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# Workers are prepared to work in a de-carbonised economy: Companies and government need to invest in training and education

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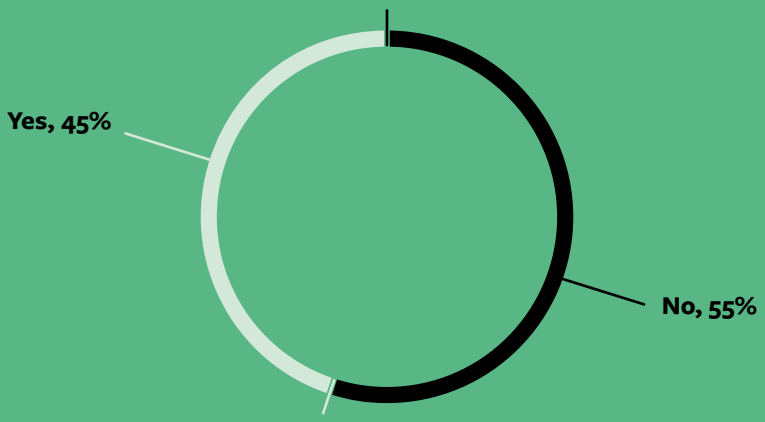
**To mitigate the devastating consequences of climate change, governments in Europe are planning to shut down coal mines, phase out cars with a combustion engine, replace natural gas with 'green' hydrogen and to push for less carbon-intensive ways of farming and construction.**

As a consequence, the nature and distribution of work performed will have to fundamentally change in tandem. This will have significant repercussions for those employed, ranging from learning new skills and re-training for a different job in the same industry to changing occupations or sectors altogether.

Without suitably qualified people to, for example, produce, install and maintain heat pumps, solar panels, wind turbines, or batteries, to learn and to apply poly, perma- or perennial agricultural techniques and to build, inspect and approve energy-efficient houses with less carbon-intensive materials the implementation of the urgently needed climate policies is doomed to fail. A recent analysis forecasts 600,000 new jobs in these roles if the federal governments invest in them. Developing the necessary "green" skills to either move into new "green" jobs or be able to participate in "greening" of the current job role is therefore of central importance.

Against this backdrop, in December 2024 we conducted a representative survey, financed by the Hans-Böckler-Foundation, of more than 2000 employed workers in Germany with a specific focus on training and qualification for the "green" transition. In this short briefing we present some key findings.

**Figure 1: As part of your job, have you participated in any training or education programs in the past 12 months?**




Source: complete sample, n=2076

**"Green" training barely takes place**

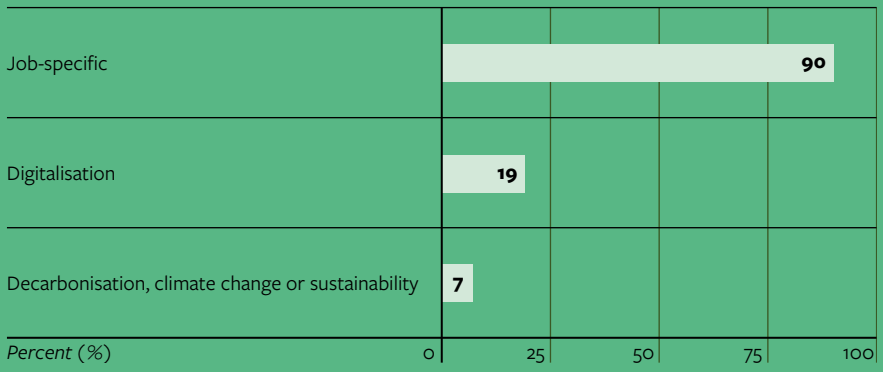
Less than half (45%) of the surveyed employees state that they have participated in training or (re-) education, no matter on what topic, in the past 12 months (see figure 1 above). Even those who have taken part in training only did so for a very limited number of days. For forty percent of those undergoing training, training lasted only one or two days (39%) and three to five days (37%), respectively. Only ten per cent of training lasted more than ten days. In light of the multiple transformative changes the economy is facing – de-carbonisation, digitalisation, demographic change – this extent of training supply is insufficient.

Regarding the topic of training, climate change related training constituted a small part of overall training (see figure 2 below). Whereas nine out of ten employees who participated in training state that training was job-specific, one fifth (19%) took part in digitalization related training and only seven per cent in training activities related to de-carbonisation, climate change or sustainability. In other words, digitalization related training was almost three times higher and job-specific training 13 times more common than training related to the de-carbonisation or sustainability. It is possible that job-specific training includes some elements of sustainability, however, this does not change the fact that training specifically targeted at reducing $CO_2$ emissions or improving sustainability is barely taking place.

Importantly, of those few who state that they have participated in training related to de-carbonisation, climate change or sustainability, 60 per cent answer that the training was voluntary. This means that of the complete sample, only three per cent participated in training directly aimed at reducing emissions and only 1.25 per cent, participated in mandatory climate change related training. These figures suggest that to employers in Germany climate change is not yet seen as a necessary topic of employee skills or training.

