#### Introduction

Brighton & Hove was one of the first councils to declare climate and biodiversity emergencies and commit to becoming carbon neutral by 2030.

In line with our approach to combatting these emergencies, in 2018 we committed to creating a Circular Economy Routemap to 2035 as part of the Economic Strategy for Brighton & Hove.

Circular Economy principles are a based on a move away from a linear 'take, make, consume and throw-away society', towards one that minimises waste and pollution, keeps products and materials in use for as long as possible and supports the regeneration and protection of natural resources.

Since making the commitment, we've been working to identify the challenges and opportunities that moving to a circular economy approach will create.

The routemap is the result of 18 months of targeted engagement, workshops and conferences attended by over 200 council staff and stakeholders from across the city, taking them on the first steps of this journey.

The routemap will grow and evolve over time, shaped around new opportunities, learning and collaboration as the city begins to unlock its potential and transition towards circular systems and ways of working – driving sustainable growth and protecting our communities and the environment.

Brighton & Hove City Council plays an important role in leading our city and we can use this position

to facilitate a move to circular principles through our own practice as well as introducing policies that affect the whole city.

We have a clear ambition:

#### Mission

We want to empower the city to end linear wasteful practices, do more with less and achieve carbon neutrality through facilitating a change to a circular mindset.

#### Vision

Our vision is for our city to become a global frontrunner where circular economy practices and principles are embraced by all, as a route to fighting climate change.

These ambitions are supported by a series of goals and benchmarks that have influenced the creation of actions for leadership, policy making, procurement, planning, property, and day to day work.

We are committed to continually reviewing and improving these actions to support the transition towards circular practices across the city.

#### What is the Circular Economy?

A circular economy aims to redefine growth, focusing on positive society-wide benefits.

It separates economic activity from the consumption of finite resources and through design, aims to minimise waste.

Adding a focus on a move to renewable energy sources, the circular model builds economic, natural, and social capital and is based on three principles:

- Minimising waste and pollution.
- Keeping products and materials sustainable, so that they are in use for as long as possible.
- Regenerating and protecting natural systems.

"We can grow sustainably by generating 'less harm' to the environment. In a circular economy, the main goal is 'doing good' to our ecosystems" - William McDonough (architect and pioneer of circular economy)

## The Circular Economy around the world

Brighton & Hove is not the first authority to embrace circular economy principles.

The EU created its Circular Economy Action Plan in 2015 in response to the momentum of this new way of thinking, including measures aiming at moving Europe towards a circular economy and encouraging sustainable economic growth.

The measures adopted included actions to:

- reduce the use of natural resources;
- reduce waste;
- adopt new economic strategies designed to incentivise reuse, refurbishment and remanufacturing.

This has led governments, regions and cities to develop new strategies to transition to a circular economy system, including Scotland, London, Peterborough, Glasgow, Bristol, Amsterdam and Prague.

Learning from others and from what we have already achieved in the city, the council is setting an ambition for Brighton & Hove, to create:

- A liveable city with reduced congestion, improved health and well-being and air quality, elimination of waste, reduced consumption of natural resources.
- A strong and sustainable local economy, supporting green skills development and green jobs.

 A resilient city, reducing reliance on raw materials by keeping products in use and balancing local production with global supply chains.

With a high concentration of resources, capital, data, and talent, Brighton & Hove is uniquely positioned to drive a rapid transition towards a circular economy.

#### **Five Circular Approaches**

We will focus on five approaches that have been adopted by cities around the world to deliver our, goals and prioritise actions and opportunities over the coming 15 years:

- Changing the approach to design to embed circularity and change behaviour
- Extending product life through systems across the city
- Exploring new business models
- Treating waste as a resource
- The use of resources will prioritise social, environmental and economic value

#### Changing the approach to design

The way products, infrastructure and services are designed impacts their entire lifecycle. Therefore, if the focus shifts to one that uses new sustainable materials; reduces the use of materials; remanufactures during use; disassembly at end of life; and recycling as a last resort, there will be less damage done to the environment.

In 2019 a Sussex University graduate designed MarinaTex – a home compostable alternative to plastic film and created from fish waste and algae. The creator of MarinaTex has won international awards and has spoken at a UN panel on the potential for designing out plastic.

