



UNIVERSITY OF
DERBY



GREEN GROWTH TRENDS IN THE EAST MIDLANDS

20

23

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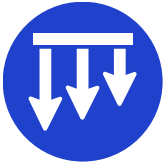
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HEADLINES

Based on the responses to the East Midlands Chamber (Derbyshire, Nottinghamshire, Leicestershire) Quarterly Economic Survey in quarter two of 2023:



01 — Green growth slows

The percentage of businesses in the East Midlands deriving turnover from supplying green goods or services (GGs) has declined by 9% reaching 36% in the second quarter of 2023 down from 45% in 2022.



02 — Micro businesses are hit the hardest

68% of the large businesses report they are actively pursuing the green growth opportunities compared with 31% of micro, 51% of small and 50% of medium-sized businesses.



03 — Green diversification maintains

Three-fold increase in East Midlands businesses reporting 1-19% and 20-49% turnover from GGs since the 2015 baseline.



04 — Four in ten businesses are not engaged

Four in ten regional businesses have no turnover generated from the green goods and services, a 5% increase when compared with 2022.



05 — Decarbonisation is fragmented

Over a third of the businesses invested in decarbonisation initiatives over the last 12 months. Large companies are leading the trend where over 70% of large companies invest in decarbonisation.



06 — Policy does not fully deliver

Only 13% of businesses surveyed, a 4% decline on 2022 figures, stated that the current policy allows businesses to fully engage with green growth.



07 — Information gap widens

Over a third (36%) did not feel well informed about the support available for green growth in 2023 compared with 33% in 2022.



08 — Skills gap shifts

The largest demand for skills development are in the areas of energy efficiency, business strategy, resource efficiency, environmental strategy and waste management.

KEY MESSAGES

There is a 9% decline in the green growth trend in the East Midlands when compared with 2022.

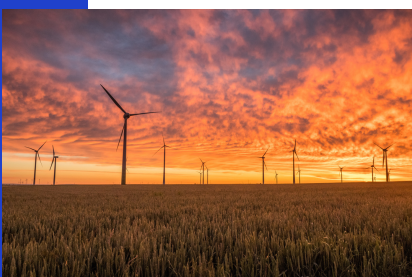
Despite this, there is a two-times increase in the green growth activity in the East Midlands during eight-year period from 2015 to 2023.

Over a third of the regional businesses invested in decarbonisation over the last 12 months. Large companies lead the trend by volume and size of the investment.

Seven manufacturing to five services companies invest in decarbonisation.

County businesses invest in decarbonisation twice as much when compared with city businesses.

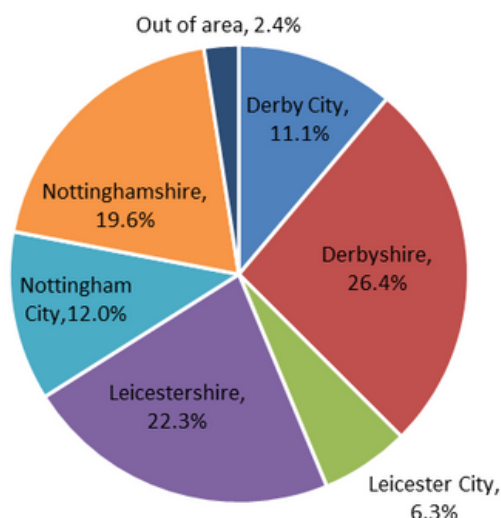
Over 40% of regional businesses have never engaged in nature restoration, conservation or biodiversity projects.



INTRODUCTION

This report presents an analysis and discussion of the green growth trends and decarbonisation based on the data collected as part of the East Midlands Chamber Quarterly Economic Survey (QES) run from 16.05.2023 to 10.06.2023. Whilst the QES routinely explores a range of business interests, this analysis refers to a series of questions that focused on regional businesses' awareness and engagement with the green growth, decarbonisation trends and uptake of the nature-based solutions.

Figure 1: Survey responses by geography



QES Q2 2023 respondents represented businesses from the three counties: Derbyshire (26%), Leicestershire (22%) and Nottinghamshire (20%) and the respective cities, with only 2% of the respondents from the outside of these three regions.

The survey received 368 responses in Q2 of 2023

38% from Derbyshire County and Derby City

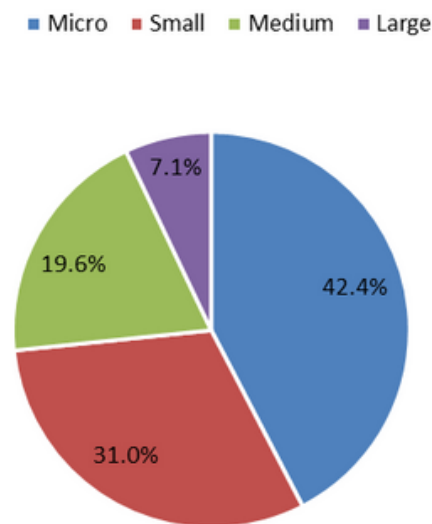
32% from Nottinghamshire County and Nottingham City

29% from Leicestershire County and Leicester City

Sectoral responses match our previous studies, with most responses coming from professional services (26%) followed by manufacturing (21%). Overall, services represent over 66% of the survey responses, and manufacturing sectors comprise just under 34% of the responses.

The majority of businesses responded to the survey were micro businesses (42%), followed by 31% of small, 20% of medium-sized and 7% of large businesses. This composition is similar to the QES 2022 responses collected in February-March 2022 (Baranova et al., 2022).

