

# Who wants to work in the green economy? The importance of climate concern, skills confidence and national context

## Abstract

The paper explores the factors influencing workers' interest in switching to jobs in the green economy (GE), a critical condition for labour market transformation in response to the climate crisis. Drawing on original survey data from 3,054 workers in the UK and Germany – countries with comparable decarbonisation goals but distinct labour market institutions – we extend established turnover intention and job mobility research by integrating “green” factors, such as climate change awareness and perceived skill fit for GE roles. Our results show that green factors far outweigh conventional job and demographic characteristics in explaining interest in GE jobs. These findings are robust across national contexts, although other factors, such as job satisfaction, union membership, tenure, or contract type, show country-specific effects. The study highlights the need for policy strategies that raise climate awareness and foster workers' confidence in their skills, while ensuring the availability of decent green jobs. Our work contributes to emerging debates on labour market readiness for a just transition and provides empirical insights for social dialogue, training policy, and worker engagement in decarbonisation strategies.

**Keywords:** green jobs; worker transition; just transition; climate change; job mobility; skills

## 1. Introduction

Workers are becoming increasingly concerned about the impacts of climate change on their jobs (Baiardi and Morana, 2021; Cutter et al., 2023; Schulz and Trappmann, 2023). Achieving national pledges to reduce emissions will necessitate profound changes to the economy. While, above all, energy supply systems must transition to renewable sources, sectors such as transport, agriculture, manufacturing, finance, and retail will also need to adopt more circular models to align with net-zero targets (IPCC, 2023). This reimagined approach to production and consumption — emphasising low carbon emissions, resource efficiency, and social inclusion — is often referred to as the “green economy” (UNEP, 2011).

According to the International Labour Organisation (ILO), the green economy (GE) could generate over 100 million jobs worldwide, with a net increase of approximately 25 million jobs (International Labour Organisation, 2022). Countries like the UK and Germany have committed to achieving net-zero emissions by 2050 and 2045, respectively. In the UK, it is estimated that the transition will create around 480,000 jobs by 2030 (Department for Energy Security & Net Zero, 2023; Green Jobs Taskforce, 2021), while Germany expects to add 400,000 new direct jobs in electric and heating technologies from 2025 onwards (Weber and Zika, 2023). Crucially, this shift to “clean” jobs hinges on the reskilling and redeployment of the existing workforce (OECD, 2023) and on workers' willingness to move to industries critical for decarbonisation (Bauer et al., 2021; Jagger et al., 2013).

Despite the scale of the required change, there remains a surprising lack of research on workers' intentions to transition to the GE (Renwick et al., 2016). Existing studies have predominantly explored employers' recruitment strategies (Hicklenton et al., 2019), and the impact of employer branding (Ma et al., 2022). Yet, the factors shaping employees' motivations to shift from “non-green” to “green” sectors are still underexplored. Addressing this important gap, the study draws on insights from the turnover intentions and job mobility literature (Bolt et al., 2022; Holtom et al., 2008; Hom et al., 2017;

Ng et al., 2007; Rubenstein et al., 2018). We apply a specific focus on the GE by examining the role of "green" factors influencing workers' transition intentions.

To uncover the main factors driving workers' interest in switching to GE jobs, we analyse data from two representative surveys of workers in the UK and Germany (n = 3,054). As the largest and second-largest CO<sub>2</sub> emitters in Europe (European Parliament, 2024; Office for National Statistics, 2024), Germany and the UK share similar decarbonisation pressures but differ markedly in employment structures and labour relations (Behrens, 2020; Kelly, 2020). Comparing outcomes across these two contexts allows us to identify both common patterns and country-specific dynamics – a perspective largely missing in the turnover intention literature (Hom et al., 2017). We assess the significance and explanatory strength of different factors for workers' interest in switching to GE jobs, using binary logistic regression models.

The paper makes three contributions. First, by highlighting the importance of green factors for workers' interest in switching to a job in the GE, we extend established theories of job mobility and turnover intentions to a growing but under-researched field of economic activity: the green economy. Second, our findings underscore both the context-dependence of factors and the relatively modest explanatory power of traditional factors when compared to green factors. Third, by improving our understanding of the drivers behind workers' interest in GE jobs, we offer insights that can inform more effective policy measures to support the labour market transition towards decarbonisation.

The remainder of the paper is organised as follows: In Section 2, we review the literature on the GE, job mobility and turnover and develop criteria that could influence an interest to switch to a green job. We introduce the data, measurements and methods used for the analysis in Section 3. Section 4 presents the findings and section 5 discusses the findings, paying attention to the theoretical and most importantly practical implications of the research.

