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FUTURES

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Reskilling for net zero

Emily Jones, November 2022

Summary

The UK's transition to a net-zero economy will bring a major shift in the labour market, requiring the existing workforce to upskill and reskill as they adapt to industrial and occupational changes. In addition to actions by Government and business to reduce carbon emissions, individuals are changing their behaviour and use of energy.

People are facing real challenges with the cost of living and energy bills. However, our survey suggests that up to one half of people are not confident about how they could install renewable energy or improve insulation, with poorer households least likely to be confident to do so. This shows the value that a public information campaign could provide.

Our survey indicates that awareness and understanding of green skills and jobs is low, although nearly three in ten adults say they feel inspired to develop green skills to help progress their career. The research highlights that some groups are less likely to say they are aware of green skills and therefore less able to take up opportunities, with inequalities by gender, age and social class.

Context

The UK Government has committed to achieve net-zero carbon emissions by 2050. This will bring a major shift in the labour market – with changes to existing jobs, the creation of new ones, and the growth of jobs already considered to be 'green'. The existing workforce will need to adapt through upskilling and reskilling, facilitated by the further education and skills system as well as on-the-job training. This will come alongside other ongoing changes to our economy and labour market, which will continue to affect the jobs available and skills required, as well as demographics, meaning people will experience more of these changes over longer working lives.

Learning and Work Institute's (L&W) New Futures programme, funded by the Covid-19 Support Fund, is exploring what support people need to retrain and change

careers¹. Given the growing importance of green skills in the labour market, we surveyed a representative sample of approximately 5,000 adults in the UK to understand their awareness of and interest in green skills for work².

Individuals are also changing their behaviour and use of energy, to help reduce carbon emissions but also due to the cost of living and energy skills. Survey respondents were therefore also asked to rate their confidence to take different actions to reduce their energy use.

This short briefing summarises the findings from the survey, highlighting where awareness raising activities and support may be best targeted.

Reducing home energy bills

In addition to actions by Government and business to reduce carbon emissions, individuals are changing their behaviour and use of energy. UK households are also experiencing rises in the cost of living, largely caused by the increasing cost of energy and high rates of inflation. The Government has introduced the Energy Price Guarantee, capping the unit cost of electricity and gas, the Energy Bills Support Scheme and further Cost of Living support for households with lower incomes. But many households will struggle as real wages have continued to fall³, and are likely to take action to reduce their energy use at home.

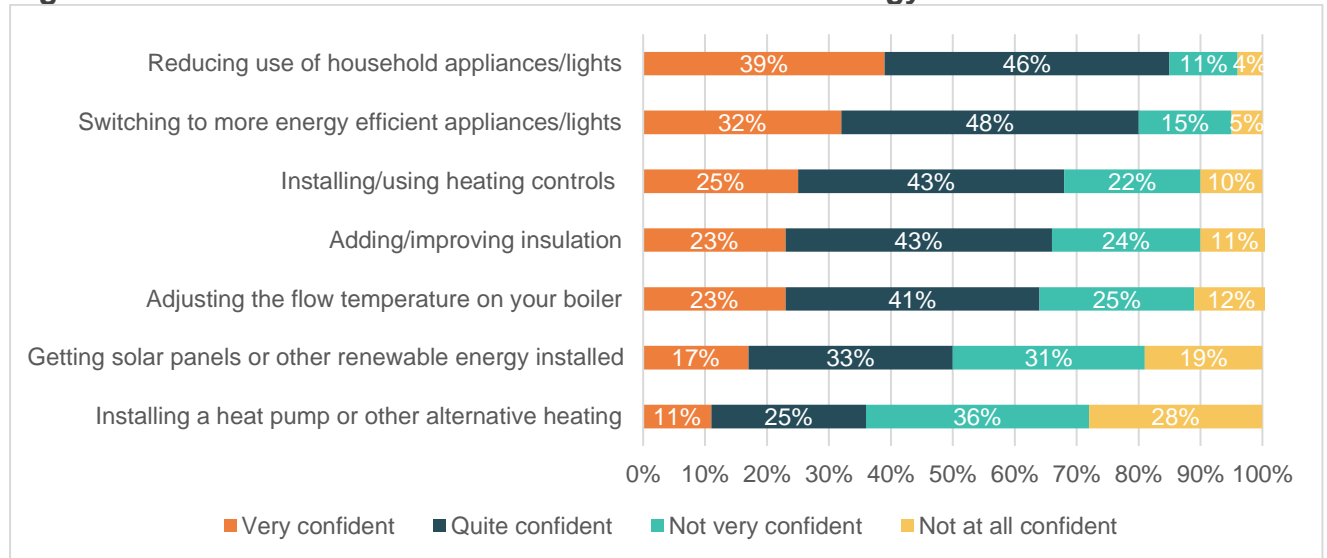
In this context, survey respondents were asked to indicate how confident they would be to take actions to reduce their home energy bills. The results suggest that adults are most likely to feel confident to reduce their use of household appliances/lights (85 per cent) or switching to more energy efficient appliances/lights (80 per cent) (Figure 1). Even so, 15 per cent of adults said they lack confidence to reduce their use of household appliances/lights and one in five (20 per cent) lack confidence to switch to more energy efficient appliances/lights. Around one in three adults indicated that they would lack confidence to install/use heating control (32 per cent), add or improve insulation (35 per cent) or adjust the flow temperature on their boiler (36 per cent). Adults are most likely to lack confidence to install an alternative heat source, such as a heat pump, with more than three in five (64 per cent) saying this, or to get renewable energy installed, such as solar panels, with 50 per cent saying this.

