

Recycling Plastics News

Household Plastics Packaging Collection Survey



Destination Recyclability



Plus

- Recycle on the Go
- Plastics Packaging Recycling
- Consumer Communications
- UK Policy
- New Technologies
- European Perspective
- Markets Overview
- Research and Guidance

RECOUP

RECYcling Of Used Plastics Limited



Environmental Line

Business Line

www.recoup.org

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RECYcling Of Used Plastics Limited

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Foreword

Welcome to the latest edition of Recycling Plastics News. Recoup have continued their work to facilitate and deliver sustainable plastic recycling on behalf of our members and the wider Recoup network. This includes working with UK and EU stakeholder groups, responding to government consultations, generic research and information sharing, bespoke client activities, attending and speaking at conferences and exhibitions, packaging reviews, highlighting issues and joined up thinking. This is underpinned by a strong board of directors drawn from corporate and associate members which provide representation across the plastic supply, use and recycling chain.

Many of the perceived short and long term requirements to develop sustainable UK plastics packaging recycling are a continuing theme. Increased efforts across the plastic bottle supply chain are needed to recover an acceptable quantity and quality of plastic bottles for recycling. The focus has shifted onto wider plastic packaging collections in recent years, but the infrastructure to effectively handle and reprocess this material has not yet caught up with collection levels which also continue to increase.

It will be necessary to adopt a 'value recycling' concept to enable the UK to develop and maintain sustainable and commercially viable plastics packaging collection, handling and reprocessing systems.

Despite recent financial pressures on many companies due to the economic conditions, environment is no longer the first budget to be cut. Most organisations now see a strong CSR and environmental programme supported by tangible outcomes as a core part of business success. In local government, plastic collections are generally seen as a required part of an integrated

kerbside service that the consumer demands, whilst waste companies try to maintain a balance between quality and processing costs.

I hope that this issue of Recycling Plastics News will be of interest and highlight the range and depth of activities that Recoup are delivering. It may provide some ideas for your organisation to work with Recoup to maximise sustainable plastics packaging recycling and deliver real environmental benefits. We have a dedicated knowledgeable team who are waiting to hear from you.



A handwritten signature in black ink that reads "John Simmons".

John Simmons, CEO

**We look forward to
working with you.**



The Plastics Packaging Journey – Destination Recyclability

At Recoup we believe in looking at the bigger picture, the whole picture, from start to finish. We focus on the plastics packaging journey from design to recycling, working with our members and clients helping to guide them to take the most sustainable and economical route to destination 'recyclability'.

Recoup are a leading UK authority on plastics waste management, a registered charity built on a network of members who come from all areas of the plastic supply chain – including those who produce plastics, equipment suppliers, large multiple retailers, local authorities, and those who sort and process the collected plastics – enabling us to offer a 360 degree view of the industry.

Recoup's own in house knowledge and that of its membership network enable us to add insight, initiative and value to a range of projects across the 'plastics packaging recycling' arena.

Across all areas of collection, including 'on the go' recycling, sorting and reprocessing we offer a range of services:

- CSR Programme Development
- Pack Reviews
- Design Guidance
- Material Review – Supply, Demand and Sourcing
- Research & Development
- Feasibility Assessment
- Financial Analysis
- Project Management
- Trials & Performance Review
- Technical Advice
- Training

Call our team today to find out how we can work together - +44 (0) 1733 390021

Resources and Education

A core part of our activity is that of resource provision and education. Via the Recoup website you can visit a one stop shop for all your plastic recycling questions and requirements. The site is aimed at helping you to find out all you need to know about plastics packaging recycling including news, legislation, policy, advice on identifying different types of plastic, searching for a reprocessor in your area or advice on setting up a scheme, it's all there, just a click away at: www.recoup.org.

Educational Resources

Recoup's resources are both educational and fun. These resources vary from printable fact sheets and data, to images and video clips all aimed at raising the awareness and understanding of plastics packaging recovery and recycling across a range of audiences including younger school age children & communities, plus a Secondary School teaching resource or Key Stage 3 Citizenship is available through WRAP with input and support from the Material Recycling Organisations, including Recoup.

All of these resources can be accessed via the Recoup website at: www.recoup.org.



Supporting Events and Launches

Our mascots add a sense of fun and bring the plastics recycling message to life in local communities. Children love to see the fun bottle shaped characters out and about, promoting the importance of plastic recycling. These six-foot mascots can be adapted to include a message specific to your campaign/organisation or area and are ideal for environmental awareness days, launches or educational events. Recoup members are entitled to one free hire of the mascots each year.

Packaging Design



Collection 'Recycle on the Go'



Kerbside and Bring



Sorting



Recyclability



RECOUP

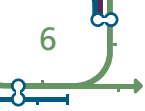
REcycling Of Used Plastics Limited

Every journey starts by choosing a destination, we ask you to choose **Recyclability** and let **Recoup** be your guide.

- CSR Programme Development
- Product & Pack Reviews
- Design Guidance
- Material Review – Supply, Demand and Sourcing
- Research & Development
- Feasibility Assessment
- Financial Analysis
- Project Management
- Trials & Performance Review
- Technical Advice
- Training

Environmental Line

Business Line



Benefits of Recoup Membership

Being a member of Recoup means that you are directly supporting an organisation founded in 1990 to “maximise efficient plastics packaging recycling”. Our core objective remains the same, as do our values and passion to deliver our objectives. Our network and knowledge has grown with the plastics packaging recycling agenda which is continually evolving. You will directly benefit from our vast experience with an access to an established and competent team, capable of adding value and offering solutions to any stage of the plastics packaging recycling loop.

