

A series of decorative chevrons and arrows in various shades of green and white, pointing to the right, are scattered across the upper half of the page. The largest and most prominent is a white chevron above the word 'Sustainability'.

# **Sustainability** **victoria**



**Towards Zero Waste –**

**Sustainability in Action**

**Victoria, Australia**

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**Sustainability Victoria**

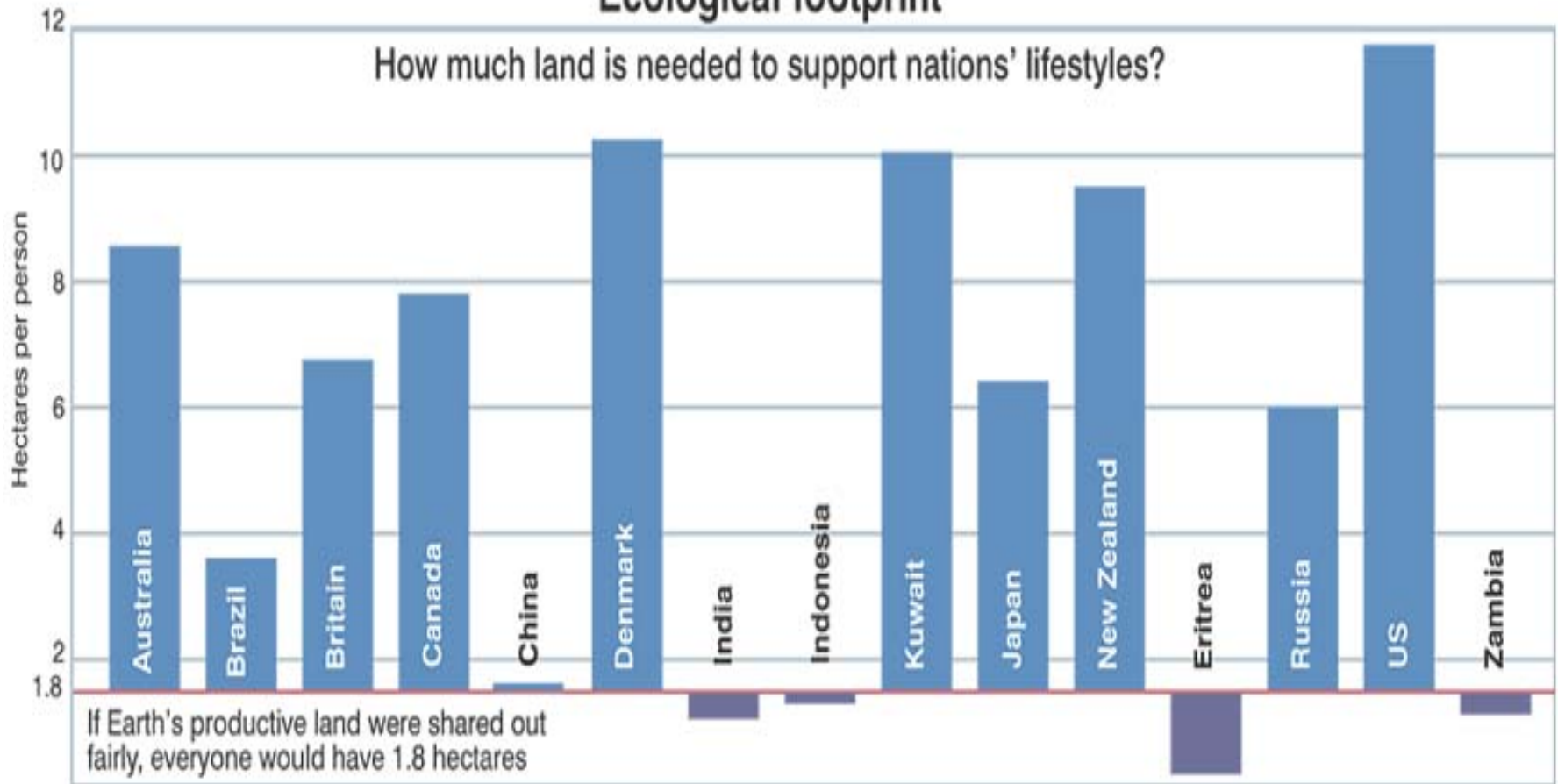
# Towards Zero Waste: a year in review

- > 54% of waste generated recovered for recycling (2004/05)
- > 95% of Victorian households have access to kerbside recycling (2004)
- > Victoria recycles 80.3% of the newspaper it consumes (2004)
- > Victorian businesses recycle >60% of the waste they generate
- > 1000 schools participate in Waste Wise and 800 teachers trained
- > ECO-Buy members spent \$80m on green products (2005)
- > 3.2m people attended public events that were Waste Wise

