

Legal implications of Climate Change

Background Paper

November 2021

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Executive summary

Introduction

The purpose of this Background Paper is to provide additional context for the Law Council of Australia's (**Law Council**) Climate Change Policy¹ (**the LCA Policy**), by describing the broad impact that climate change and climate change mitigation and adaptation measures have for Australian lawyers.

The Background Paper is not intended to be a complete precis of the legal implications of climate change in Australia, and represents a 'point-in-time' discussion of these evolving issues as at November 2021. It is hoped that this Background Paper will provide a resource or starting point for those practitioners who are not familiar with the legal issues associated with climate change and its impacts.

Part 1 – The scientific, social and economic context of climate change

The recently published work of the United Nations' (**UN**) Intergovernmental Panel on Climate Change (**the IPCC**) on the causes of climate change confirms the contribution of anthropogenic greenhouse gas (**GHG**) emissions to climate change. The IPCC and UN World Meteorological Organization (**the WMO**) agree that human activities are a major driver of climate change, particularly by increasing levels of GHGs in the Earth's atmosphere. Australian authorities have also attributed 'essentially all' recent global average temperature change to humans and Australia's contribution to climate change, as the fourteenth largest global emitter in 2020 and producer of approximately one per cent of global emissions, is recognised.

It is widely agreed that the direct physical impacts of climate change are already grave and expected to worsen. The IPCC projects that global warming will cause numerous future changes in weather patterns worldwide. Domestically, many changes have already taken place, including increasing heatwaves, droughts, bushfires, floods and other extreme weather events, ocean warming, coastal storm-surge inundation and land degradation.

The physical risks arising from these changes extend to almost all facets of natural and human life, from terrestrial and marine ecosystems to socio-economic systems. The impacts are serious for human health and wellbeing, peace and stability, and national security. Rural communities, children and older people, First Nations communities, migrants and displaced peoples are likely to be disproportionately affected. Displacement events prompting forced migration are more likely in the future, including across the Asian-Pacific region. On the economic side, physical risks result in lost productivity, disruption events and infrastructure damage.

Understanding the legal implications of climate change also requires an understanding of the two main umbrellas of policy responses to the phenomenon. Mitigation responses aim to limit GHG emission levels and concentration in the atmosphere, while adaptation responses aim to minimise risk within any assumed current temperature level. The IPCC underlines that 'large, immediate and unprecedented' global efforts are required in relation to both mitigation and adaptation measures.²

¹ Law Council of Australia, Climate Change Policy, (November 2021).

² Intergovernmental Panel Climate Change (**IPCC**), 'Special Report on Global Warming of 1.5C – Chapter 3' (2018) (1.5C Report) Executive Summary.

The adverse consequences which may flow from adaptation or mitigation responses, described as 'transition risks', are many and varied. They impact all industries, business and employment, and pose a systemic risk to markets, as has been recognised by Australia's financial regulators and other financial sector leaders. Key stakeholders and regulators view transition risks as a central concern for Australia's economy, trade prospects and financial sector.

Businesses in a wide range of industries face pressure from employees, institutional investors and shareholder groups in the transition towards a low carbon economy. Many are already adapting to these new demands and taking up new opportunities as they arise. Fundamental shifts in employment are also anticipated. Across the business and community sectors, there is consensus about the need to minimise job losses, enhance job gains and ensure just transitions for all Australians.

Part 2 – the Legal Implications of Climate Change

Rapid shifts are occurring as international legal frameworks adapt to climate change and its drivers, impacts and risks. Climate-specific instruments are being created with binding legal obligations for their parties. Under the UN Framework Convention on Climate Change (UNFCCC)³ and Paris Agreement,⁴ for example, Australia has made a number of significant commitments with a view to holding the increase in global average temperature, compared to pre-industrial levels, 'well below 2°C' and pursuing efforts to limit temperature gain to 1.5°C. Environmental treaties and instruments also contain highly relevant commitments.

Human rights obligations, too, have increasingly been engaged when considering climate change mitigation and adaption responsibilities. Australia is bound by a number of treaties to respect, protect and fulfil human rights. UN authorities are underlining that States have a human rights obligation to prevent the foreseeable adverse effects of climate change and ensure that those affected by it, particularly those in vulnerable situations, have access to effective remedies and means of adaptation to enjoy lives of human dignity. There are also suggestions that treaty bodies may hold State parties to human rights treaties accountable for human rights harms caused by climate change.

Concurrently, the relationship between large-scale displacement and climate change is being scrutinised by reference to existing international law frameworks. Some States are increasingly voicing concerns that climate change is a relevant potential source of aggravation to international peace and security.

Alongside this evolution in international legal frameworks for State responsibilities, Australian businesses are also subject to increasing guidance on their role in responding to climate change. The recommendations by the Taskforce on Climate-Change Related Financial Disclosures (**TCFD**)⁵ have, for example, been widely adopted and have driven significant regulatory change. There are also attempts to outline responsible business conduct on climate change by reference to existing international standards, including with respect to human rights. The development of instruments such as the Oslo Principles on Global Climate Change Obligations (**Oslo Principles**)⁶ and the Principles on Climate

³ See, *United Nations Framework Convention on Climate Change*,(**UNFCCC**), opened for signature 9 May 1992, 1771 UNTS 107 (entered into force 21 March 1994).

⁴ Paris Agreement, opened for signature 22 April 2016 [2016] ATS 24 (entered into force 4 November 2016) (**Paris Agreement**). Australia ratified the Paris Agreement on 10 November 2016: <u>Statement</u> by the Hon Greg Hunt MP, 'National Statement, Signing of the Paris Climate Change Agreement' (New York, 22 April 2016). ⁵ Task Force on Climate-related Disclosures, <u>Overview</u> (March 2020, Bloomberg) 7.

⁶ Expert Group on Global Climate Change Obligations, <u>Oslo Principles on Global Climate Obligations</u> (Oslo Principles) (2015, Eleven International Publishing).

Obligations of Enterprises (**PCOEs**),⁷ may contribute to an emerging body of international law and practice over time.

Domestically, a range of legislation exists at federal level, including to regulate national emissions reduction. There are substantial policies and programs implementing direct action policies and backed by significant investment. National financial regulators have also released guidance regarding climate-related risk disclosure.

However, Australia's domestic policy and laws tend to diverge at the state, territory and federal levels, and there are gaps and inconsistencies. A national climate response may assist in setting out long-term objectives, roles and responsibilities. As part of this national response, an overarching federal legislative framework for achieving progress on climate change mitigation and adaption measures, including a legislated emissions reduction target, may assist in achieving certainty, stability and predictability in the domestic implementation of Australia's obligations.

Specifically, the possibility of federal legislative change has been canvassed (and in some cases, implemented) across diverse fields, from environmental to corporations, natural disaster, water, and migration laws. The possibility of future legislated emissions trading or carbon pricing schemes remains under debate, given their increased global take-up.

