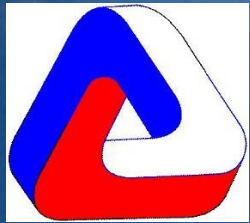


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# Sustainable Polymers and the Built Environment



Professor Edward Kosior

Managing Director, Nextek Limited

**Sustainable Materials in the  
Built Environment 2007**

February 20<sup>th</sup> 2007 Melbourne Australia

# Sustainaball Polymers!



## Sustainaball® FACT SHEET

More than 10 million tennis balls are imported into Australia each year - this equates to 670km of tennis balls...

**Sustainaball®** - a community project exploring the reuse and recycling of tennis balls and promoting a sustainable future.

With State government support through the Sustainability Fund, Sustainaball® initiatives have developed from concept to implementation.

### **Sustainaball® aims to:**

[1] Prolong the use of tennis balls within the local community.

Selected venues in metropolitan Melbourne and regional Victoria have been installed with ball collection bins.

Community members are encouraged to utilise these

### **Closing the loop for Sustainaball®**

#### **Vision**

*To reduce the number of tennis balls ending up in our parks, waterways and maximise resource use by closing the loop.*

#### **How?**

Reused tennis balls collected in the ball collection bins at local community groups will be incorporated into recycled rubber products by Repeat Rubber Pty Ltd.

This includes products such as:

- Gymnasium flooring
- Acoustic underlay
- Commercial grade sports and play surface coatings
- Moulded products

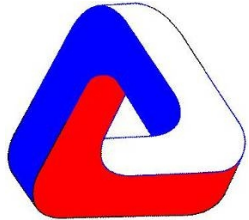
# Sustainable Polymers and the Built Environment

## Summary

- Use of polymers in the building industry
- Recycling of Plastics
- Opportunities and cases studies of polymer recycling, rPET, rHDPE, PVC
- Sustainable biopolymers and bioplastics
- Research and development directions in sustainable plastics and Biopolymers
- Investment in new plant and capacity
- Future Directions



Repeat Plastics products



# Nextek Limited – Creating Sustainable Solutions in Polymers and Recycling

## Background

Professor/Director RMIT Polymer Tech. Centre

R&D Manager Visy Industries.

Establishment of mixed bottle plant to Visy USFDA rPET process

Revision of Sydney Coca Cola Plant – Phoenix process

Market development bottle, fibre, sheet and moulding applications

## RECENT UK Projects

Development of PET recycling plant for Closed Loop London

Development of a new FDA Food Grade PET Recycling Process

Demonstration of Viability of rPET in Retail Packaging: CLL, M&S and Boots

Beverage Packaging Waste Reduction: Light weighting PET bottles, Esterform

Using Post-Consumer Tyres in a Range of New Applications: Pipe Sealing System

Development of Light Weight Compostable Packaging- Sainsburys

Demonstration trial of Recycled HDPE into Milk Bottles- WRAP