## 2. Literature review

### 2.1. Work in the GE

The United Nations Environment Program (UNEP) first defined the GE in 2008 as “one that results in improved human well-being and social equity, significantly reducing environmental risks and ecological deficit”. It generates low carbon emissions, is resource efficient and socially inclusive” (UNEP, 2011). The ILO defines a GE similarly as “an economy in which a sufficient level of output is generated without producing a level of CO<sub>2</sub> emissions that contributes to significantly increasing the risk of raising the Earth's average temperature” (International Labour Organization/International Institute For Labour Studies, 2011: 20). Since then, different definitions of the GE have proliferated, prioritising either environmental, economic or social concerns to varying degrees (Merino-Saum et al., 2020). At the EU level, the European Green Deal (EGD) (European Council, n.d.) proposes a new, more sustainable growth model with better distributional mechanisms (Baccaro et al., 2022). It supports new employment policy models to enable a switch to the GE, like the Just Transition Fund under the 'Fit for 55' package (European Commission, n.d.), which aims to support the economic diversification of territories affected by climate decarbonisation policies (Crespy and Munta, 2023). While such policy instruments are important, their implementation has (a) placed less emphasis towards employment growth, and more on funding research and technological innovation, (b) failed to address their policy target to leave no-one behind and to positively discriminate those most at risk (Sarkki et al., 2022), and (c) lacked sufficient stakeholder inclusion (Moesker and Pesch, 2022). Moreover, recent policy

developments, such as the European Clean Industrial Deal launched in February 2026, indicate a shift from job quality to economic competitiveness.

Some labour union voices argue that the GE also needs to be part of a new eco-social state: a state pursuing ecological sustainability above economic growth (Galgóczy and Pochet, 2022). The energy crisis, resulting from Russia's invasion of Ukraine, led governments to experiment with new forms of eco-social policies (Guardiancich and Trif, 2024), public policies which explicitly pursue both environmental and social policy goals in an integrated way, like income support for energy-poor households, unemployment benefits for redundant workers from carbon-intensive sectors (Mandelli, 2022).

In line with these definitions of the GE, there is strong demand for qualified workers in low-carbon electricity, heat and alternative fuel production, electric transport systems (Climate Change Committee, 2023), in environmental protection and restoration, provision of environmental services, waste management, including job creation in repair, mending and maintenance (Laubinger et al., 2020), on the one hand. On the other hand, to fulfil the goals of wellbeing and social equity, a GE will require investment and more workers in health, social and care sectors as well as education (Balata et al., 2022; Bedford et al., 2022).

In the UK, targeted investment into low-carbon industries such as renewable energy, waste management, recycling, agriculture, environmental conservation, and sustainable transport aims to deliver 480,000 green jobs by 2030 (Department for Energy Security & Net Zero, 2023; Green Jobs Taskforce, 2021). A 3.6 per cent increase in green jobs since 2021 has already been noted (Simmonds and Lally, 2024). In Germany, 400,000 jobs are forecasted to be created in green construction and sustainable mobility each, from 2025 onwards (Weber and Zika, 2023). Employment effects from decarbonising the economy are argued to be net positive, but there is a risk of a lack of qualified workers (Weber and Zika, 2023). Thus, creating interest in shifting from existing jobs to new jobs in the GE will be vital.

Although some studies highlight the growing awareness of and demand for workers in "green" jobs (Jones et al., 2016; Martins et al., 2021), little is known about the motivations of workers to switch to a job in the GE. In the next section, we discuss existing models of turnover intention and job mobility explaining individuals' motivation for leaving their jobs.

## 2.2. Job mobility and turnover intention

Turnover intention research identifies factors that predict workers' intentions to leave their current jobs. Factors can be broadly divided into individual, organisational and external factors (Martins et al., 2021; Rubenstein et al., 2018). Personal characteristics that influence turnover intentions are age, gender, education, skills, tenure, number of dependents, personality traits and values (see for instance Ng et al., 2007; Rubenstein et al., 2018; Takase, 2010). Individual work-related aspects that affect turnover intentions refer to attitudes and perceptions, for instance, job satisfaction, pay, autonomy, commitment, involvement, or job security. Job satisfaction, including pay level, has been explored in numerous studies and has consistently been found to play a role in turnover and job mobility decisions (AbouAssi et al., 2021; Flickinger et al., 2016; Yuan et al., 2024). In addition to these factors, in their review of job mobility models, Ng et al. (2007) highlight an individual's belief that the change is personally beneficial in addition to structural factors such as the extent to which workers have the knowledge, skills and ability compatible with the change. Organisational factors, among others, include organisational size, trade union presence, reward systems or organisational culture. In short, these factors pertain to aspects of the worker's current job that are on a structural level and do not

entail the individual's attitudes or perceptions towards these aspects. Individual and organisational factors originate from the workers' current situation, driving their intention to leave their current job from within.

