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**BLUEPRINT**   
to a Circular Economy



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# Welcome to the BLUEPRINT Circular Economy Roadshow

The session will begin soon

[projectblueprint.eu](https://projectblueprint.eu)

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# Inspiring local authority initiatives for a circular economy

Monday 9 May, 09:00-10:40

# Housekeeping



This session will be recorded



Use the chat/Q&A box for your questions



Please leave feedback

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# Inspiring local authority initiatives for a circular economy

Chair's welcome

**Emily Martin, Essex County Council**

# Inspiring local authority initiatives for a circular economy

1. Sophie Moss, Brighton & Hove City Council & Dr David Greenfield, Tech Takeback
2. Hannah Ramsey-Smith, Essex County Council
3. Donald Chapman, Environmental Analyst, Zero Waste Scotland
4. Joanna Williams, UCL

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# Inspiring local authority initiatives for a circular economy

*Speaker slides...*



**Brighton &  
Hove Circular  
Economy  
Routemap**

A sustainable green growth  
strategy for the city

2020-2035

Economy, Environment & Culture  
Supporting economic growth and maintaining  
an attractive, connected and well run city for  
residents, businesses and visitors



# OUR CIRCULAR ECONOMY JOURNEY

# POLITICAL MANDATE

The political mandate for our programme of work was set in 2018 with the publication of Brighton & Hove City Council's Economic Strategy and reiterated in 2021 with the publication of the council's 2030 Carbon Neutral Programme.



**Brighton & Hove  
City Council**





# BHCC ECONOMIC STRATEGY (2018 – 2023)



## A Growing City

A city that unlocks its capacity for growth, through the delivery of homes, space and infrastructure and through the evolution of a better-connected economy.

Outcomes: more homes, business space, vibrant SME economy, sustainable infrastructure.



## An Open City

A city that achieves its potential as the most distinctive City in the UK, evolving as an attractive, welcoming and modern place for investors and visitors alike.

Outcomes: business investment, thriving visitor, retail, leisure & culture offer, better places.



## A Talented City

A city makes the most of its talent, by ensuring that all residents have the competencies that they need to access employment, to progress in work and build careers.

Outcomes: economic participation, skills for growth, labour market productivity.



## A Fair City

A city which is inclusive and responsible, encouraging engagement and participation across our communities and working to ensure the benefits of growth are distributed fairly.

Outcomes: economic and social inclusion, health, civic pride and responsibility.



## A Sustainable City

A City which looks to the future, focusing its economy on sustainable solutions to future challenges in order to protect and enhance the health and wellbeing of its residents and act as a leader in developing a robust response to climate change.

Outcomes: a more circular, sustainable and resilient economy.



# BHCC ECONOMIC STRATEGY (2018 – 2023)



## A Sustainable City

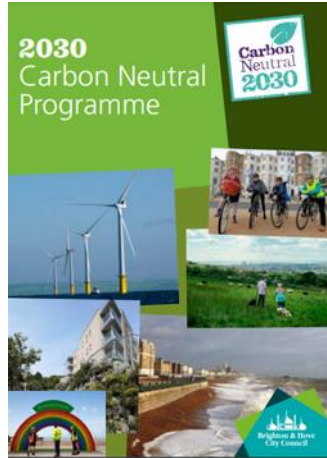
**Focus:** A circular and sustainable economy, business and community engagement and climate change.

**Purpose:** A city which builds a strong, sustainable economy geared towards developing a robust response to climate change.

**Priority Action 6:** Promote the development of a circular and sustainable economy to minimise waste and pollution by reducing, reusing and recycling.



# CARBON NEUTRAL 2030 PROGRAMME



Carbon Neutral 2030 programme

The Living Coast Biosphere



CN2030 action plan

Governance

Circular Economy programme

Biodiversity

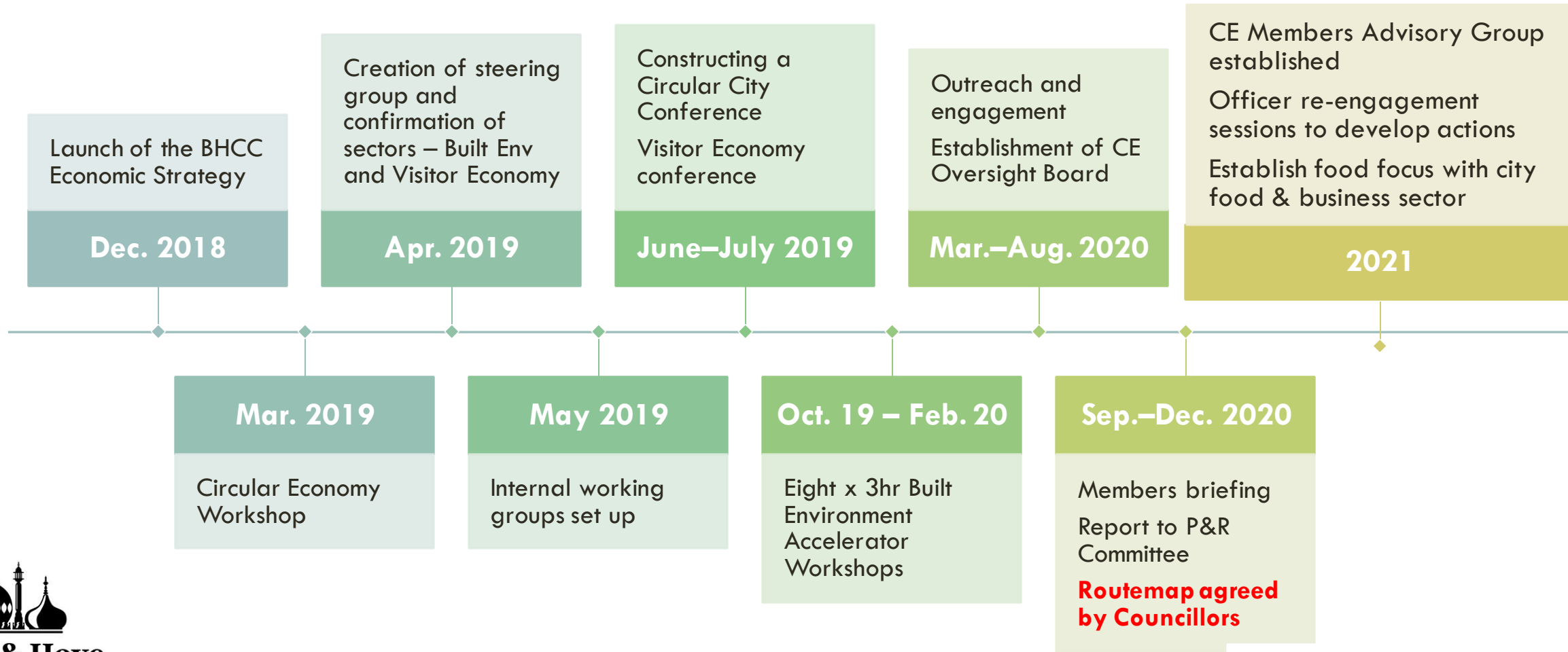
Carbon Reduction

Climate Adaptation

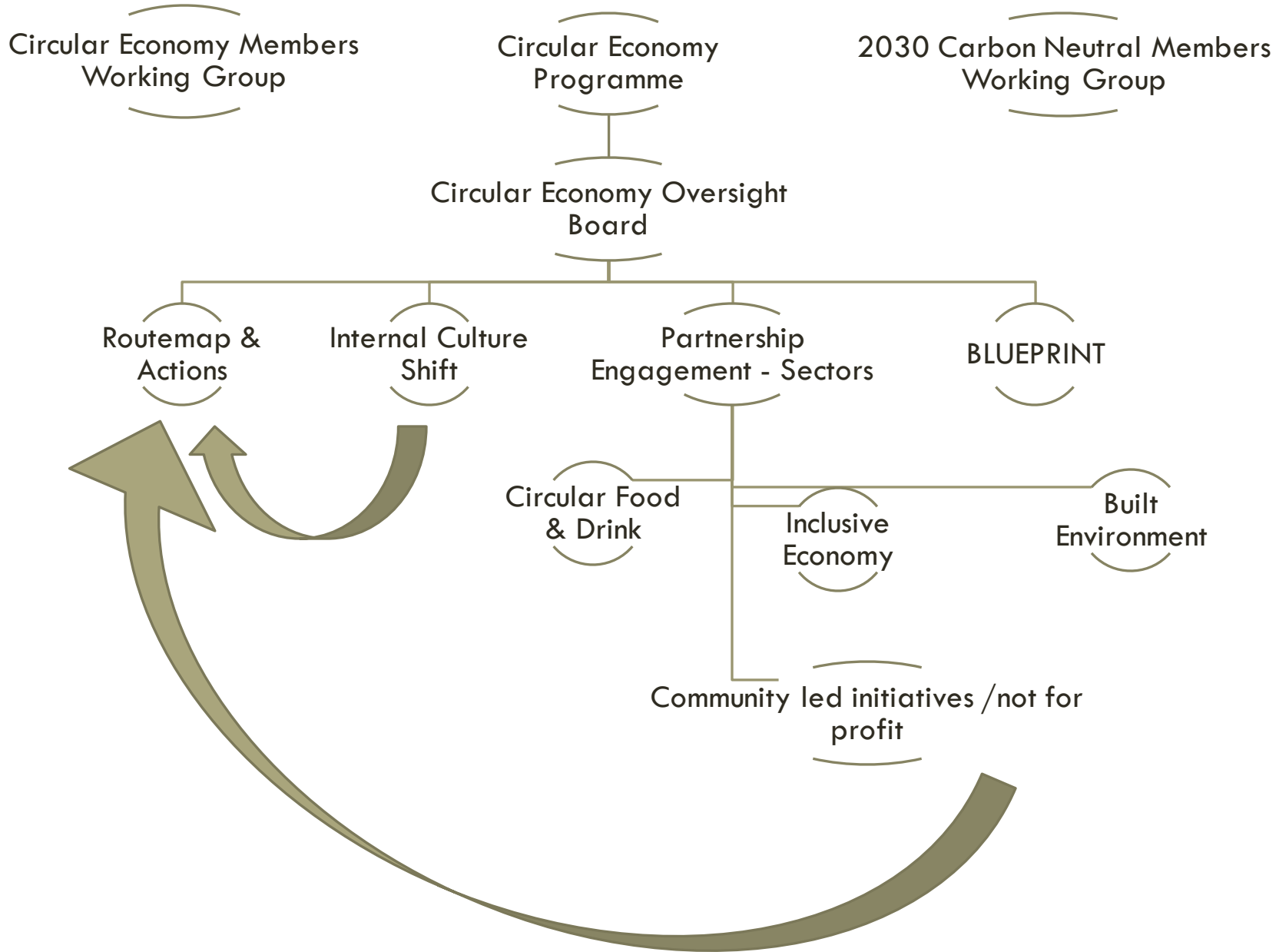
Comms & Engagement



# THE BHCC CIRCULAR ECONOMY JOURNEY



# CIRCULAR ECONOMY PROGRAMME





# ACTION AREAS

Business engagement

Behaviour change

Creating a circular food system

Creating a circular built environment

# SUPPORTING THE DELIVERY OF ACTIONS IN THE CIRCULAR ECONOMY ACTION PLAN

Work Package 1 - Ensuring local authorities have the framework to work towards a circular economy

Work Package 2 - Mobilising social enterprises and public sector bodies to provide circular economy training

Work Package 3 - Helping schools and households to change their behaviour to support circular economy growth





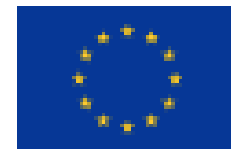
**TECH-TAKEBACK**



# RevaluElectricals – Small Electricals COLLECTION SERVICE

**Dr David Greenfield**

*Co-founder and Managing Director Tech-Takeback*



**Brighton & Hove City Council**





# History



Tech-Takeback started as a small pop-up event in a Brighton cafe where a team of reuse, recycling and data security experts held an event to allow residents to donate their unwanted tech.

We ran 8 pop-ups over 28 days between 2017 and 2019 and collected over 9 tonnes of tech.





In 2020, Tech-Takeback and The ZeroNet joined forces with Brighton & Hove City Council and Recycle your Electricals to offer Brighton and Hove residents a new service:

 **RevaluElectricals**

# Collection Process



- Residents download The ZeroNet app and state what they want to donate and request a collection
- Using route optimisation we schedule a collection which they accept or reject through the ZeroNet App
- Tech-Takeback undertake a Covid-19 Compliant Collection (Contactless, maintaining a safe distance) in a fully electric van
- Boxed filled by resident and then Box sealed by driver
- Next resident notified that we are en-route
- After all collections, all boxed taken to Operations hub.



