



How recycling can affect your purchasing decisions

**Waste To Resource**

A high-resolution photograph of Earth from space, showing the Americas and surrounding oceans. The image captures the curvature of the planet, with the dark blue of the oceans and the lighter brown and green of the continents. Swirling white cloud patterns are visible over the oceans, particularly in the Atlantic and Pacific. The text "Let's give the earth the benefit of the doubt" is overlaid in the center in a white, outlined font.

Let's give the earth the benefit of the doubt

# Environment

*“What does this word mean”*







**Water**



**Air**

E  
n  
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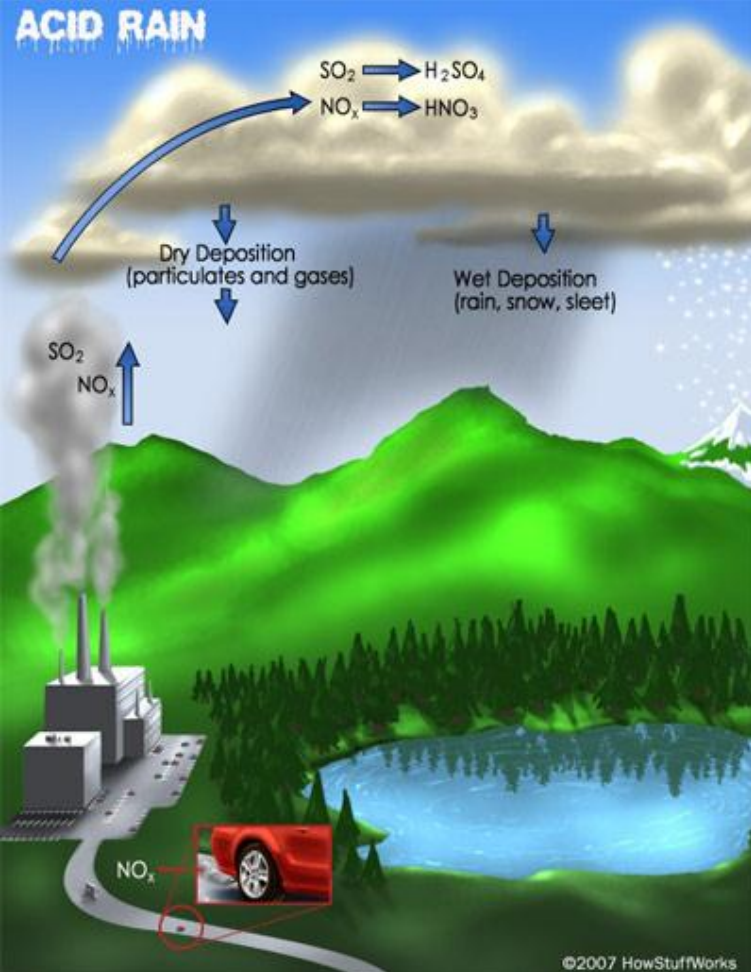


**Sun**



**Earth**





Around 1 in 6 Australian children are currently diagnosed with asthma, according to the Asthma Foundations of Australia.



