

About this tool

This tool has been designed to help stimulate new ideas and thinking.

Twenty 'what if' questions challenge the status quo and inspire new solutions to today's problems. Each card showcases a successful model for moving towards a circular economy, many delivered by communities for communities.

Zero Waste Scotland have developed this updated toolkit, based on the Knowledge Transfer Networks original resource.

Zero Waste Scotland exists to lead Scotland to use products and resources responsibly, focusing on where we can have the greatest impact on climate change.



The Linear Economy

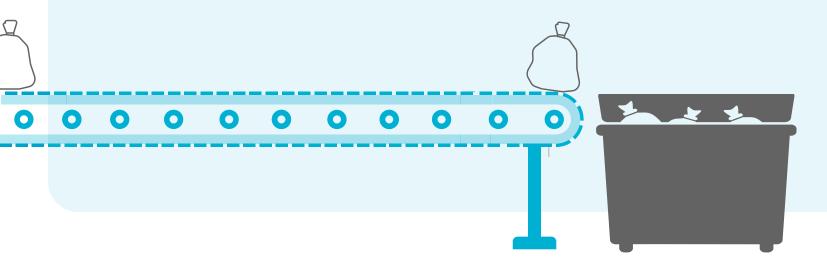
Our current economy is a one way flow of materials, from extraction, manufacturing, use and ultimately disposal. This model relies on cheap flows of energy and materials.

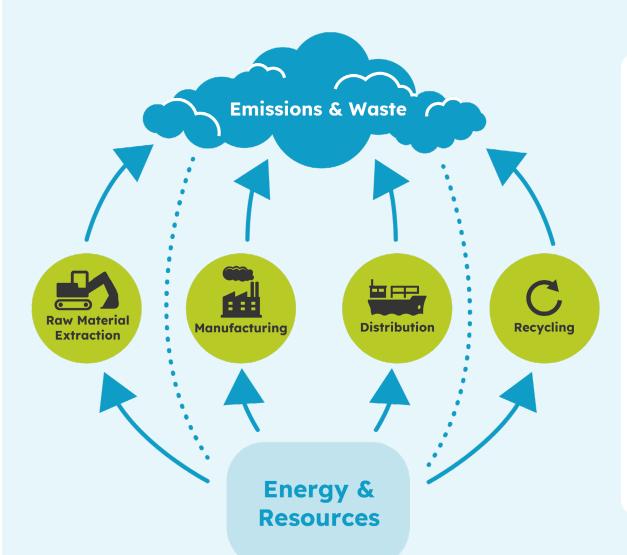
The linear economy has been extraordinarily successful at bringing affordable products and material prosperity to billions of people.

Whilst there is space for this model to grow and find efficiencies, it is impossible to have infinite growth on a finite planet.

The global middle class will double by 2030, with 3 billion more consumers creating an unprecedented demand for resources. Huge increases in resource demand, with limited supplies, creates huge price volatility for business.

Using less, recycling more and being more efficient will not solve the problem. A fundamental rethink of business structures, finance models and government policy is necessary to find an economy that can work in the long term.





Around four fifths (80%) of Scotland's carbon footprint comes from all the goods, materials and services which we produce, use and often throw out after just one use. This is the single greatest cause of the climate crisis.

As a society we are over-using our planet's resources. The average Scot consumes 18.4 tonnes of materials every year. Academics agree that a sustainable level of material use, is about 8 tonnes per person per year.

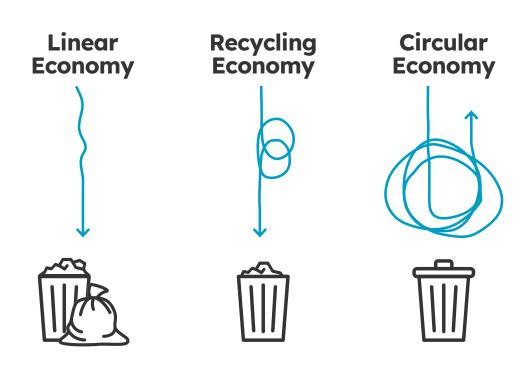
Our linear economic model leaks endless value through the poor management of products and resources. We have an opportunity to create a stronger and more resilient economic system, whilst saving the planet.

The Circular Economy

The circular economy is a practical framework for creating an economy which is sustainable by design. It aims to keep products, components and materials at their highest quality and value at all times. Crucially, growth is decoupled from scarce resource use. Material use is of two types: biological (renewable) materials, designed for reuse and ultimate return to the earth; and technical (non-renewable) materials, designed to move back and forth between production and consumption with minimal loss in quality or value.