Australia's states and territories are working towards a target of net zero emissions by 2050, four of them pursuant to specific climate change legislation. A national climate action plan, underpinned by legislative frameworks as required, could more clearly set out respective roles and responsibilities of federal, state and territory governments, as a way to aligning and achieving long-term objectives.

Finally, foreign and Australian courts are increasingly being asked to adjudicate on relevant duties with respect to the risks posed by climate change, across multiple areas of the law. Foreign climate litigation continues to raise novel causes of action. Some of these cases may prompt future Australian litigation challenges. In Australian courts, the pace of litigation has become more rapid across a variety of matters. These evolving client demands in turn pose challenges for the legal profession.

Part 3 – Implications for the Legal Profession

Australian individuals and businesses face new risks, liabilities and challenges requiring legal advice. Novel questions of law are arising across many legal practice areas. Legal risks are emerging with respect to corporate governance and directors' duties, for example, and insurers and reinsurers are under increasing international pressure to reduce the GHG emissions of their portfolios, while also facing more predictable and less insurable natural disasters. Other key client groups encountering specific and evolving climate-related legal challenges include First Nations peoples, RRR communities, and other marginalised groups.

Structural changes show that private and community lawyers are already responding to changing market demands. However, access to justice concerns prevail given the critical underfunding of legal assistance services. Legal educators are also responding to changing legal practices by giving more focus to climate-related legal issues, indicating

⁷ Expert Group on Global Climate Change Obligations (Jaap Spier ed.), <u>Principles on Climate Obligations of Enterprises</u> (**PCOEs**) (2020, Eleven International Publishing). For commentary on the authority of this group of experts, see, Satvindar Nagra, 'The Oslo Principles and Climate Change Displacement: Missed Opportunity or Misplaced Expectations?' (1 April 2017) *Carbon & Climate Law Review* (2) 122, citing Margaret Young, 'Climate Change Law (LAWS70293)' (Lecture delivered at Melbourne Law School, University of Melbourne, 11 May 2016).

growing demand for academic and practical knowledge in the area, and an awareness on the part of universities of the vocational value of education in climate-related law.

Alongside these very tangible shifts, questions are emerging about the extent to which Australian legal practitioners must consider the risks and legal implications of climate change when preparing their advice, if they are to comply with their legal professional obligations. Existing professional ethical standards provide appropriate guidance as to the appropriate role for legal practitioners.

Lawyers should be aware that advice regarding a legal problem should be provided in a manner which meaningfully addresses any identified climate change issues and related consequences, including the possible risks, liabilities and reputational damage which may flow from activity that has a negative impact on climate change. It is not suggested that lawyers should offer advice on matters unconnected to legal issues or outside the scope of their retainer, but rather, that legal advice should take into account the full range of contextual circumstances in which it is given, consistently with professional obligations.

Having regard to the matters outlined in the Background Paper, it is evident that several of the Law Council's key functions are likely to be engaged on climate change and its legal implications into the future. These functions include promoting and defending the rule of law, including to ensure that it is certain and clear, non-discriminatory, ensures access to justice, transparent and accountable Executive decision-making and Australia's compliance with its international legal obligations. Broader functions include furthering the betterment of the law in the public interest, promoting the administration of the law, and promoting the development and promote advancement of the profession, and the ethical standards of practitioners and legal institutions. This also underlines the role of the LCA Policy in drawing together the Law Council's current thinking and future engagement on this issue of critical importance.

Part 1 – Scientific, social and economic context

Purpose of this Part

- 1.1 This Part explains the evidence base for the Law Council of Australia's (Law Council) Climate Change Policy (the LCA Policy). It first introduces the Law Council's Climate Change Working Group and its role in overseeing the development of the LCA Policy. The purpose of the LCA Policy is also explained by reference to the Law Council's broader functions and advocacy.
- 1.2 The balance of this Part sets out the high-level scientific, social and economic context of climate change, globally and in Australia. This Part outlines the scientific facts on the existence, nature and drivers of climate change. Next, it discusses the observed and projected impacts of climate change (globally and domestically, direct and indirect) on ecosystems, society and economy, and human health and welfare. Particular attention is given to specific risks which arise for certain groups of people.
- 1.3 Finally, this Part describes the key strategies which are being taken by a variety of stakeholders to address climate change, both by way of mitigation of, and adaptation to, its effects. The transition risks associated with these strategies are considered, with particular regard to the economic shifts which are occurring and/or projected.

Introduction

- 1.4 The purpose of this Background Paper is to provide context for the LCA Policy by describing the broad impact that climate change and climate change mitigation and adaptation measures have for Australian lawyers.
- 1.5 The Background Paper is not intended to be a complete precis of the legal implications of climate change in Australia. The developments outlined in the paper are, necessarily, current only as at November 2021.8 However, it is hoped that this Background Paper will provide a resource for those practitioners who are not familiar with the legal issues associated with climate change and its impacts.

Climate Change Working Group

- 1.6 On 10 December 2019, the Law Council sought feedback from its stakeholders on the merits of developing a legal profession policy statement on climate change and its potential content. Responses overwhelmingly supported developing a policy that is evidence-based and focused on the legal implications of climate change.
- 1.7 Accordingly, in March 2020 the Law Council's Directors agreed to establish a Climate Change Working Group (the Working Group, see Appendix) comprising a diverse group of representatives. Its role was to consider the legal implications of climate change and develop a policy position on those implications. The Working Group was formally established in November 2020, following delays due to the COVID-19 pandemic.

Purpose of LCA Policy

1.8 The LCA Policy has been developed by the Working Group (in close consultation

⁸ The Law Council recognises that further developments have continued into 2022, including with respect to international reports cited in this Part.

with the Law Council's Constituent Bodies) and endorsed by the Law Council for the following three purposes, namely to:

- provide an evidence-based policy position on climate change which furthers the Law Council's objects and is clearly linked to the Law Council's remit, for use in the Law Council's work;
- ensure that the legal implications of climate change are well understood from different perspectives; and
- set out the Law Council's position on the elements that a regulatory framework addressing the legal implications of climate change should include, having regard to the objectives of the Law Council.
- 1.9 The Law Council's organisational objects and policies support the development and promotion of the LCA Policy project.

Organisational objects

- 1.10 The LCA Policy contributes to one of the key objects of the Law Council, the promotion of the rule of law in the public interest. The Law Council's Policy Statement of the Rule of Law Principles (**Rule of Law Principles**) articulates eight principles on the basic tenets of the rule of law objects of the Law Council, the
 - The law must be readily known and available, and certain and clear.
 - All people are entitled to the presumption of innocence and to a fair and public trial.
 - Everyone should have access to competent and independent legal advice.
 - The law should be applied to all people equally and should not discriminate between people on arbitrary or irrational grounds.
 - The Judiciary should be independent of the Executive and the Legislature.
 - The Executive should be subject to the law and any action undertaken by the Executive should be authorised by law.
 - No person should be subject to treatment or punishment which is inconsistent with respect for the inherent dignity of every human being.
 - States must comply with their international legal obligations whether created by treaty or arising under customary international law. The Policy explains that this means that States must avoid inconsistencies between their international legal obligations and their domestic laws and policies.

