

Low Carbon Environmental Goods and Services Sector Study 2024: Short Report for Greater Lincolnshire

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 Greater Lincolnshire. Reports on the wider picture of the MNZH region and Local Authorities (with example companies), including 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.

Local Authorities with separate reports within Greater Lincolnshire are:

- Boston Borough Council
- East Lindsey District Council
- Lincoln City Council
- North East Lincolnshire Council
- North Kesteven District Council
- North Lincolnshire Council
- South Holland District Council
- South Kesteven District Council
- West Lindsey District Council

2. Current Activity Supporting the Growth of the Sector

Activity at the Greater Lincolnshire level relevant to the wider geographical region:

- The "Find a Grant" service on the Business Lincolnshire website gives businesses the chance to see all available grants and support schemes available to them in one place, including those that support the low carbon sector.
- Business Lincolnshire also run net zero business support workshops, hosted by PECT. They provide support to SMEs in the region, educating them on the challenges and opportunities presented by the low carbon transition, as well as actions for businesses to implement to decarbonise and increase sustainability.

- Lincolnshire's South Humber Bank is a key hub location for large-scale low carbon sector investment projects. This includes industrial decarbonisation such as carbon capture and clean hydrogen, renewable energy generation and innovation clusters.
- A prototype STEP fusion powerplant is planned for construction in on the Bassetlaw – West Lindsey border, with the area acting as a hub for fusion-related engineering and commercial progress, generating thousands of jobs in the industry.
- Grimsby's offshore renewables cluster is supported by a number of specialist training providers, including HETA, Grimsby Institute and CATCH, who offer training and courses for companies, workers and students in the industry.
- The Greater Lincolnshire LEP has recently completed a study to baseline the level of commercial, industrial and research activity within the circular economy across Greater Lincolnshire, with a view to exploring the potential for circular economy clusters and growing the level of circular activity.

3. Recommendations

Recommendations for Greater Lincolnshire are:

- Engage with grid network operators and local authorities in nearby energy intensive regions of the Midlands such as Birmingham, Coventry and Leicester to investigate whether there is potential to expand energy infrastructure to keep renewable energy generated in Lincolnshire within the Midlands.
- Reduce barriers for businesses accessing funding for energy efficiency improvements, for example by removing the requirement for large proportions of match funding or offering interest free loans for costs which grants do not cover.
- Devise a strategy to build the infrastructure to allow innovation to grow on a region-wide scale, establishing and connecting place-base clusters. This could draw on lessons from successful innovation ecosystems from around the UK.
- Ensure information is effectively communicated between grid network operators and local businesses, such as when grid upgrades have been carried out, allowing businesses to increase their renewable energy capacity, or install other low carbon technologies such as solar panels or rapid EV charging stations.

- Facilitate collaboration between local skill providers, educational institutions, local authorities and LCEGS businesses to ensure training courses and apprenticeships are available that address specific skills gaps identified in the sector. This should include a particular focus on recovery and recycling, alternative fuel vehicles and energy management.

4. Headline Figures for Greater Lincolnshire

The headline figures for Greater Lincolnshire area are:

- The LCEGS sector in Greater Lincolnshire was worth £2.6bn in 2023/24 and is forecast to grow to £3.8bn over the next 5 years
- The LCEGS sector accounts for 6.3% of GVA, 3.2% of employment, and sales accounts for 7.0% of GDP in Greater Lincolnshire
- Greater Lincolnshire's LCEGS Sales generates 8.9% of the LCEGS Sales in the MNZH region, slightly lower than the 10.5% of total GDP contribution
- Greater Lincolnshire's LCEGS GVA generated 8.8% of the MNZH's LCEGS GVA, lower than the 10.5% total GVA contribution
- Greater Lincolnshire's LCEGS employment accounts for 7.9% of MNZH's LCEGS employment, lower than its 10.5% of economically active people in the MNZH
- Net Zero 2030 targets are expected to require between 3,711 and 12,933 FTE employees in addition to those employed now in Greater Lincolnshire
- Net Zero 2050 targets are expected to require between 17,430 and 59,852 FTE employees in addition to those employed now in Greater Lincolnshire
- Greater Lincolnshire's LCEGS sector could generate up to 59,852 jobs between 2023/24 and 2050*
- Between 2019/20 and 2023/24, Investment in R&D for the LCEGS sector has grown from £120m to £196m for Private Equity Investment; £233m to £321m for Venture Capital Investment; and £352m to £451m for Other Investment.
- Exports in the LCEGS sector for Greater Lincolnshire have increased from £251m in 2019/20 to £281m in 2023/24.

