

# 2009 Waste Minimisation Summit

March 11, 2009 – Cape Town



- Economies stimulate GROWTH (JOB CREATION) on the back of increased CONSUMPTION.
- Increased CONSUMPTION generates increased WASTE.
- PROBLEM OR OPPORTUNITY?
- We are chasing a moving target.



# WHY RECYCLE?



- Plastic waste creates a visible, in your face, **litter** problem.
- P.E.T. bottles are voluminous - Landfill Space is SCARCE.
- **To not recycle places added pressure on the world's diminishing oil reserves. – REUSE!**



- Corporate Social Responsibility
- Benefit to Environment – a bottle takes 10,000 years to biodegrade
- Job Creation
- Poverty Alleviation
- **GOVERNMENT PRESSURE –  
WASTE BILL**





# **COLLECT AND DO WHAT?**



- While the ultimate challenge remains that of collection, one cannot lose sight of what has transpired within the last 6 months.
- Polyester Fibre Market.



## PSF Prices in China (1.4D\*38mm)



**Last 5 Years**

(05 November 2003 - 04 November 2008)



# Recycling waste piles up as prices collapse

Former military bases could be used for storage

Lewis Smith - Environment Reporter

Thousands of tonnes of rubbish collected from household recycling bins are piling up to be stored in warehouses and former military bases to save them from being dumped after a collapse in prices.

Collection companies and councils are running out of space to store paper, plastic bottles and steel cans because prices are so low that the best option is to put them in landfills. Collections of mixed plastics, mixed paper and steel reached record levels in the sum-

mer but the market for most of the material and they are now worthless. The plunge in prices was caused by a sudden fall in demand for recycled materials, especially from China, as manufacturers reduced their output to ease the global economic downturn.

Local authorities and collection companies also worry about the mountains of paper, plastic bottles and cans that they are having to store that they have called for storage restrictions to be eased.

Officials from the Environment Agency and the Department for

Environment, Food and Rural Affairs are considering extending the regulations on the storage of recycled waste and are expected to issue new guidelines next week. They have been urged to relax the rules, increase the quantity of waste that can be stored and to allow it to be kept in secure warehouses at abandoned military bases and former airfields.

Steve Griffiths, of [letsrecycle.com](http://letsrecycle.com), said: "Warehouses around Britain could start to be filled with waste paper, metal and plastic bottles. There's now a real risk these materials to

go to the ground. It's rapidly becoming a very serious problem."

He said that mountains of plastic bottles, paper and steel cans were likely to build up by the end of the year and that the problem could be exacerbated by the Christmas festivities, when a surge of packaging materials and a raft of containers would fill recycling bins.

The year in which prices collapsed has taken the recycling industry and local authorities by surprise and has been made worse because recycling rates are at record levels.

John Keenly, the Environment Minister, will announce this morning that more than 90 per cent of local authorities are meeting or exceeding their household recycling targets. East London District Council has the highest recycling rate, with 59.4 per cent of all household rubbish, and 18 other authorities exceeded 50 per cent.

Steve Foster, of Reclaim, which advises on plastic recycling, said that mixed plastics had slumped from about £200 a tonne to the price of worthless paper in just five weeks. He was confident, however, that the low value would be temporary as at least three mixed plastic facilities will open next week, reducing the national dependence on Chinese demand.

Mr Foster urged officials to be

flexible on the regulations and said that, with sensible management, the waste paper and steel could be stored safely until prices rise. "We think there's light at the end of the tunnel but it's going to take some work," he said.

Staff at Waste Resources Action Programme (Wrap) and the Local Government Association have begun investigating the extent of the problem.

A spokesman for the Local Government Association said: "The steel crunch has caused prices to fall to the national and market and clearly this potentially has implications for councils."

Steve Green, of Wrap, said: "We think the current extremely low prices are likely to be temporary. Recovery may well be aided if our ability to recycle has even undergone similar price volatility in the past."



Recycling rates have risen while demand for materials has fallen



- The Times (UK) November 6<sup>th</sup>, 2008
- “Warehouses around Britain could start to be filled with waste paper, metal & plastic bottles. There’s nowhere for these materials to go at the moment.”
- The speed at which prices collapsed has taken the recycling industry and LOCAL AUTHORITIES by surprise, and has been made worse because recycling rates are AT RECORD LEVELS.



- “Officials from the Environment Agency and the Department for Environment, Food and Rural Affairs are considering changing the regulations on the storage of recycled waste and are expected to issue new guidelines next week.
- “They have been urged to RELAX the rules limiting the quantity of waste that can be stored and to allow it to be kept in secure warehouses or ABANDONED MILITARY BASES and FORMER AIRFIELDS”.





