



**Circular  
Economy  
Accelerator**



# Inspiring sustainable, circular business

*Toolkit*





This toolkit is designed to make you think differently about your own business or organisation. This resource will help you generate ideas that will inspire you to take the first steps in becoming a more sustainable, circular business.

Use this toolkit to look at ideas for your entire business or break it down into specific products, processes or projects. Remember, there's no bad ideas at this stage. *Just think differently and think big!*



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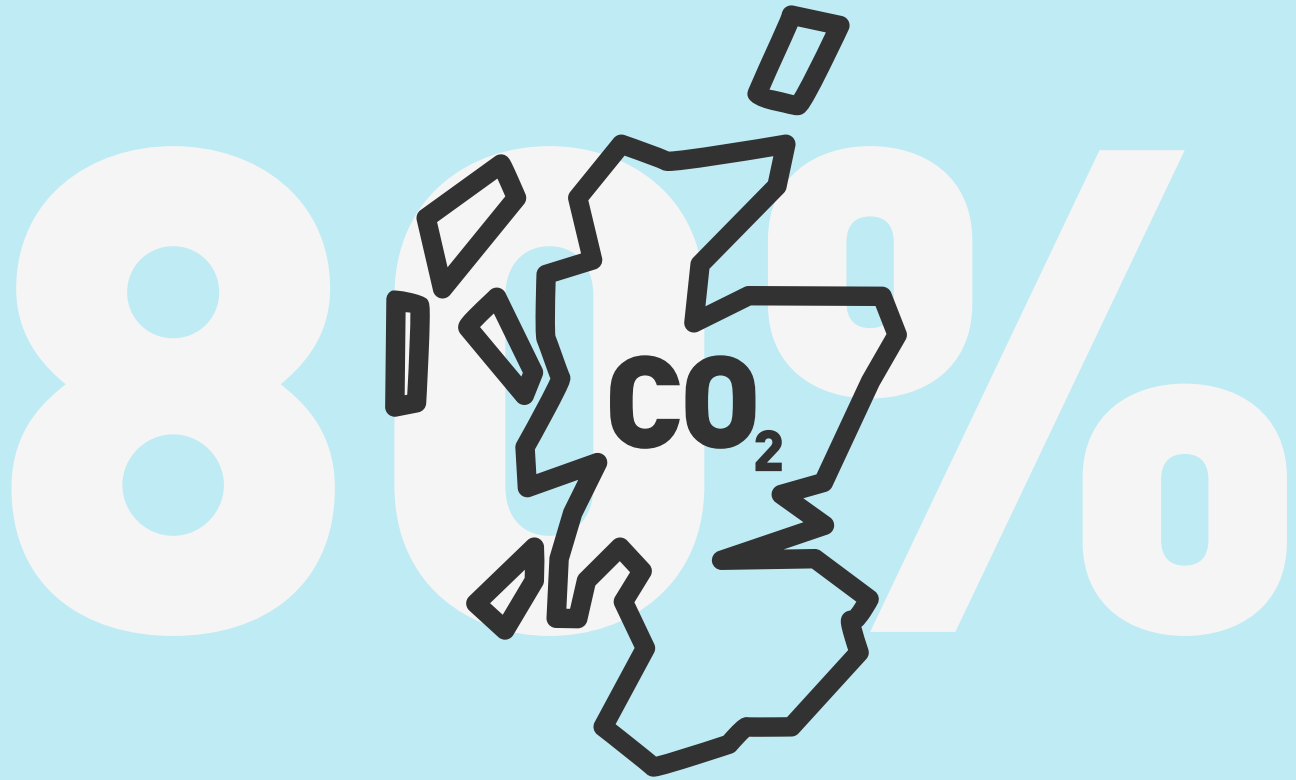
# What is the Circular Economy?

*And what does it mean for my business?*

## Consumption in Scotland is unsustainably high.

Around 80%\* of Scotland's footprint comes from the products and materials we manufacture, use and throw away.

We all have a role to play in a system-wide change. One that enables us all to choose more sustainable ways to live, use the things we need, and share resources.



