

Low Carbon Environmental Goods and Services Sector Study 2024: Local Authority Short Report for Newcastle-under-Lyme 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 Newcastle-under-Lyme District Council are:

- Promote sustainable practices within the region's agricultural sector, focusing on evidence-based solutions like anaerobic digestion (AD), [BioChar](#) and Agri-Tech innovation. AD should be a particular focus due to the large dairy farming industry. Partner with institutions like Harper Adams University to pilot innovations. Learnings can be taken from projects in surrounding regions, such as the [Shropshire AGRI](#) project.
- 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 Newcastle-under-Lyme, 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 similar or stronger 3-year growth in Newcastle-under-Lyme than 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 in 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 Newcastle-under-Lyme

Headline figures for the Newcastle-under-Lyme District Council area are:

- The LCEGS sector in Newcastle-under-Lyme was worth £236m in 2023/24 and is forecast to grow to £325m over the next 5 years
- The LCEGS sector accounts for 6.4% of GVA, 3.5% of employment, and sales accounts for 6.9% of GDP in Newcastle-under-Lyme
- Newcastle-under-Lyme's LCEGS Sales generates 0.8% of the LCEGS Sales in the MNZH region, slightly lower than the 1.0% of total GDP contribution
- Newcastle-under-Lyme's LCEGS GVA generated 0.8% of the MNZH's LCEGS GVA, slightly lower than its 1.0% total GVA contribution
- Newcastle-under-Lyme's LCEGS employment accounts for 1.0% of MNZH's LCEGS employment, slightly lower than its 1.2% of economically active people in the MNZH

5. Newcastle-under-Lyme’s LCEGS Sector Key Metrics

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

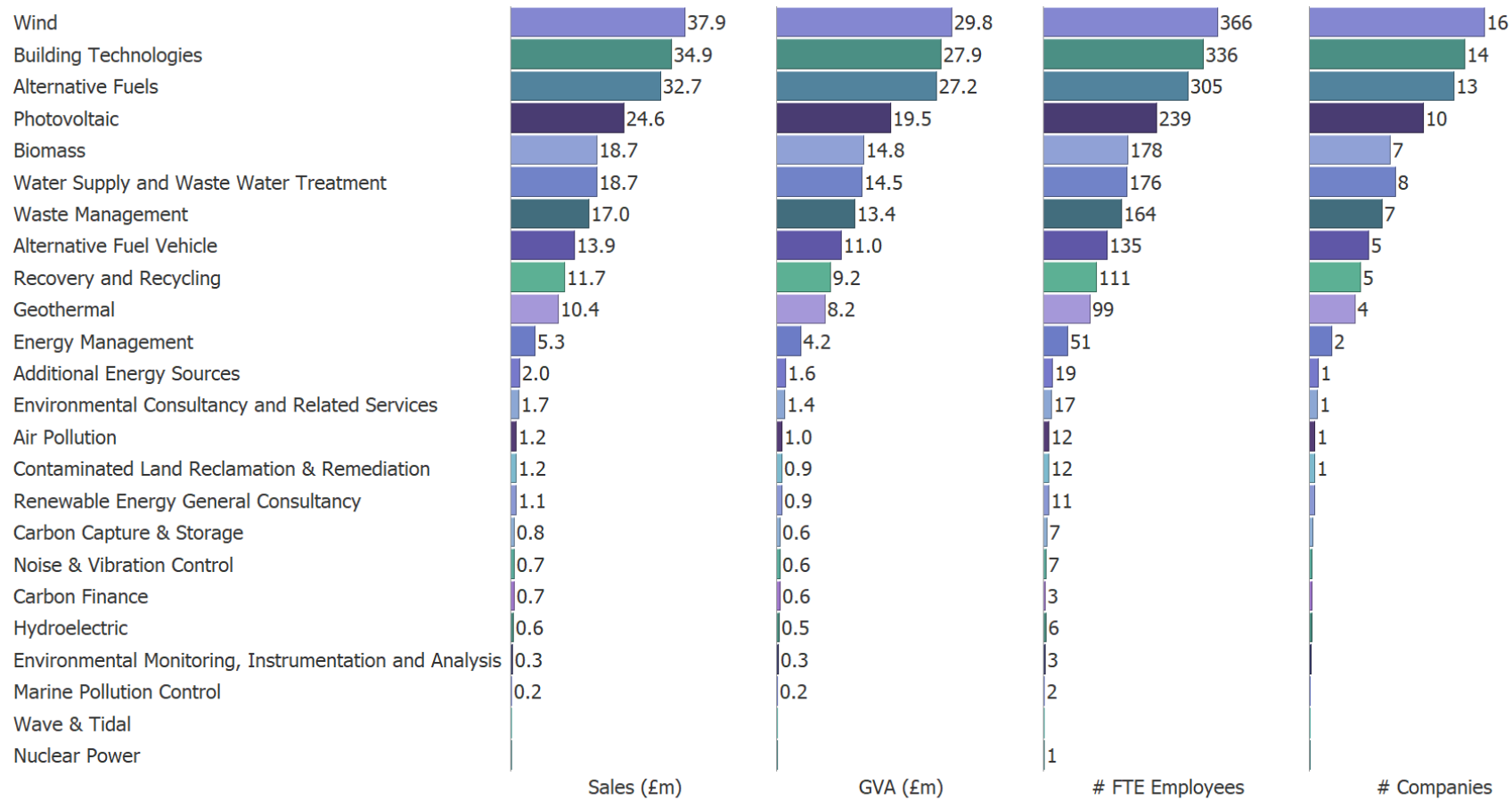
Newcastle-under-Lyme	2019/20	% growth	2020/21	% growth	2021/22	% growth	2022/23	% growth	2023/24
Sales	£219.2m	-3.9%	£210.6m	2.9%	£216.8m	3.7%	£224.8m	5.2%	£236.4m
GVA	£174.2m	-3.9%	£167.3m	2.9%	£172.2m	3.9%	£178.9m	5.2%	£188.1m
# FTE Employees	2,068	-2.5%	2,017	2.8%	2,074	3.6%	2,148	5.2%	2,260
# Companies	90	-3.9%	87	2.9%	89	3.8%	92	5.0%	97