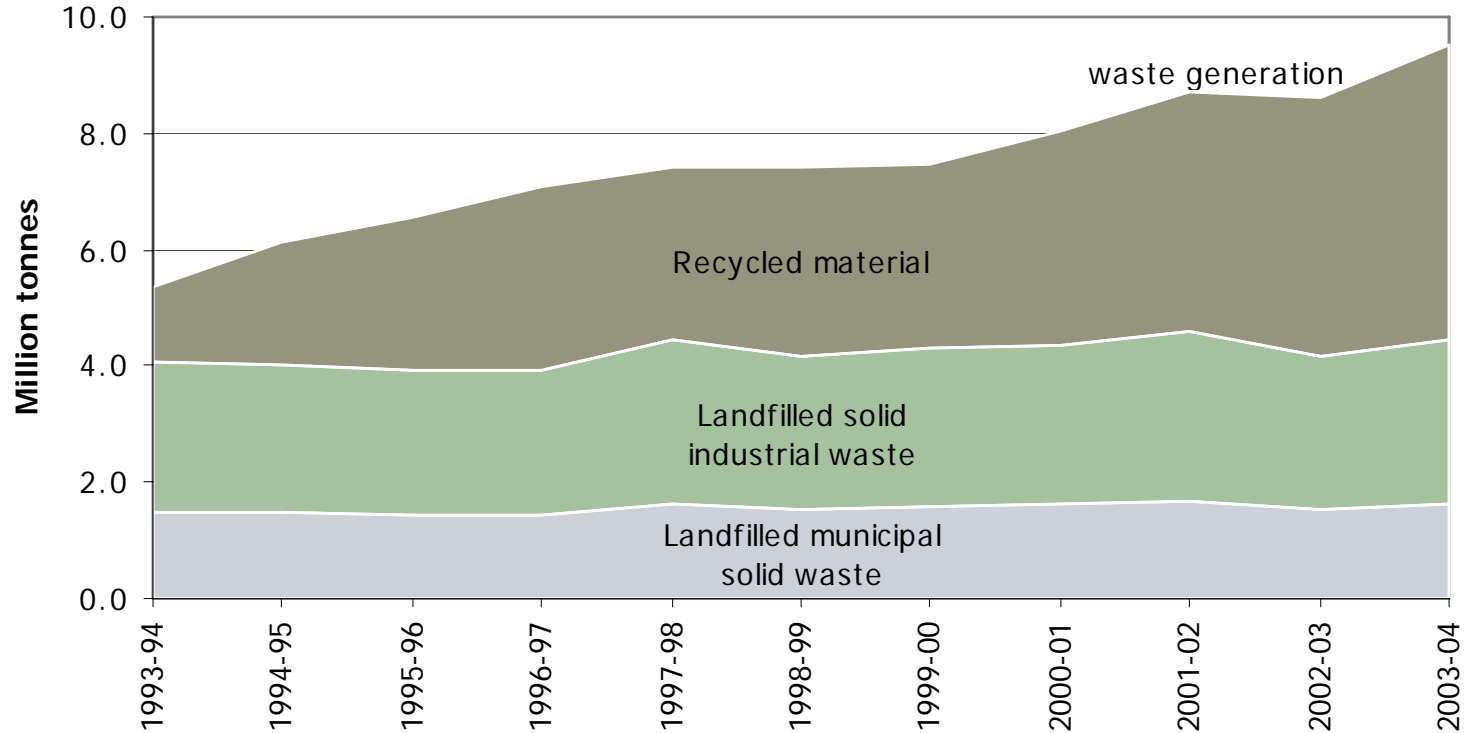
Despite an excellent record for recycling, Victoria remains one of the highest per capita waste generators in the world, and one of Australia's largest contributors to solid waste.