Lastly, external factors relate to outside aspects that determine the degree of attractiveness related to the voluntary intention to leave the current job. Such factors include the perception of outside alternatives, general labour market conditions, the attractiveness of other jobs, employers, or organisations, for instance in terms of pay (Ng et al., 2007; Price, 2001) but also value alignment (Anderton and Jack, 2011; Gully et al., 2013).

Taken together, labour market mobility and turnover intention research imply the need to understand factors that influence both the intention of an individual to quit their current job and the interest in working in a particular other sector. However, existing literature in these fields has neither considered the case of moving from a job in the "non-green" economy to one in the GE, nor has there been an investigation into environmentally related factors. To remedy the omissions, we introduce green factors.

### 2.3. Green factors

We introduce green factors as those factors defining environmental or climate change related motivational elements and propose several such factors below.

Existing research suggests that green companies might attract workers when there is alignment between prospective employees' environmental values and the organisation's commitment (Hicklenton et al., 2019). Jones et al. (2016) infer individuals intentionally seek firms with high corporate social responsibility standards, including sustainability, whilst Ma et al. (2022) find that individuals may move into new sectors or organisations based on employer-side branding to signal sustainability values. These findings stress the role of a worker's environmental awareness and concern. Environmental awareness refers to "an individual's insight that humans endanger the natural environment combined with a willingness to protect nature" (Dunlap and Jones, 2002; Franzen and Vogl, 2013: 1002). Climate change constitutes a distinct area of environmental concern, alongside others such as biodiversity loss and water and air pollution. Previous studies in environmental psychology suggest that awareness of climate change is a necessary condition for pro-environmental behaviours (Baiardi and Morana, 2021; Nordlund and Garvill, 2003). An awareness of the severity of climate change, its effects, and a general concern increase an individual's willingness to act in a more pro-environmental manner (Kollmuss and Agyeman, 2002). Based on prior research on environmental awareness, we would expect individuals who are more aware to be more likely to consider shifting jobs to undertake work which will help to mitigate or adapt to the climate crisis.

Considering that the framing of pay and training and development opportunities in the GE is assumed to be motivating for employees (Martins et al., 2021), the presence of decarbonisation training provided by the current employer constitutes another potential factor influencing workers' motivation. Employers providing sustainability-related training, such as decarbonisation training, signal green behaviour and intentions to employees, thereby reducing the attractiveness of external alternatives. This would suggest that the provision of green training by the current employer is likely to reduce a worker's interest in switching to a job in the GE.

Similarly, workers may be more interested in switching if they believe they possess the required skills for the new job and that switching will be personally beneficial (Ng et al., 2010). The former concerns a perceived skill match. The latter relates to the attractiveness of outside options that may influence the intention to leave the current job. This includes the perception of general labour market

conditions, the attractiveness of other jobs or employers, for instance in terms of pay (Ng et al., 2007; Price, 2001), but also value alignment (Anderton & Jack, 2011; Gully et al., 2013). The attractiveness of outside options pulls individuals away from their current job toward options that are perceived to be better than the current job (Ng et al., 2007; Rubenstein et al., 2018). Applying these insights from job mobility research to the case of green jobs implies that positive perceptions of working conditions in the GE are likely to increase the attractiveness of outside options in comparison to the current job, thereby increasing an interest to switch jobs. On the other hand, if an individual perceives jobs in the GE to be of lower quality or does not perceive that there are options, i.e. jobs, this may reduce their interest to working there.

To sum up, in this paper we are interested to uncover the main factors driving workers' interest in switching to GE jobs, resulting in three research questions. First, how influential are traditional factors that influence workers to change their jobs in explaining interest to switch to a green job? Second, keeping in mind climate change as a context for green jobs, which role, if any at all, do the identified green factors play in people's motivations? And third, considering the role of institutional differences, does the country context affect the relationship between the different explanatory factors and an interest in switching to a job in the GE?