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

6. Newcastle-under-Lyme’s Sub-sectors Key Metrics

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



The largest eleven sub-sectors account for 95% of sales, 95% of GVA, 96% of employment and 95% of companies in the LCEGS sector. These eleven sub-sectors are Wind; Building Technologies; Alternative Fuels; Photovoltaic; Biomass; Water Supply & Waste Water Treatment; Waste Management; Alternative Fuel Vehicle; Recovery & Recycling; Geothermal and Energy Management.

7. Newcastle-under-Lyme’s Sub-sector Growth Compared with the UK

Sub-sectors that saw similar or stronger growth in sales than the UK average between 2021/22 and 2023/24 for Newcastle-under-Lyme include:

Sub-sector	Newcastle-under-Lyme Sales 2023/24	Newcastle-under-Lyme Growth 2021/22 to 2023/34	UK Growth 2021/22 to 2023/34
Air Pollution	£1.2m	9%	7%
Contaminated Land Reclamation & Remediation	£1.2m	9%	9%
Waste Management	£17.0m	8%	8%
Water Supply and Waste Water Treatment	£18.7m	9%	5%
Energy Management	£5.3m	9%	10%

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

Of the five sub-sectors that saw similar or stronger growth than the UK, Waste Management; Water Supply & Waste Water Treatment; and Energy Management are also large sub-sectors and should be considered a strength of Newcastle-under-Lyme.

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 Newcastle-under-Lyme

Examples companies in Newcastle-under-Lyme.

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:	Accutronics Ltd
Web:	https://accutronics.co.uk/
Turnover:	£9.7m
Employees:	61
SIC Codes:	Manufacture of batteries and accumulators

About the company: “Accutronics is a leading battery and charger design, development and manufacturing company for high performance portable and handheld electronic devices, specialising in the development and manufacture of smart batteries.”

Company Name: **Impulse Embedded Limited**

Web: <https://www.impulse-embedded.co.uk/>

Turnover: £13.2m

Employees: 34

SIC Codes: Manufacture of computers and peripheral equipment
Manufacture of electronic industrial process control equipment

Additional Products and Services: Renewable energy supply chain
Smart Cities supply chain

About the company: “Impulse Embedded is a leading provider of Industrial computing systems and solutions. Our customers rely on us to provide the best embedded computing products and solutions for the challenges presented by today’s industrial demands. Together with our global manufacturing partners we provide world-class innovative embedded computing and automation products and solutions suitable for multiple industrial market sectors including Renewable energy and Wind power.”