

A GREEN NEW DALES: Year One of the climate emergency

Local politicians,
conservation experts
and the general public
join together to consider:

What have we achieved?
What are the challenges?
What are the next goals?

3 and 17 October 2020 on Zoom

The Future is Bright, the
Future is Circular
*How to make our lives
more sustainable*

Catherine Weetman FCILT FRSA

Rethink



Catherine Weetman MSc, FCILT, FRSA

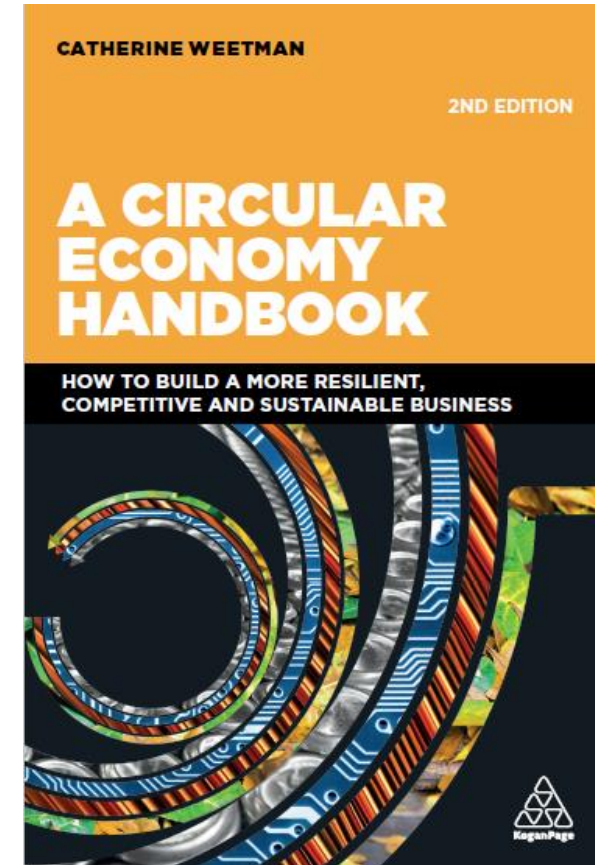
Director, Rethink Global: Helping businesses and community groups use circular approaches to make a better business (and a better world!)

advice / coaching / research / talks / workshops



CIRCULAR ECONOMY
C L U B

Mentor and Tees Valley Coordinator,
Circular Economy Club



feel it. believe it. love it.
warner's

Work Study
Engineer

TESCO

Industrial
Engineer
Distribution

Kellogg's

Distribution
Planning
Manager, Europe

exel

Project
Manager
Retail

DHL
SUPPLY-CHAIN

Product
Implementation
Director

1980

1990

2000

2010

Structure

2020

- Challenges
- Build back better...

Circular
Economy

- Overview
- Examples
- Benefits

Goals

- What you can do

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The world is changing, fast
Growing consumer demand.
Resources under pressure.
Fragile planet.
Business as usual is inefficient and wasteful



UN Climate Change  @UNFCCC · 28 Apr

"They say it's darkest just before the dawn. These are dark days, but they are not days without hope. We have a short and rare opportunity to change our world for the better."

UN Secretary-General @antonioguterres at #PCD11

We need an emergency response

- The population sizes of mammals, birds, fish, amphibians and reptiles have seen an alarming average drop of 68% since 1970
- The way we live and the food we eat is driving destruction at a rate faster than nature can recover. Everyone can do something to help.
- Almost all aspects of human health depend on a thriving natural world. But if biodiversity loss continues at the current rate, the health and well-being of many will only get worse

The Living Planet Report 2020 shows that **our relationship with nature is broken – but we know what needs to be done if we're going to turn it around.**

THERE'S NO TIME TO WASTE. WE MUST TAKE ACTION NOW IF NATURE IS GOING TO RECOVER.