A significant part of Scotland's carbon footprint is created from the making, use and disposal of products and materials. The circular economy challenges the way that Scotland manufactures, uses and views materials and products. It reduces waste to a minimum by recovering and reusing as many products and materials as possible. A circular economy in Scotland will require changes to business models, supply chains, the way products and services are designed and a significant shift in consumer behaviour. These changes will allow for all materials to remain within the value chain, removing the need for newly sourced materials and reducing the volumes of waste that Scotland produces.

These new models question the ownership of products, with services offering access to better products, at lower price points. Businesses and communities can retain ownership of valuable products, materials and components, retaining wealth and improving resilience.



Credit. CC by Circular Flanders

Instructions

The Idea Cards have been developed to stimulate new ways of thinking.

As you look at the ideas, consider how these concepts could be used to make your community more circular, or generate new enterprise opportunities.

Keep in mind that circular economy isn't just about changing individual habits or business models, how could these concepts be used to create more sustainable supply chains or influence systems change across sectors and geographical areas.

Pick out any ideas that present an opportunity to you or your community.

- How would you use it?
- Are there wider social benefits?
- What are the main opportunities and challenges?



Brainstorming rules

No Judgement

Make everyone feel like they can say the idea that's on their mind.

No negativity at the idea generation stage.



Think extraordinary thoughts

No idea is too crazy. Think beyond material or technical constraints.



Use each other's ideas

Re-interpretations are crucial to get to ideas that you couldn't reach on your own.



Keep focused on the task

Try to keep the discussion on target, and in scope.



Think quick

The best way to have a good idea is to have lots.



Keep to time

Keep an eye on the clock. Make sure everyone gets a chance to share ideas.

1. What if you as a customer could buy outcomes rather than products?

Do you want a lightbulb or do you want the light that they provide?

Could this approach encourage companies to design out planned obsolescence?

Case Study

EGG Lighting

EGG Lighting operate under a model that lighting should last as long as buildings. Their lighting is provided as a service, the LED smart technology is modular built so it can be repaired easily. If parts of the lighting system need removed the materials are refurbished, keeping them in the cycle.

This 'product as a service' and circular design model allows EGG to build a strong customer base and a steady source of revenue. Customers save energy and benefit from lights that can be simply upgraded with the latest technology.





2. What if you were charged per month for a product rather than buying and owning it?

Could offering customers access to products rather than ownership create a more compelling customer experience?

Could a subscription model allow you to access higher quality products and upgrade them over time?

Case Study

The Bike Club

The Bike Club aims to make kids cycling more affordable and sustainable. Its monthly subscription service allows kids bikes to be exchanged as the child grows. There's also no big upfront costs and payments are spread out into an affordable monthly subscription.

Pre-loved bikes that are exchanged come back to expert mechanics who refurbish them to leading industry standards before they are ready to be ridden and loved by a new family.



3. What if you could access a range of useful items without having to buy them?

Could you new learn skills at the same time?

Could sharing models help build community?

Case Study

Edinburgh tool library

The average drill is used for only 13 minutes in its lifetime. A tool library works like a normal library but with tools instead of books. The Edinburgh Tool Library started in 2014. Borrowing tools is very easy and anyone can be a member. By enabling consumers to borrow rather than buy tools, the library has saved households an incredible £1.5m. The environmental impact is also huge - buying these tools would mean an extra 180 tonnes of CO₂ pollution, the equivalent of driving a car around the world 180 times! The organisation also offer repair skills workshops,

providing people with the skills and confidence to repair things

themselves.



4. What if you could share resources with other people in the community?

Could you avoid the additional expense that comes with owning?

Case Study

Co Wheels Glasgow

Co Wheels was set up to provide an environmentally friendly, socially just, community-based alternative to car ownership.

The business wanted to provide its members with the opportunity to save money, reduce car ownership and create a cleaner environment by making lower emission transport options available to everyone.

Co-wheels operates pay-as-you go car clubs, pool car fleet management and franchise operations in over 60 towns and cities across the UK.



5. What if the products and services you buy came with an inspiring story?

Could it help you to make more informed purchasing decisions?

Could you be part of a bigger journey?

Case Study

Selkie Collective

The Selkie Collective is an Eco Shop and Women's Community Collective. The shop has a focus on eco, ethical, sustainable and refillable products. The organisation looks to provide a choice of everyday items locally, whilst producing as little waste as possible. Positive environmental impact is really important to The Selkie Collective, they carefully consider every ingredient and packaging choice. The organisation run many events throughout the year that seek to offer rejuvenating spaces for women.

They believe that women empowering each other and providing wellbeing support can help uplift the community.



6. What if you could support a community organisation that was making money from other's unused items?

Could your support help enable further positive community action, whilst preventing things from going in the bin?

Case Study

Moray Waste Busters

Moray Waste Busters (MWB) was originally set up in 2002 as a food recycling/wormery/compost making site. The organisation sold compost bins and wormcast made from local food waste. Through its work MWB noticed that a huge volume of good quality items were being thrown out in the adjoining recycling centre. They wanted to change this and expanded their operations into the reuse sector. MWB now run a reuse shop located next to the Recycling Centre in Forres, making it convenient for citizens to drop off unwanted reusable items. It is a popular shopping destination with locals.



