IEMA Written Submission
Environmental Audit Committee Inquiry into Green Jobs
January 2021

About IEMA

1. IEMA is the professional body for those people working in environmental management, impact assessment and sustainability roles. IEMA’s growing membership of over 16,500 professionals work at the interface between organisations, the environment and society to create long-term value and minimise risks. They guide and lead the changes that will be required for a sustainable future and will play an important role in implementing the UK’s climate and environmental goals.

2. We work with a range of corporate partners (over 200) that are actively working to enhance skills and capabilities within their organisations, using the IEMA Sustainability Skills Map, to enable them to play their part in the transition to a sustainable economy. This workforce development is crucial in helping them to drive positive change and unlock the opportunities of a greener future.

3. Our response draws on IEMA’s success to date of working to deliver low carbon, resource efficiency and environmental skills into the economy. We work with over 85 approved training course providers and 70 University programmes that are training thousands of people each year – not just here in the UK but in over 50 countries around the world.

4. Our professional qualifications are well regarded by employers across all sectors of the economy, regularly being cited as a requirement/desirable for people being employed in “green” roles. This provides a sound platform on which to mainstream a national green jobs and skills strategy.

Summary - key ingredients for a “Green Jobs and Skills Strategy”

5. This submission puts forward the case for the development of a “Green Jobs and Skills Strategy” to enable the UK’s economy to transition to an environmentally sustainable model of operation over the long-term. For the strategy to succeed there are key ingredients that it must include.

   a. We need a national “Green Jobs and Skills Strategy” to embed climate change and environmental protection & improvement across the whole education, training, and life-long learning system.

   b. The Strategy must be underpinned by ambitious, long-term environment & climate policies that give businesses the certainty to invest in improvements and which lead to new green jobs and employment opportunities.

   c. All new green policies, strategies and laws must be accompanied by an explicit consideration of the skills needed for effective implementation and a green skills plan setting out how any ‘skills gaps’ will be addressed.
d. The Strategy must ensure that all parts of society have access to the emerging green jobs and skills opportunities – tackling diversity and inclusion must be an integral part of the agenda.

e. In defining “green jobs” it is essential to recognise that, in addition to jobs in new and growing sectors (e.g. renewable energy, low carbon heating) many of the green jobs will be in the mainstream economy and are key to driving energy and resource efficiency, sustainable procurement, eco-design, pollution control and environmental improvements in all organisations.

f. The Strategy must include a mainstreaming strand...“all jobs greener”....such that all parts of the existing and future workforce are equipped to play their role – including by weaving green competences through the majority, if not all, apprenticeship standards.

g. Given the long-term nature of the challenge, the need to take a strategic approach across education and skills, business and energy, environment and economic policy, and failures to past green jobs initiatives, a new Green Jobs and Skills Commission or similar body should be established and mandated to take forward the strategy.

Overview - Challenges that a “Green Jobs and Skills Strategy” must address

6. IEMA is supportive of the Government’s overall intention to create 2 million green jobs by 2030 and welcomes the Committee’s inquiry into i) how this can help tackle unemployment arising from the COVID-19 pandemic, and ii) the skills and training needs to achieve the UK’s long-term climate and environmental goals.

7. The transition to net zero emissions by 2050, while at the same time restoring the UK’s natural environment, tackling the plastics crisis and developing resilience to climate change, will require significant change across the whole of society and the economy. All organisations, across all sectors, will need to play their part; this must include investing in human capital (the existing and future workforce) to enhance knowledge, understanding, competence and skills so that everyone can play their part and take advantage of the opportunities.

8. There is an underlying presumption in the narrative on “Green Jobs”, including in the Government’s Green Jobs Taskforce, that focuses on dealing with the skills/roles needed to deploy new low carbon infrastructure and technology (e.g. offshore wind, electric vehicles, heat pumps) and ensure a “just transition” in sectors/communities which will be most affected (e.g. oil and gas, steel). These are clearly very important, but the reality is more complex as many “Green Jobs” are (and will be) in existing businesses which are not in the new low carbon sectors, nor in those with the most significant transition challenges; the “Green Jobs” in the mainstream economy are key in driving energy/resource efficiency, sustainable procurement, eco-design, pollution control and corporate net zero transitions. Mainstreaming and integration is critical, for example: we need all engineering and product designers to integrate climate and environmental considerations into all their work, not just designs specifically relating to low carbon technologies; all procurement activity should apply sustainability principles, not just the procurement of green technologies. We also see
effective engagement through “Green Champion” networks in a growing number of IEMA corporate partners, where hundreds of employees are engaged in supporting the overall delivery of organisational environment and climate targets.

