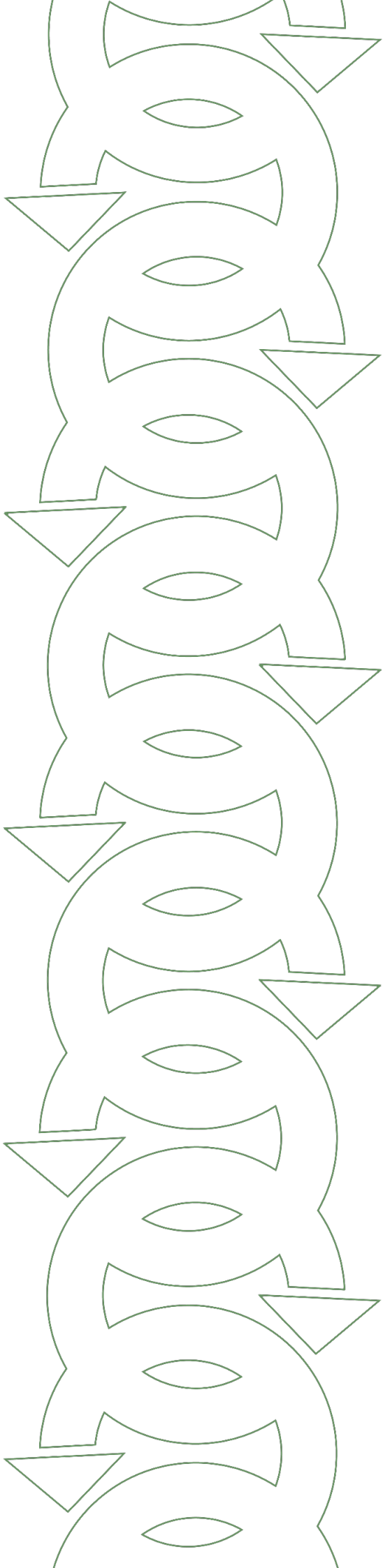


Plastic Plant Pots – Give Them a Break!

May 2024

RECOUP

Leading a more circular
plastics value chain



Plastic plant pots come in a variety of sizes, an abundance of bright colours and are usually made from mono polypropylene (PP). This is a primary polymer and one of the most used types of plastic for all types of packaging formats, including food, consumer goods, automotive, construction, the list is endless. It also has recognised end markets and can be recycled back into new products.

So, why are plant pots not being collected, sorted, and recycled given they are made from such a valuable material?

Most local authorities do not actively collect plastic plant pots as part of kerbside recycling collections for the following reasons:

- Concern that the consumer does not always empty the soil and plant from the pot before disposing of it, causing contamination to the other materials (both plastic and others) in the recycling stream.
- The pots and trays can be made of materials that are not commonly sorted and mechanically recycled, like PS.
- The PP plant pots that are black contain a carbon pigment that when presented to the infra-red optical eye at sorting facilities cannot be detected as it absorbs the light. So, the pot ends up being rejected.

Approximately 5 years ago, plastic plant pots and bedding trays were commonly black with some being made from PP, and some from polystyrene (PS). Since then, consumer awareness of sustainability has increased, and media coverage promoted black plastic as bad! With most local authorities not accepting plastic plant pots as part of kerbside recycling collections, the industry went to work.

With these barriers in mind RECOUP, The Horticultural Trades Association (HTA) and plant pot manufacturers came together to address these challenges. The first step was to rethink the design, and most importantly the colour. A number of newly manufactured, coloured plant pots were rigorously tested by RECOUP at various UK Material Recovery Facilities (MRF) and controlled tested at an independent laboratory in Europe. The tests took place over the course of 2 years and manufacturers worked tirelessly to produce colours that contained minimal or no carbon pigment using colours that were easily identified during the optical sorting process.

RECOUP CEO Stuart Foster stated, "This is a valuable fraction of plastics and I see no reason why it shouldn't be included in household recyclables collections subject to meeting usual good practice collection requirements, namely being clean and empty."

It was evidenced that many of the coloured PP plant pots can be crushed and successfully moved through the sorting process, being correctly identified as PP and being sent for further processing. RECOUP also investigated the next step of the recycling of PP plant pots and sought guidance from a PP re-processor. It was widely communicated that mono PP plant pots are a valuable material and can be easily processed into pellets that go on to make new products.

At this point, after successful testing the findings were presented to local authority representatives to discuss the reasons why plastic plant pots are not widely collected as part of kerbside recycling across the country.

The counterargument largely remained the same with the concern that the plant pots will be discarded containing contaminants, and it would encourage households to clear out their sheds and outbuildings of old stored plant pots resulting in all kinds of unwanted materials.

The data from RECOUP's 2023 UK Household Plastic Packaging Collection Survey reported that only 30 of the 379 local authorities across the UK target plastic plant pots as part of their kerbside recycling collections. That is less than 10%. By comparison, 88% accept plastic pots, tubs, and trays.