We understand the plastics packaging journey – we work with our members to help guide them to destination ‘recyclability’

Recoup understand the importance of a well thought out Corporate Social Responsibility (CSR) policy, and have worked with a number of organisations to help develop a programme based on joined up thinking and which delivers at every level of the organisation’s activity. CSR is not just about offering a message – a policy needs to include actions which must be taken to fulfil and communicate that message. And importantly, any CSR policy must be sustainable but also commercially viable.

Nampak has been a Recoup member company since 2000 and I was delighted to join the organisation’s board in 2010. Recoup is an excellent source of guidance to its members and offers invaluable expertise and assistance to companies like Nampak. The Recoup team have an excellent knowledge of the plastic supply and recycling chain, and I would strongly recommend that you also consider supporting Recoup and its activities.

James Crick
Business Development Director
Nampak Plastics

Recoup have, and continue to provide invaluable support and assistance to Surrey County Council and the Surrey Waste Partnership through a number of recycling initiatives and work programmes. In the past year this has included events recycling, large scale plastic waste composition assessments, recycle on the go site development, and the provision of detailed information leading to consideration of effective plastic recycling strategies for Surrey.

Matt Smyth
Waste Reduction Manager,
On behalf of Surrey County Council and the Surrey Waste Partnership



How to join

How to join

We have two levels of membership – associate and corporate. Associate membership is for local authorities, charities and non-profit organisations. Corporate membership is for private organisations, with a fee structure based on number of employees and annual turnover. We currently have members from all areas of the plastic supply chain, and of all sizes from a handful of employees to multinational companies.

Membership benefits include:

- Free Recoup ezine, regularly bringing news and contacts direct to your desk
- Free use of mascot at one event per year (worth over £250)
- Discounted rates on conferences and training materials
- Discounted rates on specialist project work

Membership of Recoup comes with a wide array of benefits. Access to our expertise and that of our network has proved invaluable to many of our members, and has also provided some excellent networking opportunities. Recoup are also able to offer our members consultancy and project work when required, as well as exclusive access to the results of our work with other organisations via our website and news updates.



RECOUP help to increase plastics recycling levels by demonstrating and promoting good practices, efficiency and expertise.

- Better scheme economics means more opportunities to develop recycling.
- Better consumer and regulator understanding of plastic packaging enhances opportunities for plastics recycling in the future.
- Better national policy & regulations make it easier to do good business.

To find out more about the additional benefits of being a Recoup member, please contact Michele Matthews on: +44 (0)1733 390021 or go to www.recoup.org for more details and an application form.



Associate
Membership



Corporate
Membership

Destination 'Recyclability' – The Values of Integrated Environmental Design

Just how much do you know about the packaging journey? More and more plastic packaging producers are taking active steps to understand what really happens after products are taken off the retail shelf and into the household, the associated recyclables collection and handling systems, and where appropriate ensuring their packaging is designed to maximise recyclability.

Based around a key UK and European endorsed design document, **Plastics Packaging – Recyclability by Design**, Recoup work with its network of members and contacts across the plastics packaging supply chain to understand and identify the current practicalities of recycling plastic packaging. The full guide is available for FREE download from: <http://www.recoup.org/design/rbdv2>

The document is an essential guide for all those involved in plastic packaging development, design, marketing and procurement. The guide was first launched in 2006, commissioned by Recoup and sponsored by Reckitt Benckiser Group plc (www.reckittbenckiser.com), followed by revisions to keep the document up to date.

Recyclability by Design is unique in recognising that for much of the publication's audience, there is a need to make commercially viable design choices that also maximise environmental credibility and recyclability on a global level. Co-ordinated by Recoup, the guide has been developed by a wide range of international industry expert stakeholders and has retained a positive reputation worldwide and continues to be an accepted European industry publication.

The guide allows designers, specifiers, marketers and those involved in plastics packaging procurement to better consider the environmental credentials of products they put onto the market. Essentially, it takes account of both environmental and corporate responsibility expectations and seeks to ensure that plastic packaging placed on to the market is designed to be easy to collect, sort and reprocess for recycling.

Updating the guide again will be a timely exercise as we all look to identify drivers that can assist the UK and other countries in reaching greater recycling targets in a sustainable way. Going forward, there are likely to be a number of revisions to the guide particularly in the non-bottle plastics recycling sector as we reflect ongoing activity and progress being made.

Since its launch 'Recyclability by Design' has proven to be a key tool and reference point to many. Recoup is very much aware of the pressures that face all of those involved in plastics packaging and recycling, not just today but looking ahead.



Applying the Principles of Recyclability to Plastics Packaging Design

Recoup accept that there are many pressures on pack designers, and the additional consideration of recyclability may not lead to overnight changes. The approach and guidance associated with recycling systems also needs to be dynamic as the systems evolve. But to understand existing collection and handling systems for recycling plastics is key to ensuring any recyclability based design changes are really going to make a difference.

