

Response summary: Defining and measuring green jobs

User engagement exercise
Environment Division
Office for National Statistics

November 2022



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Contact information

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Accessibility

This engagement exercise response can be provided in alternative formats upon request.

If you have any feedback about the way this engagement exercise has been conducted, please email external.affairs@ons.gov.uk

Introduction

This document summarises the responses received to the Office for National Statistics (ONS) 'defining and measuring green jobs' engagement exercise and sets out what action we plan to take as a result.

The engagement exercise ran for 8 weeks, from 11 August 2022 to 6 October 2022. It was designed to provide us with a better understanding of who is currently using green jobs data, statistics and analysis, the reasons for their interest, and how we can meet users' needs. The engagement exercise was conducted in line with the [Code of Practice for Official Statistics](#).

We thank everybody who shared their views by responding to the engagement exercise. This will help us develop a suite of experimental estimates and outputs that will help improve UK green jobs measures.

Background

We currently produce two sets of statistics related to green jobs: estimates of the [Environmental Goods and Services Sector](#) and the [Low Carbon and Renewable Energy Economy](#). Our work on both focuses on relevant industries and relevant activities within them.

The ONS realises the need for robust statistics on “green jobs”. However, there is currently no agreed definition of “green jobs” which can be used to produce official statistics. Various UK and international organisations use a range of definitions which we explored in our article, [The challenges of defining a “green job”](#) (April 2021).

The UK Government’s [Net Zero Strategy](#) (October 2021) states that “The Office for National Statistics will seek to refine our understanding and measurement of the green economy as the UK transitions to net zero, including looking at such issues as quality of work and diversity within the green economy.”

We have been funded by HM Treasury’s Economic Data Innovation Fund for a project on defining green jobs and producing statistical and analytical outputs. We have committed to providing:

- a user engagement exercise and an analysis of the responses
- a clear definition, or definitions, of green jobs
- experimental statistics measuring green jobs, using these definitions
- initial analytical outputs
- a forward work programme for ongoing green jobs statistics production

Following further research, we identified three broad approaches to measuring “green jobs”. These are:

- an industry-based approach, which includes all jobs in a “green” industry or sector, with such industries classified according to activities undertaken in them
- an occupation-based approach, which includes all jobs that are green based on the tasks undertaken by workers or objectives of their work, regardless of the industry those jobs are in
- a firm-based approach, which includes all jobs in a green firm, which could be classified based on firms’ environmental commitments, such as an emissions target and/or their trajectory of emissions

Through dialogue with stakeholders’ different expectations and needs emerged around the breakdowns for green job statistics, such as greater regional, job quality and demographic data.

To help target our work, our user engagement exercise covered three key areas:

1. current and/or expected future uses for green jobs estimates
2. preferred green jobs definitions and ways to frame them
3. which breakdowns of green jobs estimates would be most useful

Summary of Responses

Our engagement exercise ran for 8 weeks, from 11 August 2022 to 6 October 2022. The engagement exercise was promoted on social media and a number of meetings held with key stakeholders. A total of 107 responses were submitted.

Note: in the analysis below sometimes percentages do not sum to 100%, due to rounding or the small number of respondents who did not answer a particular question.

