

CONSULTING
SERVICES



Turning today's waste into tomorrow's products

WHAT ARE THE CURRENT RESOURCE ISSUES?

It is now widely accepted that our current processes and systems for resource recovery are ineffective and inefficient. Significant changes must, therefore, be made if we are to transition to, and receive the benefits from, a more circular economy.

As such, we currently face the following challenges:

- Decreasing, and eradication, of export markets for poor quality 'mixed recyclables'. This will result in a zero-tolerance approach to contamination by contractors that will lead to a significant increase in disposal costs and, consequently, a decrease in recycling performance for businesses.
- A deepening concern about the impact of waste on the environment, highlighted by recent mainstream issues such as paper cup recycling and ocean plastics.
- Increasing scarcity of resources that will greatly impact the ability to source raw materials, at a commercially viable price, to sustain a manufacturing industry.
- A lack of belief in our current recycling systems which provide little tangible evidence to confirm that products, that are claimed to be recyclable, compostable or collectable, reach their intended destination and are actually recycled or composted.
- A lack of visibility of the real end-of-life disposal points for material that represents a significant reputational risk to businesses and compromises the validity of sustainability reporting that is shared with stakeholders





We know the issues, so why can't we find the solutions?

Although the concept of the circular economy is now understood, our experience tells us that businesses really struggle to work out how they can implement it into their practices. Here are some of their issues:

- Although the commercial benefits are clear, businesses want to implement in bite size chunks to ensure that the process of transition is also commercially viable.
- Transition requires a level of collaboration that organisations are not normally used to. Instead, they need help to work outside of their insular focus and become part of a wider system.

How can Closed Loop Consulting Services help?

Long before people even knew what recycling was, Closed Loop has been pioneering what we now know as the circular economy with major global brands. We are not a consultancy that will tell you what you need to do and not help you deliver it; rather, we are commercially minded practitioners who design and implement long-term, commercially viable solutions for you, and your stakeholders, that will assist you in making the transition to a circular business model.



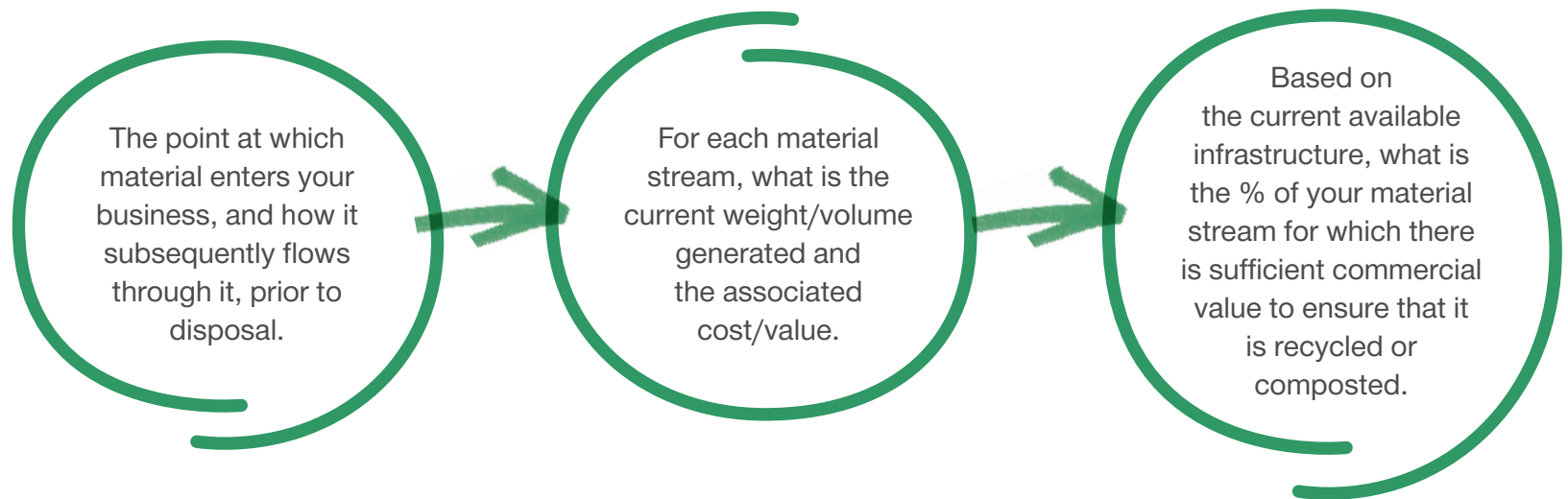


HELPING YOUR BUSINESS SAVE MONEY AND REDUCE WASTE

Waste not only represents a financial cost to your business. Failure to reduce waste, re-use where possible and recycle more, may also be detrimental to your reputation. If your organisation produces a lot of waste then we have the tools to not only save you money but to also turn today's waste into tomorrow's products. By keeping the material within the UK, together we can stimulate the green economy and facilitate the investment in much needed recycling and reprocessing infrastructure.

