



Introducing

**Eco**trace

 Polytag

# An industry-led programme for optimising single-use plastic recycling in the UK: a revolutionary initiative





# A game-changing approach to single-use plastic recycling

---

A coalition of major FMCG brands and businesses are joining forces to launch a game-changing approach to data collection and optimisation of single-use plastic recycling in the UK.

The Polytag EcoTrace programme will be set-up and operated 'for the industry, by the industry' with the objective of investing in and deploying UV-tag detection equipment in recycling centres.

The initiative will utilise financial contributions from businesses that deal in single-use plastic to deploy UV-tag detection equipment into recycling centres. Suitable recycling centres will be identified based on the volumes of single-use plastic being handled - prioritising sites handling the highest volumes to achieve optimised coverage with minimal investment. The UV-tag detection equipment will be signed-over to and owned by the recycling centres.

A clear plastic bottle is the central focus, filled with a blue, shimmering liquid. It sits on a base made of a glowing blue wireframe mesh. The background is a dark blue space filled with bokeh light effects and a large, faint, glowing blue number '1'.

//01

Impact at a  
national scale



**A network of UV-tag detection equipment across 40+ UK sites will achieve over 90% coverage of the total domestic recycling throughput**

In collaboration with Polytag, an innovative recycling technology business, the industry-led programme will unlock a real-time data revolution.

Data is a key enabler for a successful circular economy and can inform strategy at both a brand-level and a national-level - we've all heard that 'what gets measured gets managed'.

A network of UV-tag detection equipment installed across the UK's 12 largest recycling centres secures 50% coverage of the total domestic recycling throughput (based on the Monksleigh Report). A network across 40+ UK sites will achieve over 90% coverage.

Locations are ready to deploy UV-tag detection equipment including those operated by Biffa, Bryson and Re-Gen Waste. Additionally, support from the Welsh Government - who have pledged a £92,000 investment - will ensure representation of UV-tag detection equipment at recycling centres across Wales.

Creating a circular economy for single-use plastic in the UK is a significant but ambitious necessity.

Thanks to industry collaboration enabled through Polytag's innovative solution the circular economy can now become a reality: Brands that apply a simple UV-tag to their label artwork on single-use plastic packaging, will be able to access never-before-seen data - in real-time and at barcode level - about recycling rates of their packaging.

//02

# Why contribute to the Polytag Ecotrace programme?



## Challenges in single-use plastic recycling

### Current industry limitations

Brands have no visibility of what happens to their single-use plastic once it has been put in the bin. Recycling is effectively a 'black-hole' and brand insight is impossible to report due to limited technology and innovation for capturing barcode-level data in the UK recycling sites.

### Need for innovation and collaboration

The transition to a circular economy is complex and requires industry-wide adoption of new processes and concepts. Establishing common methods of standardised data collection in order to inform strategies and guide operational optimisation is a key part of enabling circularity. Polytag is an approved GS1 partner and operates in-line with open global standards.





## A unique value proposition for brands

### Develop informed strategy around SDG, GHG and ESG targets

Real-time, measurable data at barcode level provides a benchmark for understanding recycling rates of single-use plastic packaging.

### Support response to packaging EPR and digital waste tracking

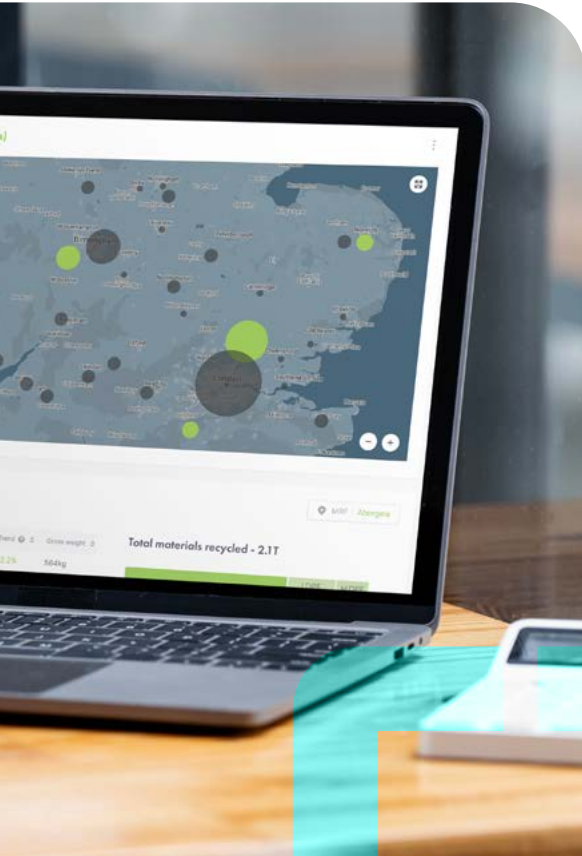
Insight collected across a network of UK-wide recycling centres unlocks new perspectives on modulated fees and can optimise sortation.

