Low Carbon Environmental Goods and Services Sector Study 2024: Local Authority Short Report for Lichfield District 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 Stoke-on-Trent & Staffordshire, 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 Stoke-on-Trent & Staffordshire level relevant to the wider geographical region:

- The Staffordshire County Council Green Solutions programme in affiliation with Business Energy Advice Service (BEAS) offers support and funding to businesses across the region to reduce their greenhouse gas emissions. This includes free energy assessments, free carbon literacy training and a 50% Low Carbon Grant of up to £100,000 to implement recommended actions, such as the installation of solar panels, thereby helping to drive demand in the LCEGS sector.

- Staffordshire Business Environment Network is one of the biggest environmental networks in the country, with over 750 members. It offers training and support to its members and has been growing the LCEGS sector in Staffordshire for over 30 years.

- Staffordshire Green Skills for Growth is a programme funded by Innovate UK and is run in partnership with Staffordshire County Council and Keele University. It aims to model the pipeline of net zero skills needed in the region through to 2050 and establish a skills development and investment plan in collaboration with the region's major education providers.

- Stoke-on-Trent is a major center of energy innovation and low carbon adoption, and the Stoke District Heat Network and Smart Energy Network Demonstrator are national assets that allow businesses and academic researchers to collaborate, share expertise to innovate and grow.

3. Recommendations

Recommendations for Lichfield District Council are:

- Strengthen SME engagement with the LCEGS sector and funding available to them through promoting good news, clear communication of support options, and helping advice providers to incentivise SMEs to take up grant offers.

- 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. For Lichfield, this could be a particular focus on environmental skills such as auditing and sustainable management, as well as ensuring there are a sufficient number of highly trained installers to meet the local demand for low carbon technologies.

- 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 the closest 3-year growth in Lichfield to the UK average and are considered strengths are:
  - Waste Management
  - Water Supply & Waste Water Treatment
  - Energy Management

These compare with a wider range of strengths of the wider Stoke-on-Trent & Staffordshire area, which include Recovery & Recycling; Alternative Fuel Vehicle; Alternative Fuels; Building Technologies; Nuclear Power; Biomass; Geothermal; Photovoltaic; and Wind. The Stoke-on-Trent & Staffordshire report and dataset includes details of the skills gaps across Stoke-on-Trent & Staffordshire for each sub-sector, providing evidence to feed into local skills plans, ideally formed in collaboration with neighbouring councils.

4. Headline Figures for Lichfield

Headline figures for the Lichfield District Council area are:

- The LCEGS sector in Lichfield was worth £251m in 2023/24 and is forecast to grow to £303m over the next 5 years

- The LCEGS sector accounts for 6.2% of GVA, 3.1% of employment, and sales accounts for 6.9% of GDP in Lichfield

- Lichfield's LCEGS Sales generates 0.9% of the LCEGS Sales in the MNZH region, slightly lower than the 1.1% of total GDP contribution

- Lichfield's LCEGS GVA generated 0.9% of the MNZH's LCEGS GVA, slightly lower than its 1.1% total GVA contribution

- Lichfield's LCEGs employment accounts for 0.8% of MNZH's LCEGS employment, slightly lower than its 1.1% of economically active people in the MNZH