¹ Learning and Work Institute is working with partners to develop five place-based pilots – in Edinburgh, Belfast, Tees Valley, Devon and Wales – to build locally-led solutions to tackle retraining challenges. For more information, please contact newfutures@learningandwork.org.uk.

² Questions on green skills were included in L&W's Adult Participation in Learning Survey, including a representative sample of 5,139 adults aged 17 and over across the UK. Fieldwork was conducted in September 2022 by a market research company via their UK online omnibus survey. For more details, see Hall, S. Jones, E. and Evans, S. (2022) [Adult Participation in Learning Survey 2022](#). Learning and Work Institute

³ Learning and Work Institute (2022) [Labour Market Analysis October 2022](#).

Figure 1: Confidence to take actions to reduce home energy bills



Base: all respondents to the Adult Participation in Learning Survey. Weighted base = 5,139; unweighted base = 5,139.

The evidence helps to make a strong case for a public information campaign to increase people's knowledge and confidence in how they can improve energy efficiency and reduce energy use. In addition, the survey results indicate that some groups of adults may require support to make changes to reduce their use of energy at home. Those who are most likely to lack confidence to reduce their use of household appliances/lights include adults aged 20-44; people in the DE social grade; those in full-time higher education, unemployed and seeking work or are disabled/unable to work; and parents.

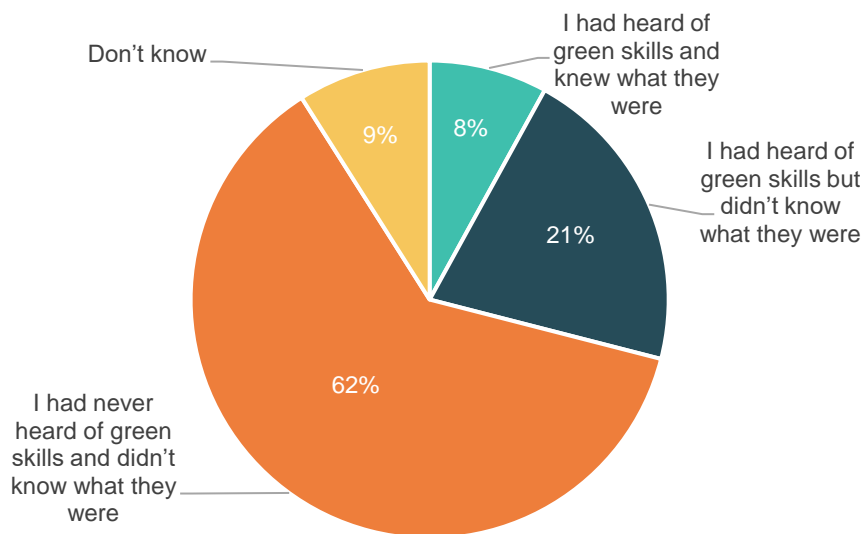
Awareness of green skills

Survey respondents were shown the following definition of green skills and asked to rate their level of awareness and knowledge of green skills:

‘Green skills are defined as the skills needed to promote a green economic recovery focused on reducing UK carbon emissions. This can range from technical green skills such as those relating to construction, engineering or manufacturing, to more general green skills such as project management, change management, leadership, education management and communication skills’.

