

Low Carbon Environmental Goods and Services Sector Study 2024: Local Authority Short Report for Wolverhampton City Council

Commissioned by the Midlands Net Zero Hub, this report provides 2024 data of the LCEGS sector, updating the 2021 study.

1. Introduction

This document has been prepared to provide an overview summary of the LCEGS sector within this Local Authority. Reports on the wider picture of the MNZH region and WMCA, including skills forecasts relevant to this Local Authority, and datasets are available [here](#). Additional detailed data is available from kMatrix; and further recommendations and details on areas of focus are available through the Climate Action Benchmarking study.

2. Current Activity Supporting the Growth of the Sector

Activity at the WMCA level relevant to the wider geographical region:

- The WMCA offers lots of support for businesses to help decarbonise. Schemes such as the Business Energy Advice Service, the WM Net Zero Pledge and decarbonisation grants will help further drive the LCEGS sector, although more support and funding are needed in the future to maximise effectiveness.
- The WMCA region has a very strong innovation sector including a number of funding projects and support networks, such as the West Midlands Innovation Programme. The Innovation Accelerator programme has offered £33m of funding for five projects, two of which directly support the LCEGS sector - "Clean Futures" and the "Biochar Cleantech Accelerator" - and offers a strong platform to drive innovation throughout the LCEGS supply chain.
- Energy Capital's work developing a Regional Energy Strategy and a Smart Energy Cluster will provide a useful direction of travel and an opportunity to collaborate for the region's diverse and otherwise disparate energy sector.

- Birmingham has the highest concentration of low carbon sector employees in the country and is home to over 5,100 low carbon businesses. This activity gives the region the opportunity to act as a national LCEGS hub.

3. Recommendations

Recommendations for Wolverhampton City Council are:

- Develop and promote a centralized directory of trusted LCEGS suppliers and consultants to simplify the vetting process for SMEs, as well as increasing the awareness of local LCEGS businesses.
- Utilise existing manufacturing clusters such as the Black Country Industrial Cluster to engage with energy-intensive manufacturing businesses and promote the benefits of the circular economy and low carbon technologies.
- Build on the opportunities presented by the Innovation Accelerator to grow the LCEGS sector. Investigate how to retain skills, knowledge and if possible, activity from the Innovation Accelerators post March 2025.
- Work with nearby local authorities to develop a strategy to better work with local skills providers, education institutions and LCEGS businesses to ensure training and apprenticeships are available that address the specific skills gaps in the area. This work could include pooling funding.
- Review procurement processes within the local authority and wider public sector to prioritise sustainable practices across the supply chain, thereby driving growth in the LCEGS sector. Shift focus from short term cost savings to longer term savings and consider savings to other budgets through procurement which brings social and environmental benefits.
- Contact the Midlands Net Zero Hub and request the supplementary booklet of additional data to provide further information and context to the LCEGS sector in your area.
- Large sub-sectors which saw stronger 3-year growth in Wolverhampton City than the UK average and are considered strengths are:
 - Recovery & Recycling
 - Waste Management

- Water Supply & Waste Water Treatment
- Energy Management
- Nuclear Power

These are similar strengths to the wider WMCA, which also includes Alternative Fuel Vehicle; Alternative Fuels; Building Technologies; Energy Management; and Geothermal. Nuclear Power is not a strength of the wider WMCA, due to its size. The WMCA report and dataset includes details of the skills gaps across the WMCA for each sub-sector, providing evidence to feed into local skills plans, ideally formed in collaboration with neighbouring councils.

