

BUSINESS WALES HAS A GREEN AMBITION

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BECOMING A CIRCULAR BUSINESS

"We must transform every element of our take-make-waste system: how we manage resources, how we make and use products, and what we do with the materials afterwards. Only then can we create a thriving circular economy that can benefit everyone within the limits of our planet"

Ellen Macarthur Foundation

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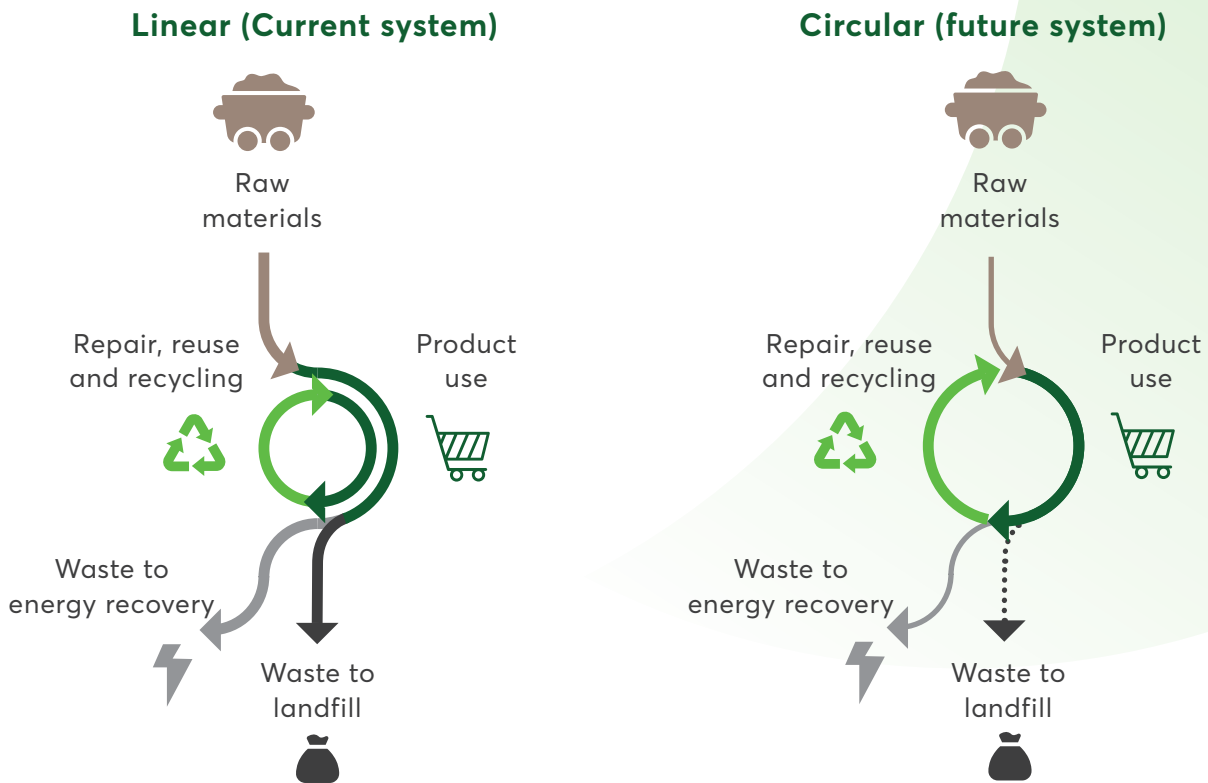
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In our current economy, we take materials from the Earth, use them to make products, and eventually throw them away as waste – this process is **linear**. Conversely, in a **circular** system, we stop waste being produced in the first place.