The survey results suggest that adults’ awareness and knowledge of green skills is low, with around three in five (62 per cent) respondents saying that they had never heard of green skills prior to the survey (Figure 2). A further fifth (21 per cent) said that they had heard of green skills but don’t know what they are. Just eight per cent of respondents indicated they had heard of green skills and know what they are.

Figure 2: Awareness of green skills



Base: all respondents to the Adult Participation in Learning Survey. Weighted base = 5,139; unweighted base = 5,139.

The survey also indicates that some groups of adults are statistically more likely to say they are aware of green skills⁴:

- People aged 17-44 (34 per cent), compared to those aged 45 and above (25 per cent). This is consistent with earlier research which found that 36 per cent of young people said they were aware of green skills⁵.
- Men (35 per cent), compared to women (24 per cent). This is also consistent with the research on young people and green skills, which found that young women were more likely to say they had never heard of green skills before and didn't know what they are⁶.
- Adults in the social grades AB (35 per cent) and C2 (31 per cent), compared to C1 (27 per cent) and DE (22 per cent) groups.
- Working adults (33 per cent), compared to people who are unemployed and seeking work (25 per cent) and people who are economically inactive (17 per cent).
- Respondents from black, Asian and minority ethnic backgrounds (44 per cent), compared to of white respondents (27 per cent).

⁴ This includes respondents who said they had heard of green skills but don't know what they are and those who said they had heard of green skills and know what they are

⁵ White, Y., Bradley, T., Packer, B. and Jones, E. (2022) [Skills for a net-zero economy: Insights from employers and young people](#). WorldSkills UK and Learning and Work Institute

⁶ Ibid

- Parents (36 per cent), compared to people without parenting responsibilities (26 per cent).
- Those who left full-time education aged 21 or over (36 per cent), compared to 32 per cent of people who left age 19-20, 29 per cent of those who left at 17-18 and 22 per cent of those who left full-time education aged 16 or less.
- University graduates (38 per cent), compared to those whose highest level of qualification is an A level (29 per cent), another further education course (28 per cent), GCSE (21 per cent) and people with no qualifications (24 per cent).

These results not only highlight the scale of work to be done to raise awareness of green skills and green jobs, but also that some groups may be more likely to miss out on opportunities due to lower levels of awareness and understanding. This emphasises the need for an inclusive approach to green growth, where opportunities are fairly distributed.

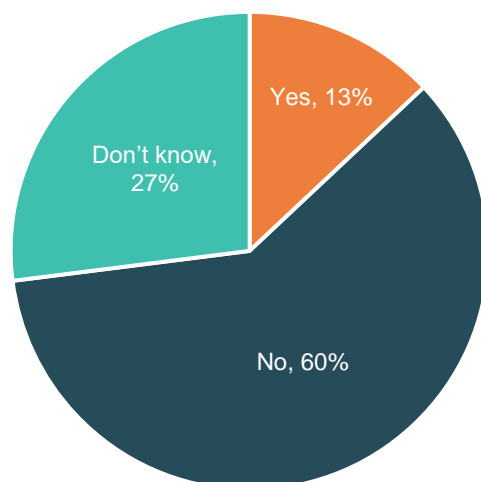
These patterns reflect patterns found in the Adult Participation in Learning Survey, with some groups of adults being statistically more likely to say they have taken part in learning within the last three years. Year on year, the survey shows that those most likely to say they have taken part in learning are younger, in higher social grades, in work or closest to the labour market, who spent longest in full-time education and with higher level qualifications⁷.

