

Local Authority Plastics End Market Analysis May 2019



PLASTICS MARKETS - THE BACKGROUND

Plastics packaging collected for recycling provides income generation, employment and business opportunities for Local Authorities, Waste Management providers and recyclers.

As with all material commodities, the value of plastic collected for recycling changes due to market conditions. Regardless of values of collected plastics, with landfill and Energy from Waste costs, the business case to recycle is proven if an end market is commercially viable.

Since the Chinese Government announced that it would ban the import of post-consumer plastics, the market for plastic packaging has shifted substantially. Other destinations were sought, and countries such as Malaysia, Vietnam and Poland saw a rush of material being exported there, with the UK a prime exporter.

These countries couldn't cope with the additional material, and with tougher import restrictions and import bans in place, end markets availability has been transformed in a relatively short time.

RECOUP asked Local Authorities across the UK how the changing position of end markets for plastics collected for recycling is affecting them.



SUMMARY OF FINDINGS

- <u>52%</u> of Local Authorities reported they were experiencing issues with plastic markets, with nearly half of these stating market values were being affected.
- There are <u>stable markets</u> for good quality material. This is largely:
 - Clear and light blue PET bottles
 - Natural HDPE milk bottles
- Local Authorities only collecting plastic bottles stated they would like to continue with a <u>bottle only collection</u> scheme as values for this material have remained stable.
- The only fraction of plastic pot, tubs and trays with end markets is <u>Polypropylene</u> pot and tubs.
- <u>Quality</u> is the primary market factor and increasingly end markets are becoming more limited low grade material or 'mixed plastics' are being diverted to Energy Recovery, RDF and SRF.
- <u>Plastic film</u> is generally reported to be going to Energy Recovery.
- Although there is an <u>increased interest</u> from consumers in recycling they are increasingly recycling plastics that are not target material or not presenting them in an optimal way e.g. removing excess food, and the current systems are not able to handle the diverse and complex nature of the material.
- The UK Government has just closed four consultations that aim to meet commitments set out in the *Resources and Waste Strategy* and the *25 Year Environment Plan* to accelerate change to how the UK funds, structures and manages its waste materials. New funding and infrastructure systems should increase and focus investment to transform consumer collections, material sorting and recycling of post-consumer packaging, and development of UK based end markets should be a central component of this. This does not change the position in the short or medium term, and a <u>careful balance</u> is needed between delivering any interventions quickly to meet immediate needs and optimising any changes to meet the UKs long term aims.

WHAT ISSUES ARE YOU CURRENTLY EXPERIENCING WITH PLASTIC MARKETS?

52% of respondents said they were experiencing issues with plastic markets.

It was reported there is still good demand for traditional good quality material – clear PET and natural HDPE bottles, and prices for these materials are holding. MRF's are recovering as much of this material as possible.

Increasingly end markets are becoming more limited, and 'mixed plastics' potentially becoming a non-tradeable fraction unless there is enough clear PET bottles, natural HDPE or PP in the stream.

New markets are continually being investigated to seek best prices. It is reported there is a not enough value in Local Authorities and Waste Management Providers collecting the lower grade material, even with changing operations to produce higher quality material or refine fractions to increase potential to sell the material and benefit from the value of it.



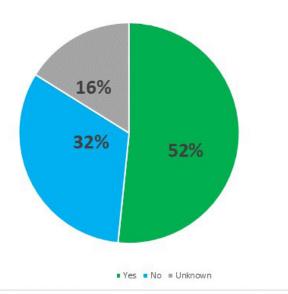
"A key issue raised for our (multi-national) contractor was that MRF speeds have been slowed down to improve quality in order to meet market expectation"

Non-Recyclable Mixed Plastics

"Mixed plastics previously counted by the MRFs as 'non-target recycling' but is now increasingly being categorised as 'nonrecyclable'"

Reprocessors and Traders Rejecting Materials

"Reprocessors and traders advising they are unable to accept some materials. Limited market for where they can be accepted"