Interestingly, every tenth worker (9%) has participated in training or education programmes related to climate change or de-carbonisation outside of work. Learning about climate change and how to address it thus seems to be more relegated to individual behaviour and private sphere. Workers participating in climate related training are overall highly positive about it. On the one hand, they want to contribute to halting climate change and help to improve with the "greening" of their sector. On the other hand, many see training in this area as an opportunity to improve their employability and make their own jobs future proof.

**Figure 2: Topic of training**




Source: only those that participated in training and education measures, n=934

### Training perceived by many as requirement to keep their jobs

Not only is the supply of training in this area low in comparison to the importance of addressing the climate crisis, but it also does not appear to meet workers' demand. Workers in our survey see a high need for further training related to climate change and the ongoing transformation. More than four in ten (44%) agree that training and education will be necessary for many of the current jobs in their sector, and three in ten (30%) stated that they will personally need to engage in training and education in order to keep their jobs (see figure 3).

### Switching to a "green" job? Skills are seen as major obstacle

One option is to keep workers in their current jobs but to train them so that they can participate in "greening" their workplace in different ways. The second and additional option is to switch to a "green" job. We asked workers if they are interested in switching to a job in:

- Renewable and low-$CO_2$ energy production
- Environmental protection ad re-wilding
- Energy efficient construction
- Alternative/synthetic fuel production
- Recycling management
- Emission-free transport and electric vehicles

One quarter (27%) would consider switching to a green job. Of these, each nine out of ten think that working in a green sector would be interesting (91%), like to contribute to halting climate change (87%) and believe these jobs have a good future perspective (92%). However, only half (47%) think that the pay would be better than their current job (see figure 4).

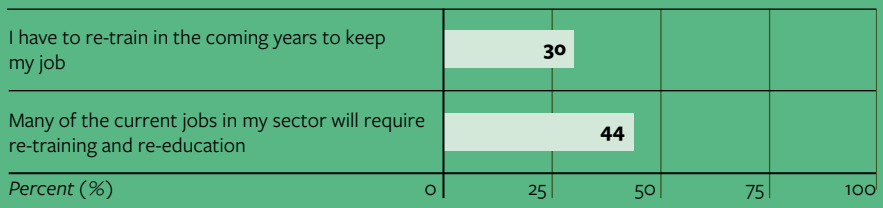
However, for half among those who are not interested in switching to a "green" job profile qualifications are an important factor. 46 per cent do not consider their current qualifications sufficient, 45 and 47 per cent, respectively, view time for and cost of retraining as obstacles (see figure 5). It is exactly here that the government must step in and support workers.

### Policy lessons

These findings illustrate a significant gap between what employees perceive as necessary and what employers are currently doing. More needs to be done from employers to encourage "green" training and to understand that it needs to be integrated as much as, if not more, than digital skills training.

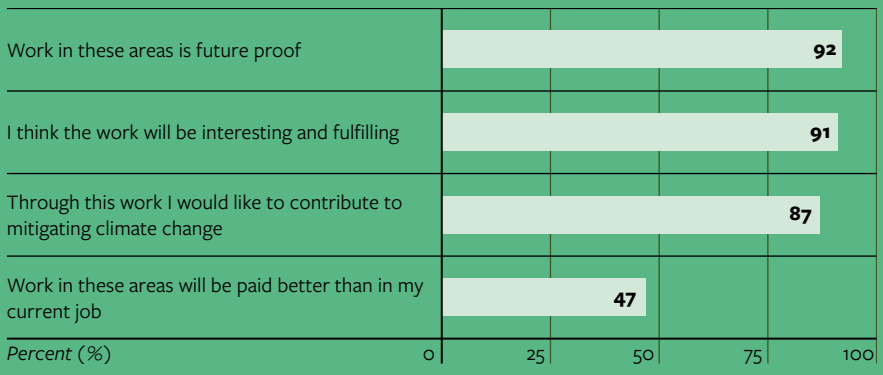
The federal and regional governments also have an important job to do. On the one hand, their role is to give directions for employers and employees regarding the types of jobs and skills needed in a de-carbonised economy. On the other hand, especially when they see the training is slacking, they need to encourage and support employers and workers. Providing training to employees can be a way of increasing their interest in "green" jobs while reducing uncertainty and fear about potential job losses resulting from the transformation. Different tools are available as part of the "National Skills Strategy", but the next government needs to increase their efforts. Without workers with the right skills, the transformation is going to fail.

**Figure 3: Consequences of the transition towards a "green" / "sustainable" / "low-$CO_2$" economy (agreement, %)**




*Source: complete sample, n=2076*

**Figure 4: Reasons for interest in switching to a job in the "green" economy (%)**




*Source: only those that are interested in switching, n=503*

**Figure 5: Reasons for no interest in switching to a "green" job (agreement, %)**


*Source: only those that are not interested in switching to a "green" job, n=1342*

This work is part of the Leeds Competence Centre on Just Transitions. The Centre contributes to public debate around de-carbonisation and just transition. It surveys the public on a regular basis on topics such as energy transition, climate mitigation, skills for de-carbonisation, and policies to support a fair and just transition.

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