Inertia in transformed times: Work health and safety amid climate change

Elizabeth Humphrys 🆔
University of Technology Sydney, Australia

Abstract
Climate change will impact work health and safety conditions at an unprecedented scale, and the effects are already being felt. The most significant consequences are for workers labouring in higher temperatures and heatwaves. Other dangers include increased air pollution, vector-borne diseases and solar ultraviolet radiation. The International Labour Organisation (ILO) says climate change and WHS 'needs to top our list of global priorities', requiring national planning and action to ensure successful workplace adaptation to limit injuries and deaths. If this is correct, why is so little happening in Australia to plan for these current and emerging issues? This article considers the findings of key ILO and Australian Government reports and initiatives in 2023 and 2024 to assess what action experts argue is needed and how Australia stacks up.

Keywords
Work health and safety, labour, climate change, heat stress, extreme weather

Introduction

Global warming is acknowledged as a critical threat to human health, and 'can lead to a deterioration of working conditions and an increased risk of occupational injury, disease and death' (ILO, 2024a: 7). Rising temperatures and more frequent heatwaves, especially for workers exerting themselves in higher humidity, are the most significant risk. Other work health and safety (WHS) consequences include increasing air pollution, disease spread, skin cancers, negative mental health impacts, and consequences from intensified 'natural' disasters such as floods and fires (ILO, 2024a). Climate change is also influencing

Corresponding author:
Elizabeth Humphrys, University of Technology Sydney, 15 Broadway, Ultimo, NSW 2007, Australia.
Email: Elizabeth.Humphrys@uts.edu.au

things like cancer rates and cardiovascular disease at a population level, which impact the community more broadly. Many of these challenges will be unprecedented.

Given the nature of paid labour, in that people must maintain employment to survive, and the drive to realise profits is central to the functioning of capitalism, workers are particularly vulnerable to the impacts of climate change. These factors place pressure on workers to maintain (and often increase) productivity, and as a result workers can't always slow down, take breaks to cool and hydrate, or stop work when things are unsafe (Flouris et al., 2024: 5). This can be particularly significant in certain jobs, such as for emergency and essential care workers or when workers lack the industrial power to act, even when robust WHS procedures are in place.

Paid labour in the 21st century is also increasingly characterised by precarity, decreased worker power, and uneven coverage of WHS regulations (Humphrys, 2019; Underhill and Quinlan, 2024; Underhill and Rimmer, 2015). For workers and unions 'the challenges of climate change are [encountered] alongside the lived experience of reduced power, voice, agency and autonomy at work' (Flanagan and Goods, 2022: 493). The neoliberal period has also delivered wider social and economic shifts that have placed pressure on public spending and privatised utilities – the latter complicating addressing environmental considerations, and making a transition away from fossil fuels more expensive and difficult (Ernst, 1997). Government funding for the infrastructures that will be needed to provide emergency and primary health care in relation to the impacts of climate change, such as hospital facilities, Medicare rebates to general practitioners, and ambulance and fire services, have also been under increasing pressure in Australia.

There are also significant impacts of global warming for productivity, labour supply and profitability, with the financial losses due to occupational high heat alone expected to reach the equivalent of 80 million full-time jobs and US$2.4 trillion by 2030 (ILO, 2019: 13). The ILO argues that implementing WHS measures to prevent injuries and death due to excessive heat could not only protect lives and livelihoods, but could save over US$361 billion globally (Flouris et al., 2024: 17).

Adaptation to the WHS impacts from climate change will 'necessitate concerted action over time' but in relation to high heat 'workers are being injured and dying now, and therefore heat stress preventative measures should be implemented as a matter of urgency' (Flouris et al., 2024: viii). Our most vulnerable community members are 'exposed to twice as many heatwave days as they would have experienced' otherwise without climate change compared to thirty years ago, and 'each moment of delay … worsens the risks to people's health and survival' (Romanello et al., 2023: 2347). At the same time, while 'the burden of climate change on workers is increasing', the 'attention on this burden in the occupational safety and health field, the media, and state and business action plans is limited' (Schulte et al., 2023: 183). Australia is better placed than some countries to deal with these issues given its relative higher levels of public and private wealth, embedded regulatory processes, skills and infrastructure in areas like fire prevention, and well-developed health services. At the same time, much of Australia is at high risk and some sections of the far north at extreme risk in relation to occupational heat (Hyatt et al., 2010). The ILO also reports that in Asia and the

Pacific, exposure to excessive occupational heat is above the global average (Flouris et al., 2024: viii–ix).

