



BRIDGING THE GAP IN THE PURSUIT OF SUSTAINABILITY: A FOCUS ON WORKERS

Research Partnership between **National Trades Union Congress (NTUC)**, **NTUC LearningHub** and
the **Lee Kuan Yew Centre for Innovative Cities**, **Singapore University of Technology and Design (SUTD)**

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Lee Kuan Yew
Centre for Innovative Cities

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Executive Summary

The Challenge

Climate change will bring about changes in production and consumption patterns globally. These changes result in loss, change and creation of jobs. Workers largely understand that a transformation of their industry/ organisation is impending. But there is uncertainty about what this transition will look like. However, ensuring meaningful employment and that climate change is mitigated can be aligned. Enhancing existing livelihoods and income is fundamental to the transition. Further assurance is needed of arising job opportunities amidst the uncertainties.

The Ambition

A strategy for a Just Transition is necessary to ensure that the future sustainable economy provides new and meaningful green jobs for workers in Singapore.

The Response

The Labour Movement in Singapore has a key role in achieving a Just Transition. The Labour Movement can further deepen partnerships with tripartite, employers and organisations, and academia partners to:

1. Set up Just Transition Committees to oversee, coordinate and advise on transitions.
2. Develop guides, case studies and training resources relevant to Just Transitions by SMEs and make them available to SMEs who may need support in making the transition.
3. Work with training providers to widen current offerings or training courses and programmes related to sustainability to give workers the needed competencies in making a successful transition into greener jobs.
4. Partner with existing unionised and large organisations that have announced plans for a Just Transition to build the Labour Movement's capacity and experience for supporting future transitions.
5. Develop case studies of Just Transitions to distil learning points and potential roadmaps for companies.
6. Provide personalised transition support for workers using the task-skills-based approach to identify transition opportunities for individuals to emerging tasks, skills and jobs in greenfield sectors.

7. Facilitate partnerships between organisations and Institutes of Higher Learning and Research Institutes to develop relevant training courses.
8. Embark on forward-looking research to understand how to build resilience and capabilities in workers to support successful transitions.

Further, the Labour Movement can expand existing activities and memberships by considering a deliberate focus on climate change and sustainability as work-related issues when organising.

Finally, the Labour Movement, being the nexus between employers and the government, is in the prime position to lead the creation of a Transition Lab where the Labour Movement brings employers, workers and relevant stakeholders together regularly to explore, discuss and problem-solve transition-related issues that affect workers and serve as a catalyst for innovative solutions.



Chapter 1: The Challenge — Climate Change and Its Impact on Workers and Jobs

The world is experiencing accelerated warming and climate change brought on by anthropogenic activities (IPCC, 2018). Tackling climate change is a global effort that will involve all parties in our society. In 2015, the Paris Agreement was adopted by 196 Parties at the 21st session of the Conference of the Parties (COP) in Paris on 12 December 2015, signalling their commitment to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future through globally coordinated programmes on climate change mitigation, adaptation, and finance (Paris Agreement, 2015; ITUC-AP, 2022).

The UN Climate Change Conference in Glasgow, COP26, also reaffirmed global ambitions toward limiting the rise of global temperatures with the agreement of The Glasgow Climate Pact. The Conference saw the biggest representation from countries, civil society, Indigenous Peoples, youth, and Business (UK COP26, 2021). Some key outcomes of the UK Presidency at COP26 include securing net zero commitments covering over 90% of world GDP and new Nationally Determined Contributions from 153 countries, ensuring that 86 countries are now in National Adaptation Plans or Adaptation Communications to increase preparedness for climate risks, achieved record mobilisation of the Adaptation Fund and Least Developed Countries Fund, and garnered financial support from the public and private institutions.

COP27, held in 2022, saw progress in helping countries and organisations meet climate goals. The task group set up to address greenwashing presented recommendations of what companies need to meet to claim to be net-zero (United Nations, 2022). In addition, the International Organisation for Standardisation (ISO) published a net-zero guideline paper for organisations wishing to create meaningful net-zero targets (ISO, 2022).

1.1 Climate Change Impacts Jobs and Livelihoods

Climate change presents significant challenges to sustainable development and has major implications for economic growth, employment, key infrastructure, human health, and livelihoods. Uncontrolled climate impacts will cause damage to infrastructure, disrupt business activity, and destroy jobs and livelihoods on an unprecedented scale (ILO, 2020). In the Sixth Assessment Report by the Intergovernmental Panel on Climate Change (2022), observations of the impacts of climate change in urban settings included economic losses, disruptions of services, and impacts on well-being.

The economic impacts of climate change are felt disproportionately by the most vulnerable people and systems across the world. The impact of climate change, biodiversity loss, and environmental degradation are concentrated among workers from lower-income countries and small-island developing states, rural workers, people living in poverty, indigenous and tribal people and other disadvantaged groups (ILO, 2020). In

urban contexts, observed climate impacts are concentrated amongst economically and socially marginalised residents (IPCC, 2022).

As industries shift toward a green economy, jobs in previously secure but highly polluting industries may turn precarious (Goods, 2017). Moreover, workers in conventional fossil fuel energy production face redundancy as changing labour processes to renewable energy require different skills. Nevertheless, the International Labour Organisation estimated that limiting global warming to 2 degrees Celsius by the end of the century has the potential to create around 24 million jobs, largely offsetting any job losses in sectors such as carbon- and resource-intensive industries (ILO, 2018).

1.2 Workers: The Gap in Climate Crisis Response

Over a decade ago, ILO (2010a) highlighted the need to acknowledge the role of a socially unjust and consumption-oriented economic model in generating present environmental and social crises. While climate debates of the past have given some coverage to the issue of employment opportunities and challenges arising from a greener economy, the social aspect of climate policies remained an afterthought (ILO, 2010a). Progress has been made in this aspect.

The United Nations 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, is a 'plan of action for people, planet and prosperity' (UN, 2015), indicating overwhelming support for sustainable development across the globe. Action to combat climate change and its impacts is central to Goal 13 of the Agenda and is relevant to most other Sustainable Development Goals, including Goal 8 on decent work and economic growth (ILO, 2020). Global measures are generating multiple benefits in agricultural productivity, innovation, health and well-being, food security, livelihood, and biodiversity conservation (IPCC, 2022).

1.3 Representing Workers in the Climate Crisis Response

Climate change policies will have impacts on the labour market and the interests of workers need to be represented. Trade unions represent workers and are vital actors in facilitating sustainable development, particularly with their experience in addressing industrial change, and the extremely high priority they give to protecting working and related natural environments.