9. IEMA believes that a national “Green Jobs and Skills Strategy” is required to embed climate change and environmental protection & improvement across the whole education, training, and life-long learning system. A pre-requisite underpinning the skills strategy is that Government must be committed to, and maintain over the long-term, ambitious environment and climate policies and the actions needed to implement them. This is essential as the investment and time needed to address the skills gap needs to be sustained over many years and the benefits to businesses and the economy can take many years to be fully realised. It is also crucial that there is sufficient focus on re-skilling and up-skilling the existing workforce, given that 80% of the 2030 workforce are already in the workforce today (Industrial Strategy Council (2019) UK Skills Mismatch in 2030 – research paper).

10. Along with the key ingredients for a “Green Jobs and Skills Strategy” outlined in the summary of this submission, IEMA believes that there are six important challenges that must be addressed to succeed:

a. It is important to distinguish between education, skills, jobs and careers and for action to be coordinated across all of these if we are to develop the current and future workforce to tackle the sustainability challenge. This is important as, for example, career choices are shaped and potentially limited by routes through the education system, which in turn are often influenced by parental perceptions. There is little point in inspiring a generation of people into certain careers if their GCSE/BTech/A-level choices preclude them from certain job roles. This requires joined up, coordinated action.

b. The sustainability profession and broader environment sector is one of the least diverse. In its 2017 report “Two sides of Diversity - Which are the most ethnically diverse occupations?”, Policy Exchange identified the Environment Profession as the second least diverse in the UK out of 202 professions. A year later, in 2018, research undertaken by SOS-UK, IEMA and The Equalities Trust showed that only 3.1% of environment professionals identify as minorities. Given a rapidly changing, more urban and more mixed-race population, it is imperative that the profession and wider sector changes and adapts. If it does not, there is a danger that it will become irrelevant, and unworthy of support from the communities it seeks to work in partnership with on the transition to a net-zero and sustainable future. In response, IEMA has established the Diverse Sustainability Initiative, a collaborative programme of work, with a wide range of participating organisations, with the vision to transform diversity and inclusion within the sustainability profession and across the environmental sector. The purpose of this initiative is to enhance diversity through education, connection, and transparency to support current professionals and increase appeal and access for future professionals and those engaged in the sector.

c. The definition of “Green Jobs” is incredibly broad and includes ecologists, solar panel installers, environmental managers, electric vehicle charging point installers, natural capital
economists….the list goes on. There is therefore a need to understand in granular detail the type of job, the skills and technical knowledge that are needed, the number of jobs and when they will be required, to effectively plan to address any shortfalls in a meaningful way.

d. Many environment and sustainability jobs require higher education, this is reflected in IEMA’s membership where over 85% of members are graduates and over 50% post-graduates (Masters or PhD). Given that social and cultural heritage backgrounds are determinants in people entering higher education, this can perpetuate a non-representative segment within the “Green Jobs” workforce.

e. The recently approved Environmental Practitioner Degree Apprenticeship ([level 6](#)) and the Sustainability Business Specialist (integrated masters degree) apprenticeship ([level 7](#)) offer opportunities to open up “Green Jobs” to a more diverse group of people, given the significant Apprenticeship Levy funding that can be used to cover education costs. However, there is a lack of coordination and promotion to ensure the supply of relevant university programmes and apprentices being taken on, beyond the initial trailblazer groups.

f. To really drive the integration of net-zero and environmental thinking into the economy, it is essential that these factors are woven into all skills and learning initiatives in a systematic way. For example: there needs to be a coordinated approach to including them in the knowledge, behaviours and duties specified in all occupational standards; teachers should be provided with tools and resources to effectively integrate climate change into all relevant parts of the curriculum.

11. The challenge of developing the skills and capabilities in the UK workforce to meet our climate and environmental ambitions is not new; indeed, IEMA gave evidence before the Committee in 2009 on this topic. We believe that a key reason that past initiatives have failed is that no single body has been tasked with responsibility for co-ordinating delivery. Given the long-term nature of the challenge, the need to take a strategic approach across education and skills, business and energy, environment and economic policy, a new Green Jobs and Skills Commission or similar body should be established and mandated to take forward the strategy.

IEMA responses to inquiry questions

In preparing this response we not addressed all of the questions.

Q1. What estimates are there for the jobs required to meet the pathway to net zero emissions, by sector, and other environmental and biodiversity commitments?