The International Labour Organisation (ILO) has increasingly focussed on the WHS impacts of climate change in recent years. Manal Azzi, ILO Occupational Safety and Health Team Lead, has argued the issue 'needs to top our list of global priorities' (ILO, 2024c). In 2024 the ILO published two major reports addressing current and emerging WHS challenges related to climate change. They argue that given the multifaceted and widespread impacts of climate change on work, there will need to be new regulations, policies and action plans in every country and across a wide range of activities, as well as public health education initiatives for specific industries and the general population (ILO, 2024a: 8). In June 2022 the ILO also formally added a 'Safe and Healthy Working Environment' to their fundamental principles and rights. This decision brings the number of ILO fundamental rights and principles to five and requires member countries to take good faith action to realise new WHS obligations.

It is therefore timely to assess how the impacts of climate change for workers are being managed and planned for in Australia, a founding member of the ILO. The first part of this article provides an overview of the two 2024 reports from the ILO – the April *Ensuring Safety and Health at Work in a Changing Climate* report, and the July *Heat at Work: Implications for Safety and Health. A Global Review of the Science, Policy and Practice*. The second section outlines recent Australian Government's efforts in relation to WHS and climate change through four key recent publications: the February 2023 *Australian Work Health and Safety Strategy*; the October 2023 *Annual Climate Change Statement*; the December 2023 *National Health and Climate Strategy*; and the March 2024 *National Adaptation Plan – Issues Paper*. Safe Work Australia's handling of the 2024 World Day for Safety and Health at Work, which was on the theme of climate change, is also considered. The analysis finds little evidence of planning by Safe Work Australia regarding the WHS impacts of climate change. WHS and climate change are integrated somewhat into other Commonwealth climate change planning processes, but not in a coordinated or comprehensive manner. The concluding section of the article discusses the research findings and possible explanations for this. However, before this analysis is set out, it will be useful to contextualise WHS regulation and overview recent studies of WHS and climate change in Australia.

Contextualising WHS regulation and climate change

For the purposes of this study, WHS regulation is understood as a state imposed legislative framework on the capitalist class, with statutes operating 'bureaucratically to ensure compliance, and juridically to punish [any] transgressor' (Heino, 2013: 150). Contemporary OHS regulation in Australia was developed through the 1970s and 1980s (Heino, 2013), with the establishing of the modern OHS profession 'in the late 1980s and early 1990s in response to the significant expansion of workplace health and safety legislation both federally and by each state in Australia' (Provan and Pryor, 2019: 428). Heino (2013: 151) describes this as a transitional period where 'the impulses to regulate OHS stem[med] both from a labour movement strengthened by the post-War

Fordist boom and an "institutional search" to find ways out of the developing economic crisis'. As such, an informed understanding of WHS regulation must be cognisant of class relations and structure (Heino, 2013: 150). Such an approach rejects what Richard Hyman calls a 'narrow' approach to industrial relations matters (1975: 203), which is often descriptive and pragmatic in focus (Hyman, 1989: 3), and instead reveals the underlying systems of power, control and conflict at work.

Research and policy making often presumes that all parties have similar motivations in protecting workers from injury and harm. The assumption is that 'there is a natural correspondence of labour and employer interests', and this 'discourse denies underlying contradictions or conflicts surrounding profit-making and OHS prevention' (Hall, 2021: 2). While at law employers must *ensure* the safety of employees, at a policy and operational level it is often framed as a situation of shared and equal responsibility, which can eschew the power relations embedded in workplaces and the impacts of the profit motive specifically. Moreover, some argue that WHS management in fact channels 'worker energy and workplace conflict into mechanisms that manage and diffuse such conflict', and in doing so it 'reduces the threat posed by workplace injuries to the capital accumulation and social reproduction processes [and] allows unsafe working conditions to persist' (Barnetson, 2010: 8).

There is a fast-expanding literature related to climate change, labour and work (Baldry and Hyman, 2022; Hampton, 2015; Lipsig-Mummé and McBride, 2015; Rathzel and Uzzell, 2013; Räthzel et al., 2021). Within the narrower field of industrial relations, research on the impacts of climate change is somewhat more limited, and the impacts for WHS are under researched (Goods, 2017: 672). In the context of Australia, the most significant bodies of work have examined: just transitions and greening jobs (Goods, 2013; Snell, 2018); union action and labour participation in relation to climate policy (Markey et al., 2019; Snell and Fairbrother, 2010, 2011); and, the role of the business sector and corporations (Goods and Ellem, 2023; Wright and Nyberg, 2015). There is also an emerging literature on whether climate change is a matter that can included within the bargaining process, or whether WHS committees might be able to play a role in relation to mitigation and adaptation (Goods, 2017; Markey and McIvor, 2019; Schofield-Georgeson, 2023). What matters can be pursued through these avenues is narrow as it stands, in that while 'environmental issues that can be clearly linked to safety or business efficiency … appear to be permitted in enterprise agreements under the provisions of the [Fair Work] Act', the law in Australia 'does not conceive of climate mitigation as a part of the employment relationship' (Markey et al., 2014: 26–27). At a broader level, some have begun considering the future of industrial relations discipline in light of climate change, arguing that the circumstances suggest 'that something more than merely "adding in" an environmental frame to existing industrial relations concepts might be required' (Flanagan and Goods, 2022: 480).