## 3. Methods

### 3.1. Data sample

We use data from two large online surveys of workers in Germany (n=2002) and the UK (n=2001). The UK and Germany were chosen as two countries that (i) are the top emitters of CO<sub>2</sub> in Europe, (ii) have both made substantial commitments to net zero and thus need to reorient their workforce towards GE roles relatively quickly, but (iii) have different provisions of skills systems, particularly around further vocational education and training.

The survey was administered by the market research firm Skopos in March and April 2022. Participants were drawn from Skopos' own consumer panel based on representative quotas for standard industrial classification codes (SIC), age and gender. Participants had to be at least 18 years old and to be in paid work. They had to provide consent for the use of their anonymised data in publications. For our analysis, we used a subsample of each survey, including only those workers who stated that they were not currently working in one of the sectors that form part of the GE (see below). This reduced the two samples by 528 and 421 participants for Germany and the UK, respectively.

### 3.2. Measurements

#### 3.2.1. Outcome Variable

We operationalised "*Interest in working in the GE*" by a binary question asking "Would you be interested in working in one or more of these sectors?"

- Renewable/low carbon electricity
- Environmental protection or restoration
- Alternative fuel production
- Energy efficient construction
- Low emission transport and electric vehicle
- Recycling/ waste management
- Low-carbon professional services

- Education, health and social care”

We opted for a wide understanding of the “GE” by adopting a sector-based approach that extends beyond narrowly defined environmental industries. While some definitions focus on task-based classifications (e.g. the environmental content of specific occupations) or restrict green jobs to sectors directly producing environmental goods and services (OECD, 2023), we use a broader understanding aligned with eco-social and just transition perspectives. These approaches emphasise that a sustainable economy involves not only decarbonisation and resource efficiency but also the expansion of low-emission, socially reproductive sectors such as education, health, and care, which are central to wellbeing and compatible with ecological limits (UNEP, 2011).

This variable does not directly measure turnover intention, which typically includes specific questions about an intention to leave the current job or organisation. It does, however, include conscious deliberation that an external job in these sectors is of interest to the individual. This is in line with Tett and Meyer’s (1993: 262) much-cited definition of turnover intention as “willingness of an employee to leave an organisation”.

### 3.2.2. Predictors

#### *Individual attributes*

We included age, gender, being a parent, political orientation, cultural worldviews and skills as individual, non-work attributes. To measure *political orientation*, we created a binary variable that differentiated between left-leaning and right-leaning orientations. These were based on participants’ preferences for a political party in both countries. *Cultural Worldviews* were measured using a shortened, 5-item, version of Kahan et al.’s (2011) cultural cognition measure to denote the extent of egalitarian worldviews. *Skills* were measured by one objective and one subjective measure. The 3-level objective measure was based on the International Standard Classification of Occupations (ISCO). Subjective skills were measured by a 2-item, 5-point Likert-type scale ranging from “strongly disagree” to “strongly agree” that asked participants about their willingness and confidence in learning new skills ( $\alpha=0.78$ ).

#### *Work-related factors*

We measured *job satisfaction* using a 4-item, 5-point Likert-type scale ranging from (1) “extremely dissatisfied” to (5) “extremely satisfied”. The four items included satisfaction with a) pay, b) job-related training, c) involvement in decisions at work, d) job security. The scale showed acceptable reliability:  $\alpha=0.80$ . For *type of employment contract*, we used a categorical variable that included permanent contract, temporary contract and self-employment. *Union membership* was a binary variable that took the value “1” if the participant was a member of one of the listed or “other union”, and “0” otherwise. We measured *organisational size* using a 4-point ordinal scale ranging from (1) “1-49 employees” to (4) “500 or more employees”. We controlled for the *industry* the individual worked in using 1-digit Standard Industrial Classification (SIC).

#### *Green factors*

We used a 3-item composite measure for *climate change awareness*, which included questions on the individual’s

- a) concern about climate change, measured on a 4-point Likert-type scale ranging from “not at all concerned” to “very concerned”;
- b) view on the urgency to act against climate change, measured on a 5-point Likert-type scale ranging from “no urgency” to “with extreme urgency”; and
- c) perceptions on the effect of climate change in their respective country (“When, if at all, do you think [the UK/Germany] will start seeing major effects of climate change?”); measured on a 5-point Likert-type scale ranging from “Never, [the UK/Germany] will not be affected by climate change” to “We are already seeing the effects”.

The scale showed satisfactory reliability:  $\alpha=0.82$

*Self-reported green skills match.* We measured an individual’s perceived ability to successfully change using a 1-item question that asked participants how confident they are that their current skills are useful for work in the GE. Answers were based on a 5-point Likert-type scale ranging from “not at all useful” to “extremely useful”.