⁹ Law Council of Australia, '<u>Constitution of Law Council of Australia Limited – As amended 1 December 2018</u>' (**LCA Constitution**) at cl 2.1(a).

¹⁰ See Law Council of Australia, '<u>Policy Statement of the Rule of Law Principles</u>' (March 2011) 2. The Policy includes explanatory material to support the interpretation and application of the principles. It is not intended to offer a comprehensive definition of the 'rule of law' and acknowledges that: 'what is encompassed under the banner of that phrase is a matter of some contest and that it is a concept that is not necessarily amenable to an exhaustive definition'.

- 1.12 The other Constitutional objects of the Law Council are also relevant to the development and promotion of the LCA Policy, including:¹¹
 - To promote the administration of justice and the development and improvement of law throughout the Commonwealth.¹²
 - The advancement of the profession and the ethical standards of practitioners and legal institutions.¹³
 - To advance the science of jurisprudence.¹⁴
- 1.13 These objects are further discussed at the end of Part 3 of the Background Paper, having regard to the rest of its contents.
- 1.14 The LCA Policy supplements the Law Council's Policy Statements on Sustainable Development¹⁵ (**SD Policy**), Human Rights and the Legal Profession¹⁶ (**HR Policy**) and Indigenous Australians and the Legal Profession¹⁷ (**Indigenous Policy**). The SD Policy emphasises the interdependence of environmental protection and human rights,¹⁸ and the HR Policy recognises and endorses increasing international attention to human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment.¹⁹ Under the Indigenous Policy, the Law Council acknowledges Indigenous peoples as the original inhabitants and custodians of Australia, and commits to working in partnership with Indigenous peoples to achieve a range of critical legal and justice system outcomes.

Global recognition: the challenge and opportunity of climate change

UNFCCC and the Paris Agreement

1.15 The existence of anthropogenic climate change was accepted in a 'lynchpin' intergovernmental treaty on the subject in 1994, the UNFCCC. It defines climate change as:

...a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods...²⁰

1.16 The 197 parties to the UNFCCC agreed to stabilise GHG amounts to a level 'that would prevent dangerous anthropogenic (human induced) interference with the

¹¹ See LCA Constitution cl 2. Relevant objects are set out comprehensively in the Appendix.

¹² Ibid sub-cl 2.1(f).

¹³ Ibid para 2.1(e)(ii).

¹⁴ Ibid sub-cl 2.1(g).

¹⁵ See Law Council of Australia, 'Policy on Sustainable Development' (Policy Statement, 14 September 2019) (**SD Policy**).

¹⁶ See Law Council of Australia, 'Policy Statement on Human Rights and the Legal Profession' (Policy Statement, May 2017) (HR Policy).

¹⁷ See Law Council of Australia, '<u>Policy Statement on Indigenous Australians and the Legal Profession</u>' (Policy Statement, 2010).

¹⁸ Law Council of Australia, SD Policy [9].

¹⁹ Law Council of Australia, HR Policy [16].

²⁰ UNFCCC art 1(2).

- climate system'. 21 Parties committed to achieving this in enough time for ecosystems to 'adapt naturally to climate change', for threats to food production to be avoided and for sustainable economic development to occur.²²
- The next major international agreement following the UNFCCC was the Kyoto Protocol,²³ which was ratified in 2007 and imposed specific limits on the GHGs of 'industrialised' States with the aim of reducing their overall emissions by a certain amount. Australia committed to limiting increases in its net GHG emissions between 2008 to 2012 to 8 per cent above its 1990 levels and, between 2013 and 2020, to 0.5 per cent below the 1990 levels.24
- In 2015, the Paris Agreement followed on from the Kyoto Protocol²⁵ to set specific targets for reducing GHG emissions. 190 parties agreed that the increase in global average temperature as compared to pre-industrial levels should be held 'well below 2°C', and to 'pursu[e] efforts' to limit temperature gain to 1.5°C higher than pre-industrial levels (rather than the 4.8°C increase that was predicted).²⁶

Australia's commitments

- 1.19 In brief, Australia is legally bound under the Paris Agreement to 'implement an economy-wide target to reduce greenhouse gas emissions by 26 to 28 per cent below 2005 levels by 2030' pursuant to its 'nationally determined contribution' (NDC).²⁷ Australia has reserved the right to adjust its target.²⁸ In March 2020, the Australian Government stated that it is 'on track' to meet the targets set under its first NDC.29
- 1.20 Also in March 2020, the Australian Government Climate Change Authority (the Australian Government CCA) released its latest report outlining how Australia can reduce greenhouse gas emissions to meet its Paris Agreement commitments.'30 The Australian Government CCA acknowledged that the Paris Agreement will require economies in Australia and globally to adjust to 'more ambitious emission reduction targets' in the future, in accordance with parties' commitments under the Agreement to 'ratchet up' their ambition over time.³¹

²¹ Ibid art 2.

²³ Kyoto Protocol to the United Nations Framework Convention on Climate Change, FCCC/CP/1997/L.7/Add.1 10 December 1997 (Kyoto Protocol).

²⁴ On 1 July 2020, the Kyoto Protocol targets ended: ibid, art. 3(1). See also, UN Climate Change, 'What is the Kyoto Protocol?'; Kyoto Protocol, ibid at Annex B; Australia State of the Environment 2016, 'Kyoto Protocol Targets'.

²⁵ For background, see Appendix.

²⁶ See, Paris Agreement, art 2(1)(a); 1.5C Report Executive Summary.

²⁷ Australia submitted its 'Intended nationally determined contributions' in the lead-up to the Paris Conference of the Parties, where the Paris Agreement was reached. See, 'Australia's Intended Nationally Determined Contribution to a new Climate Change Agreement' (August 2015) (Australia's INDC); Climate Action Tracker, 'Summary Table'.

²⁸ Australia's reservation specifies that: 'Australia reserves the right to adjust our target and its parameters before it is finalised under a new global agreement should the rules and other underpinning arrangements of the agreement differ in a way that materially impacts the definition of our target': Australia's INDC, ibid. ²⁹ See Evidence to Senate Environment and Communications Legislation Committee, Parliament of Australia, Canberra, 2 March 2020, 135 (Ms Jo Evans).

³⁰ Australian Government Climate Change Authority, Prospering in a low-emissions world: An updated climate policy toolkit for Australia' (March 2020) ('Prospering in a low-emissions world').

31 Ibid. The Australian Government CCA made a range of recommendations for how to achieve this. For

detail, see the Appendix.