In 2007, the International Trade Union Confederation (ITUC) stressed that it was vital for trade union approaches to be reflected within ongoing international negotiations, thus establishing a Trade Union Task Force on Climate Change representing developed and developing countries (ITUC, 2008). More recently, the ITUC (2017) called for a holistic climate response whereby climate change is treated as both a social and economic concern and for the climate impact to be wholly acknowledged for its other societal effects.

Goods (2017) categorises the response of organised labour to the transition to greener economies as two competing ideas: 1) labour protection, often seen as labour or jobs versus the environment, and 2) labour for the environment, which emphasises a “just transition” for workers. To effectively achieve sustainable development and address the climate crisis, a Just Transition is needed.

1.4 What Is a Just Transition?

“Just Transition” is the idea that the transition to a more sustainable and equitable economy or society should be fair and equitable for all stakeholders, including workers, communities, and marginalised groups. It involves ensuring that the costs and benefits of such a transition are shared fairly, and that affected individuals and communities have the support and resources they need to adapt and thrive in the new economic and social environment (ILO, 2010a). Hence, a Just Transition contributes to the goals of decent work for all, social inclusion, and the eradication of poverty. The Just Transition concept has been adopted and integrated into the 2015 Paris United Nations Framework Convention on Climate Change (UNFCCC, 2015).

While the concept of Just Transition is most often applied to discussions around transitioning to a low-carbon economy, it is also relevant to other social and economic transitions, such as the transition to a more digitally-driven economy.

1.5 The Role of Labour Unions in Just Transitions

Labour unions play a critical role in Just Transitions, as they represent the interests of workers and can advocate for policies and practices that protect and support affected workers and communities. In the context of climate change, for example, labour unions may advocate for policies that provide retraining and job placement assistance for workers in the fossil fuel industry, or that invest in economic development in affected regions.

Labour unions can also be involved in planning and implementing Just Transition policies, working with governments, employers, and other stakeholders to ensure that the needs and concerns of affected workers are considered. They may also play a role in educating their members and the broader community about the importance and benefits of a Just Transition. Furthermore, they can also play a role in promoting sustainability and equity more broadly, such as negotiating for policies that reduce the environmental impact of industries, or that promote more equitable distribution of the benefits of economic growth.

Normann and Tellmann (2021) elaborated that a Just Transition requires balancing between destruction and creation policies whilst protecting workers and regions. Phase-out efforts should be accompanied by policies that both contribute to diversifying and reallocating resources from fossil fuel industries towards low-emission industries.

Tripartite actors may support this reallocation effort by prioritising job transfer programmes and retraining. While creation policies are politically feasible, they are not sufficient for a transition (Normann & Tellmann, 2021). For trade unions to become a force for change, they must also support deliberate decline policies that aim to phase out fossil fuel industries (Kivimaa & Kern, 2016). These phase-out policies can include the removal of fossil fuel subsidies, stricter regulations, reduced research and development support, or the banning of certain carbon-intensive activities. However, such policies are deeply contested and intensely political. Therefore, a successful Just Transition has to be sufficiently transformative but also politically feasible.

The ILO, in its study into the risks that climate and environmental change pose for decent work, issued a guideline for a Just Transition, which offers a comprehensive set of socially responsible policies that countries may draw on to implement their climate change commitments (ILO, 2015). The guidelines call for an alignment of climate action programmes with a universally accepted concept of “sustainable development” and A Decent Work Agenda advocated by the ILO, with its “four pillars” of social dialogue, social protection, rights at work, and employment (ITUC-AP, 2022).

1.6 The Case of the New Zealand Council of Trade Unions

The New Zealand Council of Trade Unions (NZCTU) conceived and developed a Just Transition programme in 2017 (NZCTU, 2017) and in 2021, New Zealand was the sole Asia-Pacific country that signed on to the “Just Transition Declaration”¹ in Glasgow (ITUC-AP, 2022). This achievement embodies both the challenges and possibility of pursuing Just Transitions and the key role of trade unions. Integral to the success of the Just Transition programme is NZCTU’s continuous dialogue with government ministers and representatives of the business sector and local communities, including the Maori population. Social dialogue played a significant role in a Just Transition as a tool for the democratic consultation of social partners and key stakeholders.

Evidence supports the value of tripartite dialogue for its positive effects on information and consensus-building, as a driver for internal actions in each sector, and potentially useful for monitoring progress (ILO and Sustainlabour, 2010). New Zealand has seen success in facilitating continuous social dialogue and building social consensus with government ministers and representatives of the business sector and local communities, including the Maori population, for climate action that is accepted by the people (ITUC-AP, 2022).

In New Zealand, the articulation of just transition programmes takes place through the Just Transition Unit (JTU) established by the Ministry of Business, Innovation and Employment to coordinate the country’s transition to a low-carbon emissions economy following the government ban on new field oil exploration (Molina, 2022). In the oil and

¹ The Just Transition Declaration reflects the ILO’s 2015 Guidelines for a Just Transition, which outline the necessary steps towards well-managed environmentally sustainable economies and societies, decent work for all, social inclusion and the eradication of poverty.

gas-producing region of Taranaki, the JTU facilitated a wide-ranging dialogue on how the region could manage the just transition, resulting in the *Taranaki Roadmap 2050*. The report was produced by Venture Taranaki, the region’s economic development agency co-created with communities, iwi (Māori nation/peoples), local and central government, businesses, educators, unions, and workers. In accordance with leading practices on Just Transition (Krawchenko & Gordon, 2021), the development process sought public engagement and social dialogue through workshops, surveys, community outreach, a creative challenge, and youth engagement (Krawchenko, 2022).

The *Roadmap* includes a robust monitoring and evaluation approach to track distributional, recognitional, and procedural justice outcomes (Venture Taranaki, 2019). While the implementation of the Roadmap is in its early stages, the *Taranaki Roadmap 2050* progress report showed that 85 actions are complete or in progress, 38 are partly underway, and 43 actions remain (Tapuae Roa, 2021). A wide range of actions related to diversifying and decarbonising the economy and preparing workers are underway, such as an environmental workforce development training programme by an iwi Trust (Krawchenko, 2022). Using Just Transition as the common ambition, it provided the space for inclusive discourse and negotiation, allowing tripartite partners to come to a mutual understanding of how the conflict between jobs and climate mitigation can be solved.