7. What if you could access previously owned items, that have been made to be like new?

What if you could access these locally?

Could it lead to local and affordable retail options?

Case Study

ILM Highland

ILM Highland is an independent charity and social enterprise, providing home improvement, electrical recycling and retail services to the Highlands of Scotland. It's home improvement services provide free support and assistance to the most vulnerable in their community, enabling them to maintain their independence.

To support these services, ILM offer an extensive electrical recycling service – to the public and to businesses. Many of the collected items are refurbished and then sold in ILM's retail space and online shop. Their models provides high quality and affordable

refurbished appliances. They also offer spare parts and repair services for a large number of electrical appliances through their Spares & Repairs service.



8. What if you could easily access and try out resuable alternatives to single use items?

Could you access items locally and replace items that you would traditionally buy as single use?

Case Study

Helensburgh Nappy Library

Helensburgh Nappy Library aims to reduce the amount of disposable nappies going into landfill by supporting and encouraging families to make the switch to reusable nappies. The group does this by hiring out kits of reusable nappies for families to try at home. The kits contain everything that new parents would need to successfully use reusable nappies, including a variety of types and brands, to find out which work best for the family. It aims to make reusable nappies affordable for all and have a range of kits available to suit different budgets.



9. What if you could easily repair the products you have purchased?

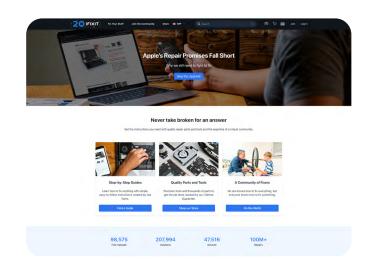
Could this mean you wouldn't have to throw away and buy new?

Case Study

iFixit

Building the reuse and repair sector in Scotland will be essential in developing Scotland's circular economy - preventing perfectly usable items from going to landfill, benefiting the environment, and relieving pressure on scarce raw materials.

iFixit is an online repair community created to help people fix their broken products. Its service includes supplying replacement parts and tools to allow customers to fix their electronic devices and free stepby-step repair guides for thousands of products.



10. What if you could send your unwanted items back after you have finished with them?

Could someone else buy items you no longer need for a reduced price from a retailer?

Could things be passed on rather than disposed?

Case Study

Keela

Keela are a Scottish Outdoor clothing company who have built sustainability into their operating model. For over 40 years Keela have brought garments back from the brink of destruction.

Stitching, patching, sealing, bonding and everything else they can think of – all to reunite prized possessions with their owners, so they can keep exploring for years to come. Keela's Legacy Project is all about maximising the life of every garment they produce. When your item hits the end of its life and just can't be resurrected, that's where there 'Second Life' programme comes in to play.

Customers can send worn out kit back, and the Keela team take what fabric they can from it, and turn it into something new.

Just imagine your old waterproof jacket enjoying a second life as a gym bag for carrying your other kit!



11. What if you could upgrade or customise the products you buy?

Could you send your tech back for the latest software upgrades?

Case Study

Fairphone

E-waste, or waste electrical and electronic equipment (WEEE), is the planet's fastest-growing waste stream. Globally, 53.6 million metric tonnes were produced in 2019, up 21% in five years. Only 17.4% was collected and recycled, with much more ending up in landfill, burnt or illegally traded.

Fairphone is a B-Corp certified social enterprise. Their mission is to create phones that last. They design for longevity, easy repair and modular upgrades. One material at a time, they are working to incorporate fairer, recycled, and responsibly mined materials into phones – to increase industry and consumer awareness.



12. What if ditching disposables and single use items use was made easy?

Could you switch to an alternative way of shoppping?

Could technology help you look at new ways of doing things?

Case Study

Highland Cup Movement (Vytal)

Scotland has set a new precedent by being the first nation within the UK to ban numerous types of problematic single-use plastics.

The Highland Cup Movement piloted a large-scale, reusable cup scheme in the Highlands linked to the route of the iconic NC500.

Participating businesses were happy to accept a customers reusable cup or they could borrow a Vytal reusable cup.

VYTAL offers a digital reusable packaging system with premium reuasable items for the hospitality sector.



13. What if you could get your broken products repaired locally?

Could you learn new skills?

Or could you share your skills with the community?

Case Study

The Edinburgh Remakery

The Edinburgh Remakery is an award-winning environmental social enterprise based in Leith, North Edinburgh. Founded in 2012, it's mission is to put an end to waste by providing people and communities with the skills and opportunities to live more sustainably. The Remakery workshops are centred around sustainable training in repair and reuse, providing techniques in mending, altering, remaking, and reimagining, utilising materials that would normally go to waste, to fix or improve other items, or to make something new. Not only do these repair skills prevent waste, they can also save people money by diminishing the need to buy new/providing them with a sustainable alternative to buying new.



