

Petcore's Director General address

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Dear Reader,

Packaging recycling is a relatively new process. It is therefore not surprising that every once in a while, we hear about new technology breakthroughs that take one's breath away.

Recycling technology is a key aspect in getting the economies of scale right while maintaining, or better still, improving on quality of the output material. It has taken the recycling industry a while to learn that "recycling" as such does not sell. I, as a car lover, do not know a better way to explain this phenomenon than using our camel of the asphalt as an example.

Selecting your new car is always an important event. Everything must be absolutely right from performance, looks, price, to reliability. Now, what if the sales person were to offer you a version of your preferred model that is made of recycled material, for the same price? Would you go for it? The vast majority of people, including those with

a strong inclination towards ecologically "correct" products, would say no. Most cars already contain parts that have been produced with recycled materials, including PET, but manufacturers just don't talk about it. The same principle applies to fast-moving consumer goods. Back in the early nineties, retailers believed, based on consumer surveys, that "green" products would sell. Very soon, "green" shelves began to appear, bearing products claiming recycled content, superior biodegradability and so on. Within a few years, most of those shelves had disappeared and with it, many of the environmental claims.

Recycling does not sell, quality and performance do.

One of the technology sectors with great potential for improvement is automatic sorting. In the early days, most plastic sorting plants relied on hand sorting combined with UV-light detection. Overall results were disappointing and rather expensive. Today, most sorting techniques depend on Near Infra-Red (NIR) detection where electronic eyes process as many as 20,000 items per second. Economies of scale have improved significantly and colour detection is excellent. Material detection however, is still tricky.



Petcore has recently visited a company that is on the verge of a very significant breakthrough. On pilot-plant scale, it achieves a detection frequency of 700,000 instructions per second with mind-boggling optics and computer processing advances, while introducing a new method that takes material detection into its third generation. This is very good news for the recycling industry and I'm sure we will soon hear more.

This does not mean that, from now on, all rubbish can be sorted out. All across the world specialists have learnt the hard way that input quality is the key determinant to output quality. In Europe, we have seen this with the German collection system where too many recyclables were collected, resulting in high sorting costs and below-average output quality and quantity, regardless of sorting technology.

A recent report in the Netherlands failed to learn from lessons of the past. It claims that good quality recyclables can be issued from the selection of the general household waste stream, in large quantities. That is simply not possible. A report published this month by the UK Institute of Civil Engineers takes a much more balanced approach. They argue that if the high-value recyclables are collected separately, the general household waste would still contain enough energy to meet 17 percent of all energy needs in the UK up to the year 2020.

Much work remains to be done. However, we must continue to keep sight of the reality call from Europe's citizens. They are the ones that expect industry to continue – on their behalf – to collect and recycle the valuable resources used to maintain their lifestyle without jeopardizing the needs of future generations.

Frank Koelewijn



Petcore's new undertakings

The recyclers workgroup

Recycling has always been crucial for Petcore. Nevertheless, originally the association only counted two recyclers among its members, and those were not in the association as recyclers, but as representatives of their respective core businesses.

In 2002 the board of Petcore decided to open up membership to that vital part of the PET chain and today, 11 out of its current 30 members are involved in PET recycling. These are: AdvanSA, Amcor, Cleanaway, Montello, Rethmann Plano, RPB, Schoeller Wavin, Sorepla, Tergal Fibres, Texplast and Wellman.

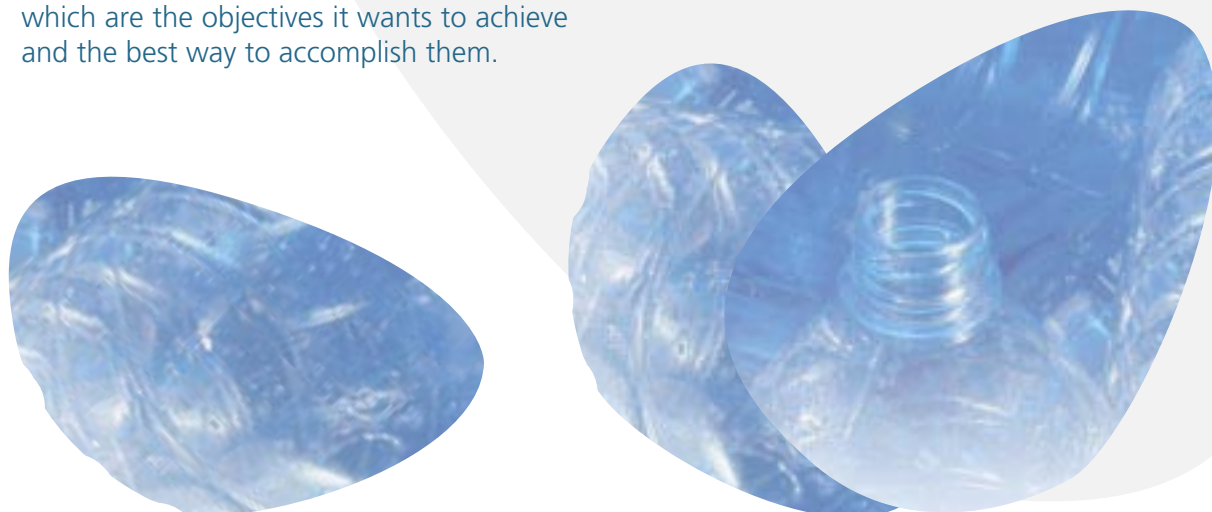
As many other associations, Petcore's undertakings get steered by its committees: the technical, the regulatory and the communications committees have been guiding the programmes and projects of the association ever since the creation of Petcore. Yet, as recyclers joined the association, and although recycling issues have always been widely discussed at the technical committee, it became more and more evident that their specific needs had to be addressed within a special forum and this is the reason why a recyclers' workgroup was set up at the end of 2004.