Questions about the respondent

1. Are you responding to this user engagement exercise in a personal or a professional capacity?

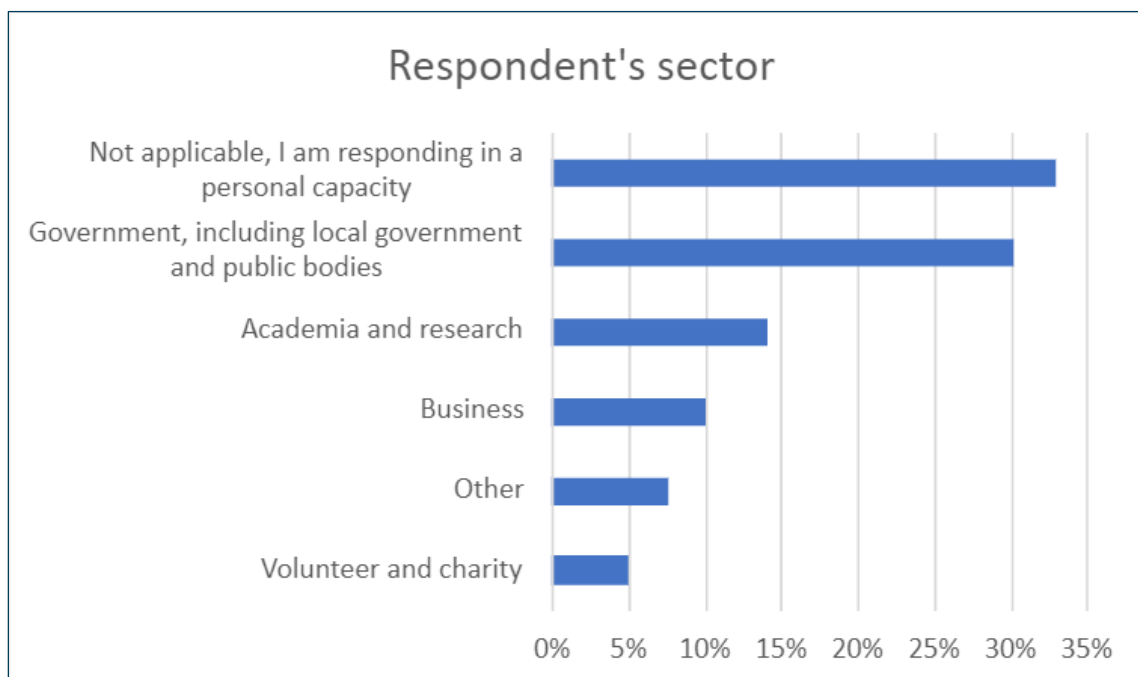
Two thirds (67%) were responding on a professional basis, and one third (33%) on a personal basis.

2. Are you responding to this user engagement exercise on behalf of an organisation or a group? (An informal group, such as a community or social media group)

Responses included individuals providing a personal view, individuals representing organisations and collective responses from organisations. Overall, 40% were responding for an organisation or group, and 60% were not.

3. If responding in a professional capacity, what sector do you work in?

The following chart shows the sectors of respondents.



Green jobs questions

1. What are your current and/or expected uses of green jobs estimates?

Respondents gave a range of reasons for their interest in green jobs and how they would use the statistics and data. Many uses were related to funding, growth and investment.

Other uses were linked to the transition to net zero greenhouse gas emissions, or wider environment themes – such as biodiversity and sustainability, wellbeing and/or health. Respondents making links to policy and to skills and local/regional needs were common.

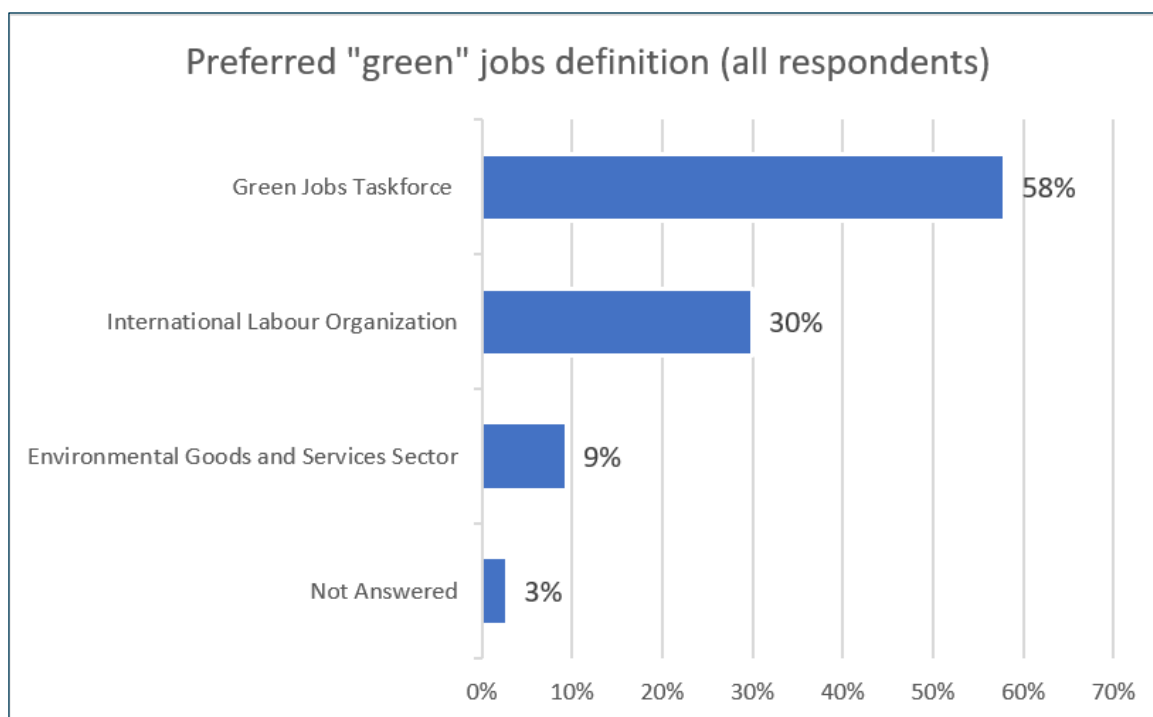
2. What is your interest in the topic?