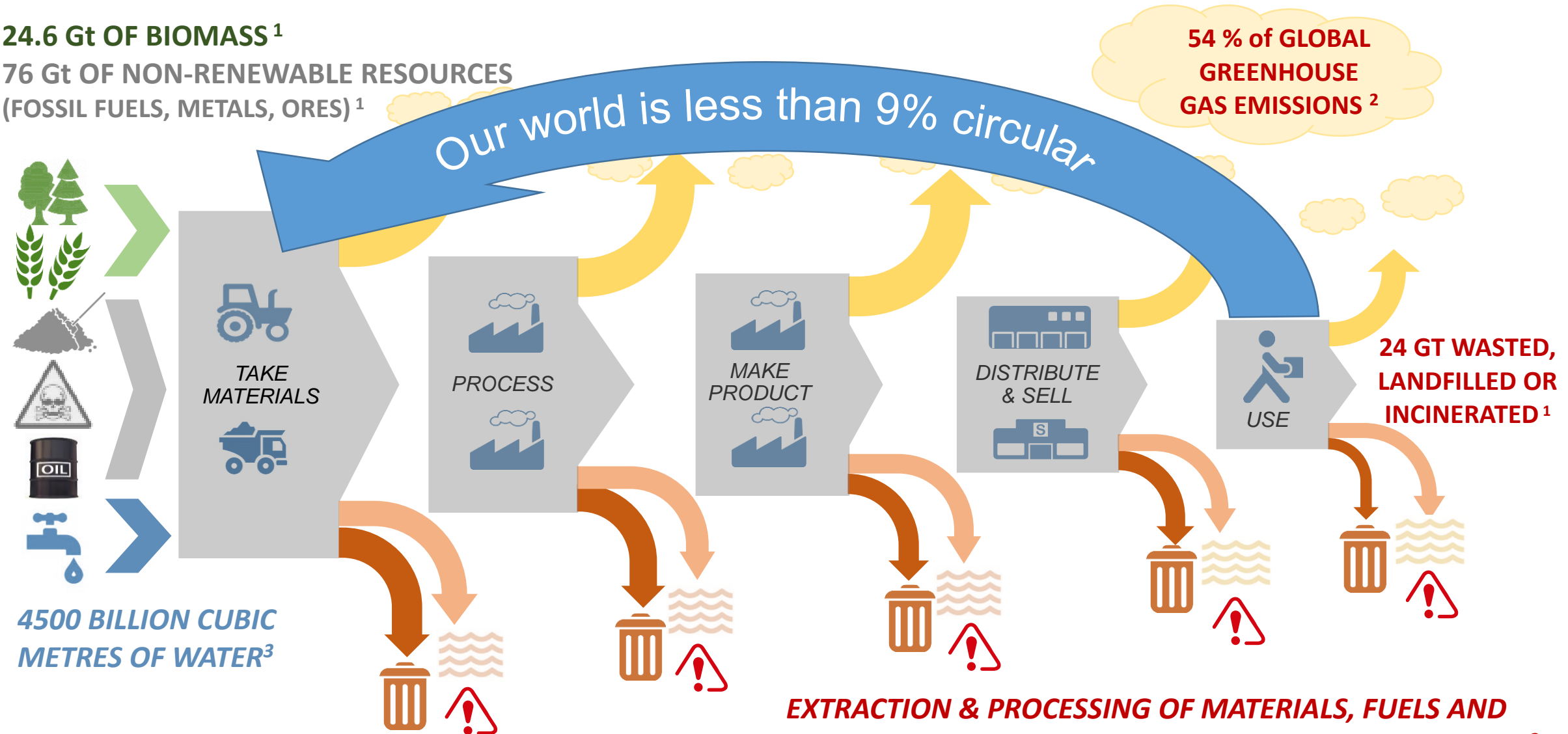
WWF Living Planet Report, 2020



Take, make, use, dispose

24.6 Gt OF BIOMASS¹

**76 Gt OF NON-RENEWABLE RESOURCES
(FOSSIL FUELS, METALS, ORES)¹**



¹ The Circularity Gap Report 2020, Circle Economy

² Global Resources Outlook 2019, United Nations Environment

³ Water Footprint Network

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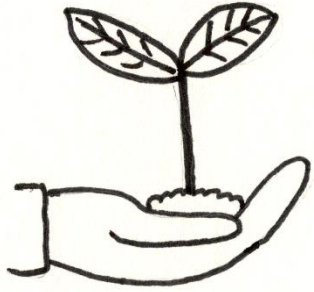
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People expect businesses to do the right things



74% say **going green** is more important than economic growth



69% think "people in my country are too consumerist"

60% of people expect to repair products instead of discarding them, in the next three years



6 in 10 say companies will experience backlash if they don't limit their environmental impact



Images Catherine Weetman [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) using data from ING International Survey – consumer attitudes towards the circular economy (November 2019)
<https://think.ing.com/reports/circular-economy-consumers-seek-help/> (~13000 respondents in 13 countries across Europe)

~~Consuming~~

So why do we shop? We are searching for excitement, looking to **increase our self-worth, confidence and recognition**.

The American media activist and advertising critic, Jean Kilbourne, [has commented](#) about how deeply advertisers insinuate themselves by **exploiting basic human desires** like friendship, happiness and success in advertising for profit.