In the beginning of this year, the workgroup met for the first time. On that occasion, it assessed which are the objectives it wants to achieve and the best way to accomplish them.

The prime aim of the group is, of course, to discuss and propose solutions to any issues linked to the physical recycling of collected post-consumer PET containers. The group however, will remain closely interlinked to the technical committee. Indeed, all of their conclusions and recommendations will be fed to Petcore's technical committee. It will be the technical committee that will decide, based on the workgroup's advice, to kick-start projects that are of interest to all.

Things discussed at the last meeting spanned from the exports of collected PET bales to China, to those new PET additives that bring along recycling challenges, to emerging flake-sorting technologies.

Petcore strongly believes that it is through discussion and through setting priorities and strategies that the European recycling industry will be supported and developed. And of course, supporting the PET recycling industry also means supporting the whole of the PET value chain, one of the the mainstay missions of the association.



Petcore's new undertakings

The adhesives task-force

Labels are an essential part of the packaging. They greatly contribute to the appeal and uniqueness of the product while at the same time they provide an array of information about the goods, helping the consumer make its purchasing decision from among the multitude of products offered on the market. Nevertheless, once post-consumer bottles reach the recycling stage, labels can become a little tricky.

Recovered PET is most valuable when it is the most pure and therefore, as labels are manufactured with other materials than PET, they need to be thoroughly removed. The same applies to the glues used to bond the labels because if they are not fully removed they might raise issues at the level of the new product. Yellowness, haze and the appearance of black specs can unacceptably alter the appearance of the product manufactured with recovered PET.

One of the missions of Petcore is to secure a fully accessible European market for PET packaging without unfair obstacles created by taxation, legislation, or regulation. In 2004 some European countries started to talk about regulating the types of adhesives to be used for labels and as "cooperation" is one of the credo of Petcore, the association grabbed the opportunity to open up dialogue with the adhesives industry (FEICA), in order to self-regulate instead of running the risk of getting regulated.



The selection of industrial use glues offered on to the market is quite large: hotmelts, cold melts, caseine/synthetic-based have each their specific

attributes, and when it comes to the PET recycling process, they all behave in a different way when in contact with the wash solution and detergents.

It is vital for the recycling industry to understand how these different types of adhesives behave in the PET recycling process, in order to provide clients with an outstanding product.

The aim of the Petcore adhesives task force is to ultimately establish guidelines on the behaviour of the currently available adhesives in the PET recycling process, in order to clarify what kind of effect they have on end-products.

In order to do that, the group, a balanced representation of the PET recycling industry, the adhesives industry and the brand-owners, have carried out tests and are drawing-up a list of adhesives that are compatible with current PET recycling technologies.

A joint Petcore-FEICA press release will be issued later this year, disclosing the results of the work carried out by this task force.

National Collection agencies: Repak in Ireland

Another national collection agency operating under the “green dot” system, Ireland’s Repak was established, by industry, to carry out the producer’s take-back obligations as set by the EU directive on packaging and packaging waste and enforced by Irish waste management regulations SI 242, 1997 & SI 382, 1998.



Ireland is one of the 3 countries that were granted a derogation by the EU packaging and packaging waste directive 94/62/CE and a further derogation by the amended packaging directive published last year (2004/12/EC). The newly adopted directive requires that by December 31st 2008:

- 60 % as a minimum by weight of packaging waste be recovered or incinerated at waste incineration plants with energy recovery,
- between 55 and 80 % by weight of packaging waste be recycled,
- material-specific target (by weight) be 60 % for glass, 60 % for paper and board, 50% for metals, 22.5 % for plastics and 15 % for wood.

Because of the presence of the many rural and mountainous areas, Ireland only will be bound by these targets as of 2011.

Repak started operations in late 1997 by taking care of industrial, commercial and household packaging waste. Through the fees paid by affiliates, Repak finances local authorities who, in turn, have the task of setting up the actual collection according to local needs. Repak also collaborates with industry and government to agree on the best strategies for meeting the recovery and recycling targets for of packaging waste.

