


## Futureproofing the workforce means we need a green jobs definition

At present, there is no set definition for a 'green job' in the UK even different government departments don't agree.

The Green Jobs Delivery Group, a cross-government and industry group chaired by the Minister for Energy Security and Net Zero, defines a 'green job' as the "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." While the Office for National Statistics (ONS) defines green jobs as "employment in an activity that contributes to protecting or restoring the environment, including those that mitigate or adapt to climate change."

While these definitions are broadly accurate, they fail to recognise the type of skills required or demonstrate examples of direct or indirect green jobs. This lack of clarity is making data collection particularly challenging and that, in turn, makes it difficult to accurately plan for future workforce needs. Without that skills planning, we will end up with continued labour shortages for jobs needed to help keep the UK safe from the impact of climate change. In our Overcoming Shortages report, we found that long-term labour and skills shortages could see the UK lose $£ 39$ billion every year in GDP. We can't afford to take that risk when it comes to the Net Zero transition. The health of the nation as
well as our economy depends on it.

The green economy represents a real growth opportunity, but only if we have the workforce to support it. For example, in 2019, the government's "Energy Innovation Needs Assessment" (EINA) identified 11 elements of the green economy that could support $£ 53$ billion
 of GVA and 500,000 jobs by 2050. These highlighted sectors like green energy, electric vehicles, construction and retrofit as presenting particular opportunities for growth. Similarly, according to Kmatrix, a data services company, the UK's Low Carbon and Environmental Goods and Services (LCEGS) sector was worth $£ 205.7$ billion to the UK's economy in 2020/21. With demand for such products and services only likely to grow - so will that figure - but only if we have the people with the right skills to do the jobs.


# How will a definition help us meet our 2030 targets? 

Without a clearer definition (even if imperfect), it is incredibly difficult to monitor the number of green jobs available now and in the future. It is also challenging to identify the skills needed to fill those roles, and implement and evaluate the impact of government policies and identify the most effective interventions still needed.

The Mission Zero Review, led by Rt Hon Chris Skidmore MP made 129 important recommendations. Of those, just three focused on skills but recognised the need for robust, regional jobs data to develop a much-needed Net Zero skills roadmap. The third recommendation focused on utilising existing skills provision and how those could be better targeted for Net Zero, for example, by increasing flexibility in the Apprenticeship Levy - something the REC has been calling for for years.

## Getting policies right is critical for economic growth.

> Too often, skills and labour market policies are developed without industry input, and this can lead to them having the opposite effect to the one they were designed with.
> One of our recruitment members runs an engineering firm based on the south coast. They are focused specifically on supporting businesses around green skills. When a previous administration said that there was going to be more government investment to incentivise use of heat pumps, the member was inundated with employers asking for heat pump engineers. At that time, there was no such thing as a heat pump engineer - instead you needed an electrician, a plumber and a labourer who was gas safety trained. Demand rocketed overnight, simply because of that announcement. The problem was we didn't have the supply to meet it. That's why working in collaboration with business and industry is so crucial, especially on Net Zero.

In addition, REC members tell us that worker expectation has changed substantially since the pandemic. Along with flexible working and non-financial perks like training and development, cultural fit is also more important. Many younger workers are now considering the social value of a business and how it aligns to their personal values when moving between employers. More than ever, taking action on things like Equality, Diversity and Inclusion (EDI) and Environmental, Social, and Governance (ESG) matter. More and more young people want to make a difference and work for companies genuinely doing the right thing. We should be utilising that desire and encouraging the next generation into green jobs and equipping them with the skills needed for those roles.

According to Plan International, only one in three young people aged 15 to 30 feel competent in the skills they believe are needed to do jobs that tackle climate change, with young women feeling less competent than young men. Providing clarity on what skills are needed will help and safeguard us against future skills shortages, but first we need to know what we're measuring.


## REC suggested green job definition

"Green jobs are those that work either directly or indirectly (at least 50\% of role involves green tasks) to reduce net carbon emissions and/or help protect the environment.

There are varying scales of green job, but to achieve Net Zero, every sector is likely to need to adopt new, increased, or enhanced skills relating to green. Direct green work, which often involves technical skills can include roles within the renewables, energy efficiency, and conservation sectors.