Chapter 2: The Ambition – Achieving a Just Transition in Singapore

The National Climate Change Secretariat and the Ministry of Sustainability and the Environment announced in October 2022 that Singapore will raise its national climate target to achieve net zero emissions by 2050 (NCCS, 2022). Revisions to the city state's Nationally Determined Contributions saw a reduction of emissions to around 60 million tonnes in carbon dioxide equivalent before 2030, down from its previous commitment of peaking at 65 million tonnes in 2030 (NCCS, 2022). While Singapore has strengthened its 2030 target, greenhouse gas emissions must peak before 2025 and be reduced by 43 per cent by 2030 (Fogarty, 2022).

The National Trades Union Congress (NTUC), Singapore's sole Labour Movement in Singapore with 58 affiliated trade unions and 7 affiliated associations and over 1 million NTUC members, is working closely with its tripartite partners to support Singapore in achieving its climate targets while ensuring a Just Transition. To date, some initiatives include supporting training and transformation efforts through Company Training Committees and Operation and Technology Roadmap initiatives and working with government agencies such as Workforce Singapore and SkillsFuture Singapore, and Institutes of Higher Learning to identify basic and intermediate green certification Continuing Education and Training courses (Tan, 2022).

What else can the Labour Movement do to achieve a Just Transition in Singapore?

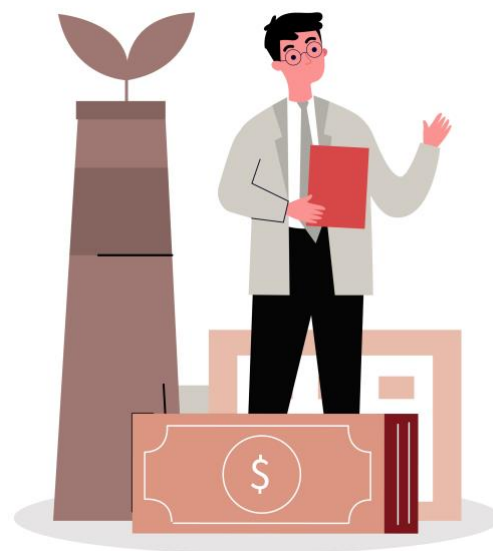


Chapter 3: The Response – How the Labour Movement Can Lead

To hear from workers and for a holistic understanding of the opportunities for the Labour Movement to be the voice of workers and be a key contributor to Singapore's Just Transition, a survey with 1,000 Singaporean and Permanent Resident workers was conducted. The key insights from the survey conducted are:

1. Despite the ongoing push for sustainability, workers' top concerns today and in the coming decade are the cost of living and livelihoods. Climate change is of less concern. Even among workers with strong pro-environmental attitudes, the cost of living and livelihoods were greater priorities. Our ageing workforce is also a growing concern for the future.
2. Workers are seeking certainty of what the Just Transition looks like and reassurances that job opportunities will arise. These hint at existing uncertainties among workers about jobs, livelihood and impending changes that will take place as part of this transition.
3. Organisations need help in making a Just Transition. The majority of workers reported their organisation is aware of climate change but more than 6 out of 10 workers polled revealed that their organisations do not have a strategy in place that they know of.
4. Workers see a role played by the Labour Movement in the Just Transition and this role is multi-faceted and builds on existing advocacy, negotiation and partnership activities.
5. Joining a cause-based organising focusing on climate change and environmental sustainability is attractive. Half of the non-union member respondents will join such an organising effort if implemented.

To support the Just Transition in Singapore in the coming years, the Labour Movement could focus on two aspects: 1) building greater partnerships, and 2) expanding existing Labour Movement activities.



3.1 Building Greater Partnerships and Capabilities

The Labour Movement is one of a myriad of stakeholders in the journey of ensuring a Just Transition in Singapore. Deepening existing partnerships with all stakeholders ensures that the Labour Movement continues to be the leading voice of workers amidst the rapid reconfiguration of the nature of industries, workplaces and jobs. For instance, the Labour Movement’s involvement in Temasek Tripartite Conversations, an annual conference that brings the public and private sectors, and unions on the same platform to discuss on the future skills forward for our workforce, is an example of an existing effort that the Labour Movement can build upon. Building greater partnerships and capabilities also ensures that the Labour Movement strengthens its position as a key stakeholder in the transition.

With Tripartite Partners

Recommendation 1: Set up Just Transition Committees to oversee, coordinate and advise on the transition. This expands upon the Company Training Committees that the Labour Movement has led the creation of. The Just Transition Committees can be created at three levels (company, industry and national) to be able to focus on unique circumstances and considerations of different companies and industries while ensuring synergies and coordinated agendas and initiatives at the industry and national levels.



Figure 1. Just Transition Committees

Recommendation 2: Address the lack of critical mass among SMEs to embark on Just Transitions on their own. Guides, case studies and training resources to embark on Just Transitions can be centralised and made available to SMEs as part of the Just Transition Lab (further explained in Recommendation 10). These will support SMEs in developing a transition plan that will also ensure their workers make a successful transition.

With Employers and Organisations

Recommendation 3: Work with training providers to widen current offerings or training courses and programmes related to sustainability to give workers the needed competencies in making a successful transition into greener jobs. This complements ongoing national upskilling and reskilling programmes.

Recommendation 4: Partner with existing unionised organisations and large organisations that have announced plans for a Just Transition (e.g., Shell, ExxonMobil and Temasek Portfolio Companies) to build the Labour Movement's capacity and experience for supporting future transitions, especially with SMEs.

With Academia

Recommendation 5: Develop case studies of Just Transitions to distil learning points for the management across all organisational sizes (including SMEs) and complement them with potential roadmaps for companies. The case studies should be a mixture of local and international ones with distilled implications for Singapore's context.

Recommendation 6: Provide personalised transition support for workers using the task-skills-based approach² to identify transition opportunities for individuals to emerging tasks, skills and jobs in greenfield sectors.

Recommendation 7: Facilitate partnerships between organisations and Institutes of Higher Learning and Research Institutes to develop relevant training courses targeted at helping workers and organisation make a successful Just Transition that can be scaled by training providers.

Recommendation 8: Address on the current dearth of knowledge and know-how on successful Just Transitions by embarking on forward-looking research to understand how to build resilience and capabilities in workers to support successful transitions.

3.2 Expanding Existing Labour Movement Activities

Recommendation 9: Consider focusing on climate change and sustainability as work-related issues when organising and communicating with workers to sensitise them to the issue. Climate change and sustainability-oriented causes can attract new members to the Labour Movement.

