



**MIDLANDS
ENGINE**

CIRCULAR ECONOMY

MIDLANDS CLUSTER SNAPSHOT 2023

Circular Economy



This is a new cluster of activity across the region that progresses the Midlands towards a more circular economy: companies, across all sectors, transforming current processes of production and waste management aiming toward net-zero outcomes. The Department for Business & Trade has allocated circular economy activities are increasingly embedded in regional industrial activity such as at Smart Parc, Derby, and Tyseley Energy Park, Birmingham.

The West Midlands Combined Authority has an active programme of work in this area built around its Circular Economy Routemap published in 2021. Academic and business-led networks across the Midlands also support the momentum on this critical endeavour such as, Circular Economy clubs, university-led support programmes and strong research credentials at Birmingham, Nottingham, Loughborough and Leicester.

Cluster in context

- Almost 84,000 jobs; 11% of UK total.
- 251 high growth companies (15% of UK) and 96 £100m+ turnover companies (27% of UK).
- 1% of Midlands university graduates in 2021 studied relevant subjects to the circular economy, including from 4 of the top 25 UK universities for Engineering and Technology, and Natural Sciences.
- 42% of Innovate UK funding to circular economy businesses since 2005 has been awarded to those with a Midlands address.
- Almost 3,600 businesses; 18% of UK total and 83% growth since 2013.
- 11% of UK circular economy relevant Foreign Direct Investment Capex and 19% of UK circular economy relevant Domestic Direct Investment Capex 2017-2021.

Business Ecosystem



Total Cluster Business Count: 18% of UK; 83% growth since 2013. ¹	3,555
£100m+ Turnover Companies: 27% of all in the UK have a Midlands location. ²	96
High Growth Companies: 15% of all in the UK have a Midlands location. ³	251
Incorporations 2017-22: 15% of UK circular economy incorporations between 2017 and 2022 have a Midlands location. ⁴	1,089
Foreign-owned enterprises: 566 are known to be foreign-owned; Higher proportion of foreign-owned than national average (9.9%). ⁵	16%