www.greenpeace.org/international/story/7493/shopping-doesnt-make-us-happy/

Caring

www.rethinkglobal.info

How long the shopping buzz lasts



www.greenpeace.org/international/story/7493/shopping-doesnt-make-us-happy/

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From linear to circular

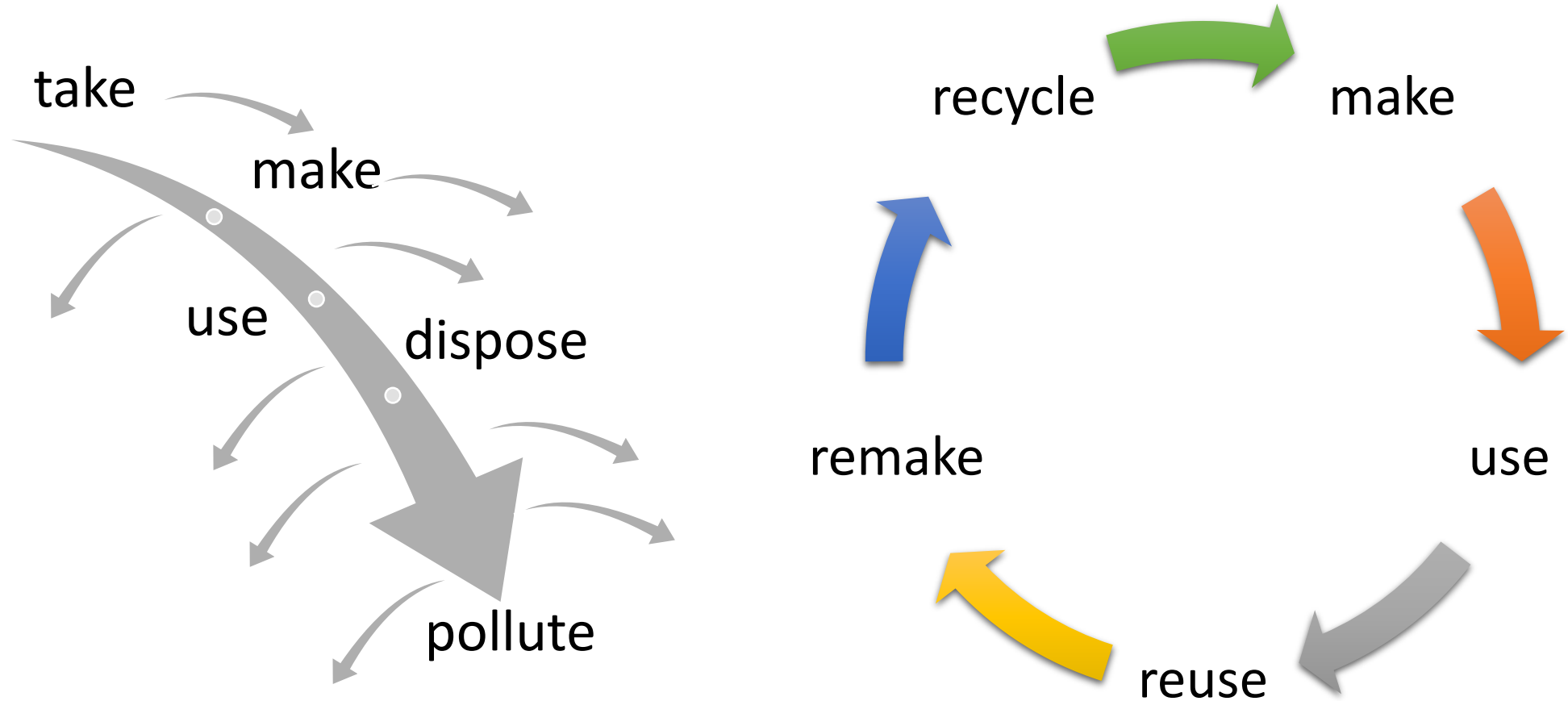
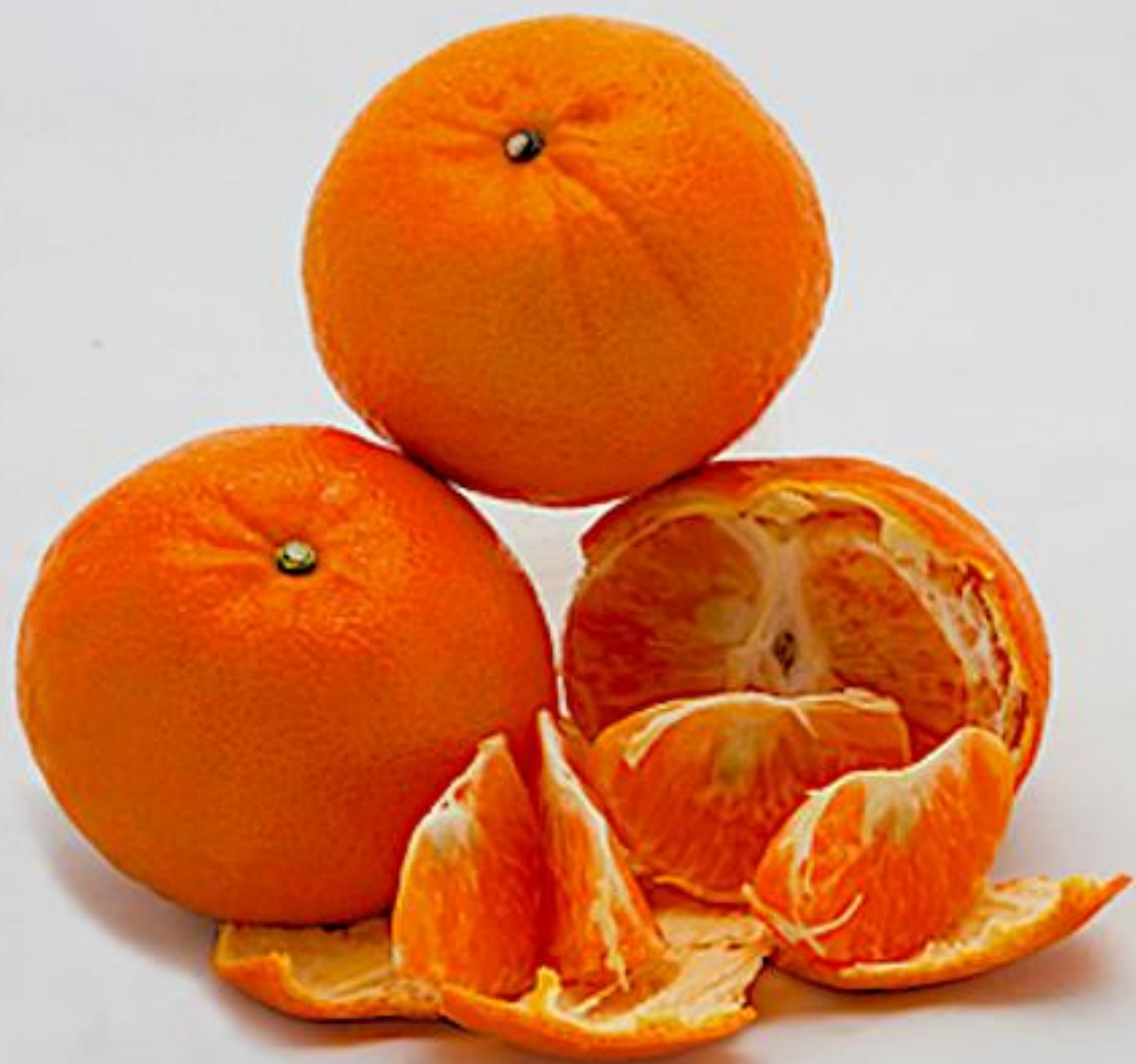