# THE methane gas leak crisis in Cranbourne

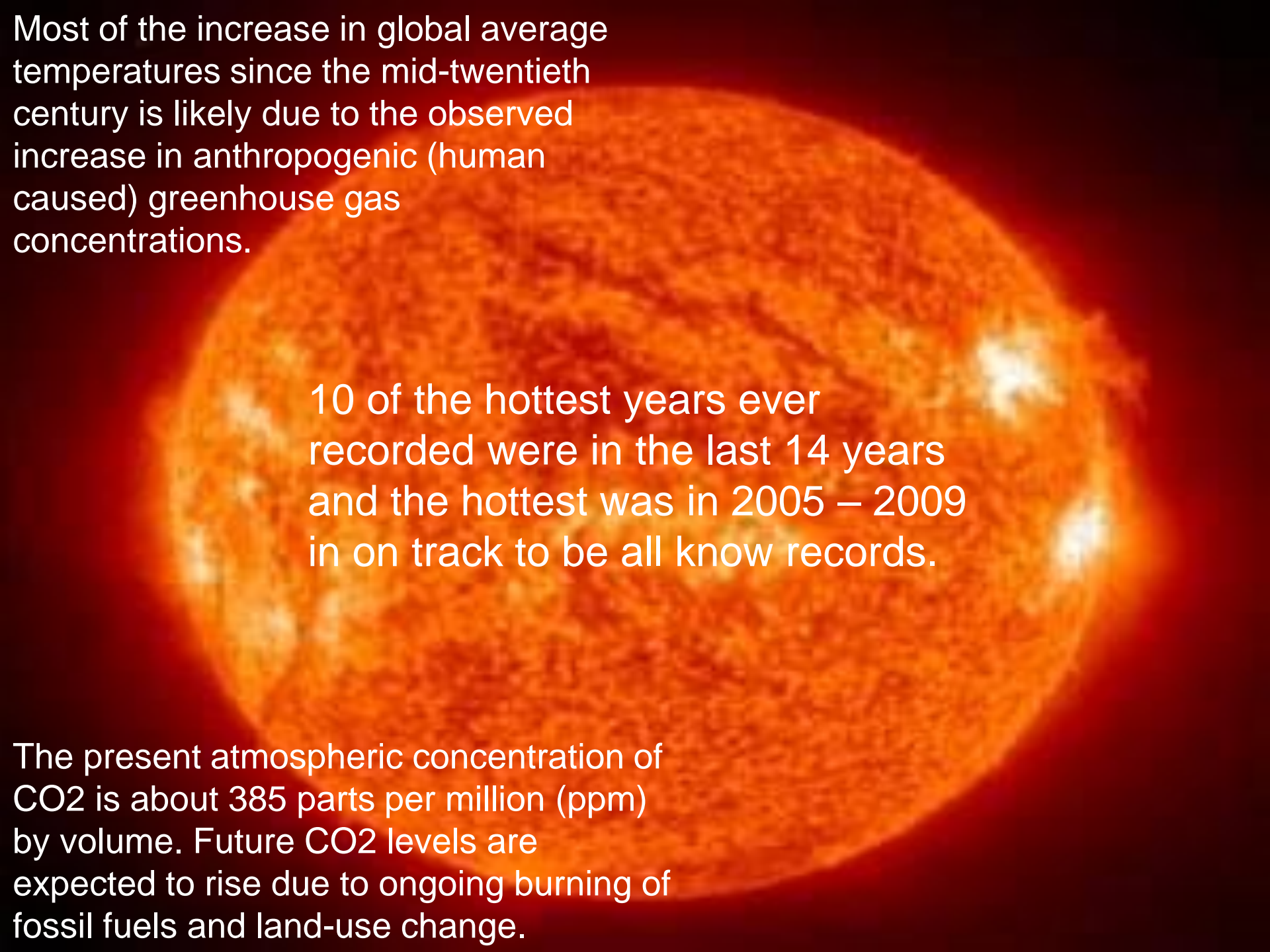
Mid-last week, residents of about 230 properties in the estate (within 250m of a disused landfill) were advised to relocate from their homes.

A further 600 residents may face a similar fate.

The warnings are in response to the detection of methane gas found in concentrations deemed to be dangerous.



Is it the fault of the Victorian Civil and Administrative Tribunal, the Environment Protection Authority, developer Peet & Company Casey Land Syndicate or Casey Council?



Most of the increase in global average temperatures since the mid-twentieth century is likely due to the observed increase in anthropogenic (human caused) greenhouse gas concentrations.

10 of the hottest years ever recorded were in the last 14 years and the hottest was in 2005 – 2009 in on track to be all know records.

The present atmospheric concentration of CO<sub>2</sub> is about 385 parts per million (ppm) by volume. Future CO<sub>2</sub> levels are expected to rise due to ongoing burning of fossil fuels and land-use change.





**Thirsty trees**  
**Growing population**

# Why do we care





# The Waste was created by “Us”



Now we have the responsibility to clean it up.



***Turn Back Time and have Waste = Resource***



# Where are we now?

- ✓ The world is using resources and fossil fuels at an alarming rate.
- ✓ Companies are now required to meet consumer, investor and community expectations and act in an environmentally sustainable manner.
- ✓ Past waste disposal methods no longer possible or less viable. eg landfill
- ✓ Waste now has value and is an internationally traded resource.

We cannot solve the problems that we have created with the same thinking that created them". *By Albert Einstein*

# Our Generation's Responsibility

- *To leave the planet in the same condition that we found it so that our children will have the same opportunities and resources that we were given by our parents.*

The North American Indian says:

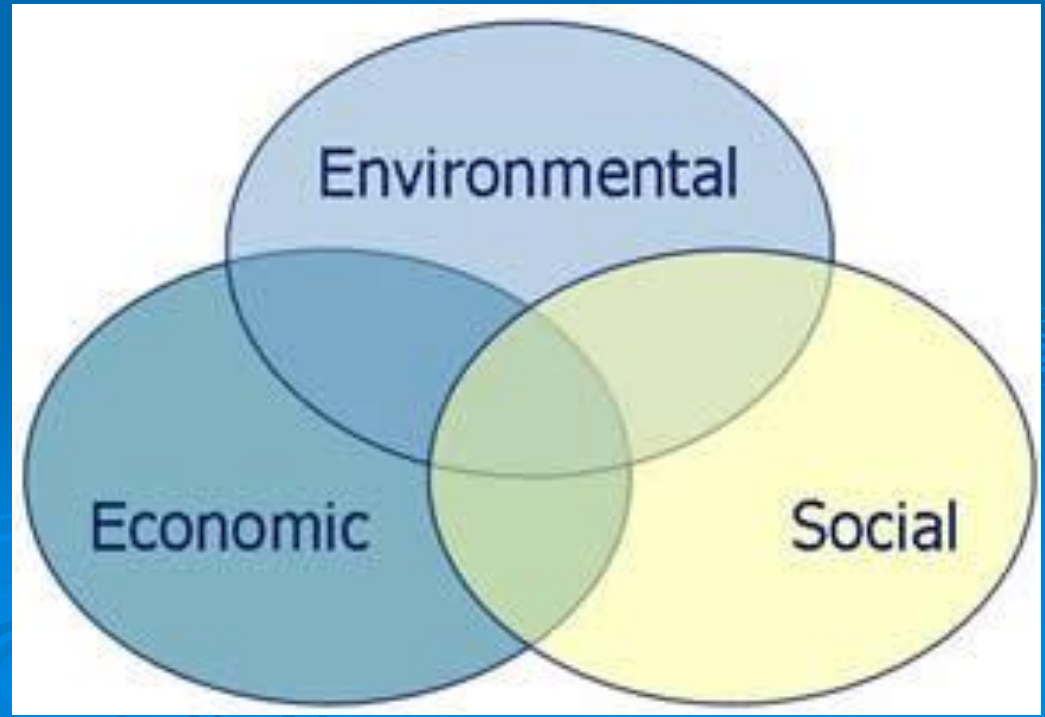
- *"Only when the last tree has been chopped down, the last fish has been taken, the last buffalo killed, will man realise that money cannot be eaten."*