Figure 2: Survey responses by firm size



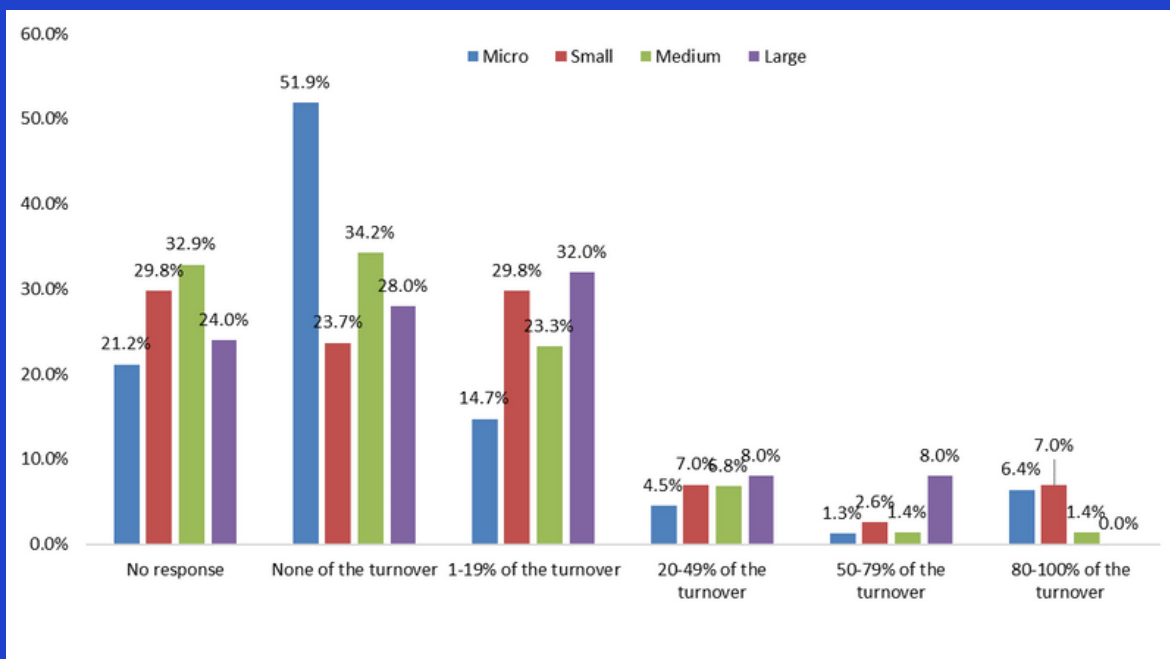
In this fast-moving arena, the terminology used by the regulators and the analysts is shifting. Previously, the Department for Business Innovation and Science used 'LCEGS' as an umbrella term to capture a range of business activities, spread across many existing sectors (like transport, construction, energy etc.) that focused upon the common purpose of reducing environmental impact (DBIS, 2015). However, the Office for National Statistics (ONS) now distinguishes between the Low Carbon and Renewable Energy Economy (LCREE) and the Environmental Goods and Services Sector (EGSS). Throughout this report we refer to 'Green Goods and Services' (GGs); a term that reflects the broadest range of environmentally friendly products and services.

GGs TURNOVER Q2 2023

Only 36% of businesses that responded to the survey generated part of their turnover from green goods and services (GGs) in the Q2 of 2023, 9% down from 45% in 2022. Four in ten businesses reported they did not generate any GGs turnover, a 5% increase when compared with 2022.

The 1-19% GGs turnover category remains the most frequent rate of green growth strategy adoption across the businesses surveyed. 20-49% GGs turnover rate is adopted only by 6% businesses, followed by 5% adoption of the 80-100% turnover category, and 2% adoption of the 50-79% GGs turnover category.

Figure 3: Green growth by firm size



Analysis of the data comparing the proportion of the turnover generated from GGs with reference to a firm size is presented in Figure 3. It shows over 52% of the micro businesses reported no GGs turnover in 2023, an increase of 8% with a previous year. Large companies are reporting no turnover in the 80-100% category, a drop of 12%, and increase in 1-19% and 20-49% GGs turnover categories of 16% in total. Small businesses are largely performing at the 2022 level with a small drop of 2.2% in the overall GGs turnover generation in 2023.

GGs TURNOVER

Q2 2023

Further analysis shows a significant decrease of 18% in medium-sized businesses generating GGs turnover when compared with 2022 position. The biggest drop is noted in the 1-19% turnover category. This indicates that medium-sized businesses in the early stages of the green growth strategy adoption are most affected by the challenging economic conditions in the UK. The GGs turnover of the regional micro businesses is in decline in every single turnover category totalling an 11% decline overall.

Both manufacturing and service companies are experiencing a drop in the GGs turnover generation respectively at 9% and 8%. The largest turnover category affected in manufacturing companies is 1-19% at an 8% drop. Whilst in services, the 1-19% and 80-100% turnover categories are most in decline at 4.3% and 3% respectively.