Recommendation 10: The Labour Movement, being the nexus between employers and the government, is in the prime position to create a Transition Lab where the Labour Movement brings employers, workers and relevant stakeholders together regularly to explore, discuss and problem-solve transition-related issues that affect workers. This Transition Lab serves to complement the Just Transition Committee as a catalyst for innovating solutions and building a network of like-minded stakeholders and a resource and expertise hub for companies, especially SMEs. The Transition Lab can be set up as a virtual lab that organises physical events initially but could expand to be a physical lab with a drop-in consultation hub as it expands.

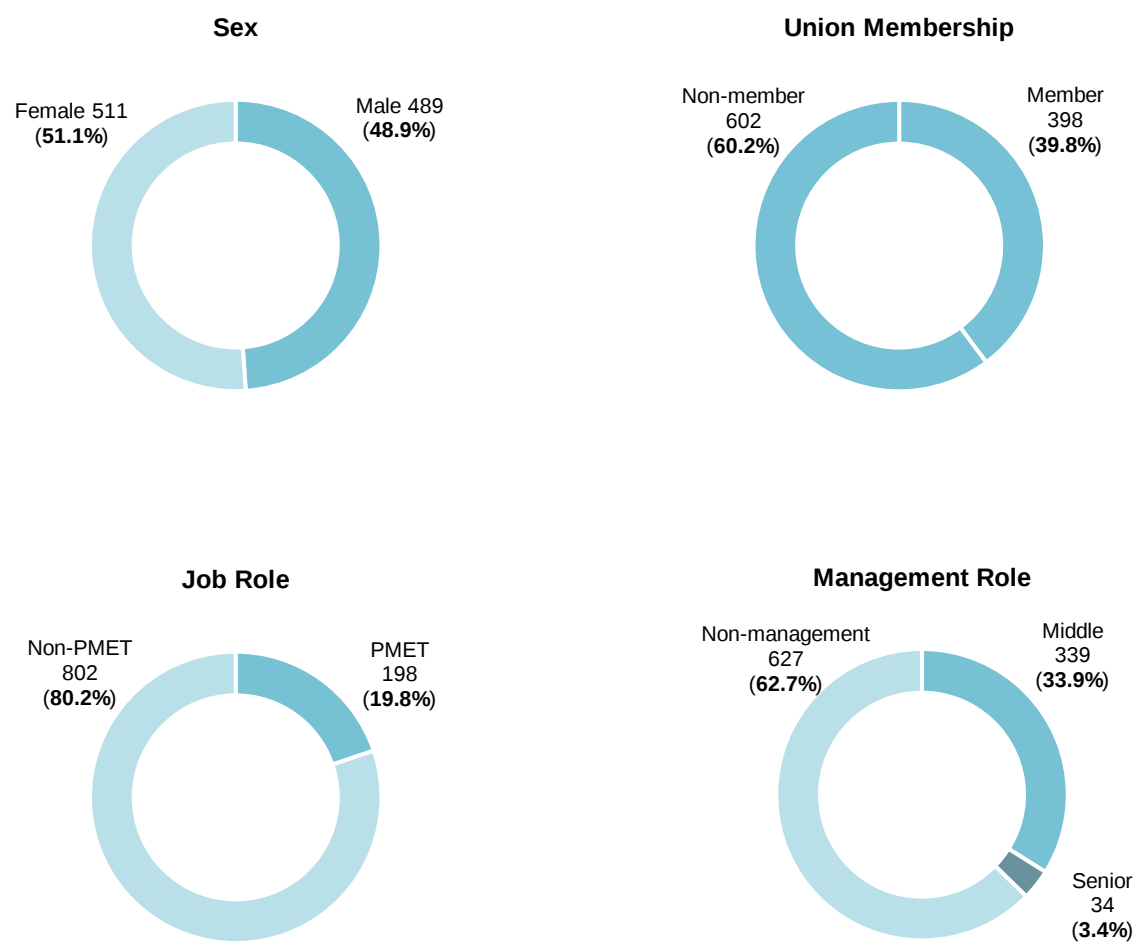
² This is an approach to job redesign developed as part of the Lee Kuan Yew Centre for Innovative Cities' research into the Future of Work. The Centre published Singapore's first industry-agnostic guide, A Guide to Job Redesign in the Age of AI, in collaboration with the Infocomm Media Development Authority and the Personal Data Protection Commission, under the guidance of the Singapore's Advisory Council of the Ethical Use of AI and Data (<https://file.go.gov.sg/ai-guide-to-jobredesign.pdf>).

Chapter 4: The Data – Detailed Reporting of Survey Findings

An online survey was conducted with 1,000 Singaporean and Permanent Resident workers in October 2022 using a third-party vendor’s online survey platform. The sample is representative of the resident labour force with a 3% margin of error.³

4.1 Respondent Demographics

The sample consisted of 51.1% females and 62.9% of participants under 35 years old. Respondents represented all 11 Union industry clusters⁴ and 39.8% are current Union members. PMETs formed 80.2% of the sample, with 62.7% in non-management roles.



³ The resident labour force comprises of Singapore citizens and permanent residents which stands at 2,438,000 in 2022 (<https://stats.mom.gov.sg/Pages/Labour-Force-Summary-Table.aspx>). The margin of error is calculated using a 95% confidence interval.

⁴ The Union industry clusters are 1) Oil, Petrochemical, Energy & Chemical (OPEC), 2) Aerospace & Aviation, 3) Electronics, Marine & Engineering, 4) Maritime, 5) Land Connectivity, 6) Building & Facility Management, 7) Essential Domestic Services, 8) Financial & Professional Services, 9) Infocom & Media, 10) Hospitality & Consumer Business, 11) Public Service.

