THE CHANGING CLIMATE OF AUSTRALIAN EMPLOYMENT LAW

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Climate change poses fundamental challenges to Australian employment law, with increasingly extreme weather events disrupting workplaces across the country. Drawing on climate change adaptation literature, this article suggests that, in responding to these challenges, law and policymakers must pay attention to three aspects of adaptation: (1) the role of employment law in minimising climate change impacts on parties; (2) the capacity of employment law to adapt to changing circumstances; and (3) the resources, institutions, or mechanisms needed to promote adaptation. These aspects of adaptation are examined in relation to unfair dismissal, enterprise bargaining and collective action, and work health and safety. This analysis highlights how both impacts and responses are likely to shift the baselines for workplace power. Law and policymakers must seek to maintain positive power relations between employers and employees, to ensure employment law can fulfil its primary function, prevent maladaptation and transform the world of work for a climate-changed future.

I INTRODUCTION

We live and work in a world of worsening climate change.[1] Climate change is altering weather patterns across the globe, increasing the frequency and severity of extreme weather events including heatwaves, floods, droughts and tropical

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1 See Richard P Allan et al, 'Summary for Policymakers' in Valérie Masson-Delmotte et al (eds), *Climate Change 2021: The Physical Science Basis* (Sixth Assessment Report, 2021) 5, 5–6 <https://doi.org/10.1017/9781009157896.001>. In its Sixth Assessment Report, the Intergovernmental Panel on Climate Change, the foremost scientific body on this issue, reaffirmed that human activities are warming the global climate at an unprecedented rate, finding that global mean surface temperatures have already increased to 0.8–1.3°C above pre-industrial levels.

cyclones.[2] In Australia, scientists have observed an increase in the frequency of extreme heat events, decreases in overall rainfall, and an increase in extreme fire weather, among other observations; and these impacts are projected to become significantly more frequent and severe in coming years.[3] Existing commitments by national governments to reduce greenhouse gas ('GHG') emissions, if fully implemented, will result in approximately 2.8°C of warming above pre-industrial levels by the end of the century.[4] This increase is well above the limit of 1.5–2°C of warming set under the 2015 Paris Agreement,[5] and far higher than any estimation of 'safe' levels of warming.[6] As a result, climate change will continue to significantly impact all aspects of Australian society, affecting everything from human health to food security.[7] The world of work is no exception, with climate change posing profound risks and challenges for Australian industries and workplaces.[8]

There is an existing body of scholarship on the intersections between climate change and Australian labour law, primarily focusing on climate change mitigation. Mitigation refers to the reduction of GHG emissions from sources including energy production and industrial processes, and the enhancement of GHG 'sinks' in which these gases are removed from the atmosphere and stored so that they do not contribute to climate change, including through reforestation, or carbon capture and storage technology.[9] Early research by Victoria Lambropoulos considered the intersection of Australian employment law and climate mitigation in the broader context of reducing the environmental impacts of workplaces and industries.[10] Existing scholarship has since considered the role of labour law in promoting employee rights and interests as industries shift to less carbon-

2 Ibid 108–10.

3 Commonwealth Scientific and Industrial Research Organisation and Bureau of Meteorology, *State of the Climate 2022* (Report, 2022) 2, 3 ('*State of the Climate Report*').

4 United Nations Environment Programme, *Emissions Gap Report 2022: The Closing Window* (Report, 27 October 2022) XVI <https://www.unep.org/resources/emissions-gap-report-2022>. See also Climate Action Tracker, *Temperatures* (Web Page, 11 November 2022) <https://climateactiontracker.org/global/temperatures/>.

5 *Paris Agreement*, opened for signature 22 April 2016, 3156 UNTS 79 (entered into force 4 November 2016) art 2.1(a).

6 Ove Hoegh-Guldberg et al, 'Impacts of 1.5ºC Global Warming on Natural and Human Systems' in Valérie Masson-Delmotte et al (eds), *Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty* (Report, 2018) 175.

7 See, eg, 'Climate Change', *Department of Health and Aged Care (Cth)* (Web Page, 21 September 2022) <https://www.health.gov.au/topics/environmental-health/what-were-doing/climate-change>; Stephen Bartos, Farmers for Climate Action, *Fork in the Road: Impacts of Climate Change on our Food Supply* (Report, March 2022) 5.

8 See Part II of this article.

9 JB Robin Matthews et al (eds), 'Annex I: Glossary' in Valérie Masson-Delmotte et al (eds), *Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty* (Report, 2018) 541, 554 ('IPCC Glossary').

10 Victoria Lambropoulos, 'Greening Australian Workplaces: Workers and the Environment' (2009) 34(3) *Alternative Law Journal* 189 <https://doi.org/10.1177/1037969X0903400309>.

intensive, more sustainable modes.[11] Labour law scholars have also considered the growing significance of climate change and other environmental concerns in influencing trends in collective bargaining in Australia.[12] In addition to research with an Australian focus, there is a growing body of international scholarship on employment law and climate mitigation, as well as sustainability more generally.[13] However, to date there has been limited consideration of the intersection between Australian employment law and climate change *adaptation*.

The Intergovernmental Panel on Climate Change ('IPCC'), the foremost scientific body on this issue, defines adaptation of human systems as 'the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities'.[14] In the context of Australian employment law, adaptation is not a question of how this body of law can promote the reduction of greenhouse gas emissions from workplaces and industries. It is about how this body of rules responds to the pressures that climate change is exerting, and will continue to exert, on the world of work. One such pressure identified by scholars from various disciplines is complex work health and safety ('WHS') issues posed by extreme weather events as exacerbated by climate change, especially from heat waves and bushfires.[15] Other, less explored, challenges include unfair dismissal

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11 In an Australian context, see, eg, Caleb Goods, 'Australian Business: Embracing, Reconceptualising, or Ignoring a Just Transition in Australia' in Edouard Morena, Dunja Krause and Dimitris Stevis (eds), *Just Transitions: Social Justice in the Shift Towards a Low-Carbon World* (Pluto Press, 2020) 76 <https://doi.org/10.2307/j.ctvs09qrx.9>; 'The Need for a Just Transition', *Australian Council of Trade Unions* (Web Page) <https://www.actu.org.au/our-work/climate-change/the-need-for-a-just-transition>; Alicia Pearce and Frank Stilwell, '"Green-Collar" Jobs: Employment Impacts of Climate Change Policies' (2008) 62 *Journal of Australian Political Economy* 120 <https://search.informit.org/doi/10.3316/INFORMIT.414156033770032>. Examples of international literature on this topic include: David J Doorey, 'A Law of Just Transitions? Putting Labor Law to Work on Climate Change' (Research Paper No 35, Osgoode Legal Studies Research Paper Series, 2016) 164; MA Graham, '"No Jobs on a Dead Planet": At the Interface of Employment' (2019) 44(2) *New Zealand Journal of Employment Relations* 63 <https://search.informit.org/doi/epdf/10.3316/informit.120704406437072>.

12 See, eg, Raymond Markey and Joseph McIvor, 'Environmental Bargaining in Australia' (2019) 61(1) *Journal of Industrial Relations* 79 <https://doi.org/10.1177/0022185618814056>; Caleb Goods, 'Climate Change and Employment Relations' (2017) 59(5) *Journal of Industrial Relations* 670, 674–6 <https://doi.org/10.1177/0022185617699651>.

13 See, eg, United Nations Environment Programme, *Labour and the Environment: A Natural Synergy* (Report, 2007); TA Novitz, 'The Paradigm of Sustainability in a European Social Context: Collective Participation in Protection of Future Interests?' (2015) 31(3) *International Journal of Comparative Labour Law and Industrial Relations* 243, 243–62 <https://doi.org/10.54648/IJCL2015014>; TA Novitz, 'Engagement with Sustainability at the International Labour Organization and Wider Implications for Collective Worker Voice' (2020) 159(4) *International Labour Review* 463, 463–82 <https://doi.org/10.1111/ilr.12181>; Consuelo Chacartegui Jávega (ed), *Labour Law and Ecology* (Aranzadi, 2022).

14 IPCC Glossary (n 9) 542.

15 See, eg, Phillipa C McCormack et al, 'An Anatomy of Australia's Legal Framework for Bushfire' (2022) 46(1) *Melbourne University Law Review* 156, 203–5; Greg Penney et al, 'A Review of the Standard of Care Owed to Australian Firefighters from a Safety Perspective: The Differences between Academic Theory and Legal Obligations' (2022) 5(3) *Fire* 73 <https://doi.org/10.3390/fire5030073>; Elspeth Oppermann et al, 'Heat, Health, and Humidity in Australia's Monsoon Tropics: A Critical Review of the Problematization of "Heat" in a Changing Climate' (2017) 8(4) *WIREs Climate Change* 1 <https://doi.org/10.1002/wcc.468>. For an analysis of work health and safety risks from a United States perspective, see, eg, Katie M Applebaum et al, 'An Overview of Occupational Risks from Climate Change' (2016) 3(1) *Current Environmental Health Reports* 13 <https://doi.org/10.1007/s40572-016-0081-4>.

claims in the context of increasingly frequent and severe extreme weather events, and the role of enterprise bargaining in promoting climate adaptation (as opposed to mitigation) in Australian workplaces.

This article examines these issues and considers how Australian employment law must adapt to a world of worsening climate change. We first turn to literature on climate change adaptation. That literature, when applied to the employment context, suggests that law and policymakers must consider the following guiding questions:

1. What is the capacity of employment law to facilitate adaptation, including by minimising or preventing negative climate impacts on parties to the employment relationship?
2. What is the capacity of employment law itself to adapt and respond to evolving challenges posed by climate change?
3. What resources, institutions, or mechanisms may be required to reconcile (1) and (2), so as to ensure effective adaptation (see Figure 1 below)?

We analyse these aspects of adaptation in relation to three important pillars of Australian employment law, being protection from unfair dismissal, enterprise bargaining and collective action, as well as WHS. We have selected these three areas of Australian employment law because – as is elaborated in Part IV – they are fundamental to the protection of both employee and employer interests, and the continued recognition of the importance of work in people's lives. Our focus on these areas of employment law necessarily excludes an analysis of volunteers and independent contractors. In saying that, we acknowledge that volunteers and independent contractors will also experience climate-related disruption to their activities and, in some cases, may be placed at an even greater risk of injury or exploitation, without the safeguards typically afforded to employees. However, for present purposes, an analysis of the implications of climate change for volunteers and independent contractors is beyond our intended scope.