# Inventory Processing



Box checked into Inventory Booking in

Data erasure is undertaken

Triage once data erased

PAT Testing

Refurbish & Redistribute / Recycling

Reuse feedback to residents





# End destinations

Multiple charities including Digital Brighton & Hove, YMCA, Refugee support and schools

- Devices are loaded with operating system and office (as appropriate)
- DBH team find recipients
- Tech-Takeback in DBH champions support hardware
- Resident who donated tech is informed their items are supporting the digitally excluded

Freegle – a reuse charity

- All non tech items are PAT tested and redistributed through a Tech-Takeaway day in Brighton
- Residents are informed that their items have gone for reuse

# Small Electrical Items Collected

12<sup>th</sup> Nov 2020-  
12<sup>th</sup> Nov 2021

## RevaluElectricals

12th November 2020 - 12th November 2021

2,063

HOUSEHOLD  
COLLECTIONS

26,712 ITEMS  
COLLECTED

WEIGHING  
A TOTAL OF  
25 TONNES

12.14 KG  
AVERAGE COLLECTION  
PER HOUSEHOLD

1,933 REGISTERED USERS  
ON THE ZERONET

668 ONLINE COLLECTION  
REQUESTS VIA  
TECHTAKEBACK.CO.UK

7,226 EXTERNAL  
DATA DEVICES 

2,092  
HOUSEHOLD  
APPLIANCES 

588  
DESKTOP PCs 

1,502  
LAPTOPS 

3,346 AUDIO &  
VIDEO  
EQUIPMENT 

49  
iMACs 

412  
TABLETS 

440  
TVs &  
MONITORS 

1,804  
MOBILE  
PHONES &  
SMARTPHONES 

792  
NETWORK  
EQUIPMENT 

4,105  
CABLES,  
POWER UNITS  
& BATTERIES 

312  
DIGITAL  
CAMERAS 

562  
COMPUTER  
MICE 

437  
COMPUTER  
KEYBOARDS 

81  
GAME  
CONSOLES 

38  
E-READERS 

# Small Electrical Items Reused and Recycled

12<sup>th</sup> Nov 2020 -  
12<sup>th</sup> Nov 2021

## 1,918 TONNES

CO2 EMISSIONS SAVED BY  
TECH-TAKEBACK THROUGH  
REUSE & RECYCLING OF  
SMALL ELECTRICAL ITEMS

5,463 ITEMS &  
ACCESSORIES  
REDISTRIBUTED  
FOR REUSE

5,600 ITEMS  
DISASSEMBLED  
& RECYCLED

57 DESKTOP  
PCs FOR  
LOCAL  
SCHOOLS



294

LAPTOPS FOR  
SCHOOLS,  
CHARITIES &  
DIGITALLY  
EXCLUDED  
FAMILIES



48  
TELEVISIONS



27



MOBILE PHONES AND  
SMARTPHONES

29



VACUUM CLEANERS

19



MICROWAVES

1,000

CDs & DVDs



TECH-TAKEBACK



# Revaluit

BY TECH-TAKEBACK



**Revaluit**  
BY TECH-TAKEBACK

How does it work?

- 1 We collect your unwanted tech and electricals to prevent them from becoming waste.
- 2 All data is erased from data-bearing devices such as phones, laptops and tablets.
- 3 Donated items are tested and refurbished / ready for reuse.
- 4 Electrical items are given a second-life when sold at our pay-what-you-can shops, or provided to local charities.
- 5 Money raised through the sale of items is used to further fund the refurbishment of items for local charities.

Revaluit is a not-for-profit organisation dedicated to reducing electronic waste by providing high quality second-hand products to businesses and supporting local people.

[www.techtakeback.co.uk](http://www.techtakeback.co.uk)

**NOW OPEN IN  
BRIGHTON & HOVE**







**KEEPING THINGS IN  
USE FOR LONGER**  
Let's talk about Textiles

## at Whitehawk Library & Community Hub

Meet local, circular organisations at this FREE  
community event on:

**Friday 1st April (2pm - 4:30pm)**

AND

**Saturday 2nd April (10am - 3pm)**



# Whitehawk Library & Community Hub

## Fri 1st April & Sat 2nd April

Friday 2pm - 4:30pm

- Pre-loved SCHOOL UNIFORMS (2-4pm) Pay-as-you-feel for Longhill uniform with 'Smarter Uniforms' & SWAP with 'Box & Hanger' for primary school ages.
- Uniform REPAIR SHOP with 'Fabric Godmother' and 'The Fashion School' - learn simple hand repairs.
- After school SNACKS from Hawks cafe.
- CRAFTS (3-4:30pm)

Saturday 10am - 3pm

- 'FREE YOUR WARDROBE' (from 11am) FREE women's wear event. Bring clothes you don't wear, take clothes you can't wait to wear!
- Clothing REPAIR SHOP and demos with 'Fabric Godmother'
- Whitehawk Arts Collective - scraps workshop (10am - 1pm).
- CRAFTS (1:30 - 3pm).
- Coffee & croissants 10-12pm.

And on BOTH days:

- 'Woolly Umbrella' SPINNING.
- Pelican parcels - supporting families in Sussex.
- SOEX - find out what happens to recycled textiles.
- Circular Economy Champions - find out more!
- Tech-Takeback - giving unwanted tech a second life.
- Freegle - the FREE online reuse platform
- Circular Brighton & Hove

# Next Steps and vision

---

- Three more roadshows
- School and university visits
- Disassembly sessions
- New material collection streams
- A circular café for home workers
- Small changes with big impact
- A multifaceted CE hub for the city

# THANK YOU

**Dr David Greenfield – Managing Director, Tech-Takeback Ltd**

**Email: [david@techtakeback.co.uk](mailto:david@techtakeback.co.uk)**

**Mobile: 07711 930988**

**Website: <https://www.techtakeback.com>**



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**BLUEPRINT**   
to a Circular Economy



# BLUEPRINT to a Circular Economy Model

*Supporting local authorities to transition to a circular economy*

Hannah Ramsey-Smith – Senior Circular Economy Officer,  
Essex County Council

# Project overview



- Three year project April' 20 – March' 23

- €5.5M total project value

## Project goals



**ENABLE** local authorities to accelerate towards a dynamic circular economy.

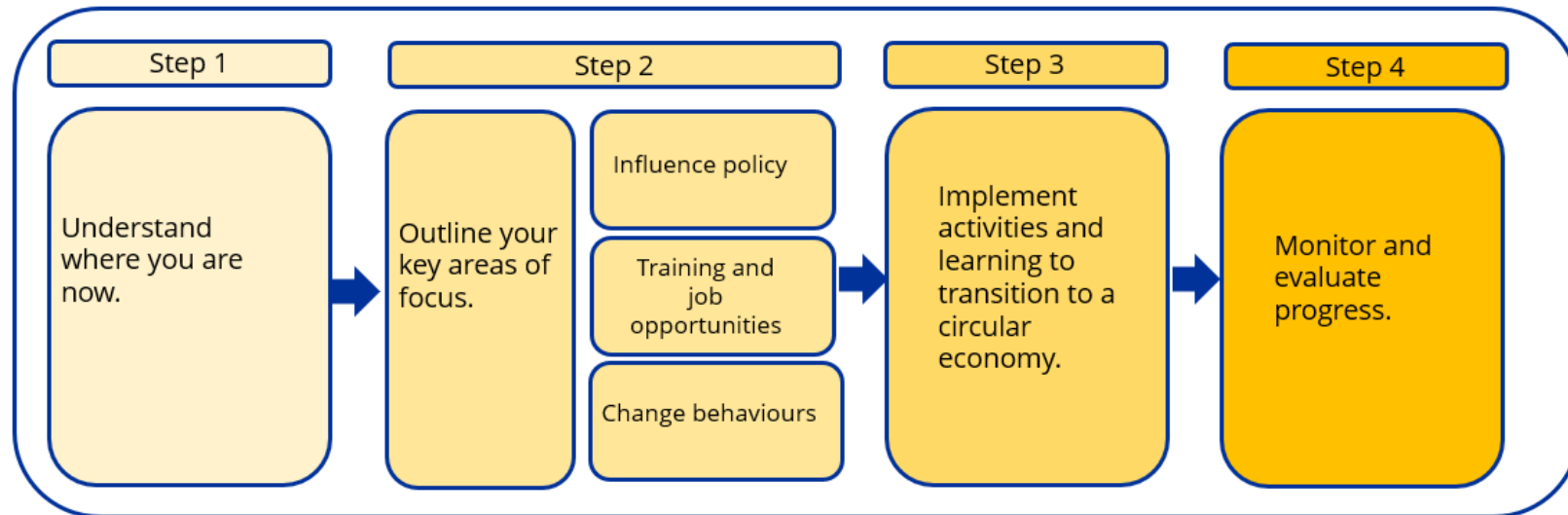


**EQUIP** social enterprises to support disadvantaged people to secure jobs in the circular economy sector.

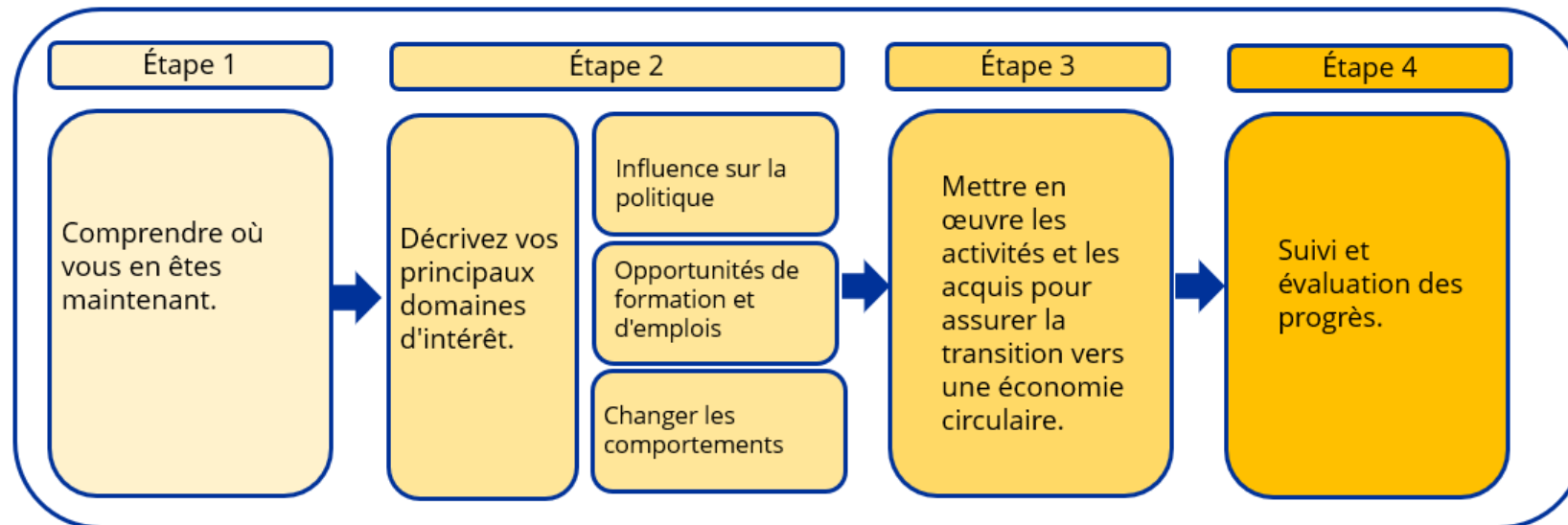


**ENHANCE** community engagement to deliver lasting behaviour change for residents and schools.

## The BLUEPRINT to a Circular Economy Model



## PLAN DIRECTEUR pour une économie circulaire

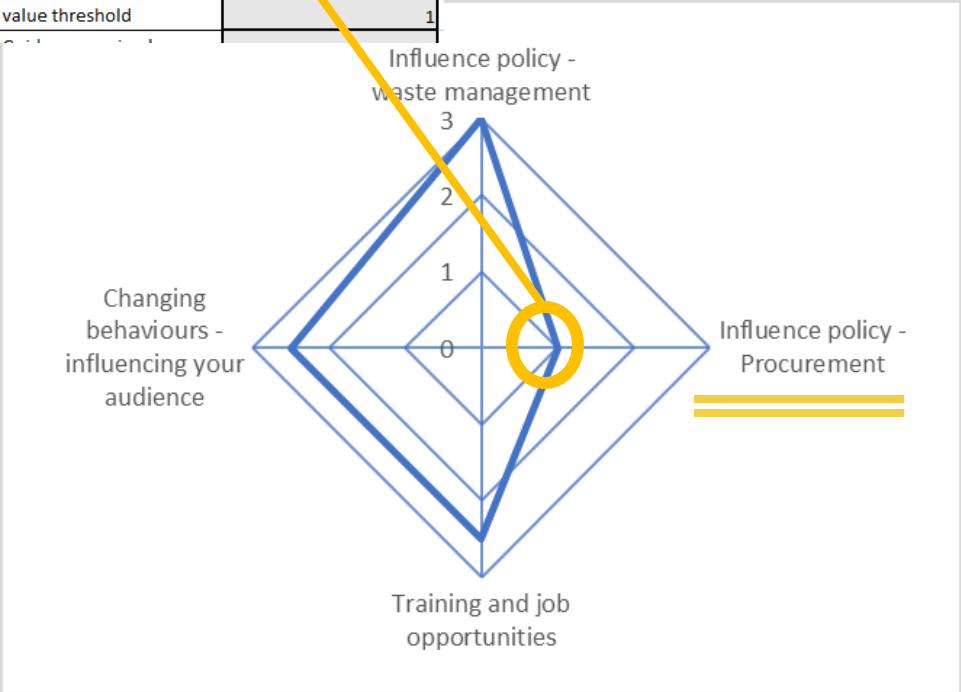




Understand where you are now.