14. What if by repairing and reusing you could create social benefits?

Could shopping differently help change peoples lives?

Case Study

New Start Highland

New Start Highland is a social enterprise working towards a future where people in Northern Scotland are free from poverty and crisis. New Start Highland creates social and environmental improvements within the local community through supporting people, delivering training opportunities and promoting re-use by working with the local community to ensure that items that were potentially going to landfill instead find a new home with people in need. Their retail site in Inverness is popular with local shoppers, all profits are fed back into the social mission of the organisation.



15. What if the products you rely on were reusable rather than disposable?

Would this save you money?

Could it change your approach to the way you do things?

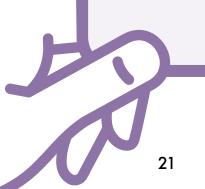
Case Study

Hey Girls

On average, one woman will dispose of around 11,000 period products in her lifetime. It's not just the plastic applicators and packaging that are causing a problem - the single-use period products contain plastics and synthetic materials themselves.

Even worse, one pad can take as long as 500 years to breakdown.

Hey Girls provide reusable alternatives. Menstrual cups are made of medical-grade silicon and can last up to 10 years. Based on a typical period scenario, a woman would have spent £440 on single-use period products in 10 years, but only £20 on average for two menstrual cups, a total saving of £420 over that time!



16.What if food could easily be re-distributed in communities?

Could sharing at a local level solve bigger problems?

Case Study

Mull and Iona Community Trust Community Fridge

The Mull and Iona Community Trust Community Fridge is set up to help combat local food waste, by sharing unused, good quality food. The fridge is for everybody. Anyone can donate and anyone can take food from the fridge.

Surplus food can be donated by local food businesses, shops or members of the public, either holiday makers when vacating their holiday homes or local people. Once the food is in the fridge it is then available for collection by people who need it or feel they could use it. The fridge is also widely promoted to tourists,

enouraging them to donate unused provisions at the end of their stay.

The fridge works on an honesty basis, no funds are paid for donated food and food is free to take from the fridge.



17. What if your buying habits helped tackle a global issue at a local level?

What if you could create social impact through the things you buy?

Case Study

Re-Tweed

Despite making up only 4% of the waste we bin and recycle, textiles accounts for nearly a third of the carbon impacts of Scotland's household waste. ReTweed is a Social Enterprise based in the fishing town of Eyemouth in the Scottish Borders.

It promotes positive environmental, social and economic change in its communities. The organisation does this through an innovative training programme upcycling, reusing and repurposing textiles into original furnishings, fashions and crafts for sale. Through upcycling they divert textile waste from landfill into the local economy, directly contributing to a more

sustainable future. And by raising awareness they change the culture around them to actively promote climate citizenship.



18. What if you could access bikes, instruments, paddle boards and other leisure equipment locally?

Would you be able to try out a new hobby without the commitment?

Could you learn new skills?

Case Study

Music Broth

Music Broth is a musical equipment and instrument library. The social enterprise is dedicated to sharing equitable access to restored musical instruments and connecting people through music learning opportunities.

Music Broth aims to divert instrument and equipment waste from landfill by catalysing exchange of instruments across the local community. It does this through receiving donations of instruments, renewing / refurbishing them and then redistributing them to across its members.



19. What if your waste created value at a local level?

Could your garden or unavoidable food waste be used create compost?

Could community waste became a resource to grow new things locally?

Case Study

Highland Community Composting Resource

The Highland Community Composting resource has been created for communities in the Highlands that are interested in starting or further developing community composting projects.

The resource provides a step-by-step Decision-Making Guide to help any community develop a project, as well as links to help, information on legal requirements, and examples of other projects already happening. Visit highlandcompost.scot to access.



20. What if you could buy food that was grown in your community?

Could you access fresher and more seasonal produce?

Could it help drive community action and reduce food poverty?

Case Study

Belville Community Garden

Since the opening in 2014, Belville Community Garden become a core part of the community of east end of Greenock, Inverclyde, acting as a central food growing hub, organising and coordinating community groups and schools in growing projects. It also coordinates local schools John Muir Awards, community arts projects and health related projects.

The community organisation promotes a safer, stronger community around improving lifestyles, and health primarily through gardening, horticulture and healthy eating. The garden and projects look to break down

social barriers for young and old alike and offer the chance of new learning experiences, improved community relationships, a sense of pride in the environment and improved mental and physical wellbeing.



Reference list

The information sourced for the 20 ideas is available in the public domain. To find out more about each company featured, please follow the links to their websites. Images are credited to the relevant business website.

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