Low Carbon Environmental Goods and Services Sector Study 2024: Short Report for the Midlands Net Zero Hub Region

Commissioned by the Midlands Net Zero Hub, this report provides 2024 data of the LCEGS sector, updating the 2021 study. Our partners at the Midlands Engine have also supported the development of the refresh. The Midlands Engine recognises that the region is at the forefront of the UK's clean energy transformation and the outputs from LCEGS will therefore help to inform their drive to shape a co-ordinated approach to supporting increased growth in this important part of the economy.

1. Introduction

This document has been prepared to provide an overview summary of the LCEGS sector across the Midlands Net Zero Hub Region. Reports for the regions and Local Authorities (with example companies) within the MNZH area, and datasets are available here. Additional detailed data is available from kMatrix; and further recommendations and detail on areas of focus are available through the Climate Action Benchmarking study.

Ares within the Midlands Net Zero Hub Region with separate reports are:

- East Midlands Combined County Authority
- Coventry & Warwickshire
- Greater Lincolnshire
- County & Rutland County
- Stoke-on-Trent & Staffordshire
- The Marches
- Worcestershire
- West Midlands Combined Authority

2. Recommendations

Recommendations for the MNZH region are:

- Support regional hubs and local authorities in meeting the skills gaps different areas identify, ensuring skills training courses are available in these areas.
- Lobby DESNZ for longer term, more strategic funding to tackle retrofit problems in the area. Lack of available retrofit funding has been one of the most significant barriers to growth in the LCEGS sector.
- Produce training programmes and guides on how to improve procurement processes within local authorities to encourage more sustainable practices and engage with finance teams around assigning value to longer term environmental savings and social benefits. Include case studies from other areas on how this has been done effectively.
- Commission a piece a work to investigate how to provide and enhance region-wide innovation support that would be most beneficial for the East Midlands, taking account of the region's unique challenges and opportunities.

3. Headline Figures for MNZH Region

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

4. MNZH Region's LCEGS Sector Key Metrics

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

MNZH Region	2019/20	% growth	2020/21	% growth	2021/22	% growth	2022/23	% growth	2023/24
Sales	£26.79bn	-8.1%	£24.61bn	5.6%	£25.99bn	7.6%	£27.95bn	11.0%	£31.01bn
GVA	£21.24bn	-7.9%	£19.57bn	5.2%	£20.59bn	7.5%	£22.14bn	10.9%	£24.55bn
# FTE Employees	209,001	-6.7%	195,089	7.2%	209,172	9.1%	228,245	12.0%	255,605
# Companies	10,590	-8.1%	9,735	5.5%	10,270	7.5%	11,043	10.9%	12,249

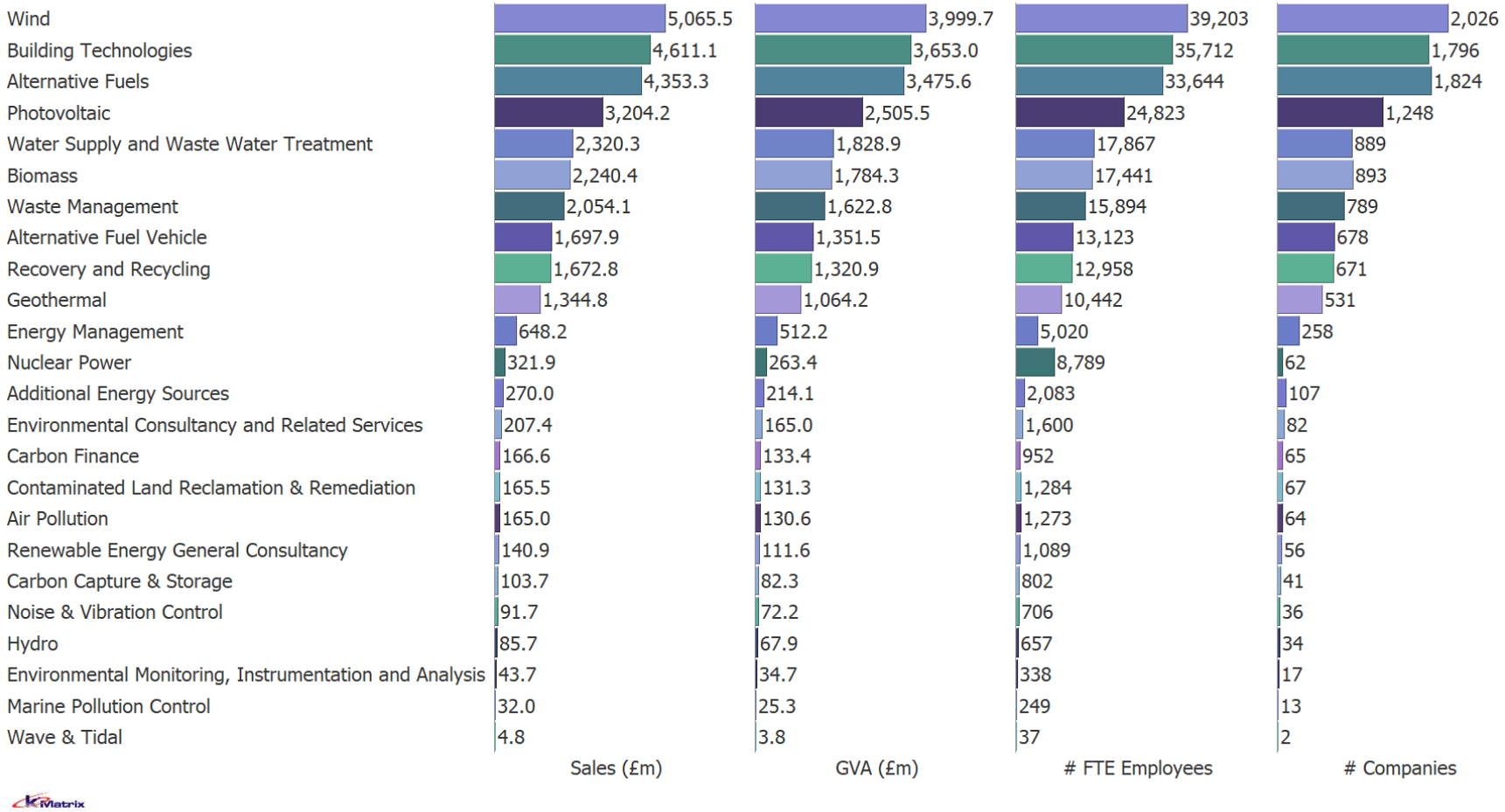
Note: the total numbers for 2019/20 are higher than those reported in 2021 due to an adjustment made in the Nuclear Power sub-sector in nine Local Authorities: Derby City Council; Dudley Borough Council; Leicester City Council; Nottingham City Council; Oadby & Wigston District Council; Rugby Borough Council; Stoke-on-Trent City Council; Wolverhampton City Council; and Worcester City Council.