The Modern View – "Environmental Sustainability" is:

- *"The principle of ensuring that our actions today do not limit the range of, social, environmental and economic options open to future generations."*

# Triple Bottom Line

**Profit - Social - Environment**





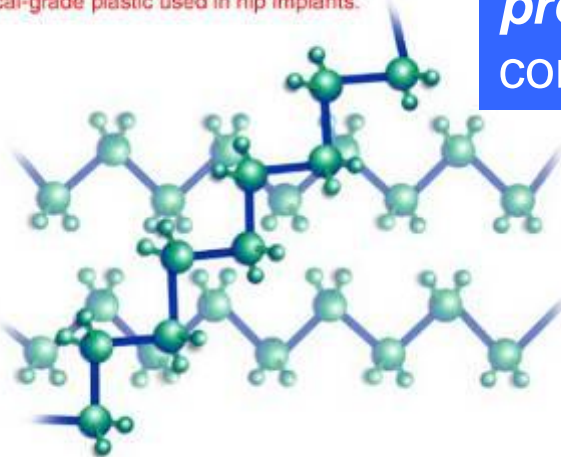
# Why is plastic important



# Is plastic a good product?

Plastics can bring many benefits to society. They keep food fresh, they are light in weight (using less fuel to move them around) and they make up most of the furnishings and fittings in our homes. More importantly, plastic has a lot of medical uses, such as blood bags, hip joints, artificial limbs etc. If you look around your home, school, or workplace and take away all the plastics and replace them with traditional materials, you will be amazed at the things you would have to learn to live without, **or the number of trees that would be felled to replace some of the plastics.**

Representation of the chemical structure of polyethylene, the medical-grade plastic used in hip implants.



As a matter of fact, the ***production*** of a ***paper bag*** consumes 1 gallon of water



PETE

Poly(ethylene terephthalate):



HDPE

High-density Polyethylene:



V

Poly(vinyl chloride):



LDPE

Low-density Polyethylene:



PP

Polypropylene:



PS

Polystyrene:



OTHER

Mixed plastic:



# What happens to your plastic waste?

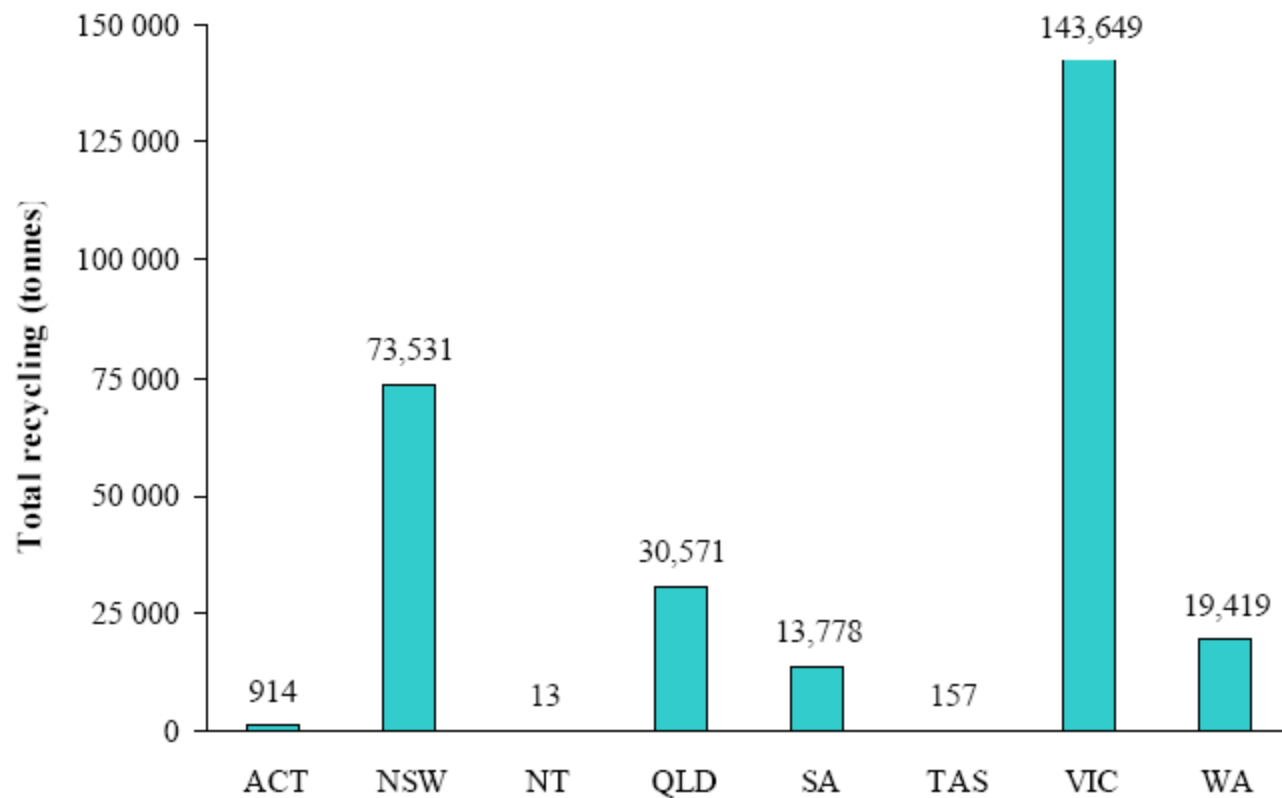


YOUR “8 R’s”	WHAT YOU CAN DO
<b>Rethink</b> – the use of all resources. Think before you buy!	<ul style="list-style-type: none"> <li>• Incorporate waste minimisation into the design of a product.</li> <li>• Replace cardboard transport containers with durable containers.</li> <li>• Walk, join a car pool or catch a bus instead of taking the car</li> </ul>
<b>Refuse</b> – Do not accept plastic bags/unnecessary packaging	<ul style="list-style-type: none"> <li>• Change your attitude to waste minimization.</li> <li>• Be strong/Demand change.</li> </ul>
<b>Reduce</b> – Minimise the use of all resources, especially non-renewable ones.	<ul style="list-style-type: none"> <li>• Refine or change processes/Improve ‘housekeeping’</li> <li>• Substitute with more efficient or cleaner technology.</li> <li>• Send and read information electronically instead of printing it on paper,</li> <li>• Use renewable energy sources such as solar power.</li> </ul>
<b>Re-Use</b> - Where possible find an alternative use for the resource	<ul style="list-style-type: none"> <li>• Use process wastes as feedstock.</li> <li>• Use newspaper for garden mulch and milk cartons for tree guards</li> </ul>
<b>Repair</b> - Fix the item rather than throwing it away.	<ul style="list-style-type: none"> <li>• Try to buy repairable equipment</li> </ul>
<b>Recycle</b> - Convert waste materials to new products.	<ul style="list-style-type: none"> <li>• Buy products made from recycling waste</li> <li>• Recycle materials, packaging and products components to the end of their useful lives.</li> </ul>
<b>Recovery</b> – Use technology to extract energy from Waste.	<ul style="list-style-type: none"> <li>• Generate/Collect methane from landfills.</li> <li>• Use “clean” incineration of household waste to generate power. Eg Pyrolysis.</li> </ul>
<b>Release</b> – give back the material to the environment.	<ul style="list-style-type: none"> <li>• Use landfill only as a last resort</li> </ul>