Recoup have worked with a number of pack and product manufacturers to assess the commercial reality of how their plastics packaging interacts with existing recyclables systems. Based on real world experience and testing, this gives confidence that recycling based pack design changes and recycling claims are actually deliverable and worthwhile.

A typical project will establish how the packaging interacts with existing collection, sorting and reprocessing systems and how design considerations can enhance the recyclability and environmental credentials of plastic packaging. When current systems are not capable or adequate to efficiently collect and / or handle the proposed pack, in depth technical analyses are produced to suggest alternative infrastructure to support the recycling of the new pack, identifying existing or bespoke collection systems, logistics and costs.

Potential partnership between pack producers and relevant waste companies can also be established in order to ensure the project results are practicable and able to be scaled up; this will also include potential end markets and end products.

Whenever applicable, a holistic approach is also considered, to provide efficient recycling of the pack as a whole and not just in relation to the plastic fraction. This will include any metal component, organic residues, etc., and will take in consideration the waste hierarchy, prioritising "reduce, reuse and recycle" but also, when necessary, options involving energy from waste.

Some Key Considerations

- Changing to another polymer will not necessarily change recyclability due to format;
- Changing to another polymer will not necessarily result in a better environmental approach;
- New pack design may require bespoke collection system, which could increase costs;
- Due to the complexity of some packs, incentives may need to be introduced to guarantee minimum recovery;
- As each country has different approaches to the collection of recyclates, alternative solutions may be required once the new design is scaled-up

Why spend your valuable time and resources on investigating recycling opportunities and recreating a similar document when you can use 'Recyclability by Design' as your template. With our extensive knowledge of the plastics packaging journey Recoup can help you reach destination recyclability. Talk to the Recoup team on: +44 (0)1733 390021



Recoup Plastics Packaging Collection

The latest report from Recoup shows an encouraging increase in the bottle recycling rate with 46% of plastic bottles now being collected for recycling. An increased number of Local Authorities are also reported to be actively collecting non-bottle plastics for recycling.

In 2010, Recoup launched the annual online UK Household Plastics Packaging Collection Survey to all waste collection authorities and unitary authorities in the UK. This establishes the levels of plastics packaging collection, based on the 2009 performance, to form the 16th local authority plastic collection report. The high level of response gives a good overview of UK domestic plastic bottle collections and planned developments, but also incorporates data regarding mixed packaging collection; recycle on the go and comparative international data. This year's report was commissioned by Nampak Plastics and PPS Recovery Systems Limited.

The full report can be downloaded from: www.recoup.org

2009 Household Plastic Packaging Recycling Rates

The analysis of the survey indicated that a total of 303,412 tonnes of plastic packaging were collected from bring and kerbside schemes for recycling. Of that, 263,049 tonnes were plastic bottles. This figure represents an additional 46,902 tonnes or a 22% increase when compared to the previous year's survey. An additional 40,363 tonnes were attributed to non-plastic bottles. The total UK plastic bottle consumption within the household waste streams for 2009 and used in this report was 568,000 tonnes, indicating a recycling rate of 46%.

Breakdown Of Recycled Tonnage By Scheme And Packaging Type

	Plastic Bottles (tonnes)	Non Bottle Plastic Packaging (tonnes)	TOTAL (tonnes)
Bring	47,473	4,921	52,394
Kerbside	215,576	35,442	251,018
TOTAL	263,049	40,363	303,412

Kerbside and Bring Scheme Performance

The two main methods used by local authorities to collect plastic packaging kerbside collection and bring schemes. In 2009, 215,576 tonnes of plastic bottles were collected via kerbside collection, representing an increase of 46,610 tonnes or a 27% growth, when compared to previous year's report. The total number of local authorities now offering plastic bottle collection through kerbside is 360 (or 90%), which represents approximately 23.3 million households, an additional 5 million households when compared to the previous year's report.

This has occurred due to the number of local authorities now introducing a kerbside collection service for the first time, the expansion of schemes and overall performance improvement of existing services.

The report identified that the latest bring scheme collection tonnage for plastic bottles was 47,473 tonnes including 5,800 tonnes from household waste recycling centres operated by waste disposal authorities and an estimated 3,000 tonnes of bottles attributed to recycle 'on the go' activities. The total number of bring sites actively collecting plastic bottles was reported as 6,876 from 248 local authorities.

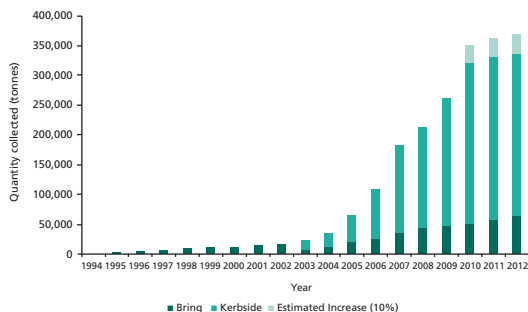
When asked how the plastic bottle collection scheme was working, 82% of the respondent local authorities indicated that their schemes were running smoothly and a further 17% suggested that there were minor problems with the schemes - only one local authority stated that there were major problems in running a plastic recycling scheme. This response suggests that the infrastructure and support required to launch and sustainably operate a plastics collection scheme is now available to most UK local authorities.