The impacts of climate change for WHS more specifically have not been considered in detail by Australian industrial relations scholars. The limited but growing literature on this, largely focussing on extreme heat, has been developed by scholars in epidemiology and medical sciences (Singh et al., 2015; Varghese et al., 2019; Williams et al., 2020; Xiang et al., 2014), exercise science (Carter et al., 2020), and geography and political economy (Carter et al., 2020; Goodman et al., 2023; Humphrys et al., 2022; Newman and

Humphrys, 2020; Oppermann et al., 2017). The lack of focus on this problem in the industrial relations literature is quite stark. Indeed, in Flanagan and Goods 'state of play' piece *Climate Change and Industrial Relations: Reflections on an Emerging Field,* they do not canvas the question of WHS, in part because there is very limited disciplinary literature to draw on. One potential reason for this is that the focus has been squarely on the transition away from fossil fuels and the urgent challenge of mitigation. Issues like WHS have until now been considered somewhat second order issues of adaptation, to follow the first order issue of climate action to wind down fossil fuel production. This is observable not only in the scholarly literature, but more broadly. For example, in their book *Living Hot: Surviving and Thriving on a Heating Planet* (2024), Clive Hamilton and George Wilkenfeld set out an wide ranging assessment of Australia's reediness in addressing and preparing for climate change, arguing too little policy and practical progress has been made by governments and that we need to make urgent and immediate strides to implement 'a far-reaching national programme to adapt Australia for life in a hotter climate'. While the authors' account is a detailed assessment of where Australia is at and where it might go, and they are concerned about health impacts, they do not tackle the question of WHS impacts for labour beyond one passing reference. Similar recent commentary focuses only on public health and safety more broadly, and the only union mentioned is the European one (Gergis, 2024; Hamilton and Wilkenfeld, 2024). Adaptation has, for the most part, been 'a neglected if not a taboo topic in climate policy' for more critical voices 'because some feared [it] may reduce the policy commitment to mitigation' (Dolšak and Prakash, 2018: 329).

Alongside these limitations in scholarly research and public debate in Australia, and as will be detailed in the main body of this article, there has been a distinct lack of action on climate change WHS preparedness – let alone a more extensive programme to address how WHS, inequality, and the social determinants of health are interlinked in the context of rapidly progressing global warming (Quinlan, 2020). The next section examines the recent ILO reports on WHS and climate change, and then considers recent Australian government planning and action in light of these.

WHS and climate change: ILO reports

April 2024: Ensuring Safety and Health at Work *report*

The ILO's *Ensuring Safety and Health at Work in a Changing Climate* report (2024a) is the first of its kind globally, outlining critical evidence related to six key impacts of climate change on WHS. The ILO identified these as the top issues – excessive heat, solar UV radiation, extreme weather events, workplace air pollution, vector-borne diseases[1] and agrochemicals – given the severity and magnitude of their effects on workers.[2] The report opens by stating the situation is 'grim' and that WHS protections globally 'have struggled to keep up with the evolving risks from climate change, resulting in worker mortality and morbidity' (ILO, 2024a: 1). It notes that many impacts from climate change are not entirely new, but intensified and altered forms of established risks (ILO, 2024a: 5). The ILO argues best practice will require 'the integration of climate and environment concerns into [WHS] policy and practice at all levels, as well

the mainstreaming of [WHS] concerns into climate change action' (ILO, 2024a: 6). As argued by leading health researchers in *The Lancet*, state-led and inclusive planning can significantly diminish growing risks from excessive heat in particular, if governments consult widely and take decisive action (Jay et al., 2021).