We measured an *organisation’s decarbonisation action* using a 1-item, 3-point Likert-type scale ranging from (1) “no” to (3) “yes significantly” (“*Has your organisation made any changes to try and reduce carbon emissions*”). In line with Martins et al.’s (2021) findings that training opportunities matter, we included a one-item measure on whether individuals had received *training relevant to their organisation’s decarbonisation plans*. This measure ranged from (1) “no” to (3) “yes significantly”.

We used three questions to measure attractiveness of green outside options, all measured on a 5-point Likert-type scale ranging from (1) “extremely unlikely” to (5) “extremely likely”. We asked participants how likely it is that the GE (i) has jobs with better pay and conditions, (ii) will bring better quality jobs to their local community and (iii) will lead to job losses in the local community.

Detailed descriptive statistics tables can be found in the supplementary materials (Tables 2-7).

### 3.3. Analytical methods

Considering the binary nature of the dependent variable, we used binomial logistic regression models. The binomial logistic model predicts the probability of a worker’s interest to switch to a job in the GE and how each variable potentially changes this probability. We followed a two-way process. Initially, we regressed interest in working in the GE on each group of predictors – individual attributes, work-related, and green factors – separately. We then included all variables into a single model. This allowed us to gauge the relative contribution of each group of predictors in explaining variation in the dependent variable. Because the dependent variable is binary, we report pseudo- $R^2$  as an indicator of relative model fit across specifications. Unlike the  $R^2$  in linear regression, pseudo- $R^2$  does not represent the proportion of variance explained. Instead, it is used here solely to compare whether including different groups of variables improves model fit across models. As a robustness check, we also estimated probit models, which assume a normal rather than logistic error distribution.

## 4. Results

4.1. What are significant and most important predictors for interest in working in GE? Tables 1–3 present the logistic regression results. Rather than discussing every coefficient, we focus on the factors that most clearly contribute to explaining workers' interest in moving into the green economy (GE).

Personal orientations matter more than basic demographics. In both the UK and Germany, two individual dispositions stand out consistently: egalitarian worldviews and a willingness to learn new skills. Workers scoring higher on either dimension are significantly more likely to express interest in GE employment. By contrast, most standard socio-demographic characteristics play a limited role. Age shows a modest pattern – younger workers are somewhat more interested – while parenthood and occupational skill group are not significantly related to interest. Gender and political orientation matter in the UK (men and more right-leaning workers are less likely to be interested), but not in Germany.

The workplace related factors are less decisive. Employment characteristics are only weakly associated with GE interest, and patterns differ across countries. In the UK, shorter tenure, union membership, and employment in larger firms are linked to greater interest. In Germany, longer tenure and temporary contracts are associated with lower interest, while other job features show little association. Substantively, these workplace factors yield poorer model fit than models that include only personal orientations.

“Green” motivations are the dominant drivers. The strongest and most consistent relationships emerge for variables directly linked to the green economy. Two factors are particularly central in both countries: concern about climate change and the belief that one's skills fit GE jobs. These internal “green” motivations substantially improve overall model fit relative to models including only personal or workplace characteristics. Perceptions of green job opportunities matter, but more selectively. Believing that GE jobs would offer better working conditions – either locally or personally – generally increases interest, although effects are somewhat stronger and more consistent in Germany. Expectations of local job losses from the transition reduce interest in the UK but play a more limited role in Germany. The employer context plays a supporting role. Workers whose employers are already engaged in decarbonisation are more likely to express interest in GE jobs, whereas access to green training is not consistently associated with such interest. Compared with other domains, model fit decreases when only employer-related green factors are included.

When all green-related factors are considered jointly, the model fit improves noticeably, underlining the central role of transition-specific motivations and perceptions. Climate concern and perceived green skill match remain robust predictors in both countries. Adding all non-green variables further improves the model fit. Still, the core pattern remains, interest in GE employment is driven primarily by workers' environmental concern and their sense that they can see themselves – their skills and values – in the GE. At the same time, traditional demographic and workplace characteristics play a secondary role. Some additional variables become statistically significant only in the fully specified model. This may reflect interdependencies among factors that are captured only when considered jointly.

The findings are robust to alternative model specifications. Probit estimates yield the same patterns of statistical significance (see Supplementary Materials Tables 8-10). To ensure these findings are not an artefact of model complexity and sample composition, we conducted sensitivity analyses, including cross-validation.

