Green jobs across Cambridgeshire and Peterborough

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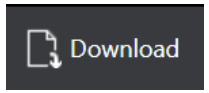

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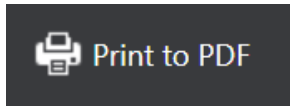

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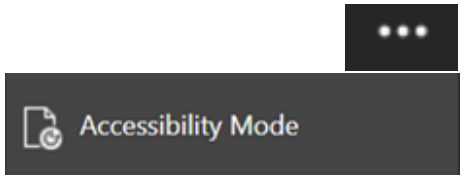

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Summary

This work examines the green jobs industry in Cambridgeshire and Peterborough, looking at job posting trends, district comparisons and required job growth for the net zero transition.

Online job postings of green jobs - Lightcast

- Historical Trend of Green Job Postings 2019 – 2023
- District-Level Comparison within Cambridgeshire and Peterborough
- Green Sectors
- District-Level Comparison of Green Jobs Postings by Sector and Districts
- Top 20 in-demand Skills

Green Occupations in Cambridgeshire and Peterborough – O*NET (US), Opinion and Lifestyle Survey (OPN) and Census2021 from Office for National Statistics (ONS)

- Green Category by Occupation groups
- Green Category by districts
- Green Jobs perception - regional comparison, 2023

Required Green Jobs Growths by 2030 and 2050 - Local Government Association (LGA)

- District-Level Comparison of Green Jobs Growths in 2030 and 2050
- Estimated Green Jobs in Cambridgeshire and Peterborough by sector
- District-Level Comparison of Green Jobs Growths by Sector

It`s important to note that each section adopts a distinct methodology, making direct comparisons challenging. While Lightcast focuses on online job postings, the Green Occupations section broadens its scope to encompass occupations potentially affected by the transition to net zero. Meanwhile, the LGA`s analysis provides a targeted look at the industries crucial for our collective environmental goals.

Headline Findings

Online job postings with **green job titles** have been increasing over the last few years

2019 to 2023

Cambridgeshire

142% increase

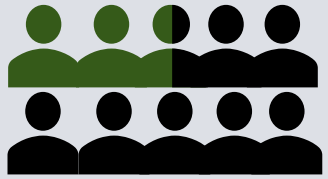
Peterborough

219% increase

75%

of online job postings with green job titles are within the following **sectors**:

Technical | **Environment Health and Safety** | **Regulatory** | **Waste**



25%

of all jobs

Approximately 25% of jobs (131,000 jobs) in Cambridgeshire and Peterborough are potentially within occupations **subject to, or affected by, greening.**

The **low-carbon electricity sector** is predicted to have the highest proportion of green jobs by 2050.

Cambridgeshire

26%

of all green jobs

Peterborough

71%

of all green jobs

Glossary of key terms

Term	Definition
Greening	"The extent to which green economy activities and technologies increase the demand for existing occupations, shape the work and worker requirements needed for occupational performance, or generate unique work and worker requirements." – Greater London Authorities (GLA) Working Paper 99
Green Increase Demand occupations	"These green occupations are not subject to any significant change in work and worker requirements, but are in increased demand due to greening. The context of work might change but the competencies and tasks remain the same." – GLA Working Paper 99
Green Enhanced Skills occupations	"These green occupations are not new but are subject to significant changes in work and worker requirements, which may or may not be associated with a change in demand. The essential purposes of the role remain the same, but tasks, skills, knowledge and external elements, such as credentials, are altered." – GLA Working Paper 99
Green New and Emerging occupations	"The impact of green economy activities and technologies is sufficient to create the need for unique work and worker requirements, resulting in the generation of new or renewed roles. These new roles could be entirely new or 'born' from existing occupations." – GLA Working Paper 99
Direct Jobs	"Direct jobs result from investment in any given economic sector (e.g. jobs created at a recently-built water treatment plant). Indirect jobs are created when an investment in a sector leads to an increase in jobs in suppliers and distributors of that sector." – UN World Water Development Report 2016
O*NET	A major source of occupational information in the United States.
Lightcast	A service which provides information on job postings, occupations, and industries. Lightcast has a 'job-posting aggregator' which scans jobs websites for postings and presents them together.
UK SOC 2020	Standard Occupational Classification (SOC) 2020 from Office for National Statistics (ONS). Offers common classification of job details, sorting roles by skill level and content.
Net Zero	"Achieving an overall balance between emissions produced and emissions taken out of the atmosphere. This can take place on different scales and is often achieved through offsetting." – Cambridgeshire County Council`s "Climate Change and Environment Strategy: Technical Report"
Cambridgeshire	Region comprised of 5 districts: Cambridge, East Cambridgeshire, Fenland, Huntingdonshire, South Cambridgeshire

Online Job Postings of Green Jobs

Online Job Postings of Green Jobs: Methodology

The data for this analysis is sourced from Lightcast, a service which provides information on Job postings, occupations, and industries. Lightcast has a ‘job-posting aggregator’ which scans job websites for postings and presents them together.

Lightcast only scans online job postings and therefore does not include any jobs which are advertised solely offline. There is also no guarantee that all online job postings are aggregated. For example, a specific job site may not be scanned.

A unique job posting is a deduplicated count of an online job vacancy advertisement. If the same vacancy is posted twice across a sixty-day period, it is only counted once. If the same vacancy is posted twice more than sixty days apart it is counted as two unique job postings.

Lightcast has two search groups for online green jobs, one for green jobs titles (e.g. recycling specialists, solar analysts, etc.) and another for green skills (e.g. greenhouse gas, wind power, etc.) which produce significantly different numbers. A green job titles search is specific, while a green skills search is broader, encompassing skills present in jobs without explicitly green titles. Lightcast identified 363 green job titles and 107 green skills.

Online Job Postings of Green Jobs: Headline Findings

Online job postings with green job titles in Cambridgeshire increased by 142% from 2019 to 2023, rising from 728 to 1,764. Peterborough saw a higher increase at 219%, rising from 206 to 658.

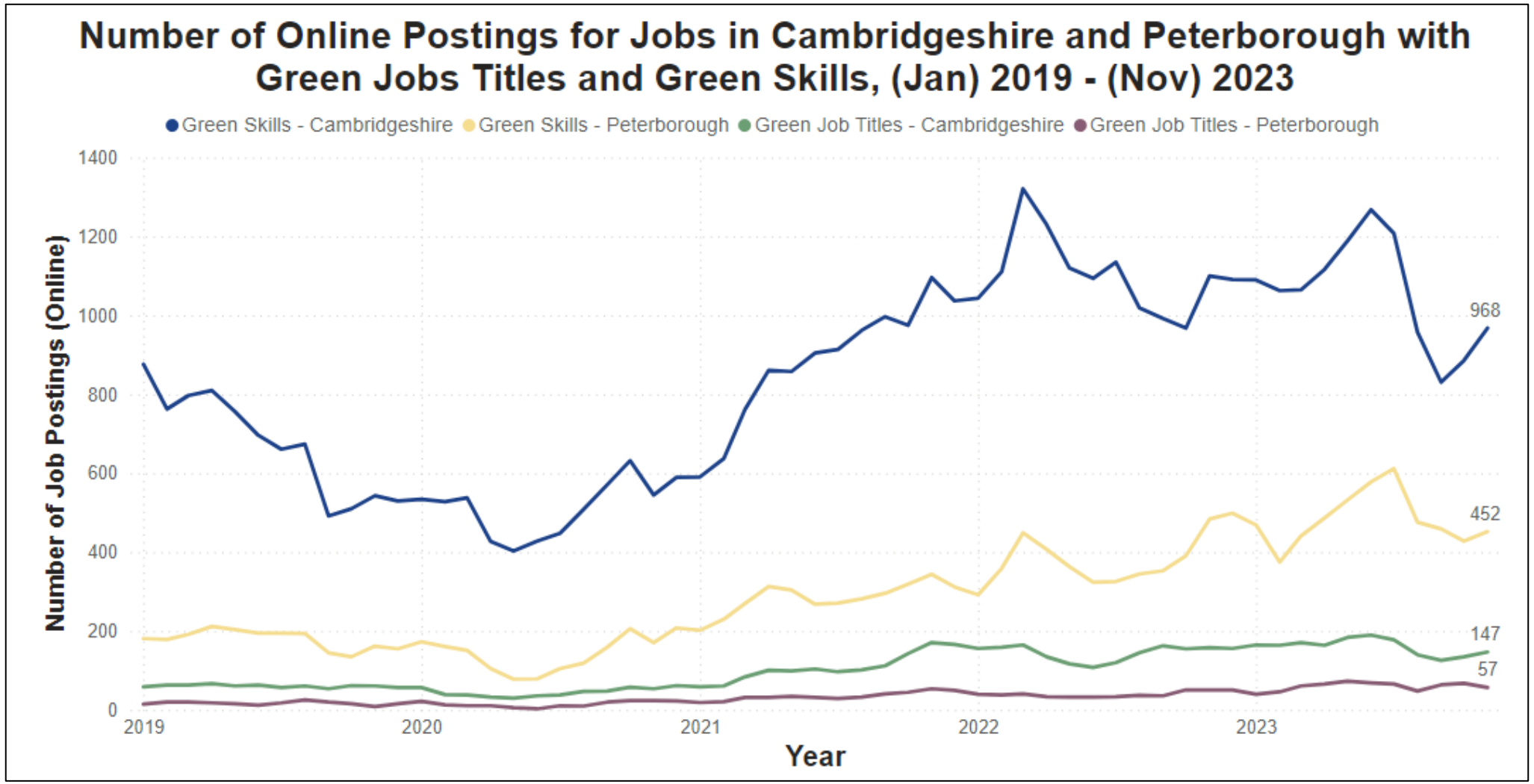
Cambridgeshire has an average of 0.34% of online job postings with green job titles which is similar to the averages of East of England.