The report highlights that the WHS dangers from climate change for labour will be uneven. Climate change disrupts all work, but exacerbates precariousness and intensifies and extends individual risk in specific ways (Natarajan and Parsons, 2021b; Newman and Humphrys, 2020). The most significant impacts will be felt 'by the working poor, those working in the informal economy, seasonal workers, and workers in micro and small enterprises' (ILO, 2024a: 7). Pregnant people, children, older adults and disabled people 'are more vulnerable to health stressors such as extreme heat, air pollution and other climate-related events' (ILO, 2024a: 7). Researchers have also identified, as is the case with health vulnerabilities generally, impacts will reflect intersecting global and national patterns of privilege and risk bound up in colonialism, wealth, class, race, disability and gender (Hansen et al., 2013; Natarajan and Parsons, 2021a; Stephenson and Stephenson, 2016). Reducing people's capacity to work also undermines the socio-economic determinates of health including reduced income, lack of access to secure housing, and lack of access to education (ILO, 2024b). Questions of control over the labour process are also essential to consider, with the types of employment contracts and how much power workers can exert essential factors in whether they can take action to eradicate or mitigate risks in the workplace.

The key findings of the report (ILO, 2024c: 102–104) argue that nations need to thoroughly assess how current policy frameworks need to be adapted, and what new policies and legislation may be needed, including in relation to new green sector jobs which can bring new WHS challenges. The needs of the most vulnerable workers must be at the centre of planning, and nations must ensure social dialogue is harnessed in efforts to respond to this challenge. The ILO argues this is because meaningful consultation it is central to effective WHS practice, underpinned by enhanced research to gather a stronger evidence base to guide action.

The report notes interdepartmental coordination within countries must be a cornerstone of coherent and effective action, and that new legislation and policies should be embedded into existing global normative instruments. Importantly, there must be an 'increased political profile of the climate-health nexus' nationally and internationally (ILO, 2024a: 103), and the workplace can (and should) be made a key site in broader national climate change mitigation strategies (ILO, 2024a: 104). The second part of this article returns to the six WHS dangers outlined in the *Ensuring Safety and Health at Work* report, to assess what action Australia is pursing.

July 2024: Heat at Work: Implications for Safety and Health *report*

In July 2024 the ILO published *Heat at Work: Implications for Safety and Health. A Global Review of the Science, Policy and Practice* (Flouris et al., 2024). The report follows on from the ILO's pioneering *Working on a Warmer Planet* (2019), which bought important global attention to the issue of climate change and work. The new

report overviews the latest research and presents analysis of 21 countries (not including Australia) 'to identify best practices to protect workers from excessive workplace heat' (Flouris et al., 2024: 2). The report argues that while many countries have WHS laws and regulations that refer to and deal with 'heat and extreme temperature as a physical hazard, these provisions are often quite general and inadequate to respond to the challenges of a warming planet' (Flouris et al., 2024: 76–77).

Workers, particularly those labouring outdoors, are 'frequently the first to be exposed to the consequences of climate change, often for longer periods and at greater intensities than the general population' (ILO, 2024a: 5). The ILO estimates that 2.4 billion workers will encounter excessive heat during their work each year out of a total of 3.4 billion workers, more than a 5% increase of the global workforce in two decades (ILO, 2024a: 18). Estimates indicate excessive heat is currently responsible annually for 18,970 deaths, 22.85 million occupational injuries, and 2.09 million disability-adjusted life years (the loss of an equivalent year of full health for a person) (Flouris et al., 2024: 102). Globally, 26.2 million workers live with chronic kidney disease due to the impacts of occupational heat stress (Flouris et al., 2024: 17), and most injuries from excessive heat – eight out of 10 – occur outside of heatwaves (Flouris et al., 2024: 75).

The *Heat at Work* report argues that some workers at heightened risk are those in agriculture, natural resource management, construction, refuse collection, emergency repair work, transport, tourism and sports (ILO, 2024a: 2). However, those labouring inside and without proper ventilation or cooling can be in similar danger (Flouris et al., 2024: 6). Older workers, those with certain pre-existing chronic health conditions, workers with certain disabilities, pregnant workers, and workers who have limited access to training and education materials – including some migrant workers – are also at higher levels of risk (Flouris et al., 2024: 13–16; Schulte et al., 2023). Further, the effects of climate induced excessive heat are concentrated 'among populations and regions where the risks are largely unnoticed and inadequately addressed' (Jay et al., 2021).