Interest in the topic was also varied, but common answers aligned to those provided to question 1.

However, some respondents also commented on their wider interest in the environment (conservation, environmental protection, etc.), and the climate crisis was a clear concern for some.

3. There are multiple options for a definition of a green job. Three of these options are listed below. Which is most useful for you?

- Jobs in those “areas of the economy engaged in producing goods & services for environmental protection purposes, and those engaged in conserving & maintaining natural resources”. [[Environmental Goods and Services Sector](#), UN System of Environmental Economic Accounting.]
- “Employment in an activity that directly contributes to - or indirectly supports - the achievement of the UK’s net zero emissions target and other environmental goals, such as nature restoration and mitigation against climate risks.” [[Green Jobs Taskforce](#), convened by the Departments for Education and Business, Energy and Industrial Strategy.]
- “Decent jobs that contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency.” [[International Labour Organization](#)]



While the Green Jobs Taskforce definition was the most popular overall, there were slightly different outcomes for different sectors. Over half of those responding in a personal capacity scored the International Labour Organization definition highest (54%), while just under a quarter rated the Environmental Goods and Services Sector definition as top (23%). In contrast, Government and business respondents overwhelmingly favoured the Green Jobs Taskforce definition, 91% and 82% respectively.

4. If you have any second preference, or other details to share, these can be added in the text box.

While respondents highlighted the values and similarities of all three definitions, the International Labour Organization definition was the overall second preference.

Some respondents wanted to avoid a “vague” definition which may not be useful as a baseline to monitor progress. Some respondents noted that a definition needs to be accessible, avoiding too much jargon, and to be flexible to account for emerging or changing green jobs. The idea of developing sub-categories was raised.

The support for the Green Jobs Taskforce option came through again as a broader option which, according to one respondent, “seems to be encompassing of what a green job could include.”

Some advised against a narrow definition and expressed the view that nature and conservation should be explicitly included. Respondents highlighted that any definition should account for a “green” economic transition over time, encompassing wider

environmental jobs as well as those specifically related to net zero greenhouse gas emissions. Respondents also expressed interest in both direct and indirect jobs. Direct jobs can include those involved in the production or delivery of goods and services whereas indirect jobs support those outcomes, such as supply chains or transport services.

5. Do you use any of these definitions already?

Some 29% of respondents reported already using one or more of the three definitions included in the survey.

Again, it was clear that the Green Jobs Taskforce definition was the main definition used by respondents in their work on green jobs and skills, to align with national and local policy and strategies.