Local authorities were also asked to indicate the reasons and factors which prevented them from introducing plastic bottles into kerbside collection schemes. The most common reasons given were the cost implications of changing existing schemes to accommodate the collection of plastic bottles and the difficulties of adding plastics due to the lack of compartments available in the kerbside sorting vehicle.

Survey 2010

A similar approach was taken to identify the reasons and factors preventing local authorities from collecting non-bottle plastic packaging. A lack of end markets in the UK and market instability were the two main reasons presented by the respondents.

UK Plastic Bottles Collection Growth Trend



Alongside this, Recoup believe that the introduction of other plastics packaging recycling can be considered. However, only when commercially viable and sustainable end markets are defined, and the collection and sorting infrastructure is capable of effectively handling the mixed plastics without detriment to the operation of existing recycling systems, or affecting the resulting output quality of other recyclables, including plastic bottles.

Planned Developments

Local authorities were able to provide information relating to future scheme developments. The responses received suggested that kerbside schemes could potentially recover 271,000 tonnes of bottles in 2012 representing a further 56,000 additional tonnes. The expected collected tonnage for 2012 could reach up to 350,000 tonnes.

Collection of Non Bottle Plastics for Recycling

The 2010 survey requested additional information on the types of plastic packaging collected by local authorities. Of the total responding local authorities, 84 indicated that they are now actively collecting other plastics packaging through kerbside schemes in addition to plastic bottles. A further 36 local authorities indicated that they were collecting 'other plastics packaging' through their bring schemes. The total reported tonnage for 'other plastic packaging', increasingly being referred to as 'non-bottle plastic' packaging or 'mixed plastics', and typically including pots, tubs, trays and plastic film (but not plastic bottles) was 40,363 tonnes. The information provided suggested a 77% increase in non-bottle plastics when compared to last year's report.

However this should be viewed as an indicative tonnage only, since the presence of other plastics within bottle streams and vice-versa can vary, and this breakdown is not always available to the local authority, particularly when collected and handled as a single stream of material.



Consultations and Government Changes

It has been an interesting time for plastic recycling, and waste policy generally. There has been the formation of a coalition government, significant budget reviews and cost saving measures, and two key consultations on packaging strategy and waste policy.

The expected 2011 waste review is likely to provide much more detail on development plans and new waste policy. This will inevitably lead to a review of the impacts on future plastics packaging recycling activities, and consideration of the infrastructure and financing needed to deliver any revised targets and implement policies. This will present the plastic supply and recycling chain with a number of challenges in the years ahead.

But in the short term, the targets for UK plastics packaging recycling have been set at 32% for 2011 and 2012. This has attracted mixed comments from various sector commentators. The original proposal was to set business recycling targets until 2015, with 2011 at 30% and 2012 at 35% for plastics packaging. The targets actually released are for 2011/12 only, and the full targets are below.

PACKAGING RECYCLING TARGETS (%)		
Material	2011	2012
Plastic	32	32
Paper/card	69.5	69.5
Glass	81	81
Aluminium	40	40
Steel	71	71
Wood	22	22
Total recycling	68.1	68.1
Total recovery	74	74

An increase for plastics recycling was needed as the UK have comfortably met 2010 targets, mainly through the collection of household plastic bottles, and commercial and industrial plastic films. Also as DEFRA note, the UK needs to meet wider EU Directive packaging recycling targets. But the announcement is seen as a holding position until the full Waste Review is completed and published.

Balancing Challenging Plastics Packaging Recycling Targets With a Sustainable Approach

Two key DEFRA consultations were published in 2010; Implementing the Packaging Strategy (including proposed packaging recycling targets until 2020), and a Review of Waste Policies. The detailed outcomes and policy considerations are expected to be released by DEFRA in Spring 2011, and will go some way to shaping plastics recycling for the next 5 to 10 years. Recoup have provided substantial responses to both documents on behalf of it's membership network and full copies are available on request. Key themes include;

1. Recycling targets to be based only on packaging that can be recycled.
2. Individual recycling targets for plastic packaging types.
3. Clarification of the 'collection' responsibility for quantity and quality.
4. Packaging Data – the need for accurate data both for regulatory and operational management.
5. Plastic Packaging Specialist Support - from a full time UK team

With even more plastic bottle reprocessing infrastructure planned for implementation in 2011, the need for continued increases in bottle collections is clear. This can only be achieved through an infrastructure that gives every UK household the opportunity to recycle plastic bottles in convenient and easy to use systems. Alongside this is the prospect of other plastics packaging formats (non-bottles) being collected in greater amounts, and the need to ensure that the sorting infrastructure is capable of effectively handling the non-bottle plastics without detriment, either financially or operationally, to the existing recycling systems. Working across the plastic supply chain to manage commercial and political pressures in line with realistic development goals will help to steer the sustainable development of the non-bottle plastic packaging recycling opportunity.

Communications and Recycling Claims – Drawing Some Lines in the Sand

Recycling claims and communications need to be more consistent, whether collecting plastic bottles or a wider range of plastics packaging. Recoup continue to monitor both consumer and industry messages and associated claims regarding plastics recycling, and consider their potential impacts.

This is a challenge given that there are so many stakeholders, a range of approaches to collecting and recycling plastics, and pressures to improve green credentials. Taking a step back from the supply chain, there needs to be some general boundaries and approaches that will allow UK plastics recycling to develop sustainably. There needs to be some lines drawn in the sand.