Adapting Australian employment law to a world of worsening climate change is, however, a more complex task than merely responding on an issue-by-issue basis. Law and policymakers must keep in mind the broader role and objectives of Australian employment law, at the heart of which lies the balance of power between employers and employees. Our preliminary analysis of unfair dismissal, enterprise bargaining, and WHS suggests that both climate impacts and efforts to facilitate adaptation to those impacts have the potential to dramatically influence the power balance between employers and employees. For example, an extended bushfire season that closes access to workplaces, calls away employees who are also emergency volunteers, and creates new risks for employees with respiratory illnesses, will complicate the rules about who, when and why someone may demonstrate that they have been unfairly dismissed. However, adjusting rules about one aspect of an employment relationship on a sector-by-sector basis risks creating far greater confusion, uncertainty and complexity.

We argue that the power held by employers and employees must be balanced effectively, efficiently, and equitably in law and policy if we are to achieve positive and just forms of adaptation in employment relationships across Australia as the

climate changes. Achieving an appropriate balance in power between employees and employers is necessary to equitably manage this dynamic relationship and protect the rights of both parties, despite external pressures from climate change. Striking an appropriate power balance is also essential to avoid 'maladaptation', in which efforts to facilitate adaptation have the perverse effect of increasing inequity or diminishing the welfare of either party to an employment relationship. An equitable power balance is fundamental to avoid increases in vulnerability to climate change and 'more inequitable outcomes, or diminished welfare, now or in the future'.[16]

This article proceeds in three parts. Part II examines the context of climate change in Australia and its current and future implications for the world of work. Part III explains how employment law can facilitate adaptation, and articulates three distinct aspects of adaptation that can guide law and policymakers in that regard. Part IV analyses these aspects of adaptation in relation to unfair dismissal, enterprise agreements and collective bargaining, and WHS laws, highlighting ways in which climate impacts and legal responses to those impacts might affect the balance of power at the heart of Australian employment law. Part V explains why achieving an equitable balance in the power held by employers and employees, even as the climate changes, is essential to achieve the objectives of both employment law and climate change adaptation. Our discussion concludes by reflecting on the interrelationship between the 'adaptability' and 'durability' of Australian employment law.

II THE IMPACT OF CLIMATE CHANGE ON THE WORLD OF WORK

The latest IPCC report highlights overall warming and drying trends across Australia.[17] These trends will continue to cause increased heat extremes, decreased cold extremes, changes in rainfall patterns and rising sea levels, with practical and extremely challenging implications for employees and employers across Australia. However, the precise implications of a changing climate differ across the continent and will affect different industries and sectors in various ways. For example, in northern Australia, climate change has caused increasingly heavy rainfall and decreased the occurrence of droughts and tropical cyclones.[18] While longer-term projections about rainfall in northern Australia are less certain, heavy rainfall events and river flooding are expected to increase and cyclones will likely become less common but more severe.[19] Central Australia will continue to

16 Hans-Otto Pörtner et al, 'Summary for Policymakers' in Hans-Otto Pörtner et al (eds), *Climate Change 2022: Impacts, Adaptation and Vulnerability* (Sixth Assessment Report, 27 February 2022) 3, 7 <https://doi.org/10.1017/9781009325844>.

17 See, eg, J Lawrence et al, 'Australasia' in Hans-Otto Pörtner et al (eds), *Climate Change 2022: Impacts, Adaptation and Vulnerability* (Sixth Assessment Report, 27 February 2022) 1581.

18 Ibid 1589–90.

19 See, eg, *State of the Climate Report* (n 3) 25–6.

experience greater warming than coastal areas, causing heatwaves and droughts, and will likely experience more frequent river flooding over coming decades.[20] Projections for southern Australia include reductions in rainfall and increased drought, particularly in winter, with rainfall likely to continue to decrease under all future climate scenarios, exacerbating the impacts of increasingly frequent and catastrophic bushfire conditions.[21]

Across the country, heatwaves and storms will create particular challenges for sectors that predominantly involve outdoor work, such as construction, agriculture and the maintenance and repair of infrastructure such as powerlines and roads.[22] For example, climate change is projected to increase the annual frequency of days over 35°C by approximately 80% to 350% by 2090, and the intensity of extreme rainfall by between 15% and 35% in the same period.[23] Extreme, long-lasting heatwaves resulting, for example, in multiple days over 40°C, and significant increases in severe storms and flash flooding, may render outside work impossible or extremely dangerous in some places, at some times. Heat extremes, which are already a substantial health risk, will increase the risk of heat-related workplace deaths in future, particularly for outdoor and manual labourers.[24] These risks are likely to be further exacerbated by humid conditions for employers and employees in Australia's tropical north.[25] Changing weather patterns may also mean that the safest working conditions for some sectors will occur at novel times, such as in the early morning, late evening and potentially even overnight, challenging the once well-established 'nine-to-five' structure of the average working day. Indeed, the COVID-19 pandemic has already begun to shift daily work patterns (eg, with a steep increase in employees working flexible hours and/or at home),[26] and climate-driven changes to weather patterns around the country will likely accelerate this shift.

WHS laws will clearly need to be evaluated for their capacity to protect outdoor workers effectively in the changing conditions described above. However, even employees that typically work in offices and other climate-controlled spaces will be affected by weather extremes, and employers may be forced to consider novel health and safety issues for these workers. For example, heatwaves, storms, floods and bushfires will make travel to and from workplaces increasingly difficult, dangerous or impossible in some cases, and may also render 'work from home' arrangements hazardous, particularly where events such as extreme flooding affect telecommunications and the safety and reliability of employees' home power supplies. Roads may become impassable and extreme events can shut down public transport, sometimes for lengthy periods. These same impacts will disrupt supply chains, particularly to remote areas and for supply chains that stretch across long

20 See, eg, Lawrence et al (n 17).
21 See, eg, *State of the Climate Report* (n 3).
22 See, eg, Applebaum et al (n 15); Oppermann et al (n 15) 10.
23 Lawrence et al (n 17) 1592.
24 See, eg, Applebaum et al (n 15).
25 See, eg, Oppermann et al (n 15).
26 See, eg, Australian Bureau of Statistics, *Household Impacts of COVID-19 Survey* (Catalogue No 4940.0, 17 March 2021) <https://www.abs.gov.au/statistics/people/people-and-communities/household-impacts-covid-19-survey/feb-2021>.

distances (such as from Western Australia to the east coast, and from southern urban centres to far-northern Australia).[27]

Increasingly severe weather extremes will also increase the vulnerability of people living and working in areas that already struggle to maintain basic supplies such as fresh food.[28] Extreme events may also divert employers' priorities away from regular economic activities such as the construction of new infrastructure towards the repair and maintenance of supply lines – repeatedly and for extended periods of time – and insurance for sites, infrastructure and assets, particularly those exposed to growing risks from extreme events such as fires, floods and droughts, will become increasingly unaffordable.[29] Disrupted supply lines and transport infrastructure may affect the capacity for businesses to continue to support fly-in-fly-out workforces, particularly if employees cannot be readily or reliably transported to places of employment such as mine sites, in time to relieve on-ground crews.[30]

More frequent, severe, and larger bushfires will represent a complex range of challenges for Australian employers. Direct impacts from bushfire – such as exposure to fire and hazardous smoke, and fire damage to a business and its assets – are becoming more common, and far more expensive.[31] Fire is growing as a particular threat to businesses with assets that are flammable, such as public and private forestry and some forms of agriculture and tourism. Changing fire regimes, and the increasing frequency of catastrophic fire weather, are also a growing threat to employees that work outdoors and/or remotely, not only emergency services employees such as firefighters, police, and ambulance officers but also, for example, service providers working with remote linear infrastructure such as telecommunications and power.[32] As bushfire weather becomes more extreme and

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27 See, eg, Tory Shepherd, 'Western Australia's "Worst" Flood Reveals Vulnerability of Supply Chains as 100 Residents Airlifted out', *The Guardian* (online, 7 January 2023) <www.theguardian.com/australia-news/2023/jan/07/western-australias-worst-flood-reveals-vulnerability-of-supply-chains-as-100-residents-airlifted-out>; Alicia Perera, Jessica Hayes and Ted O'Connor, 'Flooding in Remote NT Cuts off Rail Line and Roads, Limiting Food Supplies in WA's Kimberley and Sparking Freight Concerns', *ABC News* (online, 6 March 2023) <www.abc.net.au/news/2023-03-06/flooding-logistics-freight-issues-nt-wa-food-supplies-rail-road/102057556>.

28 See also Arunima Malik et al, 'Impacts of Climate Change and Extreme Weather on Food Supply Chains Cascade across Sectors and Regions in Australia' (2022) 3 *Nature Food* 631, 636 <https://doi.org/10.1038/s43016-022-00570-3>, which examines the vulnerability of supply chain interruptions across different regions, including food, availability, and cost.

29 See, eg, Will Steffen et al, Climate Council, *Compound Costs: How Climate Change is Damaging Australia's Economy* (Report, 2019) 6.

30 See, eg, Barton Loechel, Jane H Hodgkinson and Kieren Moffat, *Pilbara Regional Mining Climate Adaptation Workshop* (Report, December 2012) 4–5 <https://doi.org/10.4225/08/584d966eac088>. See also 'Forces of Nature', *Australasian Mine Safety Journal* (Web Page, 16 November 2020) <https://www.amsj.com.au/forces-of-nature-natural-disaster-preparation/>, which notes the difficulty of transporting fly-in-fly-out workers to and from site in relation to dust storms.

31 See, eg, United Nations Environment Programme, *Spreading Like Wildfire: The Rising Threat of Extraordinary Landscape Fires* (Report, 2022) ('*Spreading Like Wildfire*'); Steffen et al (n 29) 17–18.

32 See, eg, Applebaum et al (n 15). The profoundly important implications (on the world of work, economy, and broader communities) of extreme events disrupting or destroying technological systems have earned them the portmanteau, 'Natech' ('natural hazards' and 'technological accidents'): see, eg, Pamela Sands Showalter and Mary Fran Myers, 'Natural Disasters as the Cause of Technological Emergencies:

bushfire seasons grow longer, there is an increasing period each year within which smoke haze will create direct, short-term health hazards for outdoor employees and employees that need to travel to their workplace.[33] In some cases, bushfire smoke will result in long periods of time in which air quality exceeds health thresholds, creating particular short-term health risks for employees with lung conditions such as asthma and other co-morbidities such as heart disease.[34] In our discussion below, we consider the role for WHS standards in managing the risks to employers and employees of fires and hazardous smoke conditions.