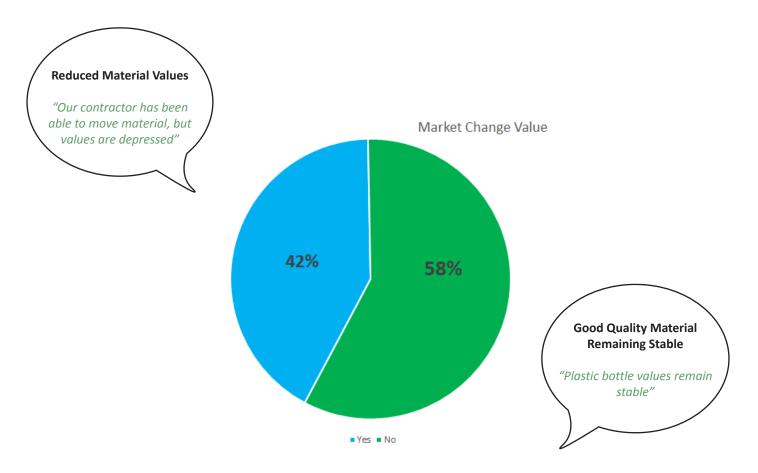


Plastic Market Issues

IF THERE ARE ISSUES WITH PLASTIC MARKETS IS THIS AFFECTING MARKET VALUES YOU RECEIVE?

Of the Local Authorities who could see market values 42% of respondents said plastic markets was affecting market values, and 58% responded it was not.

The consensus is that the price per tonne of mixed plastics has dropped but clear PET and natural HDPE plastic bottles prices are remaining steady.



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ARE THE ISSUES WITH PLASTIC MARKETS FOR ALL PLASTICS OR SPECIFIC FRACTIONS, FORMATS AND TYPES?

Plastic bottles are still the primary income stream across all Local Authorities and are seen to be maintaining their value.

The market price of plastics, and the ability to find a market, are the primary drivers for the materials that Local Authorities collect for recycling. With a weak, or limited market, some Local Authorities reported they are now moving some plastics to Energy Recovery, Refuse Derived Fuel (RDF) and Solid Recovered Fuel (SRF) end destinations.

Focus on Stable Market Values

"We are only collecting bottles as the values have remained stable."

Importance of Quality

"Since the China announcement, we have had difficulty regarding the margarine tubs, yogurt pots, food trays, etc, including the Polypropylene, such that as a temporary measure this is going to RDF. However, we are successfully placing to market all types of plastic bottles which we bale as mixed plastics of good quality. Quality seem keys to both being able to place to market and get a decent price."

ARE YOU SENDING ANY PLASTICS COLLECTED FOR RECYCLING TO ENERGY RECOVERY OR LANDFILL AS A SHORT-TERM MEASURE DUE TO THE RECENT RECYCLING MARKET ISSUES?

The majority of Local Authorities reported they are not sending plastic to landfill, but advised if markets do not recover soon then this is an approach they are having to consider.

It was reported that MRF residues (10-12% of total input material) have been sent from waste management providers to Energy Recovery treatment, which included plastic pots, tubs and trays and 'low-grade plastics'. Contractors have said this 'non-target' plastic ends up in Energy Recovery, Refuse Derived Fuel (RDF) and Solid Recovered Fuel (SRF).

Plastic film was generally reported to be going to Energy Recovery, and there is strong feeling that film collection and recycling isn't being addressed in a logical way. It was reported there needs to be an incentive to collect, sort and recycle film, but only as long as there are practical collection and sorting solutions and commercially viable end markets.



Low Grade Plastic Going to RDF/ SRF End Destinations

"We are seeing an increased amount of "non-target" plastic. Much of this is now rejected and ends up in RDF/SRF."

The Issues with Plastic Films

"Plastic film collection isn't being address properly. The longterm solution seems to be that plastic films should be collected by all kerbside schemes, but that is unlikely to become common practice for many years unless there is a market for this material. In the mean time we just have the in-store facilities at larger supermarkets, but there is not an incentive to promote these collection points and deliver big in-store communication campaigns to increase collection rates. I expect the capture rate is currently well below 1%. There is huge potential for improvement assuming that there is still a recycling market for this material - if there isn't then it all becomes highly misleading!"