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

5. Greater Lincolnshire’s LCEGS Sector Key Metrics

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

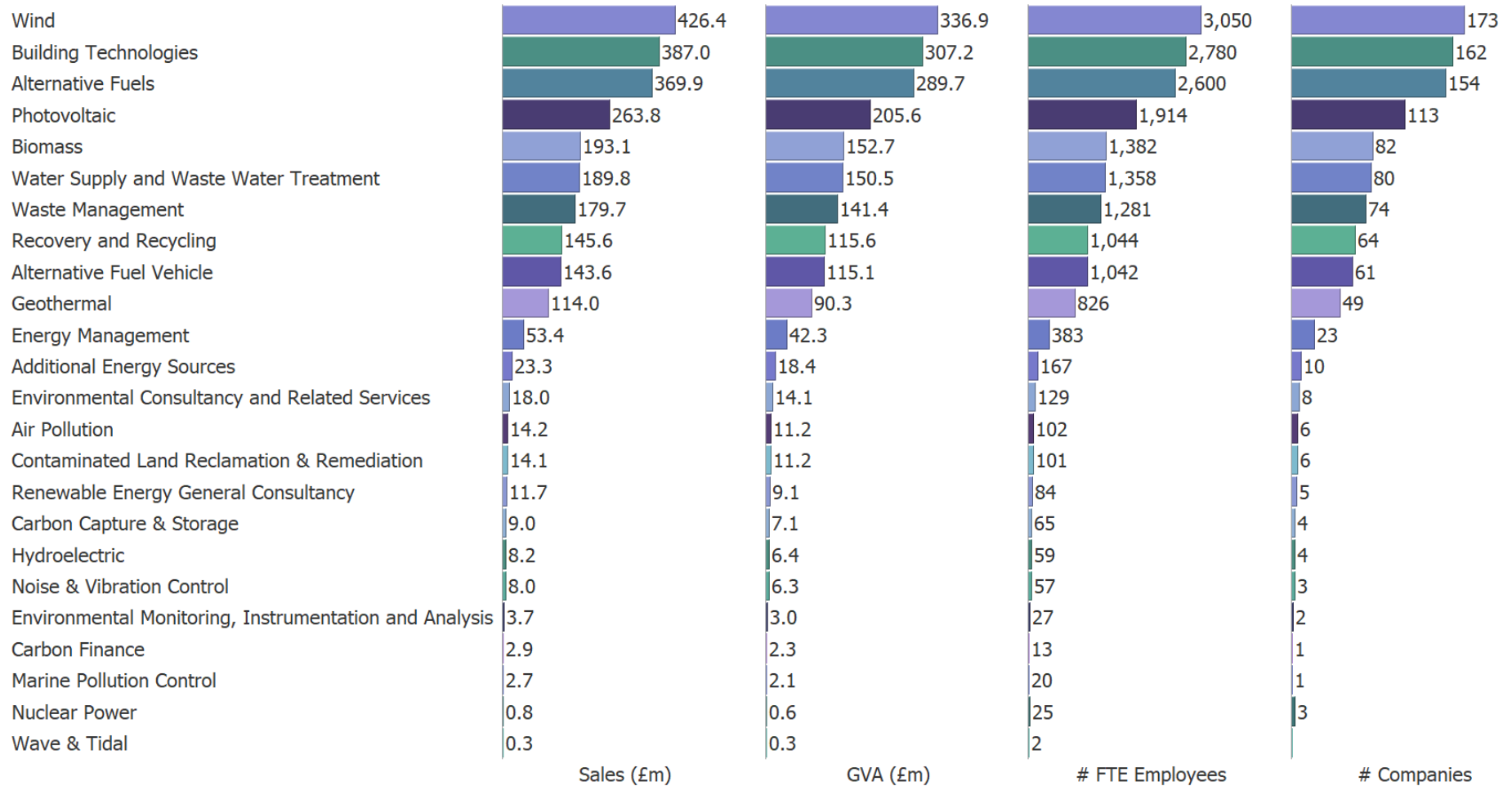
Greater Lincolnshire	2019/20	% growth	2020/21	% growth	2021/22	% growth	2022/23	% growth	2023/24
Sales	£2.34bn	-5.1%	£2.22bn	3.5%	£2.30bn	4.8%	£2.42bn	6.9%	£2.58bn
GVA	£1.85bn	-5.1%	£1.76bn	3.6%	£1.82bn	4.9%	£1.91bn	6.9%	£2.04bn
# FTE Employees	16,397	-3.5%	15,824	3.8%	16,422	5.1%	17,265	7.2%	18,509
# Companies	983	-5.2%	932	3.9%	969	4.9%	1,016	7.1%	1,089