Our process begins by first understanding your current systems and composition of your waste stream. This will create the solid foundations of a business case for systemic change which will not only improve your sustainability credentials, but will also be robust enough to face the scrutiny of your Finance Director.

THEREFORE, WE FIRST NEED TO UNDERSTAND:



ONCE WE HAVE THIS INFORMATION WE CAN THEN:

Establish the difference between the currently reported % recycling rate and what is required to reach any communicated recycling target (if one exists). We can also propose a more meaningful set of metrics moving forward, such as the reduction in weight of material generated per person or the increased value of post-consumer material.

Identify changes that can be made upstream that can enable prevention and re-use. We will also look at opportunities to change material inputs, so that they are specified from materials that can be recycled or composted at end of life.

Establish opportunities to incorporate recovered material into new functional products that are already being purchased by the organisation, thereby closing the material loop and significantly offsetting the impact of using these products in the first instance.

Apply our knowledge and experience to identify how these changes can be implemented so that they are both operationally feasible and commercially viable throughout.



CASE STUDY

HEATHROW AIRPORT LIMITED



Background

Heathrow Airport Limited (HAL) manages 26,000 tonnes of the total 110,000 tonnes of waste generated by the airport, its passing travellers and the 320 business units that operate on site. A pioneering waste audit by Closed Loop highlighted opportunities for the world's third busiest airport to recycle over 50 per cent of its waste and generate estimated operational savings of more than £250,000 per annum.

The Challenge

In 2012, Closed Loop was asked to help HAL increase its recycling rates and achieve zero (untreated) waste to landfill by 2020. The ambition was to increase HAL's 37 per cent recycling rate to 70 per cent by 2020. A major obstacle was that recycling rates at the airport were severely restricted due to EU requirements to incinerate all airside and aircraft cabin waste; which represented a minimum of 35 per cent of the overall waste stream.

Our Solution

To achieve this objective, Closed Loop gathered data on the composition of accessible HAL waste to show the potential resale value from extracting recyclable material. Closed Loop's innovative Mini Materials Recycling Facility, analysed around 100 tonnes of waste from airport terminals and aircraft cabins. The two-month process included an audit that inspected waste at a granular level. This is more effective than conventional waste assessments which assume waste samples represent the composition of the entire waste stream.

The Results

Closed Loop showed that more than half of the HAL waste stream is recyclable, including up to 60 per cent of cabin waste. Recovering and reselling these resources will save HAL over £250,000 per annum and substantially improve the environmental sustainability of its operations for stakeholders, staff and customers.

"This pioneering analysis is the first step in fully understanding what waste we are producing and the infrastructure and processes needed to achieve our stretching recycling targets."

Mark Robertson

Waste and Environment Manager, Heathrow Airport Limited (HAL)



 [Click here for the link to the case study video](#)

HOW CAN YOU GET STARTED AND WHAT IS REQUIRED?

If your organisation produces a large amount of waste, such as a local authority, FM company, transport hub, major brand or a national chain then you can benefit immediately from our consultancy services.

There is a 3-stage process which includes the following:

STAGE

1

Site visit and consultation

(Minimum 1 day) where we determine your current:

- (1) material inputs
- (2) material process flows
- (3) material disposal routes



STAGE

2

Material Composition

(Minimum 1 day)

Using our Mini Materials Recycling Facility, we can create a truly granular set of data that cannot be achieved through a traditional basic bag-splitting exercise and, as such, generate more reliable data as a basis for a long-term robust strategy.

By delivering your waste to us and we will:

- Segregate and measure bulky items in a pre-sorting bay
- Segregate and measure smaller loose items via the Mini Materials Recycling Facility. Its main picking belt can segregate up to 8 material streams (baling 3 of them)
- Produce further sampling of the residual stream (if required)
- Process commercial mixed waste c.0.5-0.75 tonnes per hour (3/4 tonnes capacity per day)

STAGE

3

Report & Recommendations

(Minimum 2 days) in which we will provide:

- Details of current materials process flows
- Granular data on material composition
- Opportunities for prevention and re-use
- Recommendations for potential environmental and financial improvement



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