5. Lichfield's LCEGS Sector Key Metrics

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

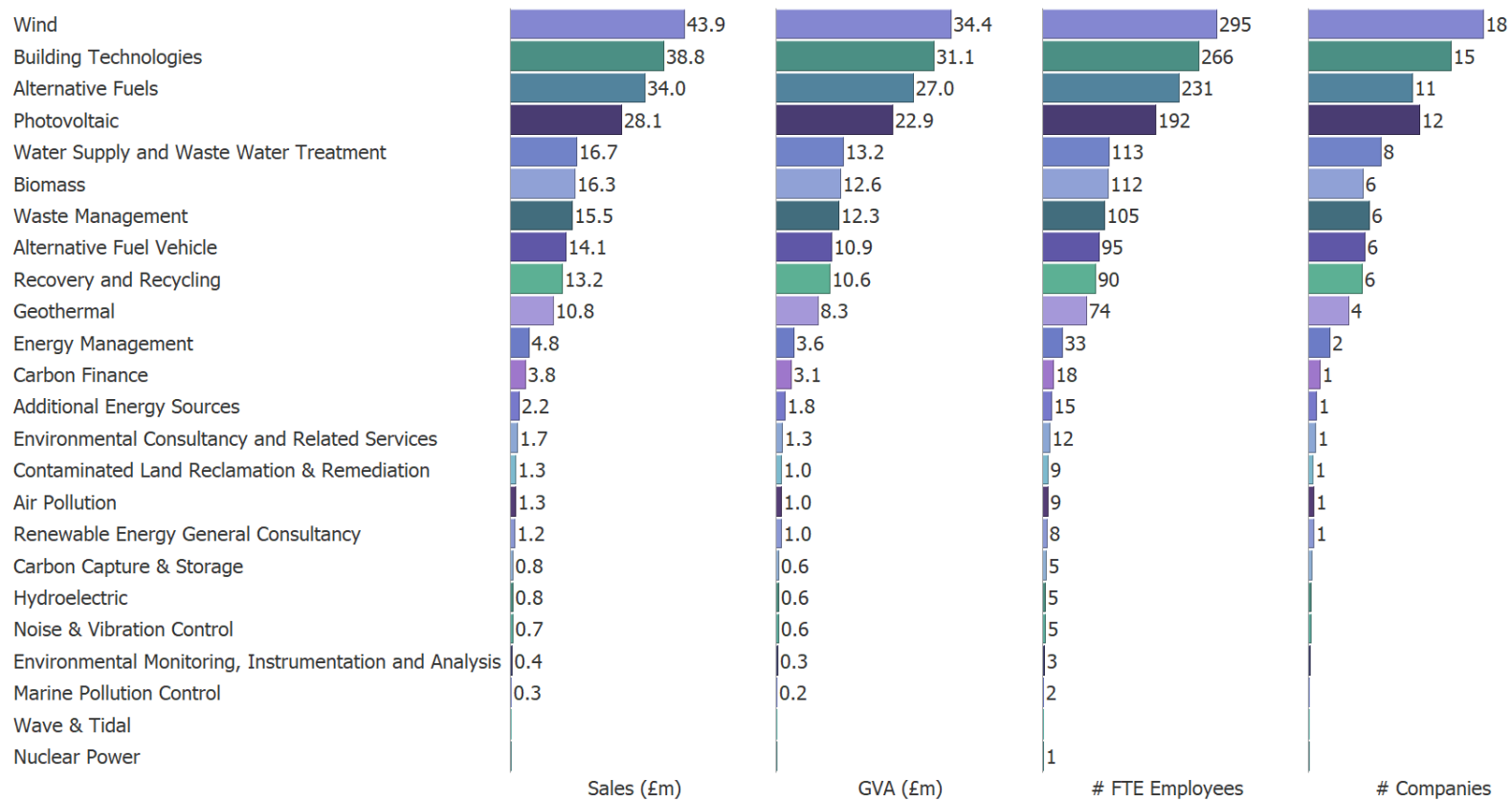| Lichfield	2019/20	% growth	2020/21	% growth	2021/22	% growth	2022/23	% growth	2023/24
Sales	£236.4m	-2.3%	£231.0m	2.9%	£237.8m	2.2%	£243.2m	3.2%	£250.9m
GVA	£186.2m	-2.3%	£182.0m	3.0%	£187.4m	2.3%	£191.8m	3.5%	£198.5m
# FTE Employees	1,593	-1.5%	1,569	2.6%	1,610	2.4%	1,648	3.1%	1,699
# Companies	94	-2.3%	92	2.5%	94	2.6%	97	3.2%	100

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

6. Lichfield's Sub-sectors Key Metrics

All twenty-four sub-sectors of the LCEGS sector have activity in Lichfield, 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 Lichfield in 2023/24 by sub-sector

Sub-sector	Sales (£m)	GVA (£m)	# FTE Employees	# Companies
Wind	43.9	34.4	295	18
Building Technologies	38.8	31.1	266	15
Alternative Fuels	34.0	27.0	231	11
Photovoltaic	28.1	22.9	192	12
Water Supply and Waste Water Treatment	16.7	13.2	113	8
Biomass	16.3	12.6	112	6
Waste Management	15.5	12.3	105	6
Alternative Fuel Vehicle	14.1	10.9	95	6
Recovery and Recycling	13.2	10.6	90	6
Geothermal	10.8	8.3	74	4
Energy Management	4.8	3.6	33	2
Carbon Finance	3.8	3.1	18	1
Additional Energy Sources	2.2	1.8	15	1
Environmental Consultancy and Related Services	1.7	1.3	12	1
Contaminated Land Reclamation & Remediation	1.3	1.0	9	1
Air Pollution	1.3	1.0	9	1
Renewable Energy General Consultancy	1.2	1.0	8	1
Carbon Capture & Storage	0.8	0.6	5	
Hydroelectric	0.8	0.6	5	
Noise & Vibration Control	0.7	0.6	5	
Environmental Monitoring, Instrumentation and Analysis	0.4	0.3	3	
Marine Pollution Control	0.3	0.2	2	
Wave & Tidal				
Nuclear Power			1	

KMatrix

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The largest eleven sub-sectors account for 94% of sales, 94% of GVA, 95% of employment and 94% of companies in the LCEGS sector. These eleven sub-sectors are Wind; Building Technologies; Alternative Fuels; Photovoltaic; Water Supply & Waste Water Treatment; Biomass; Waste Management; Alternative Fuel Vehicle; Recovery & Recycling; Geothermal and Energy Management.