**P.E.T. RECYCLING, A  
PROBLEM NOT  
UNIQUE TO AFRICA**



# WORLDWIDE EXAMPLES OF FUNDING FOR THE RECOVERY OF POST – CONSUMER P.E.T.

- Germany - US\$ 9,150 per metric ton.
- Slovakia - US\$ 5,500 per metric ton.
- Hawaii - US\$ 1,800 per metric ton.
- Australia - US\$ 1,140 per metric ton.
- Sweden - US\$ 900 per metric ton.
- Mexico - US\$ 20 Million invested in collection infrastructure as well as price support provided to collectors.





**INDUSTRY / EXTRUPET  
PARTNERSHIP -  
RISING TO THE  
CHALLENGE.**



- Set up in 2001 to address the post consumer P.E.T. problem in South Africa with the help of the P.E.T. INDUSTRY.
- Looking for a cheap source of raw material to remain competitive in the World Market.



- Progressive increase in plant and equipment capital expenditure as warranted by collection levels.
- Cost of recycling equipment is expensive and the process is capital extensive.
- Currently we have at our site in Johannesburg the capacity to recycle 2,000MT per month.
- However, beginnings were humble – 30MT per month.



- Collected 5,000 tons by May 2003.
- Collected a further 7,000 tons by July 2004.
- 2005 – PETCO formed to align all players in the industry to support the post-consumer waste recovery and recycling initiative. – **EXTENDED PRODUCER RESPONSIBILITY!**



# Notable milestones achieved with PETCO

- Oct 2005 – Jan 2006 1,800MT PCR
- Feb 2006 – Dec 2006 8,000MT PCR
- Jan 2007 – Dec 2007 12,000MT PCR
- Jan 2008 – Dec 2008 14,000MT PCR



# MILESTONES REACHED

- Nov 2008 saw an all time record monthly collection figure of 1,677MT. This equates to approx 50 million bottles in one month alone.
- To date over 57,000MT has been recovered from the waste stream by our Group alone in SA over a 8 year period. This equates to approx 1.7 BILLION bottles.



- Cape Town Branch established in August 2008 as undertaken by us. This proved very timely from PETCO's and our perspective as most of the local recyclers had already abandoned the cause prior to our arrival.
- We will by July 2009 be producing an RPET Chip that will be certified for food contact packaging – “Cradle to Grave” Solution.



- 6 January, 2009 - Motorola has unveiled a mobile phone made from recycled water bottles. According to the manufacturer, the Moto W233 is the world's first carbon neutral phone. The device has earned Carbonfund.org's **CarbonFree Product** Certification after an extensive product life-cycle assessment
- 13 February 2009 - Danone Waters says it will make Evian and Volvic bottled water brands '**plastics-neutral**' in the UK by using recycled plastic.





# Plastic Planks & Poles

Green and Gorgeous is what we do. Yes, we are thinking about lazy weekends lounging about outdoors on fabulous decking and furniture manufactured from 100% recycled plastic. The practical design and sustainable materials mean livable, stylish eco exteriors which ensure an investment that almost never needs your attention.

## Products

- Pallets
- Garden furniture
- Benches
- Boardwalks
- Decking
- Bollard
- Jetties
- Flooring
- Blns
- Balustrades
- Jungle gyms
- Seating
- Playgrounds
- Fences
- Poles

## Product Benefits

- Maintenance Free
- Never Rots
- Never Warps
- Never Splinters
- Environmentally Sound
- Waterproof
- Impervious to Insects
- No Painting
- No Water Sealing
- Non - Leaching
- Graffiti Proof
- Lifetime Limited Warranty

## Product Features

- 100% Recycled Plastic
- Denser than Wood
- Works like wood
- No Special Tools Required
- Custom Lengths



Toddler Chair



Pallets

We custom build pallets according to your needs and specifications



Gym Bench



Bench



2-seater bench



6-seater table



Through our symbiotic partnership with Extrupet (Pty) Ltd, who ensure a constant supply of recycled raw materials, we at PP are able to manufacture all your requirements for plastic applications, produced from recycled plastics.



20 Albert street, Unit 1, Heidelberg | [freebop@mweb.co.za](mailto:freebop@mweb.co.za) | Call 082 378 4547

# CONCLUSION

- WHY RECYCLE?
- COLLECT AND DO WHAT?
- END USE MARKETS SUSTAIN RECYCLING.
- CUSTOMER POWER DRIVES THE DEBATE ON REUSE!
- EXTENDED PRODUCER RESPONSIBILITY!
- IT CAN BE DONE – FACTS & FIGURES SPEAK FOR THEMSELVES!



**Thank you for your kind attention.**

For more information contact us at the following  
email address: [chandru@extrupet.com](mailto:chandru@extrupet.com)

[Or visit www.extrupet.com](http://www.extrupet.com)