Table 1: Results of binomial logistic regression UK

	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)	0.102***	3.198*	0.026***	0.307***	0.610***	0.019***
Age	0.866**					
Gender	0.677**					
Parent	1.178					
Political Orientation	1.345*					
Egalitarian Worldview	1.711***					
Occupational Skill Group	0.964					
Willingness to learn new skills	1.375***					
Job Satisfaction		0.879*				
Tenure		0.851				
Employment Temporary		1.777				
Employment Self-employed		1.092				
Union Membership		1.382*				
Employer Size		1.112*				
High-Emission Industry		1.013				
Climate Change Awareness			1.630***			1.888***
Self-reported Green Skill Fit			1.793***			1.683***
GE Individual: Better Jobs				1.246***		1.126
GE Community: Better Jobs				1.268***		0.976
GE Community: Job Losses				0.883*		0.92
Employer: Decarbonise					1.444***	1.104
Employer: Green Training					1.082	0.807
Observations	1197	1422	1211	1296	1129	902
Pseudo R <sup>2</sup>	0.063	0.042	0.143	0.042	0.017	0.150

Note: the numbers represent odd ratios; regression model (2) included a factor variable for industrial sectors. These were omitted due to space constraints. p-value < 0.05 \*, 0.01 \*\*, 0.001 \*\*\*.

Table 2: Results of binomial logistic regression Germany

	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)	0.033***	1.152*	0.013***	0.235***	0.607***	0.012***
Age	0.905					
Gender	0.921					
Parent	1.106					
Political Orientation	1.145					
Egalitarian Worldview	1.936***					
Occupational Skill Group	0.898					
Willingness to learn new skills	1.434***					
Job Satisfaction		1.020				
Tenure		0.625**				
Employment Temporary		0.547*				
Employment Self-employed		0.528				
Union Membership		1.087				
Employer Size		0.991				
High-Emission Industry		1.297				
Climate Change Awareness			1.713***			1.682***
Self-reported Green Skill Fit			1.991***			2.032***
GE Individual: Better Jobs				1.113		1.074
GE Community: Better Jobs				1.413***		1.221*
GE Community: Job Losses				0.930		0.892
Employer: Decarbonise					1.525**	0.954
Employer: Green Training					0.865	0.561***
Observations	1162	1372	1207	1309	1056	890
Pseudo R <sup>2</sup>	0.071	0.022	0.150	0.041	0.015	0.170

Note: the numbers represent odd ratios; regression models (2) included a factor variable for industrial sectors. These were omitted due to space constraints. p-value < 0.05 \*, 0.01 \*\*, 0.001 \*\*\*.

Table 3: Regression output full model for the UK and Germany

	UK		Germany	
	Odds Ratios	P-value	Odds Ratios	P-value
(Intercept)	0.20	0.272	0.14	0.056
Age	0.972	0.727	0.944	0.317
Gender	0.763	0.160	1.052	0.648
Parent	1.039	0.817	1.246	0.323
Political Orientation	1.189	0.346	1.009	0.973
Egalitarian Worldview	1.217	0.246	1.030	0.714
Occupational Skill Group	1.000	0.988	0.739*	0.049
Willingness to learn new skills	1.145*	0.020	1.228	0.237
Job Satisfaction	0.497***	<0.001	0.731**	0.010
Tenure	1.222	0.413	0.521*	0.023
Employment Temporary	2.119	0.195	0.226**	0.004
Employment Self-employed	1.436	0.512	0.483	0.434
Union Membership	1.278	1.243	1.104	0.630
Employer Size	1.170*	0.413	1.015	0.833
High-Emission Industry	0.663	0.222	1.553	0.119
Climate Change Awareness	1.897***	<0.001	1.654***	<0.001
Self-reported Green Skill Fit	1.685***	<0.001	2.063***	<0.001
GE Individual: Better Jobs	1.059	0.558	1.021	0.909
GE Community: Better Jobs	0.985	0.953	1.331**	0.004
GE Community: Job Losses	0.940	0.524	0.853	0.054
Employer: Decarbonise	1.173	0.339	1.075	0.772
Employer: Green Training	0.933	0.649	0.574***	<0.001
Observations	746		753	
Pseudo-R <sup>2</sup>	0.240		0.221	

Note: regression models included a factor variable for industrial sectors. These were omitted due to space constraints. *p*-value < 0.05 \*; 0.01 \*\*; 0.001 \*\*\*.