### Mitigate greenwashing risks

Verify claims of packaging recyclability with barcode-level information reported live from recycling centres.







## Proven low-cost solution, ready to scale

1. Polytag has successfully operated a number of UV-tag detection units at Biffa and Welsh Government recycling facilities for over 12 months. The hardware has been certified to Technology Readiness Level 9 by The Advanced Manufacturing Research Centre, Cymru – a world leading engineering and research centre where Polytag has had 'residency' for three years.
2. Several fluorescent UV ink manufacturers, including Sun Chemicals and Paragon Inks, have off-the-shelf ink approved and available for 'Use On Food Grade Packaging'. These inks are already widely used on FMCG labels and packaging as trigger marks for manufacturing operations, and performance is well understood in downstream recycling processes.
3. The fluorescent UV ink is applied during standard plate-printing process. It delivers a low-cost tag solution, invisible to the human eye and therefore easily incorporated to existing label artwork design. There is no impact on printing speeds.
4. The Polytag analytics dashboard has been successfully recording and reporting data on UV-tag detection for several of the UK's biggest brands over the last 12 months including Co-op, Ocado and Aldi. Further information is available on request.

Polytag's UV tags are being used on Co-op's own brand water to provide unique insights into recycling rates



//03

# Programme framework and deployment principles



**Your opportunity  
to shift the dial  
when it comes  
to the recycling  
of single-use  
plastics in the UK**

### Minimum contribution and programme details

- A minimum contribution of £50,000 per brand is required to participate in the programme
- Polytag recommends at least five SKUs are marked with UV ink tags to collect meaningful levels of data
- Brands who contribute £50,000 to deploying UV-tag detection equipment will automatically get six month's free subscription to their own brand account dashboard, which reports on UV-tag data captured from single-use plastic via UV-tag detection equipment deployed in UK recycling centres
- Polytag will work closely with participating businesses to ensure good PR coverage and opportunities to visit sites enabled with UV-tag detection equipment can be arranged



A game-changing approach to single-use plastic recycling

## Partnership with Polytag and connected partners

- Polytag, an innovative recycling technology solution provider, is integral to the programme's success, offering a proven hardware specification for UV-tag detection equipment
- Allocation of UV-tag detection equipment in recycling centres will be based on the volume of single-use plastic being processed, highest volume sites will be prioritised
- Polytag and selected hardware partners will conduct surveys at recycling centres to tailor the design and build process according to specific site requirements
- The installation and commissioning of UV-tag detection equipment will follow a meticulous process to ensure accurate and secure data capture from UV-tags applied to single-use plastic
- Once a UV-tag detection unit has been installed it will be assigned to the ownership of the recycling centre
- Data collected and reported will be managed in accordance with Polytag strict data handling processes, outlined in Polytag's subscription agreement
- A quarterly report will be circulated to all programme stakeholders, ensuring information of the roll-out and successes of the 'Polytag EcoTrace' programme are well documented and widely communicated





# Be part of the change

---

## Join the Polytag Ecotrace Programme

The Polytag Ecotrace Programme represents a tangible and practical solution to enable the single use plastic circular economy: no more talk, no more reports... for the first-time brands can stop guessing and start knowing where and when their plastic is getting recycled.

By it's very nature - as an industry-led programme - this is a unique opportunity to be part of a truly collaborative and ground-breaking initiative. Once the data is available who knows what it may unlock in terms of an innovative and data-led revolution in single-use plastic recycling in the UK?

Interested Brands are invited to meet with the team at Polytag to discuss making a contribution and being part of this positive PR story, which is set to shake up the industry!

Contact Alice Rackley at [alice@polytag.io](mailto:alice@polytag.io)





**For the first-time brands can  
stop guessing and start knowing  
where and when their plastic is  
getting recycled**



[www.polytag.io/Ecotrace](http://www.polytag.io/Ecotrace)