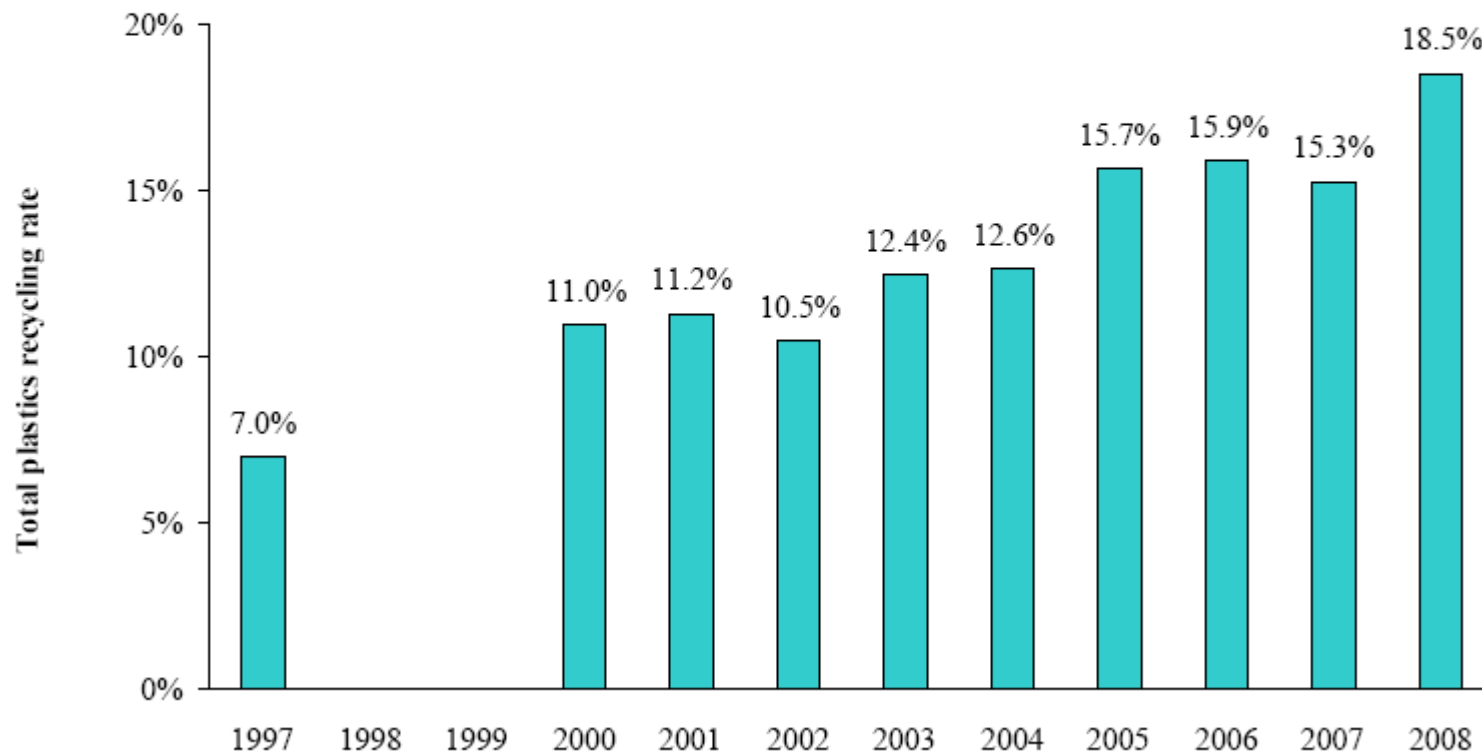
## Source of recycled plastics

The 282,032 tonnes of plastics recycled in 2008 was sourced from each Australian state as detailed in Figure E-4.



## Total plastics recycling rate

From 1997 to 2008, the total recycling rate of plastics in Australia has increased from 7.0% to 18.5%, as shown in Figure E-3. The recycling rate has increased significantly from 2007. This increase was due to a reduction in plastics consumption and an increase in plastics exported for reprocessing, local reprocessing was fairly flat.