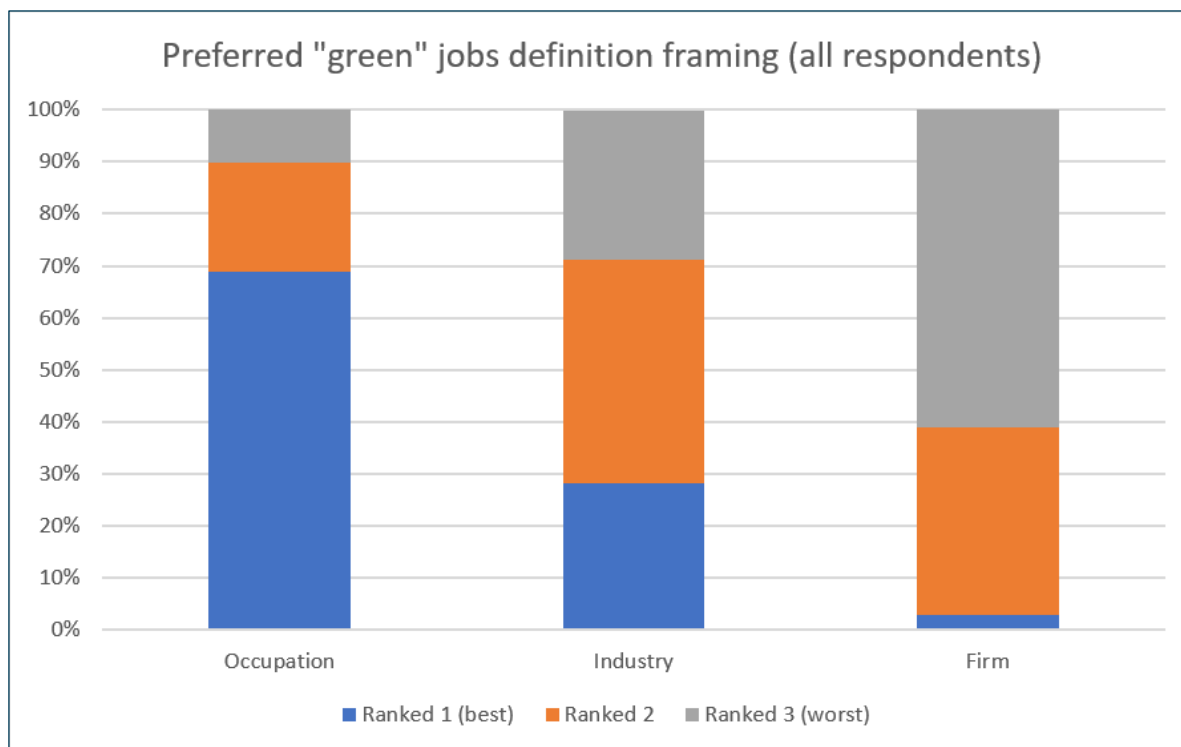
For those who confirmed they did not currently use one of these definitions, some referred to the difficulty in attaining useful measurements from them. For example, the lack of data sources aligning to these definitions was mentioned, including the issues of calculating occupations which might become classed as green jobs over time.

The notion of a “decent” job in the International Labour Organization definition was sometimes considered hard to define for statistical purposes. However, some respondents thought green jobs should be “decent” as well as having a positive environmental impact.

The fact that the ONS has started work to identify a definition of green jobs and develop associated statistics was supported by respondents. We also received feedback that the ONS Environmental Goods and Service Sector estimates, and Low Carbon and Renewable Energy Economy estimates, are already being used to provide metrics and targets associated to policy and strategy.

6. How would you rank these three ways of framing green job definitions and measurements? (1, most useful to 3, least useful)

- An industry-based approach, including all jobs in a green industry or sector.
- An occupation-based approach, including all jobs that are green.
- A firm-based approach, including all jobs in a green firm.



An occupation-based framing for a definition was chosen by 69% of respondents as their favoured approach. For those who used one or more of the listed approaches, it was evident an industry-based approach was also regarded as advantageous, with a firm-based approach the least favoured option. This was evident across all of the respondent sectors.

7. Do you use any of these three approaches or combinations of them?

Some 43% of respondents confirmed they use one or more of these approaches to framing green jobs. Where used, most confirmed either an industry or occupation framing, or a mix of both.

Estimates for jobs and turnover from the Low Carbon and Renewable Energy Economy sector, Environmental Goods and Services Sector and the United States O*NET (Occupational Information Network) approach were all mentioned.

Respondents illustrated the value of being inclusive regarding levels of employment, but warned many jobs are advertised as “green” may lack green credentials. The challenges around matching data to current [Standard Industrial Classification](#) codes and [Standard Occupational Classification](#) codes was also flagged as a major barrier to this work.

8. Do you use any other (not covered in the previous questions) ways to define, understand or measure green jobs already?

- If yes, what are they and how are they used?
- If no, why not? Please include links to relevant sources, if used, and more details.

