

Green Jobs in Scotland

An inclusive approach to definition,
measurement & analysis



University of Warwick's Institute for Employment Research, University of Strathclyde.
Commissioned by the Climate Emergency Skills Action Plan Implementation Steering Group

November 2022

Why we need to know

- Build a better understanding of future job and skills needs to better support Scotland's transition to net
- Drive awareness and action to support reskilling and upskilling.
- Lack of agreement on what makes a green job hampers policy development and evaluation




How do we define a green job?

This is an inclusive definition meaning one that takes into account the impact net zero goals will have on a broad range of jobs and skills across the wider labour market

In order to explore employment and demand for green jobs in Scotland, data from the Labour Force Survey was used along with web-based job vacancy data collected in real time.



The background is a solid green color. It features several overlapping circles of varying sizes and shades of green and white. The circles are scattered across the frame, with some partially cut off by the edges. The text is centered in the upper half of the image.

Green jobs in Scotland can be defined as either new and emerging, subject to significant changes in work and worker requirements or increasing in demand.

In Scotland, green jobs are defined, through the impact of green economic activities and technologies or 'greening', as:

New and emerging
the need for unique work and worker requirements, which results in the generation of new occupations.
e.g. energy plant operatives and engineering professionals



Enhanced skills and knowledge
essential purposes of the occupation remain the same but tasks, skills, knowledge and external elements, such as credentials, have been altered.
e.g. architects, plumbers and heating engineers



Increasing in demand
the work context may change but the tasks do not.
e.g. IT technicians and electricians.



The data



The definition uses the O*NET data to understand green skills and jobs.



SOC2020 4-digit level:
Standard Occupational Classifications UK, ONS, classifies people for statistical purposes according to their job.



Green jobs figures at the **upper limit** - **may be an over-estimate.**



SOC job definition - "a set of tasks or duties to be carried out by one person" according to the level and specialisation of skill.



Uses web-scraping vacancy data – only identifies **job vacancies advertised online**



But this data can continue to be refined, and this research is a huge step forward to what exists.

Green jobs by category

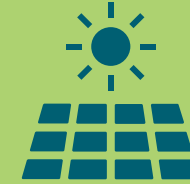


Of the 2.5 million jobs in Scotland:



New and Emerging

green jobs accounted for
4.3% of all jobs in Scotland;



Enhanced skills and Knowledge

green jobs accounted for 25.7% of all jobs in Scotland;



Increased Demand

green jobs accounted for 9.9%
of all jobs in Scotland.

Green jobs are on average, better paid. Median wages are higher in advertised green than non-green jobs. £29,673 vs £23,837.

Green jobs by industry



72.4% of New and Emerging green jobs are within green sectors. 48.2% are in **Engineering** and **Energy & Waste treatment**.



More Enhanced Skills and Knowledge green jobs in **Construction** (12.1%) and **Engineering** (9.0%) than other CESAP sectors.



Construction accounted for 24.5% of Increased Demand jobs, followed by **Transport** (14.7%).

Green jobs by occupation



Professional occupations have the highest proportion of green jobs (32.1%), followed by **Skilled trades Occupations** (19.6%)



Engineering occupations were dominant in new and emerging green jobs, **education and managerial occupations** were dominant in enhanced skills and knowledge, and **skilled trades** and **operatives** dominated increased demand green jobs.

Green jobs by Demographics



Men **72.2 %** Women **27.8%**.



Green jobs are most concentrated among **25 - 49** year olds (58.0%)

The vacancy data shows us:



Demand for green jobs is growing.



Green job vacancies accounted for almost **40% of all job vacancies** in Scotland, most of these will be people gaining new skills and knowledge in their current roles.



Real time vacancy data shows an upward trend in demand in all three categories of green jobs across all regions of Scotland.



- Demand for new and emerging green jobs is highest in Eastern Scotland at 47.3% and South West Scotland at 32%.
- All regions show similar patterns in terms of the proportions of jobs within each category.

How will this help us

- People making decisions on where investment goes to support skills, can use the data to better meet demands, and address inequalities.
- Significant new tool for policy development and evaluation. Huge step forward to what exists not just in the UK but internationally and is unique to Scotland.
- Supports a Just Transition as it can be used to track progress across demographics when it comes to green jobs. We now know more about where they are, who is getting them, and what they need for a role.



Thank you