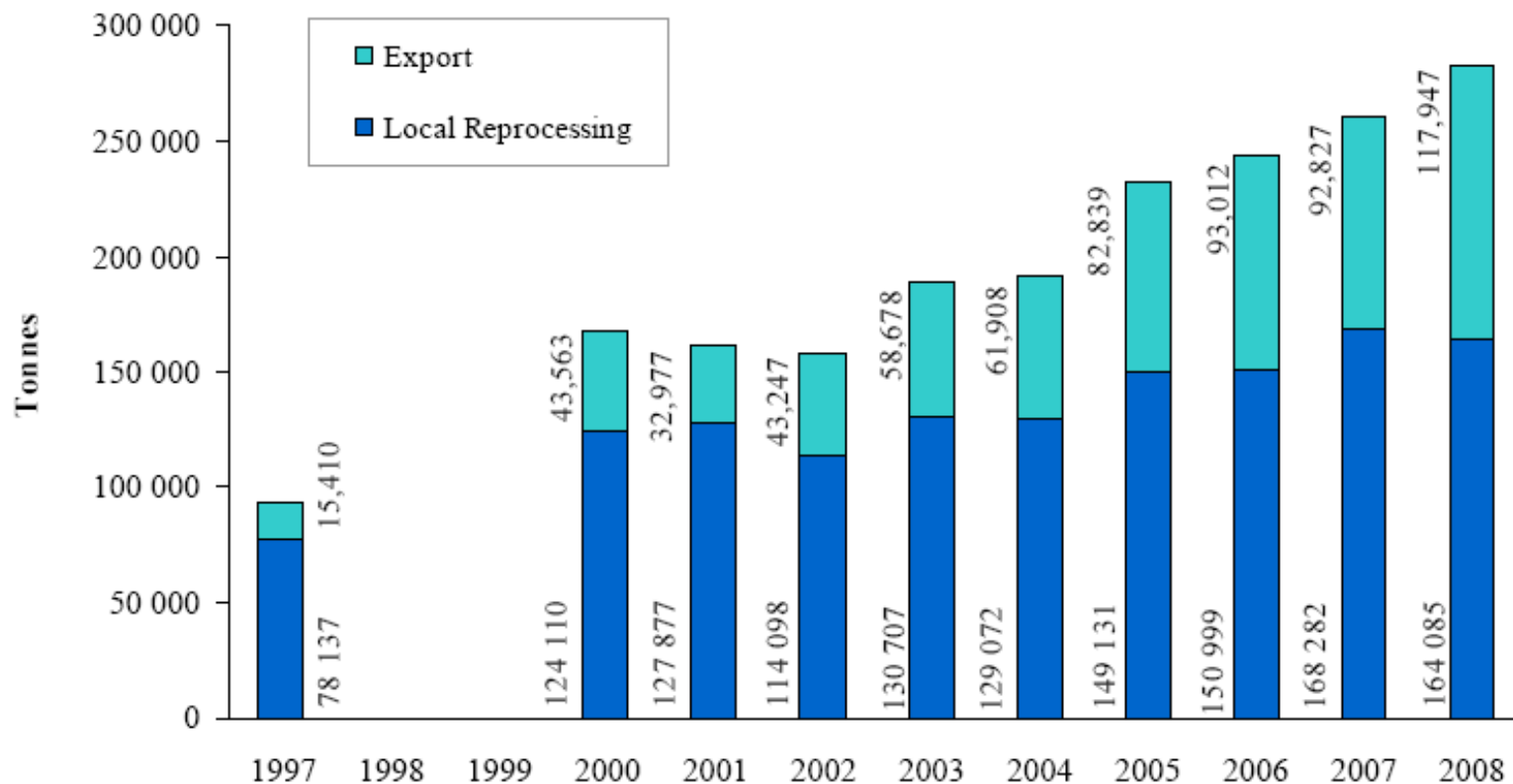




# Bad news

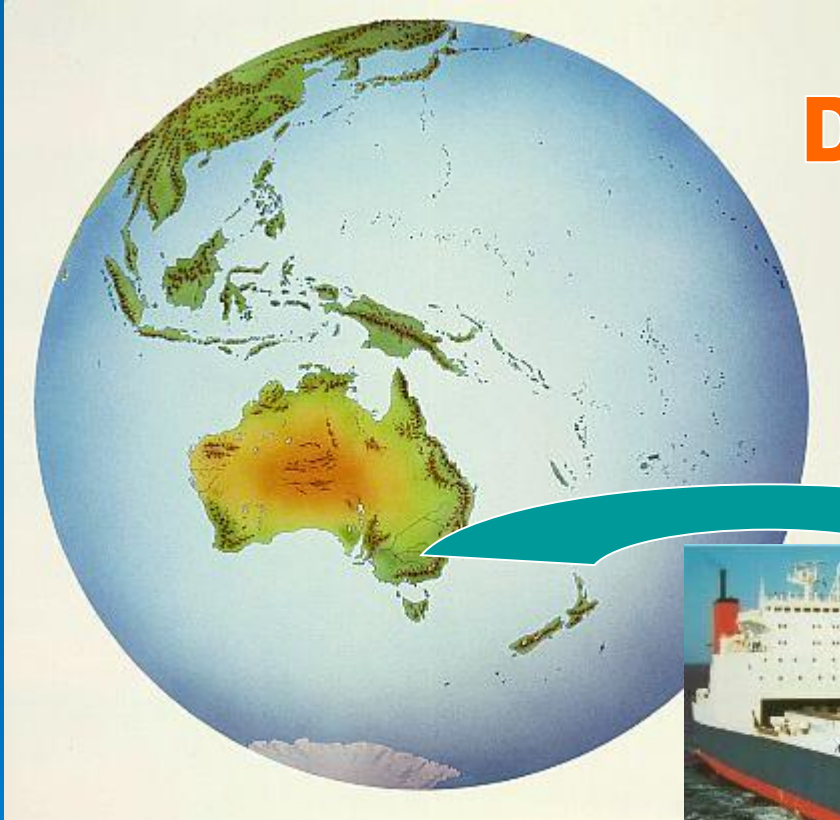
## Total plastics recycling

A total of 282,032 tonnes of plastics were recycled in 2008, with 164,085 tonnes reprocessed locally and 117,947 tonnes exported for reprocessing, as shown in Figure E-1. This was an increase in export of used plastics of over 25,000 tonnes compared with the previous year.



# Exporting Waste

Is not a viable environmental solution



**Driven by Profit \$ \$ \$**



**Best to recycle close to the source**



**Recycled in Australia**

**New Products made from recycling in Australia**



**Sustainable Environment Solution**

**Waste = Resource**



# Interesting Facts - Recycled vs Virgin Materials

- ✓ Paper – uses up to 50% less energy and 90% less water
- ✓ Aluminium Cans - 95% energy saving
- ✓ Glass – 74% energy saving.
- ✓ Steel Cans - 87% energy saving
- ✓ Plastic – 75% energy saving