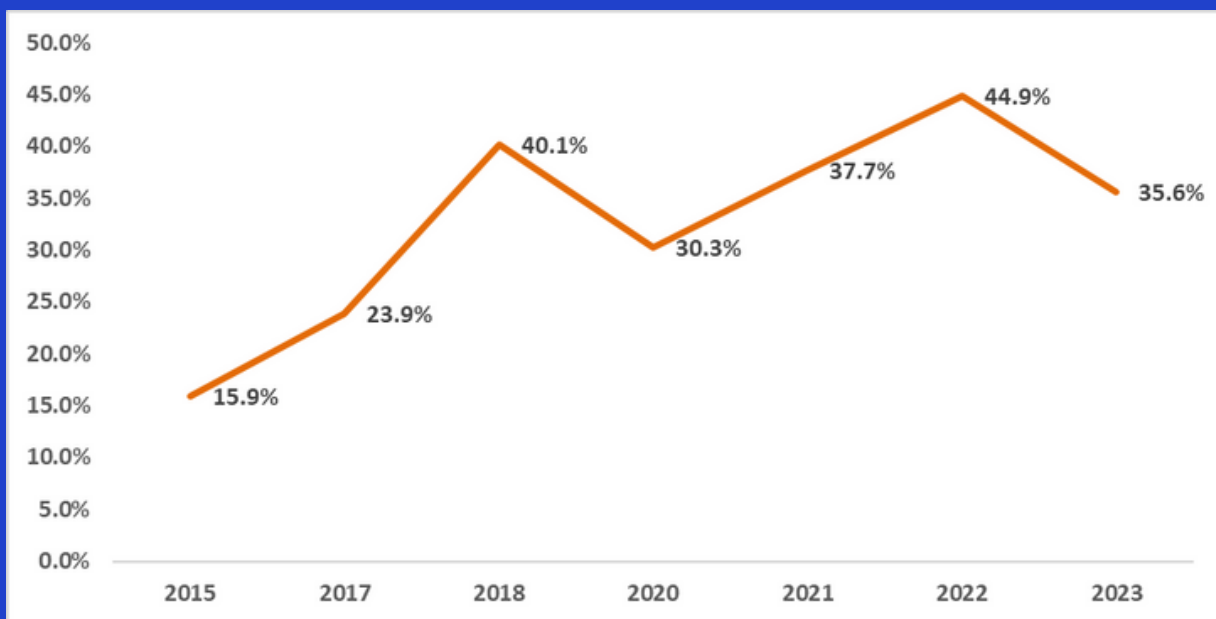
The analysis shows a slowing of the green growth trend in 2023 in the East Midlands when compared with 2022 green growth performance. The contributing factors include the remaining challenging economic conditions in the UK, the Cost of Living Crisis and the waves of public sector strikes which ripple effect impacts other sectors, supply-chains and markets. This could also indicate that the green gains secured over the Covid pandemic period are starting to fizzle out and businesses are reverting back to the conventional, non-green, operating models and business strategies.

This socio-economic scenario illustrates the fragility of green growth in the face of economic adversities. The analysis shows companies of different sizes are affected at a different rate by uncertainty of the political and economic commitments towards green growth. Large businesses scale down the GGs turnover. Medium-sized and micro businesses are affected mainly in the lower turnover categories. Whilst small businesses manage to maintain the GGs turnover positions at large for now. The data shows manufacturing and services companies are equally affected by the green growth downturn.

GGs TURNOVER TREND 2015-2023

A similar survey exploring the green growth trends was carried out in 2015, 2017, 2018, 2020, 2021, 2022 and 2023 (Figure 4). Despite the downturn in 2023, the overall trend is positive where a number of regional businesses reporting the GGs turnover more than doubled since 2015. On average, over a third of the regional business reported the sales of green goods and services over the last eight years. The lowest recorded levels of the GGs sales in the region were recorded in 2015 at 16% and the highest at 45% in 2022.

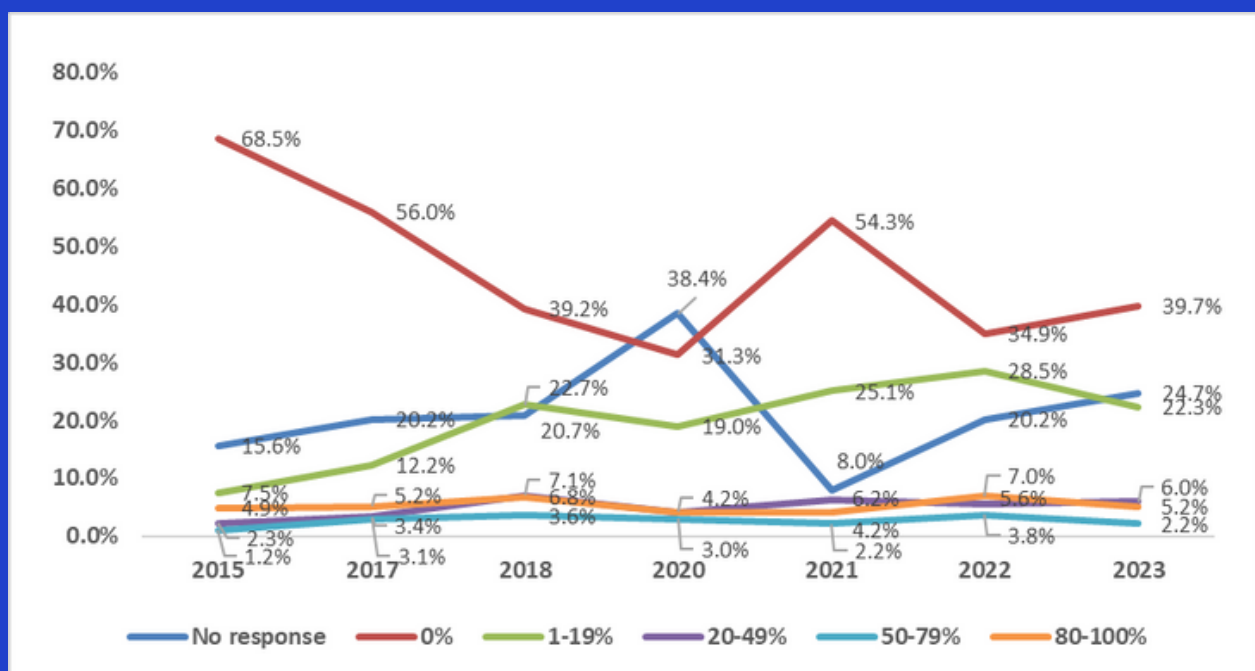
Figure 4: Turnover generated from green good and services 2015-2023



GGs TURNOVER TREND 2015-2022

A comparative analysis of the trend per GGs turnover category reveals an interesting picture of the regional green growth development over the last eight years (Figure 5).