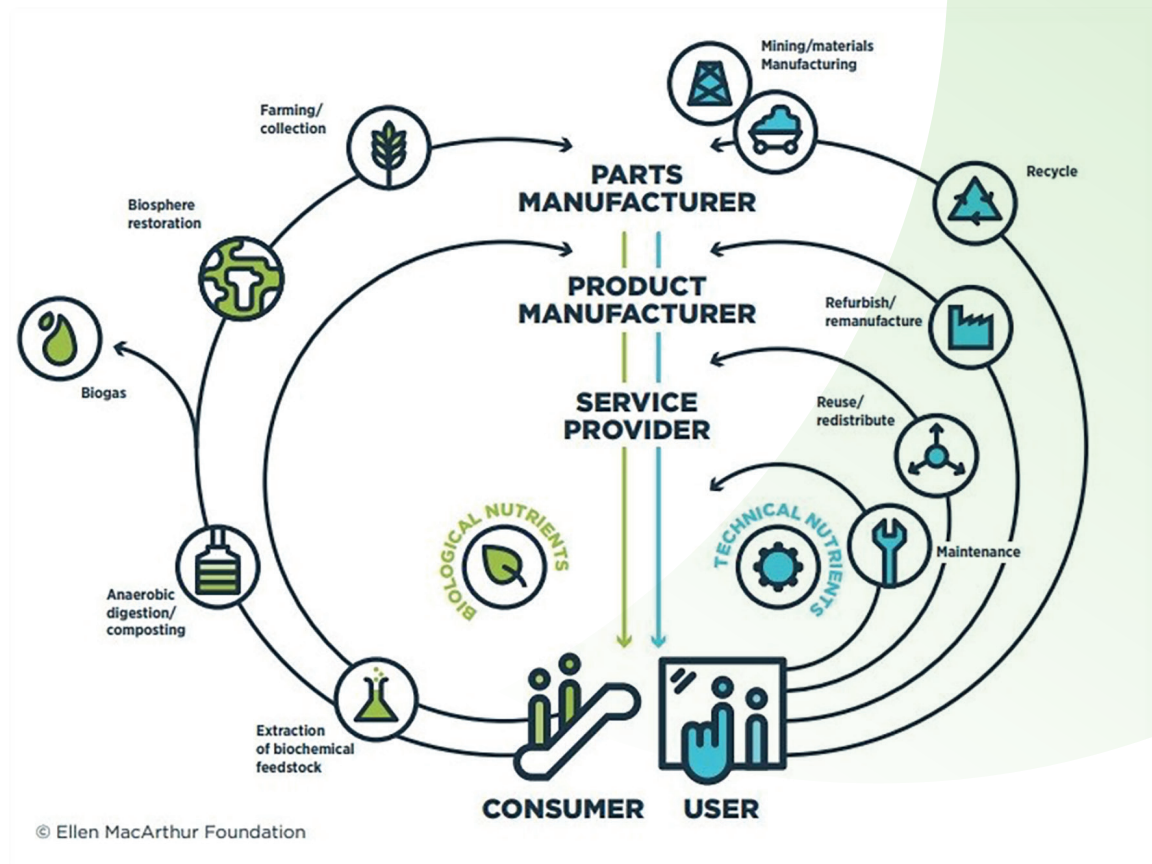
Beyond Recycling': Welsh Government, 2019

Currently, only five per cent of the material value of goods produced is recovered. The Circular Economy provides a genuine economic alternative. Restorative and regenerative by design, it aims to maintain the value and use of products, components and materials at all times. This means enabling reuse, multiple uses, cascading uses, or fully closed loops for technical or biological resources. Circular businesses have an important role in the transition

to the circular economy, and there is commercial opportunity to recover, generate and maximise value within production and consumption systems. This is delivered through product life extension, re-use, remanufacturing, up and downcycling, and recycling. New business models, the use of new disruptive technologies and new mindsets, particularly around technology, are also key.¹ An illustration of a circular economy is shown in the figure overleaf:

¹Ellen Macarthur foundation

A circular economy



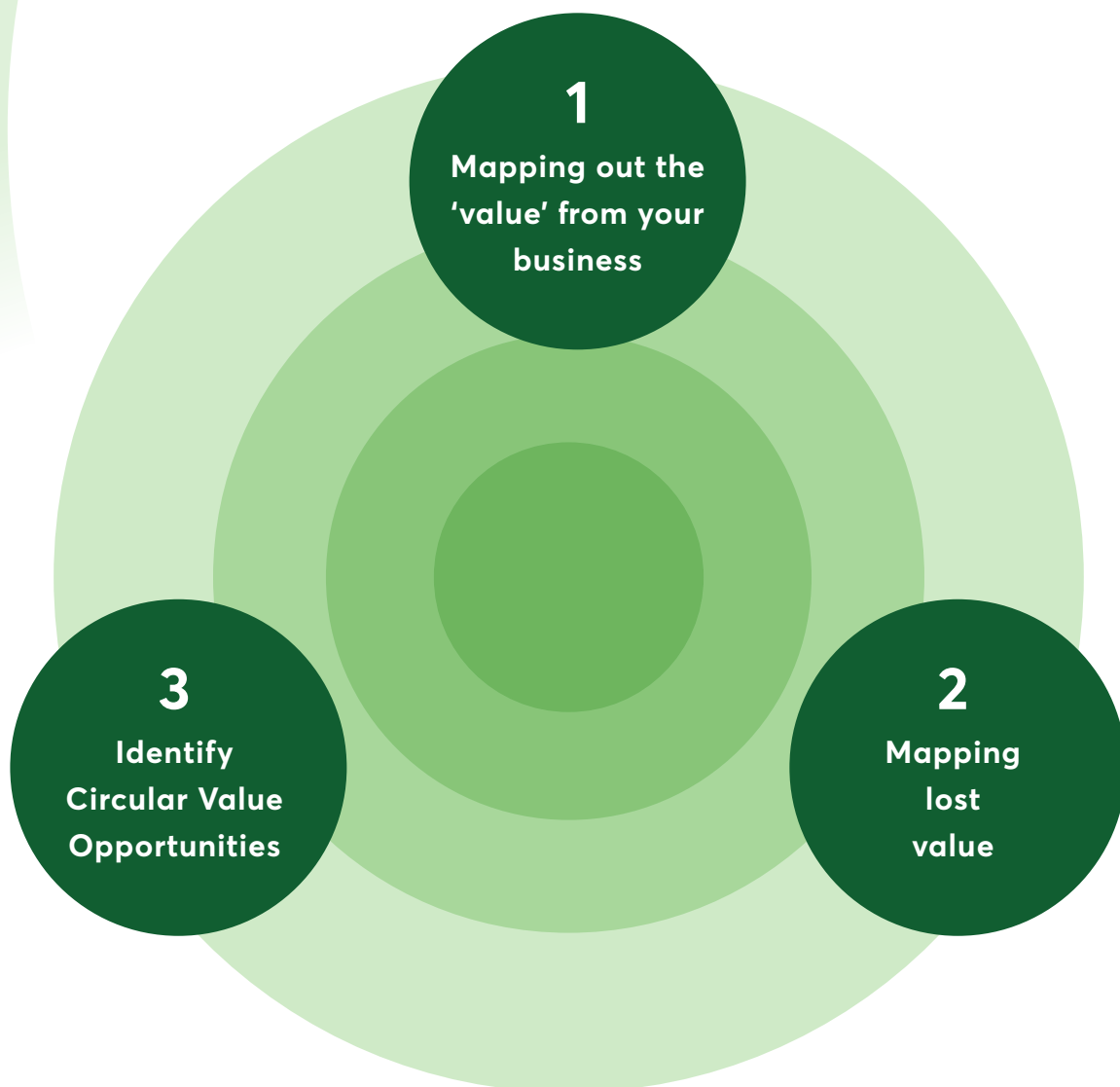
WHY IS A CIRCULAR ECONOMY IMPORTANT FOR BUSINESS?

The circular economy is about making things last and there are lots of ways to do it. Each with unique opportunities to cut costs and increase profits and introduce new ways to grow and diversify your business. As well as creating new opportunities for growth, a circular economy will:

- Reduce waste
- Drive greater resource productivity
- Deliver a more competitive UK economy
- Position the UK to better address emerging resource security/scarcity issues in the future.
- Help reduce the environmental impacts of our production and consumption in both the UK and abroad

HOW TO TRANSITION TO A MORE CIRCULAR BUSINESS MODEL

Making the transition to a circular business model can take time, but by taking a step back and considering where added value can be achieved through your business process, you are already progressing. No matter how big or small your business, every step towards retaining value (i.e. keeping our resources in use for as long as possible and eliminating waste) is positive and progressive.