# Main issues with recycling

Contamination  
Cost of collection  
Density weight



# Sustainability

**Do we recycle for the sake of recycling alone?**





# Advantages: Plastic Vs Wood

- ✓ Does not absorb water
- ✓ Never needs painting
- ✓ Graffiti wipes clean off with conventional cleaning fluids
- ✓ Lasts many times longer than wood
- ✓ Safer to work with – No Dust.
- ✓ Not susceptible to white ants, insects, salt, water, barnacles
- ✓ Durable with no cracking or splitting and minimal UV weathering
- ✓ Can be cut, drilled, nailed, screwed, bolted, stapled - and nails hold well
- ✓ Convenient to handle - no protective gloves, lightweight and easy to transport and handle



# Seats





Table size is 1800mm (L) x 850mm (W) available in slab mount or in-ground

# Picnic Settings







# Bollard Fencing









# 4 WD Access Ramps



Boardwalk material being attached at Bribie Island



The finished crossover. Now you see it.....



Now you don't



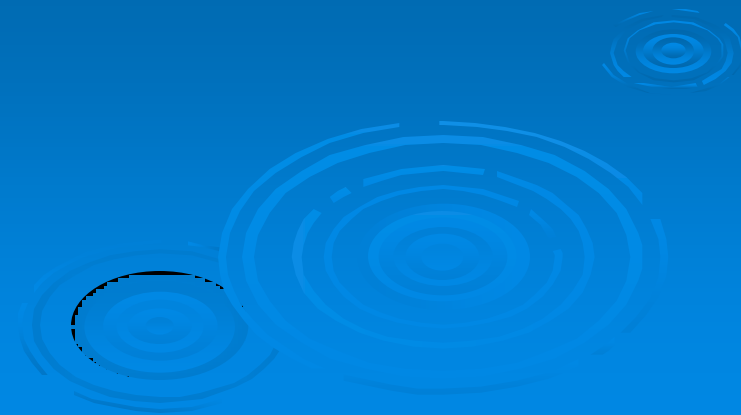




# **Innovative Corporations**

## **"With Sustainable Environmental Solutions"**





# Victoria Park Recycled

## ➤ Collingwood Memorabilia Seats



**Only 50 made from the  
seats in the “Rush Stand”!**



# Dulux®

Manufactured from 100% recycled material  
including Dulux plastic paint pails.















# Dalrymple Bay Coal Terminal - DBCT

As part of the world's largest coal export port, Dalrymple Bay Coal Terminal exports coking and metallurgical coal from Central Queensland's Bowen Basin mines to ports around the world. The terminal operates around the clock and with the completion of the current expansion project, the end of 2008 capacity is set to be 85 Mtpa.



Replas is proud to recycle used hard hats from DBCT P/L.



# coles



## Recycle your old shopping bags...

June  
3rd-17th



## and we'll turn them into furniture for Aussie schools.



Drop your bags into the giant green bag in this store and we'll do the rest.