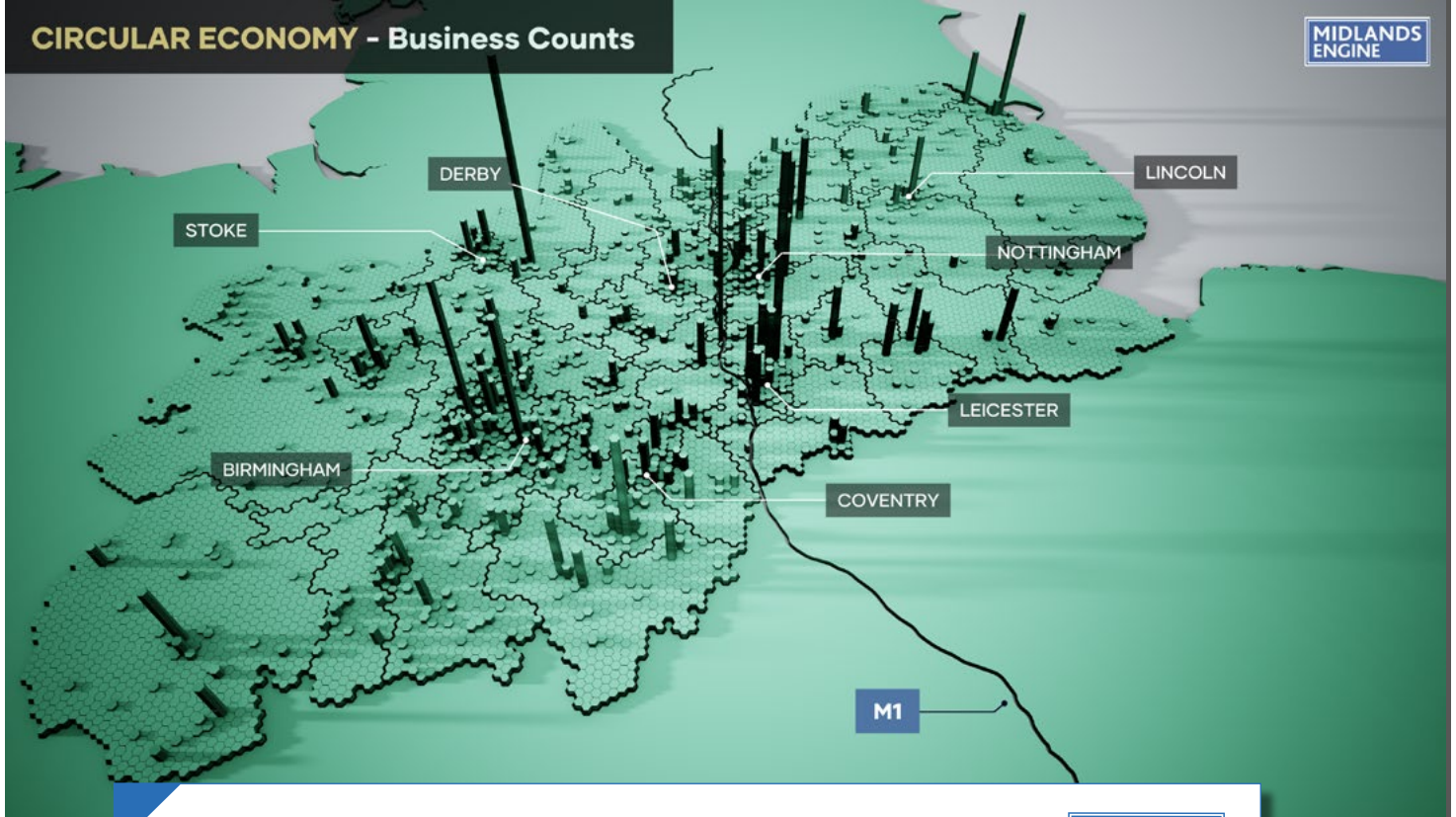


Circular economy is a relatively nascent and undefined industry which cross-cuts several other more traditional and some emerging sectors.

It is also a cluster with relatively few studies or data attached to it in its own right, thus the data presented should be taken with caution and in full knowledge of limitations previously outlined. The data at this stage can be seen as a broad estimate.

^{1,3,4,5}Data City 2023, ²Data City 2023: 20%+ company growth percentage per year.