1

Mapping out the 'value' from your business

Identifying the value from your business can be done through following the steps outlined below:

- Re-think your materials – Map the current flow of materials (eg input material and/or waste resources) within your process/system.
- Identify the value it offers (eg could waste from one process be used as input materials into another process within the business or for other businesses).
- How it is the value measured (eg. a commodity, waste, in-kind contribution)?
- Consider how the value can be used elsewhere within our business, or to other businesses.
- Consider what part of the value chain do you manage (eg supply of good/materials)

2

Mapping lost value

Mapping lost value from your business can be done by considering the following key areas:

- Where in your process is value lost and what is the potential future risk associated with the lost value (eg is the value scarce/expensive)?
- Why is the resource currently not captured and used for another purpose?
- Where is value currently being lost (eg material disposed of as waste)?
- What alternative uses could be made from the value and who are those potential users?

3

Identify Circular Value Opportunities

Based on your insights from steps 1 and 2 identify ways of creating or closing loops to recover lost value and create new opportunities. You may wish to consider where the opportunities are to recover the value, for example, could any of the typical circular business model work for you (reuse, repair, industrial symbiosis). In manufacturing for example, you may wish to consider the following models:

- **Retaining product ownership (RPO):** producers rent or lease products to customers rather than selling them. This works well for complex products with lots of embedded value (e.g. office printers and photocopiers) but also for products like high-end, designer clothes.
- **Product life extension (PLE):** companies focus on designing products which last longer, which may open up possibilities for used product markets. Though this may seem counter-intuitive to businesses who want to sell more products, the durability of goods can be marketed to give an edge over competitors selling less durable products.
- **Design for recycling (DFR):** companies focus on redesigning products and manufacturing processes to increase the recoverability of materials in new products. By partnering with other businesses who have specific expertise or a use for recovered materials, what would have been a waste product becomes a valuable resource.

Supply Chains

Supply chain collaboration is essential to achieve a shift from the current linear system to a circular economy, and each business can take an active role in stimulating markets for more sustainable supply chains. By signing up to the [Green Growth Pledge](#) you can begin the journey to becoming an environmentally responsible business; a route that more and more businesses are taking every day,



not only as a commitment to sustainable development but to make their business more attractive to customers. Sign up to [Green Growth Pledge](#) today.

INNOVATION SUPPORT

Whilst recognising that making the transition to a circular business isn't always simple and factors such as finance, time, human resources and skills can be real barriers to engaging with such changes, but with support from [Business Wales](#) the transition could be easier than you think.

[SMART Innovation](#) is a unique programme funded by Welsh Government, with the single aim of helping Welsh businesses do better by being more innovative. The programme is delivered by expert engineers, scientists, industrialists, and intellectual property specialists, all working to help businesses prosper. SMART Innovation offers:

- **Expertise:** working on the ground in Wales but with access to a UK-wide network of specialists
- **Money:** financial support is available (between 2015-2020, £150 million went into research and development projects, helping thousands of projects get off the ground)
- **Support:** manufacturing and design consultancy from an approved framework of private sector advisors.

With a vast range of expertise across multiple sectors, [Business Wales](#) **can support your business** to capture value and deliver innovation. For free expert advice, contact [Business Wales](#) today.

Resources & guidance

[Green Ambition Webinar on
The Circular Economy and Industrial Symbiosis](#)

[Circular Business Models – Sustainability Guide](#)

[How to build a circular economy | Ellen MacArthur Foundation](#)

[SMART Innovation | Innovation \(gov.wales\)](#)

[WRAP and the circular economy](#)

[Zero Waste Scotland Circular Economy Accelerator](#)

[Business Wales – Green Growth Pledge](#)