**coles**  
it all counts

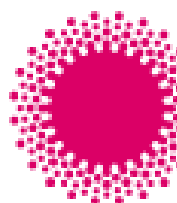


**Kimberly-Clark**

*Trusted Clinical Solutions\**



**Knox**  
PRIVATE HOSPITAL



the women's  
the royal women's hospital  
victoria australia



**Peninsula Health**



*St Vincents & Mercy Private*



**Cabrini Health**

*Southern Health*

**Multigate®**



# Sterilised wrap Is Collected Two Ways

## Bailed

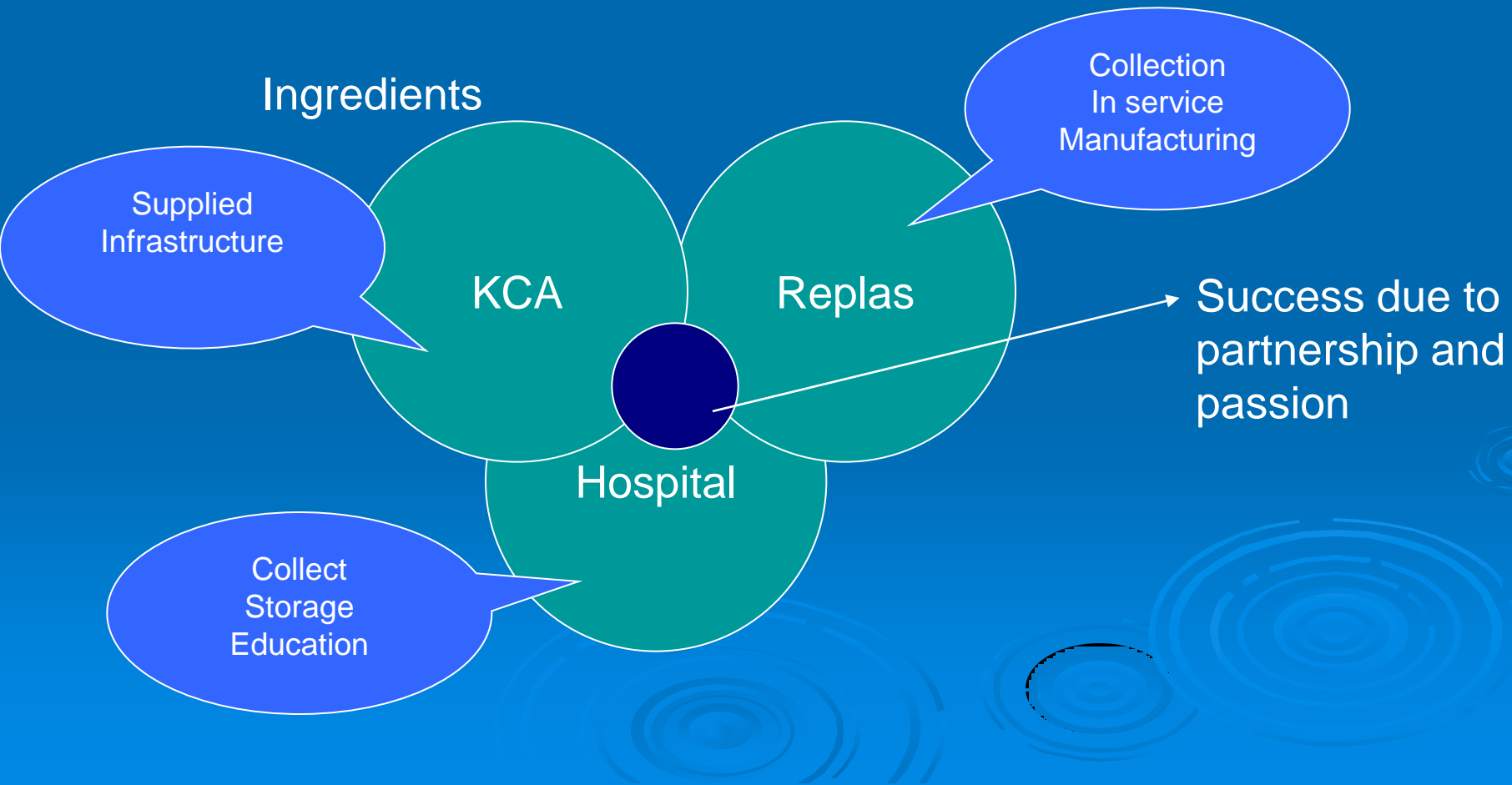


## Bagged





# Kimberly Clark Australia





# Peninsula Health









Cabrini Malvern Waste KPI,s  
 1000's Patient Bed Days  
 <60% To Landfill  
 >40% Recycled  
 1998 - 2010





# Gippsland South Health Services







Stackable bowls  
and baled bowls

*Multigate.*





# Staff, management and the public love recycling story's



THEATRE nurse unit manager, Samantha Maxwell and MP for Cranbourne, Jude Perera, with Corporate Recycling's general manager (back right) Mark Jacobsen and staff member Mark Yates (back left) with the new Kingguard bench.

## Setting a benchmark in recycling

PENINSULA Health and Corporate Recycling are tackling hospital waste head on.

Last month, the first bench made entirely from Kingguard sterile wrap was handed over to Frankston Hospital's theatre nurse unit manager, Samantha Maxwell.

"The sterile wrap is used in

operating theatres and has been collected by Peninsula Health staff," said Samantha.

"We then passed it on to the local recycling company Corporate Recycling, and they made the first ever bench made entirely from moulded plastic products. It's a great way to recycle a product that would have normally ended up as landfill."

Together with Corporate Recycling, Peninsula Health is trying to eliminate all Kingguard waste at the hospital.

Corporate Recycling operates in Australia, Fiji and New Zealand collecting office consumable waste and re-introducing it back into society as new products.



# New market wrapped up

ammi Munro

CARRUM Downs company has become the first in the world to turn sterile wraps from hospital operating theatres into outdoor furniture.

Corporate Recycling last Thursday released the first seat made from Kingguard sterile wrap. The sterile wrap used in operating theatres, was collected from Frankston Hospital by Corporate Recycling and manufactured into outdoor furniture. Unlike other



Mark Jacobsen and Samantha Maxwell with the seat.

N16FS403

furniture made from recycled materials, the seats are made entirely

from moulded plastic products. Corporate Recycling general manager Mark Jacobsen said the process closed the loop on a product that would have normally ended up as landfill. Up to 70 per cent of plastic waste is sold off shore and used in Asian countries for such things as industrial pipes.

Mr Jacobsen said the project had been a group effort between his company, the hospital, Kimberly-Clark and SteriCorp.

"It has been a group of people prepared to look outside the

square that has made this project possible," he said.

"The hospital has worked hard to develop a comprehensive waste management program, a looking at alternatives for recycling or reusing their various waste materials."

A recent waste audit showed the hospital's operator, Peninsula Health, had 100 per cent compliance with the recycling of the sterile wrap. Mr Jacobsen will expand the project to other hospitals in Victoria.



What products do you have at  
your Hospital that is made from  
recycled products - better still  
made from your own  
waste?



**info@replas.com.au**



**Recycling works when a partnership approach is taken.**



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