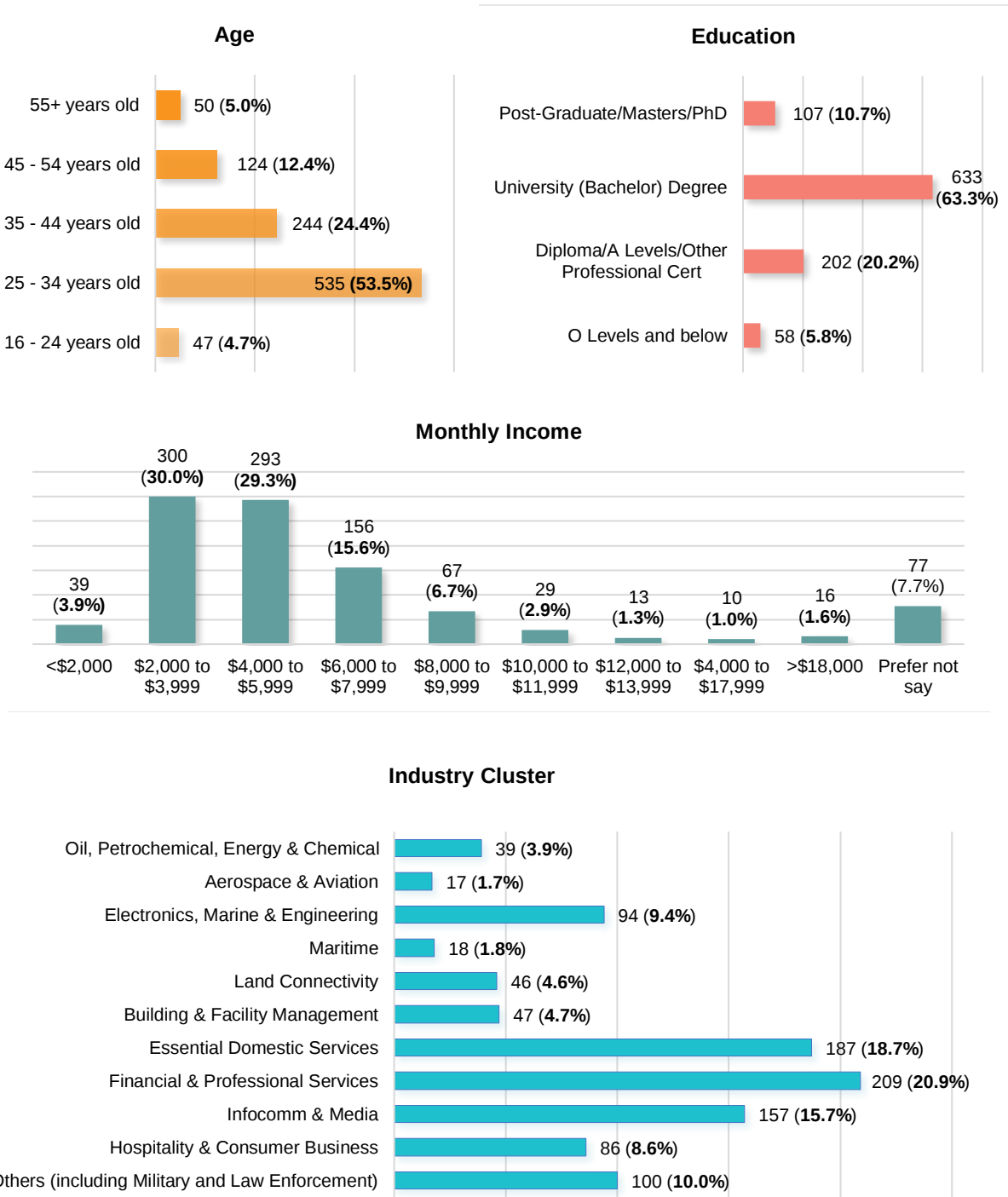


Figure 2. Sample Demographics



4.2 Urgent Issues Today Versus in a Decade

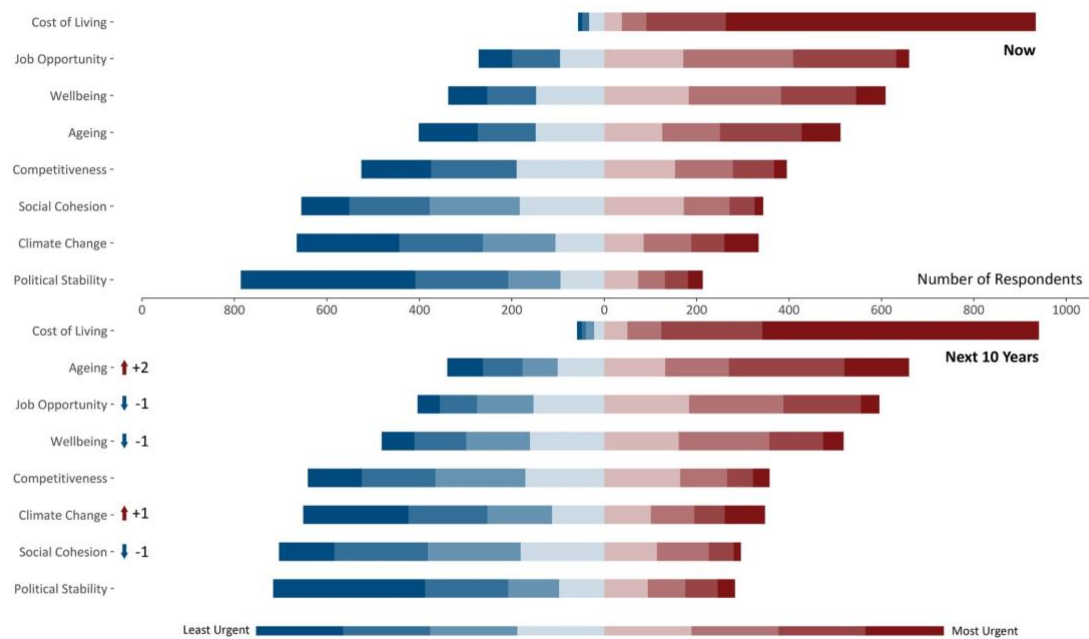


Figure 3. The Urgency of Addressing Eight Key Issues Today and in the Next Ten Years

Respondents ranked eight key issues by their urgency to be addressed across two time horizons: today and in a decade. Despite the ongoing push for sustainability, workers' top concerns today and in the next decade were the cost of living and livelihoods. Climate change was of less concern. Even among workers with strong pro-environmental attitudes, the cost of living and livelihoods were greater priorities. Our ageing workforce was also a growing concern for the future. There were no significant differences observed across age, sex, income, union membership and job role.