Fenland has the lowest proportion of online job posts with green job titles (0.17%) whereas South Cambridgeshire has the highest percentage (0.40%) in Cambridgeshire.

Peterborough has a higher percentage (3.62%) of online job postings with green skills than the average of Cambridgeshire (2.92%) and East of England (2.90%).

Both Cambridgeshire and Peterborough show a high number of online vacancies posts with green job titles in Technical, Environment Health and Safety, Waste, Regulatory and Renewable Energy sectors with a strong demand for skills in Environment Health and Safety, Project Management and Risk Analysis.

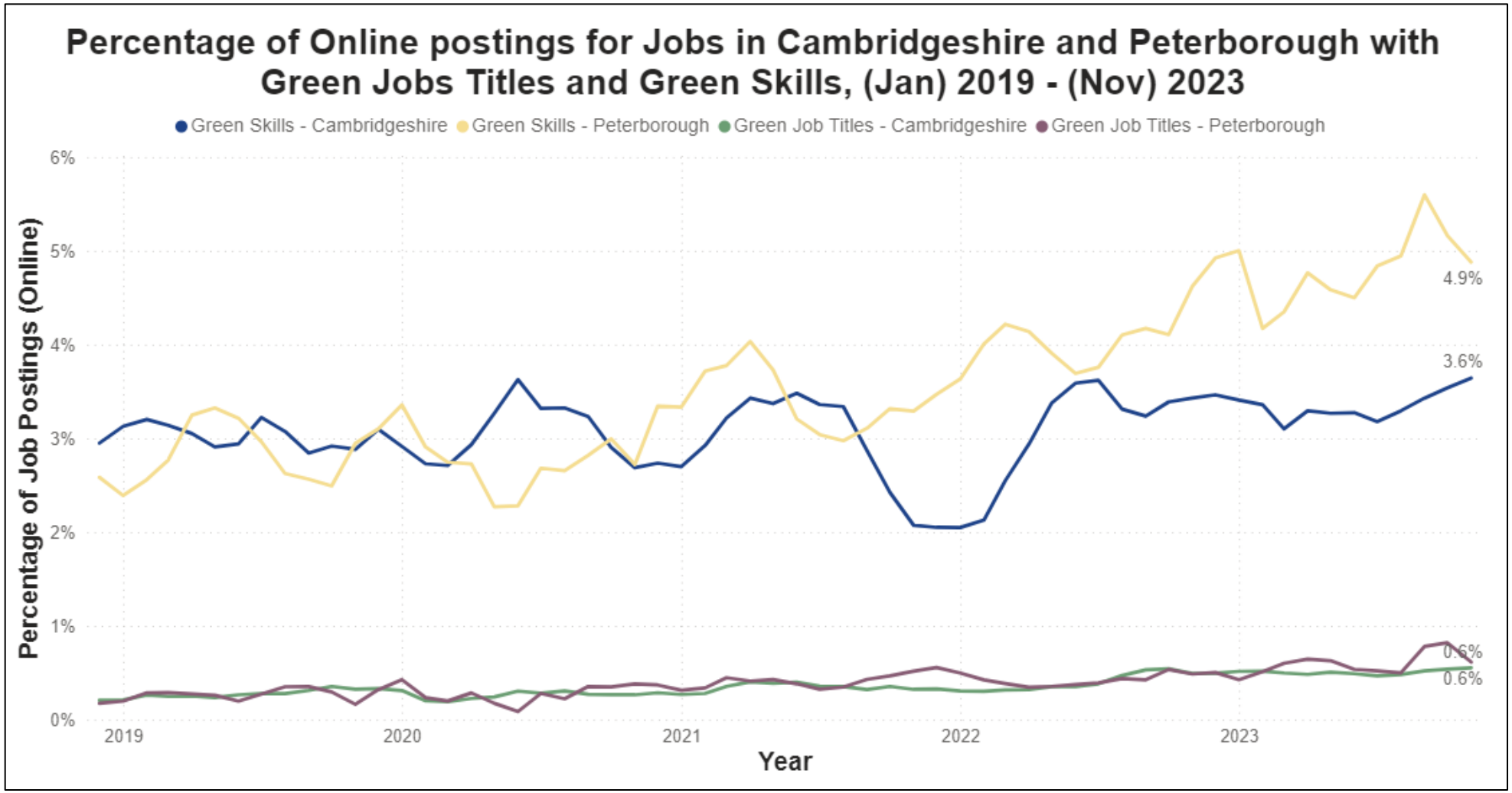
Green Job Titles and Green Jobs Skills



Both Cambridgeshire and Peterborough follow the same trend in online job postings with green skills and green job titles. In 2023, Peterborough saw a 219% increase in green job title postings compared to 2019, surpassing Cambridgeshire's 142% increase.

Source: Lightcast

Proportion of Green Job Titles and Green Jobs Skills



Both regions had a decline in green jobs postings due to a rise in non-green jobs postings around late 2021, early 2022. However, despite the decline both regions were able to recover to previous levels within a few months.

Source: Lightcast

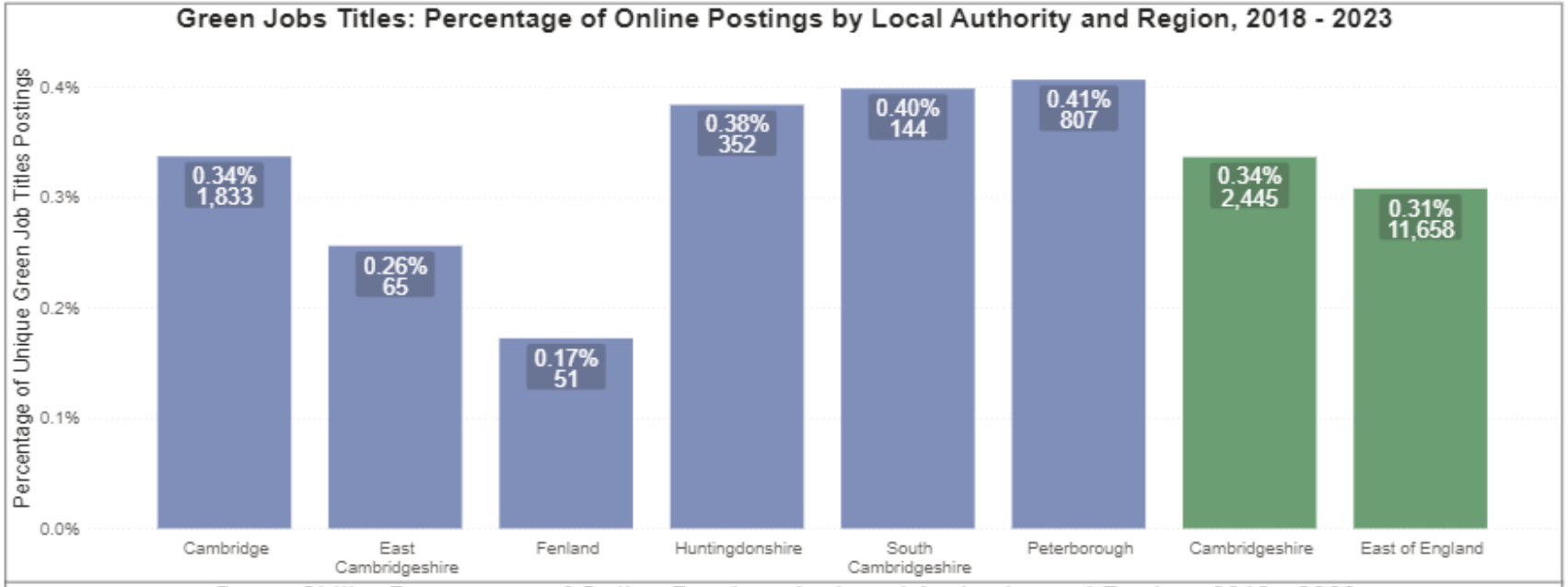
District-Level Comparison of Green Job Titles and Green Job Skills