Image: Catherine Weetman (2016) www.rethinkglobal.info CC 4.0

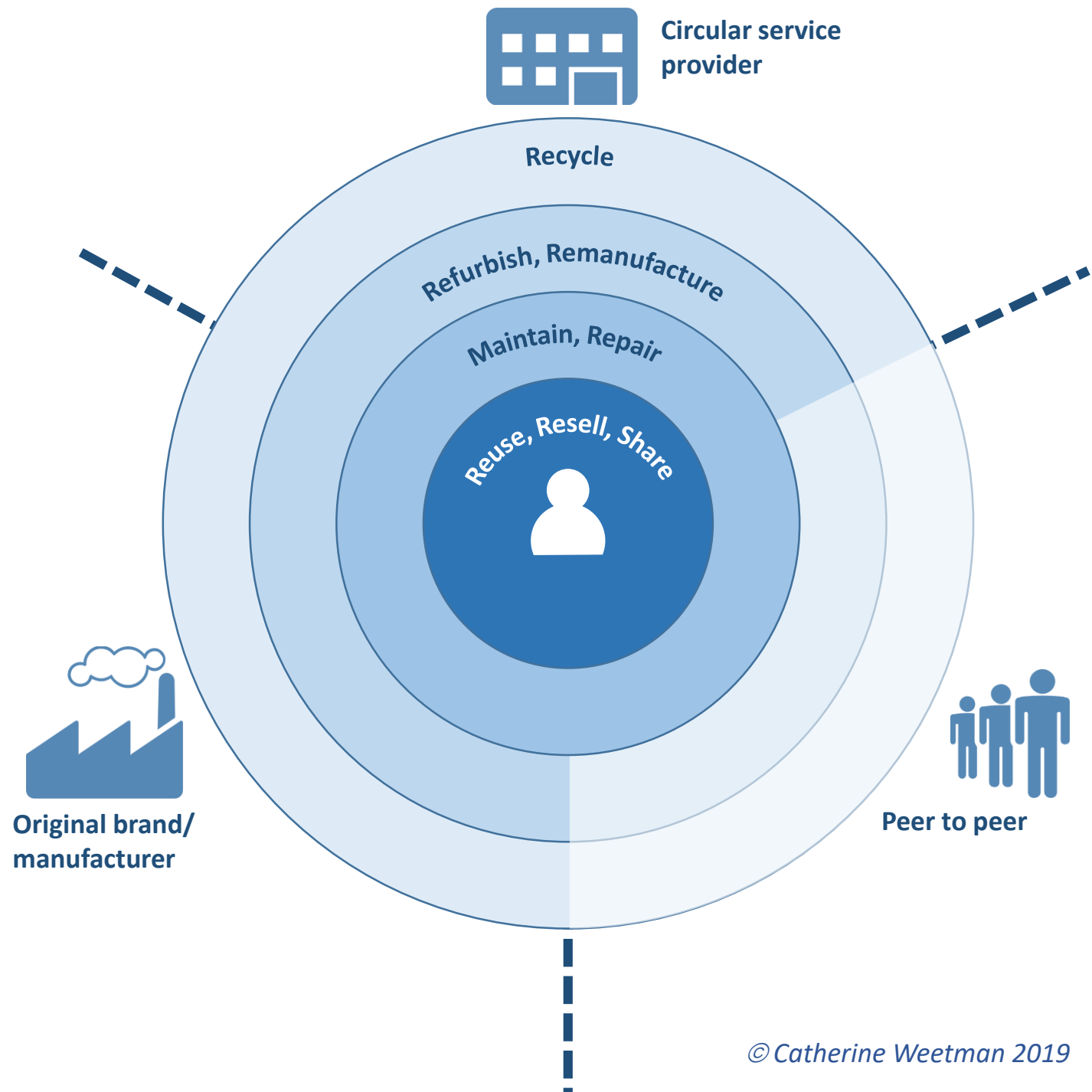


The future is in the filing cabinet!



Image by Naeem Mayet from Pixabay

The tightest loops retain most value...