Scientific explanation of climate change

Existence and nature of climate change

Global perspective

- 1.21 The study of climate change has been the subject of formal international cooperation since the IPCC was established by the WMO in 1988. Regarded as the 'authoritative voice of the international scientific community' on these issues, the IPCC assesses the science related to the causes of climate change, as well as the implications of climate change, possible future risks and options for policymakers to address it.³²
- 1.22 In 2021, the IPCC found in its *Sixth Assessment Report* that it is 'unequivocal' that human influence has caused global warming and that this has resulted in 'widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere'.³³ The Earth's climate has been warmed by human influence 'at a rate that is unprecedented in at least the last 2000 years'.³⁴
- 1.23 The IPCC made the assessment that it is likely that from 1850-1900 to 2010-2019,³⁵ GHGs contributed to a warming of 1.0°C to 2.0°C while other human drivers (mainly aerosols) caused a cooling of 0.0°C to 0.8°C.³⁶ The likely overall increase in global surface temperature in this period was estimated at 1.07°C.³⁷
- 1.24 The IPCC also found with 'very high confidence' that since 1750, 'increases in CO₂ (47 per cent) and CH₄ (156 per cent) concentrations far exceed, and increases in N₂O (23 per cent) are similar to, the natural multi-millennial changes between glacial and interglacial periods over at least the past 800,000 years'.³⁸

Weather and climate extremes

- 1.25 The IPCC has attributed a range of changes in weather patterns and other natural phenomena to human influence.³⁹ These include increases in global average precipitation, shifts of mid-latitude storm tracks poleward since the 1980s, a global retreat of glaciers, a decrease in Northern Hemisphere spring snow cover, warming of the global upper ocean and global acidification of the surface open ocean, global mean sea level increase, and changes in the land biosphere (including location of climate zones and length of growing season).⁴⁰
- 1.26 The IPCC considers it 'virtually certain' that hot extremes in climate are more

³² IPCC, '<u>The Intergovernmental Panel on Climate Change</u>'. See also, International Bar Association Task Force on Climate Change Justice and Human Rights Report, 'Achieving Justice and Human Rights in an Era of Climate Disruption' (October 2014) 38.

³³ Masson-Delmotte et al (eds) Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (2021) Cambridge University Press (IPCC, August 2021) ('6th IPCC Assessment Report') Summary for Policymakers 42 [A.1].

³⁴ Ibid 7.

 $^{^{35}}$ Ibid 6 [A.1.3]. The IPCC's findings can be read alongside those by the World Meteorological Organization (**WMO**), which estimated in 2020 that the global mean surface temperature (defined as the air temperature 2 metres over land and the sea surface temperature in various ocean areas) is 1.2 ± 0.1 °C warmer than in the 'pre-industrial baseline' period of 1850-1900: WMO, <u>State of the Global Climate 2020</u> (2021) (**State of the Global Climate**) 6.

³⁶ 6th IPCC Assessment Report, <u>Summary for Policymakers</u> 42 [A.1].

³⁷ Ibid 6 [A.1.3].

³⁸ Ibid 9 [A.2.1].

³⁹ Ibid 6 [A.1.4].

⁴⁰ Ibid [A.1.4]-[A.1.7]. Note, the IPCC links these observed changes to human influence with varying degrees of certainty, however the minimum degree of certainty is 'likely'.

frequent and intense in most land regions since the 1950s.⁴¹ The IPCC has 'high confidence' that heavy precipitation events are also more frequent and intense since that time, considers it 'likely' that globally, the proportion of major tropical cyclone occurrence has increased over the last four decades, and attributes the likely increase in the chance of compound extreme events to human influence.⁴²

Future projections

- 1.27 In 2021, the IPCC projected five scenarios of 'possible climate futures' based upon 'the range of possible future development of anthropogenic drivers of climate change'.⁴³ The scenarios show the need for 'deep reductions' in GHG emissions in the coming decades to avoid exceeding global warming of 1.5°C and 2°C this century.⁴⁴ The scenarios also show that if GHG emissions are high or very high, warming of 2°C will be exceeded in the 21st century.⁴⁵ It is 'extremely likely' that intermediate emissions will have the same result.⁴⁶ Under the very low and low emissions scenarios it is 'extremely unlikely' that 2°C will be exceeded.⁴⁷
- 1.28 The IPCC found a 'direct relation' between increasing global warming and many climate system changes. Each further 0.5°C of global warming has 'clearly discernible increases' in the frequency and intensity of such changes. The IPCC also found that many changes due to both past and future GHG emissions 'are irreversible for centuries to millennia, especially changes in the ocean, ice sheets and global sea level'. 50

Australian perspective

1.29 In 2020, the Bureau of Meteorology (**the BOM**)⁵¹ and the Commonwealth Scientific and Industrial Research Organisation (**CSIRO**)⁵² released their sixth biennial *State of the Climate* report.⁵³ The report found that Australia's climate has warmed on average by 1.44 ± 0.24°C since national records began in 1910, and presented detailed evidence on weather and climate changes which have been observed in Australia.⁵⁴ The IPCC cites the BOM and CSIRO's work extensively in the *Sixth Assessment Report*.⁵⁵ The Australian Government CCA also draws extensively upon research by BOM, CSIRO and the IPCC in its publications, and has attributed 'essentially all' temperature change from pre-industrial levels in Australia to 'human-induced warming'.⁵⁶

⁴¹ Ibid 10 [A.3.1].

⁴² Ibid [A.3.2]-[A.3.5].

⁴³ Ibid 15, Box SPM.1.1.

⁴⁴ 6th IPCC Assessment Report, Summary for Policymakers 17 [B.1].

⁴⁵ Ibid [B.1.2].

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ Ibid 19 [B.2].

⁴⁹ Ibid [B.2.2].

⁵⁰ Ibid 28 [B.5]

⁵¹ The BOM is an executive agency of the Australian Government responsible for providing weather services to Australia and surrounding areas: Bureau of Meteorology, 'About Us'.

⁵² CSIRO is an Australian Government corporate entity and Australia's national science agency. Its purpose under the Science and Industry Research Act 1949 (Cth) is to carry out scientific research for the listed purposes and to encourage or facilitate the application or utilisation of the results of such research, for the benefit of Australia: CSIRO, 'Our origins'.

⁵³ See, BOM and CSIRO, '<u>State of the Climate 2020</u>' (Report, 2020) ('**State of the Climate Report'**) 2; Appendix.

⁵⁴ Ibid 2.

⁵⁵ See, for example, 6th IPCC Assessment Report, Chapter 12 48-49.

⁵⁶ See, for example, CCA, 'Prospering in a low-emissions world' 18.