## Ecological footprint

How much land is needed to support nations' lifestyles?



## Solid waste generation, Victoria 1993-94 to 2003-04



**Reduce solid waste by 1.5m tonnes by 2014**  
**Reduce amount sent to landfill by 50%**  
**Increase recycling from 53% to 75%**

Overarching framework  
Election policy commitments  
Strategies and frameworks  
Enabling legislation

# GROWING VICTORIA TOGETHER

- More quality jobs and thriving, innovative industries across Victoria
- Efficient use of natural resources

## THE SUSTAINABLE STATE

## ENERGY FOR THE FUTURE

### OUR ENVIRONMENT OUR FUTURE (ENVIRONMENTAL SUSTAINABILITY FRAMEWORK)

GREENHOUSE STRATEGY

GREENHOUSE CHALLENGE

SECURING OUR WATER FUTURE

TZW STRATEGY

MELBOURNE 2030

RENEWABLE ENERGY AND ENERGY EFFICIENCY STRATEGIES

Under development

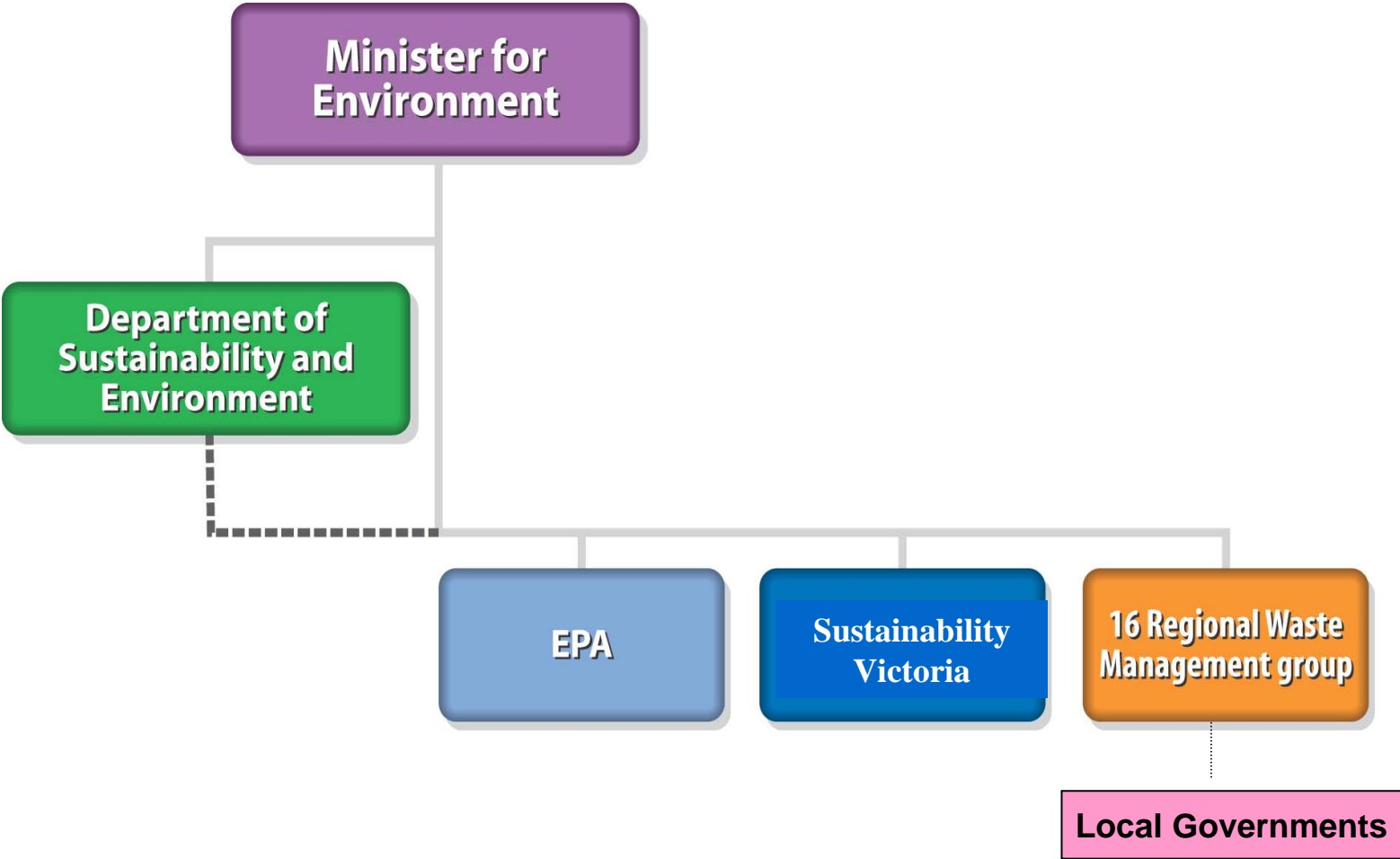
Sustainability Victoria Act

Environment Protection Act

Water Act

Energy Act

# Government Structures





- Formed from the Sustainable Energy Authority Victoria and EcoRecycle Victoria, as well as taking on an element of the State's water program, in October 2005
- Vision: Victorians demonstrating sustainable resource use to support a thriving community and economy.
- Budget ~ \$ 40 million( *including Victorian landfill levy*)
- Strategic Directions
  - Engaging Victorians
  - Transforming markets
  - Making connections
- 110 staff

# Sustainability in Action: Towards Zero Waste Strategy for Victoria

- > Increasing materials efficiency and reducing solid waste generation by 1.5m tonnes
- > Increasing the sustainable recovery of materials for recycling and reprocessing to 75%