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

5. MNZH Region's Sub-sectors Key Metrics

All twenty-four sub-sectors of the LCEGS sector have activity in MNZH Region, 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 MNZH Region 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; Building Technologies; Alternative Fuels; Photovoltaic; Water Supply & Waste Water Treatment; Biomass; Waste Management; Alternative Fuel Vehicle; Recovery & Recycling; Geothermal; Energy Management; and Nuclear Power.

6. MNZH Region'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 MNZH Region include:

Sub-sector	MNZH Region Sales 2023/24	MNZH Region Growth 2021/22 to 2023/34	UK Growth 2021/22 to 2023/34
Air Pollution	£165.0m	19%	7%
Contaminated Land Reclamation & Remediation	£165.5m	19%	9%
Environmental Consultancy and Related Services	£207.4m	19%	11%
Recovery and Recycling	£1,672.8m	19%	11%
Waste Management	£2,054.1m	20%	8%
Water Supply and Waste Water Treatment	£2,320.3m	19%	5%
Additional Energy Sources	£270.0m	19%	10%
Alternative Fuel Vehicle	£1,698.0m	19%	12%
Alternative Fuels	£4,353.3m	19%	14%
Building Technologies	£4,611.1m	19%	16%
Energy Management	£648.2m	20%	10%
Nuclear Power	£321.9m	17%	8%
Geothermal	£1,344.8m	19%	18%

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

Of the thirteen sub-sectors that grew stronger than the UK, Recovery & Recycling; Waste Management; Water Supply & Waste Water Treatment; Alternative Fuel Vehicle; Alternative Fuels; Building Technologies; Energy Management; Nuclear Power; and Geothermal are also large sub-sectors and should be considered a strength of MNZH Region.