- 1.30 BOM and CSIRO's *State of the Climate* report projects a range of impacts on Australia's climate as a result of climate change, from continued increases in air temperature and more frequent heat extremes, to more time in drought in the south and east, and more intense, heavy rainfall events across Australia.⁵⁷ The report also foreshadows more dangerous fire weather days and a longer fire season in southern and eastern Australia, continued rising sea level and acidification of Australia's oceans,⁵⁸ and a greater proportion of high-intensity tropical cyclones.⁵⁹
- 1.31 The Royal Commission into Natural Disasters found that Australia's climate is 'naturally variable' but that climate change is 'driving' weather changes, including with respect to extreme weather, and 'increasing climate impacts on our water resources, ecosystems, health, infrastructure and economy, both now and continuing into the future.'61
- 1.32 Significant industry-science partnerships have also recognised the potential significance of climate change impacts. For example, the science committee from the Climate Measurement Standards Initiative (**CMSI**)⁶² projects 'substantial' changes in many natural hazards in Australia by 2030, regardless of the emission scenario⁶³ and notes that by 2050, the extent of changes in some (though not all) hazards will depend upon the emissions scenario.⁶⁴

Future projections

1.33 The IPCC projects that by mid-century, Australia's average temperature will have increased by a further +1.1°C.⁶⁵ It is 'virtually certain' that hot extremes and heatwaves will be increasingly more frequent over the course of the 21st century, and it is projected that the frequency of dangerous humid heat will increase, particularly in Northern Australia.⁶⁶ Changes in annual mean precipitation throughout Australia, as well as heavy precipitation and pluvial flooding, are also forecast – alongside an increase in droughts (in Southern and Eastern Australia) and fire weather (throughout Australia).⁶⁷ Relative sea-level rise is 'virtually certain' around Australia, and increased marine heatwaves are also expected.⁶⁸

⁵⁷ BOM and CSIRO, State of the Climate Report 3, 22-23.

⁵⁸ Under the process known as ocean acidification, rising atmospheric CO2 levels increase the uptake of CO2 by the oceans, which affects their carbonate chemistry and decreases their pH: lbid, 15. ⁵⁹ lbid, 3, 22-23

⁶⁰ Royal Commission into National Natural Disaster Arrangements' (Report, 28 October 2020) ('Royal Commission Report') 56.

⁶¹ Ibid 57.

⁶² The CMSI is an initiative under independent organisation Climate-KIC Australia, coordinated by a steering group led by Climate-KIC Australia, the National Environmental Science Program, Earth Systems and Climate Change Hub, and a group of industry partners including: QBE, Suncorp, IAG, RACQ, National Australia Bank, Westpac, Commonwealth Bank of Australia, HSBC Australia, Munich-Re, Swiss-Re, Leadenhall CP, MinterEllison and Investor Group on Climate Change. The program is designed to provide information to assist with compliance with Taskforce on Climate-related Financial Disclosures (**TCFD**) and other climate-related financial disclosures, specific to Australian banks, insurers, asset owners and private and residential property traders (as well as regulators and other institutions which preside over these sectors): Climate KIC Australia, 'Climate Measurement Standards Initiative'. The CMSI's findings with respect to future symptoms of climate change in Australia are referenced in the Royal Commission Report 59.

⁶⁴ Ibid.

⁶⁵ 6th IPCC Assessment Report, Chapter 12, 12.4.3.1.

⁶⁶ Ibid.

⁶⁷ Ibid.

⁶⁸ Ibid.

Drivers of climate change

Greenhouse gas emissions

- 1.34 The IPCC has found that human activities have 'unequivocally' caused increased concentrations, observed since around 1750, of carbon dioxide, methane, nitrous oxide and other well-mixed GHGs.⁶⁹ The IPCC also considers it:
 - 'likely' that well-mixed GHGs have contributed warming of 1.0°C to 2.0°C from 1850-1900 to 2010-2019 and that other human drivers (mainly aerosols) caused cooling of 0.0°C to 0.8°C in the same period;
 - 'very likely' that 'tropospheric warming' since 1979 has mainly been driven by well-mixed GHGs; and
 - 'extremely likely' that the main driver of cooling of the lower stratosphere of Earth between 1979 and the mid-1990s was human-caused stratospheric ozone depletion.
- 1.35 Recognising that increasing GHG emissions due to anthropogenic activity are an overarching driver of climate change, one of the key measures under the UNFCCC and related instruments is to require the collection and reporting of information about sources of GHG and removal by sinks. The Kyoto Protocol identifies the following as key sources for emissions, by sector:
 - energy, including fuel combustion from the energy industries, manufacturing industries and construction, transport and other sources, as well as fugitive emissions from fuels including solid fuels, oil and natural gas;
 - industrial processes, including mineral products, the chemical industry, metal production and other production;
 - solvent and other product use;
 - agriculture, including enteric fermentation, manure management, rice cultivation, agricultural soils, prescribed burning of savannas and field burning of agricultural residues; and
 - waste, including solid waste disposal on land, wastewater handling and waste incineration.⁷¹
- 1.36 Subsequent reporting provides a global indication of the contribution of different sectors to GHG emissions. For example:

⁶⁹ Ibid, Summary for Policy Makers 42 [A.1.1]. The term 'well-mixed' is used to denote 'gases [which] remain in the atmosphere long enough to become well mixed, meaning that the amount that is measured in the atmosphere is roughly the same all over the world, regardless of the source of the emissions' United States Environmental Protection Agency, 'Overview of Greenhouse Gases'.

⁷⁰ 6th IPCC Assessment Report, Summary for Policy Makers 42 [A.1.3].

⁷¹ Kyoto Protocol, Annex A.

- Energy According to the Chair of the IPCC and Executive Director of the International Energy Agency (IEA),⁷² the energy sector produces over two thirds of global emissions.⁷³
- Land use, land-use change and forestry activities⁷⁴ these include agriculture, forestry and other land use activities, which the IPCC estimates represented 23 per cent of total net anthropogenic emissions of GHGs in 2007-16.⁷⁵ There is also the potential for these activities to mitigate climate change by increasing removals of GHGs from the atmosphere or decreasing emissions.⁷⁶
 - Land degradation⁷⁷ is one particularly relevant component of agriculture, forestry and other land use activities.⁷⁸ Land degradation exemplifies how these activities can drive climate change by causing GHG emissions and reducing rates of carbon uptake.⁷⁹ Decreases in global forest area and in the carbon density in re-growing forests caused by deforestation, the thawing of permafrost, an increase in wildfires and the degradation of peat soils, have resulted in net emissions.⁸⁰
- 1.37 Australia produced approximately one per cent of global emissions as the 14th largest emitter in 2020.⁸¹ According to recent data, the electricity sector is the biggest contributor of Australian's emissions at 33.6 per cent in 2020, with other direct combustion emissions next at 20.4 per cent, then transport at 17.6 per cent.⁸² Agriculture made up 14.6 per cent.⁸³

⁷² Australia is one of thirty members countries of the IEA, having joined in 1979. The IEA describes itself as an autonomous inter-governmental organisation within the OECD framework and is headed by the OECD's Executive Director. The IEA's decision-making body comprises energy ministers or representatives from the IEA's member countries: IEA, 'Structure'. Climate-related research by the IEA has been cited widely, including by the Australian Government: see, for example, CCA, 'Prospering in a low-emissions world', 99, 102.
⁷³ Dr Hoesung Lee and Dr Fatih Birol, 'Energy is at the heart of the solution to the climate challenge' (31 July 2020) *IPCC*.