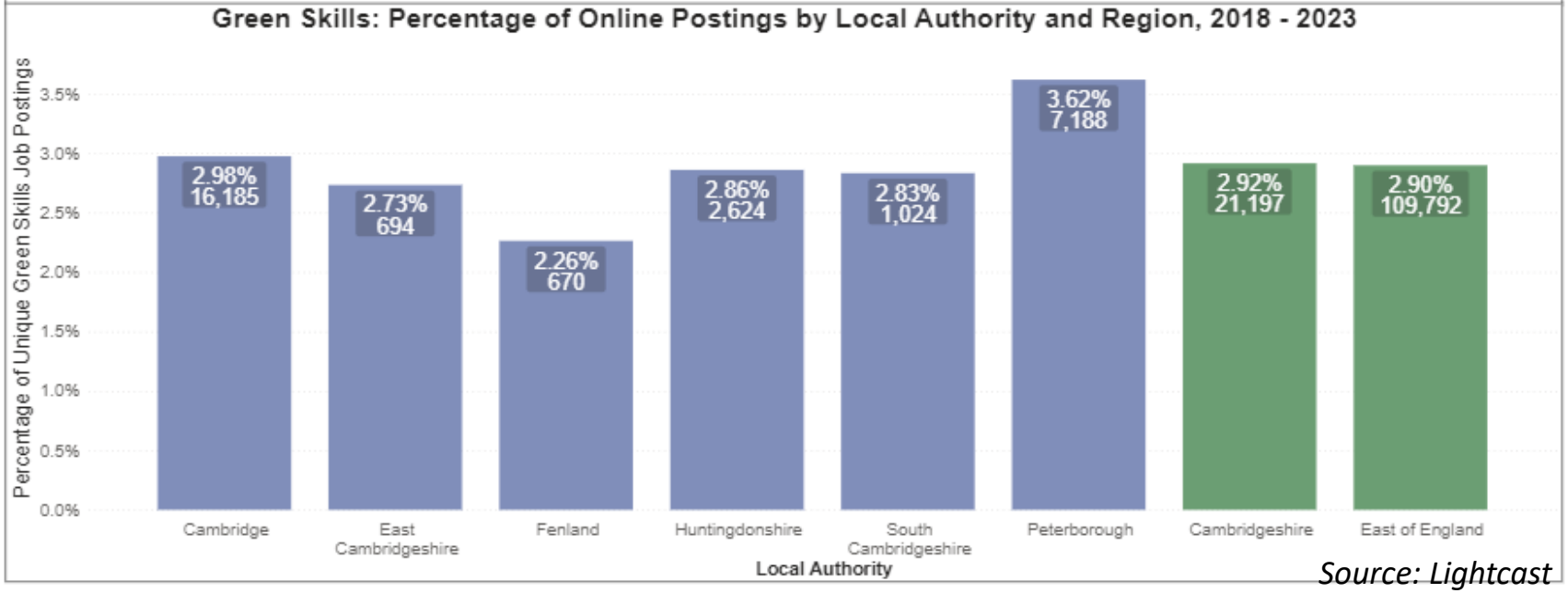
Cambridgeshire has an average of 0.34% of online job postings with green job titles and 2.92% for green skills, which are similar to the averages of East of England. Peterborough has a higher proportion of online job postings with green job titles (0.41%) and green skills (3.62%).

In both charts, Fenland has the lowest proportion of online job postings with 0.17% listing green job titles and 2.26% involving green skills, notably lower than regional average.

For both searches, Cambridge has the highest number of online job postings (1,833 for green job titles and 16,185 for green skills job postings).

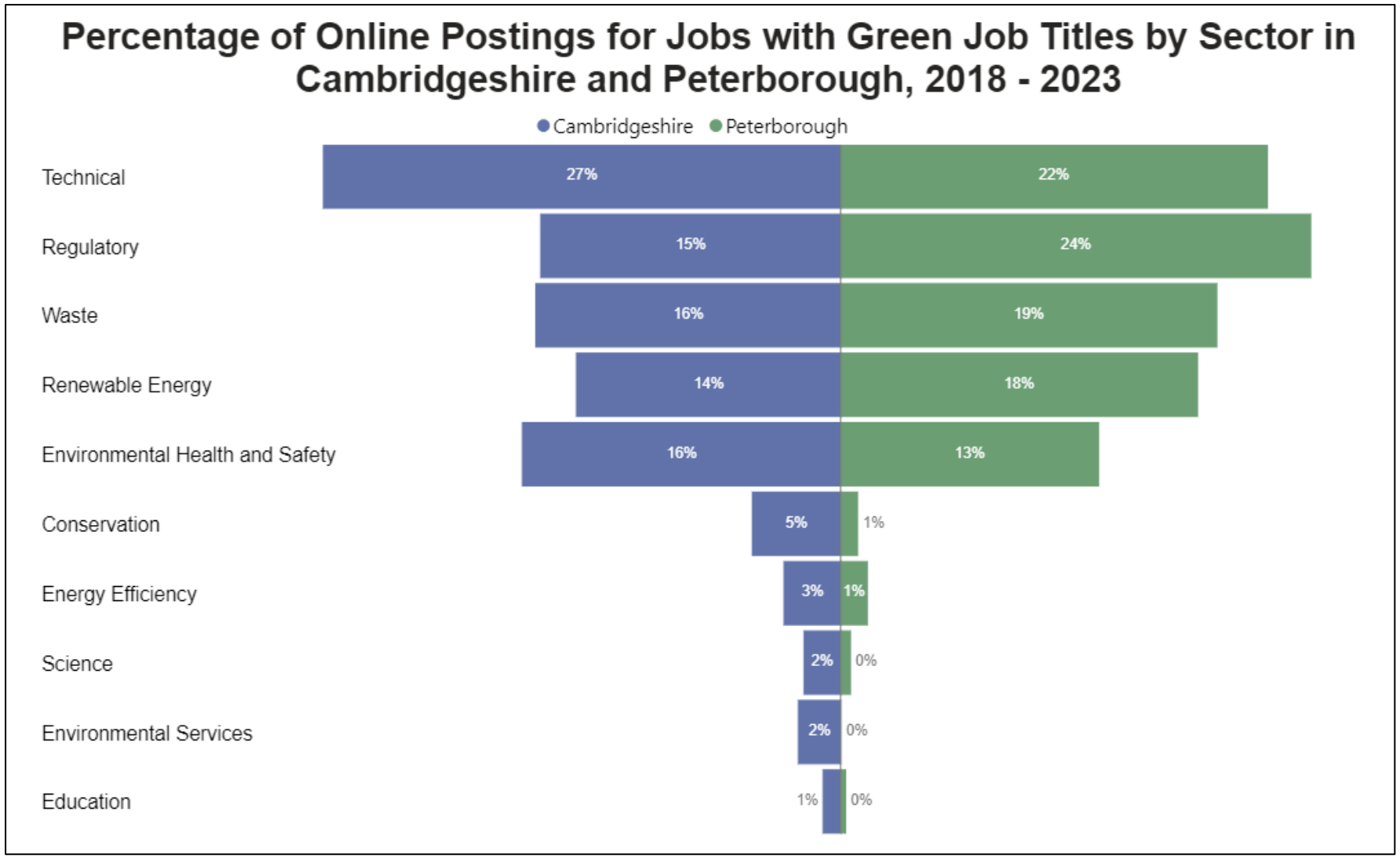
In Cambridgeshire, South Cambridgeshire has the highest proportion of online job postings with green job titles, while Cambridge has the highest proportion within the green skills search.





Source: Lightcast

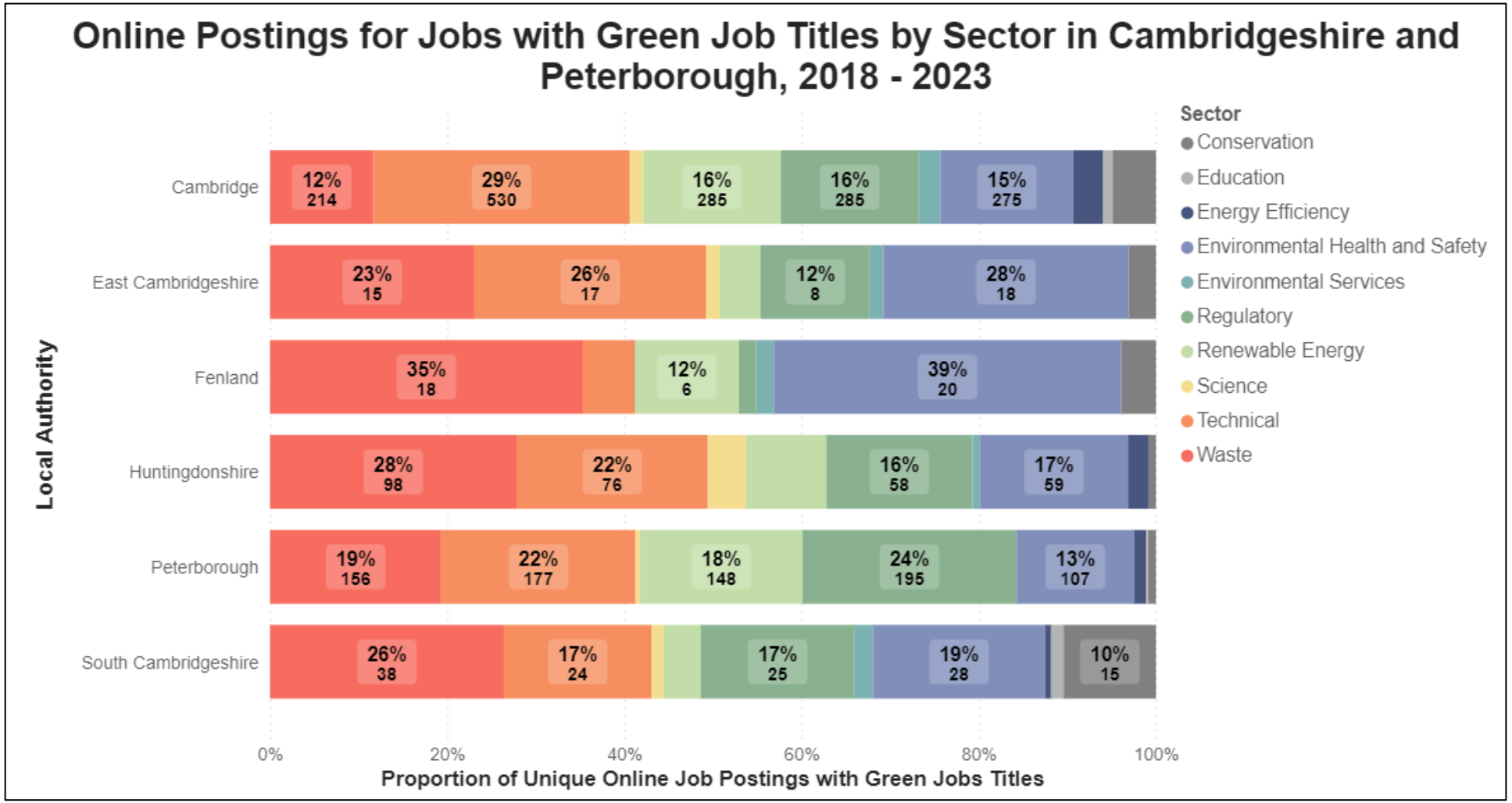
Job Postings with Green Job Titles by Sector



The Technical sector has the highest proportion (27%) of online job postings in Cambridgeshire, while in Peterborough, the Regulatory sector has the highest proportion (24%).