4.3 Perceived Climate Change-Related Impact on Organisations

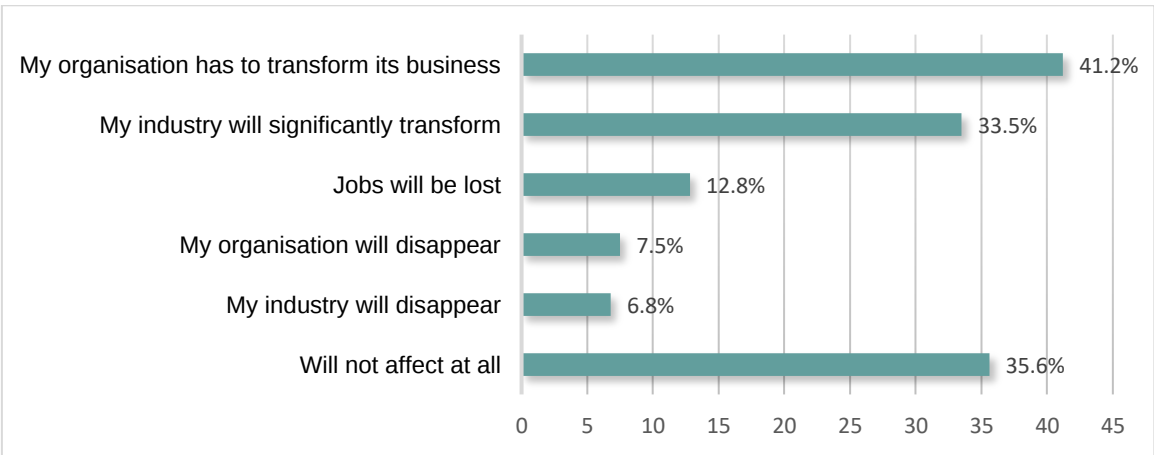


Figure 4. Perceived Climate Change-Related Impact on Organisations

Respondents shared their perspectives on how climate change might impact their organisations. The need for organisations to transform their business was most reported (41.2%), and this was significantly higher among respondents from the aerospace and

aviation industry cluster (70.6%) and significantly lower among those from the essential domestic services industry cluster (32.1%).⁵

One in three respondents (33.5%) reported that the industry their organisation is in will transform significantly. This percentage was significantly higher among union members (39.6%)⁶ and those in the aerospace and aviation industry cluster (70.6%) but significantly lower among those from the essential domestic services industry cluster (32.1%)⁷.

The impact on jobs was less reported. One in eight respondents (12.8%) reported that jobs will be lost but this percentage was significantly higher among respondents who were union members (16.2%)⁸, non-PMETs (18.7%)⁹ and in the hospitality and consumer business industry cluster (25.6%)¹⁰.

The perspectives that their organisations (7.5%) and industries (6.8%) will disappear as a result of climate change were least reported by participants. However, the former was significantly higher among respondents who were in senior management job roles (17.7%)¹¹. Non-PMET respondents also reported significantly stronger perspectives of both the former (11.1%)¹² and latter (10.0%)¹³ perspectives.

Nevertheless, about one in three respondents (35.5%) also responded that their organisations would not be affected and this number was significantly higher among those from the essential domestic services industry cluster (51.3%).¹⁴

4.4 Organisations' Transition to Be Environmentally Sustainable



Figure 5. Stages of Organisation's Transition to Be Environmentally Sustainable

Most organisations appeared to be in the early stages of their transition to be environmentally sustainable. Less than two in five (37.2%) respondents reported that their

⁵ $\chi^2(10, N = 1,000) = 22.26, p = .014$

⁶ $\chi^2(1, N = 1,000) = 6.36, p = .012$

⁷ $\chi^2(10, N = 1,000) = 23.02, p = .011$

⁸ $\chi^2(1, N = 1,000) = 3.96, p = .047$

⁹ $\chi^2(1, N = 1,000) = 7.67, p = .006$

¹⁰ $\chi^2(10, N = 1,000) = 21.55, p = .018$

¹¹ $\chi^2(2, N = 1,000) = 7.00, p = .030$

¹² $\chi^2(1, N = 1,000) = 4.64, p = .031$

¹³ $\chi^2(1, N = 1,000) = 4.24, p = .039$

¹⁴ $\chi^2(10, N = 1,000) = 35.64, p < .001$

organisations had a strategy in place and only one in 10 (11.2%) reported that their organisation had implemented their strategy to be environmentally sustainable.

4.5 Prioritising Organisational Just Transition Focus

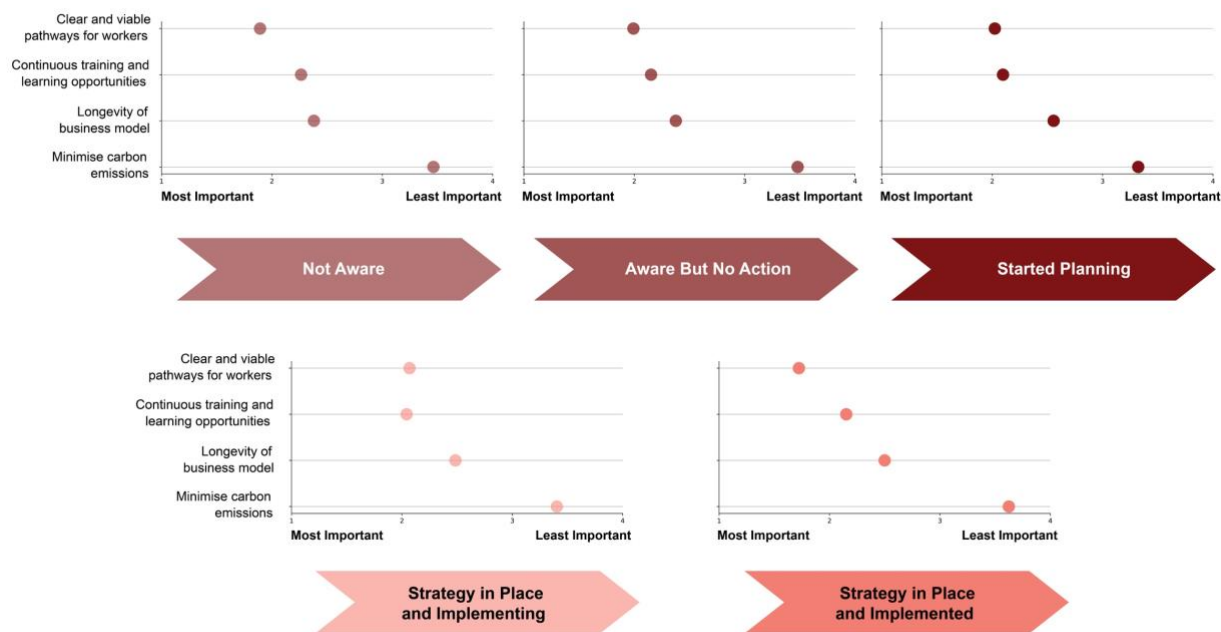


Figure 6. Survey Respondent's Desired Organisational Priorities During Just Transition

Ensuring clear and viable job transition pathways for workers was reported by survey respondents to be the most important focus they would expect of organisations in a Just Transition, followed by providing continuous training and learning opportunities and the longevity of the organisation's business model. Focusing on minimising carbon emissions was the least important. The order of the priorities reported was largely similar across respondents from organisations that were at different stages of transition.