⁷⁴ See, UN Climate Change, 'Land Use, Land-Use Change and Forestry'.

⁷⁵ PR Shukla et al, 'Summary for Policymakers in Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems' *IPCC* [A.3]. A Commission report led in 2019 by *The Lancet* estimated that this may be as high as 29 per cent if the 'wider downstream food system processes' such as waste are also counted: Prof Boyd Swinburn, MD et al, 'The Global Syndemic of Obesity, Undernutrition, and Climate Change' *The Lancet Commissions* (10173) 393 (23 February 2019) ('**The Global Syndemic'**) 801.

⁷⁶ See, L Olsson et al, 'Chapter 6 Executive Summary: Interlinkages between desertification, land degradation, food security and GHG fluxes: synergies, trade-offs and integrated response options' in *Climate*

degradation, food security and GHG fluxes: synergies, trade-offs and integrated response options' in Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (2019) (eds R. Shukla et al) ('Land Report'). The IPCC notes the 'interlinkages between desertification, land degradation, food security and GHG fluxes: synergies, trade-offs and integrated response options': Ibid.

⁷⁷ Land degradation is a 'negative trend in land condition, caused by direct or indirect human-induced processes including anthropogenic climate change, expressed as long-term reduction or loss of at least one of the following: biological productivity, ecological integrity, or value to humans: 'Land Degradation' in ibid, 349-350. The WEF calculates that one third of the world's topsoil has already been degraded and 32 per cent of its forest areas destroyed: Celine Herweijer et al, 'Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy' (January 2020) *World Economic Forum* ('Nature Risk Rising WEF Report')

⁷⁸ L Olsson et al, 'Land Degradation' in *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* (2019) (eds R. Shukla etal) ('**Land Degradation Report'**).

⁷⁹ IPCC, 'Land Degradation Report', Summary for Policymakers.

⁸¹ CCA, 'Prospering in a low-emissions world' 32.

 ⁸² Australian Government Department of Industry, Science, Energy and Resources (**DISER**), <u>Quarterly Update of Australia's National Greenhouse Gas Inventory: December 2020</u> (March 2021) 11, 13-14.
 ⁸³ Ibid 18.

1.38 Knowledge of drivers of climate change in Australia is also evolving. For example, soil insecurity, a symptom of land degradation,⁸⁴ has attracted growing academic attention in this context. There is an argument that land management practices of European settlers caused a significant reduction in vegetation which has, in turn, reduced soil organic matter.⁸⁵ This lowers the land's capacity to convert solar radiation into latent heat,⁸⁶ thereby increasing atmospheric temperature.⁸⁷

Impacts of climate change

- 1.39 The impacts of climate change, observed and projected, extend to almost all facets of natural and human life. Discourse on impacts commonly differentiates between those which operate as a result of:
 - physical risks⁸⁸ that is, direct impacts on the environment and people, as a result of 'changes in the physical environment or biota resulting from climate change':⁸⁹ and
 - transition risks⁹⁰ that is, indirect impacts on societies, cultures, business and the many other facets of human life, as a consequence of human responses to climate change.

Physical risks, direct impacts

1.40 The physical risks posed by climate change have wide-ranging direct impacts, including upon ecosystems, human health and welfare, the operation of socioeconomic systems and national security.

Impacts on ecosystems globally

- 1.41 The IPCC found in 2014 that there was new or stronger evidence 'for substantial and wide-ranging impacts of climate change' in land and ocean ecosystems. 91 Recently, the IPCC repeated the view that the environmental impacts of climate change extend from loss of plant life to animal life, and declining biodiversity. 92
- 1.42 In June 2021, a workshop of 50 leading global experts on biodiversity and climate

⁸⁴ Ibid. Soil insecurity is a product of desertification, which is defined as: "land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities': *United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa*, opened for signature 14 October 1994, 1954 UNTS 3 (entered into force 26 December 1996) art 1(a).

⁸⁵ See, Philip and Freya Mulvey, Ground Breaking (2021, Kerr Publishing Pty Ltd), 8-9, 52-53.

⁸⁶ Soil organic matter performs a range of essential functions for healthy soil, including heat exchange, by which solar radiation is converted to 'latent heat' – in other words, heat that is not radiated back into the atmosphere. See ibid 9-11.

⁸⁸ This terminology is used by the Network of Central Banks and Supervisors for Greening the Financial System (**NGFS**). See, Thomas Allen et al, '<u>NGFS Climate Scenarios for central banks and supervisors'</u> (June 2020) *Network for Greening the Financial System* ('**NGFS Climate Scenarios'**) 8.

⁸⁹ See, the UNFCCC definition of the 'adverse effects of climate change': *changes in the physical environment or biota resulting from climate change...*[which] *have significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems or on the operation of socio-economic systems or on human health and welfare*: UNFCCC, art 1(1).The Paris Agreement provides further detail, referring to both 'extreme weather events and slow onset events': art 8(1).

⁹¹ See, W Cramer et al, 'Detection and attribution of observed impacts' in CB Field et al (eds), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Report, 2014) ('Part A Adaptation Report') 982.

⁹² IPCC, 'Land Degradation Report' [A.1.3].

change, co-sponsored by the IPCC and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (**IPBES**), ⁹³ concluded that climate change is increasingly altering how organisms and ecosystems are distributed, function and interact. ⁹⁴ As a result, climate change 'exacerbates risks to biodiversity and natural and managed habitats'. ⁹⁵ The workshop also highlighted the 'mutual[ly] reinforcing' nature of climate change and biodiversity loss. ⁹⁶

- 1.43 As outlined by the World Meteorological Organisation (**WMO**),⁹⁷ climate-linked marine heatwaves affect marine life and ecosystems in numerous ways,⁹⁸ including through coral bleaching.⁹⁹ The 23 per cent of anthropogenic carbon dioxide emissions which accumulate in the ocean¹⁰⁰ also cause ocean acidification, which has effects on 'many organisms and ecosystem services'.¹⁰¹
- 1.44 Notably, the IPCC indicates that ecosystems are also put at risk as a result of 'mitigation choices in terrestrial ecosystems' – in other words, transition risks. 102

Impacts on ecosystems in Australia

- 1.45 Climate change has manifested in a range of events in Australia, from severe drought and floods to severe storms, land degradation, sea level rise, ocean warming and coral bleaching. These have, in their turn, impacted upon Australia's terrestrial and marine ecosystems.
- 1.46 In 2021, the IPCC found that increases in climate events will challenge 'agriculture, forestry, water systems, health and ecosystems' in Australia. It conducted a detailed exercise of tracing impacts on Australia's terrestrial ecosystems in 2014. The report found that climate change-related events such as drought and climatic trends have had observed effects on 'distribution, genetics, and phenology of individual species' in Australia, as well as the 'structure and composition of some ecological communities'. 105
- 1.47 The 2019-20 bushfires offer a recent illustration of the effects of climate change on terrestrial ecosystems. The fires burnt approximately 21 per cent of Australia's temperate broadleaf and mixed forests, in circumstances where typically, even in more extreme fire seasons, only two to three per cent of these forests burn.¹⁰⁶
- 1.48 The IPCC has also observed that climate change is warming the ocean temperatures around Australia consistently and affecting its marine systems.