ARE YOU CONSIDERING ANY PLASTIC SERVICE OR INFORMATION CHANGES TO RESIDENTS DUE TO THESE ISSUES?

Most Local Authorities who responded said that they were not currently looking to make any changes in information to residents.

However, due to the current markets several Local Authorities reported they are considering small scale changes to better highlight the limited material they want to target (plastic bottles). They reported they may also run a 'general contamination campaign' listing the common plastics not wanted.

Reinforcing Plastic Bottles Only

"Instruction to residents has always been plastic bottles only, communications do not necessarily need to change. However, the message to only include bottles may be reinforced."

Non-Target Plastics Informing Communication Campaigns

"Analysis of the current rejects suggest that 20% of our rejects is non-target plastics so as part of a general contamination communication campaign we are listing common plastics which we don't want as well as the common rejects."

How RECOUP can Help with Communicating Changes to Residents

Pledge 2 Recycle is RECOUP's national plastics recycling initiative aimed to boost plastic recycling in the UK and achieve real behaviour change through consistent and simple messages.

We work with Local Authorities across the UK to reduce confusion and increase plastics collected for recycling through education and communication.

Plastic is a truly sustainable and circular resource, but positive consumer behaviour change is central to tackling ongoing ambitious targets and circular economy aspirations.

If you would like to know more about how we support Local Authorities through our *Pledge 2 Recycle* initiative contact enquiry@recoup.org.



ARE THERE OTHER RELATED COMMENTS OR INFORMATION THAT WOULD BE USEFUL, OR YOU'D WANT TO SHARE?

Although Local Authorities reported they are struggling to find markets for the 'mixed plastics', plastic pots, tubs and trays and plastic film, it was reported markets for good quality plastics is high.

There was a common feeling amongst Local Authorities that some plastics packaging placed on the market are leaving Local Authorities and waste management providers with the problem of managing and disposing of what is seen as poor-quality material, with little or no thought about recyclability or end destination of the packaging. However, with an increased focus on design for recycling, there is increased optimism this could be transformed.

Local Authorities have seen an increase in consumer interest in recycling, but consumers are increasingly placing plastics for recycling that are not target material or not presenting them in an optimal way. This includes excess food not be removed from plastic food packaging, not being rinsed or top film not being removed from ready meals. The current systems are not able to handle the diverse and complex nature of the material and therefore deliver high collection rates with premium material quality.

The UK Government has just closed four consultations to meet commitments set out in the *Resources and Waste Strategy* and the *25 Year Environment Plan* to accelerate change to how the UK funds, structures and manages its waste materials. New funding and infrastructure systems should increase and focus investment to transform consistency, convenience and enhanced engagement to manage post-consumer packaging, which should make it easier for consumers to recycle.

Design For Recycling

"Issues will only be addressed when producers are made responsible for the real cost of their packaging choices – currently, most of this cost is carried by Local Authorities."

Consumer Desire To Recycle Having Unintended Consequences

"Over the last year plastics and environmental issues have gained greater media attention, this hasn't entirely been beneficial to Local Authority recycling collections. We have seen a significant increase in a vast array of plastic material been put in the kerbside collection systems, although approximately half of this is not recyclable through these schemes in their current state."





LOCAL AUTHORITY PLASTICS END

MARKET ANALYSIS

Written by Steve Morgan & Amanda Bakewell

This work was commissioned by RECOUP to support its members. The content and analysis contained in this report is based on the information received. While every effort has been made to ensure the accuracy of the contents, RECOUP can accept no responsibility or liability for any errors or omissions.

RECOUP is a charity and leading authority providing expertise and guidance across the plastics recycling value chain. Built on a network of valued members, collaboration is central to our activities, and we are committed to securing sustainable, circular and practical solutions for plastic resources both in the UK and world-wide.

RECycling of Used Plastics Limited (RECOUP) Registered Charity No: 1072029 & Company Registration No: 102435729 1 Metro Centre, Welbeck Way, Woodston, Peterborough, UK, PE2 7UH t: +44 (0)1733 390021 e: enquiry@recoup.org w: www.recoup.org



@Recoup_UK
@pledge2recycle