Mindset-shift – from consumers to citizens

| | | |
|------------|----|--------|
| Consuming | >> | Caring |
| Fast | >> | Slow |
| Solo | >> | Shared |
| Single-use | >> | Reuse |

Structure

2020

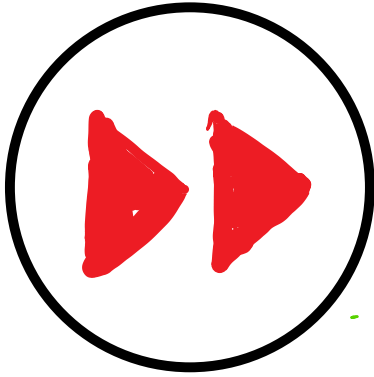
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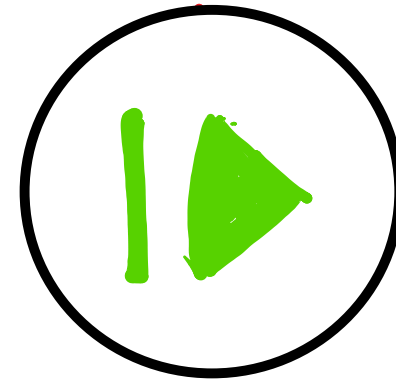
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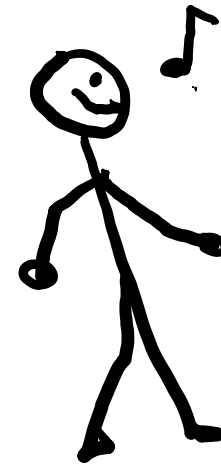
- What you can do



FAST!



SLOW



This is not a phone

It's an opportunity
to change the industry



Image: www.fairphone.com/



Fairphone2 modular design

Image: www.flickr.com/photos/fairphone/23624799326/

Durable and rugged

Modular design for easy repair and upgrade – disassemble with a single screwdriver

Circular materials:

- limit composite materials,
- favour homogenous materials;
- maximise use of recycled materials,
- minimise coatings

Minimise social and environmental **impact** of production



With **our Imagine Project**, we are aiming to create an environmentally sustainable children's bike that uses the principles of the circular economy to challenge and change the way we think about designing, manufacturing, owning and ultimately disposing of our products. However, with so many unique challenges we cannot do this alone, so we have been collaborating with other organisations to help us better understand every aspect of our design and manufacturing process to allow us to meet our goals of:

Minimising environmental impact: all materials and components for Imagine bikes should originate close to the place of manufacture to reduce the energy used in transportation (currently our Ludlow base in Shropshire, UK)

100% reused materials: we want to remove the need to draw on finite natural resources

Longevity: Our aspiration is for the Imagine bikes to last 50 years

Circular Sustainable materials: all materials used in the bike construction must be easy to separate and reprocess at the end of use, without downgrading

Superb user experience: zero maintenance, with excellent customer service during the rental period

iFixit



The free repair guide for everything,
written by everyone.

What would you like to fix today?



[iPhone 6 Battery Replacement >](#)

[Repair Guides](#)

[Answers Forum](#)

[Parts & Tools Store](#)

[Tear-downs](#)

[Translate](#)

Image: www.ifixit.com/

The power of circular products

5.4 Million

Since 2018 **5.4 million** used cups have been given a new longer life as Circular reusable coffee cups.



187 Million

187 Million single-use cups could have been saved from **contaminating our environment**.



17 Billion

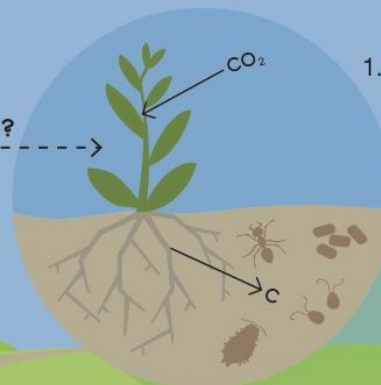
During the life of one **Circular Cup**, **17 billion single-use cups** will have **been saved from use**.



RESTORE IT!

STORING CARBON
RESTORING SOILS

HOW DOES IT WORK?



1. Plants absorb carbon dioxide & turn it into a carbon-based sugar
2. These sugars allow the plant to grow & absorb more carbon
3. Roots store & release some sugars deep into the soil
4. Organisms eat the sugars & build healthy soil

PERENNIAL PLANTS & DIVERSE CROPS

Provides harvests for several growing seasons from a single planting

COMPOSTING

Supplies nutrients to improve the health of soils and crops

COVER CROPPING & CROP ROTATION

Covers exposed ground between plantings

MANAGED GRAZING

Rotation of livestock according to forage availability & soil health

ZERO OR LOW TILLAGE & MULCHING

Reduces ground disturbance & protects soils with natural cover

FARMERS USE THESE METHODS

BENEFITS OF REGENERATIVE AGRICULTURE

These practices have many benefits, from local to global.

Farmlands are restored for long-term sustained use, making surrounding communities & environments more resilient.

Research shows that regenerative agriculture could sequester 100 percent of yearly CO₂ emissions, a significant step towards reversing climate change.