These are likely to require more enhanced green skills, as demand increases. Indirect roles often require more general skills and can include roles in the circular economy, which contribute to more sustainable practices.

These are likely to require new and emerging skills relating to green. There are also transitional roles, which are likely to require increased green skills as demand for renewable materials increases, while reliance on things like fossil fuels decrease. These include roles within construction, transport, and brown sectors, like oil and gas."


# REC data demonstrates scale of green transition 

Using metrics proposed by the Greater London Authority (GLA) in 2022, we have identified jobs which fall under three core green skills sets.


## Green increased skills

Including roles like construction operatives, carpenters and joiners, and insulation installers. These tend to categorise roles which aren't traditionally considered directly green but are likely to be impacted by the Net Zero transition, particularly as customers demand the use of more sustainable materials in their homes and workplaces and look for less carbon intensive ways to travel.


## 2

## Green enhanced skills

Including roles like plumbers and heating and ventilating engineers, electric vehicle technicians, mechanics and electricians, and renewable energy engineers. These tend to categorise roles which are already considered green but as demand increases, are likely to require further, enhanced green skills.

## 3 Green new and emerging skills

Covering occupations like management consultants and analysts, sustainability consultants, and green marketers. These categorise newer jobs or jobs that will come in the future, as a direct result of Net Zero.


Using these metrics, we've identified jobs relating to the three skills categories outlined and have calculated the change in demand between February 2020 and July 2023. The list below is not exhaustive. We have only included roles which have increased by $100 \%$ or more to demonstrate the increasing demand for green skills. However overall, demand for jobs within the green enhanced skills category has increased by 84.9\% between February 2020 and July 2023. For green increased skills, demand is up $81.4 \%$ in the same period, and for green new and emerging skills, it's 79.4\%.


The table below shows the range of roles that will be impacted by the green transition - everything from traditional green roles like heat pump engineers to transitional roles in construction and transport, to indirect roles like actuarial and financial. That's why when thinking about green jobs, it is important for policy makers to think about new and transitional roles, and not just traditionally green sectors like renewables.

| SOC2010 <br> Job Titles | Green skill <br> category | February <br> 2020 <br> postings | July <br> 2023 <br> postings | \% change <br> February <br> 2020 to <br> July 2023 |
| :--- | :--- | :--- | :--- | :--- |
| Construction and building trades <br> supervisors | Green increased skills | 1,031 | 3,903 | $278.6 \%$ |


| Forestry workers | Green enhanced skills | 206 | 614 |
| :--- | :--- | :--- | :--- |


| Production managers and <br> directors in manufacturing | Green increased skills | 8,232 | 22,870 | $177.8 \%$ |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Construction operatives | Green increased skills | 1,727 | 4,632 | $168.2 \%$ |


| Plumbers and heating and <br> ventilating engineers | Green increased skills | 2,842 | 7,384 | $159.8 \%$ |
| :--- | :--- | :---: | :---: | :---: |
| Rail construction and maintenance <br> operatives | Green increased skills | 134 | 346 | $158.2 \%$ |


| SOC2010 <br> Job Titles | Green skill category | February <br> 2020 <br> postings | July <br> 2023 <br> postings | \% change <br> February <br> 2020 to <br> July 2023 |
| :---: | :---: | :---: | :---: | :---: |
| Science, engineering and production technicians | Green increased skills | 11,947 | 29,843 | 149.8\% |
| Conservation professionals | Green new and emerging | 500 | 1,180 | 136.0\% |
| Horticultural trades | Green enhanced skills | 178 | 419 | 135.4\% |
| Engineering professionals | Green increased skills | 15,365 | 34,366 | 123.7\% |
| Waste disposal and environmental services managers | Green enhanced skills | 135 | 292 | 116.3\% |
| Vehicle technicians, mechanics and electricians | Green increased skills | 9,503 | 20,523 | 116.0\% |
| Air-conditioning and refrigeration engineers | Green enhanced skills | 465 | 968 | 108.2\% |
| Construction project managers and related professionals | Green increased skills | 4,784 | 9,825 | 105.4\% |
| Agricultural and fishing trades | Green enhanced skills | 210 | 430 | 104.8\% |




## REC policy recommendations

## Given the scale of change, and the unique opportunities

 we have in the UK, action is needed if we are to remain competitive, meet our Net Zero targets, and ensure we have a workforce that will help us meet our Net Zero targets. While businesses have a significant role to play, governments must also ensure the right policies are in place to catalyse investment and harness the opportunities that the green transition will bring.The creation of the Department for Energy Security \& Net Zero was a welcome step however too often, rhetoric around green commitments changes, creating uncertainty and hampering much needed private investment. That's why policy makers must work alongside business and industry when it comes to policy development for Net Zero.