4. Headline Figures for Wolverhampton

The headline figures for the Wolverhampton City Council area are:

- The LCEGS sector in Wolverhampton was worth £520m in 2023/24 and is forecast to grow to £797m over the next 5 years
- The LCEGS sector accounts for 6.2% of GVA, 2.8% of employment, and sales accounts for 6.7% of GDP in Wolverhampton
- Wolverhampton's LCEGS Sales generates 1.8% of the LCEGS Sales in the MNZH region, slightly lower than the 2.2% of total GDP contribution
- Wolverhampton's LCEGS GVA generated 1.8% of the MNZH's LCEGS GVA, slightly lower than the 2.2% total GVA contribution
- Wolverhampton's LCEGS employment accounts for 1.7% of MNZH's LCEGS employment, lower than its 2.5% of economically active people in the MNZH

5. Wolverhampton’s LCEGS Sector Key Metrics

Key metrics in Wolverhampton for each financial year from 2019/20 to 2023/24, with growth between years:

Wolverhampton	2019/20	% growth	2020/21	% growth	2021/22	% growth	2022/23	% growth	2023/24
Sales	£467.6m	-4.9%	£444.9m	3.9%	£462.4m	5.0%	£485.3m	7.1%	£519.5m
GVA	£377.5m	-6.0%	£355.0m	5.1%	£373.2m	4.9%	£391.5m	6.6%	£417.3m
# FTE Employees	3,441	-3.3%	3,328	4.0%	3,462	11.3%	3,852	12.6%	4,337
# Companies	179	-5.1%	170	4.0%	177	4.7%	185	7.1%	198

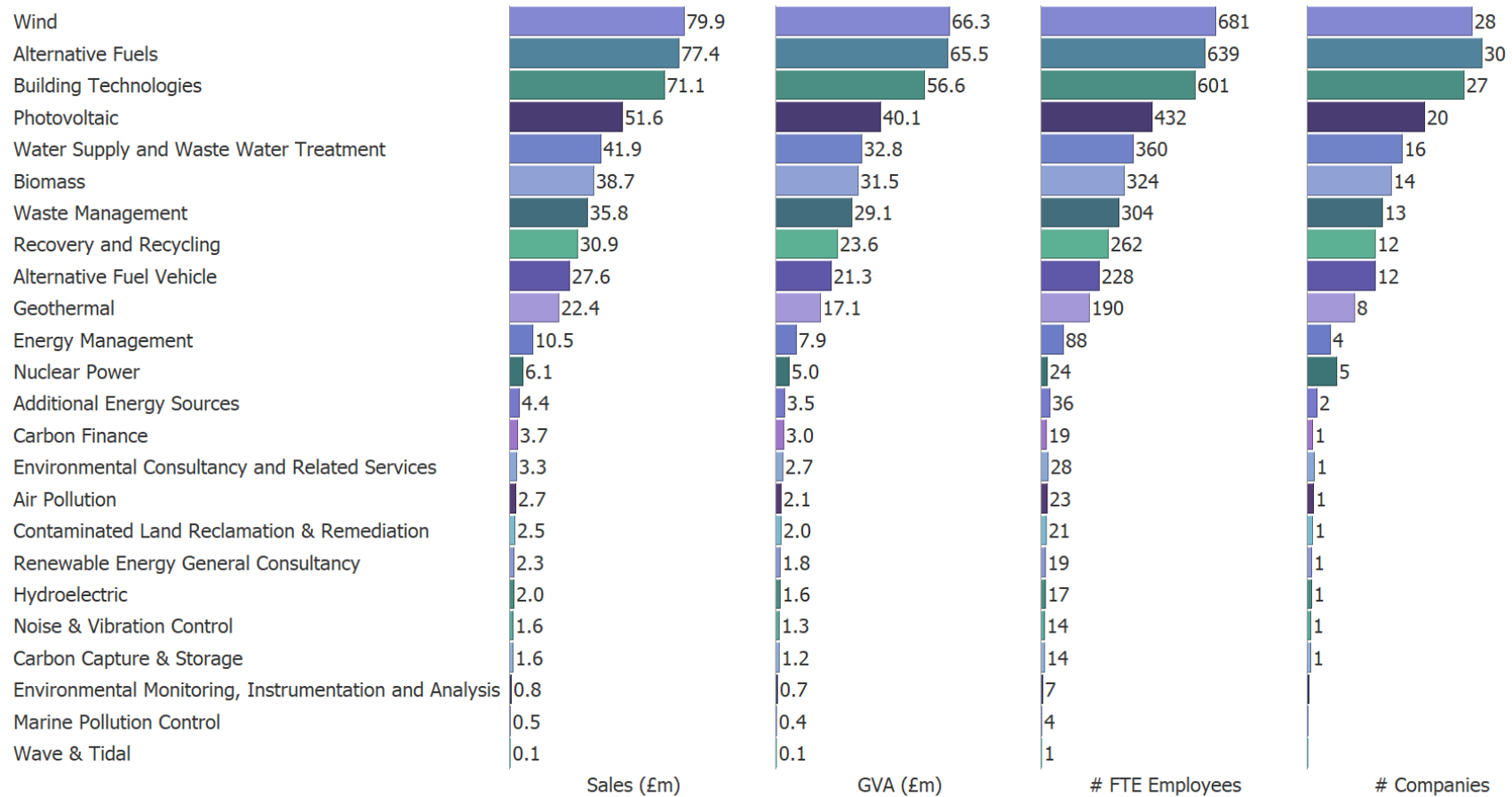
Note: the total numbers for 2019/20 are higher than those reported in 2021 due to an adjustment made in the Nuclear Power sub-sector in the Wolverhampton City Council area.

