

# The Vale Smart Builders Program

## Earth Care Consulting

### Introduction

The Towards Zero Waste Event Pilot Project is assisting public event management organisations to The Vale Smart Builders Program is developing a coordinated waste management strategy with a focus on improving resource recovery systems as a basis for increased recycling and reuse of residual building materials.

The program aims to reduce the amount of material used in housing construction going to landfill as waste and to reduce the harmful effects building waste can have on the surrounding environment.

Participants in the Vale Smart Builders Program include Perth's biggest builders, key suppliers, recycling companies and industry groups.

Vale is a residential estate being established in the Swan Valley by Multiplex Developments Pty Ltd.

### Towards Zero Waste

The Vale Smart Builders Program aims to minimise the amount of building material sent as waste to landfill. Experience suggests that it is possible to achieve up to a 70 per cent reduction in material going to landfill.

Separation of resources and recyclables from waste on building sites is a key aspect of the program.

This source separation is a vital first step towards cost effective recycling.

In addition, program partners are examining the potential for the use of processed and unprocessed recyclables at Vale.

### Future outlook

The Vale Smart Builders Program is driven by the need to develop an economically viable waste management system that is adopted because it makes good business sense as well as providing environmental and social benefits.

The innovative waste minimisation and resource recovery systems being developed in the Vale Smart Builders Program are intended to be forerunners of a transformation in waste management strategies across the housing construction industry in Western Australia. It will be able to be replicated in other housing estates around Perth.

In this way the Program can make a significant and lasting contribution to progress in reducing construction waste.



**Developing markets and converting "waste" materials into useful end products.**  
 In addition to waste generated on individual construction sites, materials from the broader earthworks and civil works undertaken on a residential development can also be recovered – for example, to produce course aggregate or road base. This reduces demand for "virgin" materials and associated environmental impacts/costs.



**Practical re-use of "waste" materials**  
 The use of recycled aggregate for paths in a school community garden at Vale is one practical example of how recovered resources can be applied.

### Strategic Waste Initiatives Scheme

Grants are available through the Strategic Waste Initiatives Scheme (SWIS) – a broad support scheme for projects that are consistent with the Waste Management Board's priorities for waste management in WA.

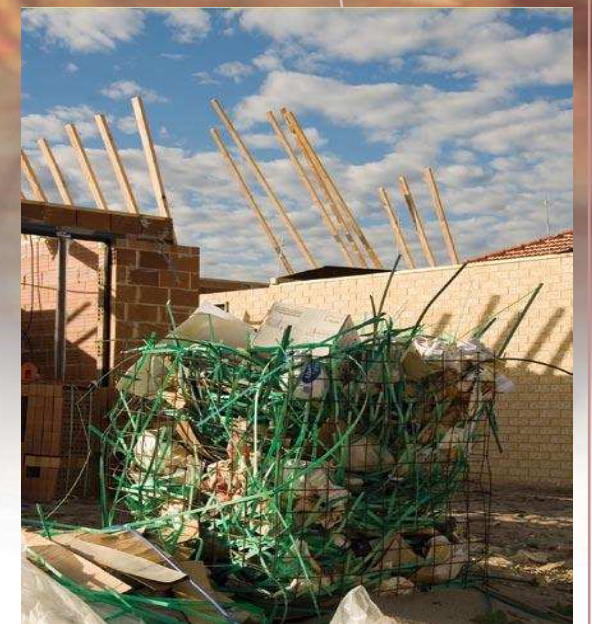
The scheme was developed to assist the State in achieving the vision of 'Towards Zero Waste in WA'. The grants are made available from the funds raised by the Waste Management and Recycling Account through the landfill levy.

More information regarding the Strategic Waste Initiatives Scheme is available on the Zero Waste WA website: <http://www.zerowastewa.com.au/ourwork/supportschemes/swis/>

For more information call the Department of Environment and Conservation on 64675318.



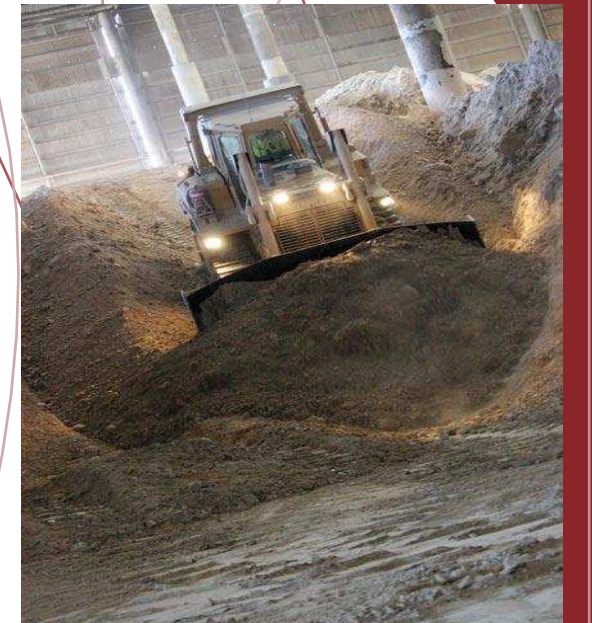
**What Smart Builders is trying to change**  
 Standard existing practice for construction sites on large residential developments is a pile of unsorted mixed waste – the vast majority of which goes to landfill.



**Basic initial waste management practices**  
 Cages for on-site separation and collection of "light" waste (e.g. brick straps, cement bags, general refuse) prevents contamination of larger volumes of heavy waste (e.g. bricks, tiles, timber, render spoil, sand) – this is one example of what is being trailed in the early stages of Smart Builders.



**Basic initial waste management practices**  
 On-site sorting of "heavy" waste allows these materials to then be recycled cost-effectively. These basic initial waste management practices will become more sophisticated as Smart Builders evolves.



**Reprocessing of "waste" materials**  
 Crushed waste brick can be mixed with fresh clay as part of the brick manufacturing process – this reduces raw materials, transport and energy costs.