

WMCA Board

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Report title	West Midlands Circular Economy Routemap
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Report has been considered by	Environment & Energy Board - 9 September 2021

Recommendation(s) for action or decision:

The WMCA Board is recommended to:

- (1) Notes the production of the West Midlands Circular Economy Routemap, the engagement of key partners, and the opportunities for the WMCA to add value in turning the Routemap into action to maximise circular economy opportunities for the region.
- (2) Discuss and agree two areas for priority action and business case development, both of which will support the regional economy:
 - Circular Manufacturing with a focus on a West Midlands Industrial Symbiosis Delivery Programme to unlock investment, innovation and circularity in strategic regional locations, building on the hub models of Repowering the Black Country by supporting the project's emerging investment opportunities.

- Circular Construction with a focus on developing Zero Waste Construction Hubs to support materials exchange and recovery using strategic hubs based across the region.
- (3) Notes the wide-ranging opportunities for wider collaborative action and good practice sharing and the suggested delivery plan in the Routemap.
- (4) Notes the recommendation to local authorities to build on their existing leadership, and to use their enabling functions to create the conditions for a more circular economy.

1. Purpose

- 1.1 This paper provides an overview of the West Midlands Circular Economy Routemap as well as the next steps and recommendations for delivery. An extract of the Routemap is attached for information, but this Board paper highlights the salient points. Supporting appendices are available on request.

2. Background

- 2.1 The definition of a circular economy is a system that designs out waste and pollution, keeping products and materials in use for as long as possible and regenerating our natural systems through economic activity. It is much more than a sophisticated term for recycling. Rather than depend on linear and extractive, wasteful processes, a circular economy encourages repair, reuse and regeneration of resources and materials as well as a transition to renewable energy.
- 2.2 There are a number of reasons why a regional routemap is a necessary step in the transition to a circular economy. These include:
- A regional approach will complement local and regional economic and environmental strategies, such as the Local Industrial Strategy and Plan for Growth. This will ensure that circularity is a principle that is baked into all strategy and investment, so that opportunities to unlock value for places, people and businesses are not missed.
 - It will raise the profile of local authority and combined authority leadership, by telling a story of how economic value can be unlocked through shared vision, values and collaboration. This shared narrative will allow the region to influence the circular economy agenda at a national level, in a way which plays to our diverse economic and community strengths.
 - The baseline analysis conducted as part of the Routemap's development shows that materials flow freely throughout the region, crossing and re-crossing local authority boundaries as they change form and use. Understanding the material flows at this spatial scale supports the identification of opportunities by the public and private sector as it is based on the functional economic geography of the West Midlands.
- 2.3 In June 2020, WMCA approved the formation of a Circular Economy Taskforce and the production of a Routemap for the region to guide future activity, comprising a strand of the first five-year plan to reduce the region's carbon emissions.
- 2.4 The Routemap development commenced with a workshop and public survey, to develop an understanding of the regional circular economy activity and key stakeholders. This informed the membership of a Circular Economy Taskforce in November 2020, made up

of public, private, academic and third sector partners in the region. The Taskforce provided input to a specification which was used to publish a WMCA tender for consultancy support to produce the Routemap. Useful Projects, a consultancy and global leader in this field, was appointed in January 2021.

- 2.5 The production of the Routemap involved extensive engagement and consultation with regional stakeholders through a series of workshops, including WMCA internal; Circular Economy Taskforce; Local Authorities and Low Carbon Officers Group (LCOG); LEP and academic institutions; businesses and policymakers from the three priority sectors; SME engagement organised with Groundwork WM; West Midlands Circular Economy Club workshop, plus 1-2-1s and a public survey.
- 2.6 This engagement enabled Useful Projects to build a detailed picture of where the region currently is – and whilst the next steps are ambitious, they build on existing leadership, practice and innovation in all areas. For example:
 - In Wolverhampton, the first English city to sign the European Circular Cities Declaration, the National Brownfield Institute and the University of Wolverhampton's Springfield Campus form a centre of excellence for circular and sustainable construction. MHCLG's relocated second HQ in the city, along with its new national Modern Methods of Construction (MMC) taskforce, also based in the city, means Wolverhampton is well placed to lead this part of the Circular Economy Routemap.
 - Coventry University's National Transport Design Centre, which considers a broad range of factors that influence vehicle, transport and infrastructure design, is informing ways of designing out obsolescence in mobility.
 - Solihull's Koolmill is using globally significant technological innovation to design out waste food from the milling process. This sort of technology will be a critical component of climate resilience, where lower yields could result in food shortages.
 - Birmingham is home to International Synergies, which supports industrial symbiosis networks and solutions worldwide, and has expertise in different elements of low carbon heat and fuel across its universities, including EBRI, which focuses on circular practices within the field of bioenergy.
 - Walsall is home to several innovative start-ups which are growing circular practice, including Kiondo, an arts, design and regeneration-focused social enterprise currently receiving support from the Cultural & Creative Social Enterprise grant programme.
 - In Dudley, the Black Country and Marches Institute of Technology provides a vibrant learning environment to encourage people to take up cutting edge technical education, focused on circular practice in modern methods of manufacturing and other essential industries.
 - Sandwell's Kew Technology uses high efficiency Advanced Thermal Conversion to turn end-of-life waste derived fuels into a hydrogen rich 'syngas', which has a broad range of uses in the generation of heat and power.

- Finally, the BEIS and UKRI-funded Repowering The Black Country project takes in all four Black Country authorities, and focuses on decarbonising industry across the area, including through industrial symbiosis and other innovative practice.