\* Source [Zero Waste Scotland Material Flow Account](#)

Our current economic system can be described as **linear**, where we take materials, make products from them, and eventually throw them away.

In a **circular economy** we stop waste being produced in the first place.

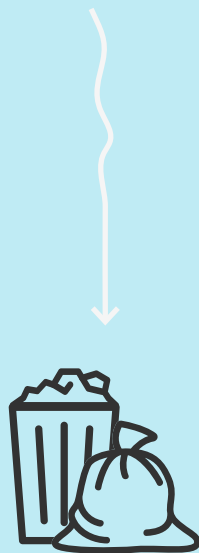
**A circular economy is built on 3 core principles:**

1. Eliminate waste and pollution
2. Keep products and materials in use
3. Regenerate natural systems



**Find out more** about the circular economy in this film from the [Ellen MacArthur Foundation](#)

## Linear Economy



## Recycling Economy



## Circular Economy



Credit. CC by Circular Flanders



The circular economy is a **fundamental shift in the way that we manufacture, use and view materials and products.**

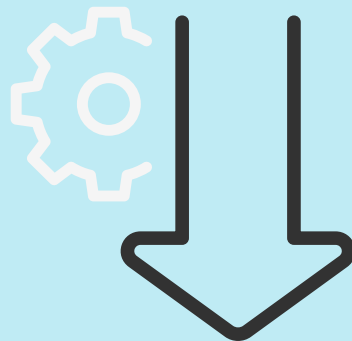
It reduces waste to a minimum by recovering and reusing as many products and materials as possible, over and over again.

It can be described in simple terms as a *make, use, reuse, redesign, remake* economy.



## Good for the planet and the bottom line

By adopting a more circular business model you can:



### Reduce costs

Sourcing and using materials in smarter ways can reduce costs and protect against external supply change disruption and fluctuations.



### Generate profits

Creating new models that keep materials and products in use for longer can lead to increased income generation and new income streams.



### Tell your story

Customers want to hear about (and buy from) innovative, green businesses. It can open you up to new customers, attract new skills to your business and add real brand value.





# Identify opportunities for change

*This is the chance for you to evaluate each part of your product or service journey. Examining every input and output of your business can highlight opportunities.*



## Your business inputs

1. What are the inputs for your business?
2. Are you aware of the material/product journey before it reaches you?
3. What raw materials and/or products do you buy in?
4. Where do those raw materials and/or products come from?
5. Think about where suppliers get their products?
6. Could any of your inputs be sourced more locally, swapped for a more sustainable alternative or sourced as an output from another business?

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### Thinking Point

Consider all aspects of your business, including things like office furniture, vehicles, IT equipment and stationary.



Spend some time working through each of these questions and capture your thoughts below.



## Your business outputs

1. What do you make, or what service do you provide?
2. Are there any co-products or by-products generated during your processes? List these things as additional outputs from your business.
3. Do you know where they go?
4. Is there any waste generated from your processes?
5. Could any of your outputs be useful to other businesses? Could your waste streams hold untapped value?

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### Thinking Point

Consider all aspects of your business, including things like waste, final products and packaging.



Spend some time working through each of these questions and capture your thoughts below.



## End of usable life

1. What is your product's lifecycle after leaving you? When/why does it reach its end of usable life and what happens. Is it discarded, recycled or reused?
2. How could you make your products and their packaging last longer/can their useful life be extended? Could you design a better end-of-life or make them easier to repair or dismantle?
3. Thinking similarly, what happens to unwanted materials/waste streams?
4. Do you currently influence what happens to your product once it's no longer used or wanted?

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### Thinking Point

Don't make assumptions about what your customer does with the product or packaging at the end of its life. Consider what's realistic.



Spend some time working through each of these questions and capture your thoughts below.



# Developing a circular strategy

*Now that you've thought in detail about what your business Inputs, Outputs and End of usable life, lets look at The Nine Circular Strategies to consider how you can develop your own circular business model.*



# Circular Economy Accelerator



**To create a circular economy in Scotland we need to re-think and re-design our business models.**

Zero Waste Scotland has identified nine key circular strategies that organisations can use to help discover opportunities for change. This next activity will take you through each of the nine strategies, supporting you to think about how they could be used in your own business and giving some examples of them in action.