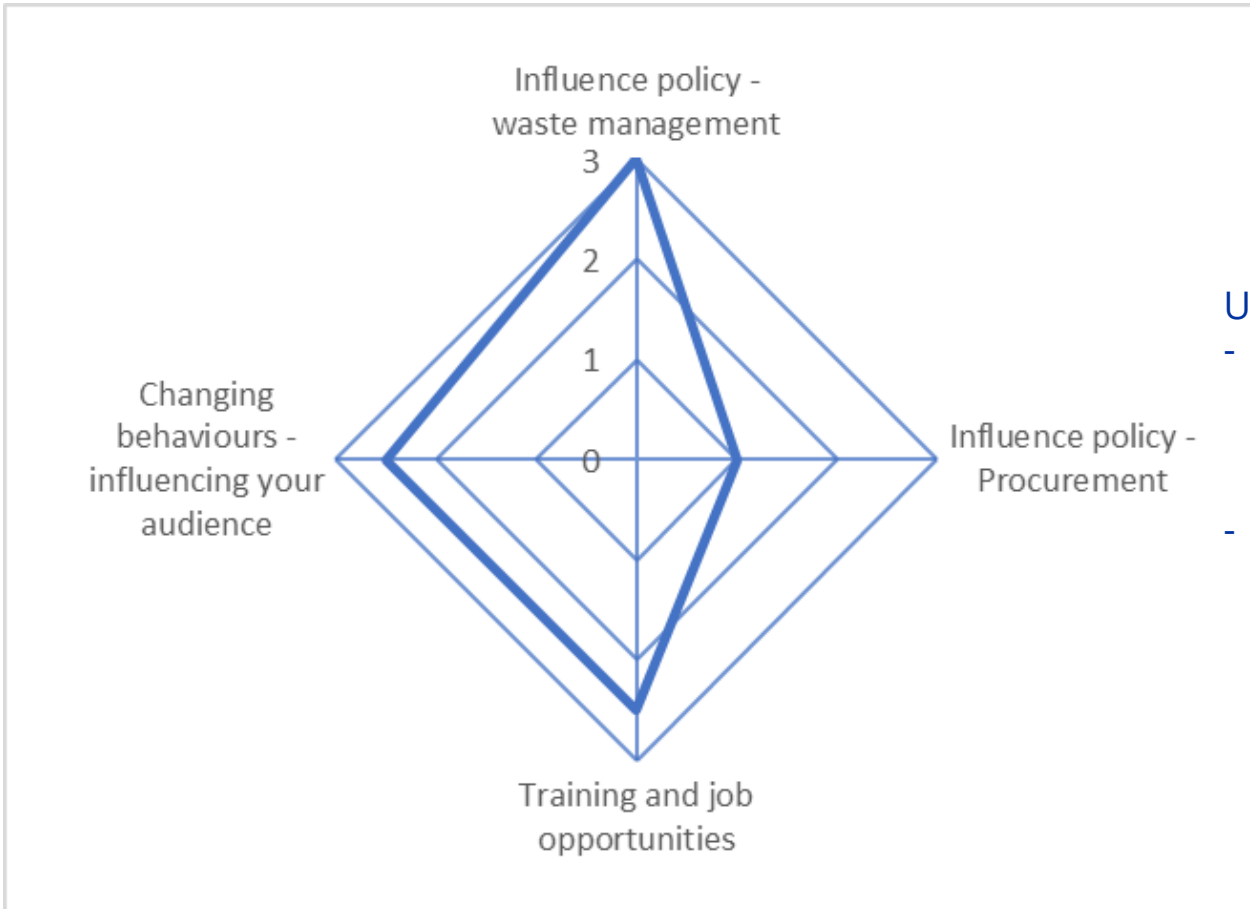
# Step 1 - Understanding where you are now.

Insert BLUEPRINT logos here		Influence policy - Procurement - the circular economy	Average score		
		Score (0-3)			
Question	0	1	2	3	INSERT SCORE
Do you have dedicated circular economy procurement expertise in your organisation?	No	Some colleagues actively try to include/encourage other members of staff to think about circular economy in procurement	Some of our procurement colleagues have circular economy expertise	Yes we have dedicated circular economy expertise who drive circular procurement across the organisation	1
Does your organisation include CE requirements in tenders. E.g. such as requiring them to use no virgin materials in construction	No / very limited	On occasion, and may be lead by individuals	Yes, we do include some circular economy requirements in tenders	Yes, we encourage circular economy requirements in tenders where it's applicable, and we make it mandatory for some areas / over a certain value threshold	1



# Step 2 – Outline your areas of focus.

Survey output example:



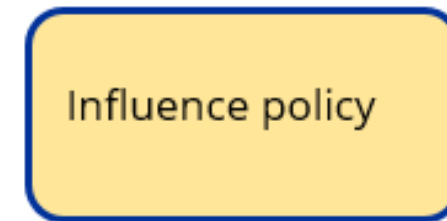
Users answer indicate

- That local authority is performing well for training job opportunities, and changing behaviour.
- User should identify from the visual, gaps or opportunities to improve with regard to influence policy.

Influence policy

## Step 3 – Implement activities and learning to transition to a circular economy.

- Influence policy – procurement (webpage)
  - Broadly following Qs in baselining activity
- Incorporate outputs of BLUEPRINT project:
  - Advice, research, reports, case studies & CE solutions
- Incorporate external guidance
  - National targets, best practice from LA BLUEPRINT Partners, & Industry best practice – EMF & Interreg projects

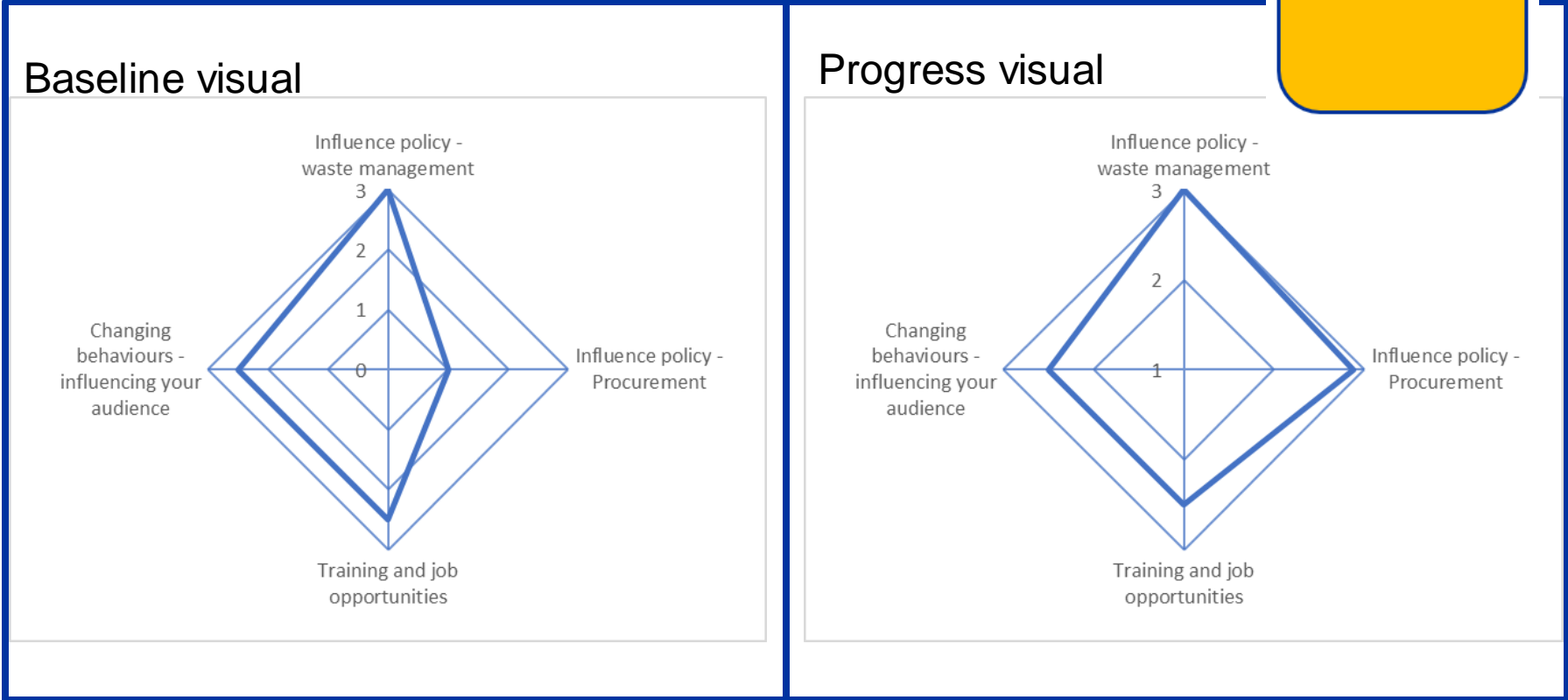


# Step 4 – Monitor and evaluate progress

- User to repeat baselining activity and compare progress
- Circulates Tool

Step 4

Monitor and evaluate progress.



# Local authority training

- Local authority engagement
- BLUEPRINT Model self-guided
- Considering 'training' opportunities to support LAs to use BLUEPRINT Model
- How training can support LAs after BLUEPRINT – video recording/virtual pre-recorded training.

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# Thank you.

Please get in touch if you would like to find out more about the  
BLUEPRINT to a Circular Economy Model  
&

If you would like to attend the LA workshop next Tuesday 17 May  
9:30 -11:00am

[blueprint.project@essex.gov.uk](mailto:blueprint.project@essex.gov.uk)