Our recommendations to policymakers are as follows.


## 1 Introduce a clear green jobs definition, as suggested by the REC.

We have set out a clear rationale for why we need to start with an agreed green job definition.

However, as highlighted in our annex, there are already multiple definitions in use by different organisations, so agreeing one, which will enable us to accurately track green skills needs is vital.

Importantly, the definition needs to be broad enough to work for different organisations, but also recognise the complexity and varying scales of green jobs. We believe our definition does this, but to get buy in from others, the definition should be tested with the Green Jobs Delivery Group, adopted and recommended by the Department for Energy Security \& Net Zero along with others.

## 2 Create a green workforce strategy, as part of an industrial strategy.

As suggested in our Overcoming Shortages report, government should commission a long-term plan for putting people at the heart of growth. The strategy could be 'owned' by the Cabinet Office or an independent commission, but there must be representation from relevant departments, business, and industry, including recruiters. Recruiters act as partners for their clients - businesses - advising on labour market trends, candidate expectations, retention, policies, and more.

The Future Workforce Strategy group should produce and present annual reports to Parliament. The reports should track regional green skills needs, identify challenges, and present

The
Future Workforce Strategy group should produce and present annual reports to Parliament. recommendations to address them. Departments involved in the group should have some spend ringfenced for projects and schemes which promote green skills - progress should be shared with the Future Workforce Strategy group and fed into the reports. The strategy should also include devolved participation, ensuring each part of the UK is working towards the same goals on Net Zero, sharing best practice, and identifying opportunities or challenges.

## 3 <br> Empower local authorities and regional mayoralties to deliver local green skills plans.

Those involved in the Future Workforce Strategy group should engage with, and empower, local authorities and regional mayoralties to deliver local skills plans that are relevant for the local environment and labour market. Given the diversity of the UK, there are likely to be quite stark differences between the green skills needed in Cornwall versus the skills needed near the North Sea.

Recognising the need for and importance of this local intelligence will support long-term workforce planning across the UK, ensuring green jobs aren't just focused on the South East, for example. These partnerships should involve local businesses, including recruiters, industry, education and training representatives. As suggested in the Skidmore Review, these groups should share annual, regionally relevant jobs data with the Future Workforce Strategy group.
...there are likely
to be quite stark
differences between the green skills needed in Cornwall versus the skills needed near the North Sea.

## 4 <br> Offer subsidies to encourage more people to undertake green training and incentivise businesses to invest in green skills.

As set out in our Overcoming Shortages report, labour and skills shortages result in higher inflation and lower investment. A recent report by Nesta highlighted the growing appetite for undertaking green training courses, but one of the biggest barriers is a lack of financial help. Offering a wider range of subsidised training courses, as is currently on offer for heat pump engineers, would help. Although some cost is involved, the return on investment is greater. For example, government is offering $£ 7,500$ for every heat pump installed in England and Wales, but the subsidy for training is just $£ 500$ - and each of those trained engineers could go on to install a significant number of heat pumps across the country.

Offering loans, through Student Finance or another body, might also be an option, but more green training courses are needed first - there's no point in offering loans if there aren't courses for people to complete - this is where LSIPs and the Future Workforce Strategy group can play a role. Incentivising business by flexing the Apprenticeship Levy to cover shorter training courses and ringfence some funding for green courses is important.


## 5 Commit to labour market activation schemes to boost participation in green jobs.

Schemes like Kickstart and Restart should be used to promote the uptake of green skills training or jobs that will be needed to meet our net zero targets, including roles in retrofit, renewables, and the electric vehicle sector. Previously, just 1\% of roles within Kickstart jobs were in green sectors. There's a real opportunity to ensure that green jobs and skills are embedded in these programmes from the outset.