#### **Extending product life**

Good product design promotes reuse, sharing, redistributing, donating, repairing, and remanufacturing.

Recycled goods shops, repair stores, community tool banks (tool lending), apps for sharing food, and sharing platforms are all examples of organisations supporting extending product life through good product design.

We are working in partnership with Tech-Takeback and The ZeroNet; RevaluElectricals to extend the product life of electricals within the city. This will deliver a new service for residents and small businesses by collecting end of life electricals for data erasure, refurbishment, and reuse with local charities and digitally excluded families.

#### **Exploring new business models**

Instead of the traditional consumption model of purchasing items, goods or capital, a move to offering products as a service, renting products, sharing, re-selling, or leasing could be better financially and environmentally over the long term, as it allows customers to purchase a desired result rather than the equipment that delivers that result.

For example, Brighton & Hove Bike Share provides users with the chance to pay for the miles cycled and not the bike itself.

#### Treating waste as a resource

Using waste products of any kind, as a source for a new product, saving waste from landfill, incineration, and closing the loop.

The Brighton Waste House is Europe's first permanent public building made from 90% post

construction waste. Designed by Duncan Baker Brown, Senior Lecturer, School of Architecture and Design, University of Brighton with materials sourced via Freegle, over 50 tonnes of waste that were destined for landfill have been used to build the University's headquarters for ongoing sustainable design research, whilst doubling up as a public exhibition and workshop space for greenthemed events.

## The use of resources will prioritise social, environmental and economic value

We will prioritise the use of resources and products that are renewable, do not contain any hazardous chemicals, are biodegradable, or do not contain a lot of packaging.

Windfarms, green roofs, local and organic farms, community gardens, restaurants who compost and serve seasonal, local foods provide a range of examples where social and environmental value is prioritised already within Brighton & Hove.

The Real Junk Food Project and Brighton & Hove Food Partnership are proving that a focus on sustainability within the city has already led to benefits for many members of the community.

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# The role of the city council in creating a circular economy city

The council can be the facilitator of change, as a key stakeholder in regional and national partnerships, we will work in partnership to adopt circular approaches to the way we and others work.

We want to shape policy, deliver projects, maximise our assets and resources in a way that supports businesses to grow sustainably, to protect and generate jobs, and create a healthy environment for our citizens.

There are five roles that we have within our control:

#### Planning the future circular city

As a local planning authority, we can influence new development proposals to use the principles of circularity to minimise the use of new materials, avoid waste and support high recycling rates. We can encourage innovative building design and construction methods, designing for adaptability, flexibility and re-use.

## Using our land and buildings to demonstrate circular solutions

As an owner and user of land, roads and buildings, we can identify and use public property for circular economy partnerships.

#### **Procuring circular economy solutions**

As a procurer of services, we can accelerate the introduction of circular economy goods and services.

#### Leading the city towards a circular future

As a convenor, we can promote knowledge sharing through accessible platforms for information and guidance. We can set the benchmark for others to follow through bold public initiatives and by spreading best practice.

#### As a stakeholder of the environment

Brighton & Hove City Council, alongside citizens, businesses, universities and other public sector bodies are stakeholders in the urban, rural and marine environment. We want to see the environment protected by the actions we collaboratively undertake.

'I believe it will be competing city states and regions that give us all hope, not governments preoccupied with numerous other 'big issues' before they can think of the climate emergency question. With over 50% of the world's population now residing in cities, and over 805 in the UK, cities are now the main driver for economic and system change and have the potential to power a successful Circular Economy.' Duncan Baker-Brown, Senior Lecturer,

School of Architecture and Design, University of Brighton

#### **Priority areas**

We will initially concentrate on two key sectors for the city: the built environment and the visitor economy, before expanding to look at other areas.

#### **Built environment**

The built environment was chosen as the first priority sector due to the level of impact on the environment and the fact that there is significant new build and re-development planned for Brighton & Hove over the next 15 years.

The design of infrastructure and materials used in construction have a significant impact on both short and long-term emissions of carbon, use of raw materials, water, energy and other resources.