As with the general WHS ILO report, it emphasises that in 'designing global, national and workplace-level actions to mitigate heat stress, the roles of workers and employers, along with social dialogue, are integral for creating effective and sustainable strategies' (Flouris et al., 2024: 50). Policies and strategies developed in this manner have the greatest chance of being effective to real world situations and changes:

> Collaboration between governments, employers and workers' organizations, international organizations, OSH networks and non-governmental organizations (NGOs) is essential to share knowledge, resources and best practices addressing workplace heat stress. Policy coherence should be ensured on heat stress-related issues that concern the world of work, especially between Ministries of Labour, Ministries of Health, Ministries of Environment and Ministries of Climate Change, as they begin to become established. (Flouris et al., 2024: 77)

The report makes clear that employers hold the responsibility for comprehensively assessing, managing and addressing heat-related illnesses, in line with ILO Convention 155. This includes providing proper training and education on how to recognise developing heat illness and what action to take. At the same time, it emphasises that the

participation of workers in 'the design of prevention policies and programmes' to ensure 'the strategies developed are grounded in the realities of those most affected by heat stress', is essential (Flouris et al., 2024: 50).

Together, the ILO reports emphasise three key aspects for successful policy planning to deal with the WHS consequences of climate change. First, a thorough review of current frameworks and what changes are needed to meet new and emerging challenges, including enhancing current frameworks for known risks (such as heat) to ensure they meet the specific features of the climate change era. Secondly, through consultation and collaboration between key stakeholders – government, labour and industry – underpinned by enhanced research to ensure robust policy development. Thirdly, intra department coordination and whole of government planning is essential, including policy coherence across labour, health and environment and climate change ministries.

WHS and climate change: Limited planning in Australia

Considering growing attention to the issue of climate change at the ILO, as well as the findings of international research more broadly, one might expect to find similar efforts in Australia. This is not the case, however. This section assesses key Australian Government initiatives and reports across 2023 and 2024, and the article's concluding section considers potential reasons for slow policy progress locally.

February 2023: Australian Work Health and Safety Strategy 2023–2033

The *Australian Work Health and Safety Strategy 2023–2033*, published by Safe Work Australia (the Commonwealth's WHS policy agency[3]) in February 2023, includes an acknowledgement of the impacts of climate change for WHS for the first time. However, the new strategy summarises the problem only briefly and generally, noting that: a 'warming planet creates WHS risks'; that 'heat, flooding and extreme weather events are increasingly likely to disrupt the normal operation of many businesses', and that climate change has also 'led to the emergence of novel infectious diseases and increased the transmission and spread of other diseases' (Safe Work Australia, 2023b: 9). The *Strategy* doesn't include specific goals or targets in relation to climate change, other than that by the year 2033 the agency 'will have assessed with stakeholders how to best respond to the impacts' (p. 17).

There is little attention given to climate change in Safe Work Australia publications, including their annual reports across 2013–2023. No annual report has explicitly discussed climate change, save the 2020–2021 annual report noting that the agency had published information on working in heat in a 'changing climate'. In two annual reports the agency mentions their work on extreme weather, and in 2019–2020 they implemented a communication strategy on bushfire and air pollution during crisis the Black Summer fires. While the agency has been focussed on occupational heat and exposure to ultraviolet radiation for many years, as the ILO has noted general provisions around these dangers are often insufficient to respond to the challenges of climate change (Flouris et al., 2024: 76–77). Similarly, although significant effort has been made by Safe Work Australia and

state agencies in relation to workplace psychosocial risks in recent years, this needs to be expanded to plan for climate change specifically.

The 28 April 2024 ILO World Day for Safety and Health at Work was designated on the topic of the impacts of climate change. Public resources produced by Safe Work Australia contained no Australian produced or Australia specific commentary or guidance in relation to the growing risks from climate change, with the webpage devoted to the day simply linking people to the ILO's website and the home pages of the state WHS agencies. An examination of the state bodies' websites did not reveal any further information on climate change and WHS.[4] The Safe Work Australia materials provided to the public to promote the day noted the climate change theme infrequently, and the Safe Work Australia CEO's statement made only passing reference to it.

Overall, a review of Safe Work recent reports and activities has not found evidence it is engaged systematically or consistently on climate change, and the 2023–3033 Strategy does not set out a clear pathway to progress work in this area. It is urgent that Safe Work Australia conducts a review of WHS risks impacted by climate change in conjunction with stakeholders, along the lines set out in the ILO reports.