It is key that we maintain the confidence of consumers in plastics recycling through a transparent approach and consistent communications. What the industry say can be recycled must stand up to scrutiny.

A multi stakeholder approach is needed which, as far as possible, allows communications and recycling claims to be de-politicised. Recyclability is sometimes used as a marketing technique which can be exploited. Local authorities must ensure that recycling claims are audited as they are custodians of the front line recyclables collection schemes which link back to the consumer.

If some plastics are recovered through energy from waste, this is not necessarily an issue, but stakeholders must be made aware. It is important to question if this is recovery or recycling, and does this match the consumer perception? It is common for some non bottle plastics collected in other EU countries to be used in EFW applications where it cannot be effectively recycled.

However, inconsistency of collection scheme provision mean that while some householders are still unable to recycle their plastic bottles, others can put every item of plastic packaging into their recycling container. Standardisation of collection and sorting systems will not happen overnight, if at all, but the instructions to householders needs to be more consistent.

Reviews of plastic recycling instructions to consumers highlights many different approaches despite this material being sold to the same or similar reprocessors. Why can't every plastic bottle collection scheme carry the same message?

Recoup advise that the polymer codes can confuse rather than encourage the consumer to recycle and should therefore be avoided. We also believe that further work is needed to provide consistency and accuracy for labelling of plastic packaging with recycling messages. It is for the local authority to decide which plastics should be collected, through guidance from the plastic reprocessor they are supplying. Other methods of consumer communication such as on pack labelling should align with those who have the direct responsibility for collection and sorting.

Green Claims Guidance has been published by Defra. This notes that environmental claims are important for enabling consumers to make informed choices and drive business to improve the environmental performance of their products or organisation. But the true value of environmental claims and marketing rests on the assurance that claims are both credible to consumers, and reflect a genuine benefit to the environment. It promotes the use of clear, accurate, relevant and substantiated environmental claims and labels on products, services or in marketing and advertising.

The associated report also provides a good insight into consumer understanding and interpretation of a range of green terms. The full guidance and further information can be obtained online from the **Defra website**.



The Wider Plastics Packaging Recycling Managing Expectations

Definitions

There needs to be a standard approach to plastic definitions. The term 'mixed' has traditionally been used within the plastic recycling industry to describe mixed plastic bottles. However, the introduction of wider plastic collections has also led to the adoption of the term 'mixed plastics'. This may include or exclude a number of plastic packaging formats including bottles, some or all rigid items, flexible plastics, and even non packaging plastics.

Recoup view 'mixed plastics' as an ambiguous term and now try to avoid it where possible. The terminology should be updated to reflect the four household plastic fractions of; bottles, non bottle rigid packaging, flexible, and non packaging items. Furthermore, the non bottle rigid plastic packaging can be more easily referred to as 'plastic pots, tubs and trays' (PTT's), as this appears to best describe the non bottle material in question.

Improving and Maintaining Quality of Bottles

One of the keys to the successful development of PTT's recycling is that it does not interrupt, practically or economically, existing bottle recycling systems. The quality of plastic bottles arising from the UK recyclables collection systems is best described as variable. A bottle specification was produced by Recoup in the early 1990's, which stated that contamination within a bottle bale should be no more than 5% by weight – including caps, labels and residues.

While some bottle suppliers can still achieve this today, many more are sacrificing quality for increased throughput, widening acceptance of plastic formats, avoiding capital expenditure in appropriate equipment to separate bottles from other plastics where collected, meeting political and consumer demands. This lowering quality is also encouraged by market conditions, with bottle reprocessors accepting this lower quality material due to the aggressive markets both in the UK and China, even if there are significant rejection rates.

It is accepted that ranges of quality are needed for different applications, but this must be underpinned by a base level of quality which should be set collectively by the UK plastic reprocessors. This is not to say that material cannot be sold to export markets, but it removes ambiguity over specification, and also levels the plastic field in terms of UK reprocessors issuing PRN's when the plastic is melted, compared to exporters issuing PERN's (of the same value) when whole baled material is loaded onto a ship, even if some of that material is not recyclable / not plastic.



Opportunity: Definitions, Quality and

Specifications and Audit Trails

Recoup support manufacturers in striving for recycled content goals, but it would be seen as a failure of UK recycling systems if we couldn't support these initiatives through our own bottle collections due to a lack of quality and quantity.

There are two key parts to the solution. Collection services must be supported by consistent clear simple consumer messages, and non requested items discouraged. The handling of material needs to use appropriate equipment and levels of resource. This entails QA for separate collections such as bring schemes or kerbside sort services, and, more importantly, appropriate provision for separation of plastic in commingled MRF's to meet specifications. This should generally include the sorting of plastic bottles from all other items, including non bottle plastics. The only exception is where it is sold to a recognised secondary plastic sorting facility who can provide the audit trails, so it is clear where the various plastics are being reprocessed.

The aggressive nature of waste plastic sales needs to be controlled with brokers and reprocessors accountable for providing an audit trail to suppliers, waste companies and local authorities obliged to show evidence of that audit trail. Some elements are commercially sensitive but it is important to find a way around this. Recoup continue to work across the plastic packaging supply and recycling chain to try and clarify specifications and audit trails, in partnership with other key stakeholders organisations.

