

Low Carbon Environmental Goods and Services Sector Study 2024: Short Report for The Marches

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 The Marches. Reports on the wider picture for 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 The Marches are:

- Herefordshire County Council
- Shropshire Council
- Telford & Wrekin Council

2. Current Activity Supporting the Growth of the Sector

Activity at The Marches level relevant to the wider geographical region:

- The Marches has invested £1.2m in the Herefordshire Low Carbon Technology Centre which will develop industry-lead training in green skills and support 750 learners in the first 3 years.
- The Marches Energy Grant offers free advice, energy assessments and grants for energy efficiency and renewable energy measures to SMEs from all sectors in the region. This includes grants worth up to £60,000 for eligible businesses, and matched (75%) funding grants of up to £100,000 for businesses wanting to install energy efficiency measures.

- The Marches region, particularly Shropshire, is increasingly utilizing anaerobic digestion (AD) technology to manage agricultural waste and generate renewable energy. By expanding AD infrastructure, the region has the opportunity to become a leader in sustainable farming, further growing the LCEGS sector.
- The Marches Energy Agency is a long-standing organisation focusing on the delivery of renewable energy and energy efficiency programmes. They supported over 11,000 people in fuel poverty last year, increasing knowledge and driving demand in the LCEGS sector.

3. Recommendations

Recommendations for The Marches are:

- Further promote The Marches website as a source of information for all support and grants available to LCEGS businesses to address concerns around limited awareness.
- Ensure rural LCEGS businesses are not being excluded from opportunities in the low carbon sector by directly marketing and tailoring support opportunities such as the Marches Energy Grant for quick, low-level interventions.
- Raise awareness with community and businesses that low carbon solutions are an increasing priority and increase understanding of the impending risks of climate change to public sector and business continuity.
- Facilitate collaboration between local skill providers, educational institutions and LCEGS businesses to ensure training courses and apprenticeships are available that address specific skills gaps identified in the sector. For the Marches, this should include upskilling of retrofit professionals to appropriate levels for quality installation in order to meet the demand here.

4. Headline Figures for The Marches

The headline figures for The Marches are:

- The LCEGS sector in The Marches was worth £2.1bn in 2023/24 and is forecast to grow to £3.3bn over the next 5 years
- The LCEGS sector accounts for 7.4% of GVA, 3.8% of employment, and sales accounts for 8.3% of GDP in The Marches

- The Marches' LCEGS Sales generates 6.7% of the LCEGS Sales in the MNZH region, in line with the 6.7% of total GDP contribution
- The Marches' LCEGS GVA generated 6.7% of the MNZH's LCEGS GVA, in line with its 6.7% total GVA contribution
- The Marches' LCEGS employment accounts for 6.1% of MNZH's LCEGS employment, lower than its 6.9% of economically active people in the MNZH
- Net Zero 2030 targets are expected to require between 3,501 and 12,039 FTE employees in addition to those employed now in The Marches
- Net Zero 2050 targets are expected to require between 11,284 and 55,763 FTE employees in addition to those employed now in The Marches
- The Marches' LCEGS sector could generate up to 55,763 jobs between 2023/24 and 2050 *
- Between 2019/20 and 2023/24, Investment in R&D for the LCEGS sector has grown from £84m to £136m for Private Equity Investment; £171m to £241m for Venture Capital Investment; and £264m to £346m for Other Investment.
- Exports in the LCEGS sector for the Marches have increased from £187m in 2019/20 to £213m in 2023/24.