Source: Lightcast

Proportion of Green Jobs Titles by Sector and District

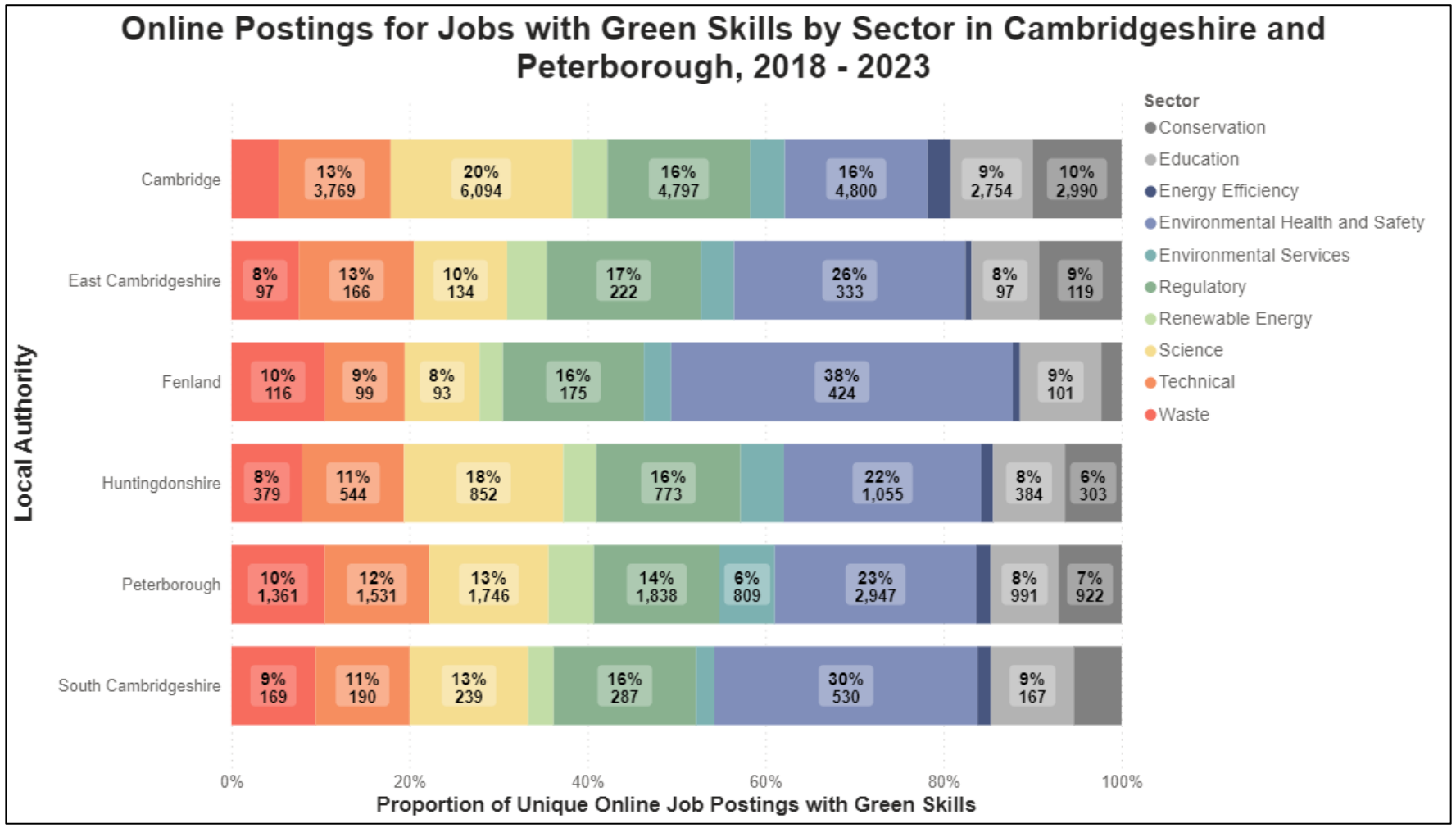


Sector proportions vary across the districts but generally, the Waste, Technical and Environmental Health and Safety sectors have the higher proportions while the Science and Education sectors have the smallest proportions. Peterborough and Cambridge have a smaller proportion of online job postings in the Waste sector (<20%) than other districts.

Note: Any sectors with less than 10% are not labelled.

Source: Lightcast

Proportion of Green Skills by Sector and District

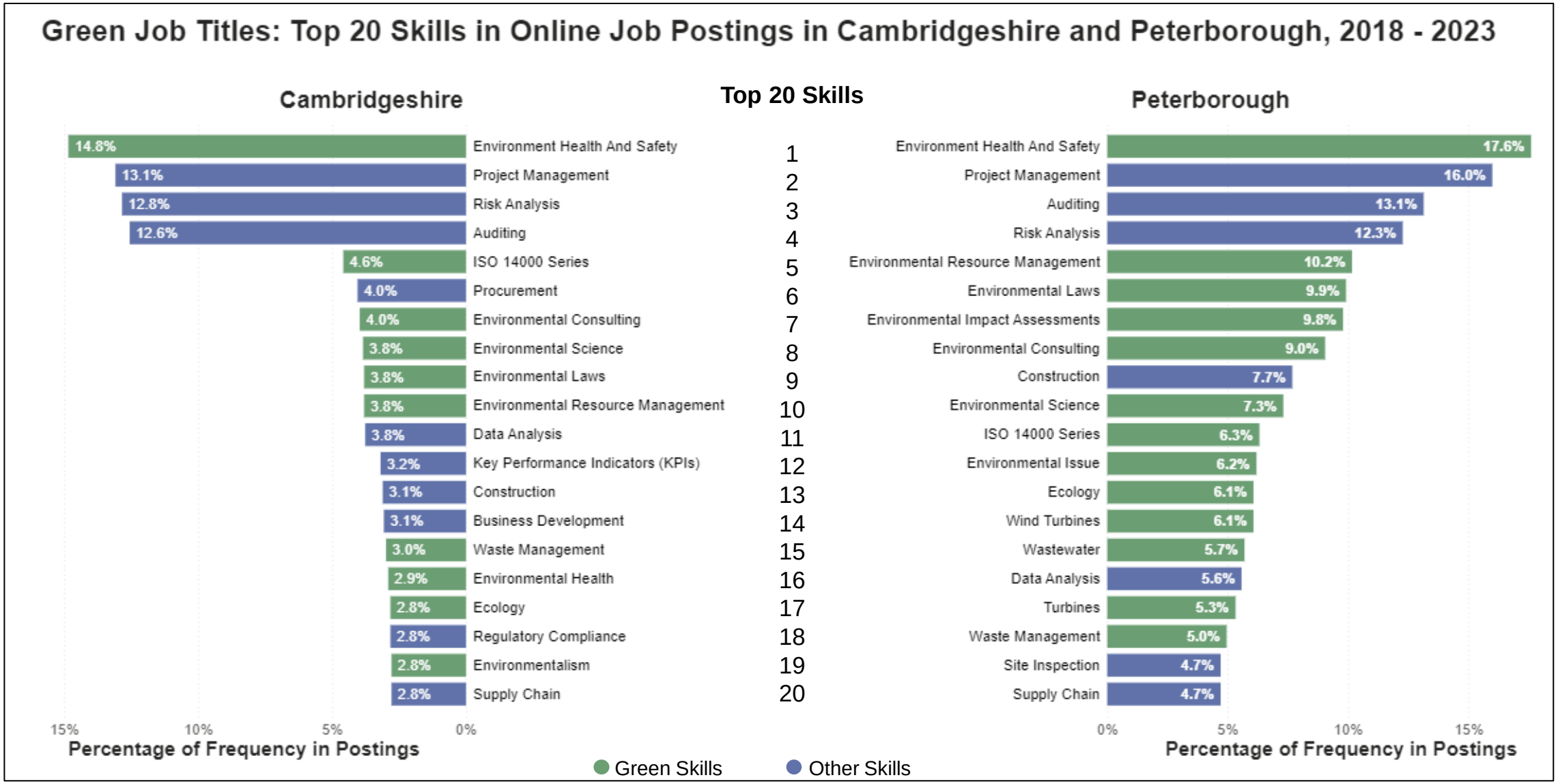


Proportionally, the Environmental Health and Safety, Science and Regulatory sectors generally have the highest proportion of online job postings with green skills. Cambridge see the highest proportion of jobs in the Science sector (20%).

Note: Any sectors with less than 5% are not labelled.
The green skills search conducted in Lightcast is indicative and may contain duplicates as certain skills may be categorised in several sectors.