7. MNZH Region Skills Forecast to Net Zero 2030 and 2050

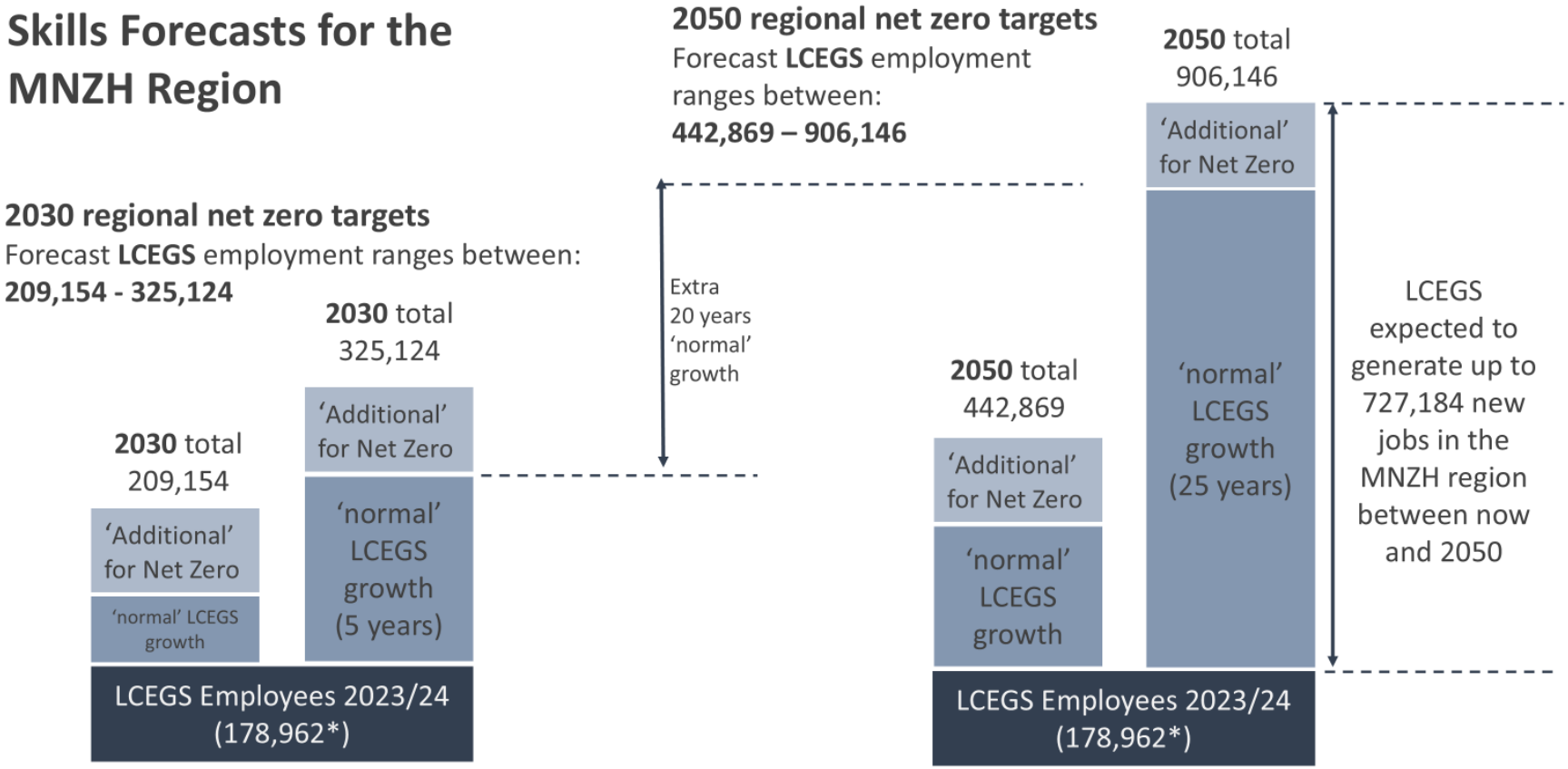
This section provides highlights of the skills analysis. Skills forecast tables are available from the Midlands Net Zero Hub.

The LCEGS sector is expected to generate up to 727,184 jobs in MNZH Region 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:

- MNZH Region has increased the number of people working in the sector and the overall skills gap has remained at 7.2% 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 12% increase in 2019/20 employment numbers in LCEGS to reach net zero 2030 targets, this is now reduced to 9% increase in 2023/24 employment numbers, although strong economic growth could increase this need to 70% to reach net zero targets.
- To reach net zero targets by 2030, MNZH is expected to require between 209,154 and 325,124 employees, i.e., between 30,192 and 146,162 employees in addition to those employed now, representing an increase of between 12% and 70% in employment compared with 2023/24.

- To reach net zero targets by 2050, MNZH is expected to require between 442,869 and 906,146 employees, i.e., between 263,907 and 727,184 employees in addition to those employed now, representing an increase of between 131% and 372% in employment compared with 2023/24.



*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.

8. MNZH Region Sector Strengths

Sub-sectors with strong historic growth which are strengths of the MNZH Region are:

Sub-sector	Sales 2023/24	Forecast Sales 2028/29	CO2 Reduction Potential	Sector Scalability	Current Training Provision	Potential Upskilling of Workforce	Skills Shortage
Building Technologies	£4.61bn	£6.92bn	High	Medium	Medium	Medium	Low: **4.4%**
Alternative Fuels	£4.35bn	£6.5bn	High	Low	Medium	High	High: **13.2%**
Water Supply & Waste Water Treatment	£2.32bn	£3.47bn	Medium	High	Medium	High	Low: **3.6%**
Waste Management	£2.05bn	£3.12bn	Medium	Medium	Medium	Medium	Low: **5.1%**
Alternative Fuel Vehicles	£1.70bn	£2.54bn	Medium	Medium	Medium	Low	High: **14.2%**
Recovery & Recycling	£1.67bn	£2.52bn	High	Medium	Medium	Medium	High: **14.2%**
Geothermal	£1.34bn	£2.03bn	Medium	Medium	Medium	Medium	High: **14.4%**
Energy Management	£648.2m	£982.7m	Medium	Medium	Medium	Low	High: **15.5%**
Nuclear Power	£321.9m	£453.5m	Medium	Medium	Low	Medium	Low: **1.6%**