October 2023: Annual Climate Change Statement

The Commonwealth's Annual Climate Change Statement to Parliament is required by law. The second Statement in 2023 outlined the government's action programme, emissions reduction efforts, issues of adaptation, and national security. The Statement's emphasis is on Net Zero and the development of a clean energy workforce, and the transition of workers from declining industries into these new ones. There is no discussion of WHS issues that can arise from the introduction of new forms of green technology or a rapid expansion of a particular section of the workforce. The Statement's focus is on needs of industry and productivity, and climate change consequences as an economic and security problem. It briefly notes that there are WHS consequences from climate change and extreme weather in relation to workers, from greater heat and humidity which 'are likely to increase deaths from heatstroke and cut outdoor workers' productivity' (DCCEEW, 2024a: 59). Section 7 on adaptation, which includes a section on health and wellbeing, does not mention workers at all. This orientation in the Statement, one that is primarily attentive to the needs of capital, can also be seen in the Commonwealth's National Climate Resilience and Adaptation Strategy 2021–2025. The purpose of the *Resilience and Adaptation Strategy* is to set out what the Australian Government will do to support efforts across all levels of government, business and the community, to better anticipate, manage and adapt to the impacts of climate change. The strategy is a high-level document but has only one passing reference to climate change impacts for 'outdoor workers', in stating they can be disproportionally impacted heatwaves.

December 2023: National Health and Climate Strategy

In 2022 the *Medical Journal of Australia* published a report, in conjunction with *The Lancet's* Countdown on Health and Climate Change, arguing that Australia was,

broadly speaking, 'unprepared and paying the price' for climate change (Beggs et al., 2022). The Australian Academy of Health and Medical Sciences 'also joined the chorus of scientific and medical institutions [internationally] to sound the alarm, highlighting climate change as an urgent health priority' (Beggs et al., 2022: 439). One response to these calls for more attention to be paid to the climate change and health nexus, was the 2023 *National Health and Climate Strategy*.

The *National Strategy* states its objective is 'a whole-of-government plan for addressing the health and wellbeing impacts of climate change', alongside 'the contribution of the health system itself to climate change' (DHAC, 2023: 6). It states it adopts a health equity approach to action across its mitigation and adaptation efforts, taking account of existing health disparities and ensuring they are addressed. The *Strategy's* first principle is a recognition that health is a human right and that 'some populations are more susceptible to and have less capacity to adapt to the health impacts of climate change' (DHAC, 2023: 14).

The report identifies workers who are 'significantly more at risk of negative health effects associated with climate change', including 'outdoor workers such as farmers, rangers, construction and transportation workers, as well as those working in hot indoor environments' (DHAC, 2023: 20). Other identified groups induce first responders such 'firefighters, paramedics and police officers, [who are] are at higher risk of exposure to floods, bushfires, heat and air pollution', as well as healthcare workers who 'are potentially at higher risk of transmission of climate-related communicable diseases and can be affected by surges in healthcare demand during extreme weather events' (DHAC, 2023: 20). The *National Strategy* notes that 'targeted advice and resources, such as suitable personal protective equipment, education and training, should be made available to protect and empower these priority occupational groups' (DHAC, 2023: 20). However, WHS itself does not feature as a core discussion within the document, which focuses on the health sector primarily and more broadly on impacts on the broader community.

Regarding impacts for the community in the *National Strategy*, and mapping these to the ILO's six identified key risks, it is worth noting:

- *Excessive heat* – heat and heatwaves are identified as one of the most significant risks for Australia. The *National Strategy* outlines at Action 6.1, that the Australian Government will work with states and territories to develop and publish a National Heat-Health Action Plan which promotes a nationally consistent approach to minimising the health impacts of heat, and that occupationally exposed workers are one at-risk group (DHAC, 2023: 86).
- *Solar UV radiation* – this is not canvassed in the *National Strategy* for workers or the broader community. Australia has one of the highest rates of skin cancer in the world and the ILO reports 1.6 billion workers are exposed to solar UV radiation annually, with 18,960 work-related deaths are attributable to nonmelanoma skin cancer alone (ILO, 2024a: 3).
- *Extreme weather events* – extreme weather and climate-related disasters are canvassed throughout the *National Strategy*, but not specifically regarding WHS risks. Identified actions include that government should develop adaptation and emergency response plans, but do not identify WHS as a specific focus.

- *Workplace air pollution* – climate change adversely effects air quality, which is recognised as a 'major global public health risk' (DHAC, 2023: 88). Indoor air quality, such as from mould from flooding is also identified as a risk. Workers are not discussed regarding these dangers.
- *Vector-borne diseases* – the transmission of vector-borne diseases is identified as a health risk significantly impacted by climate change. Workers are not discussed regarding risk in the *Strategy*, although outdoor workers are at a heightened risk.
- *Agrochemicals* – these are not discussed in the report. The global consumption of agrochemicals (including pesticides) is increasing and is likely to do so further, as climate change continues to negatively impact agriculture and crop yields (ILO, 2024a: 3).