⁹³ The IPBES is an intergovernmental organization established to improve the interface between science and policy on issues of biodiversity and ecosystem services: IPBES, 'About'.

⁹⁴ Hans-Otto Portner et al, 'IPBES-IPCC co-sponsored workshop report on biodiversity and climate change' (Report, 2021) *IPBES and IPCC* 15.
⁹⁵ Ibid 14.

⁹⁶ Ibid 14-15. The WEF has also stated that nature loss is 'inextricably interlinked' with climate change, as both a consequence and driver: WEF, 'Nature Risk Rising Report', 65, 8.

⁹⁷ Australia is a member of the WMO, a specialised agency of the UN with a mandate covering weather, climate and water resources: WMO, 'About us'.

⁹⁸ WMO, State of the Global Climate.

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ Ibid 14.

¹⁰² IPCC, 'Land Degradation Report', [Figure SPM.2].

¹⁰³ 6th IPCC Assessment Report, Chapter 12 at 12-6.

¹⁰⁴ A Reisinger et al, '<u>Climate Change 2014</u>: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Chang' (VR Barros et al, eds) *Cambridge University Press* ('**Part B Adaptation Report**') 1371-1438, 1390. ¹⁰⁵ 'Ibid 1390.

¹⁰⁶ Nerilie J. Abram et al, 'Connections of climate change and variability to large and extreme forest fires in southeast Australia' (2021) *Communications Earth and Environment*, 2, 24.

including the growth rates of coral and coastal fish, and life cycles of seabirds (amongst many others). Climate change was labelled the cause of calcification on the Great Barrier Reef and of 'multiple mass bleaching events' of coral reefs. 108

1.49 The findings by BOM and CSIRO in their *State of the Climate 2020* report are consistent with these themes, 109 including that the current rate of change in ocean acidification is 10 times faster than it has been at any other time in the past 300 million years, leading to 'a significant reduction' in the growth rates of coral reefs including the Great Barrier Reef. 110 Further, the Australian Academy of Science (the AAS) has found that:

Heat stress has impacted marine and coastal ecosystems, destroying habitats and reducing biodiversity. Land-based environments have been affected by drought, fire, extreme heatwaves, invasive species and disease, leading to large-scale mortality of trees, birds and tree-dwelling mammals. Many species are shifting where they live, but cannot keep up with the rate of change, especially given the geography of Australia. Rising sea levels are amplifying storm impacts, damaging coastal ecosystems such as coral reefs and mangrove forests, and causing increasing issues for human health and wellbeing in coastal areas.¹¹¹

Impacts on human health and welfare

1.50 Climate change also has direct effects on human health and wellbeing, peace and stability – with particular effects experienced by marginalised groups.

Human health

- 1.51 The IPCC has predicted that any increase in global temperature will affect human health negatively. Morbidity and mortality will result from heat and ozone changes. Impacts include increased risks of, and changes in the geographic range of, vector-borne diseases like malaria and dengue fever, as well as increased risks of undernutrition.
- 1.52 The World Health Organisation (**WHO**) has made a 'highly conservative' estimate that between 2030 and 2050, climate change will be responsible for 250 000 'additional' deaths annually. This prediction, made before the advent of the COVID-19 pandemic, was reached by accounting for a subset of four of the possible health impacts of climate change and assuming the economy would continue to grow and health to progress. The Lancet Commission has remarked upon the 'sweeping effects [of climate change] on the health of humans and the

¹⁰⁷ 'Part B Adaptation Report', 1392.

¹⁰⁸ Ibid 1395.

¹⁰⁹ See, for example, BOM and CSIRO, 'State of the Climate Report', 4.

¹¹⁰ Ibid 15.

¹¹¹ See, Australian Academy of Science, 'The Risks to Australia of a 3°C Warmer World' (Report, March 2021) ('Risks to Australia') 8.

¹¹² IPCC, 1.5C Report, Executive Summary.

¹¹³ Ibid.

¹¹⁴ Ibid. The Australian Government CCA has acknowledged that one way that human health may be adversely impacted by climate change is through 'heat exposure and changing spread of disease: Australian Government Climate Change Authority, '<u>Fact sheet on climate change</u>'.

¹¹⁵ See, World Health Organization, 'COP24 Special report: Health & Climate Change' (Report, 3 December 2018) 24.

¹¹⁶ Ibid.

natural systems we depend on'. 117

- 1.53 In Australia, the AAS raises health concerns with respect to projected increases in the frequency and intensity of heatwaves.¹¹⁸ It cites the particular vulnerability to heat stress of certain population groups, including the ageing population (who are particularly vulnerable to extreme heat events), young people, those with chronic medical conditions, groups who are socially isolated or suffer socio-economic disadvantage, and First Nations peoples, amongst others.¹¹⁹ The AAS also lists the diverse health risks posed to Australians by increased bushfires, reduced access to food and water, and impacts of infectious disease and global temperature changes.¹²⁰
- 1.54 In terms of mental health and wellbeing, the Royal Commission into Natural Disasters found 'compelling evidence' of the mental health impacts of natural disasters, and that disaster events in Australia over the past ten years had resulted in 'long-lasting trauma'. Mental health impacts ranged from depression and anxiety to aggression and violence, as well as exacerbation of existing mental health problems. The Royal Commission found that members of vulnerable groups are particularly prone to these impacts, including children, older persons and young people, and that first responders also experience psychological effects. It further noted that natural disasters can trigger a range of social impacts, including family violence.
- 1.55 In addition, recent studies have assessed the impacts of climate change on human health and welfare, including the impact on the mental health of young people in the context of legal education¹²⁵ and on the needs of people with disability in the context of disaster risks.¹²⁶

Marginalised groups

1.56 Numerous reports produced by the UN over recent years expose the risks posed by climate change for people in vulnerable situations. For example, the Office of the United Nations High Commissioner for Human Rights (**OHCHR**) highlights that climate change will have a disproportionate, negative impact on individuals, groups and 'peoples in vulnerable situations including women, children, older persons, indigenous peoples, minorities, migrants, rural workers, persons with disabilities and the poor'. The importance of strengthening resilience and adaptation to

¹¹⁷ Swinburn et al, 'The Global Syndemic' 792.

¹¹⁸ Australian Academy of Science, 'Risks to Australia' 63.

¹¹⁹ Ibid.

¹²⁰ Ibid 63-65.

¹²¹ Royal Commission Report 345, 331.

¹²² Ibid 345.

¹²³ Ibid 345-346.

¹²⁴ Ibid 478.