All metrics have recovered from the pandemic in 2020 and saw growth across the reporting period from 2021/22 to 2023/24.

6. Wolverhampton’s Sub-sectors Key Metrics

All twenty-four sub-sectors of the LCEGS sector have activity in Wolverhampton, with the 2023/24 values for Sales, GVA, FTE Employees and number of companies in figure 1.

Figure 1: Sales, GVA, FTE Employees and number of companies in Wolverhampton in 2023/24 by sub-sector



The largest twelve sub-sectors account for 95% of sales, 95% of GVA, 95% of employment and 95% of companies in the LCEGS sector. These twelve sub-sectors are Wind; Alternative Fuels; Building Technologies; Photovoltaic; Water Supply & Waste Water treatment; Biomass; Waste Management; Recovery & Recycling; Alternative Fuel Vehicle; Geothermal; Energy Management; and Nuclear Power.

7. Wolverhampton’s Sub-sector Growth Compared with the UK

Sub-sectors that saw stronger growth in sales than the UK average between 2021/22 and 2023/24 for Wolverhampton include:

Sub-sector	Wolverhampton Sales 2023/24	Wolverhampton Growth 2021/22 to 2023/34	UK Growth 2021/22 to 2023/34
Air Pollution	£2.7m	12%	7%
Environmental Consultancy and Related Services	£3.3m	12%	11%
Recovery and Recycling	£30.9m	13%	11%
Waste Management	£35.8m	13%	8%
Water Supply and Waste Water Treatment	£41.9m	12%	5%
Additional Energy Sources	£4.4m	13%	10%
Alternative Fuel Vehicle	£27.6m	14%	12%
Energy Management	£10.5m	15%	10%
Nuclear Power	£6.1m	14%	8%

Only sub-sectors contributing more than 1% of the total Sales in Wolverhampton have been included in this table.

Of the eight sub-sectors that grew stronger than the UK, Recovery & Recycling; Waste Management; Water Supply & Waste Water Treatment; Energy Management; and Nuclear Power are also large sub-sectors and should be considered a strength of Wolverhampton.

8. MNZH Regional summary

Headline figures for the MNZH area are:

- The LCEGS sector in MNZH Region was worth £31.0bn in 2023/24 and is forecast to grow to £46.6bn over the next 5 years
- The LCEGS sector accounts for 7.4% of GVA, 4.2% of employment, and sales accounts for 8.3% of GDP in MNZH Region
- MNZH Region's LCEGS Sales generates 11.9% of the LCEGS Sales in the UK, slightly lower than the 12.4% of total GDP contribution
- MNZH Region's LCEGS employment accounts for 15.5% of the UK's LCEGS employment, lower than its 16.8% of economically active people in the UK
- Net Zero 2030 targets are expected to require between 30,192 and 146,162 FTE employees in addition to those employed now in the MNZH region
- Net Zero 2050 targets are expected to require between 263,907 and 727,184 FTE employees in addition to those employed now in the MNZH region
- The MNZH region's LCEGS sector could generate up to 727,184 jobs between 2023/24 and 2050*
- Between 2019/20 and 2023/24, Investment in R&D for the LCEGS sector has varied, but is now similar, shrinking slightly from £2.2bn to £2.1bn for Private Equity Investment; being £3.6bn for Venture Capital Investment for both years; and increasing slightly from £4.9bn to £5.2bn for Other Investment.
- Exports in the LCEGS sector for MNZH Region have increased from £2.8bn in 2019/20 to £3.2bn in 2023/24.