Project and Routemap aims

2.7 The Circular Economy Routemap, developed in collaboration with key stakeholders, sets out the following:

- A vision for the circular economy in the West Midlands
- Headline opportunities for three priority sectors as well as the enabling conditions for a more circular economy
- A clear plan for delivery, implementation and resourcing

2.8 The vision for the region's circular economy is: *“The West Midlands circular economy will support the green industrial revolution. It will support sustainable growth and contribute to the social economy as well as to green recovery. Our circular economy will make better use of our resources, generating more value and creating new jobs.”*

2.9 The Routemap aims to expand the circular economy in the West Midlands, as quickly as possible, by building on existing projects and expertise across the public, private and third sectors to:

- Generate economic advantage and innovation, safeguard existing jobs and create new ones. A 2020 report by the Waste and Resources Action Programme (WRAP) found that a circular economy could bolster the UK economy by £75 billion and create over half a million jobs.
- Complement broader environmental recovery activity (e.g. WM2041), significantly reduce material and resource consumption.
- Support wider social outcomes and support social economy growth. Analysis conducted by the Ellen MacArthur Foundation shows that the average household income would increase by £2,500 a year in a circular economy¹.
- Accelerate green and just recovery from COVID-19 and maximise post Brexit opportunities.
- Build on existing circular economy activity, expertise and best practice in the region.

2.10 The Routemap includes a detailed policy analysis at the international, national, regional and local level. At both regional and local level, it was found that there is a low level mainstream understanding of what the circular economy is and there are currently no significant policies in the region enabling circularity at scale.

2.11 International and national policy best practice has been used to inform what can be done to support policy development at the regional and local level and these are covered under the Enablers section within the Routemap (page 5) and will form part of the delivery activity. The enablers set the systems wide conditions to create more circularity in the region.

¹ [Growth Within: a circular economy vision for a competitive Europe](#)

Priority areas and opportunities

2.12 The Routemap illustrates that the West Midlands already has unique strengths in moving to a more circular economy, with leading activity across academia, research and businesses. Publicly available data was also used to analyse the inputs of materials and resources into the West Midlands economy to help identify specific resource and materials issues across sectors. Together this analysis informed the priority sectors, strategic projects and opportunities in this Routemap, that would most effectively support the delivery of outcomes. The Routemap includes suggested action plans for activities the WMCA can deliver, or support its partners to deliver, under each of the strategic opportunities found in appendix 1 of this report.

3. Next Steps

3.1 We plan to publish the Routemap in September 2021.

3.2 WMCA will work with local authorities and key stakeholders to deliver the circular economy enablers (page 5) and proposes the following priority opportunities resulting from the Routemap, which will have significant regional impact:

3.2.1 There are two areas for priority action and business case development by the WMCA:

1. **A West Midlands Industrial Symbiosis Delivery Programme** to unlock investment, innovation and circularity in strategic regional locations including East Birmingham and building on the hub models of Repowering the Black Country by supporting the project's emerging investment opportunities.
2. **Developing Zero Waste Construction Hubs** to support materials exchange and recovery using strategic hubs based across the region.

3.2.2 There are also numerous opportunities for collaborative action, led by partners, to further create the conditions needed to nurture a more circular economy. We propose three initial priorities for collaborative action and good practice sharing including:

- a. **Convening a Circular Battery Partnership** (working closely with UKBIC, University of Birmingham and Coventry City Council) to create a world leading ecosystem of circular battery manufacturing in the West Midlands and identify any funding proposals e.g. circular battery accelerator
- b. Exploring a **Circular Construction Repurposing Programme** (subject to a clear mandate from Housing and Land Board) to develop and implement circular approaches for refurbishing and repurposing commercial and residential properties, as well as public buildings and spaces, building on the Zero Carbon Homes Taskforce expertise and Energy Capital retrofit work.
- c. **A Circular Hubs Network** – developing hubs in communities based around sharing of food, products and skills as part of the wider social economy growth programme and building on local initiatives such as Birmingham City Council's Food Trails programme and The Active Wellbeing Society and opportunities associated with Commonwealth Games 2022.

3.2.3 WMCA officers are keen to work with local authorities to identify opportunities to use their enabling functions such as waste, planning, procurement and other key strategies, plans and policies, to support investment in critical waste, energy and transport infrastructure that will create the conditions for a more circular economy.

3.3 Following business case development and partnership working, proposals will be brought back to WMCA Board for consideration. We will pursue external funding opportunities with partners and Government as part of our work.

4. Financial Implications

4.1 The costs associated with developing the business case proposals will be covered by Environment portfolio's existing budget.

4.2 The next steps will include developing our understanding of the costs associated with delivering the prioritised parts of the Routemap, with particular focus on that which may fall under WMCA delivery.

5. Legal Implications

5.1 None from the Routemap. We will work closely with colleagues in the Legal Team during business case development as these progress for each of the priority interventions.

6. Equalities Implications

6.1 The equalities implications of this paper – and the activities it proposes – should create net positive effects in terms of the impacts on citizens and communities. Underpinning all of the WMCA Environment and Energy programme is the need for a 'just transition' and it seeks to embed environmental goals as part of an overall approach to economic growth that is more inclusive.

7. Inclusive Growth Implications

7.1 The Routemap has inclusive and green growth as one of its key principles to ensure activity delivers co-benefits of job creation, social value, decarbonisation as well as health and well-being. It also aligns with the UN Sustainable Development Goals, which underpin the WMCA's Environment and Energy programme.

8. Geographical Area of Report's Implications

8.1 The report concentrates on the seven constituent authorities. Different parts of the Circular Economy Routemap may involve non-constituent authorities as part of delivery. These relationships will be developed on a case-by-case basis.

9. Other Implications

None.

10. Appendix

Appendix 1 - Table of strategic opportunities

Appendix 2 - Circular Economy Routemap