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

6. Greater Lincolnshire’s Sub-sectors Key Metrics

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



The largest eleven sub-sectors account for 95% of sales, 95% of GVA, 95% 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; Recovery & Recycling; Alternative Fuel Vehicle; Geothermal and Energy Management.

7. Greater Lincolnshire’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 Greater Lincolnshire include:

Sub-sector	Greater Lincolnshire’s Sales 2023/24	Greater Lincolnshire’s Growth 2021/22 to 2023/34	UK Growth 2021/22 to 2023/34
Air Pollution	£14.2m	12%	7%
Contaminated Land Reclamation & Remediation	£14.1m	13%	9%
Environmental Consultancy and Related Services	£18.0m	13%	11%
Recovery and Recycling	£145.6m	12%	11%
Waste Management	£179.7m	12%	8%
Water Supply and Waste Water Treatment	£189.8m	12%	5%
Additional Energy Sources	£23.3m	12%	10%
Alternative Fuel Vehicle	£143.6m	13%	12%
Energy Management	£53.4m	12%	10%

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

Of the nine sub-sectors that saw similar or stronger growth than the UK, Recovery & Recycling; Waste Management; Water Supply & Waste Water Treatment; Alternative Fuel Vehicle; and Energy Management are also large sub-sectors and should be considered a strength of Greater Lincolnshire.

8. Greater Lincolnshire Skills Forecast to Net Zero 2030 and 2050

This section provides highlights of the skills analysis. Skills forecast tables are available from the Midlands Net Zero Hub.

The LCEGS sector is expected to generate up to 59,852 jobs in Greater Lincolnshire between 2023/24 and 2050. The majority of growth is determined by usual growth in the sector as the LCEGS sector services the wider economy, forecasts are therefore provided as a range, determined by the potential growth of the sector before the requirement to reach net zero targets is overlaid. Regional net zero targets place an additional skills requirement for the sector above usual growth. They are influenced by changes in practice, new technologies and technology compression.