Managing Expectations

The UK systems need to follow a simple rule – only collect non bottle plastics if there is a facility to separate it from the bottles before sending to a reprocessor. In addition, those facilities must have the capacity to effectively separate the bottles from non bottles, or provide an audit trail to evidence secondary downstream separation at a plastics reclamation facility, and onward sale for recycling. This material can be sent for incineration or landfill, but this must be clearly stated back to the local authority, and a decision made as to whether to pass this message to the consumer.

Recoup released a household plastics packaging recycling guidance document in 2009 which has been subsequently updated. We did not want to produce a specification for non bottle plastics because there were too many variables and uncertainties. There was, however, a need to put a stake in the ground, to have a position statement which we can work from. These guidelines are aimed at collectors and handlers, with the intention of providing coordinated and consistent information for those already collecting a range of plastics packaging from households, and providing good practice indicators for others looking to develop mixed plastics packaging recycling systems.

The opportunities for recycling non bottle plastics will develop over time, but it is key that we maintain the confidence of the householders in plastics recycling, and that we collectively only support and encourage the collection of plastics that can actually be sorted, reprocessed and recycled in a sustainable, practical and economically viable way.



Recycle on the Go

Since the last issue of Recycling Plastics News, there has been a wealth of development in the world of "Recycling on the Go". Building on the work which had been implemented during 2008 and 2009, this year has seen a significant increase in the number of locations which have set up and launched such a scheme. Recoup continue to be involved in developing new projects and concepts which touch all of these areas.

2010 has seen a large variety of projects and initiatives launched which have increased the opportunities for consumers to recycle when they are away from the home environment.

Several local authorities have developed their own on street recycling collection schemes, implementing mixed recyclables collections. In addition to these schemes, there have been a number of local authorities whom have partnered with Coca-Cola Great Britain, to launch a branded recycling scheme. These schemes are an extension to the Recycle Zone project, which Recoup project manage on behalf of Coca-Cola Enterprises Ltd, although the local authority engagement is dealt with directly by Coca-Cola Great Britain.

In 2010, Recoup hosted a conference entirely centred around Recycling on the Go. The event was extremely well attended, with delegates attending from both local authority and the private sector. At the end of the conference, it was suggested and agreed that the launching of a platform for Recycling on the Go would be extremely beneficial, in helping to develop consistency around how best practice can be used and shared when establishing such schemes.

In August 2010, the platform held its inaugural meeting to explore how the over-arching concept of Recycling on the Go should be developed and implemented. It already has 17 key members, and momentum around Recycling on the Go has continued to grow and at some pace.

Recoup have continued to be at the forefront of some of the major activities which have occurred during the year, and have an experienced team who can help you shape and deliver a successful recycle on the go programme.

To find out more about the platform go to www.recycleonthego.info



Coca-Cola Recycle Zone

Recoup have continued to deliver the Recycle Zone project and in the process achieved the target of 120 zones. As the project has grown, so has the stature of location which has engaged with the project.

Some of the more significant locations which have implemented Recycle Zone include, Birmingham International Airport, Center Parcs, ABP Ports in Southampton to name but a few. At the time of writing, the Recycle Zone project is now reaching a consumer audience of 162 million people. The strength of its visibility, coupled with its success is continuing to generate an accelerated level of interest.

The Recycle Zone project is also engaged in events recycling. Early events were very much a pilot trial, but the concept was proven to be successful. With that in mind, the level of activation is intended to expand.

Once again, the focus was on the collection of plastic bottles and cans. Building on the lessons learnt from 2009 and applying some creativity around engaging with consumers, Coca-Cola produced a "swap for swag" concept, whereby festival goers could collect plastic bottles and then trade them in for merchandise, all of which was manufactured using recycled PET.

GSK – Reverse Vending

One of the first On the Go projects that Recoup devised was in conjunction with GlaxoSmithKline and Recycling Options. Reverse Vending units were placed in three shopping centres around the UK for a trial period. The three locations were Lakeside in Thurrock, Queensgate in Peterborough and the centre: mk in Milton Keynes. The aim of this trial was to assess the public's perception to on the go recycling as well as assessing the suitability for reverse vending.

All three units used incentives to try and attract customers to recycle their bottles. The trial lasted for 12 months and in this time 17,000 PET bottles were recycled across the three centres.

The main findings of this project were that there is a definite audience and need for on the go recycling. However, there is a need for incentives to attract consumers to the units. There is also a need to make reverse vending units more economically viable.



Buxton Water

Recoup have been developing an exciting new initiative on behalf of Nestle Waters. Recycle Stations have been installed in a number of areas in Buxton, home of Buxton Water, in order to encourage and promote recycling within the town. The first phase of the project saw recycling units installed in a major tourist attraction, the main shopping precinct, and outside key locations such as Buxton opera house.

The launch of the new units was attended by the Mayor of Buxton, representatives of Nestle Waters and our very own Pete, the PET bottle mascot! The event received extensive coverage both in the press and on the internet. A good day was had by all and the message that Recycling on the Go has never been easier was well received and understood by the residents of Buxton.

An assessment of the material collected by the project was carried out by representatives of Recoup and the results have been encouraging with very little contamination found.