Green skills for work

Employed and self-employed survey respondents were asked whether their current job requires green skills. Three in five adults (60 per cent) said that they do not currently need green skills in their work, while 13 per cent said their jobs do require green skills (Figure 3). Interestingly, just over one quarter (27 per cent) of respondents said they don't know whether their current job requires green skills, further emphasising the lack of awareness and understanding of what they are.

⁷ Hall, S. Jones, E. and Evans, S. (2022) [Adult Participation in Learning Survey 2022](#). Learning and Work Institute

Figure 3: Whether current job requires green skills



Base: all respondents to the Adult Participation in Learning Survey who are employed or self-employed. Weighted base = 2,940; unweighted base = 3,009.

When looking at the groups of adults who are most likely to say their job requires green skills, we see that this aligns with the profile of adults who are more likely to say they are aware of green skills. This includes:

- Men (17 per cent), compared to women (10 per cent). This is consistent with other analysis that found men are more likely to be working in green jobs or 'brown' jobs that are expected to change as a result of the transition to a net-zero economy⁸.
- Adults aged 17-44 (average of 21 per cent), compared to adults aged 45 and above (average of 6 per cent).
- Adults in the social grades AB and C2 (both 16 per cent), compared to those in the C1 (11 per cent) and DE (9 per cent) groups.
- People living in London, compared to other England regions except the South West and West Midlands. Wider analysis has also found geographical variations, with green jobs more concentrated in parts of London and the South East⁹.
- Respondents from black, Asian and minority ethnic backgrounds (24 per cent), compared to of white respondents (11 per cent).
- Parents (18 per cent), compared to people without parenting responsibilities (10 per cent).

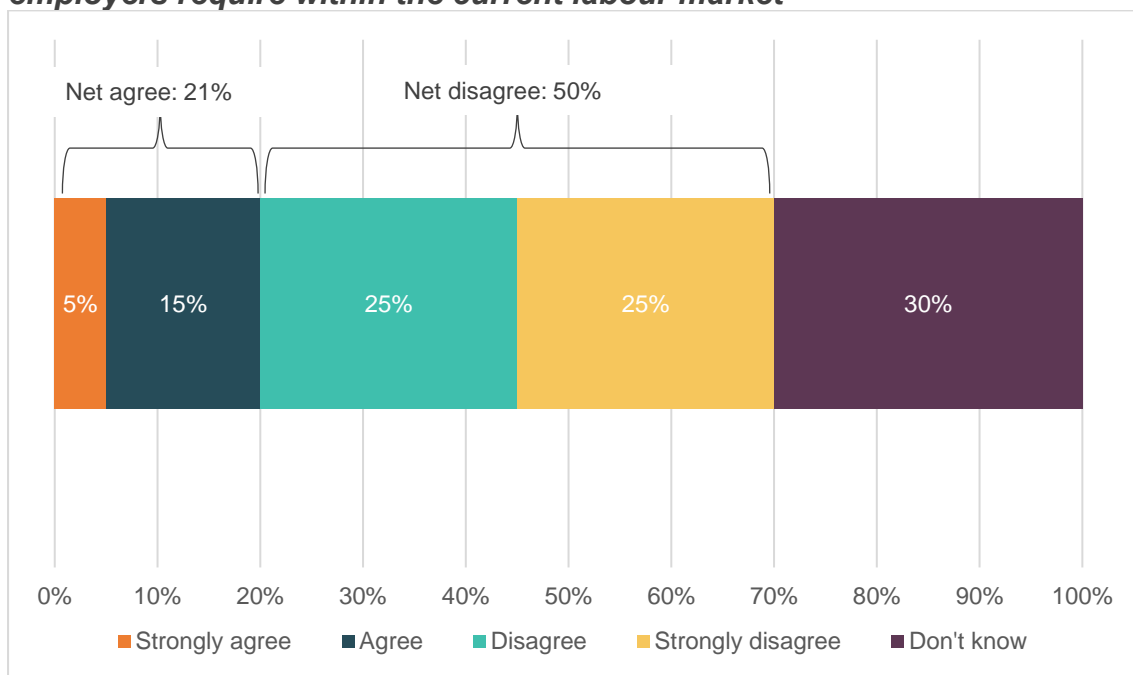
⁸ Broome, M., Cellini, S., Henehan, K., McCurdy, C., Riom, C., Valero, A. and Ventura, G. (2022) [New zero jobs: The impact of the transition to net zero on the UK labour market](#). Resolution Foundation.