In England, according to DEFRA, the construction, excavation, demolition and deconstruction of built environment is responsible for:

- 36% of all carbon emissions
- 40% of energy consumption
- 50% of all raw material extraction
- 33% of all potable water usage
- 60% of all waste

All aspects of the built environment can be adapted to fit into circular economy thinking. From how infrastructure is designed, to the materials used, the construction methodology, the way occupants use infrastructure and finally what happens at the end of the infrastructure's life.

#### Visitor economy

The visitor economy in Brighton & Hove is worth £886 million, generated by over 11 million visitors annually, and it accounts for around 14% of all employment, equivalent to 21,000 direct jobs in the local economy.

The characteristics of this sector are very different from the built environment with the focus being on the visitor experience; with travel, accommodation, food and activities the focus of potential circular economy interventions.

- By 2030, reduce consumption of primary raw materials in the city (minerals, fossils, timber and metals) by 50% and replace with secondary raw materials.
- By 2030, achieve a reuse and recycling rate of 50% for municipal materials
- By 2030, have a net zero carbon city.
- By 2035, by working with partners, attract investment of over £100 million in circular economy activity within the Greater Brighton Area.
- By 2035,by working with public sector partners ensure that 75% of external, priority area, public sector spend will be on circular products and services, with 50% with local suppliers.

The benchmarks will be monitored, and performance will be recorded transparently.

The benchmarks will be supported by a series of actions that deliver incremental and fundamental change to the working practices in the council.

#### Our benchmarks

We will measure success against the following benchmarks that contribute to delivering a circular city:

#### **Action plan**

An action plan will be developed to focus on delivery of circular economy solutions across the

city and specifically for the first two priority areas: the built environment and the visitor economy.

We will split actions which need to be implemented in the short, medium and long term.

The role of the council, through planning, procuring, managing and maintaining the built environment, including public spaces above and below ground and influencing all activities in the city is not to be overlooked. With commitment, leadership, insight and focus, we will increasingly shift from raw material use to circular systems.

The actions fall into built environment, visitor economy, and cross cutting categories for the short 2020-2025, medium 2025-2030, and long 2030-2035 term.

The action plan will be put on the Circular Economy online Platform

business models. Universities can foster the development of new materials and enterprises. Residents can work together to share and re-use.

Through research and knowledge, we are continually learning of new and emerging circular economy opportunities which are being used locally, nationally and globally.

More information on the opportunities can be found at <a href="https://www.brighton-hove.gov.uk/circulareconomy">www.brighton-hove.gov.uk/circulareconomy</a>

You can read the case studies at <a href="https://www.brighton-hove.gov.uk/circulareconomy">www.brighton-hove.gov.uk/circulareconomy</a>

### **Case studies**

Case studies bring opportunities to life and show the exciting work happening in the city. We will be following projects which embed circular principles, finding successes and overcoming problems, from which others can learn and follow.

## **Circular opportunities**

A move to the circular economy must involve stakeholders across the city. Businesses operating locally can reduce waste and take advantage of new

#### **Development of the routemap**

In December 2018, Brighton & Hove City Council and the Brighton & Hove Economic Partnership launched 'Productive, Inclusive, Transformative: An Economic Strategy for Brighton & Hove 2018'.

One of the strategy's five key themes is 'A Sustainable City: a city which looks to the future, focusing on 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'.

Priority Action 6 of the strategy is to: 'Promote the development of a circular and sustainable economy to minimise waste and pollution by reducing, reusing and recycling', and Supporting Action SC1 for the 'A Sustainable City' theme is:

'Create a Circular Economy Framework, incorporating Sustainable Development Goals, to 2035, for priority sectors, for the Brighton & Hove City Region.'

Further information on our research base can be found at <a href="https://www.brighton-hove.gov.uk/circulareconomy">www.brighton-hove.gov.uk/circulareconomy</a>

#### Research

As part of our journey of understanding the circular economy, over 20 circular strategies were analysed, and many common themes were found among them regarding structure, content, and presentation. We have assessed what kind of projects and policy interventions are common, and what the target group is for those.

Further information on our research base can be found at <a href="www.brighton-">www.brighton-</a>

hove.gov.uk/circulareconomy [NOTE: not live yet to be part of the online Circular Economy Platform]

#### **Next steps**

An oversight board made up of council representatives and stakeholders will ensure the action plan is developed and carried out.

New sectors will be identified and focussed on, further developing actions, opportunities and case studies.