Figure 5: Turnover generated from green good and services 2015-2023: comparative analysis

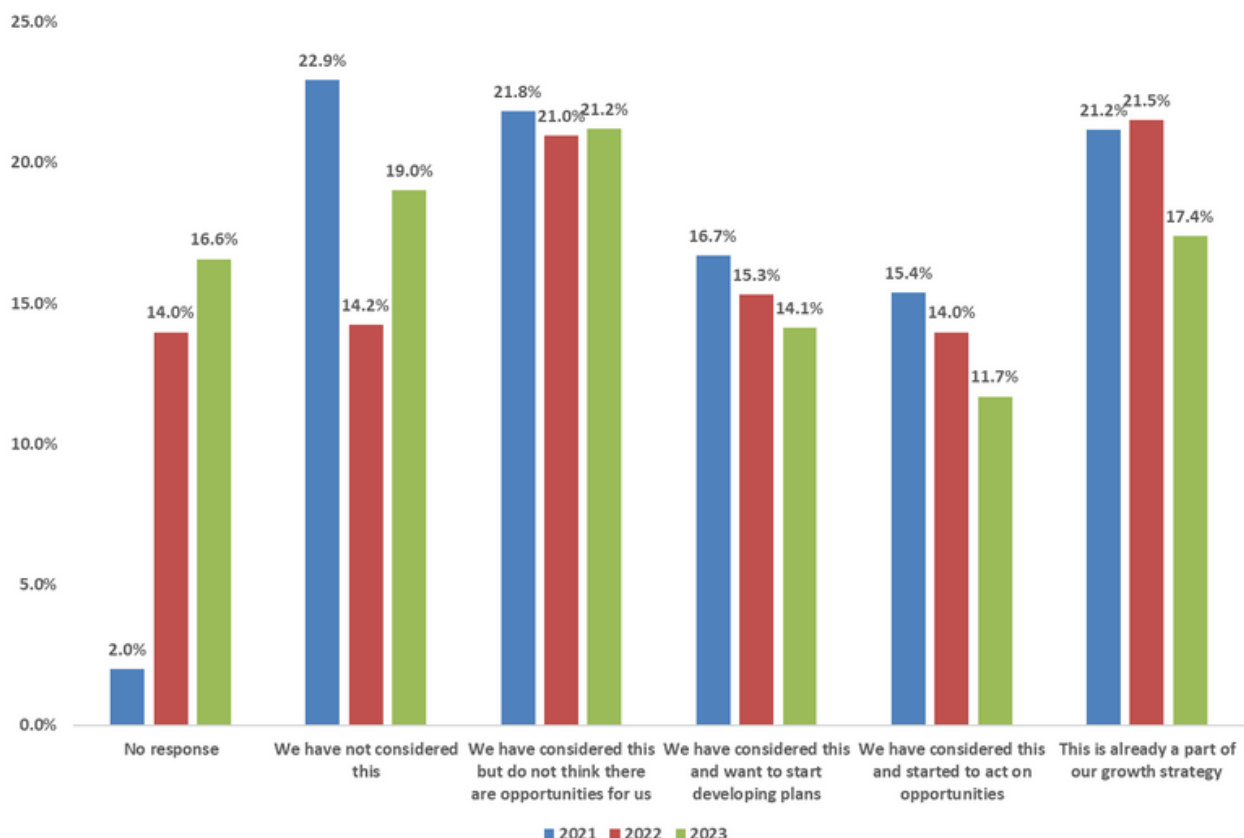


There is a decline in every GGs turnover category but 20-49% category which shows an increase of 0.3% on 2022 data. There is a 6% decline in the 1-19% turnover category and 2% decline in each of the 50-79% and 80-100% turnover categories. Such a picture illustrates that the most vulnerable to green growth decline are the businesses with a small proportion of the GGs sales. Although the green diversification maintains, it is very much at risk in smaller rather than larger businesses. It is likely that the businesses affected have had a presence at the green market niches which have been shrinking due to the challenging socio-economic conditions. This position highlights that green growth in its nascent stage is vulnerable to the rising political and economic uncertainty.

GREEN GROWTH STRATEGY

The businesses were asked about the rate of adoption of the green growth strategies (Figure 6).