⁹ Ibid

- People who left full-time education aged 17 or over (average of 15 per cent), compared to those who left aged 16 or under (8 per cent).

Consistent with their levels of awareness, only one fifth of respondents agreed (15 per cent) or strongly agreed (5 per cent) that they know which green skills employers require within the current labour market (Figure 4). One half of respondents either disagreed (25 per cent) or strongly disagreed (25 per cent) with this statement, while three in ten adults (30 per cent) indicated that they didn't know. This aligns with wider research on young people and green skills, with 22 per cent agreeing that they understand the green skills that employers require and 55 per cent disagreeing¹⁰.

Figure 4: Adults' agreement with the statement 'I know which green skills employers require within the current labour market'



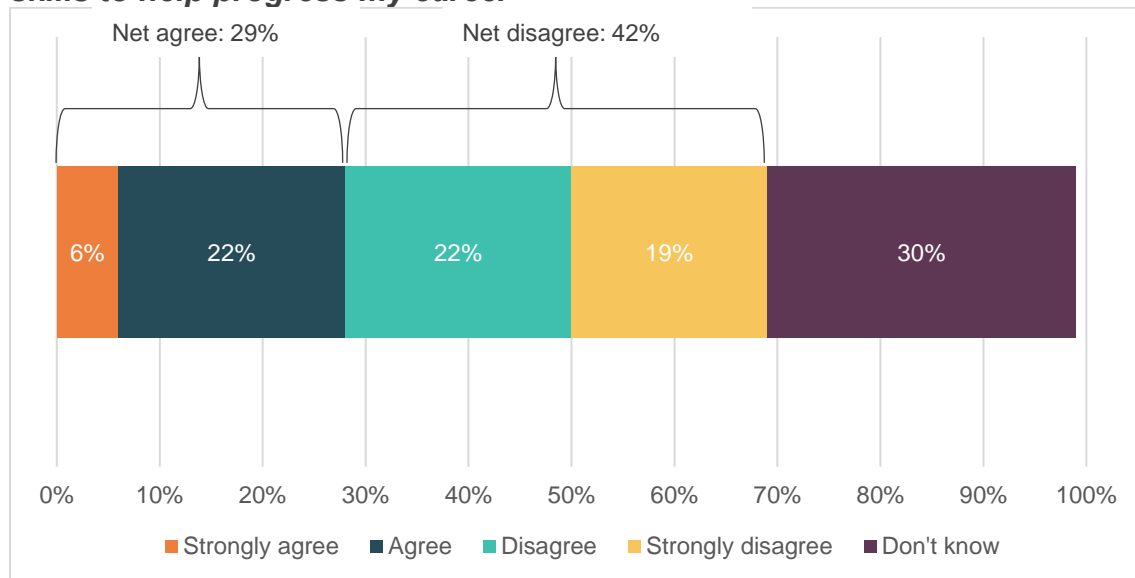
Base: all respondents to the Adult Participation in Learning Survey. Weighted base = 5,139; unweighted base = 5,139.

Reflecting the characteristics of adults who are most likely to say they are aware of green skills and need them in their current job, those most likely to agree they know which green skills employers require include: men; respondents aged 17-44; adults in the social grades AB and C2; people in work or in full-time higher education; people living in London; individuals from black, Asian and minority ethnic backgrounds; parents; those who left full-time education aged 19 or above; and university graduates. This again emphasises that understanding of green skills and current green jobs may not be evenly distributed across different demographic groups, and that some adults may need additional and targeted support to ensure they benefit from the opportunities that the transition to net-zero could bring.

¹⁰ White, Y., Bradley, T., Packer, B. and Jones, E. (2022) [Skills for a net-zero economy: Insights from employers and young people](#). WorldSkills UK and Learning and Work Institute

Nearly three in ten respondents (29 per cent) agreed that they that they feel inspired to develop green skills to help progress their career (Figure 5). Two in five adults disagreed (22 per cent) or strongly disagreed (19 per cent) with the statement, while three in ten (30 per cent) said they didn't know. Research with young people indicates that they are more likely than adults to say they feel inspired to develop green skills and pursue a green career, with 55 per cent of young people aged 16-24 agreeing with this¹¹.