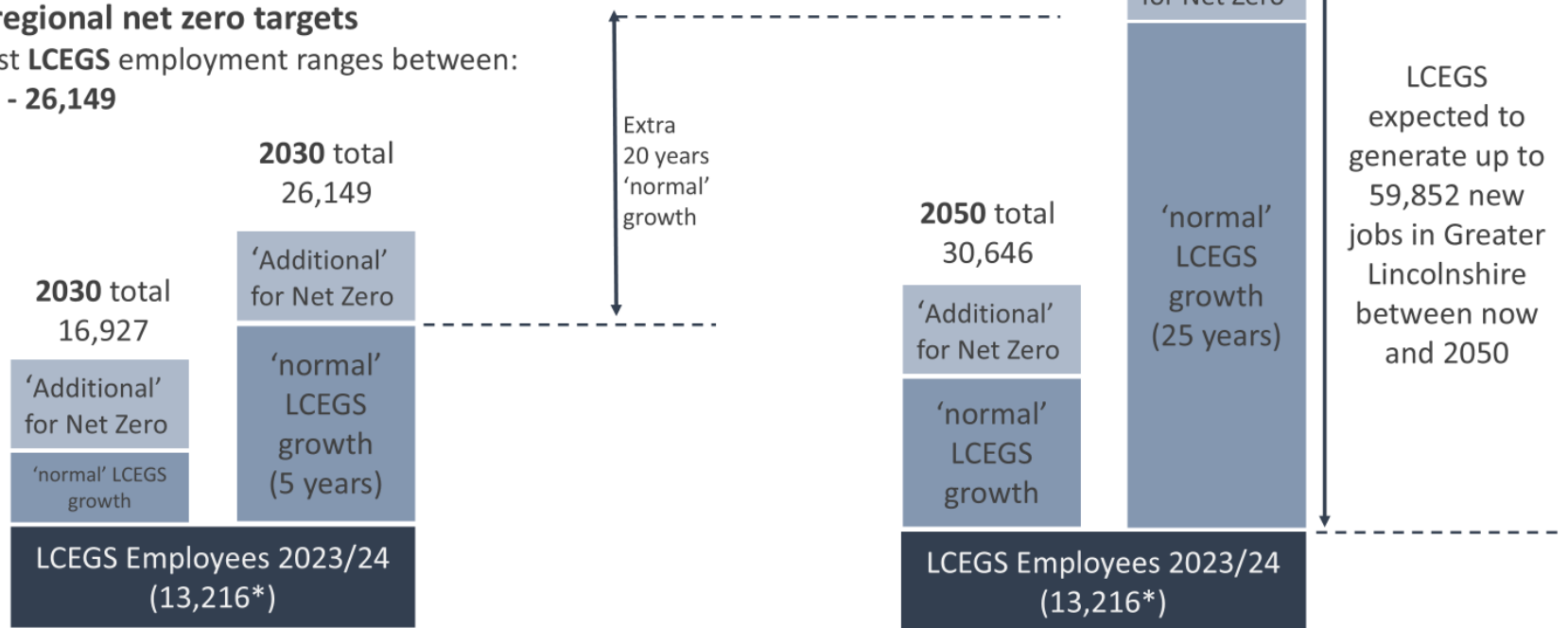
Key points from the skills analysis:

- Greater Lincolnshire has increased the number of people working in the sector but has increased the overall skills gap from 8.7% to 9.4% since 2019/20.
- The economic challenges of the last four years have resulted in less time to achieve targets, and despite the increase in total employment in the sector, the forecast number of employees required to reach net zero targets are higher than forecasts made in 2020.
- The 2021 report forecast a need for a 20% increase in 2019/20 employment numbers in LCEGS to reach net zero 2030 targets, this is now reduced to 17% increase in 2023/24 employment numbers, although strong economic growth could increase this need to 81% to reach net zero targets.
- To reach net zero targets by 2030, Greater Lincolnshire is expected to require between 16,927 and 26,149 employees, i.e., between 3,716 and 12,933 employees in addition to those employed now, representing an increase of between 17% and 81% in employment compared with 2023/24.
- To reach net zero targets by 2050, Greater Lincolnshire is expected to require between 30,646 and 73,068 employees, i.e., between 17,430 and 59,852 employees in addition to those employed now, representing an increase of between 112% and 405% in employment compared with 2023/24.

Skills Forecasts for Greater Lincolnshire

2030 regional net zero targets
Forecast LCEGS employment ranges between:
16,927 - 26,149

2050 regional net zero targets
Forecast LCEGS employment ranges between:
30,646 – 73,068



*Lower value than sector total due to some employees in Micro and SMEs being difficult to allocate to SOC codes. LCEGS sector = high proportion of Micro and SMEs.



9. Greater Lincolnshire Sector Strengths

Sub-sectors with strong historic growth which are strengths of Greater Lincolnshire are:

Sub-sector	Sales 2023/24	Forecast Sales 2028/29	CO ₂ Reduction Potential	Sector Scalability	Current Training Provision	Potential Upskilling of Workforce	Skills Shortage
Water Supply & Waste Water Treatment	£189.8m	£286.0m	Medium	Medium	Medium	Medium	Low: 4.4% (MNZH: 3.6%)
Waste Management	£179.7m	£274.5m	Medium	Medium	Medium	Medium	Low: 6.4% (MNZH: 5.1%)
Recovery & Recycling	£145.6m	£222.2m	Medium	Medium	Medium	Medium	High: 18.4% (MNZH: 14.2%)
Alternative Fuel Vehicles	£143.6m	£215.0m	Medium	Medium	High	High	High: 19.7% (MNZH: 14.2%)
Energy Management	£53.4m	£83.7m	Medium	Medium	Medium	Medium	High: 18.3% (MNZH: 15.5%)

10. 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