# Scotland's journey with waste metrics

Donald Chapman, Environmental Analyst

Project Blueprint  
9<sup>th</sup> May 2022



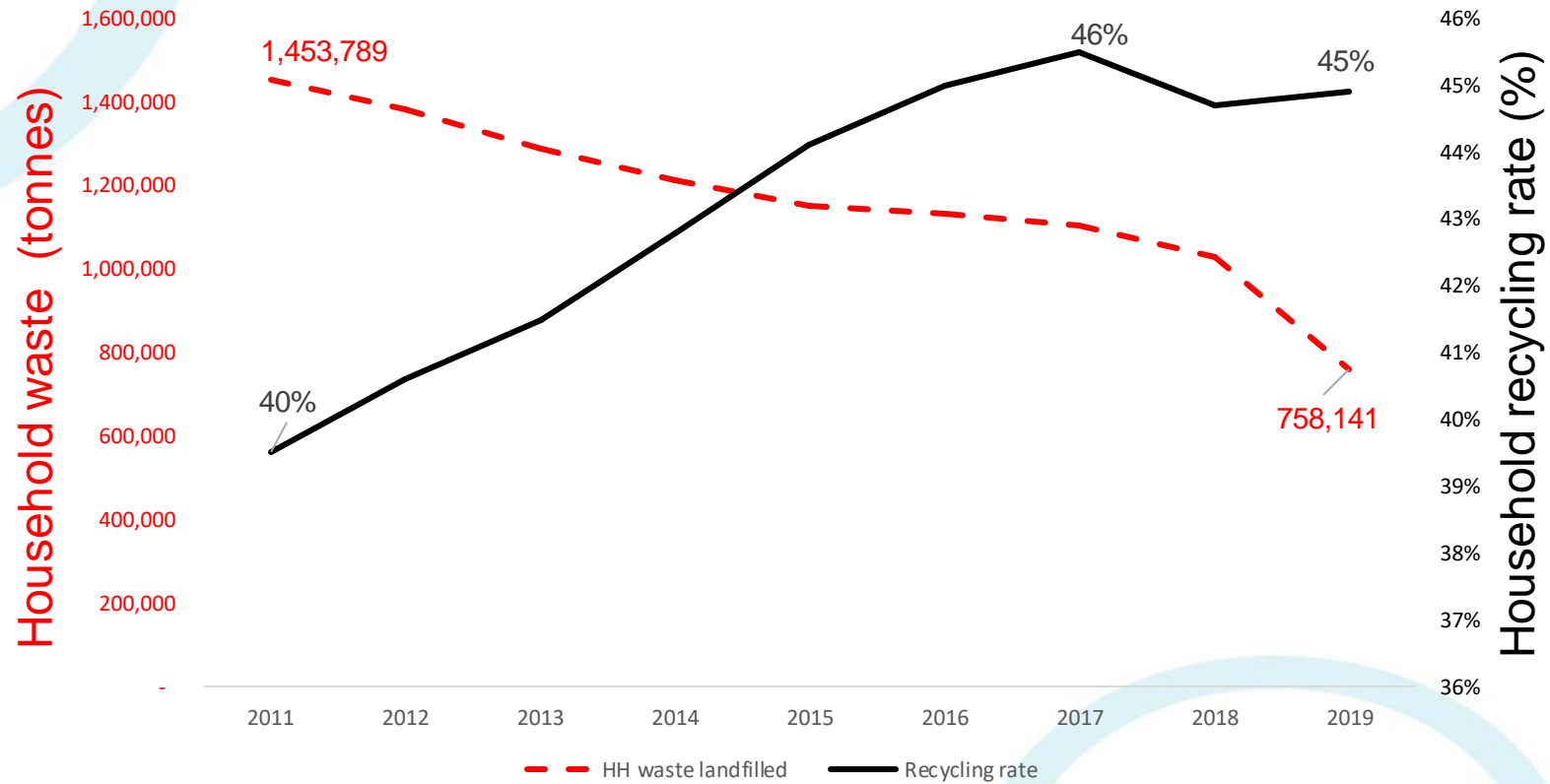
**EUROPE & SCOTLAND**  
European Regional Development Fund  
Investing in a Smart, Sustainable and Inclusive Future

# Monitoring Scotland's waste





# Scotland's stats on household waste



Source: Scottish Environment Protection Agency

# From weight-based to impact-based

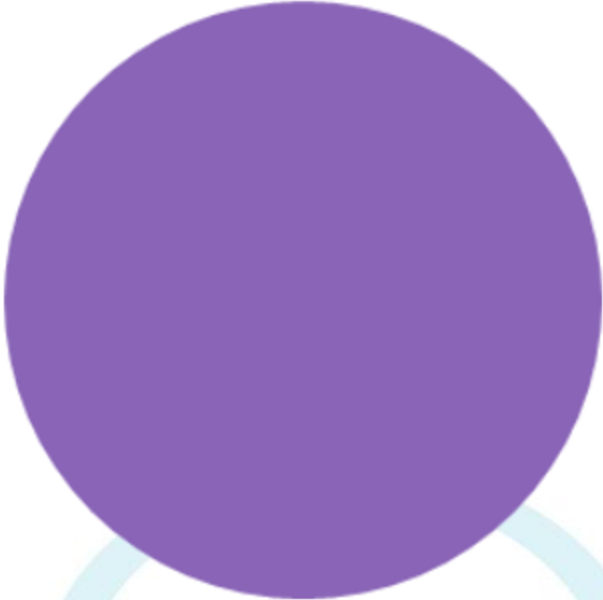


1 tonne  
of glass  
waste

1 tonne  
of food  
waste



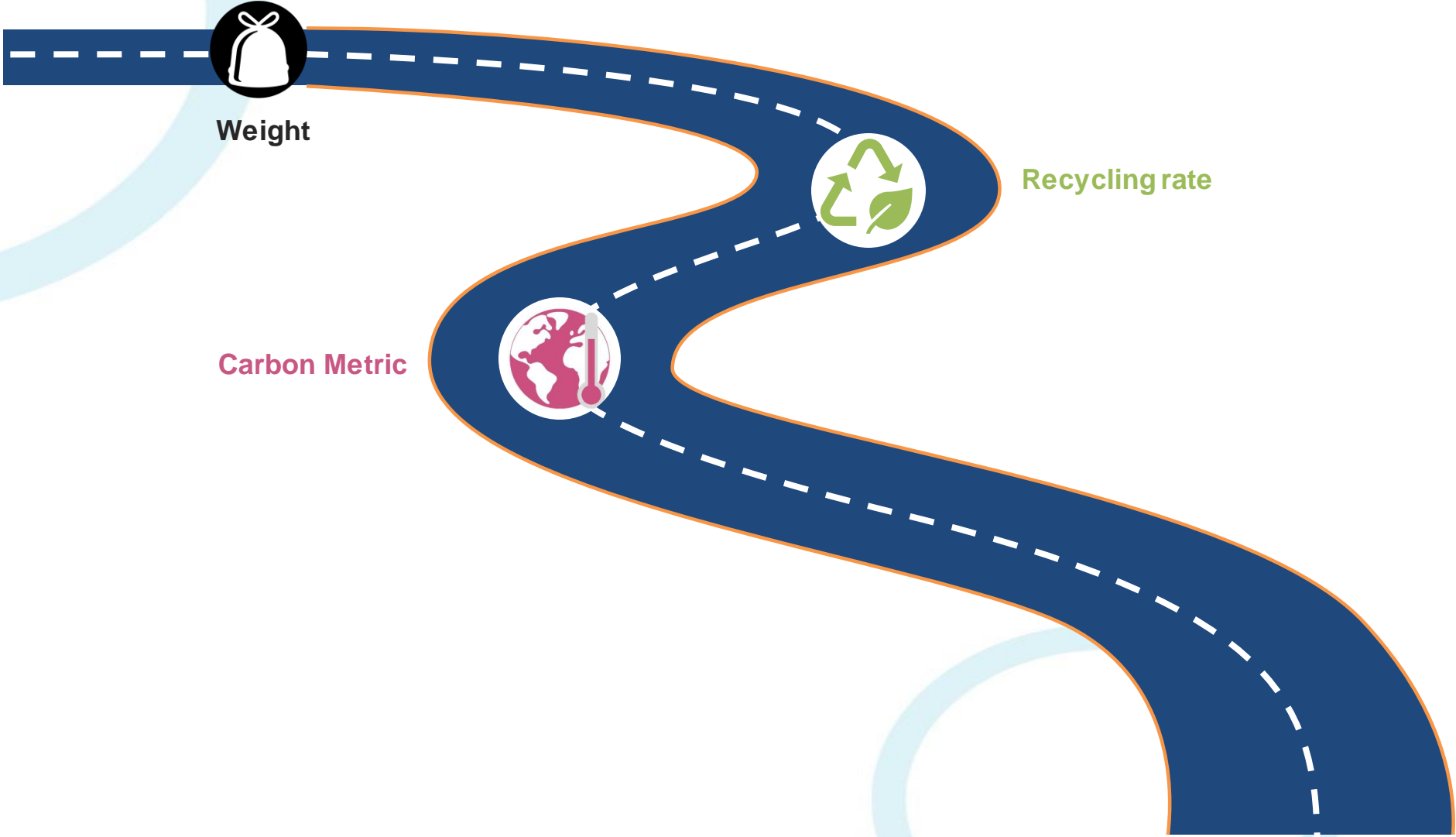
4 kg CO<sub>2</sub>e  
Carbon impacts of landfilling 1  
tonne of glass waste.



989 kg CO<sub>2</sub>e  
Carbon impacts of landfilling 1  
tonne of food waste.