So, why do these 30 collect them and what do they do differently to avoid the issues and concerns raised by other local authorities and waste management companies?

To investigate further, RECOUP conducted case studies with several of the local authorities that actively collect plastic plant pots as part of their kerbside recycling collections. These local authorities actively communicate to their residents that plastic plant pots can be included providing they are empty and are not black in colour. They confirm that the PP plant pots are sorted into the mixed plastic bales and sent on for further processing.

There is no special process for plant pots in the MRF, they behave the same way as most other packaging formats, and being classified as packaging should be included in this process.

To help meet the challenge of ensuring these formats are recycled, RECOUP would present the following points:

- The plastic plant pot is a type of packaging, and like all other packaging the consumer is asked to empty and clean before they place packaging into their recycling bin.
- In recent years, black plastic packaging for food has become almost extinct and is rarely seen in supermarkets. This is also true for plastic plant pots, a visit to a garden centre can confirm this. Black plastic is often avoided in recycling collections, and this is actively communicated to residents in what can and cannot go into recycling, Surely, this would and could be the same for black plastic plant pots?
- Like other industries, the horticulture sector has worked together to reduce the use of black plastic and carbon pigments, with lack of recognition unlike the large retailers who replaced black plastic for food packaging with unanimous applause.
- There have been some concerns about the potential size of plant pots with larger 3 litre pots or bigger being placed into recycling bins causing issues for the MRF's flow of material. This comes down to common sense and the communication would remain the same to residents: "no large or bulky items."
- Most keen gardeners are conscientious about the environment and sustainability and are willing to do the right thing when it comes to recycling.

Following the extensive work carried out from 2018 around plastic plant pots, it seems that things are not much further forward. Back then 40 local authorities were collecting them for recycling and today the number is down to 30 which feels like the great strides made in making the pots detectable have been counterproductive.

In April this year, RECOUP held a webinar for RECOUP members in the horticultural industry to get an update on how things are progressing for manufacturers around sustainability, particularly since the UK Plastic Packaging Tax was introduced, whilst also drawing on their experiences in other markets. Joining the online seminar was a representative from a UK PP recycler who gave valuable evidence that mono PP plant pots can be easily processed and are a valuable material with recognised end markets.

It is evident that the industry continues to follow guidelines when it comes to design for recyclability, and they have taken responsibility as an industry to use carbon black-free pigments. Now industry

need to openly communicate their challenges and frustrations regarding plant pot collections with local authorities and reach agreement with Waste Management companies.

The average UK household spends around £150 per year on their gardens and the garden industry made an estimated £28 billion contribution to national GDP in 2019.

There have been and continue to be many trials of plant pot takeback schemes at garden centres across the UK, but these schemes come with challenges - many of these stores are small, independent garden centres and do not have the space or staff to manage a take back scheme, and there is a minimum volume required to make the scheme viable.

DIY giant B&Q last month announced in the press that they have installed plant pot recycling stations across their UK stores and RECOUP would be keen to engage with B&Q in analysing the data from this scheme.

Last year, the Horticultural Trades Association responded to DEFRA's consultation on simpler recycling. They requested clarity on the issue of recycling non-black plastic plant pots. They urged for explicit acceptance of such pots in the recycling stream, so that individual councils could not have the liberty to interpret the recycling guidelines and create confusion among households who want to recycle. Unfortunately, the "do not recycle" category for garden waste mentioned plant pots as well, which could give the impression that they are not recyclable at all.

Packaging from all sectors is evolving, with constant variations of on pack instructions to consumers about how to dispose of them. The food and beverage industry especially make frequent alterations to packaging which affects disposal.

- Lid on or lid off bottles.
- Multi material food packaging, remove card/separate plastic.
- Film, take to supermarket collection point.....

And added to this list should be.

- Plastic plant pot – **EMPTY RECYCLE!!**

The whole industry is behind this issue and with a valuable recyclable material currently being lost it makes sense that the best solution would be for all UK local authorities to collect plastic plant pots through kerbside recycling collections.



RECOUP is the UK's leading independent authority and trusted voice on plastics resource efficiency and recycling. As a registered charity, our work is supported by members who share our commitments including a more sustainable use of plastics, increased plastics recycling, improved environmental performance and meeting legislative requirements. We achieve these by leading, advising, challenging, educating and connecting the whole value chain to keep plastics in a circular system that protects the environment, underpinned by evidence and knowledge.

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 of this publication, RECOUP cannot accept responsibility or liability for any errors or omissions. Opinions expressed by external contributors may not reflect RECOUP positions. Recommendations provided herein are offered for the purpose of guidance only and should not be considered legal advice.

RECOUP publications are exclusively available to members for a period of 3 months before being released to the open domain. All information contained in this report will remain the subject of copyright and any reference made to this document must ensure that RECOUP is credited.

**1 Metro Centre
Welbeck Way
Woodston
Peterborough
PE2 7UH**

T | 01733 390021
E | enquiry@recoup.org
W | www.recoup.org