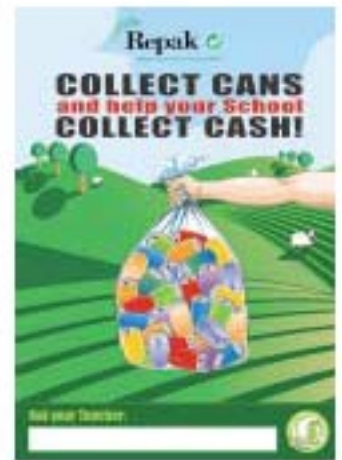
Communications is always essential when establishing a collection agency and Repak knows that well. Indeed, it runs local/national educational campaigns. Operations such as Cash for Cans, National Recycling Week or Green Christmas have been carried out with the aim of raising awareness of primary school pupils and the general public towards recyclable wastes collection. All of Repak’s actions are carefully monitored and quantified in order to for the collection agency to further develop their tactics and increase Irish collection and recycling rates.

Among those companies that can join Repak are packaging material manufacturers, converters, brand-owners and importers, but also distributors and retailers. Repak’s fees are based on the principle of “shared responsibility” in order for the cost of recovery and recycling to be spread across the whole supply chain. Repak’s fees include two elements: “Participation fees” that are charged as a flat rate per tonne, irrespective of material type and “Material-specific fees, that charged at brand owner and importer level and are based on the weight of each packaging material placed on the market by the members. All fees are calculated on the basis of statistics supplied for the previous-year placement and are fixed for a one-year period beginning January 1st.

Packaging producers and users that have signed the green dot licence agreement with Repak, are not in the obligation of printing the green dot logo on their packaging. Nevertheless, their affiliation to the recovery scheme grants them the right to do so.

In 2003 Repak subsidised the collection and recycling of about 47% of the total packaging placed onto the Irish market. As far as plastics is concerned, 2003 saw 34,000 tonnes of plastics packaging collected: a 30% increase compared to the previous year. This figure includes shrinkwrap packaging (industrial and commercial packaging), however, plastics bottle recycling grew by an amazing 87% in excess of 2,000 tonnes and representing 45 million bottles.

All this was achieved thanks to the active participation of population to the separate collection of their waste packaging and to the set-up of collection schemes. Nowadays, about one third of all Irish household are serviced by a kerbside collection system.



Latest news

- Italy to begin PET chemical recycling

<http://www.prw.com/main/newsdetails.asp?id=3953>

- Trying to get Malaysians to recycle

<http://thestar.com.my/lifestyle/story.asp?file=/2005/4/12/features/10479400&sec=features>

- Plastic bottlers turn to Hungarian Court

http://www.budapestsun.com/full_story.asp?ArticleId={B98E2BA10FAE4BFCB46454A13FC58BFB}&From=Business



Material recovery and recycling events

Forthcoming events

May

03-04/05 Innovations in PET Packaging.
Abu Dhabi, UAE
For further information:
Tel. (+44)-1372-802-055,
Fax (+44)-1372-802-243,
e-mail: henriettaf@pira.co.uk.

03-05/05 Waste Expo - Conference & Exhibition.
Las Vegas, USA
For further information:
Tel. (+1)-203-3589900,
Fax (+1)-203-3585816,
e-mail: imagliola@primediabusiness.com.

10-12/05 Ekotechnika – International
Environment Technology Exhibition.
Bratislava, Slovakia
For further information:
Tel. (+421)-2-67271111,
Fax (+421)-2-67272055,
e-mail: mchvi@incheba.sk.

16-17/05 12th Asia Pacific PET 2005.
Bangkok, Thailand
For further information:
Tel. (+65)-6345 5701,
Fax (+65)-6345 5928,
e-mail: huiyan@cmtsp.com.sg.

25-27/05 N-Expo – 14th New Environmental
Exposition 2005 Tokyo.
Tokyo, Japan
For further information:
Tel. (+81)-3-3262-3461,
Fax (+81)-3-5213-8847,
e-mail: info@nippon.co.jp.

31/05-03/06 Waste Tech - 4th International
Trade Fair and Congress for the Waste
Management and Recycling Industry.
Moscow, Russia
For further information:
Tel. (+7)-95-101-4621,
Fax (+7)-95-101-4621,
e-mail: waste-tech@sibico.com.

June

07-08/06 6th PET Markets - Russia, New Europe
& CIS 2005.
St. Petersburg, Russia
For further information:
Tel. (+65)-6345-5928,
Fax (+65)-6345-891-199.
e-mail: cynthia@cmtsp.com.sg.

08-11/06 Envirtec.
Tunis, Tunisia
For further information:
Tel. (+216)-717-87-933,
Fax (+216)-717-86-226.
e-mail: info@sogefoires.com.tn.

13-17/06 ENVEX - International Exhibition on
Environmental Technologies.
Seoul, Korea
For further information:
Tel. (+82)-2-224-95-265,
Fax (+82)-2-224-95-267.
e-mail: envex629@epa.or.kr.

August

10-12/08 Afriwater - International Water, Waste
and Environmental Exhibition.
Sandton, South Africa
For further information:
Tel. (+27)-11-886-3734,
Fax (+27)-11-789-6562.
e-mail: info@exhibitafrica.co.za.