Multiple, long-running bushfires will also deplete the response capacity of employed firefighting and other emergency services, leading to greater and more extended periods of time relying on volunteer firefighters and State Emergency Service volunteers. Those volunteers will often be called from their places of formal employment to protect their communities and families with implications for the resilience and sustainability of workforces – particularly in regional and remote parts of Australia – and in sectors and industries that more commonly employ people who volunteer for local emergency services, such as small businesses, agriculture and the trades.[35] Drawing employees away from their places of work for extended periods of time will stretch the resilience of employers and business budgets, and may demand a re-evaluation of what is 'reasonable' for the purposes of unfair dismissal law.

Climate change is not only increasing the likelihood and severity of extreme events, but also the likelihood that multiple extreme events will co-occur, creating novel and immensely 'complex, compound and cascading' aggregated climate risks.[36] For example, in the lead up to the Black Summer bushfires of 2019–20, eastern Australia was experiencing one of the worst droughts on record and the fires were immediately preceded by a catastrophic heatwave. The extreme bushfire weather conditions that then prevailed for months across eastern and southern Australia were rendered more than 30% more likely as a result of climate change.[37]

A Review of the Decade, 1980–1989' (Working Paper No 78/1992, Natural Hazards Research and Applications Information Center, University of Colorado, 1992) 78.

33 See, eg, Elizabeth Shi, 'What Employers Need to Know: The Legal Risk of Asking Staff to Work in Smoky Air', *The Canberra Times* (online, 13 January 2020) <https://www.canberratimes.com.au/story/6577788/what-employers-need-to-know-the-legal-risk-of-asking-staff-to-work-in-smoky-air/>; 'Bushfire Smoke Impacts in the Workplace', *Safe Work Australia* (Web Page) <https://www.safeworkaustralia.gov.au/safety-topic/hazards/bushfire-smoke-impacts-workplace>. For a United States perspective, see 'Outdoor Workers Exposed to Wildfire Smoke', *Center for Disease Control and Prevention* (Web Page, 18 August 2023) <https://www.cdc.gov/niosh/topics/firefighting/wffsmoke.html>.

34 See, eg, Australian Institute of Health and Welfare, *Australian Bushfires 2019–20: Exploring the Short-Term Health Impacts* (Report, 25 November 2020); Andrew Greene, Kate Midena and Jordan Hayne, 'Canberra Air Quality Still Poor as Smoke Forces Home Affairs and Border Force to Close Doors', *ABC News* (online, 7 January 2020) <https://www.abc.net.au/news/2020-01-05/nsw-fires-blanket-canberra-inthick-smoke/11841546>.

35 See, eg, McCormack et al (n 15) 203–4.

36 Pörtner et al (n 16) 18.

37 Lawrence et al (n 17) 1589. See also Josep G Canadell et al, 'Multi-Decadal Increase of Forest Burned Area in Australia Is Linked to Climate Change' (2021) 12 *Nature Communications* 6921:1–11 <https://doi.org/10.1038/s41467-021-27225-4>.

One of the lead authors of the latest IPCC report explained the cascading and compounding impacts of these co-occurring extreme weather conditions:

> The drought also reduced water availability for firefighting; the heat exhausted the firefighters in their protective clothing; and the fires generated their own fire weather, spreading the fire faster while also disrupting communications, power networks, and fuel and banking systems – all of which severely hampered the disaster response … The fires also released huge amounts of carbon dioxide into the atmosphere, adding to warming and future fire risk.[38]

Compounding and cascading risks will render extreme events more difficult to prepare for and manage, and will render responses and recovery more time-consuming, costly and potentially less effective. Moreover, compounding and cascading impacts from extreme events will – in parallel with the highly localised nature of extreme events and impacts more generally – hamper the role, and perhaps even the possibility, of participating in collective action to improve employment conditions as the climate changes. Indeed, as was seen during the COVID-19 pandemic, the ability of employees to engage in collective action was similarly hampered due to an extreme external event – a point revisited later in Part IV.

Some of the climate impacts that we have described here may be mitigated if the world can achieve aggressive cuts in greenhouse gas emissions over the coming decades. However, for many of the projected changes described here, emissions that are already 'locked in' to the climate system mean that even the most ambitious mitigation efforts will have little effect on the projected changes in the short-to-medium term. For example, models of the global change in wildfire events, when mapped against both the highest and lowest emissions scenarios, reveal an almost identical increase in the risk of more frequent and severe bushfires, even over the long term.[39] Climate change therefore presents the world of work with complex and unavoidable challenges. Law and policy reform will undoubtably be needed to contend with these challenges. The window of opportunity is closing for proactive, rather than reactive, law reform. In the next Part, we turn to adaptation literature to consider how this goal might be achieved.

III ADAPTING AUSTRALIAN EMPLOYMENT LAW FOR CLIMATE CHANGE

How law and policymakers respond to the challenges posed by climate change will have profound implications for the capacity of employees, employers, industries, and economies to respond and adapt to climate change impacts. The past 10 years has seen a rapid increase in the attention paid by scholars and policymakers to the important role that law can play in facilitating (or hindering)

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38 Mark Howden, Joy Pereira and Roberto Sánchez, 'Mass Starvation, Extinctions, Disasters: The New IPCC Report's Grim Predictions, and Why Adaptation Efforts Are Falling Behind', *The Conversation* (online, 28 February 2022) <https://theconversation.com/mass-starvation-extinctions-disasters-the-new-ipcc-reports-grim-predictions-and-why-adaptation-efforts-are-falling-behind-176693>.

39 *Spreading Like Wildfire* (n 31) 10, showing an increase in the likelihood of catastrophic wildfire events by the decade 2090–2100, even in the lowest greenhouse gas emissions scenario.

climate adaptation at international, national and subnational scales.[40] We draw on this literature to explain how employment law could facilitate climate adaptation and the key aspects of adaptation with which law and policymakers need to engage.

A Facilitating Adaptation and Adaptiveness in Employment Law

As mentioned in Part II, climate change adaptation is the process of adjusting to the actual or expected effects of climate change, to minimise harm or realise opportunities.[41] Law can facilitate climate change adaptation, as well as act as a barrier to adaptation.[42] For example, law can facilitate adaptation by reducing the exposure or sensitivity of a group of people or an environment to climate risks through regulation, including by prohibiting particular activities during extreme weather events; providing economic incentives and support for adaptation measures, such as through taxes and rebates; and by distributing the costs of climate change through compensation, liability and/or contractual mechanisms.[43] While there is a wealth of scholarship about facilitating adaptation through environmental and natural resources laws,[44] relatively little has been written about what might be required to foster adaptation in the context of employment law. Nevertheless, employment law is an important part of the regulatory framework for enabling climate change adaption in Australian society. We therefore argue that, in responding to the challenges posed by climate change, employment law must develop in a way that promotes climate change adaptation and does not – intentionally or unintentionally – create barriers to this objective.

Existing literature underscores the importance of three particular aspects of law for facilitating climate adaptation, and we illustrate these three aspects and their relationship with one another in the context of Australian employment law in Figure 1.

40 Jan McDonald, 'The Role of Law in Adapting to Climate Change' (2011) 2(2) *WIREs Climate Change* 283 <https://doi.org/10.1002/wcc.96> ('The Role of Law'); Jan McDonald and Phillipa C McCormack, 'Rethinking the Role of Law in Adapting to Climate Change' (2021) 12(5) *WIREs Climate Change* e726:1–21 <https://doi.org/10.1002/wcc.726>; Benoit Mayer, 'Climate Change Adaptation Law: Is There Such a Thing?' in Benoit Mayer and Alexander Zahar (eds), *Debating Climate Law* (Cambridge University Press, 2021) 310 <https://doi.org/10.1017/9781108879064.024>.

41 Pörtner et al (n 16) 5.

42 McDonald, 'The Role of Law' (n 40) 284, 286–7.

43 Ibid 284–6.

44 See, eg, JB Ruhl, 'Climate Change Adaptation and the Structural Transformation of Environmental Law' (2010) 40(2) *Environmental Law* 363; Phillipa C McCormack, 'The Legislative Challenge of Facilitating Climate Adaptation for Biodiversity' (2018) 92(7) *Australian Law Journal* 546. On adaptation in law more generally, see, eg, Robin Kundis Craig, '"Stationarity is Dead": Long Live Transformation' (2010) 34(1) *Harvard Environmental Law Review* 9; McDonald, 'The Role of Law' (n 40).

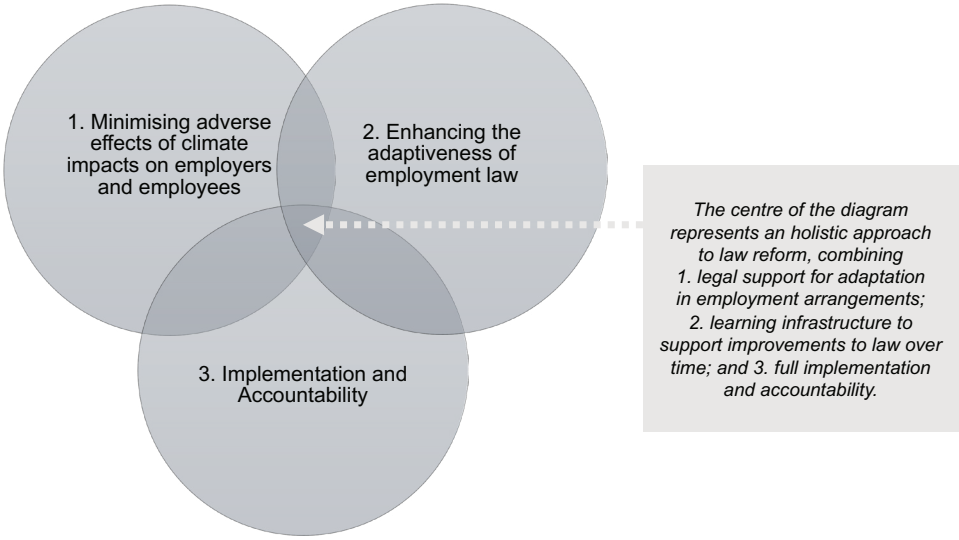

Figure 1: Interacting aspects of adaptation in law

As Figure 1 illustrates, the first aspect is the extent to which a relevant law specifically facilitates climate adaptation. In the context of employment law, this means considering the extent to which existing rules might help or hinder the world of work adapt to existing and future challenges posed by climate change, as described in Part II. This aspect of adaptation also invites an analysis of what can be done to enhance the capacity of the existing legal framework to promote adaptation. Such an analysis involves more than simply identifying and forecasting climate challenges. It involves considering what regulatory strategies, goals, obligations and incentives are needed to help minimise negative climate impacts and maximise opportunities for employers and employees; and, through them, for broader Australian communities and natural environments.