*The majority of increase from 2030 targets due to additional 20 years of wider economic growth

9. West Midlands Combined Authority summary

Headline figures for the WMCA area are:

- The LCEGS sector in WMCA was worth £9.2bn in 2023/24 and is forecast to grow to £14.2bn over the next 5 years
- The LCEGS sector accounts for 7.8% of GVA, 4.6% of employment, and sales accounts for 8.8% of GDP in WMCA
- WMCA's LCEGS Sales generates 29.0% of the LCEGS Sales in the MNZH region, higher than the 27.1% of total GDP contribution
- WMCA's LCEGS GVA generated 29.1% of the MNZH's LCEGS GVA, higher than the 27.5% total GVA contribution
- WMCA's LCEGS employment accounts for 28.8% of MNZH's LCEGS employment, higher than its 26.7% of economically active people in the MNZH
- Net Zero 2030 targets are expected to require between 10,116 and 45,735 FTE employees in addition to those employed now in WMCA
- Net Zero 2050 targets are expected to require between 76,728 and 219,141 FTE employees in addition to those employed now in WMCA
- WMCA's LCEGS sector could generate up to 219,141 jobs between 2023/24 and 2050*
- Between 2019/20 and 2023/24, Investment in R&D for the LCEGS sector has grown from £414m to £563m for Private Equity Investment; £820m to £1.0bn for Venture Capital Investment; and £1.2bn to £4.5bn for Other Investment.
- Exports in the LCEGS sector for WMCA have increased from £798m in 2019/20 to £933m in 2023/24.

*The majority of increase from 2030 targets due to additional 20 years of wider economic growth

10. Example Companies in Wolverhampton

Examples companies in Wolverhampton.

Note: Some or all of the company's activity and employment are either currently in the LCEGS sector or have the potential to be. In some cases, turnover and/or employment may include activity in other locations.

Company Name: **Ansaldo Nuclear Limited**

Web: <https://www.ansaldoenergia.com/companies/ansaldo-nuclear-limited>

Turnover: £36.2m (estimated by Pomanda)

Employees: 249

SIC Codes: Manufacture of other special-purpose machinery not elsewhere classified

About the company: “Ansaldo Nuclear Ltd is the largest independent turnkey provider of nuclear engineering, manufacturing and services in the UK, and part of Ansaldo Nucleare SpA.

The Company's involvement in the nuclear industry began with the construction of the first nuclear reactor in the UK for the Dounreay Power Plant. Since then, Ansaldo Nuclear Ltd has supplied an extensive range of equipment and solutions to most UK nuclear power stations – including fuel route, remote handling, inspection equipment, encapsulation and waste handling.

Ansaldo Nuclear Ltd also operates in the defence sector.”

Company Name: **S & B Waste Management & Recycling Limited**

Web: <https://www.sbwaste.co.uk/>

Turnover: £13m

Employees: 65

SIC Codes: Treatment and disposal of non-hazardous waste

About the company: “Experts in waste management and recycling”

Company Name: **Recycled Plastics (UK) Limited**

Web: <http://www.recycledplasticsuk.com/>

Turnover: £10.6m

Employees: 43

SIC Codes: Manufacture of plastic packing goods
Recovery of sorted materials

About the company: “We offer a fully managed service including end to end, closed loop polythene recycling, extrusion, conversion and distribution. We constantly look at ways to innovate, reduce costs, add value to customers and suppliers and minimise the adverse impact to our environment.