#### 4.2. Robustness check

To test the robustness of these findings and address potential overfitting, we used repeated 10-fold cross-validation for the complete logistic regression models. Cross-validation reduces the risk that results are driven by idiosyncrasies of a particular sample composition and provides a more reliable estimate of out-of-sample model performance. It therefore serves as a robustness check against overfitting and helps ensure that the identified relationships between worker characteristics and interest in GE generalise beyond the estimation sample. Ten-fold cross-validation repeatedly partitions the data into ten subsets, estimating the model on nine folds and evaluating predictive performance on the remaining fold, rotating through all partitions.

The complete models for both countries were as accurate in predicting interest in working in the GE using repeated 10-fold cross-validation as they were when applied to the complete samples.

For the complete samples, the error rate was 33.7 per cent and 33.8 per cent for the UK and Germany, respectively. Error rates for cross validation were 35 per cent and 34.5 per cent, respectively, for the UK and Germany. This shows that the model performs as good on unseen data as it does on the data at hand. This is a strong indicator that overfitting was unlikely to be an issue in our model and suggests that the model is robust.

## 5. Discussion

Against the backdrop of an urgent need to create jobs in the GE to reduce CO<sub>2</sub> emissions, this study set out to explore the factors driving workers' interest in switching to GE jobs. Using representative survey data from Germany and the UK, we examined the significance of established predictors alongside newly developed green explanatory factors. Our analysis yields four key findings. First, two green factors — climate change awareness and the perception that one's skills are applicable in the GE — emerge as by far the strongest predictors of interest in switching to green employment. Second, traditional predictors from the turnover intention literature show inconsistent results and comparatively poor model fit. Third, except for the two green factors, the associations between predictors and green job interest are highly sensitive to national context. Fourth, our combined model is robust to model specification and sample composition and predicts a worker's interest in switching to the GE with 65 per cent accuracy, a result confirmed through repeated ten-fold cross-validation. Together, these findings carry important theoretical and practical implications.

### ***Theoretical implications***

Our results partially, though not consistently, align with existing theories and findings from turnover intention and job mobility research. In both countries, higher job satisfaction reduced the likelihood of interest in switching to a GE job, although the effect reached significance only for Germany in the full model. These findings are consistent with prior studies (Flickinger et al., 2016; Yuan et al., 2024). Inconsistencies, particularly within the German sample, may stem from omitted variable bias, where key factors linking job satisfaction and green job interest were not captured. Moreover, the effects of union membership, age, gender, and political orientation were significant in the UK but not in Germany, while tenure and temporary employment were significant in Germany but not in the UK. These divergences underscore the sensitivity of traditional predictors to national context, resonating with Hom et al.'s (2017) call to move beyond universalist models and incorporate contextual factors.

Our study's explicit focus on GE job transitions also introduces a new contextual dimension, which may help explain why established models yield mixed results. By examining interest in entering a relatively new, highly politicised sector (Schulz and Trappmann, 2023), we extend the turnover literature into novel territory. The strong and consistent effects of green factors further underscore the need to consider sector-specific and societal influences on job mobility.

Workers' interest in GE jobs appears to be fundamentally shaped by two key factors: heightened awareness of climate change, and the belief that one's skills can be successfully transferred to green sectors. The first finding builds on existing research linking climate change awareness to pro-environmental behaviours (Baiardi and Morana, 2021; Kollmuss and Agyeman, 2002) while identifying a new behavioural outcome: the intention to leave a "non-green" job in favour of contributing to the green transition. The second aspect underlines the critical role of perceived skills fit. Although an objective skills measure based on occupational group was not statistically significant, subjective perceptions, including willingness to acquire new skills, were important predictors. This aligns with Ng et al.'s (2010) concept of "readiness for change," particularly regarding the appropriateness of knowledge and skills for navigating transitions.

In addition, perceptions of improved working conditions in greener local economies correspond with the concept of “valence”: the belief that change will be personally beneficial. Together, these insights confirm the role of external factors (Nair et al., 2016; Ng et al., 2007; Price, 2001) in shaping workers’ openness to transition into the GE.

### ***Practical implications***

In light of the high future demand for green jobs (Simmonds and Lally, 2024; Weber and Zika, 2023), our findings provide several insights for policymakers, unions, employers, and training providers seeking to accelerate the transition to green jobs.

First, climate change awareness emerges as the strongest factor shaping workers’ openness to transitioning to GE jobs. This suggests that labour market readiness for decarbonisation is not purely a function of skills supply or job availability, but also of societal engagement with the climate crisis. Public communication strategies, school curricula, and workplace information campaigns should go beyond general environmental messaging and explicitly connect climate impacts to local labour market transformations. Trade unions and works councils could be valuable intermediaries in such campaigns, linking the climate crisis to concrete employment opportunities and rights protections.