Figure 6: Green growth strategy adoption



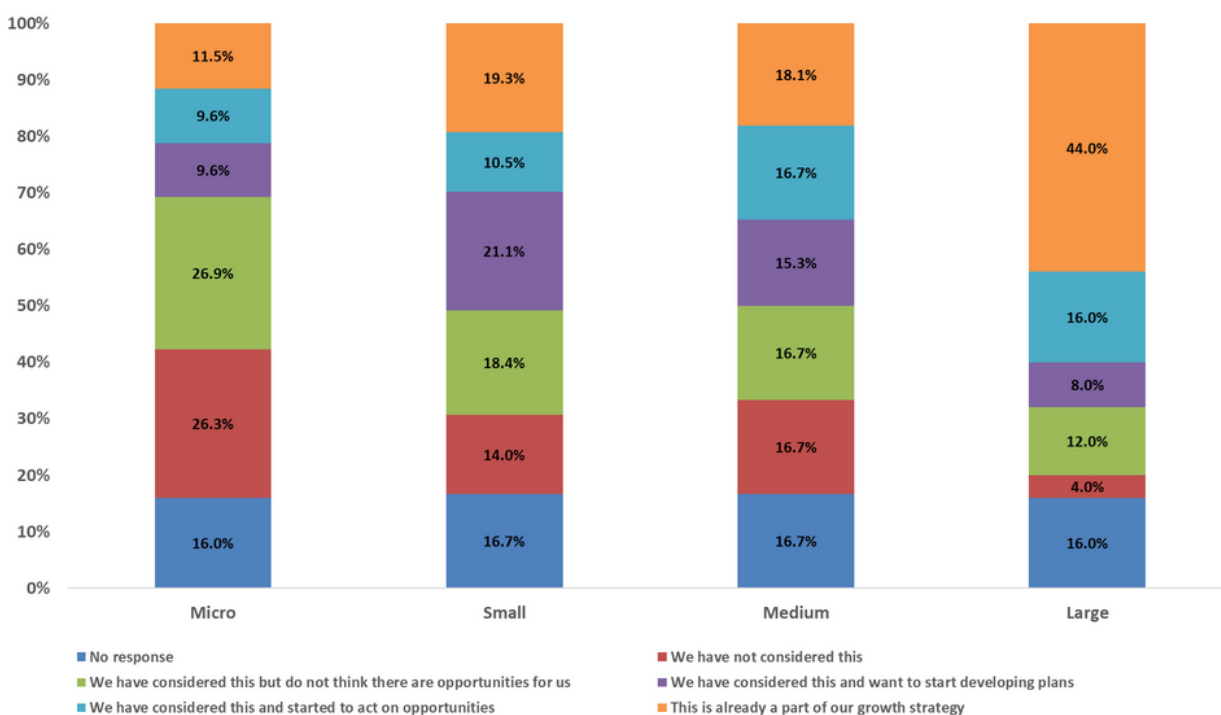
17.4% of the businesses said that green growth is already part of their business strategy, a decline of 4% from the 2022 position. Additionally, only 12% of the respondents indicated that they had ‘considered [green growth] and are starting to act on opportunities’ which represents a decline of 2% on 2022 data. 14% of businesses stated they are starting to develop green growth plans which is also a 1% decline when compared with 2022 figures.

Regional businesses report a decline in confidence when engaging with green growth. There is a slight, 0.2%, increase in the ‘we have considered [green growth] and do not think there are opportunities for us’ response category. Importantly, there is a 5% increase in the ‘we have not considered this’ category. These trends need to be taken in the context of the 16.6% ‘no response’ rate to this question in the Q2 2023.

GREEN GROWTH STRATEGY

The analysis of the responses by company size presented in Figure 7 is insightful and reflects the trends described in the academic literature (Baranova et al., 2020). The larger companies remain to be well in advance of their smaller counterparts with regards to a strategic approach to green growth; with 68% of large companies either incorporating green growth or developing green growth strategies compared with only 31% of micro, 51% of small and 60% of medium-sized businesses.

Figure 7: Green growth strategies by firm size



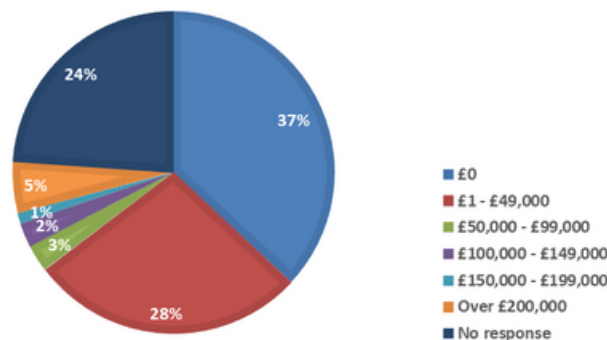
Similar trend was observed in 2022 but with 88% of large large companies reporting active commitments to green growth. It is surprising to see such a change in the responses of large companies within one year. The responses of SMEs are largely similar to the 2022 positions. Further analysis shows an increase in 'we have not considered this' response in every type of business. Regional micro businesses have reported the highest level in this category at 26% an increase of 6% on 2022 figures.

The biggest decline in the responses affirming the adaptation of the green growth strategy is noted in the medium-sized businesses at -12.5%, followed by large companies at -6% and micro businesses at -4%. It is only small businesses that confirm an 1.3% increase in this response category in 2023.

DECARBONISATION

A new set of data on decarbonisation of regional businesses was collected for the first time by the survey. The analysis shows that just over a third of businesses surveyed invested in decarbonisation over the last 12 months. The most popular level of investment is under £50,000 and reported by 28% of survey respondents.

Figure 8: Decarbonisation by level of investment



A close examination of the data reveals an interesting dynamic between a size of the business and a level of investment in decarbonisation (Figure 9). It comes as no surprise that large companies lead in every single investment category with an exception of £1-49,000 category. Small companies are the largest contributor to this category accounting for 27% of the investments. Large companies outperform by a volume of investment in decarbonisation leading in over £200,000 investment category.