4.6 Do Workers Consider Climate Change When Seeking Jobs?

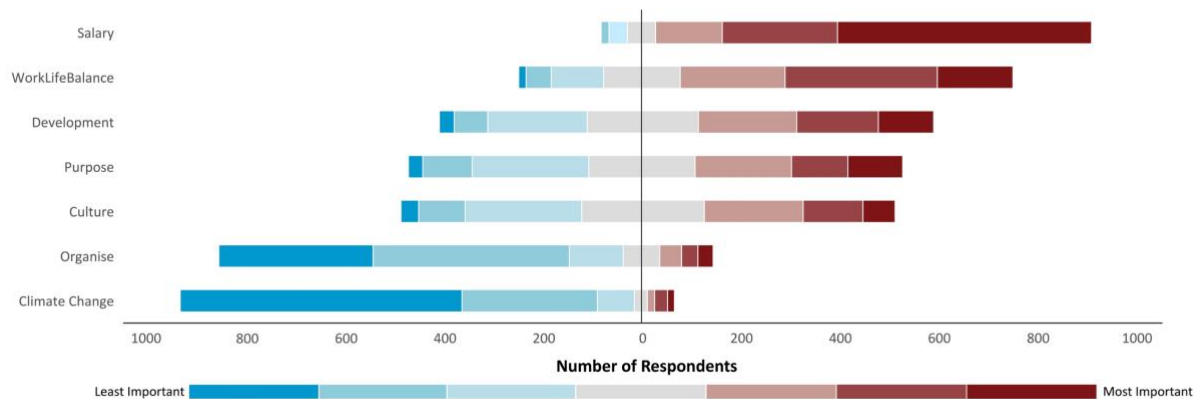


Figure 7. Job Considerations by Workers

The organisation's contribution towards mitigating climate change was the least important factor for respondents. The most important consideration for respondents when seeking

a job was salary followed closely by work-life balance. The other important factors considered were career development opportunities, the purpose and meaning of the job and organisational culture.

4.7 Attitude Towards a Just Transition



Figure 8. Attitude Towards a Just Transition

One in two (51.1%) respondents felt that during a Just Transition, protecting jobs is more important than protecting the environment. Less than one in 10 (8.8%) respondents felt the opposite.

This attitude varied significantly across job roles. Almost one in four (23.5%) respondents in senior management job roles felt protecting the environment was more important compared to respondents in middle (9.4%) and non-management roles (7.7%).¹⁵ In addition, a significantly higher percentage of respondents in non-PMET jobs were neutral (48.0%) compared to those in PMET jobs (38.2%).¹⁶

4.8 Taking up Greener Jobs

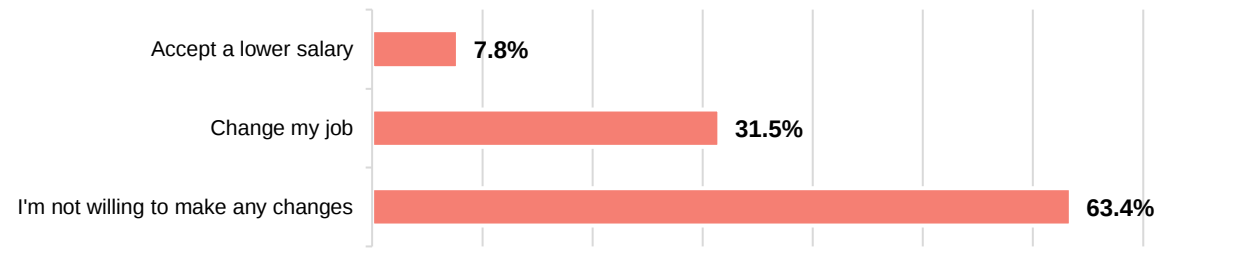


Figure 9. Willingness to Take up Green Jobs

Most workers were generally unwilling to accept changes to the status quo for a greener job. About three in five (63.4%) were not willing to make any changes. This percentage was significantly higher among mid-career (35-44 years of age; 70.1%)¹⁷ and middle-to-high income (\$8,000-\$13,999 per month)¹⁸ respondents. Non-union members (65.4%) also reported higher levels of unwillingness than union members (58.3%).¹⁹

The youngest (16-24 years of age; 12.8%)²⁰ and older (45-54 (14.5%) and 45 and above (16.0%)) respondents were significantly more accepting of a lower salary. Regarding

¹⁵ $\chi^2(4, N = 1,000) = 11.80, p = .019$
¹⁶ $\chi^2(2, N = 1,000) = 7.81, p = .020$
¹⁷ $\chi^2(4, N = 1,000) = 12.87, p = .012$
¹⁸ $\chi^2(9, N = 1,000) = 18.14, p = .034$
¹⁹ $\chi^2(1, N = 1,000) = 4.36, p = .037$
²⁰ $\chi^2(4, N = 1,000) = 18.51, p = .001$

changing of jobs, the youngest (16-24 years of age; 44.7%)²¹ and union members (36.3%)²² were significantly more accepting of changing to a green job. Mid-career (35-44; 23.8%) respondents were significantly less accepting.