A consumer survey in the town was recently carried out and the overwhelming opinion of the residents was that the initiative was good for the town. There is support for further development of recycling opportunities in the area to further promote and encourage the change in behaviour which has clearly taken root in the community. As the scheme moves forward, there are plans to develop other high footfall areas in and around the town centre in order to increase and build on the momentum that the project is now gathering.



Tesco

The objective of the Tesco project was to promote responsible recycling behaviour, encouraging more people such as pedestrians, shoppers and office workers to recycle their waste when they're 'on the go'. The machine automatically recognises and segregates plastic drink bottles (PET) and drink cans (aluminium and steel), the most common items thrown away in high street waste bins. They are compacted or shredded in order to make collection more efficient. Tesco used its existing store recycling infrastructure to transport the material to depots for bulking for collection by a reprocessor. The trial units were installed at 10 sites in Essex, Hertfordshire and Hampshire.

To help promote the scheme and raise public awareness, Recoup were actively involved in official launches, schools presentation, customer and local business surveys, and material assessments. The machines also gave different types of incentives such as clubcard points, vouchers and donation to local charity.

If you are looking for advice and assistance to set-up a trial or scheme then we can help you – our years of experience means that we have a flexible model that can be adjusted to suit just about any 'away from home' environment. Call the project team today on: +44 (0)1733 390021



Gateways to Knowledge - Working with Europe and Beyond

Recoup are a founding member of the European Association of Plastic Recovery and Recycling Organisations (EPRO). We work together with 18 organisations representing 15 countries on developing best practice and innovative approaches to plastics packaging recycling across Europe.

Recoup were involved in both the organisation of the competition and Stuart Foster of Recoup moderated a session on the second day about capturing value opportunities through open loop recycling.

Understanding the European view on plastics recycling is essential for every organisation involved in the plastics supply chain, as systems and areas of strength are different for every country. Recoup play an active role within all four of the EPRO working groups – Best Practice, Bottles, Mixed Plastics and Communications. The output from these groups has proved beneficial to our existing members and the wider UK plastics packaging recycling community.

Plastics – The Facts 2010

A good starting point for finding out more about the European picture is the report 'Plastics - The Facts 2010', which is the plastic industry's report on trends in production, demand and recovery of plastics. This report has been produced in partnership between PlasticsEurope, EuPC, EuPR and EPRO. This is a great example of the collaborative work EPRO gets involved in, and the full report is available from the EPRO website.

EPRO Best Recycled Product – this competition is in its second year and looks to promote the cycle of plastics, as well as increase the request for recycled materials. The entries had to contain at least 50 per cent recycled plastics. They also had to be made out of recycled used plastics packaging, entered the market and made sales since 2008 and of course, it has to be manufactured in Europe.

To date the competition has had over 60 entries from 13 countries. The entries were judged by a panel from across Europe, including representatives from EPRO, Plastics Europe and EuPR. The awards were presented on at a key plastics industry event - Identiplast 2010, in London.



Mechanical Biological Treatment

New treatment options are being implemented as part of the local authorities waste management portfolio.

A technology that is still in its early stage in the UK but already widely used in mainland Europe for the (pre) treatment of residual waste is the Mechanical and Biological Treatment (MBT), which consist of a range of processes applied in order to mechanically recover valuable recyclates as well as biological treatment to reduce the biodegradability of the organic matter. However, some types of MBT are less compatible with plastic recycling than others; for example, some technologies apply size reduction techniques (e.g. hammer or ball mill) or high temperatures that produce outputs almost impossible to be further separated.

Considering the origin of the waste input (e.g. black bag / residual waste), despite MBT recovering valuable fractions, markets are not always available and landfill becomes the main disposal route for the plastic fraction; alternatively, energy from waste can also be considered if capacity exists.

As a result, any recycling opportunity for the plastic packaging stream that results in better economics than the current landfill option will be commercially attractive. Separation of plastics from MBT systems provides the benefit of capturing all of the plastics not recovered through recycling schemes such as kerbside, with minimal additional investment compared to the total cost of this type of facility.



Case Study

Recoup were commissioned by a major MBT operator in the UK to conduct a review of the plastic material being produced from the plant, assess the market options and potential values, and suggest any changes to the existing system to improve value and reduce costs specifically relating to the management and recovery of plastic wastes. As a result, the output currently produced in the treatment which was being disposed of in landfill had a negative value (e.g. gate fee and landfill tax). Recoup indicated that it was possible to generate revenues by sorting the plastic fractions in different value categories.

Despite some of the proposed scenarios involving a range of investment levels, the majority would achieve a cost neutral position in less than 2 years.

Recoup have completed detailed assessments on wastes from these types of facility, and have found that the quality of recoverable plastics could be suitable for some reprocessing applications. Various plastics packaging including PET and HDPE bottles were prevalent within the waste fraction. This makes sense given the current plastic bottle recycling rate is 46%. While this approach is not an alternative to kerbside recyclables collections, it may provide the opportunity to recover the bottles thrown in waste bins, depending on the residual treatment technology used.

Bioplastic

The term 'bioplastic' refers to a renewable and sustainable alternative to oil-based plastic and it has two different concepts: 'compostable plastics', based on renewable and/or non-renewable resources (e.g. polylactic acid and polyhydroxyalkanoates) and 'bio-based plastics', produced on the basis of renewable sources but not in all cases biodegradable and compostable (e.g. polyethylene from sugar cane).