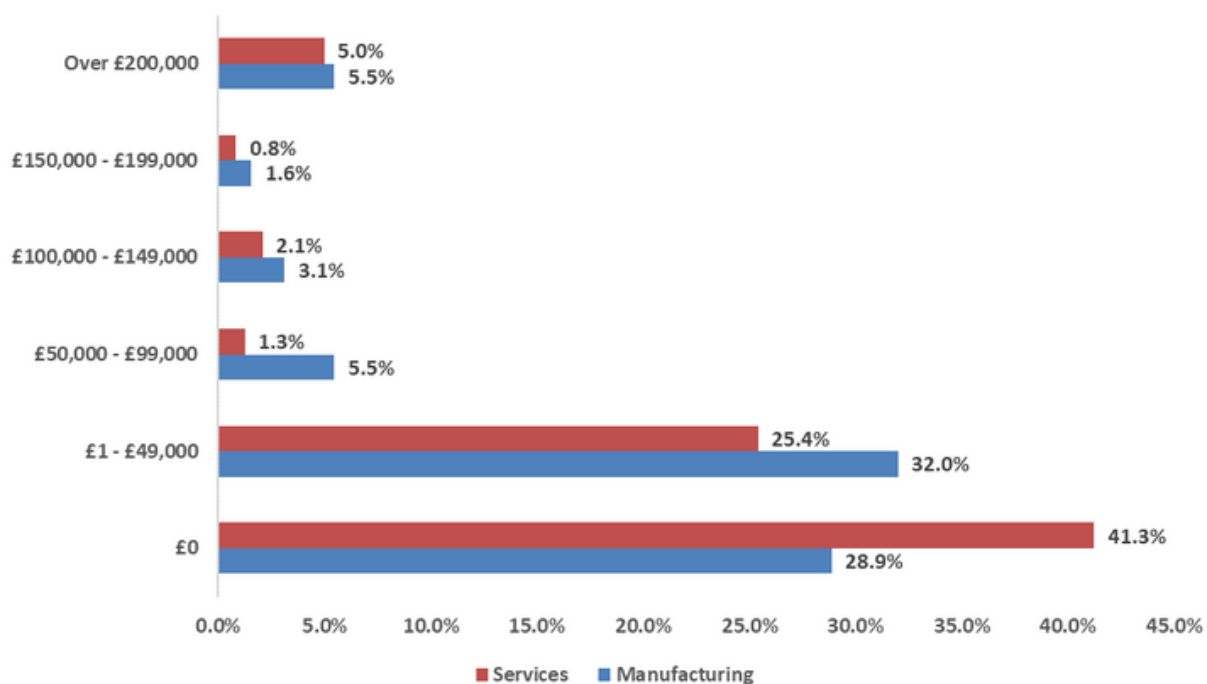
Figure 9: Decarbonisation by firm size



DECARBONISATION

When undertaking analysis by locality, rural businesses invest twice as much in decarbonisation as urban businesses. Derbyshire county is leading on the number of businesses reporting decarbonisation projects over the last 12 months accounting for 40% of the regional rural businesses investing in decarbonisation. This is followed by the businesses operating in Leicestershire county (33%) and Nottinghamshire county (24%). When it comes to city businesses, Nottingham City leads the decarbonisation trend with more than twice as much businesses reporting investment in decarbonisation compared with Derby and Leicester.

Figure 10: Decarbonisation trend in manufacturing vs services

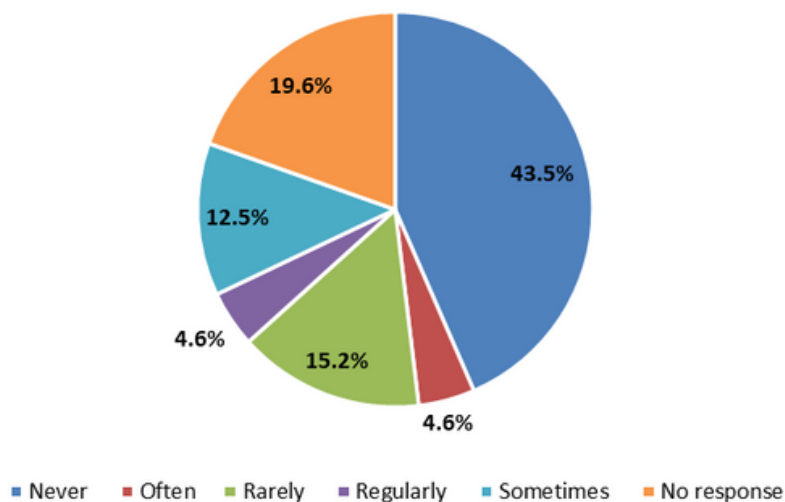


Manufacturing companies lead in every single investment category with a biggest lead of over 7% in the £1-49,000 category. Service companies are reporting 'no investments in decarbonisation' one and a half times more when compared with manufacturing companies. A fine-grained analysis of decarbonisation data by sector shows manufacturing sectors lead by a number of decarbonisation projects (29%), closely followed by professional services (24%), and construction and engineering sectors (11%). Overall, regional services sector reports more investment in decarbonisation over the last 12 months at 58% when compared to manufacturing sector at 42%.

NATURE-BASED SOLUTIONS

A new area of study looked at the level of engagement of regional businesses with the nature-based solutions (NBS) for example nature restoration and conservation projects, biodiversity enrichment, and sustainable land management. The survey respondents were asked to indicate how often their business engaged with the nature-based solutions over the last 12 months. The following results revealed a very low level of engagement with only 4.6% of regional businesses regularly engaging with NBS (Figure 11). The manufacturing to service companies ratio of the regular engagement with NBS is 2:3.