Second, perceived skill fit is as important as climate awareness. Workers who believe their current skills are applicable in the GE, or who feel confident in learning new ones, are far more likely to express interest in green jobs. This points to the urgent need for accessible and affordable reskilling and upskilling pathways. Training should be embedded in sectoral strategies and supported by public funding, with targeted outreach to groups that may underestimate the transferability of their skills, such as older workers or those in declining industries. In Germany, one initiative, first proposed by unions in 2019 (Ahr, 2019), was adopted as a federal policy instrument – *Qualifizierungsgeld* – and implemented on 1 April 2024. Under this scheme, employees whose jobs are expected to disappear in the transformation receive 60 per cent of their net pay (67 per cent if they have children) while undertaking retraining or qualification programmes that enable them to remain with the same employer. In the UK, the *skills passports* initiative, originating from a collaboration between a climate NGO and unions, is now being embedded in state policy for the energy transition in the North Sea. The *passport* programme aims to help oil and gas workers match their competencies to those required in offshore renewables with plans announced to expand the scheme to the electricity grid and nuclear sectors (Department for Energy Security and Net Zero, 2025).

Third, perceptions of job quality in the GE are crucial for sustaining interest. Workers are more inclined to transition if they expect better pay and conditions, but concerns about job losses, especially in local communities, can dampen interest. This underscores the political importance of coupling green industrial policy with robust labour standards, collective bargaining coverage, and employment guarantees. Identifying which jobs will disappear, which will be created, and under what conditions will be vital to avoid resistance and foster public support. German unions advocate that all government support be made conditional on recipients’ meeting environmental, social, and employment standards (Deutscher Gewerkschaftsbund, 2023). They also insist that financial support be contingent on employers’ commitments to maintain employment and production for a defined minimum period. UK unions have also demanded more concrete action on job measures in the green transition, calling for the integration of job quality measures in public procurement underpinning sector plans for decarbonisation, such housing retrofit (TUC, 2024) and wider industrial strategy (TUC, 2023). Within the tradition of the UK’s more voluntaristic employment relations system, the UK government has announced plans for a voluntary *fair work charter* for businesses in the offshore sector awarded government subsidies in renewable energy auctions (Department for Energy Security and Net Zero, 2026).

Finally, our findings highlight the need for coordinated governance. National governments can set strategic skills and climate targets, but successful implementation requires collaboration with local authorities, regional development agencies, employers, unions, and training institutions. At the regional level in Germany, unions have supported the creation of regional transformation councils (*Transformationsräte*) to guide and manage structural change (Moch, 2022). These bodies bring together labour unions, industry associations, civil society organisations, and regional political stakeholders – such as municipalities and employment agencies – to collaboratively develop strategies and concepts for regional transformation (Hoßbach, 2024). In the UK, regional experiments in climate governance between local authorities, privatised utilities, community campaigns and trade unions have emerged (Cutter et al, 2025) but have tended to focus on local mitigation and adaptation measures that are fragmented, lacking legitimacy (Aisling and Howarth 2024) and with less emphasis placed on labour market transitions.

### **Limitations and future research**

The findings draw on representative survey data of workers in Germany and the UK. The results are robust across alternative model specifications and remain stable when varying sample composition and addressing potential overfitting, as demonstrated by extensive sensitivity analyses. The comparative design further allows us to identify both cross-national commonalities and context-specific dynamics shaping workers' interest in transitioning to jobs in the GE. Taken together, the paper provides robust and policy-relevant insights for actors seeking to facilitate workers' mobility into GE employment.

Notwithstanding these strengths, several limitations must be acknowledged. First, the data are cross-sectional and therefore capture workers' interest in switching to a GE job at a single point in time. As such, they cannot account for how preferences evolve or how external shocks and policy changes may alter intentions. Second, the survey measures general interest in switching but does not allow us to observe whether this interest translates into actual behaviour. We cannot trace whether workers move from expressing interest, to actively searching for GE employment, to ultimately completing a job transition. Longitudinal data would be required to analyse this dynamic process. Third, while the comparative design enables us to identify differences between workers in Germany and the UK, it does not permit firm conclusions about the institutional or structural factors driving these divergences. Future research should therefore examine how specific features of the German and UK labour market contexts shape workers' interest in GE transitions.

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