Australian Government
Department of Sustainability, Environment, Water, Population and Communities

Recycling waffle pod waste

Introduction

This project demonstrates industry best practice in the development and delivery of a product stewardship scheme targeting the reduction of expanded polystyrene (EPS) litter from waffle pod offcuts on building sites and the diversion of this material from landfill. The introduction of the Pod Scrap Bag Program has been an industry initiative of Expanded Polystyrene Australia (EPSA) and its Pod Group members. Scrap bags are supplied with all pod deliveries to building sites to assist with the separation of EPS offcuts from the general waste stream. The filled scrap bags are then collected and taken back to the EPS manufacturer where it can be granulated and recycled in new waffle pods and other building and construction products.

Use of recycled and re-used material

EPS pods have become an important part of building concrete slabs, particularly for domestic dwellings. The lightweight and superior compressive strength of EPS pods deliver formwork for slabs that is uniform and consistent with ease, thereby reducing construction time and costs. In addition, the thermal properties of EPS provide significant insulation benefits, making waffle pods popular in new-home construction where concrete slabs are used.

The size of the waffle pod market in Australia is around 7000 tonnes per year. From this, around 600 tonnes of EPS pod offcuts are generated on building sites. It is estimated that where the Pod Scrap Bag Program has been implemented, the collection and recycling rate of EPS pod offcuts is extremely effective—around 90 per cent.

Drivers and benefits

Drivers:

As a result of the persistent waste on and around building sites from the use of waffle pods, there has been a threat to regulate against their use. The industry responded with the introduction of the Pod Scrap Bag Program.

Benefits:

EPS pod manufacturers can incorporate up to 40 per cent recycled materials in the production of waffle pods—this offers significant economic benefits through the reduction of virgin material required to manufacture the pods and environmental benefits, with all scrap and offcuts able to be recycled and re-used in new pods rather than going to landfill.

Problems and challenges

One challenge is to educate end users of waffle pods, such as builders and concreters, on the correct use of the pod scrap bags to ensure the EPS offcuts are segregated without contamination from other building site waste.

Another challenge is to promote the benefits of this product stewardship industry initiative to local councils to ensure EPS pods are not deselected due to their propensity to enter the litter stream if offcuts are not handled properly on site.

Solutions
The EPSA Pod Group has participated in the Keep Australia Beautiful (Victoria) Clean Site Program to showcase their efforts in addressing EPS scrap from building sites.

Specifications and opportunities for other projects
There are currently significant quantities of other EPS products being collected and recycled through the National Collection Network established by EPSA. The long-term goal of EPSA is to establish a national closed loop recycling network for all EPS products.

Contacts and links
Expanded Polystyrene Australia
(03) 9611 5400
www.epsa.org.au

Consultation
Kin-Chun Ip, Manager, Industry Development, Expanded Polystyrene Australia (EPSA)

Photo
Kin Chun Ip, EPSA