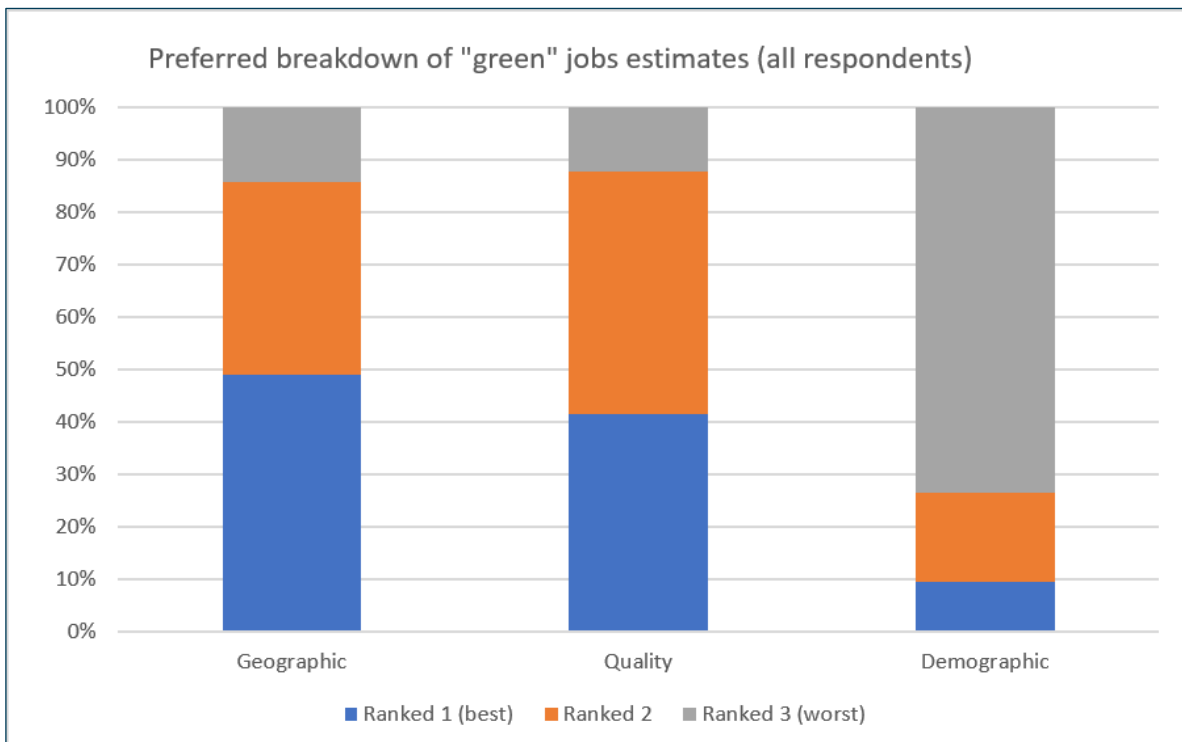
The majority of respondents (61%) reported they did not use other approaches or measures.

Various definitions and measurement suggestions were given, with many focusing on net zero emissions. Others signalled the need for improved statistics and data on jobs which focus on directly mitigating climate change or improving the natural environment and urban areas.

A number of users also said their work focuses on identifying the skills and qualifications required for green jobs. Occupational-based approaches to understand green jobs were favoured and web-scraping job adverts emerged as a common method for obtaining data. The European Skills, Competences, Qualifications and Occupations (ESCO) classification was also mentioned, along with the O*NET approach.

9. We expect to be able to provide estimates of green jobs by industry or sector. How would you rank these further breakdowns of green jobs estimates? (1, most useful to 3, least useful)

- Demographic (age, ethnicity, etc.)
- Geographic (country, region, local authority area, etc.)
- Quality (skills, salary, tenure, etc.)



Almost half of respondents (49%) ranked a geographic breakdown as the top priority for their requirement of green jobs statistics and data.

The lowest priority breakdown for the vast majority of respondents across all sectors picked was demographic. However, respondents generally confirmed the merits of all three breakdowns, the challenges of estimating breakdowns, and offered suggestions for additional breakdowns. Some respondents would like to see skills and educational attainment data, matched to green jobs.

There were slightly different views on the offered breakdowns among each of academic, business and government respondents, compared to the general trend. Respondents working in the academia sector and business sectors preferred job quality as the breakdown required with a 79% and 55% score respectively. The government sector clearly supported the need for a geographic breakdown (particularly regional and sub-regional) with 76% choosing that option.