Source: Zero Waste Scotland Carbon Metric

# Monitoring Scotland's waste



Weight

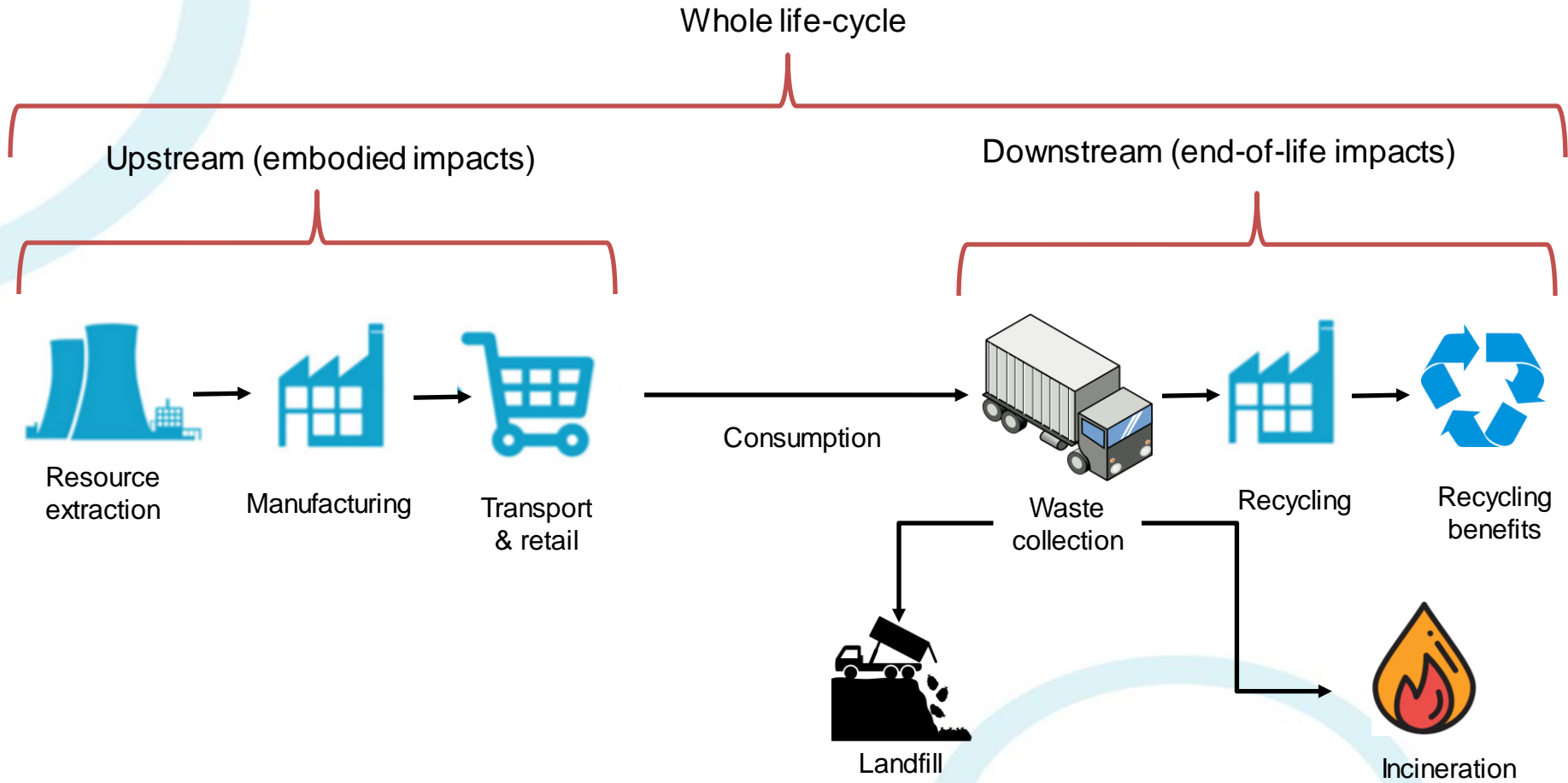


Recycling rate

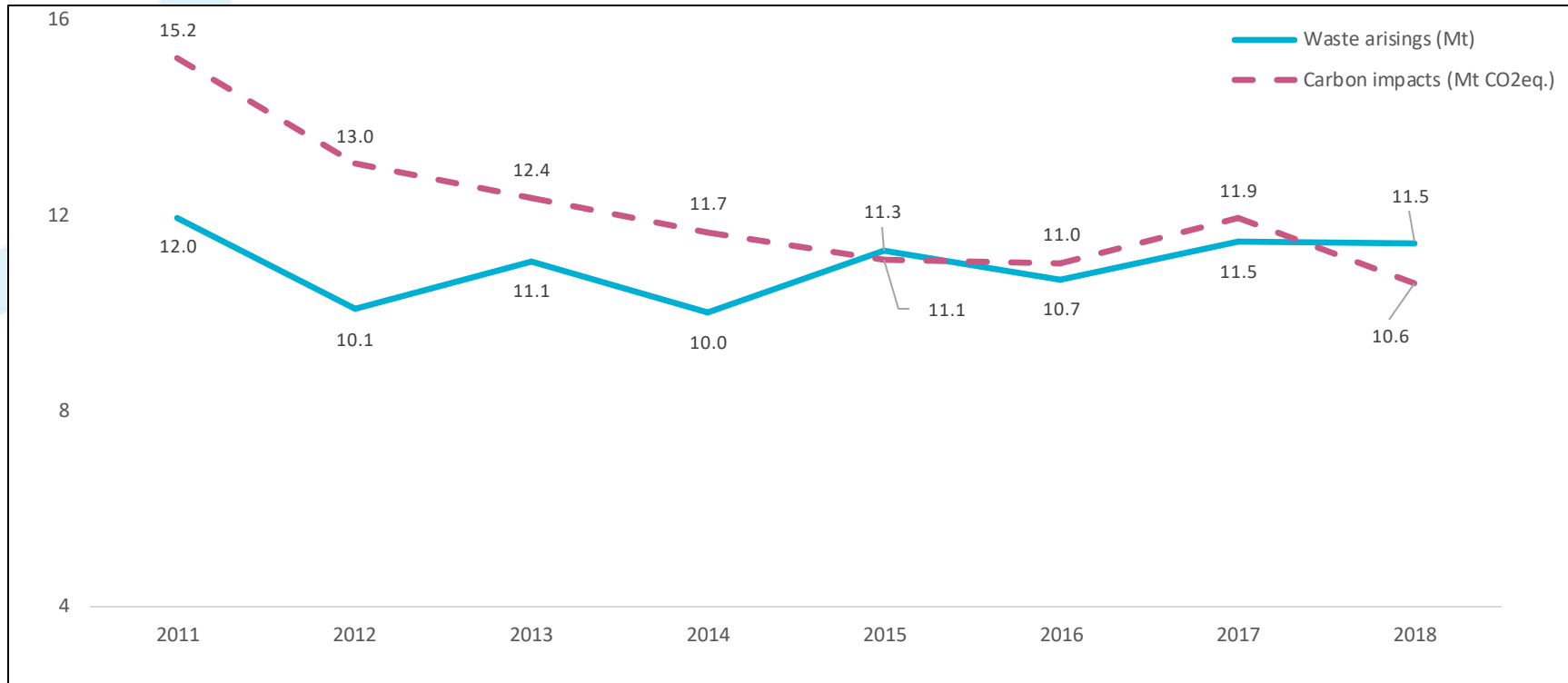


Carbon Metric

# Scotland's Carbon Metric

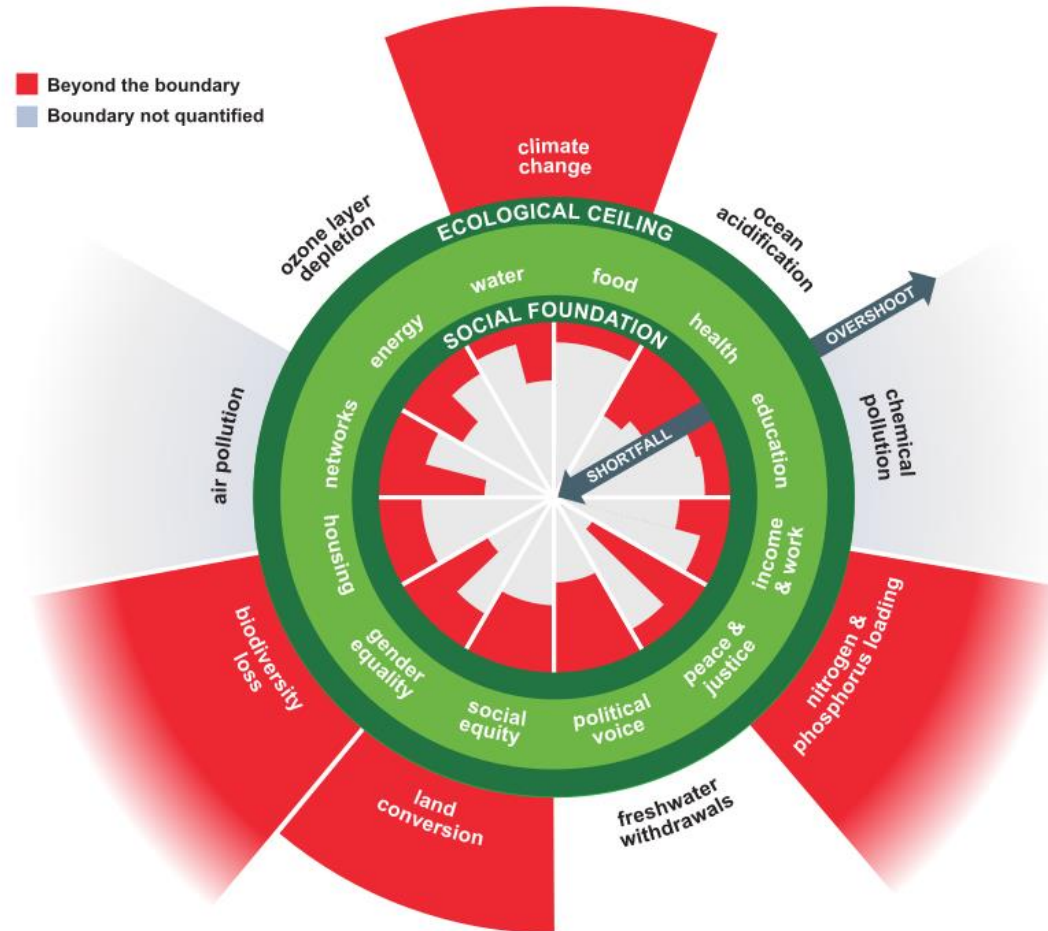


# Scotland's Carbon Metric



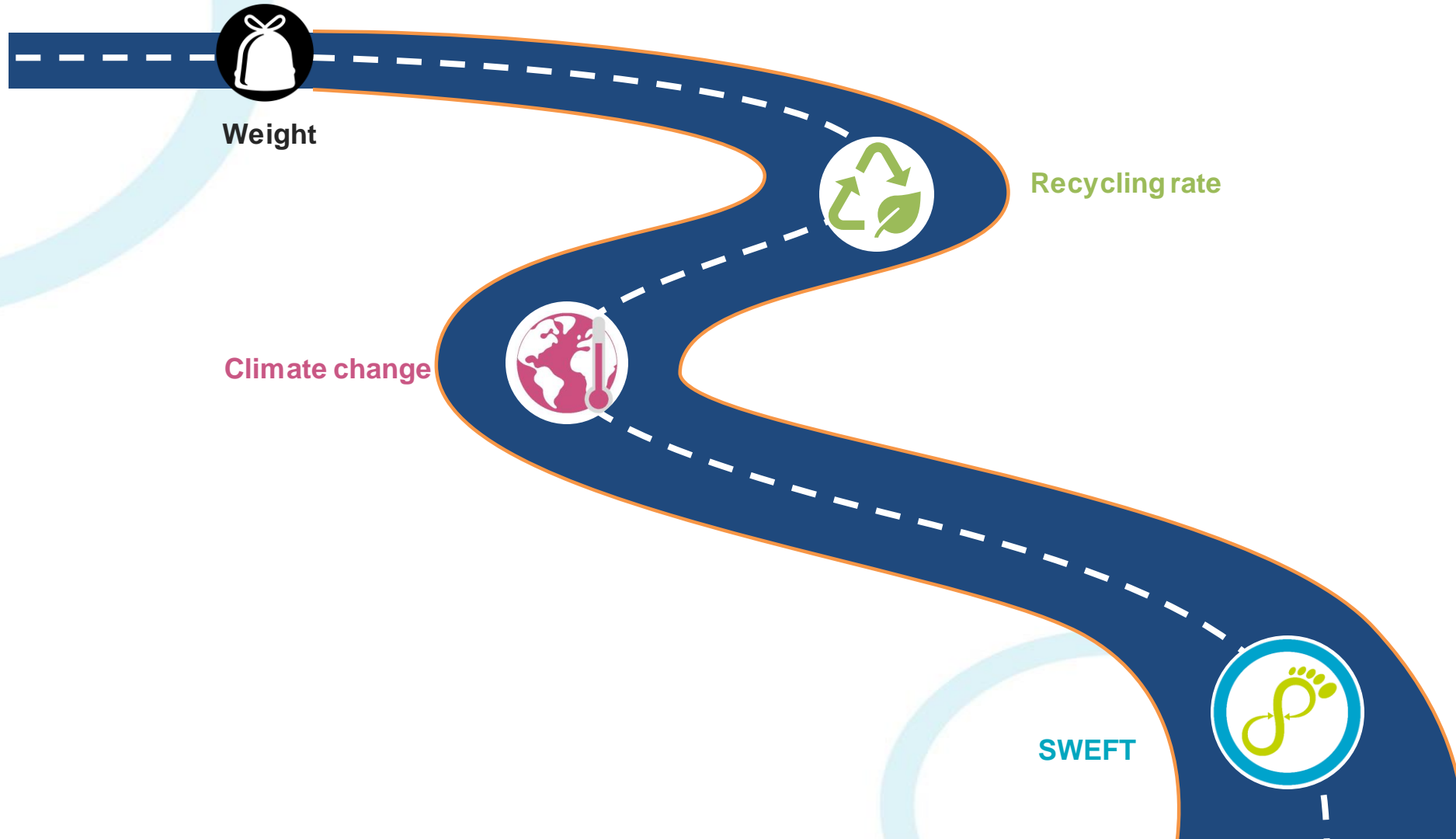
Weight versus whole-life carbon impacts of waste from all sources in Scotland.