Source: Lightcast

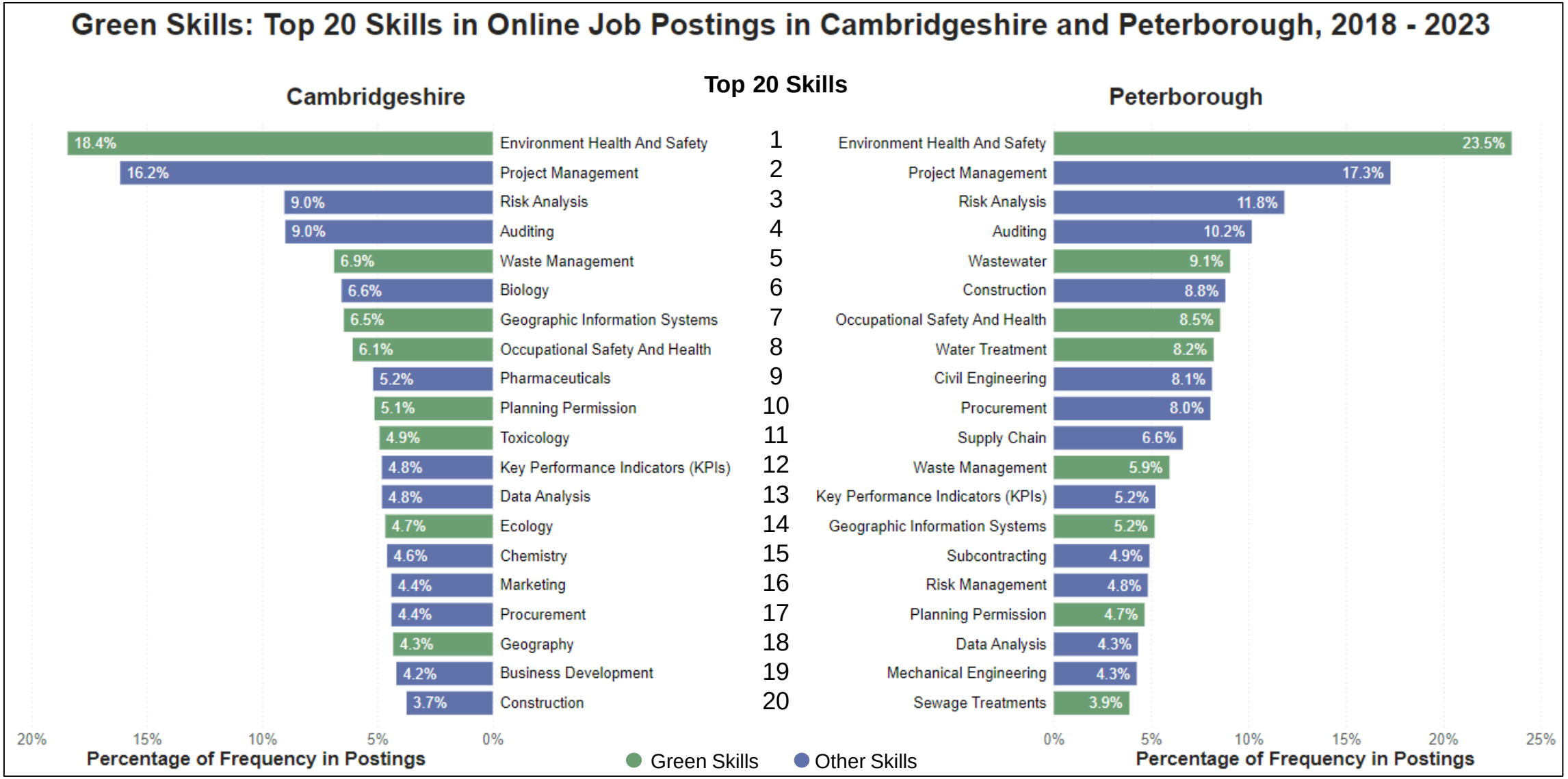
Top 20 in-demand Skills in Green Job Titles Postings



Skills in Environment Health and Safety (15% - 18%) have the highest appearance in online job postings with green job titles in both regions, followed by Project Management (13% - 16%), Auditing (around 13%) and Risk Analysis (12% - 13%).

Source: Lightcast

Top 20 in-demand Skills in Green Skills Job Postings



Again, skills in Environment Health and Safety (18% - 24%) have the highest appearance in online job postings with green skills in both regions, followed by Project Management (16% - 17%), Auditing (9% -10%) and Risk Analysis (9% - 12%).

Source: Lightcast

Green Occupations in Cambridgeshire and Peterborough

Green Occupations in Cambridgeshire and Peterborough: Methodology

The first part of this section focuses on green occupations and the second part focuses on working adults` perception of their jobs.

Since there is no universally agreed-upon definition of green jobs, identifying them poses some challenges. Greater London Authorities (GLA) adopted the O*NET green jobs specification approach in their "Working Paper 99". GLA mapped the occupations to the UK SOC codes identifying 100 SOC unit groups as occupations potentially subject to, or affected by, greening (green occupations). These occupations may undergo changes during the net zero transition. Such changes in occupations can be grouped into three categories:

- Occupations with **Increased Green Demand**: These jobs experience a rise in demand without significant changes in tasks or worker requirements. Although the context of work may shift, the core competencies and tasks remain unchanged.
- Occupations with **Enhanced Green Skills**: Existing green jobs undergo significant changes in work and worker requirements, potentially without a change in demand. The role's fundamental purpose remains, but tasks, skills, knowledge, and external elements like credentials are modified.
- **New and Emerging Green** Occupations: The influence of green economy activities and technologies leads to the creation of roles with unique work and worker requirements. This results in the emergence of entirely new or revitalized roles.

Please note this represents a broad approach to identify green occupations that are likely to be affected during the transition of net zero. GLA used SOC 2010 to map the O*NET green specification. However, given that the Census 2021 uses SOC 2020, steps were taken to ensure that the GLA`s specifications were also mapped to SOC 2020 before conducting any analysis.

The second part of this section is based on the ONS` opinions and lifestyle survey which asked working adults if they would describe any part of their job as green based on ONS` definition of green jobs ("Employment in an activity that contributes to protecting or restoring the environment, including those that mitigate or adapt to climate change"). Although the analysis is high-level, providing only regional-level comparison, it offers a snapshot of working adults` perceptions of green jobs in the UK.

Green Occupations in Cambridgeshire and Peterborough: Headlines

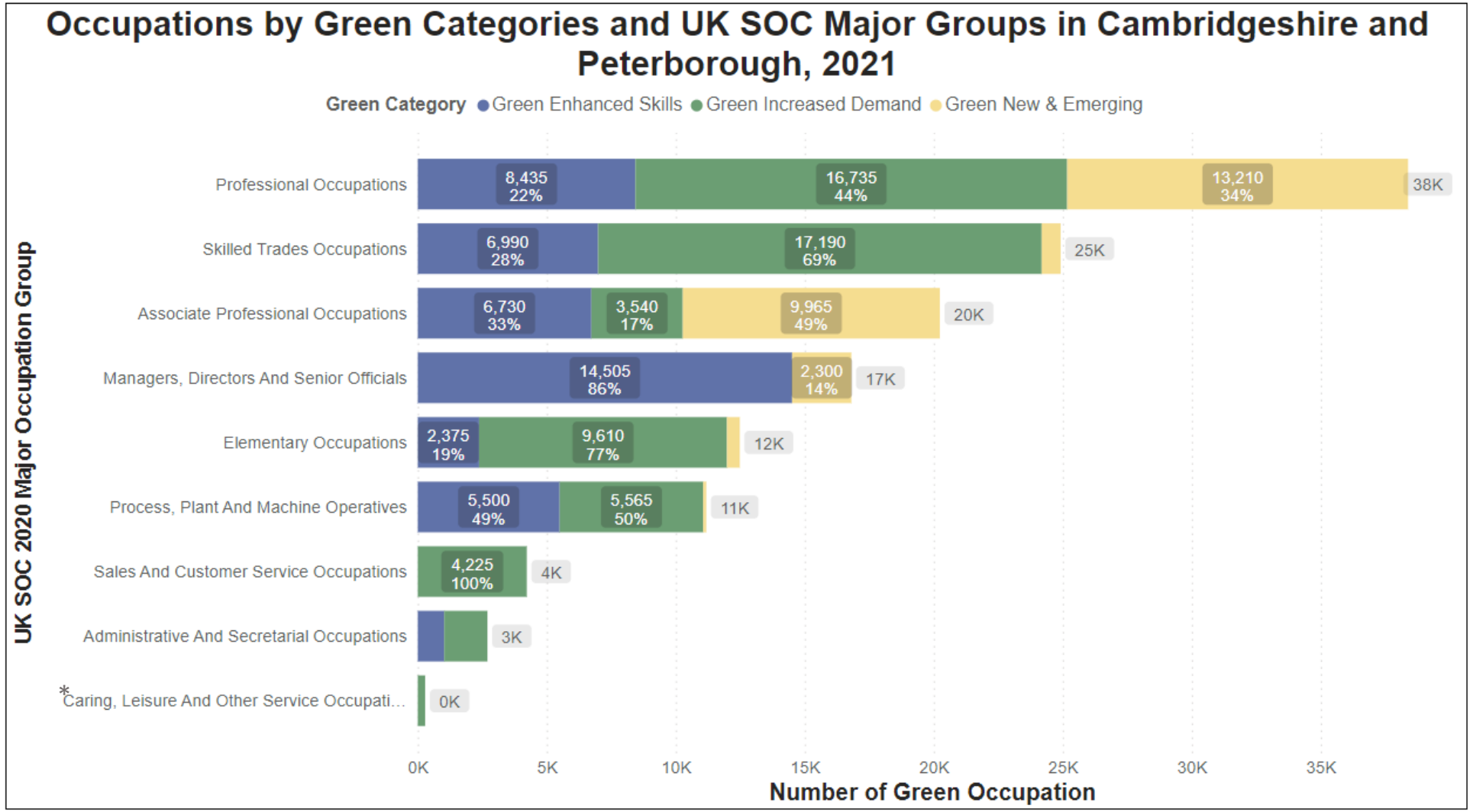
Approximately 131,000 jobs in Cambridgeshire and Peterborough are potentially within occupations subject to or affected by greening, which makes up a quarter of all jobs in the two regions.