- > Reducing the environmentally damaging impacts of waste

# Sector Targets

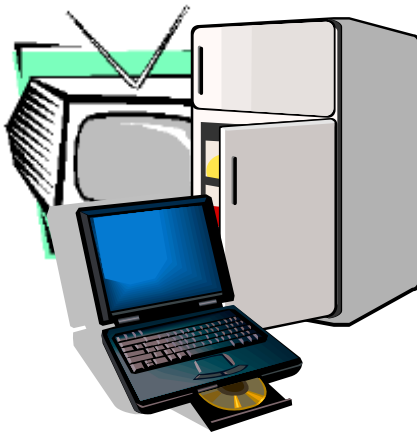
<i>Recovery Rate ( by weight)</i>	<i>2002/03</i>	<i>2008/09 Target</i>	<i>2013/14 Target</i>
Household Waste	35%	45%	65%
Commercial & Industrial	59%	65%	80%
Construction & Demolition	57%	65%	85%

# Recovery and recycling: households



Or 2 bin,  
recycling, and  
residual  
treatment

Product Stewardship



Recycling



Green Waste



Garbage



Extra plastics/  
paper

Potentially  
also food

Residual  
treatment

# Best Practice Kerbside Recycling

**Best Practice Kerbside  
Recycling System covers  
just under 60% of Victoria.**

**\$11m invested across  
41 councils**

# Achievements

- 95% of households with access to kerbside recycling services
- 41/79 councils are implementing best practice program
- \$11 million in kerbside support to local government
- \$18 million in infrastructure support to over 270 recycling facilities throughout Victoria
- Average service cost \$ 29 per household up from \$ 28 in 2001/02
- Average contamination rate 6.3%
- Kerbside recyclables cost \$ 130 per tonne for best practice councils and \$ 140 for others , inc collection.

# Education & Community programs

> Away from Home Recycling

> Regional Education



**1000 Wise Schools  
(and 800+ teachers trained)**

# Funding external partnerships with business

- > Investment in 5 positions in sectors representing 30 Billion of GSP
  - > **Master Builders Association- funded position**
  - > **PACIA- funded position**
  - > **Aust Industry Group- funded position**
  - > **EcoBuy for Business- funded position**
  - > **Tourism Victoria – funded position**