Figure 11: Engagement level of regional businesses with the nature-based solutions

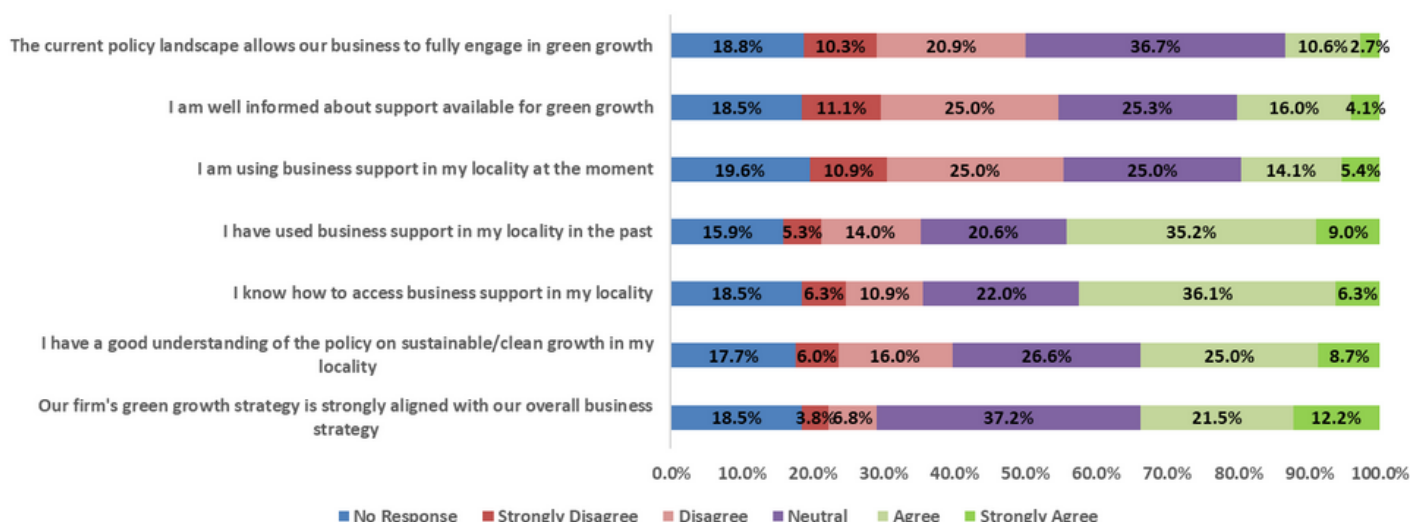


Astonishingly, 44% of regional businesses have never engaged with the nature-based solutions. This is a rather disappointing result when considering that over a third of the survey respondents are located in or in close proximity to the Peak District National Park and other nature reserves of national significance. For the first time the study reports the regional NBS engagement levels and urge policy, regulators and businesses to come together and to identify knowledge and practice gaps as the first step in addressing the concerns with the NBS non-engagement.

POLICY AND SUPPORT FOR GREEN GROWTH

Survey participants were asked to respond to a series of statements about the green growth policy landscape (Figure 12). The analysis provided some interesting findings about awareness and accessibility of the policy and business support in the East Midlands.

Figure 12: Views about green growth policy and business support



Only 13.3% of businesses surveyed stated that current policy allows businesses to fully engage with the green growth policy agenda. This is a fall of 4% when compared with the 2022 survey results. This indicates a consecutive 3-year decline of 6% in business confidence level about the regional policy towards green growth.

Over a third (36%) of businesses did not feel well informed about the support available for green growth in 2023 compared with 33% in 2022. Despite widening of the information gap, it is still an improvement on the 2021 position where over 40% of respondent felt insufficiently informed about the support for green growth. Only 20% of the survey respondents felt well informed about the support available for green growth in the region.

POLICY AND SUPPORT FOR GREEN GROWTH

Whilst over 44% of businesses had previously used business support in the locality, only 20% were using the business support at a time of the 2023 QES Q2 survey. This result is largely consistent with the 2022 survey results. Despite of this, there is a continued year on year decline in the confidence level about the knowledge of how to access the business support regionally. 42% of businesses were confident in their knowledge about the access to business support, a continued 3-year drop of 5% from the 2021 position.

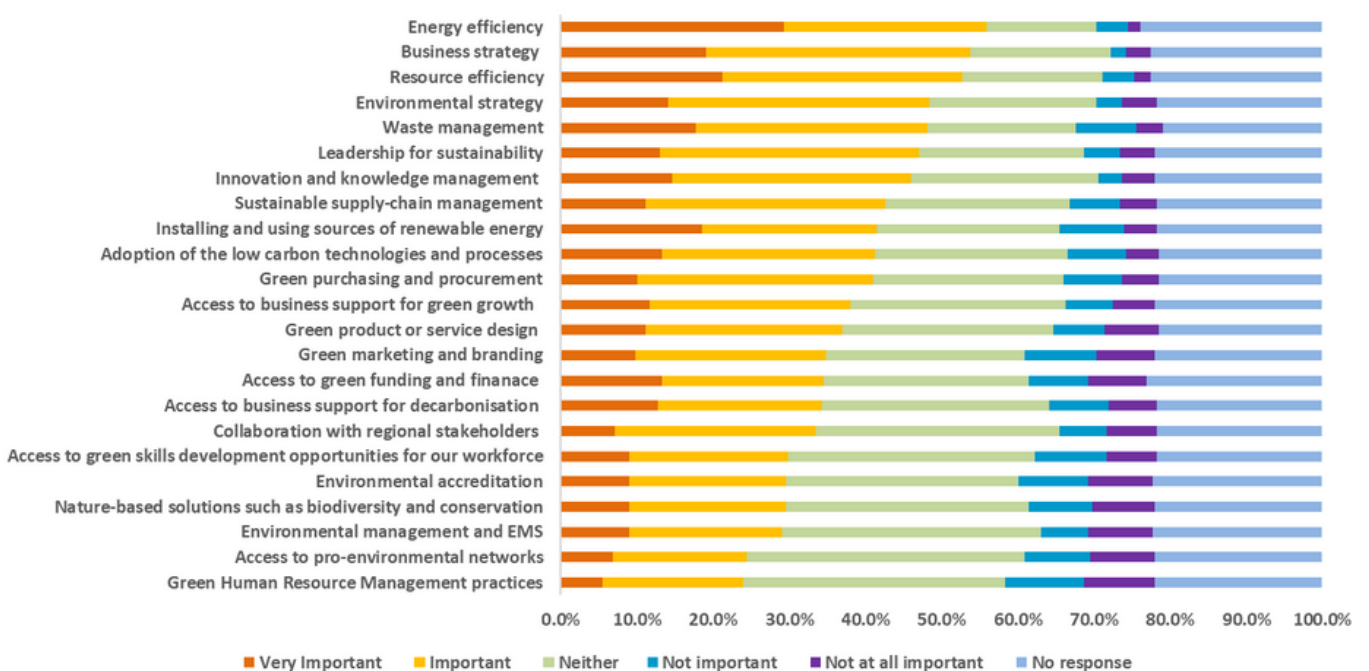
About 34% of the businesses stated that they have a good understanding of the policy. This is a drop of 8% from the 2021 position at 42% awareness rate. These responses indicate there is a need for a concerted effort across the regional support agencies to raise the awareness and to promote the engagement with the pro-environmental business support more widely.