Figure 5: Adults' agreement with the statement 'I feel inspired to develop green skills to help progress my career'



Base: all respondents to the Adult Participation in Learning Survey. Weighted base = 5,139; unweighted base = 5,139.

The characteristics of respondents most likely to agree they feel inspired to develop their green skills are consistent with those who say they are aware of green skills, require them in their job and know what green skills employers need. This includes men; respondents aged 17-44; adults in the social grades AB and C2; people living in London and the West Midlands; individuals from black, Asian and minority ethnic backgrounds; parents; those who left full-time education aged 21 or above; and university graduates. Interestingly, adults who are unemployed and seeking work were also more likely than the average to indicate an interest in developing green skills to help progress their career, in addition to those in work or full-time higher education.

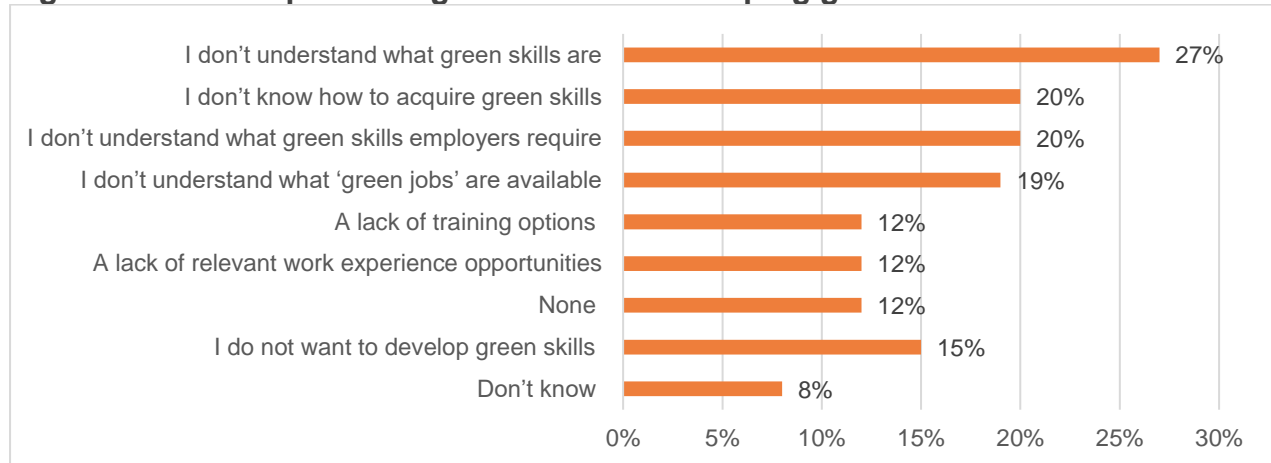
Barriers to acquiring green skills

The most common barrier identified by adults that might prevent them from developing green skills is not understanding what green skills are (27 per cent) (Figure 6). Around one in five adults said they don't know how to acquire green skills (20 per cent), don't understand what green skills employers require (20 per cent) or don't understand what green jobs are available (19 per cent). Just 12 per cent of

¹¹ Ibid

adults cited a lack of training opportunities or a lack of relevant work experience, which may reflect low levels of awareness or understanding and that opportunities are unlikely to have been sought (those most likely to say they were aware of green skills were also more likely than average to identify barriers). Fifteen per cent said that they do not want to develop green skills and 12 per cent stated that they did not have any barriers to developing green skills.

Figure 6: Barriers preventing adults from developing green skills



Base: all respondents to the Adult Participation in Learning Survey. Weighted base = 5,139; unweighted base = 5,139.

Some groups of adults were most likely to cite a lack of understanding of what green skills are as a barrier to developing these skills, indicating that they should be targeted for awareness raising. These include women; people aged 25-34 and 45-54; those in the DE social grade; part-time workers and those who are economically inactive; individuals from white backgrounds; and people who left full-time education aged 17-18.