The second aspect of adaptation that law and policymakers must consider is the 'adaptiveness', or capacity for change, of Australia's employment law itself, that is, the extent to which employment law can be adapted over time so that it not only has the capacity to respond to existing climate impacts, but also continue to regulate employment relationships effectively and equitably as the climate continues to change. The capacity for employment law to adapt over time is crucial in the context of climate change. This need for adaptive capacity stems from the fact that climate change is not a 'static' problem. For example, the severity of the risks that climate change poses, the timeframe in which risks are likely to materialise, who is likely to be affected, and scientific understandings of the same, are constantly evolving. The law therefore needs to be flexible and responsive to accommodate new understandings and challenges as they arise.[45] Literature about 'adaptive governance' provides a particularly rich source of information

45 Craig (n 44) 35–40.

about how legal instruments and frameworks might be rendered more flexible and responsive, including in times of crisis. Adaptive governance literature also provides examples of legal mechanisms that support decision-making despite uncertainty, and mechanisms for promoting adaptive management and embedding cycles of learning to improve governance processes and outcomes over time.[46] In responding to the challenges posed by climate change, employment law will need to develop an enhanced capacity to adjust employment settings and context-specific questions of, for example, what is reasonable in any given circumstance, while nevertheless maintaining its primary function; that is, to fairly and equitably regulate the relationship between employers and employees.

The third important aspect of adaptation is a practical one, focused on the resourcing, interpretation and implementation of laws and their oversight, through review by accountability bodies such as commissions and courts.[47] This aspect is necessary to achieve substantive adaptation outcomes and promote the adaptiveness of laws themselves, and also offers a non-legislative pathway for some level of adaptability. Creating reliable and up-to-date sources of information, and incentives and funding, on which employers can draw as they make decisions about how their business or, more broadly, a sector, will begin to adapt, will be critical. Processes of interpreting and implementing laws can also support adaptation by, for example, shifting the interpretation of key terms over time, such as 'reasonableness', in a time-honoured process of incremental developments through the common law.[48] Review processes can also support and enhance adaptation outcomes for employers and employees in the way that they assess and weigh evidence, deliver rulings on process requirements such as extensions of time, and adjudicate disputes. However, each of these roles may also serve to undermine practical and legislative efforts to adapt over time if commissioners and judges adopt static interpretations of law or neglect (or do not understand how) to account for changing trends in the climatic and operating contexts.[49]

There is particular value in anticipating this need for legal reform and the range of pathways that might be available for reforms to proceed, because a proactive, planned approach allows the identification and circumvention of perverse outcomes and maladaptation, and opportunities to benefit from relatively cost-effective and efficient planning and risk mitigation. The sudden challenges that the COVID-19 pandemic brought to bear on Australian employment law emphasises the need

46 See, eg, Barbara A Cosens et al, 'Designing Law to Enable Adaptive Governance of Modern Wicked Problems' (2020) 73(6) *Vanderbilt Law Review* 1687; Barbara A Cosens, 'The Role of Law in Adaptive Governance' (2017) 22(1) *Ecology & Society* 1 <https://doi.org/10.5751/ES-08731-220130>; Daniel A DeCaro et al, 'Legal and Institutional Foundations of Adaptive Environmental Governance' (2017) 22(1) *Ecology and Society* 1 <https://doi.org/10.5751/ES-09036-220132>.

47 See, eg, Victor B Flatt, 'Adapting Laws for a Changing World: A Systemic Approach to Climate Change Adaptation' (2012) 64(1) *Florida Law Review* 269.

48 Though this incremental development may be wholly insufficient in scale, speed and substance when it comes to the kinds of transformative disruptions presented by climate change: see, eg, Susan Kiefel, 'The Adaptability of the Common Law to Change' (2018) 45(10) *Brief* 34.

49 Gillian K Hadfield, 'The Dynamic Quality of Law: The Role of Judicial Incentives and Legal Human Capital in the Adaptation of Law' (2011) 79(1–2) *Journal of Economic Behaviour and Organisation* 80 <https://doi.org/10.1016/j.jebo.2011.02.006>.

for lawmakers to be proactive when it comes to climate change. Key labour law challenges during the COVID-19 pandemic included increased job losses translating to a rise in unfair dismissal claims,[50] disruptions to enterprise bargaining and the ability for employees to engage meaningfully in collective action,[51] as well as maintaining a safe workplace during a global pandemic involving a highly infectious and potentially deadly disease.[52] Planning and forethought is needed now to ensure that Australian employment law facilitates adaptation and can, itself, become more adaptable as the climate crisis unfolds. As a starting point, in the discussion that follows, we apply this understanding of climate change adaptation to three key pillars of Australian employment law.

IV CLIMATE CHANGE ADAPTATION AND THREE KEY PILLARS OF AUSTRALIAN EMPLOYMENT LAW

The preceding discussion explained why it is imperative that Australian employment law adapt to climate change and extreme weather events. We now examine what climate change adaptation might look like in the context of three key pillars of Australian employment law, being protection of employees from unfair dismissal, enterprise bargaining and engaging in collective bargaining, and ensuring WHS.

These three pillars are central to Australian employment law. They are significant in ensuring the protection of both employee and employer interests, maintenance of the employment relationship, and the continued recognition of the importance of work in people's lives. Indeed, employment is much more than being paid a wage in exchange for the performance of work; 'a person's employment is usually one of the most important things in his or her life. It gives not only a livelihood but an occupation, an identity and a sense of self-esteem'.[53] Relatedly, there have been ongoing suggestions – most of which are academic, rather than judicial – that the employment contract is one that is 'relational' in nature requiring greater emphasis on the relationship between the parties, rather than a discrete contractual exchange alone.[54] Assuming that understanding of the employment relationship continues to

50 See, eg, Justice Ross, 'President's Statement: The Fair Work Commission's Coronavirus (COVID-19) Response' (Statement, Fair Work Commission, 7 August 2020) [40].

51 See generally, Mark Bray, Johanna Macneil and Leslee Spiess, 'Unions and Collective Bargaining in Australia in 2020' (2021) 63(3) *Journal of Industrial Relations* 338 <https://doi.org/10.1177/00221856211003597>.

52 See generally, International Labour Organization, *In the Face of a Pandemic: Ensuring Safety and Health at Work* (Report, 28 April 2020).

53 *Johnson v Unisys Ltd* [2001] 1 AC 518, [35] (Lord Hoffmann).

54 For an academic consideration of the employment contract as a 'relational contract', see, eg, Mark Freedland, *The Personal Employment Contract* (Oxford University Press, 2003) 88, 90–2; Douglas Brodie, 'How Relational Is the Employment Contract?' (2011) 40(3) *Industrial Law Journal* 232 <https://doi.org/10.1093/indlaw/dwr009>; Douglas Brodie, 'Relational Contracts' in Mark Freedland et al (eds), *The Contract of Employment* (Oxford University Press, 2016) 145 <https://doi.org/10.1093/acprof:oso/9780198783169.003.0007>; Hugh Collins, 'The Contract of Employment in 3D' in David Campbell, Lisa Mulcahy and Sally Wheeler (eds), *Changing Concepts of Contract* (Palgrave Macmillan,

be accepted, we say adaptations in respect of these three key pillars must ensure optimisation of the employment relationship, allowing it to continue in a manner that recognises its relational capacity beyond a mere exchange of wage for work.

It is important to note that, in navigating the three selected pillars, our analysis is future-focused, concentrating briefly on what the law presently *is*, but also considering how it *could* and *should* be adapted in order to address potential imbalances in workplace power generated by climate change.[55] To that end, for each pillar, we reflect on the following three aspects of adaptation as explained above and illustrated in Figure 1: (1) identify certain key challenges posed by climate change in that employment law context ('aspect 1'); (2) analyse the capacity of existing legal rules to address those challenges ('aspect 2'); and (3) consider what resources, institutions, or mechanisms may be required to reconcile (1) and (2), so as to ensure effective adaptation ('aspect 3').

A Unfair Dismissal

Unfair dismissal law is likely to face significant challenges as a result of the climate crisis. In a similar, albeit arguably more extreme manner than during the COVID-19 pandemic, which saw a stark increase in the number of unfair dismissal applications made to the Fair Work Commission ('FWC'),[56] we hypothesise that so too will those applications increase because of the impacts of climate change. Existing research has shown conclusively that the climate crisis will lead to extensive job losses,[57] with its power looming over all workforces. In turn, this will likely increase the number of unfair dismissal applications made to the FWC. It follows that Australia's unfair dismissal jurisdiction must adapt to effectively respond to that potential increase (and thus addressing both the need to minimise the adverse effects of climate change on employers and employees, and to enhance the adaptiveness of this area of law, see Figure 1). Without that adaptation, employees may find themselves unable to be sufficiently protected from the threat of a climate change induced dismissal by their employer. To better illustrate these issues and the importance of adaptation, this section considers two challenges that climate change presents to unfair dismissal laws, and potential adaptation pathways.

2015) 65 <https://doi.org/10.1007/978-1-137-26927-0_4>. For the latest Australian judicial mention of employment as a 'relational contract', see, eg, *Commonwealth Bank of Australia v Barker* (2014) 253 CLR 169, 184 [17] (French CJ, Bell and Keane JJ), citing *Johnson v Unisys Ltd* [2003] 1 AC 518, 532 [20] (Lord Steyn), as well as the work of relational contract scholars, Ian Macneil and Stewart Macaulay.

55 See, eg, AV Dicey, *Introduction to the Study of the Law of the Constitution* (Macmillan & Co, 1885) vii, cited in Carol Harlow, 'Changing the Mindset: The Place of Theory in English Administrative Law' (1994) 14(3) *Oxford Journal of Legal Studies* 419, 426 <https://doi.org/10.1093/OJLS/14.3.419>: 'The possible weakness [of purely doctrinal legal analysis] as applied to the growth of institutions, is that it may induce men to think so much of the way in which an institution has come to be what it is, that they cease to consider with sufficient care what it is that an institution has [and therefore could and should] become'.

56 See, eg, Ross (n 50).

57 See Deloitte Access Economics, *A New Choice: Australia's Climate for Growth* (Report, November 2020) 35, which states that 880,000 jobs will be lost by 2070 if climate change remains unchecked.