Responses received from central government and local government respondents showed a similar pattern across the definition, framing and breakdown questions.

10. If there is another breakdown of the estimates that you are interested in, please specify below

Suggestions for breakdowns were wide ranging, highlighting the complexity of the subject area. We received multiple comments on training, qualifications or/and skills, including distribution, production, and green skills gaps.

Ideas for breakdowns included linking to natural capital accounting, biodiversity net gains, contributing to sustainable economic growth, carbon footprints, energy use and waste trends and health and wellbeing. Respondents would also be interested in further geographic breakdowns for many of these breakdowns.

Many respondents believed there could be policy, climate change mitigation and economic gains from increased attention to green jobs and environment-based data. However, some respondents said that choosing a breakdown from those offered was difficult or/and that they would all be useful. The challenges around matching data to current [Standard Industrial Classification](#) and [Standard Occupational Classification](#) codes, was again noted as a difficult task in the comments on this question.

Respondents would like to understand the comparisons between green jobs in contrast with what some termed “brown” jobs, and also in relation to the circular economy model of production and consumption. Others focused on the need for further work exploring green finance and investment data as well as innovation and technology.

11. We are constantly developing our environmental statistics and analysis. Are there any other environment-related topics or themes that are you interested in?

There were a range of answers given to this free text question. Common answers included:

- educational attainment / skills
- energy consumption / efficiency
- waste / recycling
- travel / transport
- biodiversity / conservation / nature
- growth / investment

12. Do you have any other comments about this survey?

In response to this question, we received numerous comments thanking the ONS for leading on this work and reiterated support to harmonise green jobs definitions and measurements across the UK.

Generally, there was extensive interest and support for greater granularity of data that could be used to assess green jobs and to track change.

Some respondents also discussed the need for international comparability, and for flexibility in our approach to align with emerging definitions.

There was also demand for the ONS to organise workshops to be organised for various types of audiences/organisations to help develop this work further, and additional requests to be kept informed about progress.

Our Actions

The purpose of this engagement exercise was to understand better the requirements for, and current use of, green jobs estimates as well as to determine an appropriate UK wide definition.

We welcome the positive support for our green jobs project, and we will continue to work towards publishing a definition by the end of the first quarter of 2023. This will be followed by experimental statistics in 2023, and longer-term and regular outputs.

The user feedback from this exercise has highlighted the complexity of developing an agreed definition for green jobs, particularly one that is useful to all types of user. Building on the feedback from this exercise and our existing expertise, we will continue to work with stakeholders to develop a definition. We will aim for this definition to be comprehensive and relevant, and for it to be able to be broken down to meet different user needs.

The occupation-based framing approach was preferred, although users confirmed the advantages of an industry approach and some currently use, or wish to use, both. As such we will continue to explore these options when developing our analysis plans.

We will aim to provide greater granularity of data wherever possible, noting the preferences of those responding to this engagement exercise and subject to the challenges in attaining relevant data. We will also explore the other suggested breakdowns, such as the demand for more information on qualifications and skills associated with green jobs.

As respondents have identified, a key challenge will be that some employment activity might meet one aspect of a definition, but not others or even be detrimental to them. For example, activity that contributes towards net zero emissions might do so while harming biodiversity. This highlights the need for us to take a flexible approach, with multiple breakdowns of statistics and data to meet varied needs.

Continued engagement with stakeholders and users will be crucial, to best understand requirements and allow us to develop a definition and sub-definitions that are useful. We are planning to hold a **workshop on 31 January 2023** that will discuss many of the issues raised by this survey.

The aims of the workshop will include:

- discussion of the wording of an overall definition
- exploring how any definition can be divided into sub-definitions, and which are most important
- defining the detail of what is covered within any broad definition
- identifying areas where stakeholders can work together to further develop this topic

If you would like to attend, please [get in touch](#).

We will also continue to provide updates on our work through publications of our [work plans](#).

Getting in Touch

We welcome any feedback on the results of this engagement exercise or our wider green jobs project. You can email at environment.accounts@ons.gov.uk

For further information on ONS consultations, please visit <https://www.ons.gov.uk/aboutus/whatwedo/statistics/consultationsandsurveys>

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