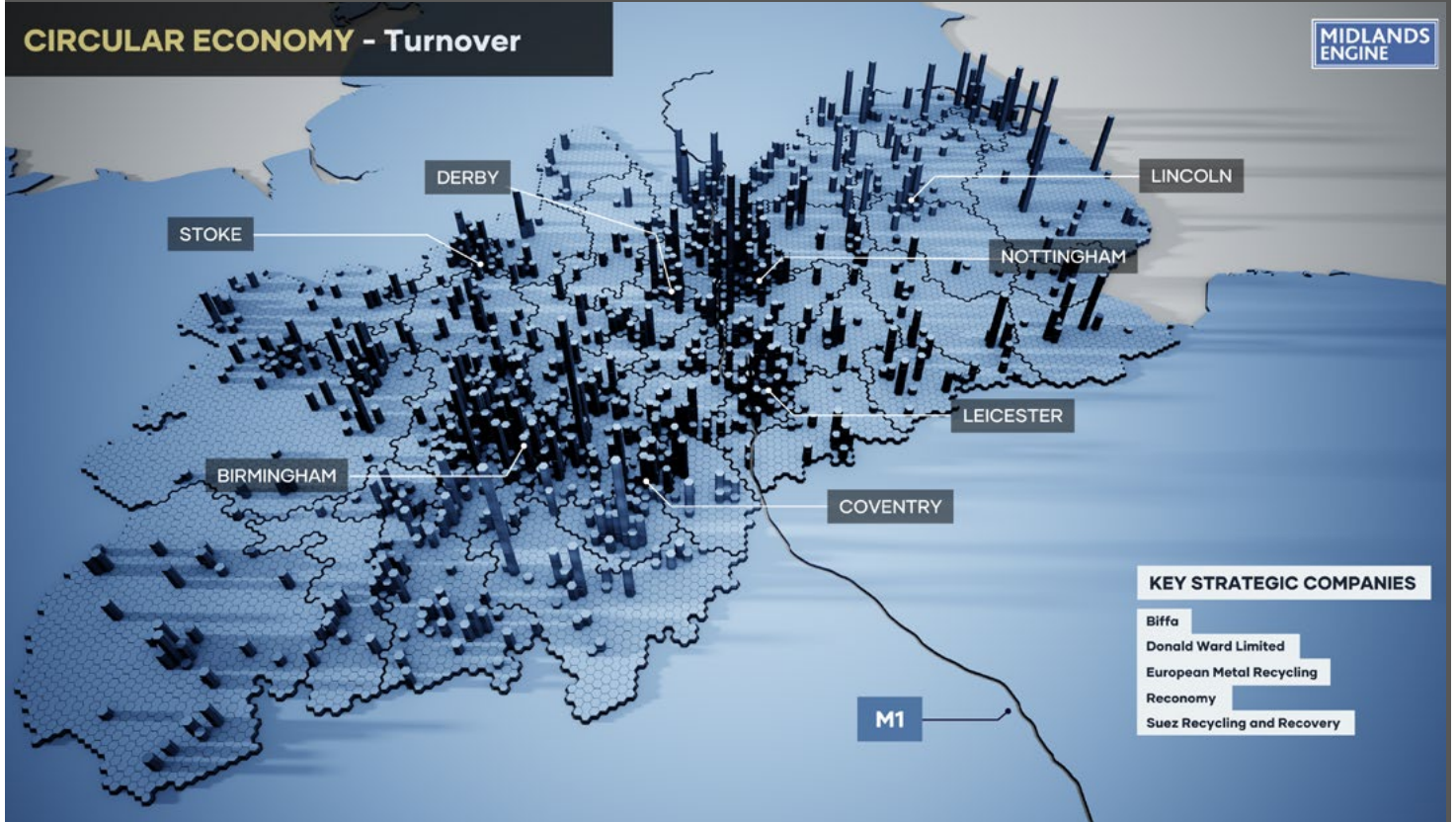
CIRCULAR ECONOMY - Business Counts



The height of the graph in several postcode areas (those with highest spikes), exaggerated by a high amount of company account duplicates in the data across a several companies. A truer reflection would be the height reduced by around 60% than currently displayed in the highest spiked postcodes (distributed across several places including Birmingham, Wolverhampton, Staffordshire Moorlands, Leicestershire, and Lincolnshire). The duplicates of these companies also affect the overall business count data by around 10%.



CIRCULAR ECONOMY - Turnover



KEY STRATEGIC COMPANIES

- Biffa
- Donald Ward Limited
- European Metal Recycling
- Reconomy
- Suez Recycling and Recovery

Circular Economy



Innovation Ecosystem



Relevant Cluster Organisations:

Sustainability West Midlands; Circular Economy Club; Innovation Alliance for the West Midlands

Relevant high performing HEI research:

Universities of Birmingham; Loughborough; Nottingham; Leicester; Nottingham Trent; De Montfort

6 Midlands universities with high research ranking in relevant subjects.¹

Significant Innovation Hubs:

Warwick Manufacturing Group; Circular Economy Research Network (CERN); Energy and Bioproducts Research Institute (EBRI); Centre for Circular Economy and Advanced Sustainability (CEAS); Environmental Technologies and Resource Efficiency Support Services (EnTRESS); Centre for Materials Research; Loughborough University's Centre for Sustainable Manufacturing and Recycling Technologies

Innovate UK funding:

£518m since 2005

42% of Innovate UK funding to circular economy businesses had a Midlands location.²

¹Beauhurst 2022: High growth companies utilised accelerators from broad 'energy' area ²REF 2021 GPA >3.0 in any of Earth systems and environmental sciences; Architecture, built environment and planning; Geography and environmental studies , ²Data City, 2023.



Circular Economy



Talent Ecosystem



Estimated Employees:
11% of national.¹

83,697

University Graduates:
1% of Midlands graduates in 2021 studied relevant subjects to circular economy.⁴

1,810

Earnings:

Average salary **£33,436**

National average £34,854 (4.1% lower in Midlands).²

Graduate Retention: change over 3 years:

91.7%

In relevant industries – manufacturing and construction – the West Midlands has a strong record of retaining graduates and attracting them from other parts of the country. There is a net positive intake of 10% of graduates to these industries.⁵

Relevant HEI High-Ranking Department:

Universities of Nottingham; Birmingham; Warwick; Loughborough

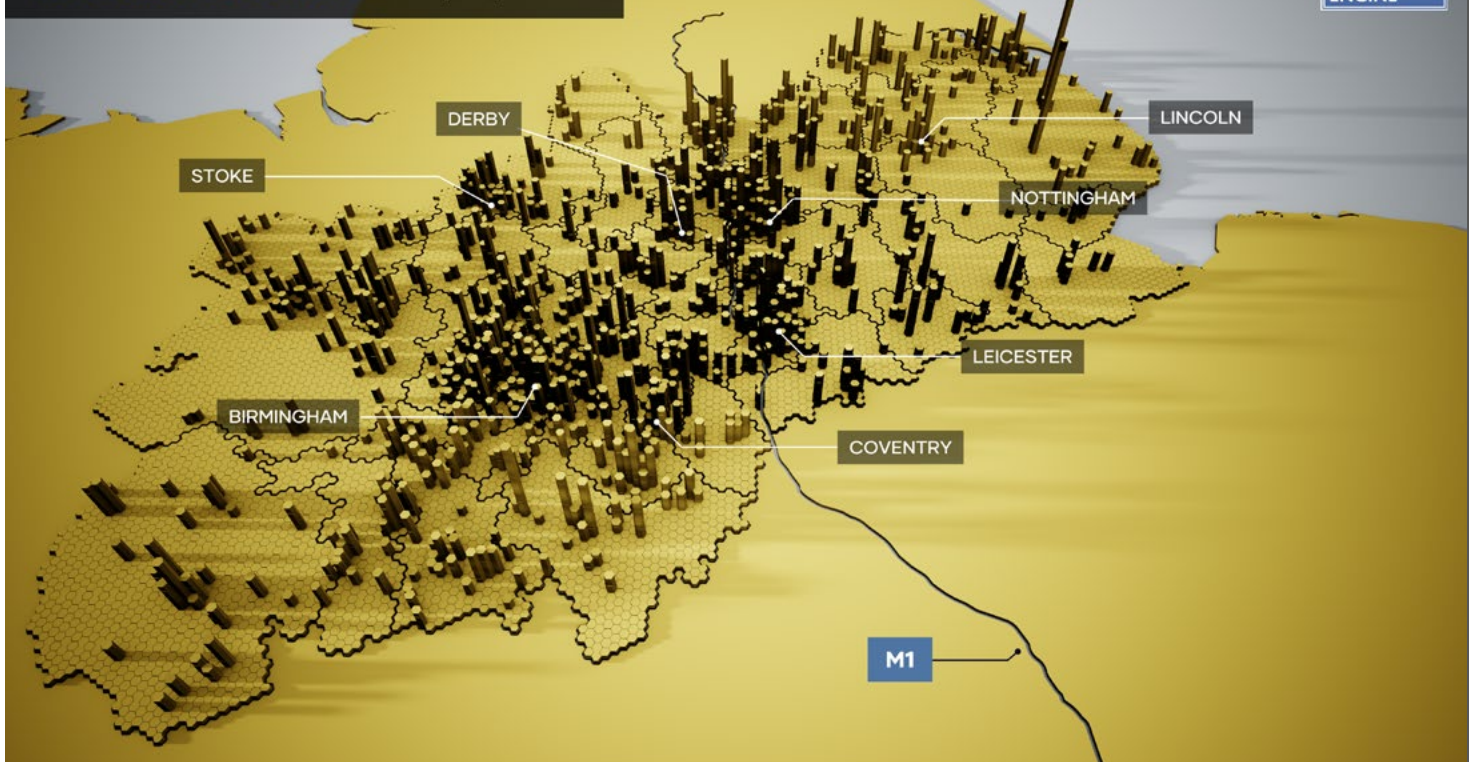
4 universities high ranked: international presence and expertise.³

¹Data City, 2023, ²ONS ASHE, 2021, ³QS 'Engineering and Technology' & 'Natural Sciences' world subject ranking 2022 - institutions appearing in UK top 25 ⁴Graduates from relevant subjects 2021 (HESA), ⁵2525/2755 first degree graduates trained in region remain in 'Construction; manufacturing' in 3 years of graduating in 2019.



The height of 2 spikes in a single postcode within East Lindsey (Lincolnshire) is likely to be exaggerated by 2 single large companies, which are unlikely to generate the level of employees accounted for just in these locations, and indeed unlikely to all be related to circular economy. So, while Lincolnshire does retain a notable, "real" level of circular economy activity, the level of circular economy employees identified to these specific postcodes (the highest two spikes) should be disregarded.

CIRCULAR ECONOMY - Employees



Circular Economy



Investment Ecosystem



Investment/Venture Capital Firms:
Funds HQ'd in Midlands Engine area
313 Funds have offices in region.¹

200

FDI Jobs 2017-2021:
22% of UK total.⁴

152 jobs

FDI Capex 2017-21:
11% of UK total.²

\$63.6m

DDI Jobs 2017-2021:
13% of UK total.⁵

150 jobs

DDI Capex 2017-21:
19% of UK total.³

\$33.14m

FDI Projects 2017-2021:
3% of UK total.⁶

5 projects

DDI projects 2017-2021:
8% of UK total.⁷

21 projects

¹Beauhurst 2022, ^{2,3,4,5,6,7}Wavteq 2022.





COMMENTARY

- DDI capex into the Recycling cluster almost reached its pre-Covid-19 high in 2021.
- The top countries for foreign ownership counts are the USA, Germany, France, and Spain.



This data has been compiled from multiple sources, using classifications based on clusters as proposed by Midlands Engine Partners. Where necessary wider sector data has been used as a 'best proxy'. Unless otherwise stated, all data is contemporary as of May 2023, and is an aggregation of all known counts/data within the Midlands Engine's 65 Local Authorities. Unless otherwise stated, business, employee and turnover figures have been calculated via DataCity based on trading addresses within the Midlands Engine.