartridge Remanufacturers Association*

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Before starting the trial, Council ran an information session for all staff and interested members of the public on biodiesel. Staff from other councils were also invited and the day was a great success, with approximately 50 people attending.

The final assessment will involve a survey of staff who have been involved in the trial. Issues to be considered are: the potential greenhouse gas savings that can

be achieved, costs for purchasing the fuel, efficient processes for refuelling, and any impact on the performance of vehicles. A cost benefit analysis will also be conducted on the use of B20 for the entire fleet as opposed to increasing the biodiesel component to B50 for key vehicles with a higher greenhouse impact.

Contact Shannon Larkin at Marrickville Council for more information: Phone 9335 2069



Local Government
Association of NSW



Shires Association
of NSW

Department of **Environment and Conservation** NSW