# Beyond carbon – The Planetary Boundaries

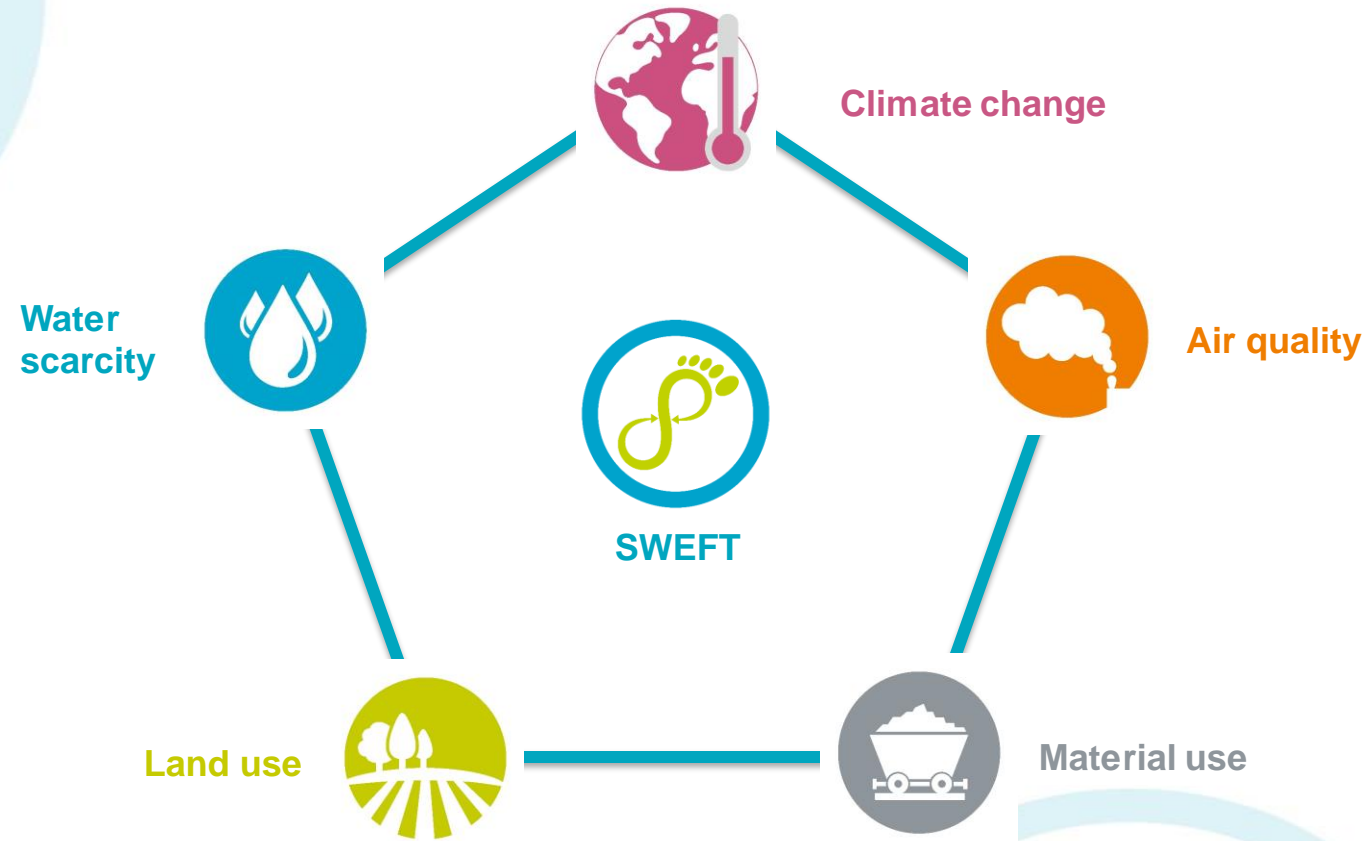


<https://doughnuteconomics.org/>

# Monitoring Scotland's waste



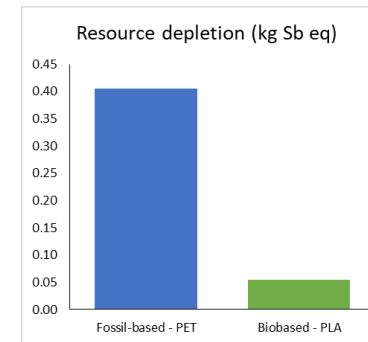
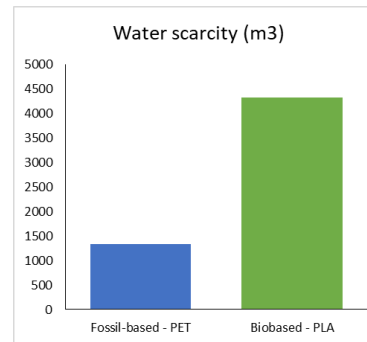
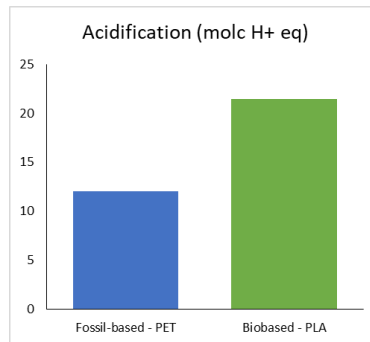
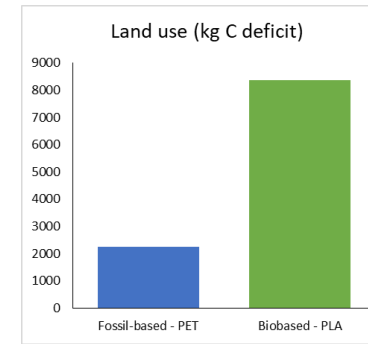
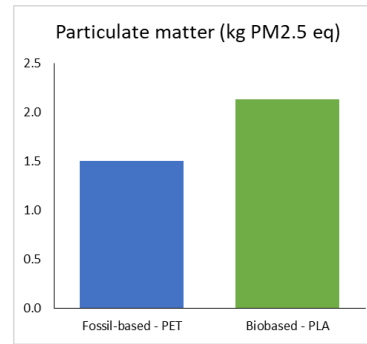
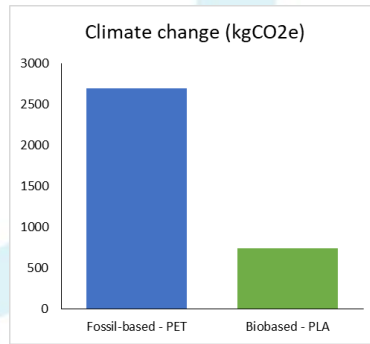
# Scottish Waste Environmental Footprint Tool (SWEFT)





# Beyond carbon ... Why now?







## Fossil-based plastics Vs Bio-based plastics

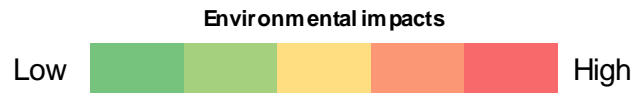


Source: Walker and Rothman, 2020. LCA of bio-based and fossil-based plastic: A review

# Identifying hotspots – key waste categories – Scotland's 2018 household waste



Waste category	 Weight	 Carbon footprint	 Water use	 Land use	 Material use	 Air quality
Food	High	High	High	High	High	High
Paper & cardboard	High	High	High	High	High	High
Plastics	High	High	High	Low	Low	High
Glass	High	Low	Low	Low	Low	Low
Wood	Low	Low	Low	Low	Low	Low
Mixed metals	Low	High	Low	Low	High	High
Textile	Low	High	High	Low	Low	High
WEEE	Low	Low	Low	Low	High	Low
Others	High	High	Low	Low	High	High



# How can SWEFT help the resource and waste sector?



Recycling rate



Weight



Waste reduction



Air quality



Climate change



Water scarcity



Land use



Material use

## Find out more



- *Beyond Recycling: An LCA-based Decision-Support Tool to Accelerate Scotland's Transition to a Circular Economy*, RCR Advances, <http://doi.org/10.1016/j.rcradv.2022.200069>
- *Making an Impact*, Circular magazine, <https://www.circularonline.co.uk/features/making-an-impact/>
- *Targeted Approach*, Circular magazine, <https://www.circularonline.co.uk/features/targeted-approach/>



Circular Development  
Presentation for BLUEPRINT Circular  
Economy Roadshow  
May 2022

**Dr Joanna Williams**

**Director Circular Cities Hub**

<http://circularcitieshub.com>

follow us on twitter @ circularcities #circularcities



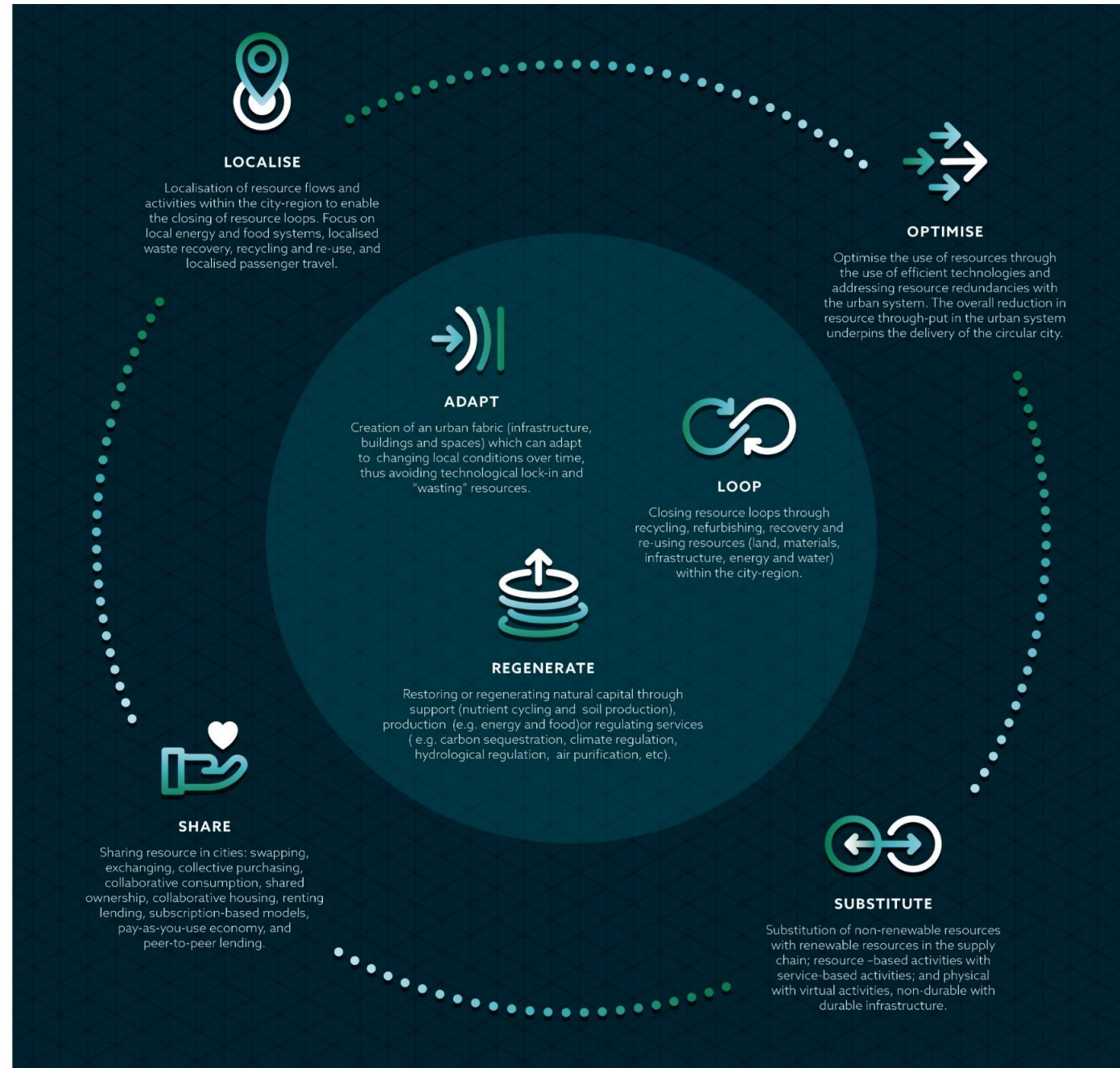
## What is circular development?





**CIRCULAR  
CITIESHUB**

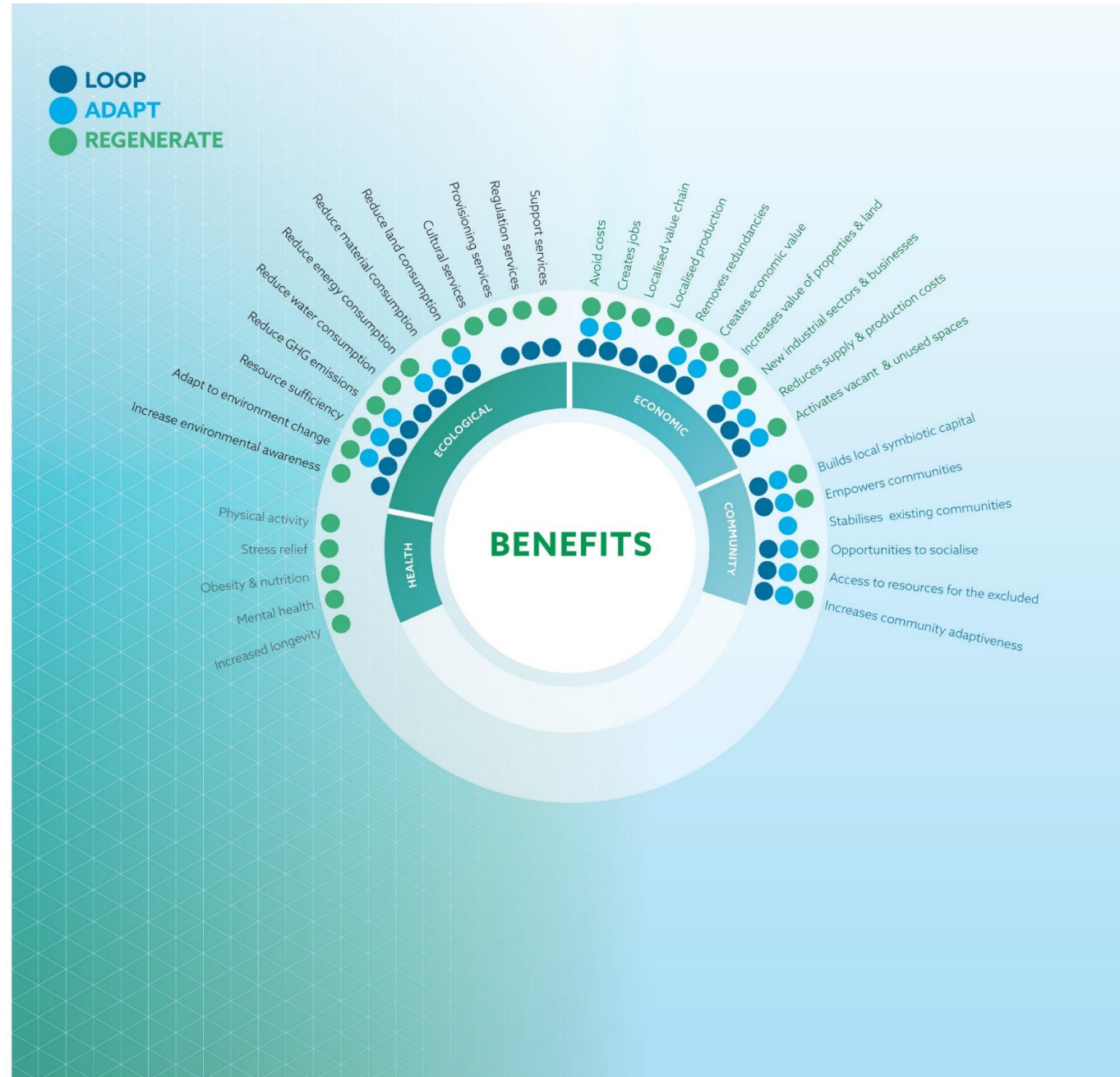
Williams, J ( 2021) Circular  
Cities: A revolution in Urban  
Sustainability, Routledge