12. IEMA is not aware of a systematic approach to quantifying the number and type of jobs needed, by sector, to meet all of the UK’s climate and environmental commitments across all sectors (including the public sector) in the economy. Data is available for some sectors, for example National Grid published its analysis ‘The job that can’t wait’ in 2019, which identifies a deficit of 400,000 jobs in the energy sector in terms of what is required to achieve the 2050 net-zero emissions target.
Q2. Does the UK workforce have the skills and capacity needed to deliver the green jobs required to meet our net zero target and other environmental ambitions (including in the 25-year environment plan)?

13. No. As noted above, National Grid identified a deficit of 400,000 jobs in the energy sector in terms of what is required to achieve the 2050 net-zero emissions target, recognising that “At the start of this crucial decade, a retirement crunch, competition for talent, a shortfall in the skills pipeline and a lack of diversity threaten our ability to build the workforce we need”. From this perspective there is a significant amount of work to be done in the green jobs/skills space to ensure that the sector can play its part in the transition to net-zero. In addition, there is also an acute challenge in bringing through a pipeline of hydrogen professionals as the gas transmission grid is adapted to carry hydrogen for heating in the future.

14. Another example provided to IEMA in support of our response to this inquiry highlighted that, in relation to energy efficiency and improving the performance of building stock, there is an absence across the skills spectrum to deliver on the new Green Homes Grant (GHG). This is similar to its predecessor scheme the Green Deal, which failed partially due to a lack of installers and the associated bureaucracy of registering to become approved.

15. We have also received reports from a major infrastructure organisation of a lack of capability and capacity to meet existing/emerging ecology and biodiversity requirements, especially in the context of biodiversity net gain; there are not enough trained, competent ecologists to do all the surveys, calculations and provide relevant in-house support and framework ecology contractors are struggling to recruit enough people to meet demand. This is a particular concern given the enhanced biodiversity and nature requirements in the Environment Bill, including:

a. biodiversity net gain for new developments
b. the establishment of a biodiversity credit system
c. the establishment of Local Nature Recovery Strategies (including preparing local habitat maps covering the whole of England together with statements on biodiversity priorities)
d. a broader public authority duty to enhance biodiversity in their areas
e. for them to publish biodiversity reports at least every 3 years.

16. For other important mechanisms in the Environment Bill which will support the UK’s circular economy ambition, including setting a national resource productivity target, the product resource efficiency requirements in Schedules 6 and 7 of the Bill, extended producer responsibility and the separation of domestic waste into individual waste streams, we are not clear that a forward-looking skills and jobs evaluation has been undertaken to ensure the capacity and capability is in place to effectively implement them and achieve the desired outcomes.

Q3. What needs to be done to ensure that these skills and capacity are developed in time to meet our environmental targets?

17. We have set out earlier in this submission the need for a national “Green Jobs and Skills Strategy”, some of the key challenges that need to be addressed, and a need for a new Green Jobs and Skills Commission or similar body to drive its implementation across government and the economy. It is
vital that a single body is given clear powers to ensure implementation and delivery; in our view, the absence of a body with a single focus to drive this agenda has been why previous green jobs/skills initiatives have not achieved their potential.

18. Long-term policy signals from Government are essential to provide the market with confidence to invest in specific technologies and the associated skills necessary for their deployment e.g. hydrogen for heat. There is a need for continued reinforcement of STEM subjects as attractive choices in schools and universities, to ensure that the UK’s educational institutions are producing what the future energy jobs market requires.

19. We believe that there is a need for sectors to develop comprehensive roadmaps to meet all the long-term climate and environmental goals (we have concerns that some sector plans focus solely on net zero, missing other aspects of the environment), and to evaluate the skills and capacity needed to meet these. It is important that these plans are holistic and that the skills needs are developed in parallel and at an appropriate level of granularity.

20. This approach will help to identify where new roles/jobs are required, and where additional knowledge/understanding needs to be integrated into existing roles. For example, in large scale construction and delivery organisations designers, procurement professionals, buyers and senior managers are critical to driving the improvements that are needed and therefore there is a need to incorporate sustainability as a key component of these functions and to train and support them to be effective.

21. We welcome the recent Cabinet Office Procurement Policy Note (PPN 06/20) “Taking Account of Social Value in the Award of Central Government Contracts” which awards a 10% minimum weighting for social value. Additional guidance should be provided to encourage project bids to make the connections between green skills development, apprenticeships, tackling diversity and inclusion and environmental stewardship/net zero transition.

22. To really drive the integration of net-zero and environmental thinking into the economy, it is essential that these factors are woven into all skills and learning initiatives in a systematic way. For example: there needs to be a coordinated approach to including them in the knowledge, behaviours and duties specified in all occupational standards which are linked to apprenticeships, with core modules to support learning and skills development made readily available rather than being developed from scratch for each apprenticeship.