**Circular design**



**Resource recovery**



**Enabling technologies**



**Product as a service**



**Leasing**



**Remanufacture**



**Reuse**



**Repair**



**Sharing economy**

## The Nine Circular Strategies



### 1. Circular design

Over 75% of decisions on material selection and manufacturing processes are determined in the design phase. Design products so that they can be easily repaired or remanufactured, using more modular designs. Consider how the materials used can remain in the value chain and manufacturers can take on extended responsibility for them.



What could circular design mean for your business? Capture your thoughts below:

## The Nine Circular Strategies



### 2. Resource recovery

Resource recovery involves using by-products or waste-products and turning them into something with a higher value. This could be a food or drink by-product, like whey or spent brewery grain, or it could be manufacturing offcuts, or waste products such as car tyres.



What could resource recovery mean for your business? Capture your thoughts below:



## The Nine Circular Strategies



### 3. Enabling technologies

Using advanced tools and systems like data collection, sharing platforms, machine learning, asset tracking and dynamic modelling can facilitate circular business approaches and behaviours. Embracing new technologies could be the backbone to enabling a circular economy.



What could enabling technologies mean for your business? Capture your thoughts below:

## The Nine Circular Strategies



### 4. Product as a service

The customer is at the core of the business model. Instead of selling products, the manufacturer retains ownership of assets and provides them as a service to the customer. This model presents an opportunity to offer greater customer service, retain customers for life and become an innovator in your sector.



What could product as a service mean for your business? Capture your thoughts below:

## The Nine Circular Strategies



### 5. Leasing

Leasing involves the manufacturer or retailer retaining ownership of products. They are responsible for delivery, maintenance and take back. Leasing allows the manufacturer to retain ownership of valuable materials.



What could leasing mean for your business? Capture your thoughts below:

## The Nine Circular Strategies



### 6. Remanufacture

Dismantling a product and refurbishing, repairing or replacing each part to produce a new product, with a warranty, that matches or exceeds the quality of the original. This extends the life and inherent value in the product.



What could remanufacture mean for your business? Capture your thoughts below:

## The Nine Circular Strategies



### 7. Reuse

Using products and materials for as long as possible. Ensuring a product is used for its intended purpose for a long period of time provides much more value than alternatives such as recycling.



What could reuse mean for your business? Capture your thoughts below:

## The Nine Circular Strategies



### 8. Repair

Extending the life of products by maintaining or improving them through repairing or upgrading. Extending a product's economic usefulness (and value), reduces waste and saves the need for new materials. Circular design principles are an important part of repair, to ensure that products can be separated and disassembled easily.



What could repair mean for your business? Capture your thoughts below:

## The Nine Circular Strategies



### 9. Sharing economy

Treating products as assets that can be used by multiple customers, multiple times. Manufacturers can retain ownership and provide shared access, or customers can create peer-to-peer sharing models. Customers can be charged a subscription, 'per use' or by 'per unit' (e.g. miles driven or hours used).



What could sharing economy mean for your business? Capture your thoughts below:

## Refining your strategy

1. Considering the Nine Circular Strategies, are there any which you think you could adopt?
2. Can you prioritise them by:
  - Ease of implementation? Are there any quick wins?
  - Revenue potential?
  - Circular/sustainable advantages?
3. What are the main barriers and challenges?
4. See if you can combine more than one circular strategy to create a plan unique to your business.

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### Thinking Point

Think about quick wins as well as longer term ambitions.



Spend some time working through each of these questions and capture your thoughts below.





# Next steps

*Now that you have some ideas on what circular strategies could be applied to your business, make some plans to investigate them properly.*

## What next?



### Time

Set aside a block of time to look into your potential shift to circular business practices.



### Resource

Allocate staff to investigate circular opportunities for your business.



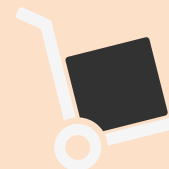
### Collaborate

Work with your team and other likeminded businesses to develop ideas and solutions to your challenges.