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

5. The Marches LCEGS Sector Key Metrics

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

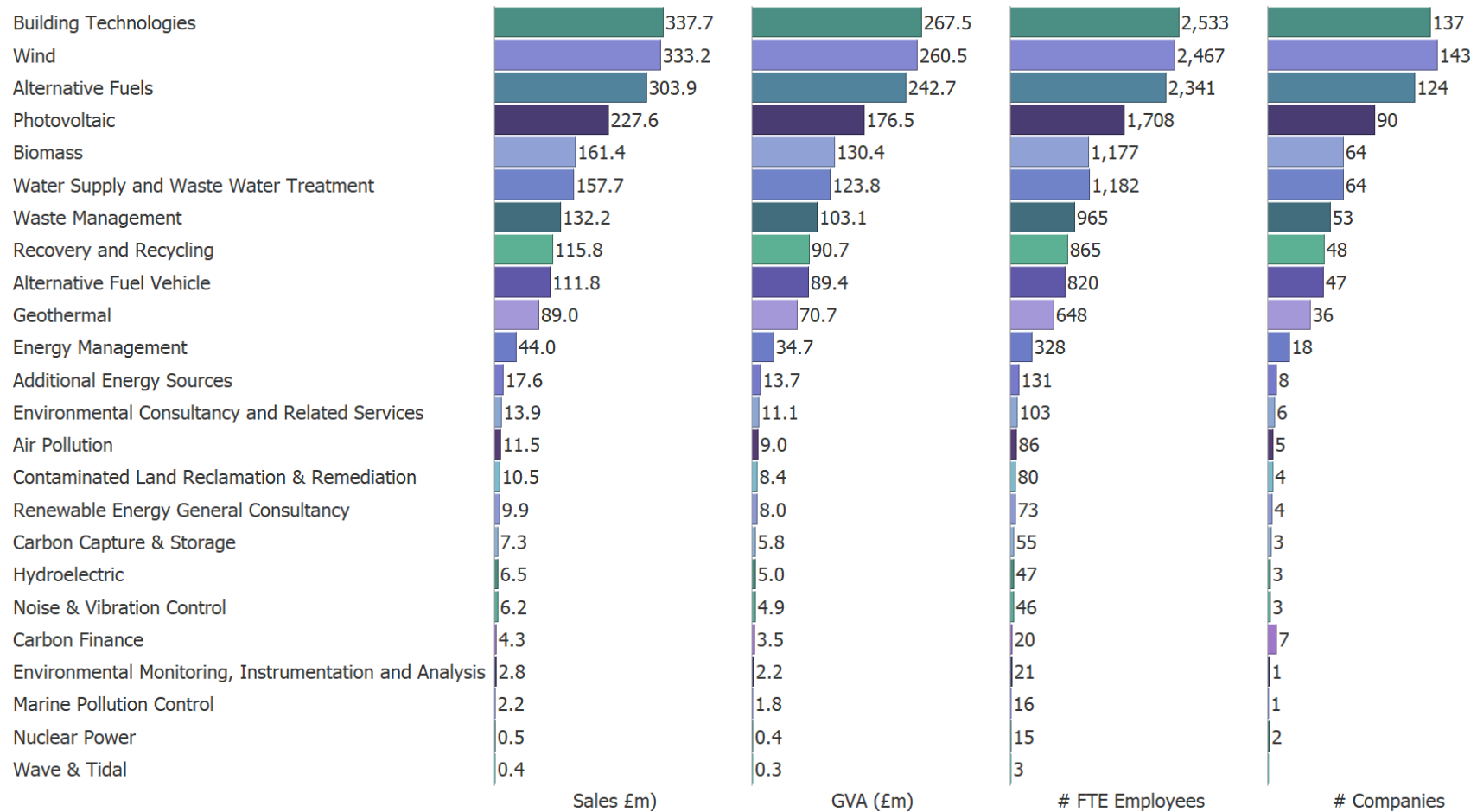
The Marches	2019/20	% growth	2020/21	% growth	2021/22	% growth	2022/23	% growth	2023/24
Sales	£1,790.0m	-8.7%	£1,633.6m	6.2%	£1,734.6m	8.5%	£1,881.3m	12.1%	£2,108.0m
GVA	£1,413.5m	-8.7%	£1,289.9m	6.2%	£1,369.6m	8.5%	£1,485.7m	12.0%	£1,664.0m
# FTE Employees	12,792	-5.7%	12,068	6.4%	12,838	8.8%	13,970	12.6%	15,732
# Companies	733	-8.7%	669	7.2%	717	8.4%	778	11.9%	870

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

6. The Marches Sub-sectors Key Metrics

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



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

7. The Marches Sub-sector Historic Growth Compared with the UK

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

Sub-sector	The Marches Sales 2023/24	The Marches Growth 2021/22 to 2023/34	UK Growth 2021/22 to 2023/34
Air Pollution	£11.5m	22%	7%
Environmental Consultancy and Related Services	£13.9m	22%	11%
Recovery & Recycling	£115.8m	22%	11%
Waste Management	£132.2m	22%	8%
Water Supply & Waste Water Treatment	£157.7m	22%	5%
Alternative Fuel Vehicle	£111.8m	19%	12%
Alternative Fuels	£303.9m	20%	14%
Building Technologies	£337.7m	22%	16%
Energy Management	£44.0m	22%	10%
Geothermal	£89.0m	21%	18%
Photovoltaic	£227.6m	23%	21%

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

Of the ten 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; Geothermal; and Photovoltaic are also large sub-sectors and should be considered a strength of The Marches.