Both regions follow a similar pattern to the average of UK.

Most green occupations are likely to see an increase in demand but will not see significant changes in tasks.

The occupation group of ‘Managers, Directors and Senior Officials’ has the highest percentage of occupations (86%) that have been identified as ‘Green Enhanced Skills’ category, meaning these occupations are likely to see a significant change in tasks and skills.

Green Occupations by Occupation Groups and Green Categories

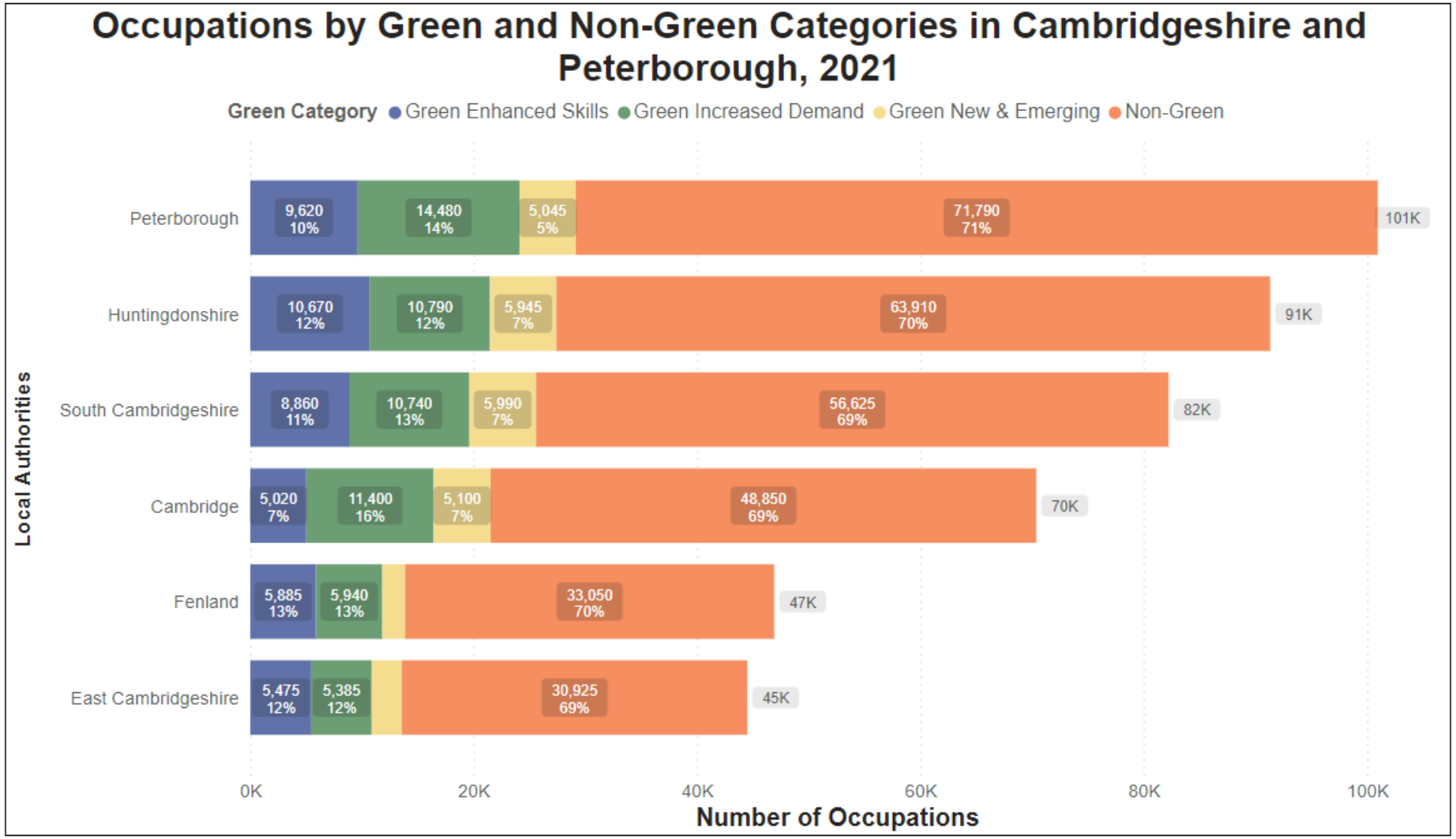


The ‘Green Increased Demand' category makes up the highest proportion (ranging from 44% to 100%) in all occupation groups except for the ‘Managers, Directors, and Senior Officials’ group and the ‘Associate Professional Occupations’.

**Caring, Leisure And Other Service Occupations*

Source: ONS & GLA

Occupations by Green Categories and Districts

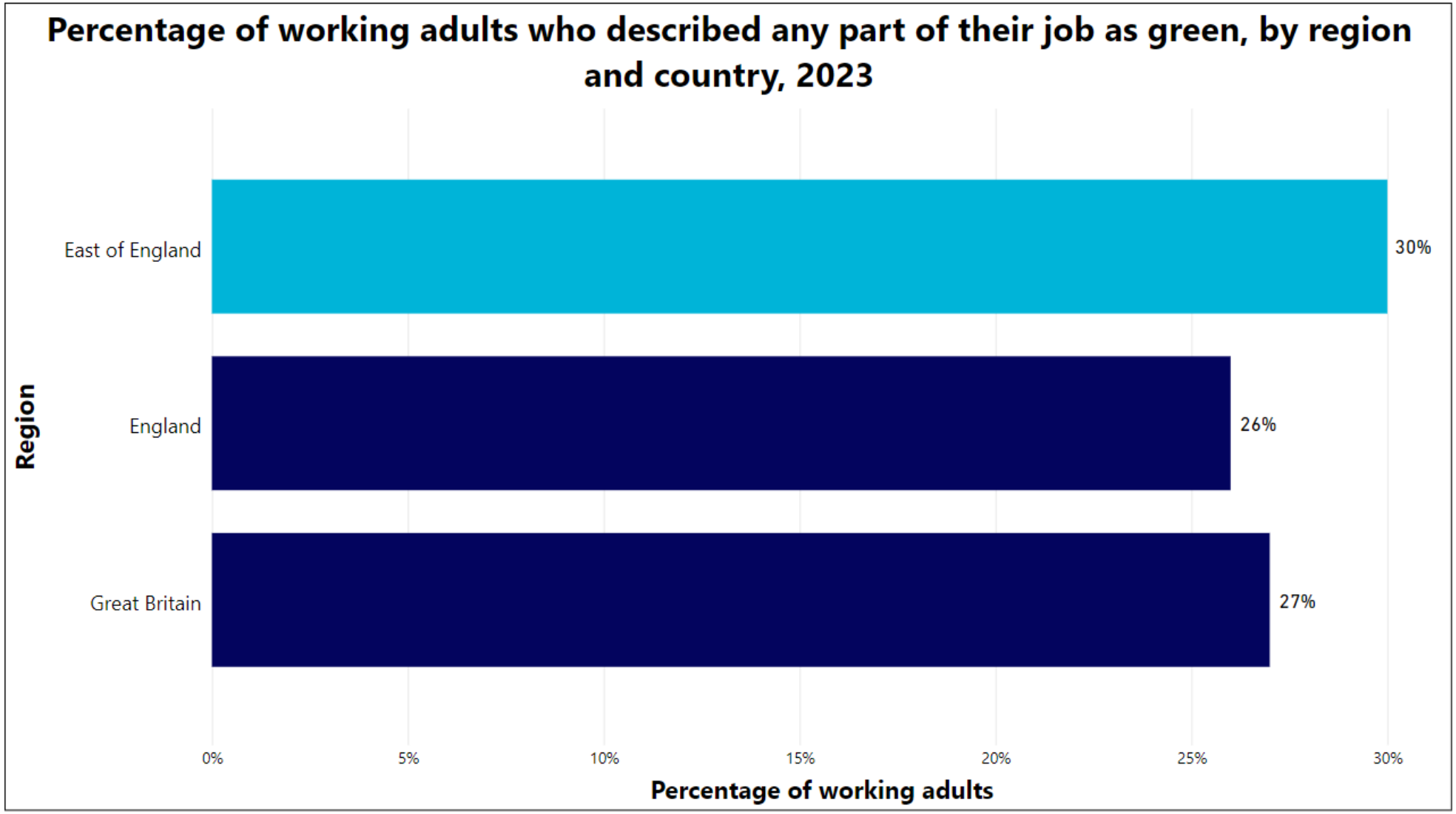


Around a quarter of all occupations in Cambridgeshire and Peterborough are potentially subject, to or affected by, greening. The pattern of green occupations across Cambridgeshire and Peterborough aligns with the average of UK.