# Infrastructure Investment \$13m

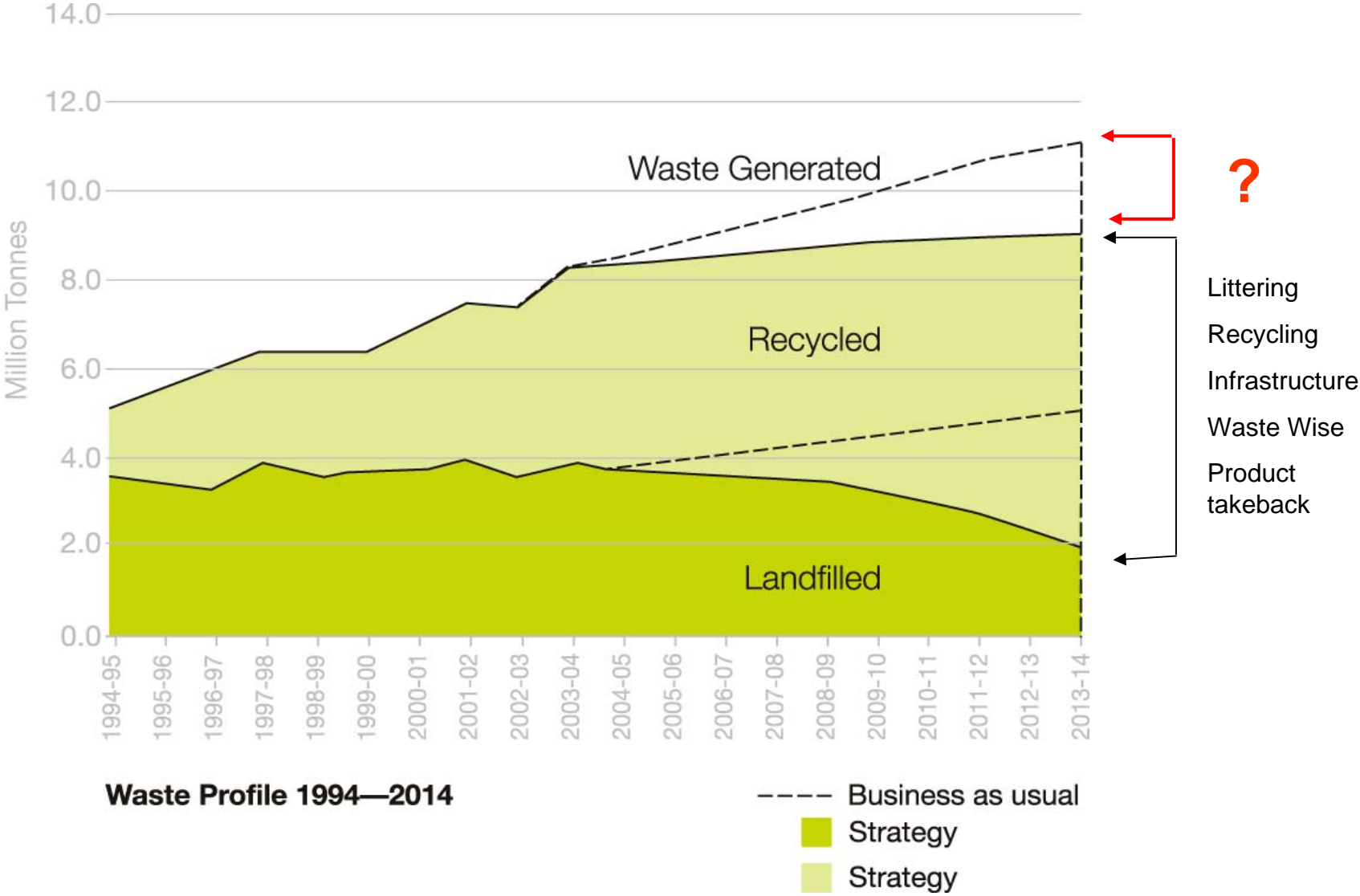
BaxVis Resource  
Recovery Plant  
C & I/C & D MRF

