



## EUROPEAN PET RECYCLING SUCCESS

At the time of writing Petcore is waiting for the final statistics on PET collection in Europe for 2008<sup>1</sup>. Provisional data show that 1.26 million tonnes of PET bottles were collected in 2008, an increase of 11.3% over 2007 and represents 41.6% of all PET bottles put on the market. 20% of the resulting RPET was used to make new containers.

The amount of RPET used to make fibres remained static at 47%. A great proportion of this will be made into filling fibres and non wovens but the outdoor industry in Europe makes great use of recycled PET fibres. According to ForumPET more and more manufacturers of outdoor clothing and equipment rely on recycled plastic materials. Many manufacturers of premium brands offer fleece jackets and trekking shirts made from recycled PET bottles.

Many more individual bottles were collected in 2008 than the above increase suggests. In the mid 1990s a 500 ml bottle to package water weighed 22 grams but by 2006 the lightest 500 ml bottle weighed 12.5grams. It is now possible to package 500 ml of liquid in a bottle weighing only 6.6 grams. This saving of material means that for the PET recycler every bale he purchases will contain a greater ratio of contamination – caps, labels, residual contents etc – to PET, than those bought even 2 years ago. Separation into purer streams will therefore cost more.

Plastics are too valuable to throw away.

The EU's Waste Framework Directive (WFD) is a piece of EU legislation dating back to 1976 which sets the legal framework for waste management in the EU. It is periodically revised, and the latest revision was concluded in late 2008 (2008/98/EC).

The WFD is a hugely important piece of legislation for the plastics industry which sets European requirements in crucial areas such as:

- “End-of-waste” criteria for certain waste streams
- Recycling targets for municipal solid waste and construction and demolition waste
- Introduction of extended producer responsibility
- Implementation of the Waste Hierarchy in the Member States

The 5-step waste hierarchy is intended to improve resource efficiency by setting out a “priority order” of waste management techniques:

- Prevention
- Re-use
- Recycling
- Recovery (including energy recovery)
- Disposal

The rationale for this hierarchy is that a higher amount of resources is saved by preventing waste, followed by reuse, recycling and recovery, going down through the hierarchy to disposal, which should be avoided as far as possible due growing shortage of landfill sites and in some countries, the imposition of landfill taxes.

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<sup>1</sup> Available from [admin@pcipetpackaging.com](mailto:admin@pcipetpackaging.com)



This Directive must be transposed into law by each member state by December 2010.

The EU agreement also allows for the hierarchy to be applied with flexibility when justified by “lifecycle thinking”.

As the most collected domestic packaging plastic, PET will continue to make a large contribution to each member state’s fulfilment of its plastics recycling target. In order to meet the new targets investment will have to be made in new recovery technology. It is possible break down PET chemically into its original raw materials that can be purified and used to make new PET. Also the inclusion of energy recovery in the waste hierarchy means that every PET bottle sent for disposal will be recovered either as material or to replace fossil fuel in energy production.

Why should anyone be tempted to litter, ever again?

Finally, we have some good news from the UK. Following hot on the heels of cooperation with the UK retail trade, was the successful launch of the *PlasticsEurope* initiative “Plastics 2020 Challenge”<sup>2</sup>. This will aim to divert plastics from landfill and to encourage reduction, reuse, recycle, and recovery. *PlasticsEurope* will provide significant scientific support and waste management expertise and additionally, facilitate development of energy from waste. Petcore is fully behind the “Plastics 2020 Challenge” which will depend on the successful continuation in growth of PET recycling across Europe.

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<sup>2</sup> <http://www.plastics2020challenge.com/>