



IET skills for net zero and a green recovery

Examining the engineering skills needed to meet net zero.

The Institution of Engineering and Technology (IET) carries out an annual skills survey of engineering employers in the UK. In 2020 we focused on the skills requirements for delivering the UK Government's net-zero target by 2050, the subsequent impacts of COVID-19 on engineering employers, difficulties in recruiting engineers, and employer perceptions of the engineering skills gap.

This flyer presents the key facts, themes and recommendations from the full survey.

Key facts and findings

Business views on climate change

employers see
national governments
as having the most
responsibility to
tackle climate change,
followed by
business
and industry.

A small majority believe net zero by 2050 is **achievable for their business**, but employers are **less assured** of the UK's overall success.

Achievable for own organisation



for UK **37%**

Achievable

Strategies to achieve sustainability



Half of engineering employers have a sustainability strategy.

Reaching sustainability: the future



Flexible working is the most **common area** of organisational change to lower environmental impacts.

28% will improve flexible working arrangements.

27% will introduce

The business context

Twelve months ago, the top priority was increasing profitability (50%). This priority is also expected in twelve months' time (57%).

Current workforce needs

of engineering employers report currently having difficulties with the skills available to them through recruitment and their internal workforce (46%) ...however, in five years' time, smaller proportions expect to have difficulty with external recruitment (38%) or internal skills gaps (34%).

Top reasons for not being able to effectively address skills gaps:



Recruitment difficulties



Key recommendations

Industry, government and academia need to collaborate to identify the essential skills required to deliver net-zero targets and provide a workforce that's fit for purpose. Based on the results of this survey, we have highlighted the following key action areas:

Education:

1. Collaborate to improve work-readiness of new recruits.

Industry and educators, including universities, further education (FE) colleges and schools, should work together to improve work-readiness and equip young people with the skills needed to tackle complex multidisciplinary activities.

2. Improve the understanding of the net-zero challenge.

Industry and educators should work together to ensure that young people have a good understanding of the importance of sustainability and the issues around it.

3. Provide meaningful and valuable work experience.

Industry and educators should strive to offer hands-on work experience and placements wherever possible.

4. Encourage greater opportunities in small and medium-sized enterprises (SMEs).

Government and large corporates should help SMEs to provide work experience and placements.



Government and policy:

5. Promote a green post-pandemic recovery.

Industry, government and academia need to collaborate to identify the essential skills required to deliver net-zero targets and provide a workforce that's fit for purpose.

6. Provide certainty by long-term planning.

It's essential that government provides long-term planning and guarantees investment in these skills through future governments.

7. Support innovation and drive down costs.

Government, industry and academia must continue to support innovation to provide improvements in efficiency and cost.

Skills:

8. Build a more flexible and agile workforce.

To effectively innovate and deliver in increasingly complex systems.

Ensure vital specialist skills aren't overlooked.

Industry should work more closely with schools, colleges and universities to address future needs.

10. Communicate the importance of engineering skills that address climate change.

General public must be engaged and support the skills needed to achieve net zero.

For further information and to read our full survey, visit theiet.org/skills