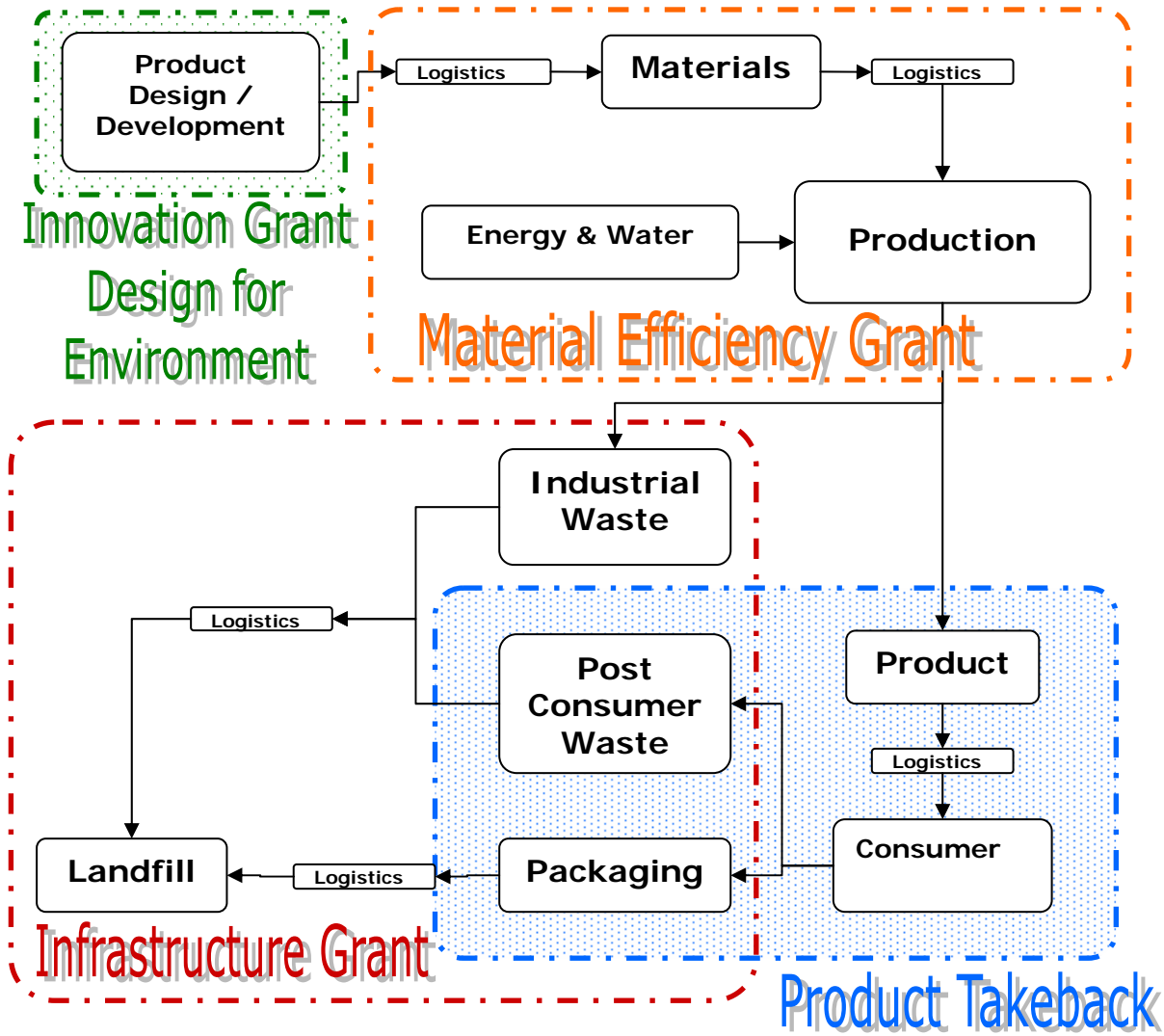
Optical Separation  
& Sorting of Glass,  
Laverton