Note: Any categories with less than 5% are not labelled.

Source: ONS & GLA

Working Adults Perception of Green Jobs



East of England has a slightly higher proportion of working adults describing any part of their job as green (30%) compared to England (26%) and Great Britain (27%).

Source: ONS

Required Green Jobs Growth to reach net zero in Cambridgeshire and Peterborough by 2030 and 2050 – Local Government Association (LGA)

Required Green Jobs Growth to Reach Net Zero: Methodology

The Local Government Association (LGA) have released a report and dataset about estimated green jobs in 2030 and 2050 that are required for local authorities to reach net zero. LGA`s analysis utilises industry insight, as well as local economic conditions to estimate the spread of green jobs across England by sector. LGA`s methodology can be found on their website and report.

In this analysis, LGA identified six green sectors where direct jobs are estimated:

Sector	Example
Low-carbon electricity	Wind power, Solar PV, Hydropower, Nuclear, Carbon Capture and Storage
Low-carbon heat	Renewable Heat, Heat Networks and Combined Heat and Power
Alternative fuels	Bioenergy and Hydrogen Production
Energy Efficiency	Insulation, Lighting, Monitoring and Control Systems
Low-carbon services	Low-carbon Financial, IT, and Advisory Services
Low-emission vehicles and infrastructure	Low-emission Vehicles and Infrastructure, Fuel Cells and Energy Storage Systems

Required Green Jobs Growth to Reach Net Zero: Headlines

Peterborough is estimated to have higher number of green jobs than any other district in Cambridgeshire and Peterborough.

By 2050, Cambridgeshire and Peterborough districts are estimated to have had a green jobs increase of 79% compared to 2030.

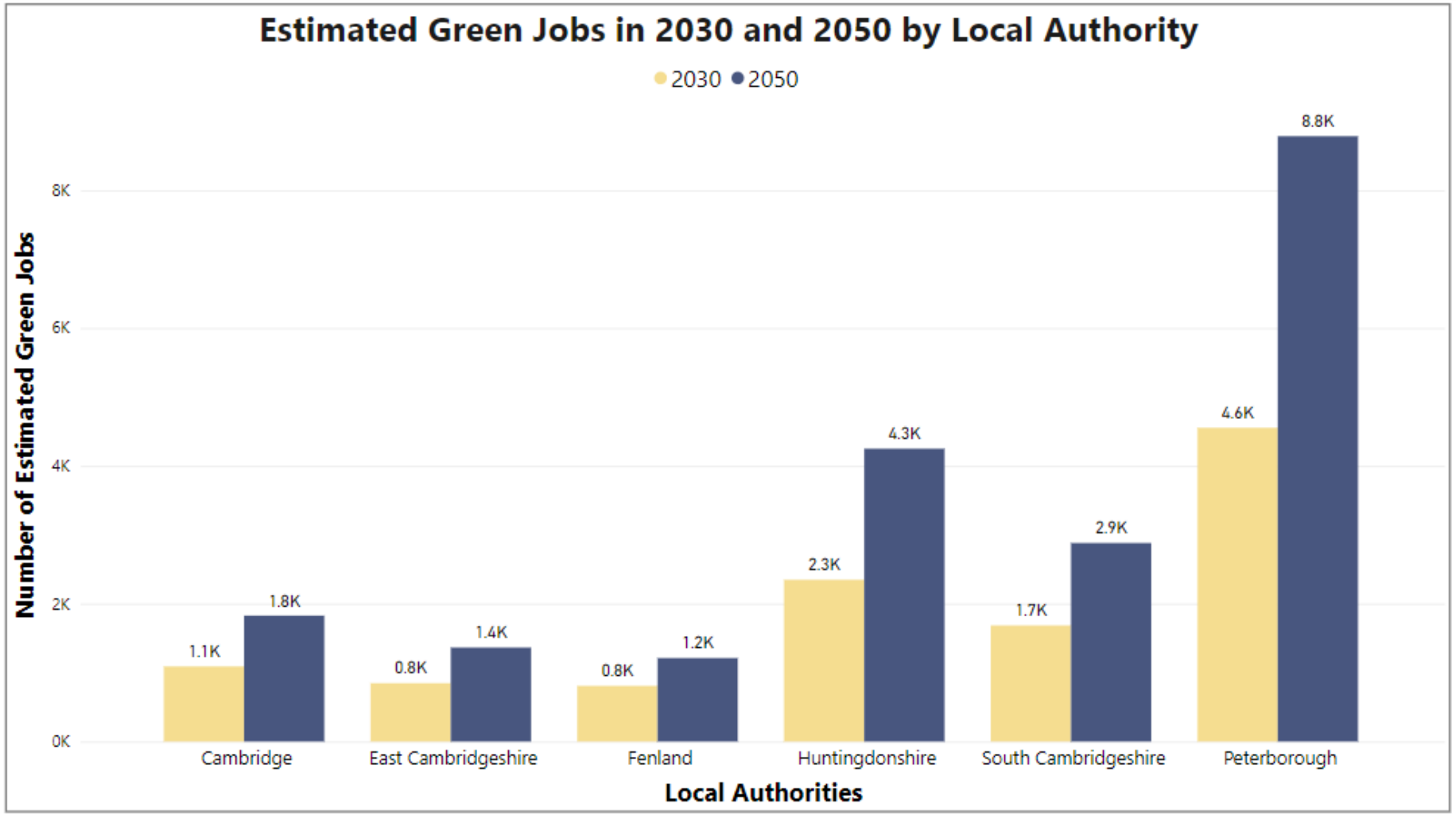
To achieve net zero, Cambridgeshire and Peterborough are estimated to require 11,333 green jobs by 2030 and 20,322 by 2050.

The majority of estimated green jobs are in the ‘Low-carbon electricity’ sector, followed by the ‘Low-carbon heat’ and ‘Energy Efficiency’ sectors in Cambridgeshire and Peterborough.

The ‘Low-carbon electricity’ sector is predicted to have the highest proportion of green jobs within most districts in Cambridgeshire and Peterborough, as well as UK wide.

Peterborough is predicted to have a higher proportion of jobs in the ‘Low-carbon electricity’ sector than the average of Cambridgeshire, East of England and England.

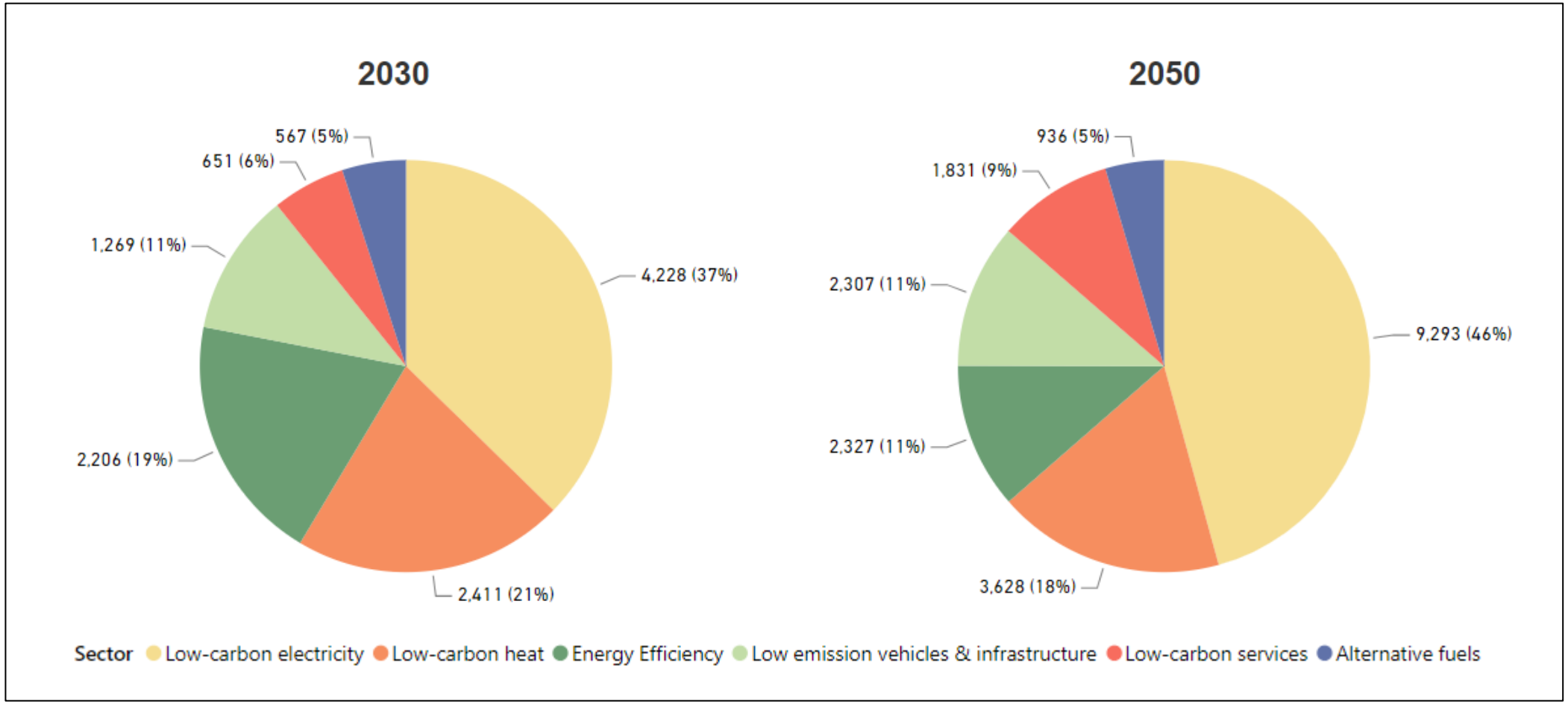
Required Green Jobs by 2030 & 2050 by district



Peterborough is estimated to see a 92% rise in green jobs by 2050 compared to 2030 to meet net zero, followed by Huntingdonshire with an 82% rise. Fenland is estimated to have the smallest growth in green jobs with a 50% rise by 2050 compared to 2030.