Mental health risks for workers are canvassed briefly in the ILO's report, noting its increasing prominence because of climate change. The *National Strategy* highlights a range of mental health impacts for Australians, and in terms of occupational impacts focusses on health workers and those working in emergency services (DHAC, 2023: 39). Action 6.5 sets out that the Commonwealth will 'work with relevant stakeholders to build workforce capacity to prevent, identify, and respond to the mental health and wellbeing impacts of climate change' (DHAC, 2023: 95).

The *National Strategy* has a core objective of 'health in all policies' in relation to climate change, through 'whole-of-government action which recognises the relationship between health and climate outcomes' (DHAC, 2023: 6). This is a necessary and welcomed approach to managing the current and emerging problems in relation to health and climate change. However, to realise this goal there needs to be a thorough assessment and integration of WHS risks into the *National Strategy* and other key government processes, including adaptation actions.

March 2024: National Adaptation Plan – Issues Paper (315 words)

The Commonwealth is currently preparing a National Adaptation Plan, and in March 2024 released an *Issues Paper* for consultation. The document does not include a detailed examination of WHS matters, but identifies that: temperature thresholds are a specific concern for workers; that a wider range of workers will need to become central to identifying and managing climate impacts as part of their roles (in ways similar to how WHS is managed in workplaces); and that emergency and disaster recovery workers face particular mental health impacts that will need to be managed (DCCEEW, 2024b: 16, 35). The *Issues Paper* notes that stakeholders have put to government that 'ambient air quality thresholds set by states and territories are general and may not sufficiently account for heightened activity levels involved in labouring outdoors' (DCCEEW, 2024b: 36).

The paper raises that there may be scope for developing guidance or thresholds specific to priority populations or occupations, despite the complexity in doing this due to the interaction of heat, humidity, air flow, and worker exertion (DCCEEW, 2024b: 36). While in Australia employers are obliged to take all actions to ensure safety, temperature triggers and cut offs are not common outside unionised construction sites and maritime terminals in some states, where the relevant union has won the condition through

enterprise bargaining (CFMEU, 2024). Discussion of temperature triggers and cut offs is more progressed outside Australia, including in Germany, China and Spain (the latter where there are clear regulations). In July 2024 the United States also proposed new regulations to protect workers from extreme heat, 'in response to rising temperatures fuelled by climate change (Philips, 2024). However, temperature triggers are not enough alone. For workers unable to cease working when involved in an emergency or health care, it is essential that relief teams are readily available to relive them while the rest, cool down, and rehydrate. This is dependent on the resourcing of those positions, and often contingent on government funding in the Australian context – and at times the availability of volunteers in contexts such as tackling regional bushfires.

Discussion: Slow turning wheels and lack of integrated planning

It is clear from the preceding analysis that the Commonwealth has engaged in only very limited consideration of the WHS impacts of climate change. There is at present no effective consultation and collaboration forum between key stakeholders – government, labour and industry – to progress policy in development in this area. Safe Work Australia has not been playing this role to date and has not integrated explicit considerations around climate change into materials and guidance. The *National Health and Climate Strategy* has canvassed climate health risks and action required more thoroughly, but with inadequate focus on WHS. This is despite the *Strategy's* goal of a 'whole of government' approach underpinned by health equity considerations, and despite WHS being raised by participants in the consultation period regarding its relative absence the draft strategy. Given the WHS management limitations revealed by the challenging circumstances of the COVID-19 pandemic (Humphrys, 2025; Quinlan, 2021), there is some urgency for the government to progress work in this area.

In considering why there has been so limited action on WHS and climate change in Australia, especially regarding extreme heat, there are three important contextual factors. The first is, as Climate Scientist Joëlle Gergis (2024: 2) notes, that despite 'Australia being one of the most climate change-exposed countries in the world, our political response to addressing the issue has a long and chequered history of delay and denial'. We live with the legacy of inaction.

Secondly, as Waters et al. (2023: 150) outline, Australia is experiencing a climate change 'adaptation impasse' more broadly, and policy making is not keeping pace 'with the scale and severity of already-existing climate change'. They reason that the root cause of this is best be explained as one of 'entrenched political economy invested in reproducing a particular configuration of state, market, society and environment at odds with the aspirations and urgent demands of adaptation' (Waters et al., 2023: 148). This has resulted in an unwillingness 'to legislate for adaptation' in Australia, and 'a preference for market-based, autonomous adaptations' which has the effect of 'devolving responsibility for decision-making' (Waters et al., 2023: 148). Relatedly, researchers observed in an Australian-based study conducted with key informants in WHS roles, unions, industry and government in relation to extreme heat, that participants believed responsibility for coping rested with individuals (Singh et al., 2015). The authors

note research participants stated that 'profit, production and performance targets are over-shadowing due diligence in protecting workforce health' and concluded that prioritising 'profits over worker health presents a powerful barrier to action' (Singh et al., 2015: 248).