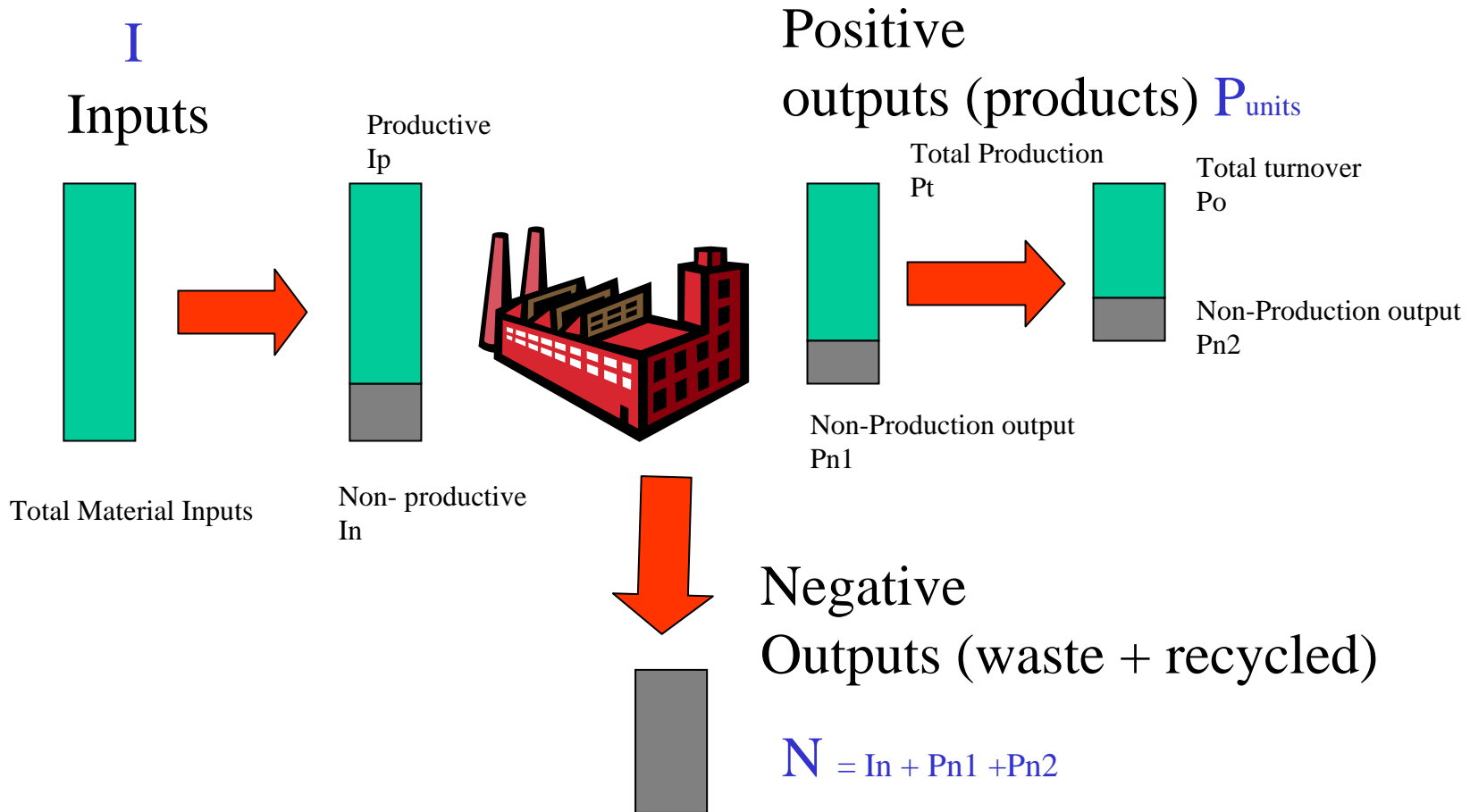
Rural Transfer Station, Horsham

# Solid waste generation in Victoria—past, present and future





# Materials efficiency – a different approach



# Materials efficiency

- > 17 companies participated
- > Value of raw materials lost through non-productive material flows was in excess of **\$23 million pa.**
- > Total waste generation by the companies was 12,500 tpa
- > Total waste management costs were only \$950,000 pa
- > Ratio of lost raw material value to waste management costs - **24:1**