BUILDS HEALTHY FARMLANDS

- improves soil health & structure
- improves water holding capacity of soil
- reduces erosion
- increases production
- improves adaptation to climate change

SUPPORTS FARMERS & FARMWORKERS

- reduces exposure to harmful chemicals
- improves & revitalizes rural economies
- reduces time, labor, input, & fuel costs
- improves quality of life

PROTECTS LOCAL ENVIRONMENTS

- improves biodiversity & wildlife habitats
- reduces air & water pollution from dust, manure, & pesticides
- reduces use of synthetic chemicals
- reduces unused plant & animal wastes

BENEFITS CONSUMERS & THEIR FAMILIES

- improves nutritional quality of food
- improves diversity of diets
- improves food security
- reduces exposure to toxic chemicals

REVERSES GLOBAL CLIMATE CHANGE

- reduces respiration of carbon from soil
- improves capacity of soil to store carbon
- reduces emissions from input production
- reduces on-farm fuel use

Implementation is site specific and depends on soil characteristics, crops grown, & local climates. Practices are rooted in organic methods and can be integrated into farms and pastures transitioning from conventional to organic. Learn more: <https://greenamerica.org/restore-it>



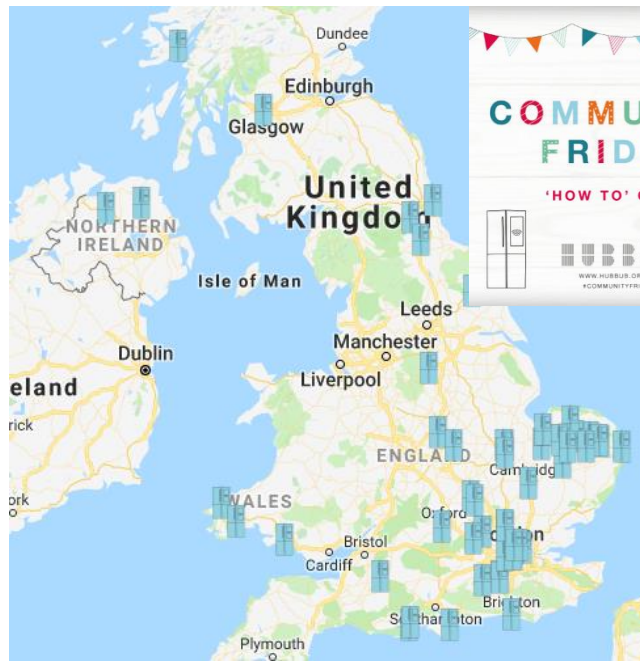
Solo



Shared



Community initiatives



2016:
100 UK groups
& 600 worldwide



Repair Cafés are free meeting places and they're all about repairing things (together). In the place where a Repair Café is located, you'll find tools & materials to help you make any repairs you need. On clothes, furniture, electrical appliances, bicycles, crockery, appliances, toys, et cetera. You'll also find expert volunteers, with repair skills in all kinds of fields.

Visitors bring their broken items from home. Together with the specialists they start making their repairs in the Repair Café. It's an ongoing learning process. If you have nothing to repair, you can enjoy a cup of tea or coffee. Or you can lend a hand with someone else's repair job. There are over 1.400 Repair Cafés worldwide. [Visit](#) one in your area or [start](#) one yourself!

Source: repaircafe.org/en/about/

Shared mobility



Shared Cars

Shared Bikes

Shared Rides

Shared Scooters

Co-mobility & Themes

What

Where

Who

Why

How

Projects



Image: <https://como.org.uk/>

www.rethinkglobal.info

Rethink



[borrow](#) [participate](#) [the movement](#) [stories](#)

why buy when you can borrow?

**Borrow useful things for your home, projects
& adventures**

Source: Library of Things www.libraryofthings.co.uk

Library of Things is on a mission to make borrowing better than buying.



More affordable & convenient

BORROW THINGS



More socially rewarding

LEARN SKILLS



Kinder to the planet

GROW THE MOVEMENT



Borrow 70 useful Things when you need them



Learn skills through events or volunteering



Start a Library of Things



How does it work?

If we've got it, you can borrow it!

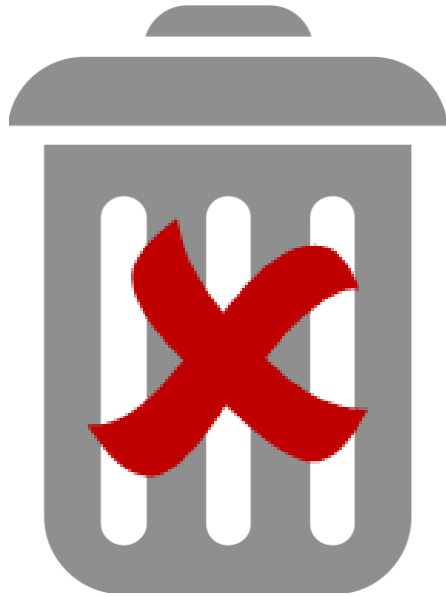
The Share Shed is the world's first mobile library of things. Based in Devon (UK), it offers over 350 items to be borrowed, including:

- TOOLS • HOUSEHOLD APPLIANCES
- CAMPING AND GARDENING EQUIPMENT
- SEWING MACHINES • SUITCASES • AND MUCH MORE!

Single-use



Reuse



CIRCULAR COMPUTING™

‘THE WORLD’S FIRST REMANUFACTURED CARBON-NEUTRAL LAPTOPS’



For every Circular Computing™ laptop purchased



5 trees planted



380kg CO₂
saved



190k litres of
water saved



1200kg of mining
minerals
prevented

“If you could buy the most ethical & sustainable laptops in the world, with 97% of the performance of the latest models and save a significant amount on the price, what would stop you?”

Images: circularcomputing.com/

www.rethinkglobal.info

Rethink

Close the loop



DESIGNING OUT WASTE

One shoe. One material. Designed to be ground up and remade without ever losing performance. When one thing can become another, we move towards a circular future and the end of plastic waste.