Thirdly, the trade union movement has not yet made the WHS impacts of climate change a priority issue. This matters because many WHS concerns only progress at the policy level when pressure is applied by unions. Of course, coordinated and decisive action on WHS risks is possible, especially when more powerful unions are involved. Efforts to address Australia's growing silicosis problem related to the use of engineered stone, has seen a world first in the 2024 banning of its use, supply and manufacture – action taken under pressure from the unions in particular (Kirby, 2024). Specific targets to eradicate occupational silicosis are also embedded in the *Australian Work Health and Safety Strategy 2023–2033*. As discussed above, the same *Strategy* has no similar clear actions or targets related to climate change, including excessive occupational heat, and a review of communiques from the WHS Meetings of Ministers revealed no mentioned of climate change between 2021 and now.[5] One exception to this lack of focus on WHS and climate change within unions is the United Workers Union, who has for several years been actively investigating and campaigning on WHS impacts of climate change. The Australian Council of Trade Unions has had a significant focus on the impacts and dangers from climate change over many years, but largely related to issues of emissions reduction, greening the economy and just transitions, with WHS consequences not a significant feature. However, the federation is currently working with the Renew Australia For All Coalition on increased government action in ensuring workers are protected.

WHS risks around climate change are also embedded into a broader industrial relations landscape. If workers' wellbeing truly is to be protected in a changing climate, governments will also need to consider issues including government funding for the staffing of essential services, the adequacy of Workcover insurance, access to paid sick leave for casualised and gig employees, and the problems created by insecure employment in influencing actions workers are able take to protect themselves (Goodman et al., 2023).

In summary, Australia has been slow to progress action on WHS and climate change, both in comparison to other highly industrialised countries and the priorities identified in international research and policy. As stated in the ILO's *Heat at Work* report, and is clearly in the case Australia at this time, relying on established WHS laws and regulations to deal with workplace hazards being exacerbated (and altered) by climate change means relying provisions that are often general and inadequate as a response to the challenges of a warming planet (Flouris et al., 2024: 31). If Australia is to protect workers, Governments will need to act on the guidance from the ILO and international experts by engaging in national, industry and local level planning. The fragmented approach to WHS and climate change must be rectified, with a designated lead agency moving to effectively progress work in this area. That agency must also ensure intra department coordination and a whole of government approach across all departments and agencies – WHS, industrial relations, health, environment and climate change. With the current approach to climate change planning, WHS is falling through the gaps. Moreover, it will be essential to contest the narrow and pragmatic approach taken by bodies such as

the ILO (and most national movements) on questions of WHS and climate change. This will include challenging the presumption that a corporatist approach to WHS management involving consultation between government, industry and labour is all that is required, as it is no panacea to a dilemma that is thoroughly political and contested in class terms in contemporary capitalism. Workers and unions will need to seek a more labour-centred approach to growing climate change WHS problems.

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ORCID iD

Elizabeth Humphrys https://orcid.org/0000-0003-0192-0426

Notes

1. Vector-borne diseases are human illnesses caused by bacteria, parasites and viruses and transmitted by a vector such as an insect (such as encephalitis, malaria and dengue fever).
2. The range of OHS risks associated with climate change is broader than these though, with Schulte et al. (2016) having delineated the occupational hazards as follows: (1) increased temperature; (2) air pollution; (3) ultraviolet radiation; (4) extreme weather; (5) vector-borne diseases; (6) industrial transition; (7) changes in built environment; (8) mental health effects; (9) economic burden; and (10) climate interventions (geoengineering).
3. Safe Work Australia is a statutory body tasked with incidences of 'work-related death, injury and illness and to improve outcomes for injured workers'. It is a 'tripartite body representing the interests of the Commonwealth, states and territories, as well as those of workers and industry' and working within that 'governance model brings together and recognises varying views and interests to ensure effective national policy and strategies to improve WHS and workers' compensation outcomes' (Safe Work Australia, 2023a: 13).
4. A search for climate change related terms on the state sites revealed a paucity of information more broadly.
5. The Communiques provided publicly by the Department of Climate Change, Energy, the Environment and Water may be incomplete for the year 2022, however.

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Biographical note

Elizabeth Humphrys is a Senior Lecturer and political economist specialising in labour and work, and the Head of Discipline of Social and Political Sciences at the University of Technology Sydney. She researches the impact of economic and climate change on workers, and control within the labour process.