By way of background, Australia's unfair dismissal jurisdiction currently serves to protect national system employees[58] from being dismissed in a manner that is 'harsh, unjust, or unreasonable'.[59] One must look to each of the factors listed in section 387 of the *Fair Work Act 2009* (Cth) ('*FW Act*') alongside pre-existing case law considering those factors to determine what might amount to a dismissal that is, in fact, 'harsh, unjust, or unreasonable'. According to section 387 of the *FW Act*, it might include:

- a dismissal that did not occur for a valid reason;[60]
- the employee not being notified of the reason for their dismissal nor given an opportunity to respond;
- the employee not receiving any warnings about their unsatisfactory performance (should their dismissal relate to poor performance);
- the employer unreasonably refusing to allow the employee to have a support person present in any discussions relating to their dismissal;
- a situation where the size of the employer's business and/or the absence of a dedicated human resources management specialist would have otherwise been likely to impact on the procedures for terminating the employment; and
- any other matters the FWC considers relevant.

A potential challenge is determining what is 'harsh, unjust, or unreasonable' in the context of climate change-related dismissals, especially when a dismissal has taken place in response to a sudden and unforeseen external event that impacts on the employment relationship. For example, consider the potential disruptions caused by extreme weather events, such as floods and bushfires. Employees who also volunteer with rural fire services and State Emergency Services might suddenly be called up and not present at work. Separate from unfair dismissal protection, the *FW Act* provides for community service leave for those required to engage in community service activities, and the definition of 'community service activity' includes 'a voluntary emergency management activity'.[61] So, if that leave were denied, then that has the potential to amount to adverse action, in breach of section 340 of the *FW Act*, for preventing the relevant employee from exercising a workplace right (namely, the ability to take community service leave). However, not all situations are this unequivocal.

Extreme weather events can close roads and shut down public transport, making it difficult, though not necessarily impossible, for employees to travel to work. If an employee does not present at work under such conditions, would it be harsh, unjust or unreasonable for an employer to dismiss them? Common sense

58 See *Fair Work Act 2009* (Cth) s 13 ('*FW Act*'), which provides that a 'national system employee' is an employee working for a 'national system employer' (defined under *FW Act* s 14) as 'an individual so far as he or she is employed, or usually employed, as described in the definition of "national system employer" in section 14, by a national system employer, except on a vocational placement'.

59 Ibid ss 385, 387.

60 A reason for a dismissal will be deemed 'valid' where it is 'sound, defensible or well founded', not 'capricious, fanciful, spiteful or prejudiced': *Selvachandran v Peteron Plastics Pty Ltd* (1995) 62 IR 371, 373 (Northrop J).

61 *FW Act* (n 58) s 109(1)(b).

suggests that such a dismissal may not be valid. However, it is unclear whether the law would support the same conclusion. The standard to which employees are held for the purpose of section 387 does not account for these situations in a direct sense.

At present, there also does not appear to be directly applicable decisions of the FWC that would otherwise assist in assessing what that standard might be. One can only hypothesise that the standard remains unclear as it did for Mr Yu during the COVID-19 pandemic. Indeed, in *Yu v Hansen Yuncken Pty Ltd T/A Hansen Yuncken*,[62] a naïve building cadet, Mr Yu, provided his employer, Hansen Yuncken, with a valid reason to dismiss him by insisting that he remain on indefinite unpaid leave, in order to avoid lengthy public transport commutes during the pandemic. As it transpired, the building cadet held 'a mistaken and somewhat novel belief that he could unilaterally determine when he would return from unpaid leave'.[63] Notwithstanding that valid reason, the FWC was scathing of Hansen Yuncken, who callously and unfairly dismissed him due to its flawed internal processes. It was held that there was 'no justification' for deciding to dismiss the building cadet before hearing from him, while notifying him of it via email was 'unnecessarily callous', 'entirely inappropriate', harsh and unreasonable.[64] Therefore, despite the flawed dismissal process that ultimately made this dismissal unfair, it represents a situation in which an employee's expectations were clearly at odds with the standard actually expected of them in terms of attending work during a global crisis. By analogy, we expect that employees could well face similar challenges because of climate change.

Actors at different levels in the employment law system can act in anticipation of such challenges to promote adaptation. Industry bodies and regulators should encourage employers to proactively consider the issues posed by climate change and their potential to influence a dismissal process; facilitating greater predictability in this area of law in a way that may alleviate some of the adverse effects of climate change on employers and employees alike (Figure 1, aspects 1 and 3). Similarly, employees ought to be made aware of the standard to which they will be held during a dismissal that arises due to a climate-related event. Given the scarcity of directly applicable case law, a suitable test case before the FWC may provide an important opportunity to clarify understanding and awareness in this regard, but other steps can be taken in the meantime to manage expectations on both sides and, through improved information and dialogue, foster a culture of adaptability in employment contexts as the climate changes (Figure 1, aspect 2). For example, unions could play an influential role by ensuring that members are aware that a climate-related dismissal has the potential to be considered harsh, unjust or unreasonable, and therefore, unfair. However, there may be limits to what 'soft' law approaches can achieve, especially in lieu of any guiding FWC decisions.

The FWC should consider whether what is considered 'harsh, unjust or unreasonable' for section 387 purposes needs to be reviewed in response to the climate

62 [2021] FWC 486.
63 Ibid [36] (Commissioner Cambridge).
64 Ibid [41], [53] (Commissioner Cambridge).

crisis. Such a reconsideration of that standard by the FWC, as well as employers, employees, and unions, could result in a relaxation of the standard to which we presently hold employees, which, in effect, would serve to combat the power that the climate crisis wields in favour of employers over and above employees.

Ultimately, it may be suitable for section 387 to be redrafted to make specific mention of employees impacted by the climate crisis needing to be considered in assessing whether their dismissal is indeed harsh, unjust, or unreasonable. Such an adaptation of the criteria for accessing unfair dismissal protection would ensure that employees retain the power to be protected from being unfairly dismissed by their employer because of sudden and/or extreme climate impacts. In saying that, any change to section 387 would also need to balance the legitimate interests of employers. It is equally important to ensure that extreme weather events, in and of themselves, do not constitute a direct route to accessing protection from unfair dismissal. Rather, reform should require that the impacts of the climate crisis be taken into account as part of the overall assessment undertaken when deciding whether a dismissal is, in fact, unfair.

In order to adapt to the challenges presented by climate change, it might also be necessary to assess implementation and accountability processes (Figure 1, aspect 3), for example, by reviewing procedural requirements for making an application for unfair dismissal and, in particular, the timeframe in which an employee must make an application. At present, employees must apply to the FWC for protection from unfair dismissal within 21 days of their dismissal taking effect.[65] Extensions to that timeframe can only be granted in exceptional circumstances, taking into account:

(a) the reason for the delay; and
(b) any action taken by the person to dispute the dismissal; and
(c) prejudice to the employer (including prejudice caused by the delay); and
(d) the merits of the application; and
(e) fairness as between the person and other persons in a like position.[66]

It may be impractical or impossible for employees to submit an application within the requisite 21-day timeframe, especially in situations where entire communities and infrastructure (including access to power, internet, and accommodation) are affected for weeks to months following an extreme weather event.[67] As such, it may be prudent for the FWC to review this time period and clarify what constitutes a

65 The 21-day period will commence the day after their dismissal took effect: *FW Act* (n 58) s 366(1)(a).

66 Ibid s 366(2).

67 For example, in the wake of the February 2022 Northern Rivers floods in NSW, many residents were without electricity, accommodation and other life essentials for extended periods. See, eg, David Kirkpatrick, '62,000 without Internet, 20,000 without Power in NSW Flood Zone', *The Canberra Times* (online, 2 March 2022) <https://www.canberratimes.com.au/story/7641820/62000-without-internet-20000-without-power-in-nsw-flood-zone/>. The impact of these floods on some residents extended for months. Nine months after the event, '52% of flood victims were living in the shells of homes that had flooded; 26% were living in temporary accommodation such as caravans, sheds or pods, or with friends or family; 18% were living in insecure accommodation such as tents or temporary rentals': Susan Chenery, 'The Never-Ending Fallout of the Northern Rivers Floods: "People Are Just Worn Down"', *The Guardian* (online, 20 February 2023) <https://www.theguardian.com/australia-news/2023/feb/20/the-never-ending-fallout-of-the-lismore-floods-people-are-just-worn-down>.

truly exceptional circumstance, so as to warrant an extension, particularly insofar as it relates to a delay induced by increasingly extreme weather events.

There exists precedent for relaxing the 21-day timeframe in a comparable situation. For example, during the COVID-19 pandemic, the requirement was relaxed on numerous occasions, considering the unexpected and tumultuous nature of the global pandemic. Taking just one example, an employee was granted a 13-day extension for filing an unfair dismissal application after the FWC accepted that his dismissal during the COVID-19 pandemic had left him in a 'bad way'.[68] In making his decision to extend the time for the application, Commissioner McKinnon reasoned that such an extension was warranted because the employee's 'state of ill health, the effect of the pandemic on his personal safety and an online lodgement error effectively prevented him from making the application earlier than he did'.[69] We acknowledge that so too could the climate crisis result in employees' ill health and effects on their personal safety, thereby warranting a similar, or in some cases, perhaps even greater, lenience. In response to that possibility, we suggest employees ought to be more readily able to submit and receive an extension to the time within which they can make an application for unfair dismissal where they are impacted by an extreme event that is made more likely and more severe as a result of climate change, with such applications decided on a case-by-case basis, depending on the employee's circumstances. As above, this adaptation to the 21-day timeframe in which to make an application for protection from unfair dismissal would ensure that employees continue to reserve the power associated with being able to make a claim for unfair dismissal, even in the midst of a climate change induced delay. To be more precise, the ability to be granted an extension in time in such circumstances would extend employees' power, in line with a commensurate increase in their employer's power – or, at least, opportunities – to dismiss them.

B Enterprise Bargaining and Collective Action

We turn now to the climate change-related challenges faced in respect of enterprise bargaining and collective action. Looking first to enterprise bargaining, it is well understood that such agreements are statutory-based instruments under the *FW Act*, the terms and conditions of which are agreed upon between the employer and those employees covered by the agreement.[70] The agreement made, which takes effect seven days after being approved by the FWC,[71] may, or may not, have involved the input of a relevant union advocating on behalf of those employees. In setting the minimum terms and conditions for employees, an enterprise agreement must be made to ensure that employees covered by it are 'better off overall' than they otherwise would have been, had they been covered by an applicable Modern

68 *Wilson v Quatius Logistics Pty Ltd* [2020] FWC 3110, [6] (Commissioner McKinnon).
69 Ibid [9] (Commissioner McKinnon).
70 See generally, *FW Act* (n 58) ss 51–3.
71 Or a later date specified in the agreement: Ibid s 54(1)(b).