Q4. What measures should the Government take to ensure that its proposals to meet environmental targets do not by default lead to jobs in affected industries being exported?

23. We have not answered this question.

5. What risks are there to meeting the Government’s ambitions for green job creation in both the public and private sectors? What should the Government do to create the conditions to ensure its commitments are met by both sectors?

24. We are concerned at the short amount of time for the Government’s Green Jobs Taskforce to report and complete its work (December 2020 to April 2021) and that it will not be possible to fully address the skills needs, in a sufficiently granular way, to develop “An actionable skills plan for
government, industry and the skills sector to deliver green jobs, while supporting a green economic recovery and an effective transition to net zero by 2050” (Green Jobs Taskforce terms of reference).

25. We are also concerned that a crowded and dynamic policy landscape to tackle the climate and environmental emergency, including the roll out of government policies and legislation (and enabling regulation) through the Environment Bill, forthcoming Energy Bill, the next version of Clean Growth plan aligned to the 6th carbon budget, and the requirements of the Environmental Land Management Scheme in the Agriculture Act, will mean that the full implications for skills/jobs development will not be fully reflected in a single plan at a fixed point of time.

26. Furthermore, we are not confident that publishing the plan in April 2021 and expecting it to be delivered across the range of educational institutions, sector skills councils, industry bodies without a body with a single focus on implementation, will be successful.

27. We believe this increases the possibility that the ambitions will not be realised in the most effective way.

Q6. Are the Government’s ambitions for green job creation in the public and private sectors sufficient for the scale of the challenges? What changes should be made?

28. As noted in our overview, we believe there is a need to embed climate change and environmental protection & improvement across the whole education, training, and life-long learning system. ‘Green Jobs’ in the mainstream economy are key in driving energy/resource efficiency, sustainable procurement, eco-design, pollution control and corporate net zero transitions. This mainstreaming and integration is critical and should form a core part of the Government’s green job ambitions.

Q7. How can the UK ensure jobs are created in areas most impacted by the transition to a low-carbon economy?

29. This is a significant challenge that requires focused and urgent attention. There needs to be a very clear understanding of places and communities at greatest risk from the transition and a coherent set of plans and investments to create the conditions for future economic success. Investment also needs to be targeted at the most difficult to abate sectors (e.g. gas for heat) so that great swathes of the energy workforce are not left behind in the transition to net-zero emissions. This can best be achieved by putting in place clear sector transition strategies across the economy for the role that each must play in contributing to net-zero, which will then drive the corresponding identification of green jobs/skills needs.

30. The finance sector will also have an important role to play in the pace of the transition; there is the potential with the introduction of “green taxonomies” for investment (UK and EU) and enhanced disclosure of climate risks and opportunities (e.g. Task Force on Climate Related Financial Disclosure), of significant divestment; there needs to be strong alignment between sector net-zero transition plans and private sector investment plans.

Q8. What additional interventions should be undertaken to aid in a ‘just transition’?

31. We have not answered this question.
Q9. What impact can green jobs have on the wider UK economy?

32. As outlined in our overview, green jobs are an integral part of the whole UK economy and not solely related to jobs in the low carbon environmental goods and services sector.

33. We believe that taking an integrated, holistic approach to embedding climate change and sustainability through workforce development programmes...“all jobs greener”...support the achievement of our UK-environmental goals and enhances productivity and competitiveness.

10. What contribution can green jobs make to the UK’s economic recovery from Covid-19?

34. There are some specific areas where green jobs might make a direct and short-term contribution to the recovery from Covid-19, for example in the commitment to planting 30,000ha of woodland by 2025, or improving home energy through the Green Homes Grant. Government should also look to accelerate key aspects of its National Infrastructure Strategy which are directly aligned to enhancing resilience, e.g. flood resilience.

35. A critical aspect is for Government to continue to drive forward with its long-term commitments to net-zero emissions and enhancing the environment over a generation and not to deviate from this path. This is a necessary condition and signal to businesses across all parts of the economy that this is the way that business will be done in the future, helping to ensure that this is an active consideration as businesses develop their own plans and investments.

Q11. How can the UK ensure high emissions are not locked-in when tackling unemployment?

36. We believe it is a false choice to tackle unemployment through support for high-emission sectors which do not have credible roadmaps to transition to a net zero future. The urgency of tackling climate change and the scale of the transition challenge offer many opportunities for good quality, durable jobs — actions to tackle unemployment must be focussed on the jobs of the future.