

# The Circular Economy

**Wales**

A top-down photograph of two hands cupped together, holding a small green seedling with soil. The hands are positioned over a forest floor covered in green leaves and brown twigs. The background is a soft-focus natural setting.

# **BUILD A WASTE-FREE WORLD**

THE  
EARTHS  
HOT  
PRIZE

# What is a circular economy?

A model of production and consumption which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible

Aims to tackle global challenges like climate change, biodiversity loss, waste, and pollution.

Implies reducing waste to a minimum. When a product reaches the end of its life, its materials are kept within the economy wherever possible. These can be productively used again and again.

A departure from the traditional linear economic model, based on a take-make-consume-throw away pattern. This model relies on large quantities of cheap, easily accessible materials and energy.



# Wales has committed to developing circular economies

Wales is already ranked the third best country for recycling in the world but aim to become world number one. But the government want to go further than this (beyond recycling) - to also be world-leading in reusing, repairing and manufacturing from what would otherwise be thrown away, by cutting the amount of food wasted in Wales, and by reducing the amount of unnecessary single use items that we use and are often littered.

This includes a commitment to jumpstart a step change in public sector procurement, worth £6.7bn per year in Wales, with low-carbon, resource-efficient businesses to be given priority in tenders that use money from the public purse. Since March 2020, the Welsh Government has already rapidly increased funding for circular economy projects from £6.5m to £43 million. This has supported 180 initiatives in every part of Wales, bringing together communities to fix their broken goods, redistribute wholesome food that would have otherwise ended up in the bin, or repurposed pots and plastics into furniture for homes.

Lesley Griffiths, the Minister for Environment, Energy and Rural Affairs, said: “By helping us to manage our resources, the steps set out in ‘Beyond Recycling’ will help us to drive our green recovery to the coronavirus pandemic, Brexit and the impact of the climate emergency – as well as playing a vital and necessary part in our route to becoming a net-zero carbon nation by 2050”

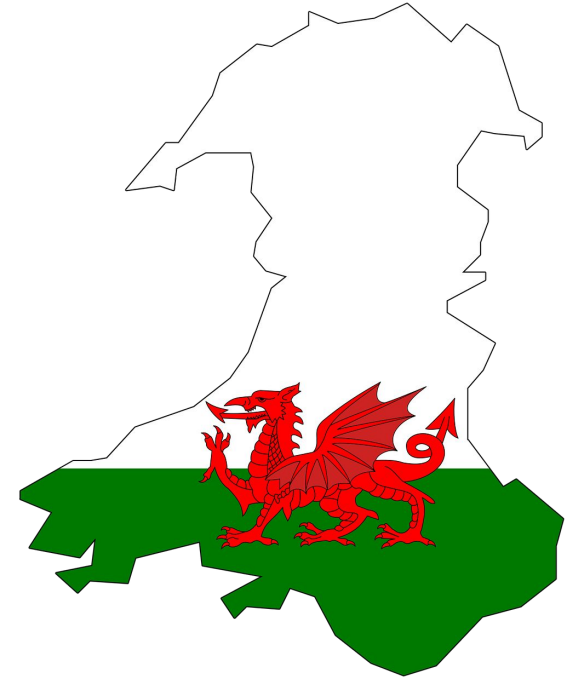


# What are the benefits of a circular economy for Wales?

A Wales with a more Circular Economy means that products will have a much longer lifespan and we will move away from a 'single-use' or 'disposable' culture and look to extend the lifetime of all the things that we own. In a more Circular Economy, it will be easier to reuse and repair items before eventually being able to recycle them into something useful.

The people and their communities are the main benefactors of the Circular economy. The Circular economy can deliver for everyone in the heart of their communities.

The circular economy will add an urgency to rebuild after the Covid 19 outbreak to allow the communities to sustain local jobs and local resources. The circular economy in Wales can help communities with the loss of business during the lockdowns.



# Fforest Farm Milk Local Example - Whitland

Fforest Farm is family run with a herd of a smaller size of 135 milking cows which are milked using a Lely robotic milker. These cows spend more time grazing outdoors compared to a high yielding herd. Here pasteurised whole milk is available to purchase from a vending machine on the farm.

Milk vending machines are popping up across the UK and booming in popularity. This initiative provides customers with fresh, non-homogenised (and sometimes even raw) milk direct from the farm. Not only does it support local dairy farmers, but it also brings a wealth of other benefits.

Fforest Farm invites you to bring your own refillable glass bottle. You can use this bottle again and again, each time you visit. Milk is something most of us use every day, so it's not difficult to see why these machines offer a much more environmentally friendly and sustainable option compared to supermarket bought milk.

“Fforest Farm was established in order to make the farm more sustainable. Ensuring we receive a stable and fair income for our produce. It will allow me to cut back on relief milking, and invest more time at home on the farm” Sally Windsor (ex student at Dyffryn Taf).



# How does Fforest Farm Milk Contribute to a Circular Economy?

Farmers are now able to contribute to a zero waste process which closes the loop and promotes a circular economy. Industrial symbiosis, products are generated from the same materials meaning more resource efficiency. This provides inspiration to society and industry as an example of the European circular bioeconomy.

During lockdown you were still able to access the automatic milk stations made by the farms and use the glass bottles. The glass bottles are also more environmentally friendly than plastic and the farmers get a higher percentage of the profit by cutting down transport and supermarket costs.