Award.[72] If the terms of an enterprise agreement are contravened that will sound in a civil penalty under the *FW Act*.[73]

It is no secret, however, that the number of registered enterprise agreements in Australia is gradually declining.[74] Therefore, to say that such agreements form an impactful and meaningful way in which employment law may minimise adverse climate impacts on employers and employees, and regulate the employment relationship in adaptive ways is somewhat of a misnomer. The impact of a registered enterprise agreement may be significant in the context of a particular workplace, but its reach will not necessarily be widespread. Nevertheless, where the terms and conditions of enterprise agreements are negotiated, they should ideally occur with the response to climate change in mind. That approach will, at the very least, set the tone for what might occur both within and even beyond the workplace that is the subject of the agreement and presents an opportunity to consider reform to the employment relationship in (at least) that relevant workplace in comparatively holistic ways (see Figure 1, aspects 1 and 3). Climate change informed enterprise bargaining practices have the potential to set a trend for how employers are to engage with their workforce in a way that responds meaningfully and adequately to the climate crisis.

There is one potential hurdle to setting such a trend. Despite the potential for parties to negotiate targeted adaptation initiatives through enterprise bargaining, there exists a provision regulating much of the content in enterprise agreements. Section 172(1) of the *FW Act* provides that 'permitted matters' must 'pertain to the relationship between the employer and the employees that will be covered by the agreement'.[75] This phrase has been interpreted to restrict its application to matters directly impacting upon the employment relationship, with indirect or inconsequential matters not deemed part of the employment relationship.[76] The *FW Act* does not expressly set out the type of matters that would be included under this provision. It is therefore no surprise that the conditions of employment altered in response to climate change are not expressly referred to as 'permitted matters' within the *FW Act* itself.

A key question is, therefore, whether matters pertaining to the impact of climate change on employment are 'permitted matters' for the purpose of section 172(1). Helpfully, when drafting the *FW Act*, the government suggested that the environmental clauses could be enforceable, provided they were tied to an

72 Ibid s 193. As to the interaction between the National Employment Standards and a Modern Award or enterprise agreement, see at s 55.

73 Ibid s 50, pt 4-1.

74 See, eg, David Marin-Guzman, 'Enterprise Bargaining Back into Decline', *Australian Financial Review* (online, 21 December 2020) <https://www.afr.com/work-and-careers/workplace/enterprise-bargaining-back-into-decline-20201221-p56p70>.

75 The operation of this provision in the context of 'greening' Australian workplaces is discussed in Lambropoulos (n 10) 189–90.

76 See, eg, *Re Manufacturing Grocers' Employees Federation of Australia; Ex parte Australian Chamber of Manufactures* (1986) 160 CLR 341, 353 (Gibbs CJ, Mason, Wilson, Brennan, Deane and Dawson JJ).

established employment or industrial concern like wages or bonus payments.[77] By this logic, so long as climate change issues pertain to the employment relationship, they would arguably constitute a 'permitted matter' in accordance with section 172(1).

Indeed, the Australian Council of Trade Unions ('ACTU') has already begun encouraging Australian employees to engage in enterprise bargaining in a way that meaningfully and purposefully recognises and responds to the climate crisis. This approach places a far greater onus on employers to acknowledge and actively implement strategies within the enterprise to reduce the impacts of climate change, and to protect their workforce (which relate to both adaptation aspects 1 and 3 in Figure 1). For example, even in light of section 172(1), the ACTU has recommended that during the enterprise bargaining process, parties to the enterprise agreement should consider implementing 'a climate, just transition or environment clause' in the relevant agreement,[78] even going so far as to propose a model clause.[79] That model clause compels the parties, among other things, '[to] recognise the risks to job security and the economy presented by climate change, and commit to adopting a collaborative and consultative approach to mitigating and/or avoiding those risks'.[80] By referring to 'job security' it falls within the ambit of a permitted matter under section 172(1), while also offering an holistic approach to the challenge of climate change (as represented at the centre of Figure 1) by seeking a proactive acknowledgement of climate change and the need to minimise its adverse effects, along with a commitment to working collaboratively to implement adaptive strategies over time.

We say that this climate-infused approach to enterprise bargaining ought to be fostered, engaged in actively during the bargaining process, and continually developed, in order to ensure an ongoing, adaptive response insofar as enterprise bargaining is concerned. Infusing enterprise bargaining with a focus on future climate conditions and potential disruptions, provided that focus relies on up-to-date, rigorous evidence and climate projections,[81] could provide employers and employees alike with important opportunities to raise issues pertaining to the terms and conditions of employment. Such opportunities could serve to combat the risk that power will shift too far towards either the employee or employer in the enterprise bargaining process.

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77 Senate Standing Committee on Education, Employment and Workplace Relations, Parliament of Australia, *Fair Work Bill 2008 [Provisions]* (Report, 2009) [4.65].

78 'How to Climate-Proof Your Workplace', *Australian Council of Trade Unions* (Web Page) <https://www.actu.org.au/our-work/climate-change/how-to-climate-proof-your-workplace>.

79 Australian Council of Trade Unions, 'Industrial Work on Bushfires, Natural Disasters' (Draft Model Clause) <https://www.actu.org.au/media/1449705/sample-model-clause-for-ea-bargaining-bushfires-and-natural-disasters-20200219.pdf>.

80 Ibid.

81 Noting that the Intergovernmental Panel on Climate Change reports provide detailed syntheses of future climate projections, a more tailored approach to climate projections and relevant information, to underpin enterprise bargaining by different sectors of the Australian economy, could be provided by a body such as the Fair Work Ombudsman, the Commonwealth Climate Change Authority (established under the *Climate Change Authority Act 2011* (Cth)), or by a new body established specifically for this purpose.

Notwithstanding the declining enterprise agreement coverage across Australia, the Australian union movement remains a key and driving force in responding to the climate crisis. It has the capability to urge employers to respond adequately by way of encouraging employees to engage in collective action, even in the absence of an applicable enterprise agreement. Collective action is enshrined in the Conventions of the International Labour Organization,[82] constituting a basic labour standard provided for workers. It provides workers with an opportunity, in association with one another, to improve their working conditions and foster the kinds of iterative but committed implementation and accountability mechanisms for adaptation that we identified in the adaptation scholarship (summarised in Figure 1). As Shae McCrystal has so eloquently put: 'It is a self-help mechanism, facilitating worker voice, aiding industrial democracy and overcoming market failures which would otherwise leave workers with little individual capacity positively to impact their working conditions.'[83]

As has been seen with the collective advocacy and response to injustices faced by those working in the Australian gig economy in recent years,[84] there is no doubt that collective action retains substantial influence in benefitting groups of workers in a meaningful sense, even in the absence of an enterprise agreement. Indeed, climate change affects us all, and for the reasons outlined by McCrystal, clearly warrants a collective response, especially insofar as the performance of work is concerned. The ACTU has already begun encouraging climate change driven collective action in the form of encouraging workers to engage with one another to 'climate proof' their workplaces, suggesting, among other things, meeting with their workmates to discuss how climate change is affecting their performance of work, and whether particular action should be taken in response.[85] A continuation of this collective approach would assist employees to collaboratively resist power imbalances that might otherwise be generated by the changing climate, in their relationship with their employer. Collective action can also support the purposes of effective adaptation, incorporating concerns about vulnerability and equity (discussed in more detail below in Part V). It can provide employees with opportunities to voice their climate-related concerns about their place of work or employment conditions, as well as fostering industrial democracy and the capacity to shape working conditions positively, emphasising strength in numbers.[86]

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82 See, eg, *Freedom of Association and Protection of the Right to Organise Convention (No 87)*, opened for signature 9 July 1948, 68 UNTS 17 (entered into force 4 July 1950); *Right to Organise and Collective Bargaining Convention (No 98)*, opened for signature 1 July 1949, 96 UNTS 257 (entered into force 18 July 1951). See also Committee on the Employment Relationship, International Labour Conference, *Report of the Committee on the Employment Relationship*, 91st session, Agenda Item 5, Provisional Record 21 (18 June 2003) 23 [65].

83 Shae McCrystal, 'Collective Bargaining beyond the Boundaries of Employment: A Comparative Analysis' (2014) 37(3) *Melbourne University Law Review* 662, 663.

84 See, eg, Anthony Forsyth, 'Playing Catch-Up but Falling Short: Regulating Work in the Gig Economy in Australia' (2020) 31(2) *King's Law Journal* 287, 291–3 <https://doi.org/10.1080/09615768.2020.1789433>.

85 See generally, 'How to Climate-Proof Your Workplace' (n 78).

86 See generally, McCrystal (n 83).

C Work Health and Safety

Australia's model *Work Health and Safety Act 2011* (Cth) ('*Model Act*'), and its largely harmonised state- and territory-based equivalents, mandate that a 'person conducting a business or undertaking', which includes an employer, owes a primary duty to ensure the health and safety of those working in the business or undertaking.[87] Apart from employees, those workers could otherwise include contractors or subcontractors, as well as volunteers[88] in more limited circumstances.[89] The *Model Act* also prescribes a reflexive duty, such that those working in the business or undertaking, including employees, must take reasonable steps to ensure their own health and safety.[90]

The key challenge in respect of climate change, particularly as it relates to extreme weather events, is the changing standard of care that must be met in respect of these duties under the *Model Act*. In the discussion that follows, we consider, in turn, the existing capacity of Australian work health and safety law to facilitate adaptation to climate change-related workplace risks associated with extreme weather events and employees' mental health, both of which have the potential to be significantly influenced by climate change (both relevant to aspect 1 in Figure 1). We also consider what is needed going forward to ensure ongoing effective adaptation of work health and safety arrangements in response to those risks (Figure 1, aspect 2).

Safe Work Australia ('SWA') is a federal government statutory agency charged with developing national policy to improve WHS and workers' compensation arrangements. SWA (and its state- and territory-based equivalents) provide guidelines and/or dedicated Codes of Practice as a mechanism from which to benchmark certain standards of care that ought to be met in satisfying the duty of care owed by a 'person conducting a business or undertaking' (typically including an employer) under the *Model Act*. It is beyond the scope of this article to analyse all Codes and guidelines. However, preliminary analysis suggests that they currently provide insufficient guidance concerning the WHS challenges posed by climate change specifically.