ADIDAS FUTURECRAFT: “MADE TO BE REMADE”

ApparelXchange is a social enterprise dedicated to school uniform reuse



Donate

- At school uniform collection points, or at our Glasgow Store, events and Pop-up shops.

Sort & check

- Our trained volunteers sort & check all garments for quality and condition such as tears or missing buttons.
- Garments that don't meet our quality control standards are recycled with a registered textile recycling provider.

Refresh

- Uniform items that meet our quality checks and are in an excellent reusable condition are washed, ironed and prepared for re-sale.

Sell

- Quality uniforms are available for re-sale in our Glasgow Store, Online-shop or at pop-up shops in schools or at special events.



Why is reuse better?

Creating 1 tonne of clothing generates 22 tonnes green house gas emissions



=



Making 1 t-shirt uses the drinking water needed for 3 people for a year



=





ODYSSEY
— Innovation —

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[Shop](#)

[Marine Protection](#)

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The Solution

The eureka moment came after a litter pick using kayaks, it ended with volunteers stood around a great haul of bin bags to have their photo taken.

The knowledge that these bags ended up in landfill had always played upon Rob's mind and it occurred to him that he could make the kayaks out the plastics gathered and then use the kayaks to gather more plastic.

[VIEW OUR KAYAKS](#)

Zero packaging and reusable packaging

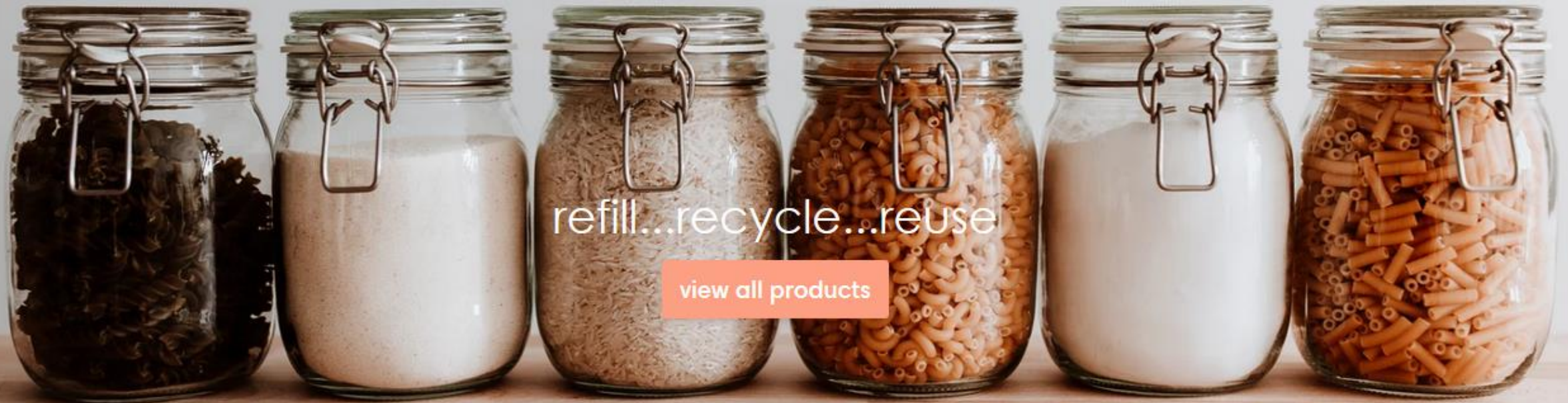


Image: <https://thezeroshop.co.uk/>



RECYCLE YOUR WASTE ABOUT TERRACYCLE WORK WITH US INVEST IN US

TerraCycle offers a variety of programmes through which you may recycle nearly every type of waste.



Free Recycling Programmes

These recycling programmes are completely free and made possible through our partners' support. Simply sign up and start recycling.

➔ [Browse Free Recycling Programmes](#)



Zero Waste Boxes

Zero Waste Boxes allow us to create recycling solutions for nearly every type of waste which are not sponsored by a brand yet. These Boxes may be purchased in various sizes.

➔ [Browse Zero Waste Boxes](#)



Large-scale recycling

Our teams can also work with your business or company to recycle large volumes of waste.

➔ [Learn more](#)

Structure

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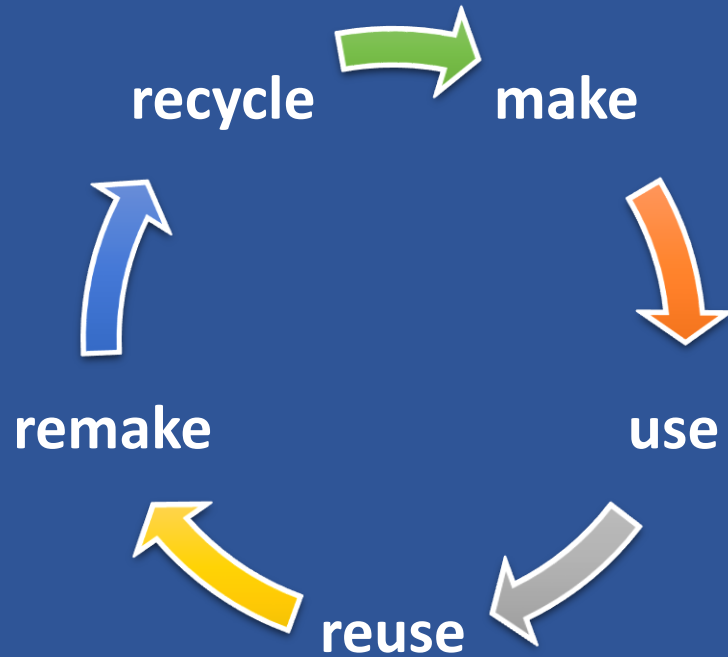
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7 reasons why the circular economy is better for your business



Each year we throw away:



300 million tons
of plastic



50 million tons
of electronic waste



1/3 of all
food produced.