Just over 34% of business agreed that the environmental strategy is strongly aligned with the business strategy. This represents a drop of 13% from the 2022 position. These are concerning signs of decoupling of the business strategy from the environmental strategy of the regional businesses. Such a trend impacts negatively on the development of the green growth capacity of the regional business and with that limits the uptake of the green growth opportunities, regionally, nationally and internationally.

SKILLS FOR GREEN GROWTH

When asked which of 23 listed areas businesses need strengthening to capitalise on green growth opportunities, efficiency-focused areas dominated the responses.

Figure 13: Skills needed for green growth



Energy efficiency, business strategy, resource efficiency were considered important areas of skills to be strengthened by over a half of the survey respondents (Table 1). Environmental strategy and waste management skills are required development by over 48% of the regional businesses. With leadership for sustainability; innovation and knowledge management; and sustainable supply chain management following closely behind.

SKILLS FOR GREEN GROWTH

Table 1: Priority areas for skills development ranked

Skill area	Agreement level	Skill area	Agreement level
Energy efficiency	56.0%	Green product or service design	37%
Business strategy	53.8%	Green marketing and branding	34.8%
Resource efficiency	52.7%	Access to green funding and finance	34.5%
Environmental strategy	48.4%	Access to business support for decarbonisation	34.2%
Waste management	48.1%	Collaboration with regional stakeholders	33.4%
Leadership for sustainability	47%	Access to green skills development opportunities for our workforce	29.9%
Innovation and knowledge management	45.9%	Environmental accreditation	29.6%
Sustainable supply-chain management	42.7%	Nature-based solutions such as biodiversity and conservation	29.6%
Installing and using sources of renewable energy	41.6%	Environmental management and EMS	29.1%
Adoption of the low carbon technologies and processes	41.3%	Access to pro-environmental networks	24.5%
Green purchasing and procurement	41.0%	Green Human Resource Management practices	23.9%
Access to business support for green growth	38%		

SKILLS FOR GREEN GROWTH

Energy and resource efficiency skills remain in the top three skills categories in demand for green growth since 2021. Business strategy skills are becoming more in demand at times of economic turbulence. Environmental strategy skills are maintained the fourth place over the last two years. These findings speak of consistency in attitudes towards the areas of skills development for green growth indicated by the regional businesses over the last three years.

The biggest change in the demand for green skills is in the area of supply-chain management moving up from the 13th (2021) to the 8th (2023) place. This development could signal an intensifying engagement of the regional businesses in supply chains operating across the growing green market niches.

Access to business support for green growth, and access to green funding and finance remains in the top 15 skills sets in demand. This indicates a consistent appetite for knowledge, support for skills development, and capital investment to stimulate green growth in the region.

Alongside the STEM-based skills, such as carbon footprinting, energy efficiency audits and other, business development skills are becoming more in demand. For example, skills in green purchasing and procurement, green product and service design and green marketing and branding are in top 15 skills set in demand. This could signal a growing expansion of a pro-environmental approach in business practices and acceleration of the green functional areas across the regional businesses.

Altogether, businesses demand skills that help them achieve energy and resource efficiency internally and as part of green supply chains. Businesses recognise leadership for sustainability and environmental strategy as important competences to harness the opportunities presented by green growth.

CONCLUSION

The study findings support development of the following highlights.

HIGHLIGHT 1



- There is a slowdown in East Midlands businesses adopting green growth strategies amid cost pressures.
- Proportion of businesses across Derbyshire, Leicestershire and Nottinghamshire that have made any income from environmentally-friendly goods and services dropped from 45% in 2022 to 36% in 2023.
- Despite this, a positive trend in the proportion of businesses entering the green goods and services markets over the past eight years remains.

HIGHLIGHT 2



- Number of businesses accessing business support has dropped when compared with the past years.
- Only 13% of businesses surveyed stated that the current policy allows businesses to fully engage with green growth.
- Over a third did not feel well informed about the support available for green growth

CONCLUSION

The study findings support development of the following highlights

HIGHLIGHT 3



- Three in ten regional companies invest in decarbonisation.
- Large companies lead by volume of investment in decarbonisation leading in over £200,000 investment category.
- The share of green products and services in a firm's portfolio is linked to the sector, market and regulatory environment.



HIGHLIGHT 4



- There is a sustained demand for skills in the areas of energy, resource efficiency and environmental strategy over the last three years.
- Business support agencies and policymakers need to respond by providing a focused support for green growth.
- Need to develop policy mechanisms that are better aligned with the regional business interests and the sectoral specifics in order to intensify engagement with the green growth opportunities.

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