The willingness to accept changes to take up a greener job differed significantly among across respondents' attitudes towards Just Transition. Almost one in five (18.2%) who felt that protecting the environment was more important would accept a lower salary, compared to 8.0% and 5.2% among those who felt protecting jobs was more important and those who were neutral respectively.²³

Regarding changing jobs, almost one in two (48.9%) who felt that protecting the environment was more important would do so, compared to 24.9% and 36.2% among those who felt protecting jobs was more important and those who were neutral respectively.²⁴

4.9 Assuring Workers in a Just Transition

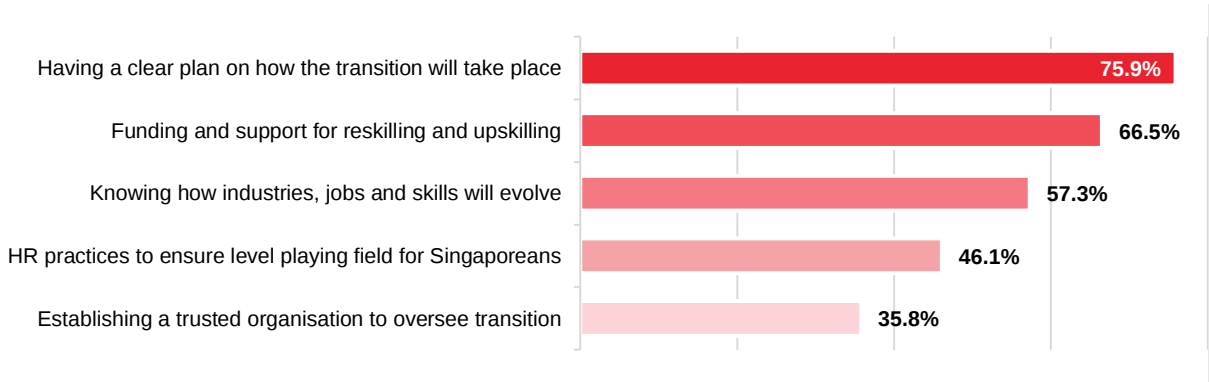


Figure 10. Assuring Workers in a Just Transition

Assuring workers with a clear plan on how a Just Transition will take place was the top preference with three in four (75.9%) respondents selecting this option. Ensuring that workers will be supported with reskilling and upskilling opportunities (66.5%) and understanding how industries, jobs and skills will evolve in this transition (57.3%) ranked closely behind. These findings were consistent across respondent profiles.



²¹ $\chi^2(4, N = 1,000) = 12.16, p = .016$

²² $\chi^2(1, N = 1,000) = 4.16, p = .041$

²³ $\chi^2(2, N = 1,000) = 16.89, p < .001$

²⁴ $\chi^2(2, N = 1,000) = 26.79, p < .001$

4.10 The Role of Unions in a Just Transition

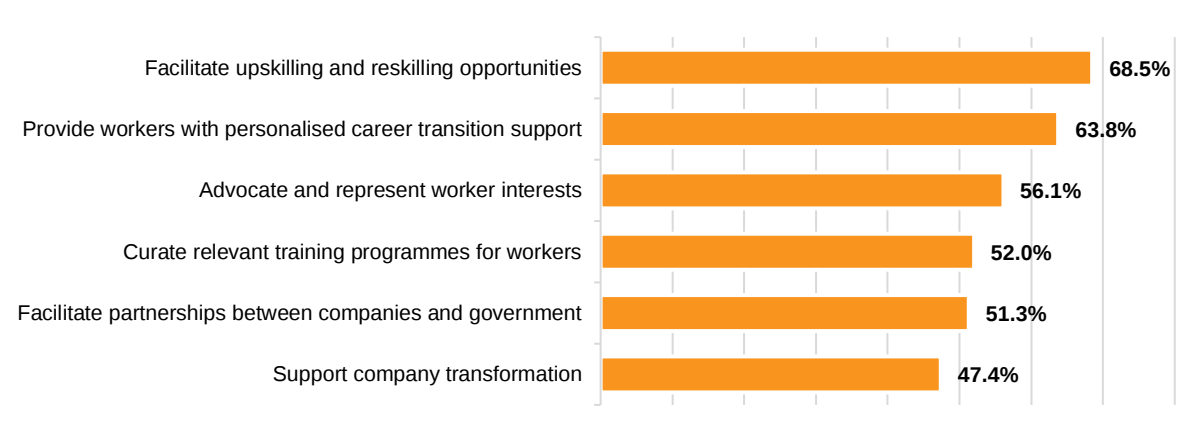


Figure 11. The Role of Unions in a Just Transition

Almost all (99.9%) respondents saw Unions playing a role in the Just Transition. Nine in 10 (90.1%) responded that Unions can take on multiple roles. The top two roles for Unions were to facilitate upskilling and reskilling opportunities (68.5%) and to support workers through personalised career transitions (63.8%). The findings here were consistent across respondent profiles with one exception. A significantly higher percentage of union member respondents (53.24%) saw a role for Unions to support company transformation than non-union members (45.2%).²⁵

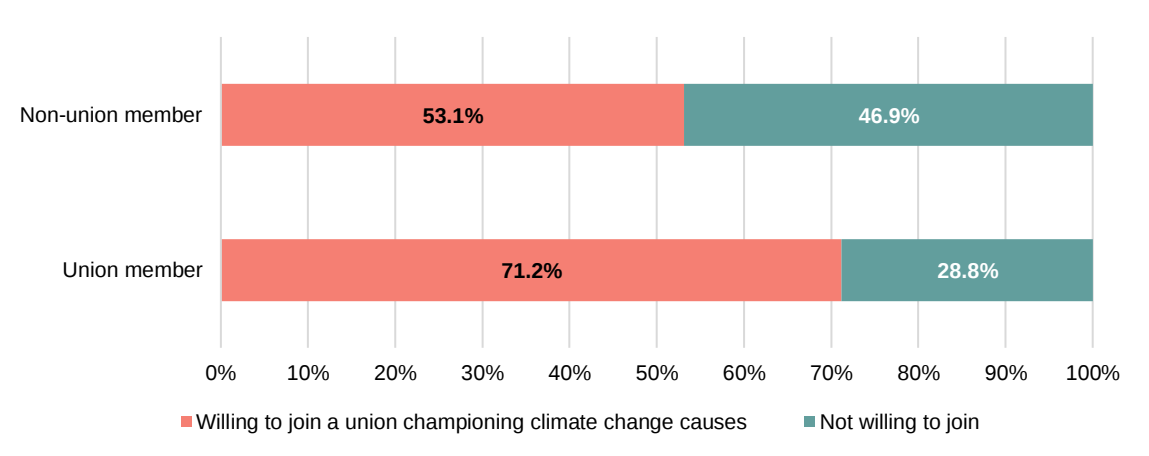


Figure 12. Willingness to Join a Union Championing Climate Change Causes

One in two (53.1%) respondents who were not union members said that they were willing to join a union that champions climate change and environmental sustainability-related causes. This number was significantly higher among union members (71.2%).

²⁵ $\chi^2(1, N = 1,000) = 5.26, p = .022$

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