# Frame Haverfordwest Regional Example



<https://www.pembrokeshire-frame.org.uk/>

Pembrokeshire Frame Shop based in Merlin's Bridge, Haverfordwest, is one of the main hubs within the community that helps the local community. They sell donated goods including furniture, household items, clothes, and books often to those families on a lower income. Frame, Merlin's Bridge, contribute to the circular community as they help families who would otherwise have to buy new furniture when they be unable to afford it and recycle and upcycle goods instead of throwing them away. They work off donations and give back to the community, creating minimum waste.

Pembrokeshire FRAME teamed up with Haverfordwest Community Fridge, based in Haverfordwest, to ensure that vulnerable members of the community received nutritious meals during the Covid-19 lockdown.



# How does Frame Contribute to a Circular Economy?

FRAME provides training and employment to disabled people through upcycling furniture and an onsite cafe. Giving furniture a second lease at life means that less materials are wasted and old materials get rehoused with new purpose.

During the first lockdown due to Covid-19, FRAME Pembrokeshire teamed up with community Fridge to launch “Bags for Care” providing those who had to shield in and around Haverfordwest several hot meals a week. This initiative contributed to a circular economy because the Community Fridge collected left over food from supermarkets for the chefs at Pembrokeshire FRAME to cook with. This meant that less food was being thrown away and vulnerable and elderly people were able to have home cooked meals during lockdown.



A BIG BANG FOR  
PLASTIC RECYCLING

# Precious Plastic National/International Example



<https://preciousplastic.com>

Precious Plastic is a business and a community. Precious plastic's goal is to have people become accountable for the waste they produce and the recycled plastic they get back from it. Precious plastic is using their gathered resources and materials to give to others and ultimately help grow the Precious Plastic movement, and create a world wide community ('Precious Plastic Universe') which is dedicated to the knowledge and recycling of plastics. Or as they said; "Precious Plastic is a combination of people, machines, platforms and knowledge to create an alternative global recycling system."

Precious Plastic ultimately exists to reduce plastic waste. Sometimes they do it through boosting recycling. Sometimes through new biodegradable materials. Some other time by adopting zero waste lifestyles. To do this Precious Plastic offer their members multiple services; Machines that can process and recycle different types of plastics from lower more basic models to professional tools for workshops, Precious Plastic's website itself is also a shop where you can sell the products of your recycling Which can range from building material to surfboard fins with the moulds Precious Plastic offers.

Precious Plastic promotes the idea that anyone can recycle for themselves by turning their waste into a something small scale (Recycling just within your home) or a full on local business recycling the waste of a whole community.

Examples of this can be seen across the globe with Precious plastics having 1000+ recycling sites all over the world in countries like India, Sweden, Australia and China. Over 80,000 people now contribute to the global precious plastic movement. And we can take part too. Areas within schools like Design Tech classes could be perfect for the implementation of recycling machines and help schools recycle across Carmarthenshire or the whole of Wales.

# How does Precious Plastic Contribute to a Circular Economy?

As we know from the earlier explanation that the circular economy is reducing the input of raw material and output of waste via increasing our recycling. And this is, if not the primary goal and a solution to the problem that Precious Plastics is trying to solve.

Precious Plastics is using its ability to connect globally to spread knowledge of the over use of plastics and how we as a collective can solve that.

By doing this Precious plastics will;

- Increase global awareness and action
- Promote change
- Install long lasting companies, communities, restoration centres and resources for that community (Housing, activities etc)
- Increase recycling, decrease plastic waste
- Provides possible employment opportunities and community income
- Removes need for MORE waste areas like landfill sites
- Eventually more plastic will not be needed as there are already recycled options

All of this goes towards a greener and brighter future for our planet and the next generations.

And is the stepping stones for starting to design a sustainable way of life.



# Why should we support circular economy businesses like these?

By supporting circular economy business like these, we are helping Wales towards its green recovery to the coronavirus pandemic, Brexit and the impact of climate emergency – as well as playing a vital role to becoming a net-zero carbon nation by 2050.

Supporting these businesses will also put Wales in positive competition with international non-circular businesses which should hopefully drive non-circular businesses out of the market. Furthermore, the development of circular businesses in Wales provides fantastic employment opportunities for the people of Wales.

Keeping items in use for as long as possible alleviates the pressure on Welsh families facing tight budgets, maintaining the long standing community spirit Wales heavily prides itself for.

**Above all by doing so we are reducing our own environmental impact and promoting a greener, more sustainable future.**

# What is Earthshot?

<https://earthshotprize.org/>

## Our Earthshot pledges

Miss T - I pledge to use seasonal local vegetables in my cooking and ones with zero or recyclable packaging.

Ben - I pledge to promote circular economies through my design work.

Elan - I pledge to only use milk from my farm.

Grace - I pledge to support local businesses as much as possible.

Holly - I pledge to take my own coffee cup when visiting my local coffee shop.

Xavi - I pledge to buy more clothes from more sustainable sources, eg. depop.

Maia - I pledge to only use vegetables from my garden and the local family run veg shed.

Bethan - I pledge to shop in charity shops and use recycled products.

Mary - I pledge to shop locally for sustainably made clothes and local produce.

Tecwyn - I pledge to shop in charity shops, buy little single use plastics, and buy seasonal food

Fin - I pledge to help guarantee sustainable practices in our flower farm business and sell local.