Taking just one example: the performance of work during a heatwave. Federally, the SWA's *Guide for Managing the Risks of Working in Heat* contains the following brief statement regarding the identification of the risk and the need to consider the potential impact of heatwaves:

> Additionally, consider the potential impact of heatwaves. A heatwave occurs when the maximum and the minimum temperatures are unusually hot over at least a three-day period. Heatwaves may pose more risks to workers due to:

87 *Work Health and Safety Act 2011* (Cth) s 19. This statutory duty is similar to those owed at common law (ie, in the law of tort and contract), but not entirely identical.

88 See the definition of 'worker', which includes 'employees', 'contractors or subcontractors', and 'volunteers': ibid ss 7(1)(a)–(c), (h).

89 See, eg, ibid s 34(1), which provides that a volunteer does not commit an offence for a failure to comply with a health and safety duty, except a duty under sections 28 or 29.

90 Ibid s 28.

- warmer nights contributing to reduced sleep quality
- high temperatures being reached earlier in the day and lasting longer, and fatigue affecting workers' ability to perform work safely and effectively[91]

There are sporadic mentions of heat-related risks across numerous SWA materials, including in the *Construction Work*[92] and *How to Manage Work Health and Safety Risks*[93] Codes of Practice. However, there is no dedicated Code of Practice to mandate how an employer (or, indeed, its own employees) ought to respond to heat waves, nor is there a Code for how to manage risks of extreme weather events more generally. In addition to heatwaves, an employer's duty of care would arguably extend further to cover broader instances of other extreme weather events (eg, extreme rainfall and flooding, and more intense storms and cyclones), including employees' exposure to bushfires and smoke, with particular risks for employees with lung and other health vulnerabilities that may exacerbate the implications of smoke exposure. Ideally, a Code of Practice should be developed which addresses climate change and the increased likelihood of extreme weather events, supporting employers to minimise the worst effects of these extreme events on employees and the business as a whole, and ensuring that an employer's duty of care is met in accordance with the *Model Act*.

Given the widespread nature and potential severity of climate change impacts, a Code of Practice is preferable to a guideline. Codes of Practice provide practical guidance for those who hold a WHS duty of care in the circumstances described in the Code itself. They do not replace WHS laws, but provide guidance on best practice for particular hazards, how the relevant standards under the *Model Act* can be achieved, as well as effective identification and management of associated risks. WHS guidelines, such as that those quoted above, similarly help duty holders comply with the law, but differ from the authoritative nature of a Code of Practice. They permit wider discretion for duty holders to choose what options are most suited to their circumstances. Such guidance material contributes to the overall state of knowledge regarding hazards, risks, and controls. It may even be tendered as evidence in court proceedings.

Codes of Practice, however, are more robust than guidelines in their requirements; they are expertly developed by SWA in consultation with stakeholders, including representatives from business, industry, workers, and health and safety bodies and, in the climate context, might require input from technical experts such as climate scientists. Codes of Practice provide practical guidance on how to comply with the law, and WorkSafe inspectors may refer to them when issuing an improvement or prohibition notice. A dedicated Code of Practice would elevate the importance of climate change induced hazards, emphasising the need to take proactive steps to protect employees at work, recognising the changing likelihood and potential severity of these risks over time, and facilitating the

91 Safe Work Australia, *Managing the Risks of Working in Heat* (Guidance Material, October 2021). See also 'Managing the Risks of Working in Hazardous Weather', *Safe Work Australia* (Web Page) <https://www.safeworkaustralia.gov.au/safety-topic/hazards/working-outside/working-hazardous-weather>.

92 Safe Work Australia, 'Construction Work' (Code of Practice, May 2018).

93 Safe Work Australia, 'How to Manage Work Health and Safety Risks' (Code of Practice, May 2018).

implementation of risk reduction activities and accountability for an employer's efforts (going to all three adaptation aspects in Figure 1). The process for developing a Code of Practice takes time and requires significant consultation with those stakeholders just mentioned,[94] so time is of the essence in initiating this proposal. Nevertheless, a single clear Code of Practice guiding employers and employees in their management of the risks associated with various aspects of climate change induced extreme weather events is imperative,[95] offering a clear opportunity to take the kind of holistic approach to adaptation in this context that is foreshadowed at the centre of Figure 1. Moreover, without the clarity and rigour of a Code of Practice for extreme weather events, the duty of care owed by an employer, alongside the duty owed by employees to take reasonable care for their own health and safety, may be unclear, and could even be diluted in the face of climate change.

In addition to developing a dedicated Code of Practice, SWA, and its state and territory counterparts, should establish a regular cycle to review existing guidelines and Codes of Practices to ensure they also sufficiently address the WHS challenges posed by climate change. A cycle of review is preferable to ad hoc review, to adapt to changing circumstances and to incorporate new knowledge and feedback concerning the operation of the Codes of Practice (see discussion of aspect 2 in Figure 1, 'enhancing the adaptiveness of law', above). We suggest that Codes of Practice ought to be specifically adapted to take climate change and the increased likelihood and severity of extreme weather events into account, and to have those matters elevated to be considered sufficiently serious, to protect employees at work. In our view, without a clear standard of care to protect workers from climate-related harm, there is a real risk of the balance of power in the employment relationship shifting too far away from the employee, potentially placing employees in unsafe situations. Without clarifying the climate-related changes to extreme events and their implications for WHS, employers may fail to implement effective risk reduction measures and adaptation or resilience-focused planning, continuing to operate in a 'business as usual' manner.[96]

Apart from responding to extreme weather events, Australian WHS law must also be alive to and adapt to the impacts that climate change may have on employees' mental health. At present, Safe Work Australia has already contemplated the requisite standard of an employer's care in respect of employees' mental health. Its Model Code of Practice, *Managing Psychosocial Hazards at Work*, identifies that there may be risks related to: 'job demands' (including unreasonable or excessive time pressures or role overload and shifts/work hours that do not allow adequate time for sleep and recovery); 'low job control' (such as workers having little control

94 See the detailed process usefully summarised here: 'Codes of Practice and Other Guidance Material', *NT Work Safe* (Web Page, 7 February 2023) <https://worksafe.nt.gov.au/forms-and-resources/bulletins/codes-of-practice-and-other-guidance-material>.

95 As to what exactly could/should be included in the Code of Practice, and how it should be most widely disseminated and nuanced to different parts of Australia where there are different climates or weather events: these are all matters which require dedicated and detailed consideration. Such considerations extend beyond the scope of this article but are worthy of separate and dedicated attention.

96 See, eg, Jan McDonald, 'A Short History of Climate Adaptation Law in Australia' (2021) 4(1–2) *Climate Law* 150, 165–6 <https://doi.org/10.1163/18786561-00402013>.

over aspects of their work, including how or when their job is done); and 'poor environmental conditions' (involving workplace conditions that affect concentration or ability to complete tasks, such as uncomfortable temperatures).[97] These matters have the potential to be exacerbated alongside a changing climate. Job demands may increase, how and when an employee's job is required to be done may be disrupted, and temperatures and working environments may become untenable.

As matters stand, however, it appears that this Model Code falls short of establishing a directly recognised impact of climate change on employees' mental health, which arguably demonstrates a need for that direct recognition for an employer to meet its requisite standard of care. For example, poor mental health, trauma and post-traumatic stress disorders are well-recognised harms that can be caused by climate-related extreme events such as the repeated floods that disrupted communities and workplaces across western NSW in 2021–22, and the catastrophic bushfires across eastern and southern Australia in 2019–20.[98] First responders, including emergency service employees, have a heightened risk of long-term mental health issues.[99] Complex psychological and mental harm will become more prevalent to employees more generally as they are exposed to the compounding and cascading effects of multiple extreme events and may result in employers being subject to an expanded duty of care or increased standard of care for mental health and wellbeing. Recognising the potential for climate-induced mental health risks is therefore of the utmost necessity for employers, so that they can minimise potential legal risk in respect of satisfying the duty of care that they owe to employees.

V THE IMPORTANCE OF ATTENDING TO THE POWER BALANCE IN EMPLOYMENT RELATIONSHIPS AS EMPLOYMENT LAW ADAPTS

The implications of climate change for employment in Australia have been detailed in Part II, and we have examined the ways in which those climatic changes may affect specific aspects of employment law and, potentially, affect the balance of power in employment relationships over the coming decades. However, interventions to promote reform may similarly create new power balances. These new power balances may arise either by overtly increasing employer power, or increasing employee power (eg, by maintaining their access to unfair dismissal protection, encouraging climate change driven enterprise agreement making and collective action more broadly, as well as the maintenance of a safe workplace in

97 Safe Work Australia, 'Managing Psychosocial Hazards at Work' (Code of Practice, July 2022) app A.

98 Grant Blashki and Craig Hyde Smith, 'The Climate Change Threat to Our Mental Health', *Pursuit: University of Melbourne* (Web Page, 21 March 2023) <https://pursuit.unimelb.edu.au/articles/the-climate-change-threat-to-our-mental-health>. See generally, Elizabeth Haase, 'How Extreme Weather Events Affect Mental Health', *American Psychiatric Association* (Web Page, May 2023) <https://www.psychiatry.org/patients-families/climate-change-and-mental-health-connections/affects-on-mental-health>.

99 The Black Dog Institute, 'The Nexus between Climate Change and Mental Health' (Brief, 2021) 3.

the midst of climate change induced risks). Some changes may be consistent with promoting fair employment relationships, enhancing adaptive capacity and resilience for both employers and employees. However, reforms such as changes to legislative or regulatory instruments, or revisions to policies, guidelines and practice manuals, may result in unintentional, undesirable or unsustainable shifts in power (as illustrated in Figure 2).