Creating a circular economy offers a
\$4.5 TRILLION ECONOMIC OPPORTUNITY by:



avoiding
waste



stimulating
business growth



creating job
opportunities

**“Businesses that work on the basis
of circular principles are amongst
the fastest growing in the economy”**

*Dr Martin R Stuchtey, McKinsey Center for
Business and Environment*

**“This shift to circular economic activity could
help address the global job gap of 600 million”**

*Dominic Waughray, Senior Director,
World Economic Forum*

**“Shifting to the circular economy
could release \$4.5 trillion in new
economic potential by 2030”**

Accenture

Source: UN Environment (plastic & e-waste), FAO (food),
Accenture (economic opportunity)



WORLD RESOURCES INSTITUTE

Source: WRI <https://www.wri.org/blog/2020/08/how-to-circular-economy>

20.08.04

Benefits for climate, nature & society

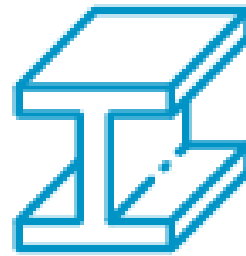
Creating a circular economy for **5 KEY SECTORS**



CEMENT



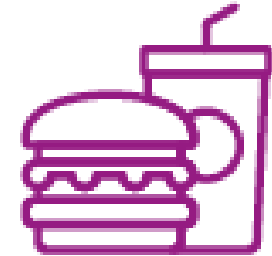
ALUMINUM



STEEL



PLASTICS



FOOD

could cut CO2 emissions by **3.7 BILLION TONS IN 2050**

Source: The Ellen MacArthur Foundation

20.08.04



WORLD RESOURCES INSTITUTE

Source: WRI <https://www.wri.org/blog/2020/08/how-to-circular-economy>

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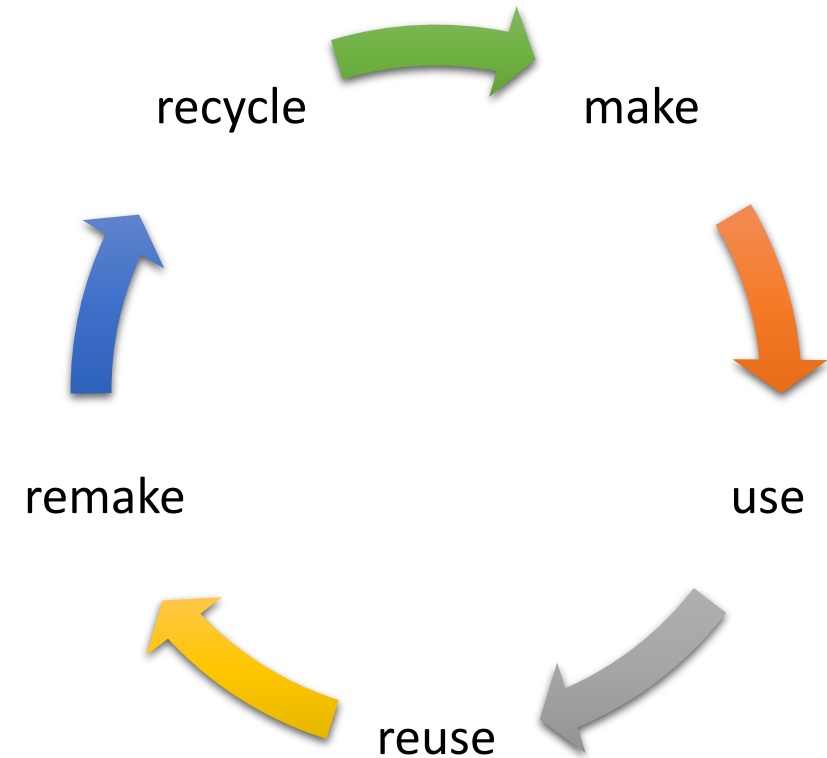
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“Be part of the solution, not part of the problem, and then you can sleep at night” *Yvon Chouinard, Founder, Patagonia Inc.*

| | | |
|-----------------------|----|--------|
| Consuming | >> | Caring |
| Fast | >> | Slow |
| Solo | >> | Shared |
| Single-use | >> | Reuse |





Your opponents would love you to believe that it's hopeless, that you have no power, that there's no reason to act, that you can't win.

Hope is a gift you don't have to surrender, a power you don't have to throw away.

Rebecca Solnit (2015) Hope in the Dark

Want to know
more?

"This is a book for everyone in business, or who wants to shape the future of business. The circular economy is the best toolkit we have for future sustainable business and this book leads you through what it is and why so many businesses and governments are getting on board." *Tom Szaky, Founder & CEO, TerraCycle*



CircularEconomyPodcast.com
with Catherine Weetman

Talks, workshops, webinars,
coaching, advice & research

www.rethinkglobal.info
hello@rethinkglobal.info