The REC is working in partnership with Maximus, experts in employability services, to deliver the government's Restart scheme and since the partnership began, thousands of workers have been placed in great jobs, including in roles like retrofit and energy efficiency. More could be done to leverage these schemes to fill roles to help meet our 2030 net zero aims.


## 6 Work with industry to streamline standards, helping people transition more easily.

According to PwC, there are currently around 270,000 workers in the oil and gas sector who can transfer their skills towards delivering net zero. However, around 20\% are expected to retire by 2030, leaving only 216,000 transferable workers to help plug the 400,000 jobs needed to build the new energy workforce across areas such as nuclear, hydrogen and renewables. To enable people to move between sectors, better alignment of the technical and safety standards is needed.

Currently, transitional opportunities between the offshore energy sector are fragmented and complicated. This results in workers regularly having to repeat training when transitioning between sectors, incurring substantial financial costs - often at personal expense - creating duplication and taking people out of the workforce while training is completed. In addition, as new roles emerge, new skills will be needed. This mapping process is something that should be undertaken and regularly reviewed as part of any Future Workforce Strategy to ensure that new skills requirements are widely known, and appropriate training opportunities provided to ensure a smooth transition.

## 7 Improve careers advice, ensuring that careers advisors have a good understanding of the range of green job opportunities.

We know that younger people in particular want to work in jobs that have a positive impact on the environment, but far too many don't know what subjects to study or training to pursue. A new occupational standard should be developed, and built into the Gatsby Benchmarks, for careers advisors, teachers, and training providers so that they can give young people the information needed to ensure that every young person receives high-quality careers information related to green jobs.



## Conclusion

## The US Inflation Reduction Act has turbo-charged the race for green investment, with Canada, the EU and others following suit. If we get our approach right, it could make the UK a more competitive place for green investment and growth, but we have to act now.

A clear green job definition is needed, utilising local jobs data is needed, and incentivising people to invest in green training is needed - all of this needs to sit within a robust, long-term green Industrial Strategy. Green has so much economic potential, but to stimulate much needed private investment, businesses need a clear signal that governments are serious about Net Zero.

As demonstrated throughout, demand is increasing, more and more people are interested in gaining green skills, and businesses are ready to do their bit, but clear, joined up leadership from government must lead the charge.

## Annex

## Other green job definitions

Department for Work and Pensions "Green jobs are roles that contribute to preserving or restoring the environment and our planet. You could be working in a traditional sector such as manufacturing or construction, or in a new, emerging green industry such as renewable energy and energy efficiency."

Department for Education "Green jobs focus on restoring the natural environment - whether that be in companies that create green goods like electric vehicles or companies that work to reduce the use of natural resources and produce clean energy."

The United Nations System of Environmental Economic Accounting defines the "Environmental Goods and Services Sector" (EGSS) as - "areas of the economy engaged in producing goods and services for environmental protection purposes, as well as those engaged in conserving and maintaining natural resources."

The International Labour Organization (ILO) "green jobs reduce the consumption of energy and raw materials, limit greenhouse gas emissions, minimize waste and pollution, protect and restore ecosystems and enable enterprises and communities to adapt to climate change."

United Nations Environment Programme (UNEP) "positions in agriculture, manufacturing, R\&D, administrative, and service activities aimed at substantially preserving or restoring environmental quality."

PwC "roles that seek to either produce or provide environmentally friendly products and services or adapt work processes to become more environmentally friendly or use fewer natural resources. This definition acknowledges roles that support the green economy indirectly, such as environmental advisers or experts in environmental education."

Recruitment
\& Employment
Confederation

The Recruitment \& Employment Confederation is the voice of the recruitment industry, speaking up for great recruiters. We drive standards and empower UK recruitment businesses to build better futures for their candidates and themselves. We are champions of an industry which is fundamental to the strength of the UK economy.

Find out more about the REC at www.rec.uk.com

20 Queen Elizabeth Street London
SE1 2LS

02070092100
info@rec.uk.com @RECmembers www.rec.uk.com

Registered in England
company registered
no.: 3895053