# 70% of a products environmental impact is locked in at the design stage

Consumer

Eco-choice

Retailer

Manufacturer

Cleaner Production and Materials efficiency

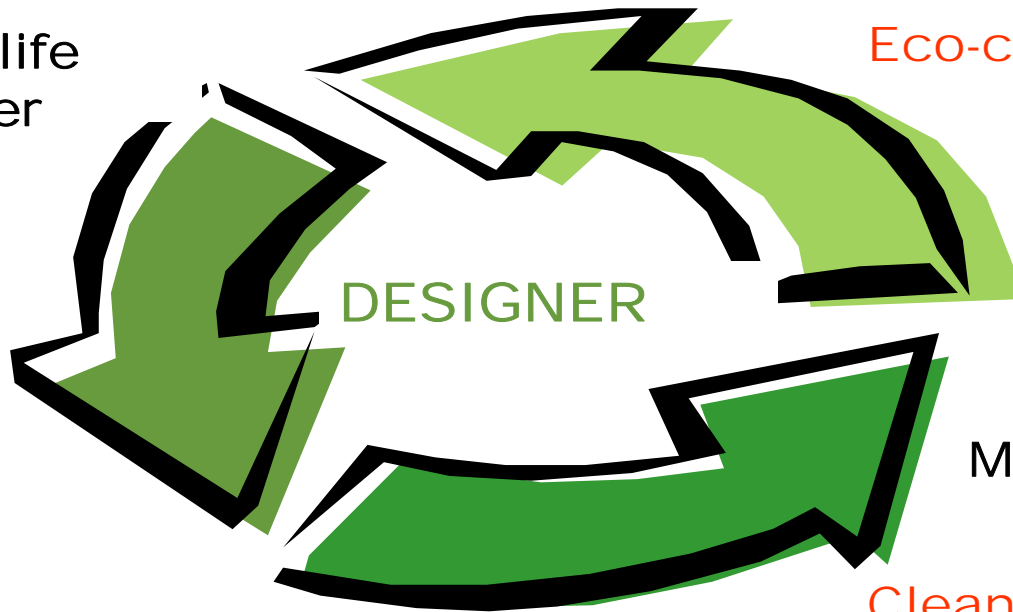
Supplier

DESIGNER

End of life Manager

Eco-design

Brand Owner



**Design for Environment  
and Product Innovation**  
Professional Practice Guidelines

October 2004

Practice Note



Design  
Institute of Australia



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**Quick  
start**  
->> design for environment

**Simple Actions... Sustainable Product Outcomes**

Design for Environment (DfE) or EcoDesign is about developing products in a way that reduces their environmental impact.

The aim is to design products that are functional, desirable, cost effective, and have no harmful side-effects on the environment.

In today's world, good design includes attention to environmental objectives.

**What is a DfE Quickstart?**

The DfE Quickstart series is made up of concise, easy to digest, information sheets that can assist designers and product developers with integrating environmental factors into new product design projects ... even when it's not called for or the client is unresponsive.

The DfE Quickstart series will be delivered to you with Curve magazine, with one dealing with a different topic.

This first issue sets the scene by providing a general overview and explores how environmental issues can be introduced into the design brief and development stage. Future issues will focus on more specific topics such as low impact materials and processes.

The DfE Quickstart series is not prescriptive - a four step process can't do that. They're about identifying the main questions and issues that you can consider within your usual design process. Links to resources can be found at [www.ecorecycle.vic.gov.au](http://www.ecorecycle.vic.gov.au).

Feedback and comments are welcome, and suggestions for future topics are strongly encouraged. Contact Product Ecology to discuss further at email: [info@productecology.com.au](mailto:info@productecology.com.au) or telephone (03) 9417 0124.

The aim is to connect new product development and environmental performance by providing professionals with practical and useful tips. The end point is about how to commercialise low waste, low impact products.

DfE is a sustainable design approach that blends positive environmental features into the design process without compromising product quality, functionality, reliability, cost and marketability.

DfE is a key strategy in any product development process aimed at avoiding or minimising waste during a product's manufacture, use and eventual disposal.

DfE recognises the reality of competing objectives and trade-offs ... it's part of any new product development process, whether environment is a factor or not.

It is estimated that 70% of a product's environmental impact is determined at the design stage. Product developers are in a key position to influence and reduce these impacts, often through straightforward methods.

Quickstart Series



Clear targets and policy direction



\$\$ to seed and invest - landfill levy



Infrastructure

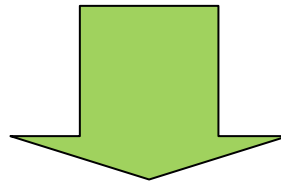


Local Govt and community support

+

Beyond recycling

Action Plans and programs



TRANSFORMATION



<http://www.sustainability.vic.gov.au>