8. The Marches 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.

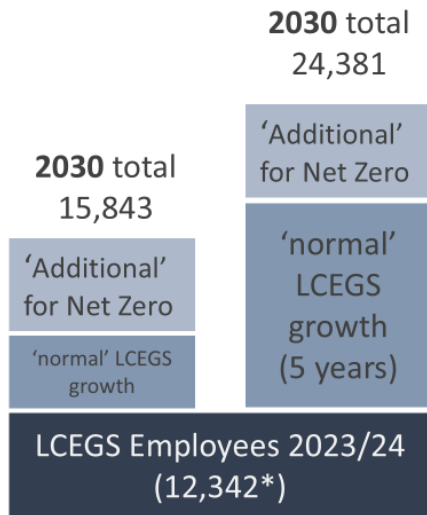
The LCEGS sector is expected to generate up to 55,763 jobs in The Marches between 2023/24 and 2050. The majority of growth is determined by usual growth in the sector as the LCEGS sector services the wider economy, forecasts are therefore provided as a range, determined by the potential growth of the 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:

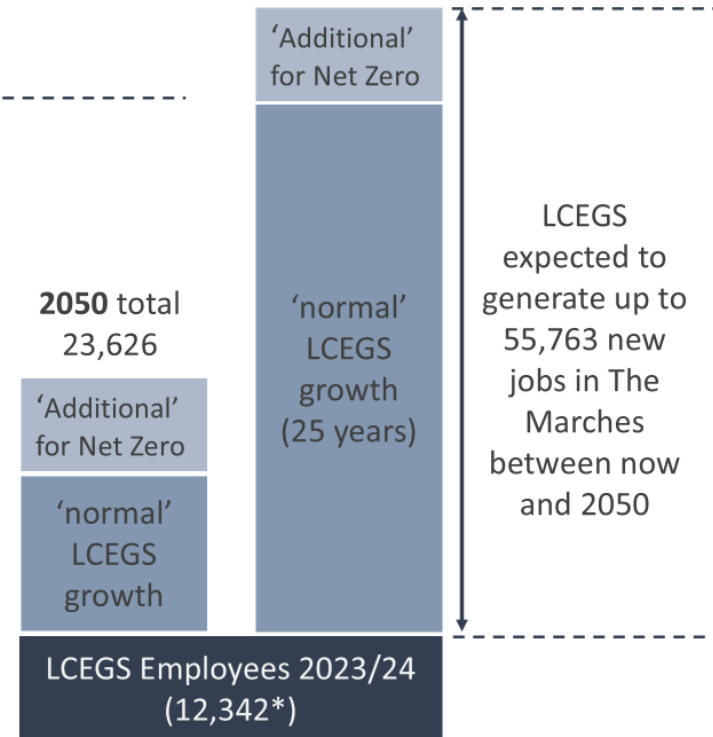
- The Marches has increased the number of people working in the sector and reduced the overall skills gap from 8.8% to 8.6% since 2019/20.
- The economic challenges of the last four years has resulted in less time to achieve targets, and despite the increase in total employment in the sector, the forecast 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 18% increase in 2023/24 employment numbers, although strong economic growth could increase this need to 82% to reach net zero targets.
- To reach net zero targets by 2030, The Marches is expected to require between 15,843 and 24,381 employees, i.e., between 3,501 and 12,039 employees in addition to those employed now, representing an increase of between 18% and 82% in employment compared with 2023/24.
- To reach net zero targets by 2050, The Marches is expected to require between 23,626 and 68,105 employees, i.e., between 11,284 and 55,763 employees in addition to those employed now, representing an increase of between 76% and 408% in employment compared with 2023/24.

Skills Forecasts for The Marches

2030 regional net zero targets
Forecast LCEGS employment ranges between: **15,843 - 24,381**



2050 regional net zero targets
Forecast LCEGS employment ranges between: **23,626 – 68,105**



*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. The Marches Sector Strengths

Sub-sectors with strong historic growth which are strengths of The Marches 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
Building Technologies	£337.7m	£534.9m	High	Low	Medium	Medium	Low: 5.0% (MNZH: 4.4%)
Alternative Fuels	£303.9m	£449.7m	High	High	High	High	High: 17.8% (MNZH: 13.2%)
Water Supply & Waste Water Treatment	£157.7m	£245.6m	Medium	Medium	Medium	High	Low: 4.0% (MNZH: 3.6%)
Waste Management	£132.2m	£209.0m	Medium	Low	Medium	High	Low: 5.8% (MNZH: 5.1%)
Recovery & Recycling	£115.8m	£181.1m	High	Medium	Medium	Medium	High: 17.3% (MNZH: 14.2%)
Alternative Fuel Vehicles	£111.8m	£166.0m	High	Medium	Medium	High	High: 18.4% (MNZH: 14.2%)
Geothermal	£89.0m	£135.7m	Medium	Low	Low	Medium	High: 17.7% (MNZH: 14.4%)
Energy Management	£44.0m	£68.1m	Medium	Medium	Medium	Medium	High: 18.7% (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