Source: LGA

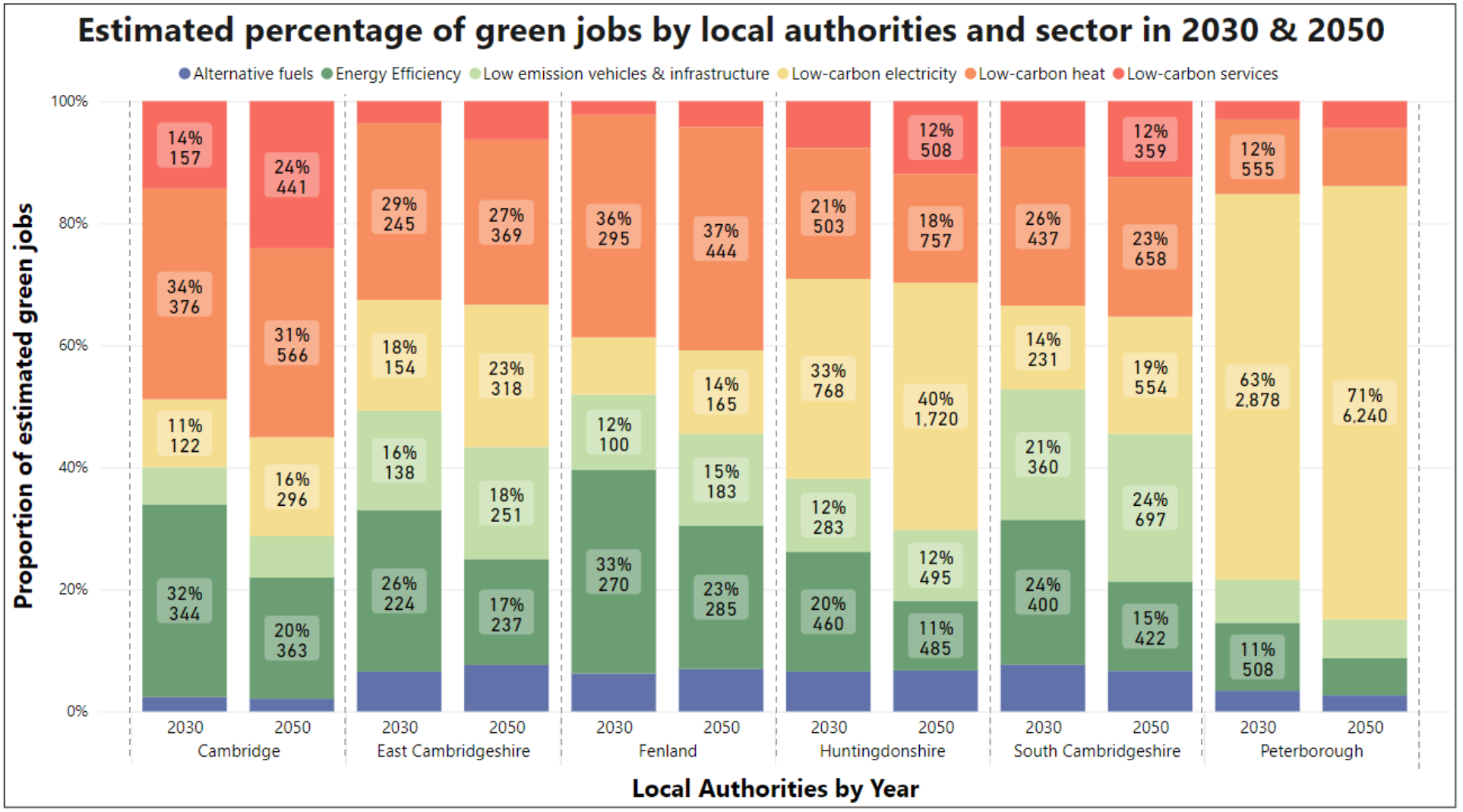
Required Green Jobs by Sector in Cambridgeshire and Peterborough



To achieve net-zero, Cambridgeshire and Peterborough are required to have 11,333 green jobs by 2030 and 20,322 by 2050. The majority of estimated green jobs are in 'Low-carbon electricity' sector (37% in 2030 and 46% in 2050), followed by 'Low-carbon heat' (21% in 2030 and 18% in 2050) and 'Energy Efficiency' (19% in 2030 and 11% in 2050) sectors.

Source: LGA

Required Green Jobs Growth by Sector and District

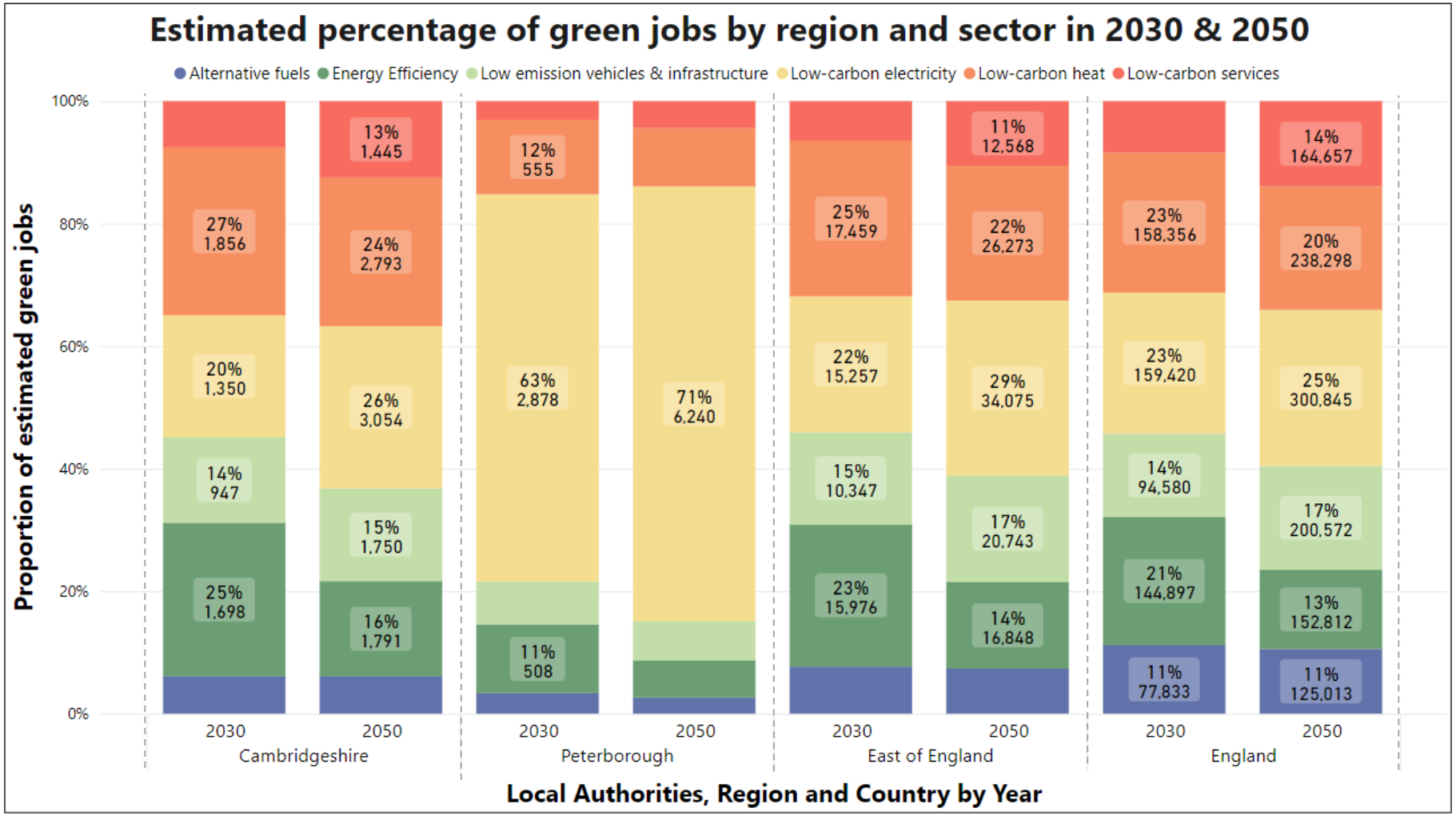


The largest growth proportionally is in the 'Low-carbon electricity' sector in Peterborough (+8 percentage points) and Huntingdonshire (+7 percentage points). Very little growth is expected in the 'Energy Efficiency' & 'Alternative fuels' sectors across all 6 districts.

Note: Sectors less than 10% are not labelled.

Source: LGA

Required Green Jobs in Cambridgeshire, Region and Country (2030 & 2050)



Cambridgeshire`s green jobs growth follows a similar pattern to the East of England and England. Notably, Peterborough stands out with a high proportion of estimated green jobs in the 'Low-carbon electricity' (71% in 2050) sector.

Note: Sectors less than 10% are not labelled.

Source: LGA

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