**CIRCULAR  
CITIESHUB**

- LOOP
- ADAPT
- REGENERATE



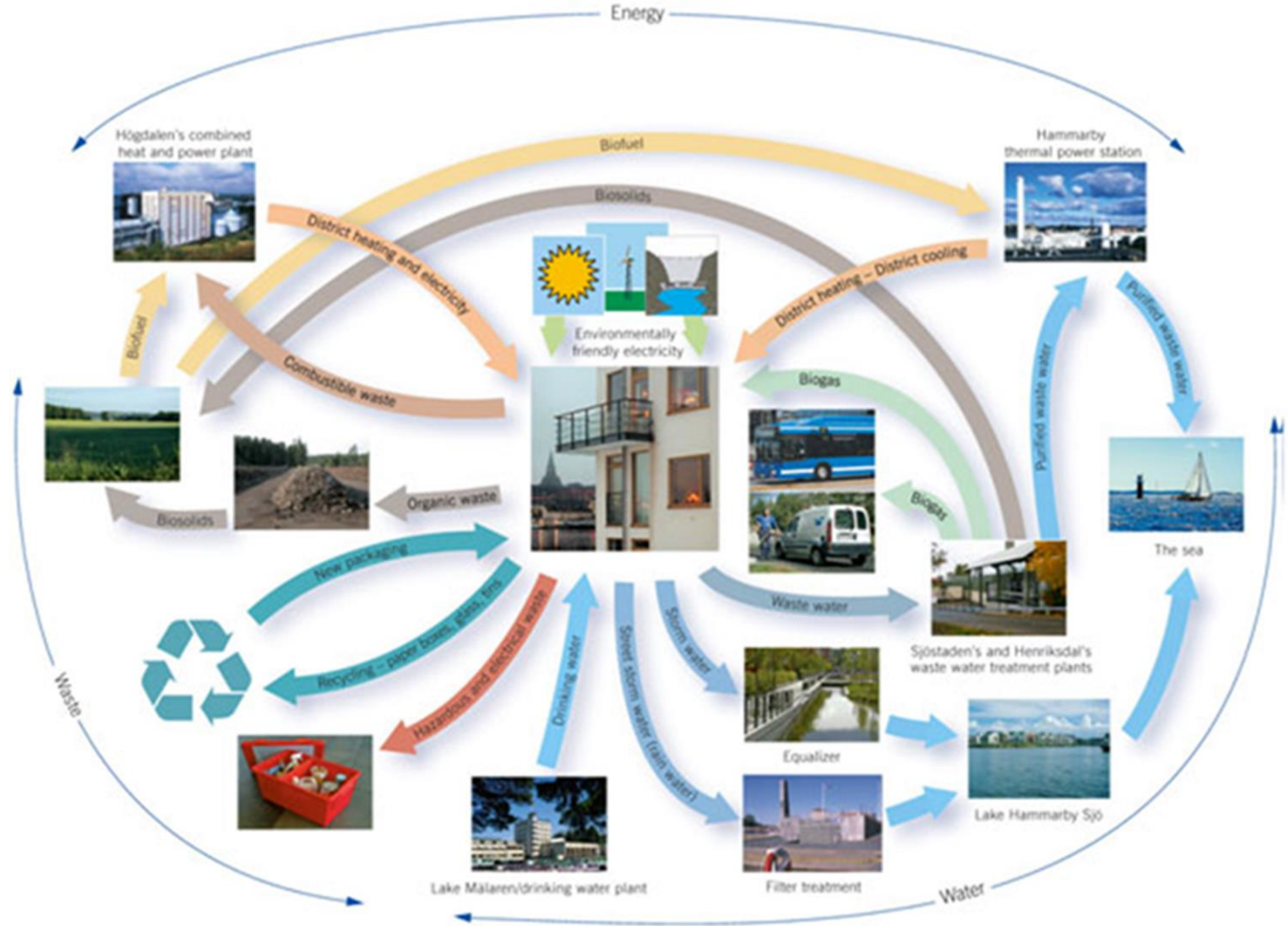
Williams, J ( 2021) Circular Cities:  
A revolution in Urban  
Sustainability, Routledge



