



# GLASS RECYCLING O-I Australia

Warwick Hassan  
Manager Product Stewardship Program  
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# GLASS 2005

Australian consumption	950,000 tonnes
Post consumer recovery	350,000 tonnes
Recycle rate	37%

## PLAYERS

- **O-I Australia**  
(Brisbane, Sydney, Melbourne, Adelaide.)
- **AMCOR Packaging**  
Adelaide
- **Imports**

# GLASS

- Unprocessed Recycling Value to councils or collectors = **\$28, 000,000**
- O-I currently paying a premium for furnace ready cullet.

A decorative blue graphic element consisting of a thin curved line at the top left and a larger, solid blue curved shape on the right side of the slide.

# GLASS RECYCLING PROCESS

- O-I Australia buys cullet plus freight subsidy and wears all losses.
- Visy toll processor and in Victoria Visy purchases mixed colour cullet >20mm.
- O-I values cullet at batch cost plus energy saving.



# GLASS

Issues and Challenges

How to increase recycling rate

- Breakage
- Colours
- Lightweighting
- New Markets for glass fines.

# Issues and challenges

1. Yield is  $>50\%$  of collected glass from Kerbside.
  - Compaction trucks run @ 250-280 kg/m (180kg/m reduces breakage by 25%)
  - Large MRF trommels increase breakage.

Measure the MRF YIELD.

Gold Coast Council specified glass recovery yield.

# GLASS

## O-I Freight Challenges

### 2. Green glass has highest recovery

- Adelaide produces only green.
- No green production in Brisbane.
- Limited production in Melbourne & Sydney.
- No glass re-use in WA, North QLD., or Darwin.

Excess green must be freighted back to Adelaide.

# GLASS





# GLASS

## Issues and Challenges

### 3. Lightweighting

- Reduced energy consumption
- Compete with imports.

**RECOVER THE 10mm + FRACTION**  
Increases AMBER and CLEAR recovery

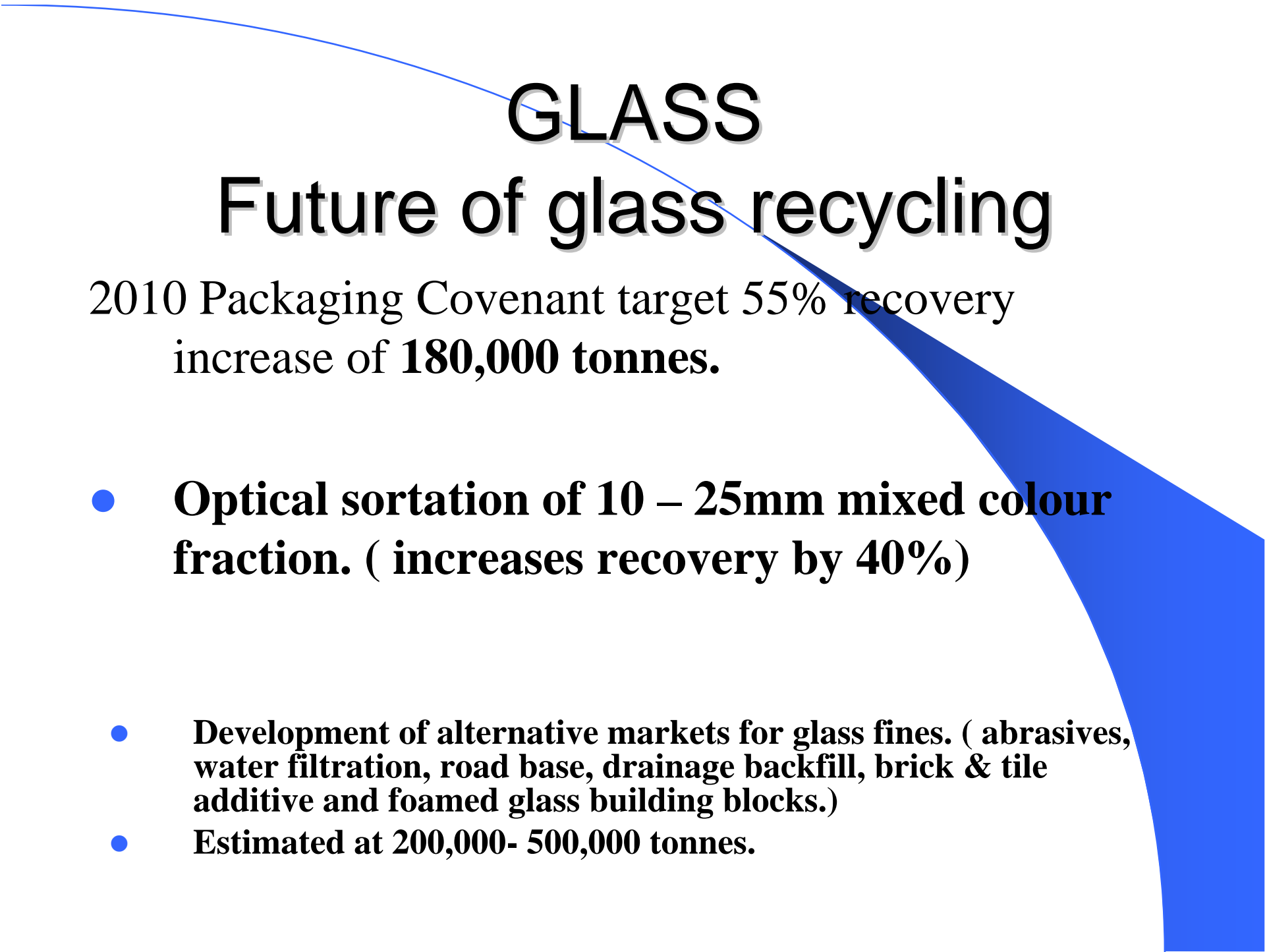
# GLASS contamination

- Ceramics, Stones, Porcelain  
china cups & plates, ovenware, pyrex  
and corningware.  
15grams/tonne
- Pyro-ceramics. (glass cookware.)  
Do not Melt in a glass furnace.





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# GLASS

## Future of glass recycling

2010 Packaging Covenant target 55% recovery  
increase of **180,000 tonnes**.

- **Optical sortation of 10 – 25mm mixed colour fraction. ( increases recovery by 40%)**
- **Development of alternative markets for glass fines. ( abrasives, water filtration, road base, drainage backfill, brick & tile additive and foamed glass building blocks.)**
- **Estimated at 200,000- 500,000 tonnes.**