7. Lichfield's Sub-sector Growth Compared with the UK

No sub-sectors saw stronger growth in sales than the UK average between 2021/22 and 2023/24, however, those who were closest to the UK average in Lichfield include:

Sub-sector	Lichfield Sales 2023/24	Lichfield Growth 2021/22 to 2023/34	UK Growth 2021/22 to 2023/34
Air Pollution	£1.3m	5%	7%
Contaminated Land Reclamation & Remediation	£1.3m	5%	9%
Environmental Consultancy and Related Services	£1.7m	6%	11%
Waste Management	£15.5m	6%	8%
Water Supply and Waste Water Treatment	£16.7m	5%	5%
Additional Energy Sources	£2.2m	6%	10%
Energy Management	£4.8m	6%	10%

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

Of the seven sub-sectors closest to the UK average, Waste Management; Water Supply & Waste Water Treatment; and Energy Management are also large sub-sectors and should be considered a strength of Lichfield.

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. Stoke-on-Trent & Staffordshire Growth Hub summary

Headline figures for the Stoke-on-Trent & Staffordshire area are:

- The LCEGS sector in Stoke-on-Trent & Staffordshire was worth £3.3bn in 2023/24 and is forecast to grow to £5.3bn over the next 5 years

- The LCEGS sector accounts for 7.1% of GVA, 3.7% of employment, and sales accounts for 7.9% of GDP in Stoke-on-Trent & Staffordshire

- Stoke-on-Trent & Staffordshire's LCEGS Sales generates 10.2% of the LCEGS Sales in the MNZH region, slightly lower than the 10.7% of total GDP contribution

- Stoke-on-Trent & Staffordshire's LCEGS GVA generated 10.1% of the MNZH's LCEGS GVA, slightly lower than its 10.6% total GVA contribution

- Stoke-on-Trent & Staffordshire's LCEGs employment accounts for 9.7% of MNZH's LCEGS employment, lower than its 11.2% of economically active people in the MNZH

- Net Zero 2030 targets are expected to require between 2,549 and 14,807 FTE employees in addition to those employed now in Stoke-on-Trent & Staffordshire

- Net Zero 2050 targets are expected to require between 31,955 and 76,017 FTE employees in addition to those employed now in Stoke-on-Trent & Staffordshire

- Stoke-on-Trent & Staffordshire's LCEGS sector could generate up to 76,017 jobs between 2023/24 and 2050*

- Between 2019/20 and 2023/24, Investment in R&D for the LCEGS sector has grown from £129m to £209m for Private Equity Investment; £267m to £376m for Venture Capital Investment; and £404m to £537m for Other Investment.

- Exports in the LCEGS sector for Stoke-on-Trent & Staffordshire have increased from £298m in 2019/20 to £338m in 2023/24.

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

10.   Example Companies in Lichfield

Examples companies in Lichfield.

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:	**Addfield Environmental Systems Limited**
Web:	https://addfield.com/machine-categories/energy-recovery/
Employees:	49
SIC Codes:	Manufacture of ovens, furnaces and furnace burners
Additional Products and Services:	CHP (Combined Heat and Power) energy recovery systems
About the company:	"Our ATTS (Advanced Thermal Treatment Solutions) and CHP (Combined Heat and Power) energy recovery systems are at the fore front of modern technological breakthrough. Addfield have a continual re-investment policy into research and development when offering innovative solutions for both waste and power. Our waste to energy systems allows the user to be more efficient with managing the waste at the source whilst generating thermal and electrical power from the waste which typically would have been sent to landfill."

Company Name:	**Red Industries (Stoke) Limited**
Web:	https://www.redindustries.co.uk/
Turnover:	£14m
Employees:	141
SIC Codes:	Treatment and disposal of non-hazardous waste

Treatment and disposal of hazardous waste

Remediation activities and other waste management services

Additional Products and Services: Laboratory and industrial services

About the company: "RED Industries was formed in 2006 with the goal of becoming the UK's most valued hazardous waste management company. Since then, our operations have grown, and we now offer total waste management solutions and environmental services to customers nationwide."