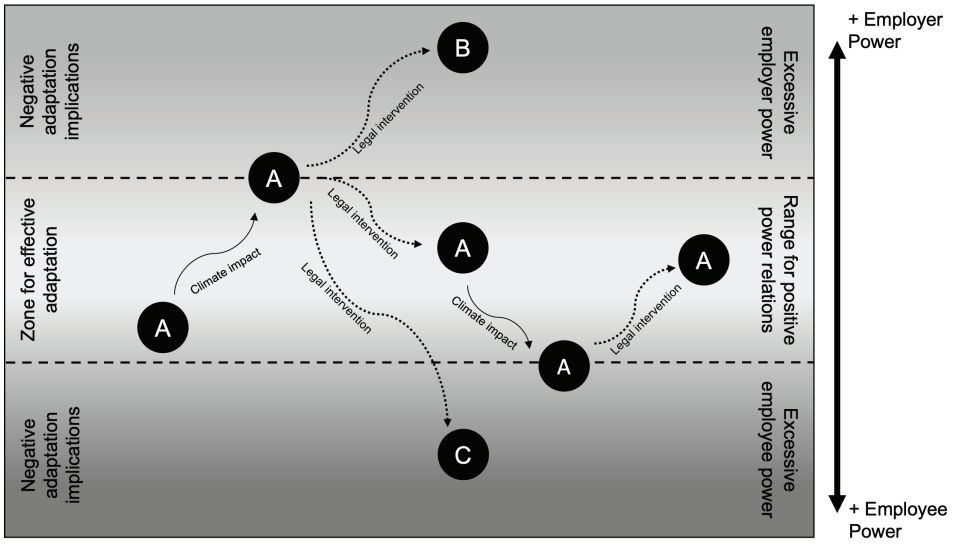

Figure 2: Options for reforms that keep employment law within the range or 'zone' of effective adaptation

Both climate change and law reform will create contexts in which the balance of power between employers and employees may be disrupted – whether in favour of employers or employees. In Figure 2, we illustrate the ways in which these disruptions occur, whether as a result of climate impacts (solid lines) or legal interventions such as legal reform, the publication of new guidelines or the development of the law through judicial decisions in litigation (dotted lines). Figure 2 demonstrates that responses to climate impacts, and the initiation of legal interventions, can be expected to affect power dynamics in employment relationships (solid circles). Options labelled 'A' (solid circles) illustrate the way in which a range of different impacts and diverse interventions may nevertheless remain within the 'zone of effective adaptation', provided attention is paid to those dynamics and their potential to trigger maladaptive outcomes, including as a result of new, substantial imbalances in power (indicated in Figure 2 with solid circles labelled 'B' and 'C'). We propose that climate impacts and legal interventions that result in employment relationships that remain within the 'zone of effective adaptation' can only be achieved if the balance of power between employers and employees remain within a positive (relatively balanced) range (Figure 2 generally).

Maintaining a positive balance in the power held by employers and employees is important for adaptation in Australian employment law for two reasons. First, as employment law adapts to climate change, it must continue to recognise the centrality of the contract of employment to the modern employment relationship.[100] It is that instrument which operates to regulate the power dynamic between the parties.[101] Indeed, the notion of employees now being engaged under a contract of employment (or contract for service) has resulted in a plethora of protections to those who are employed under such an agreement,[102] rather than performing work in servitude, as was the case during the time of the former master and servant regime.[103] This form of engagement also sets employees apart from independent contractors who are engaged under contracts for services, and do not typically attract the rights and benefits afforded to employees.[104]

The second reason for maintaining a positive power balance in employment laws is to facilitate equity in the employment relationship. Equity is at the heart of what adaptation is designed to achieve. For example, the IPCC has indicated that a climate adaptation action will only be effective if it 'reduces vulnerability and climate-related risk, increases resilience, and avoids maladaptation'.[105] To prevent maladaptation – including in efforts to revise employment legislation or undertake other forms of legal reform – Australian governments and other actors promoting reform will need to avoid 'actions that may lead to increased risk of adverse climate-related outcomes, including via … increased or shifted vulnerability to climate change, *more inequitable outcomes*, or *diminished welfare*, now or in the future'.[106]

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100 As Sir Otto Kahn-Freund quintessentially put it, understanding employment as a contractual relationship is the 'cornerstone of the edifice' of modern labour law: Sir Otto Kahn-Freund, 'Legal Framework' in Allan Flanders and HA Clegg (eds), *The System of Industrial Relations in Great Britain* (Basil Blackwell, 1954) 42, 47.

101 This regulation of power is particularly so in respect of terms implied by law into the class of employment contracts. Hugh Collins says those terms will have been 'devised primarily with a view to constructing an efficient, functioning exchange and a fair balance of obligations between the parties to the relationship constituted by this kind of transaction': Hugh Collins, 'Legal Responses to the Standard Form Contract of Employment' (2007) 36(1) *Industrial Law Journal* 2, 9–10 <https://doi.org/10.1093/indlaw/dwl037>.

102 As Collins explains, '[s]tatutory employment rights are … parasitic on the common law of contract': Hugh Collins, 'Contractual Autonomy' in Alan Bogg et al (eds), *The Autonomy of Labour Law* (Hart Publishing, 2015) 45, 60.

103 For discussion of the historical development of the employment contract away from the former master and servant regime in the Australian context, see, eg, Adrian Merritt, 'The Historical Role of Law in the Regulation of Employment: Abstentionist or Interventionist?' (1982) 1(1) *Australian Journal of Law and Society* 56; John Howe and Richard Mitchell, 'The Evolution of the Contract of Employment in Australia: A Discussion' (1999) 12(2) *Australian Journal of Labour Law* 113.

104 See generally, Joellen Riley, 'The Definition of the Contract of Employment and Its Differentiation from Other Contracts and Other Work Relations' in Mark Freedland et al (eds), *The Contract of Employment* (Oxford University Press, 2016) 321, 324 <https://doi.org/10.1093/acprof:oso/9780198783169.003.0015>; Joellen Riley, 'A Fair Deal for the Entrepreneurial Worker? Self-Employment and Independent Contracting Post *Work Choices*' (2006) 19(3) *Australian Journal of Labour Law* 246.

105 Pörtner et al (n 16) 7.

106 Ibid (emphasis added).

We have argued that climate adaptation is essential and urgent for employment law and for the benefit of employers and employers. However, we emphasise that adaptation is not simply about reducing the exposure or vulnerability of employers and employees to current or projected climate impacts, but rather, to ensure that the world of work can adjust over time in ways that support and protect employers, employees and broader economic, social and environmental values.

Adaptation scholars continue to debate the extent to which climate adaptation is primarily the responsibility of the state and we do not intend to propose here that it is only government that must drive change. Rather, a host of different actors will need to participate in the task of negotiating, promoting and helping to achieve effective adaptation and a positive power balance between employers and employees as the climate changes. Having reflected on 'who' ought to drive the kinds of interventions that we have foreshadowed in this article, it seems clear to us that adaptation cannot be left to evolve organically, if we are to ensure that the power balance between employers and employees is to be maintained. The Australian federal, state and territory governments will certainly have a crucial and strategic role to play in, for example, ensuring that employers plan adequately for climate adaptation over time; regulating and enforcing those requirements to protect employees *and* employers from the worst effects of a changing climate; and encouraging adaptiveness in legal regimes across the board, including in employment law. This final task may require upskilling and increased resources for statutory drafting bodies, parliamentary committees and regulatory agencies, as well as the development of 'best practice' policies and guidelines for legal reform.

However, beyond these preliminary reflections, we do not propose to answer the question: 'who holds primary responsibility in this context for facilitating or driving adaptation?'. Rather, we argue that the extent to which governments, employers, employees, and other stakeholders (such as unions and employer groups) hold responsibility for adaptation in the world of work, and the question of who is best placed to drive and coordinate adaptation reforms, deserve far more detailed consideration than the scope of this article allows. We look forward to rapid developments in this scholarly enterprise in coming years.

VI CONCLUSION

To conclude, this article has traversed the impact of climate change on the world of work, and considered the important role that employment law can play in adapting to these impacts. Our analysis focused on challenges to three key pillars that are central to Australian employment law: unfair dismissal, enterprise bargaining and collective action, as well as WHS. The final part of our discussion emphasised the importance of paying attention to striking the appropriate balance of power as between employees and employers inherent in the employment relationship.

Our analysis reveals an important role for considering adaptation in the context of employment law, in Australia, and around the world. We readily acknowledge

that reforming employment law and policy frameworks will not provide a complete and universal solution to the challenge that climate change represents. In this article, we have simply considered the challenges climate change poses for Australian employment law and how it should respond to these challenges to promote effective adaptation. Nevertheless, we suspect that future analyses of adaptation concepts and their application to the world of work may generate new ways of thinking about adaptation more broadly. For example, much of the scholarship about adaptation law centres around concepts from environmental sciences such as resilience and adaptive capacity. Employment law is fundamentally human-focused. As a result, there appears to be opportunities for employment law and lawyers to learn from the ecological roots of adaptation scholarship. There is real value to be gained from, for example, conceiving of resilience not in its engineering context, which values rigidity, efficiency and resistance to change, but in the context of ecological resilience, which prioritises adaptability, flexibility and innovation over time.[107] Adaptation law scholars, too, may learn from the way that employment law and the world of work more generally, adapts as the climate changes. With such a diverse range of actors, resources and capacities – ranging from global corporations with thousands of employees across continents and cultures and billions of dollars in revenue, through to family businesses that are closely connected to both local production chains and their customers – climate adaptation will look entirely different in different contexts. This diversity raises extremely complex and also very exciting questions for adaptation in law and the legal scholars that study it. We, ourselves, will need to be adaptable as we continue to interrogate, advocate for, and foster adaptiveness in our areas of expertise.

We also anticipate that the way in which Australian employment law is expected to adapt to the changing climate will continue to be contested. Although adaptation is something that all stakeholders in the employment relationship – employees, employers, unions, politicians, judges, and society more broadly – will need to embrace, employment law lends itself to being disputed or challenged in practice, especially insofar as the balancing of power in the employment relationship itself is concerned. Notwithstanding that potential for conflict, however, we make three final observations about the key features of climate adaptation-oriented employment law.

First, 'adaptability' is a precondition for the 'durability' of employment law in a future that is changing rapidly. In our analysis, we are primarily concerned with employment law and policies that can last into the future. Employment law that facilitates adaptation, and that is itself adaptable, ought to not only seek justice for the current or immediate future generation in the midst of a dramatically changing climate but should also have the capacity to adapt over the longer term. Such a notion of justice, embracing future-oriented strategies and priorities, will

107 See, eg, JB Ruhl, 'General Design Principles for Resilience and Adaptive Capacity in Legal Systems: With Applications to Climate Change Adaptation' (2011) 89(5) *North Carolina Law Review* 1373, examining the legal implications and applications of the concepts of resilience and adaptive capacity, citing previous work by, among many others, CS Holling, 'Understanding the Complexity of Economic, Ecological, and Social Systems' (2001) 4(5) *Ecosystems* 390 <https://doi.org/10.1007/s10021-001-0101-5>.

inevitably result in more durable employment law. Second, and in addition to serving longer-term economic development and protecting environmental values, employment law and policy ought to be particularly concerned with social justice. Such developments would likely be most influential and may have the strongest influence on maintaining a power balance. Third and finally, there is also a normative consensus around equality and inclusion. Essentially, the more stakeholders can agree on a law or policy, are consulted with respect to its dimensions, and can be engaged in its implementation, the more likely it is to be effective. This efficacy is important because there are potential tensions between economic, environmental, and social objectives, each of which are jointly and severally important in ensuring that Australian employment law can respond to the climate crisis.