### Speak out

Tell your suppliers and your customers your plans. They might just provide the insight you need.



### Keep it real

Don't try too many things at once. Pick one thing and then build on it.



### Budget

Explore what level of investment might be required for your proposed changes.



### Useful info

[View](#) additional advice and information from Zero Waste Scotland and our partners.



# Inspiring case studies

*View our [30 Idea Cards](#) resource to hear about other brilliant Scottish businesses who have implemented innovative circular strategies.*



# Useful info



## Further Zero Waste Scotland Resources

- **30 Idea Cards**  
Inspiring case studies from brilliant Scottish businesses.  
[ceaccelerator.zerowastescotland.org.uk/inspiration](https://ceaccelerator.zerowastescotland.org.uk/inspiration)
- **Circular Economy Accelerator Site**  
Visit our site for more info on us and the Circular Economy.  
[ceaccelerator.zerowastescotland.org.uk](https://ceaccelerator.zerowastescotland.org.uk)
- **Circular Economy Business Support**  
Find out what one-to-one support might be available.  
[zerowastescotland.org.uk/circular-economy/business-support-service](https://zerowastescotland.org.uk/circular-economy/business-support-service)
- **Food and Drink Business Support**  
Specialist info and guidance for both hospitality and production.  
[zerowastescotland.org.uk/FoodDrink](https://zerowastescotland.org.uk/FoodDrink)
- **Construction Business Support**  
Specialist info and guidance for businesses across the sector.  
[zerowastescotland.org.uk/content/construction-industry-support-programme](https://zerowastescotland.org.uk/content/construction-industry-support-programme)
- **Legislation**  
Free environmental guidance for businesses.  
[netregs.org.uk](https://netregs.org.uk)
- **SME Carbon Calculator**  
[smeclimatehub.org/start-measuring](https://smeclimatehub.org/start-measuring)
- **Revolve Quality Standard**  
Awarded to second-hand stores in Scotland who meet high standards.  
[zerowastescotland.org.uk/revolve](https://zerowastescotland.org.uk/revolve)

## Webinars

- **Product as a Service Webinar**  
How businesses are moving their product offer to services.  
[youtube.com/watch?v=ilCP18l66ms](https://youtube.com/watch?v=ilCP18l66ms)
- **Circular Design Webinar**  
Embedding circular principles during the design of products  
[youtube.com/watch?v=pQgssmonZgl](https://youtube.com/watch?v=pQgssmonZgl)
- **Reusable Packaging Webinar**  
Take action to reduce or redesign packaging in your business.  
[youtube.com/watch?v=YhKybq5qWJg](https://youtube.com/watch?v=YhKybq5qWJg)





## External Resources: Circular Economy Support

- **Ellen MacArthur Foundation**  
[ellenmacarthurfoundation.org](https://ellenmacarthurfoundation.org)
- **Net Zero Nation**  
[netzeronation.scot](https://netzeronation.scot)
- **Circular Product Design Tool**  
[circularproductdesign.org](https://circularproductdesign.org)
- **Circular Communities Scotland**  
[circularcommunities.scot](https://circularcommunities.scot)

## External Resources: Energy and Transport Support

- **Business Energy Scotland**  
[businessenergyscotland.org](https://businessenergyscotland.org)
- **Energy Saving Trust**  
[energysavingtrust.org.uk/business/transport/?loc=scotland](https://energysavingtrust.org.uk/business/transport/?loc=scotland)

## External Resources: General Business Development Support

- **Business Gateway**  
[bgateway.com](https://bgateway.com)
- **Scottish Enterprise**  
[scottish-enterprise.com](https://scottish-enterprise.com)
- **Highlands & Islands Enterprise**  
[hie.co.uk](https://hie.co.uk)
- **South of Scotland Enterprise**  
[southofscotlandenterprise.com](https://southofscotlandenterprise.com)
- **Find Business Support Tool**  
[findbusinesssupport.gov.scot](https://findbusinesssupport.gov.scot)