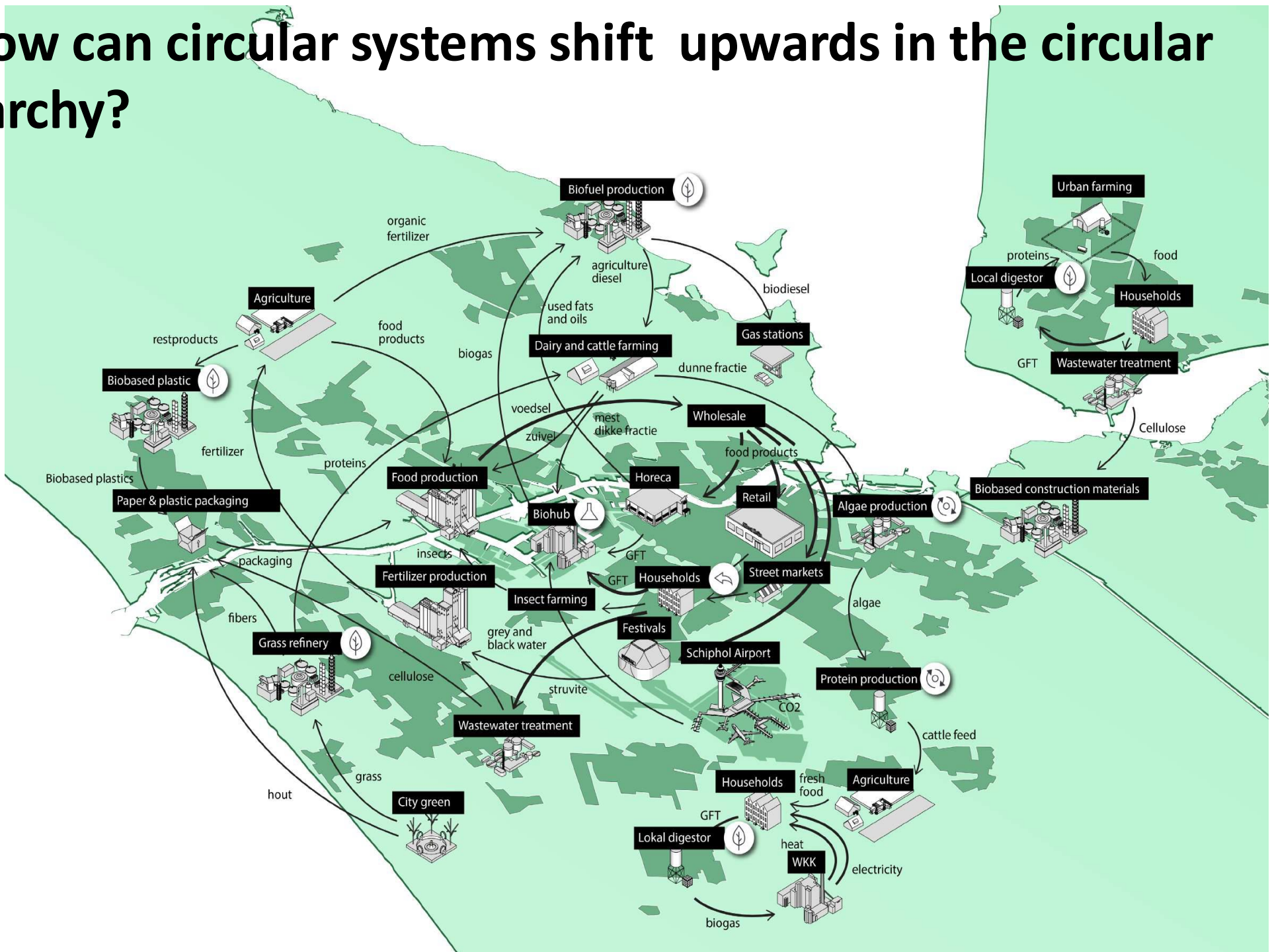


**So what can a local authority do?**



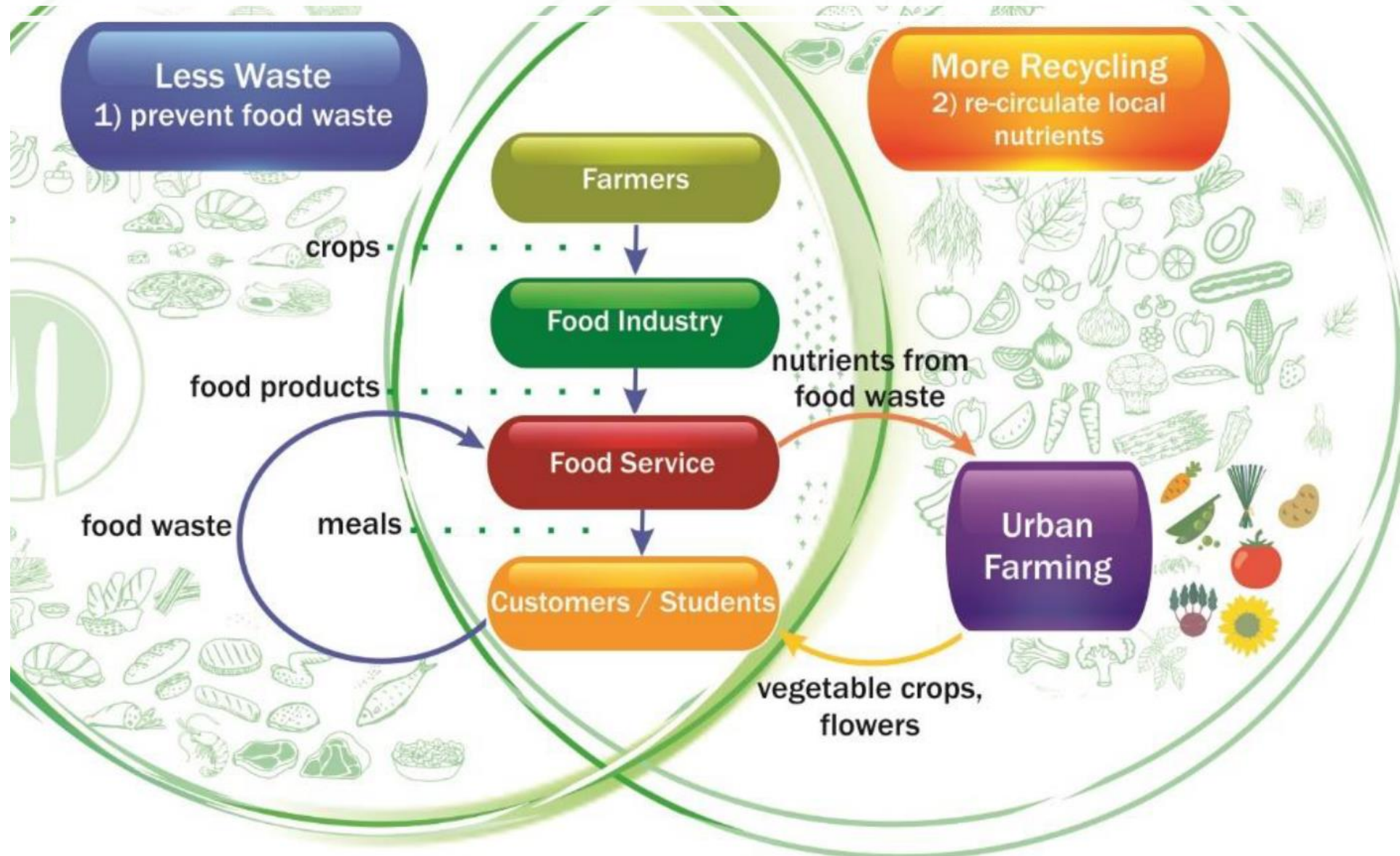


# So how can circular systems shift upwards in the circular hierarchy?

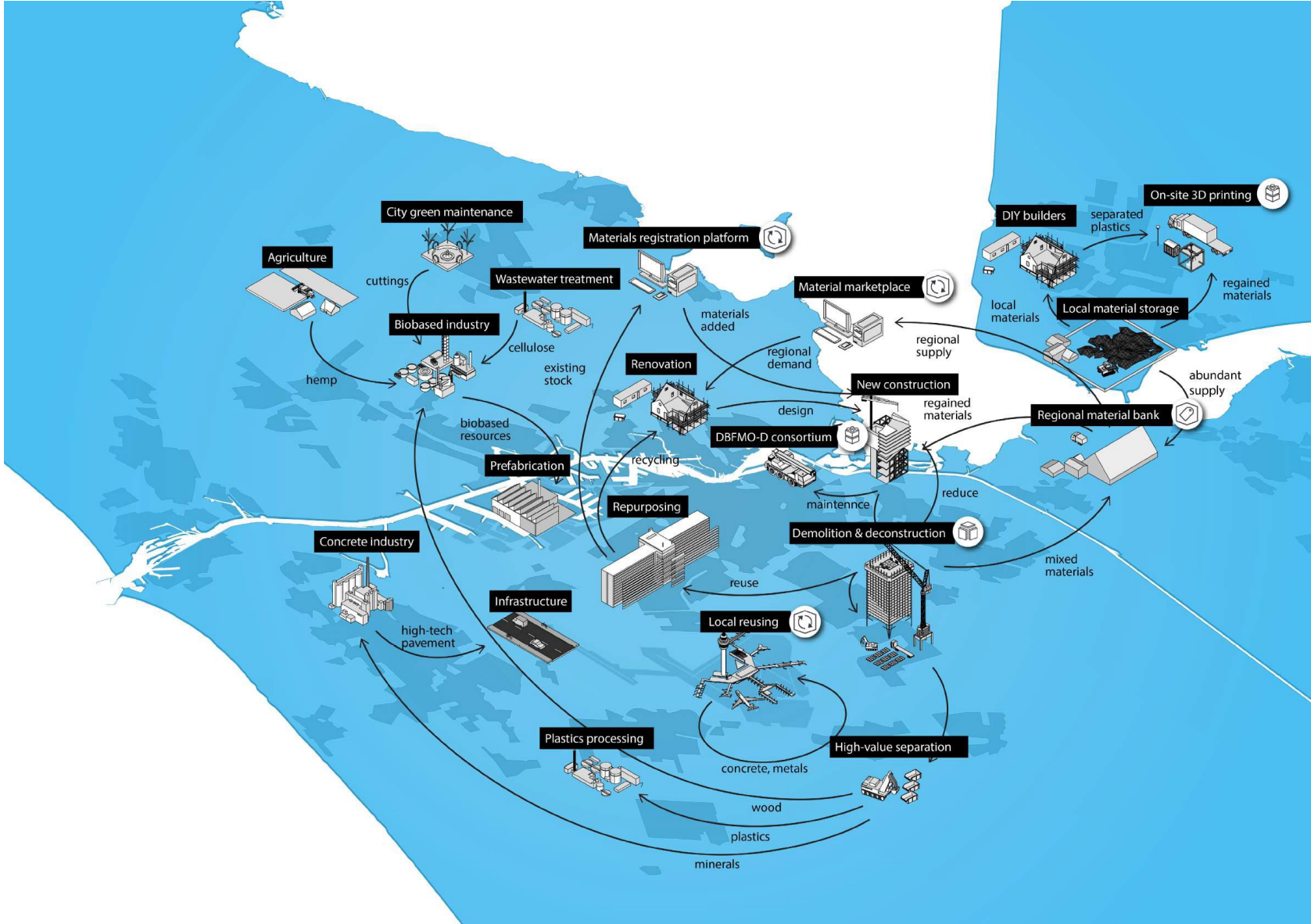




# Circular food systems – grow, reduce, reuse, recycle

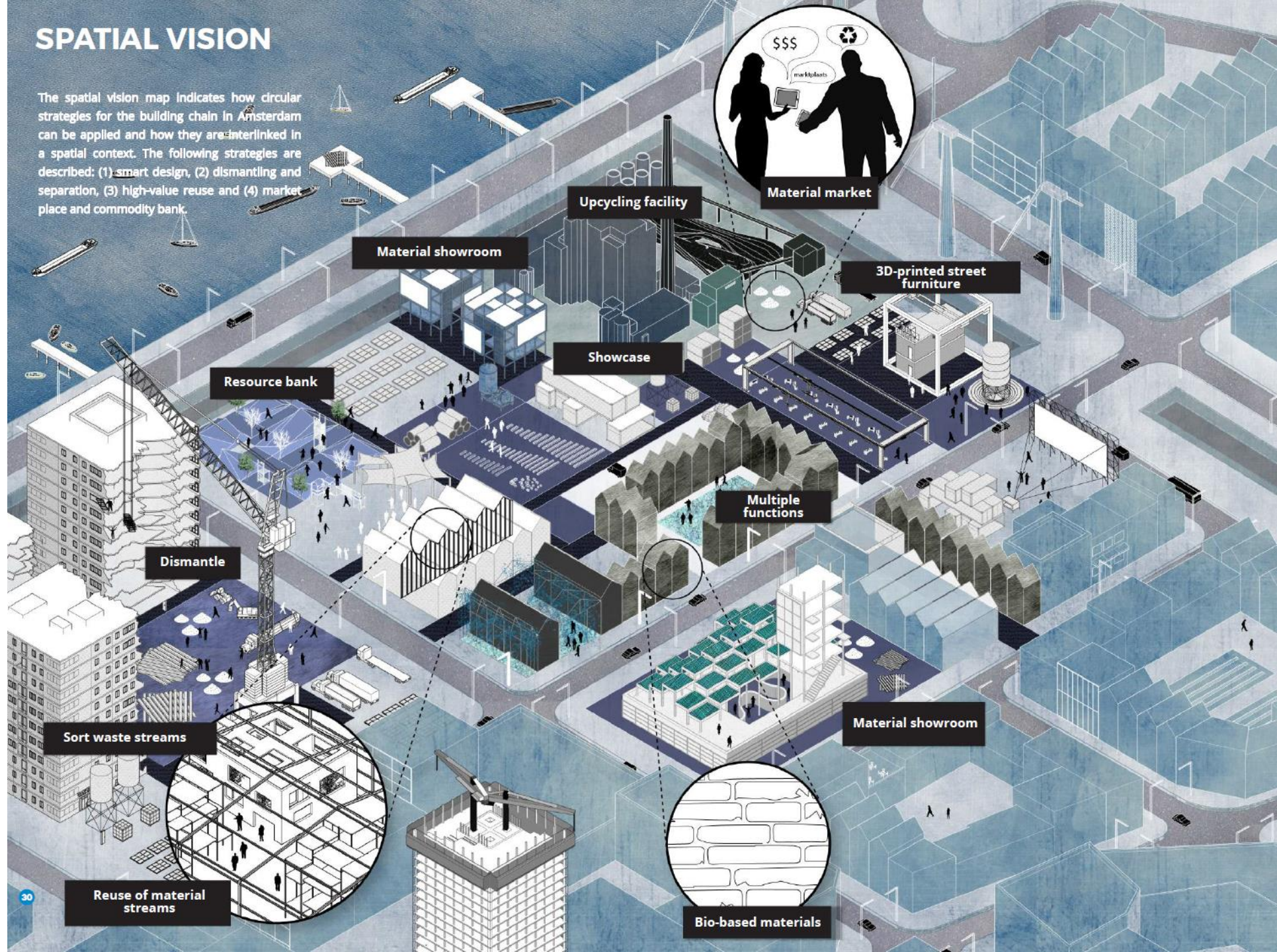






# SPATIAL VISION

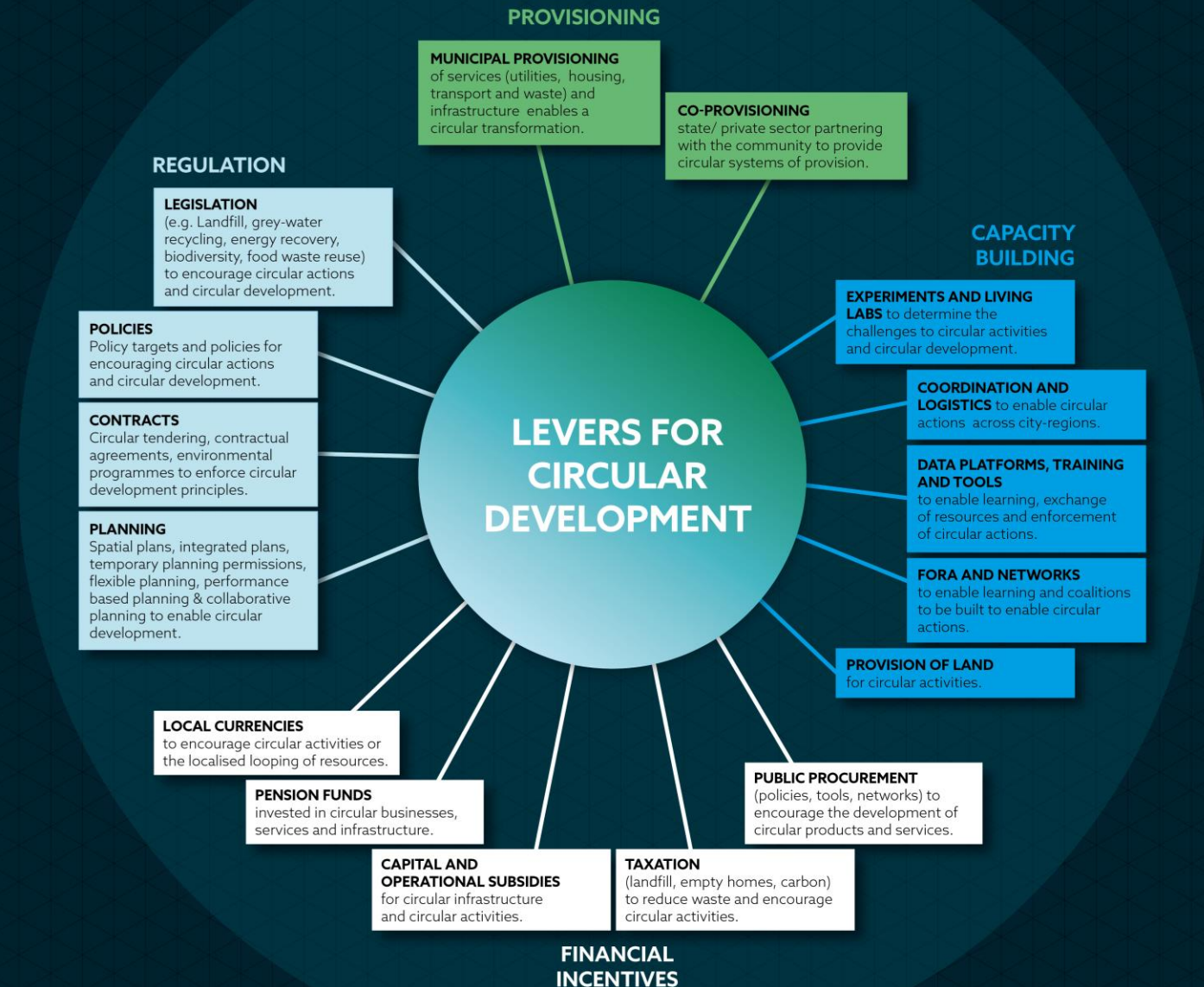
The spatial vision map indicates how circular strategies for the building chain in Amsterdam can be applied and how they are interlinked in a spatial context. The following strategies are described: (1) smart design, (2) dismantling and separation, (3) high-value reuse and (4) market place and commodity bank.











# Circular Cities

## A Revolution in Urban Sustainability

Jo Williams

Routledge Studies in Sustainability



**Prof. Jo Williams**  
**Director Circular Cities Hub**  
**University College London**  
**joanna.williams@ucl.ac.uk**  
**<http://circularcitieshub.com>**  
**follow us on twitter @**  
**circularcities #circularcities**

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European Regional Development Fund

**BLUEPRINT**   
to a Circular Economy



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# Q&A

[projectblueprint.eu/roadshow](https://projectblueprint.eu/roadshow)

# Thank you for attending!

Please complete our quick feedback survey



 [projectblueprint.eu/roadshow](https://projectblueprint.eu/roadshow)

 [blueprint.project@essex.gov.uk](mailto:blueprint.project@essex.gov.uk)