



SMEs boost recycling of glass and polystyrene

Dr Mark Jackson, Project Director, A.Prince Consulting Pty Ltd

Small and medium-sized enterprises (SMEs) produce 45% of all business waste sent to NSW landfills and one-on-one support being provided through the NSW EPA's Bin Trim program is helping to boost recycling of problematic materials such as plate glass and expanded polystyrene, known as EPS.

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Incredibly, SMEs in Sydney alone send 1 million tonnes of waste per year to landfill, 70% of which could be re-used or recycled.

Despite increased public acceptance of the need to reduce waste and protect our environment, many SMEs and staff are not taking action. Low-cost collection and re-use systems are accessible for businesses to help reduce the amount of material being sent to landfill.

Common reasons given by SMEs for not taking action are that they: believe their waste is not significant enough to warrant a recycling service; don't have in-house knowledge and expertise to improve systems; believe changes in waste disposal practices will be costly; are unaware of the benefits of improved environmental performance.

A.Prince Consulting (APC) and the NSW EPA are working together as part of the NSW Government's Bin Trim program to help boost the recycling of plate glass and polystyrene from businesses across NSW. These materials do not make up a large part of the business waste stream, but tend to be disposed of rather than recycled by most businesses.

To help businesses consider ways of recycling plate glass, EPS and other common materials such as paper, cardboard, plastics, metals and timber, APC is working in partnership with 70 businesses that are members of the NSW Glass and Glazing Association. We are also working with a further 50 businesses such as furniture and electrical retailers and produce markets that generate a large amount of EPS, which is a low-cost packaging material that can be easily compacted and sent to local companies such as IS Recycling for export and recycling into other polystyrene products.

Results to date show that businesses are very keen to receive support to assist them to recycle better. Common feedback is that while some businesses are paying thousands each year in waste disposal,

Waste recycling

setting aside time to look at ways to recycle better often drops off as a priority. By working with an expert advisor, many businesses are now installing better recycling systems to divert waste away from landfill, which not only saves money but also helps the environment.

And the results from this program are starting to gain interest from waste and recycling companies wanting to provide better recycling services. Waste assessments done with the NSW Glass and Glazing Association members show that there is in excess of 10,000 tonnes per year of plate and laminated glass that is currently being sent to landfill, of which the majority can be recycled if it is collected separately.

Programs like these can help identify gaps in the resource recovery chain and assist in identifying strategic investment opportunities for the recycling industry.

The NSW Government has just released its new 'Waste Avoidance and Resource Recovery Strategy 2014-2021' and has set a recycling target for businesses of 70% by 2021. By working in partnership with businesses and industry organisations, we are gradually helping businesses manage their waste better while also helping government reach these ambitious recycling targets.

Although business waste recycling currently rests at 57%, to reach the 70% target by 2021, a further 1.1 million tonnes per year needs to be recycled. Our work with the Bin Trim program and with businesses is making progress towards this goal and helping to make recycling standard practice in businesses across NSW.

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Dr Mark Jackson is Project Director of A. Prince Consulting Pty Ltd based in Sydney, a national waste and recycling consulting firm

working with the NSW Government to roll out the Bin Trim program to help businesses recycle better.

case studies

Yarra Valley Water upgrades sewage treatment plant



Yarra Valley Water is investing \$11 million to improve the sewerage system in Croydon and Chirnside Park, Melbourne, as well as providing recycled water to new developments in the area. This includes \$9 million in upgrades to the Brushy Creek Sewage Treatment Plant and \$2 million for upgrades to local sewerage pipes and several new recycled water pipelines.

"The sewage treatment plant at Brushy Creek treats up to 13 million litres of sewage a day," said Yarra Valley Water

Managing Director Pat McCafferty. "By carrying out plant upgrades and updating the aeration and ultraviolet treatment systems, we can process the sewage more effectively."

McCafferty said the improvements will help to increase the efficiency and reliability of the services provided to customers in the area and continue to protect the environment.

"The new sewerage pipe is upgrading an existing one which has reached the end of its useful life. The pipeline upgrade will help to reduce the likelihood of sewage spills into the environment.

"We are also installing new recycled water pipes, upgrading the recycled water supply to the Range Development and allowing for any future demand as the population grows. Up to 2 million litres of sewage can be treated and converted each day into high-quality Class A standard recycled water. The recycled water is then used by customers in their gardens, toilets and laundries, saving our valuable drinking water supplies."

Construction of the new sewerage and recycled water pipes began in June, with works to be completed between the Brushy Creek Sewage Treatment Plant along the Maroondah Highway and into Dorset Road.

"We are working closely with Maroondah City Council to put traffic management in place so that as little disruption as possible occurs while the work is carried out," said McCafferty. "While some areas of construction will require an open trench to be dug to lay the new pipes, where possible we will use trenchless technology. This means that a hole will be drilled in the ground for the pipe to be pushed through, instead of digging an open trench. This technique generally takes less time to complete and also minimises our disruption to the environment."

Pipeline construction is expected to be completed later this year, subject to weather and favourable ground conditions, with the remaining Brushy Creek Sewage Treatment Plant upgrade works to be completed over the next two years.