

# PRESS RELEASE

## 25<sup>th</sup> October 2007

**"Doing the un-doable" Plastics milk bottle packaging is now being recycled saving landfill, energy, oil and reducing CO2 emissions.**



### **Plastics Milk Bottle Recycling Project managed by Nextek Limited wins the prestigious EDIE\* Award for Environmental Excellence for projects in Waste and Recycling at London's Natural History Museum.**

Nextek Limited has received the prestigious EDIE\* Award for Environmental Excellence for consultancy projects in Waste and Recycling at London's Natural History Museum. The award was for "doing the un-doable".

The world first technology was led by Nextek's Managing Director Edward Kosior in collaboration with Nampak Plastics, Dairy Crest, Marks and Spencer and WRAP\*\*.

Edward Kosior, the founder and Managing Director of Nextek Ltd said the project for which they received the award, addressed the considerable problem of the 3 billion HDPE milk bottles that each year could otherwise go to landfill.

This represents a waste stream of over 130,000 tons of material valued at over £100 million. The recycled HDPE milk bottles are already on the supermarket shelves at Marks and Spencer even before the local plants are constructed.

The project showed that the recycling of Milk bottles to Milk bottles was technically and economically feasible.

The recycled packaging has received official letters of compliance from the US Food and Drug Administration and complies with the European Union Food standards.

Prof. Edward Kosior said "I am honoured to receive this award on behalf of our company and collaborating clients (Nampak Plastics, Dairy Crest, Marks and Spencer and WRAP) and endorse their vision and tenacity in tackling a technically challenging project that has set a new standard for sustainable packaging for milk.

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\*EDIE = Environmental Data Interactive Exchange

WRAP = Waste and Resource Action Program.

End of Press Release

## Background

This project proved that post-consumer milk bottles could be safely recycled back into food-contact quality milk bottle applications on a commercial scale in the face of the prevailing perception that this was not technically and economically possible.

The project addressed the fate of over 3 billion HDPE bottles representing a potential waste stream of 130,000 tonnes valued at over £100 million and took less than 12 months to complete.

This project has the potential to save over 40,000 tonnes of petroleum based plastics if the recycling rate of 30% is applied to the whole dairy industry. The plastic bottles will be collected from households by the various collection systems used for recyclable materials. The visible inclusion of such a ubiquitous product in the recycling stream will emphasise the role of recycling in the recovery of materials and encourage the recovery of additional recyclables and develop long standing social habits in the efficient use and recovery many materials.

The recycling of one tonne of plastics has been estimated by WRAP to save at least 1 tonne of CO<sub>2</sub>. The project has the potential to save 60,000 tonnes of CO<sub>2</sub> per annum at a 30% recycling rate based on the recycling of 40,000 tonnes. There are concrete plans for at least two plants to be commissioned within UK before the end of 2008 with a combined capacity of 20,000 tonnes of HDPE delivering CO<sub>2</sub> savings of 30,000 tonnes

The process was developed with UK resources through the application of the latest developments in polymer decontamination from leading companies in this field from the EU and converted to milk bottles at 30% recycled content by Nampak Plastics, filled with milk by Dairy Crest and put on supermarket shelves by Marks and Spencer after extensive testing by UK and EU testing laboratories. The process has gained the endorsement of Keller and Heckmann (a leading legal advisory firm on food contact matters) and the US Food and Drug Administration as producing materials suitable for milk packaging.

The project addressed the fate of over 3 billion HDPE bottles representing a potential waste stream of 130,000 tonnes valued at over £100 million and took less than 12 months to complete. The project also addressed the economic feasibility of the process and the potential business prospects for plants based in the UK. The work was conducted by a collaborative team from Nextek Limited, Nampak Plastics, Dairy Crest, Marks and Spencer and WRAP. The results of this work reinforced the opinion of WRAP to encourage the establishment of two full scale recycling plants in UK to provide this innovative material to the Dairy industry to improve the sustainability of their packaging.

The project has established the technical and commercial feasibility of recycling UK post consumer milk bottles on large scale equipment as found in full scale plants that could be built in UK. The distribution of milk bottles with recycled content has already stimulated interest from a number of blow moulding companies and dairies and on going production has been commissioned by these groups to meet demand until full scale plants are established.

Potentially the use of recycled food grade HDPE would spread to the whole dairy industry as many bottle plants and dairies supply a range of retail customers from a single production site. The wider availability of such resin via full size plants is the key to the initiative spreading across the industry.

The marketing of milk bottles with recycled content will reinforce the message that recycling of plastics is being adopted by local businesses to reduce the impact of packaging within our society. The recycled HDPE is already on the supermarket shelves at Marks and Spencers in an active way at this moment even before the plants are constructed. The deliberate collection of plastic bottles from households by the various collection systems used for recyclable materials will have a positive impact on the understanding of individuals in our communities that recycling applies to every day objects such as the milk bottle. This will emphasise the role of recycling in the recovery of materials and encourage the recovery of additional recyclables and develop long standing social habits in the efficient use and recovery many materials. This should lead to an acceleration of the adoption of recycling of packaging.

### Further References

WRAP website - Publications. [www.wrap.org.uk](http://www.wrap.org.uk)