The most commonly used feedstocks for compostable plastics are corn, potatoes, cereals, sugar cane and wood; the biodegradation depends on the temperature, humidity and microorganisms and is recommended to be undertaken by commercial biowaste treatment plants. Bio-based (non-biodegradable) bioplastics, which are derived from renewable biomass but are not easily degraded by microorganisms, can be made from plant oils extracted from castor, soya bean or rapeseed, to manufacture conventional plastic resins, or from bioethanol, to manufacture conventional polyethylene.

There are also mixed bioplastics that are manufactured using different mixes of bioplastics or mixing bioplastic with petroplastics, and therefore, can be biodegradable or non-biodegradable, respectively.

Considering the various applications for bioplastics, the most common already available in the market include:

- Compostable waste/carrier bags;
- Catering products (trays, cups, plates, cutlery);
- Rigid packaging such as containers and bottles

PET and HDPE packaging are being manufactured using a plant-based material instead of the petrochemical version, which can result in a product manufactured using sustainable source and without interfering in the recycling and reprocessing industry. Bio-based PET is being used by Coca Cola (PlantBottle), and bio-based HDPE is being used by Procter and Gamble.

Oxo-Degradable Plastic

There are other alternatives to plastic being adopted that contains additives that affect the chemical the composition to degrade (fragment) under specific conditions (heat, UV radiation, stress); they are known by terminologies such as "oxo-degradable", "oxo-biodegradable", "degradable" or "totally degradable" plastic. These plastics are made of petroleum-based polymers and therefore should not be classified as "biodegradable".

Common issues

Biodegradable/compostable plastic still poses issues to mechanical recycling, as the technology used to separate plastic packaging is not widely available and hand sorting is still applied. As a result, PLA bottles, a biodegradable material could end up being reprocessed together with PET bottles, made from oil based resources, resulting in contamination of the PET fraction. In the other hand, commercial composting plants are not widely adopted and the degradation time adopted by these facilities is usually shorter than the required to degrade biodegradable plastics, resulting in contamination.

Regarding oxo-degradable plastics, the inclusion of this material in plastic reprocessing facilities could result in destabilised end products, due to its pro-oxidation additives content. Recent studies recommend incineration and landfill as best disposal options for it.



Increasing Bottle Reprocessing Infrastructure

The high demand for plastic bottles from UK, EU and Far East markets is expected to continue, although elevated targets are not expected to result in immediate significant PRN value increases. The high demand for plastic bottles from UK, EU and Far East markets is expected to continue, although 2011 and 2012 recycling targets are not expected to result in significant PRN value increases. With even more plastic bottle reprocessing infrastructure planned for implementation in 2011, the need for more bottle collections is clear. But this can only be achieved through an infrastructure that gives every UK household the opportunity to recycle plastic bottles in convenient and easy to use system. Alongside this is the prospect of other plastics packaging formats (non bottles) being collected in greater amounts.

The focus has shifted onto wider plastic packaging collections in recent years, but the infrastructure to effectively handle and reprocess this material has not yet caught up with collection levels which also continues to increase. This has led to increased sales of combined bottle and non bottle plastic material.

Values

Values for baled plastic bottles are expected to be maintained. Premium fractions such as Clear PET and Natural HDPE attract the highest values, with the mixed bottles most likely to contain contamination, and therefore showing polarized values based on the estimated contamination levels. Pots, tubs and trays are generally of a negative value which can be worsened by the presence of other waste and non plastic contamination.

Working with the experts

Recoup Services Limited (RSL) is a wholly owned subsidiary company of RECOUP. Set up in 1997, RSL is a well established reputable trading organisation within the plastic recycling industry offering secure markets, excellent sustainable rates and a reliable service for the recycling of plastic waste. RSL provides end markets to local authorities, environmental organisations, charities, and waste management companies who are involved in the collection and sorting of plastics materials.



We want your plastics

We buy plastic bottles, other domestic plastic packaging and commercial plastics for recycling. We also offer a full market review service to help you identify the type of plastic waste you have, as well as a valuation of your waste. If you need help to develop your plastic collection and sorting facilities, we can provide this through our consultancy service.

Payment for goods in full – on time, every time
 We guarantee favourable payment terms for all loads received.

Competitive values offered
 We work with a number of market outlets to ensure competitive, sustainable prices are provided. RSL can also offer you advice on the latest market developments and assist with contracts and spot market prices.

All you need to do is pick up the phone – we will do the rest

RSL can provide you with a 'one-stop-shop' service, from providing reliable material collection and haulage services, working with licensed haulage companies, to helping manage your legislative and compliance paperwork, to offering detailed material assessments and feedback. All the work we do is accredited to ISO 9001 standards.

Capital funding available as part of material purchase agreement

We can provide funding towards equipment related to your plastics handling activity in return for a materials purchase agreement. The amount of funds available will depend on the agreed tonnage to be supplied and timescale of agreement.



RECOUP

REcycling Of Used Plastics Limited



Membership

We can help you to look at
the bigger picture

As a member benefit from our
knowledge, experience and vision:

- Policy consultation
- CSR delivery
- Broad expertise
- Research
- Technical specialists
- Extensive resources
- Information services

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