¹²⁵ Monica Taylor, '<u>Pedagogical Strategies for Action</u>' (2021) 40(3) The University of Queensland Law Journal 459 and Marks, Elizabeth and Hickman, Caroline and Pihkala, Panu and Clayton, Susan and Lewandowski, Eric R. and Mayall, Elouise E. and Wray, Britt and Mellor, Catriona and van Susteren, Lise, Young People's Voices on Climate Anxiety, Government Betrayal and Moral Injury: A Global Phenomenon. Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3918955.

¹²⁶ Michelle Villeneuve et al, 'Applying a Person-Centred Capability Framework to Inform Targeted Action on Disability Inclusive Disaster Risk Reduction' (2021) 52 International Journal of Disaster Risk Reduction 101979.

¹²⁷ See, for example, David R. Boyd, *Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, 74th sess Item 72 (b) UN Doc A/74/161 (15 July 2019).

¹²⁶ See, UN Human Rights Office of the High Commissioner (**OHCHR**), 'Key messages on human rights and climate change' ('**OHCHR Key Messages'**).

- climate change in marginalised communities has been highlighted by the Committee on the Elimination of Racial Discrimination (**CERD**). 129
- 1.57 The IPCC has also recognised the disproportionate effect which global warming has on disadvantaged and vulnerable peoples, including by reason of loss of income and of opportunities to earn a livelihood, food insecurity and more expensive food, and population displacement.¹³⁰
- 1.58 In the case of women, existing gender discrimination and related factors can be exacerbated by climate change.¹³¹ For children and the elderly, the risk of poor health, injury and illness related to climate change is greater.¹³² This is also the case for persons with disability, for whom particular problems can also arise with respect to the (in)accessibility of emergency responses.¹³³
- 1.59 In Australian, research suggests that disadvantaged suburbs in cities are most vulnerable to the 'urban heat island' effect, being the 'additional warmth in metropolitan or urban areas' caused by various qualities of urban environments and structures. This effect causes cities to feel the impacts of heatwaves with particular intensity. The Australian Medical Association (AMA) has also acknowledged that marginalised groups in Australia will disproportionately feel the negative health impacts of climate change. 136

First Nations communities

1.60 UN bodies recognise that Indigenous peoples are particularly likely to be impacted by the effects of climate change. For example, the former Special Rapporteur on the rights of indigenous peoples (**Special Rapporteur**) highlighted in 2017 that:

Indigenous peoples are among those who have contributed least to the problem of climate change, yet they are the ones suffering from its worst impacts. They are disproportionately vulnerable to climate change because many of them depend on ecosystems that are particularly prone to the effects of climate change and extreme weather events such as floods, droughts, heatwaves, wildfires and cyclones. Some of the most affected regions are small islands, high altitudes,

¹²⁹ Committee on the Elimination of Racial Discrimination, 'Contribution of the UN Committee on the Elimination of Racial Discrimination to the High-Level Political Forum's discussion on 'Eradicating poverty and promoting prosperity in a changing world' with a focus on SDG One, SDG Two, SDG Three and SDG Five' 15. ¹³⁰ IPCC, 1.5C Report, Summary for Policymakers.

¹³¹ OHCHR Key Messages 17.

¹³² Ibid 18; also Office of the High Commissioner UNHR, '<u>The UN Committee on the Rights of the Child commits to a new General Comment on Children's Rights and the Environment with a Special Focus on Climate Change' (Media Release, June 2021).
¹³³ Ibid.</u>

¹³⁴ Australian Conservation Foundation and Monash Climate Change Communication Research Hub, 'Temperature check: Greening Australia's warming cities' (Report, 10 March 2021) 9, citing J Hurley et al, 'Where will all the trees be? - An assessment of urban forest cover management for Australian cities' (RMIT, 2020) Centre for Urban Research; D Devereux and P Caccetta, 'Land surface temperature and urban heat island estimates for Australian capital cities: Summer 2018-19' (Report for CSIRO Data Collection, 2019); Y Zhang, M Nitschke and P Bi, 'Risk factors for direct heat-related hospitalization during the 2009 Adelaide heatwave: A case crossover study' (2013) Science of the Total Environment 442, 1-5; and D Hondula and A Barnett, 'Heat-Related Morbidity in Brisbane, Australia: Spatial Variation and Area-Level Predictors' (2014) Environmental Health perspectives 122(8).

¹³⁶ Australian Medical Association, 'Position Statement on Climate Change and Human Health' (2004, revised 2008, 2015) para 4.3.

¹³⁷ See, Office of the UN High Commissioner for Human Rights, '<u>Joint statement by UN Special Procedures</u> on the occasion of World Environment Day' (5 June 2015); UN Department of Economic and Social Affairs, 'Climate Change'.

humid tropics, coastal regions, deserts and polar areas. Global warming increases the risk of disease, changes animal migration routes, reduces biodiversity, causes saltwater inundation of fresh water, destroys crops and results in food insecurity. 138

- 1.61 Climate change not only poses a grave threat to Indigenous peoples' natural resources and livelihoods, but also to their cultural identity and survival. 139 It also heightens challenges which Indigenous peoples already face, including poor health, discrimination, poverty and economic marginalisation, amongst others. 140 In particular, the Special Rapporteur has recognised that Indigenous peoples in the Pacific face 'total or partial disappearance of their land' because of climate change. 141
- 1.62 As discussed in Part 3, in Australia, Narelle Bedford, Tony McAvoy SC and Lindsey Stevenson-Graf have recently argued that any analysis of climate change in an Australian context must prioritise First Nations peoples.¹⁴² This recognises that First Nations peoples hold a deep emotional and spiritual connection to the environment.¹⁴³ First Nations peoples have authority and knowledge of country, which translates into traditional land management practices and caring for their country.¹⁴⁴
- 1.63 First Nations peoples living in remote Australian communities may in some cases be better adapted for life in the context of climate extremes and equipped with valuable traditional knowledge; however, First Nations peoples may also face socio-economic disadvantages or poorer pre-existing health which may exacerbate the impacts of climate change.¹⁴⁵
- 1.64 It has previously been predicted that northern First Nations communities will bear the brunt of climate change, facing serious health risks from malaria, dengue fever and heat stress, as well as loss of food sources from floods, drought, and more intense bushfires.¹⁴⁶
- 1.65 In Northern Australia, rising sea levels are threatening communities living on the

¹³⁸ Ibid.

¹³⁹ Ibid.

¹⁴⁰ UN Department of Economic and Social Affairs, 'Climate Change'.

¹⁴¹ Ibid.

¹⁴² Narelle Bedford, Tony McAvoy SC and Lindsey Stevenson-Graf, 'First Nations Peoples, Climate Change, Human Rights and Legal Rights' (2021) 40(3) University of Queensland Law Journal 371 ('Bedford, McAvoy and Stevenson-Graf').

¹⁴³ See Heritage Chairs of Australia and New Zealand 2020, <u>Dhawura Ngilan: A vision for Aboriginal and Torres Strait Islander heritage in Australia</u> (Canberra, March 2021). See also, Professor Grame Samuel, Independent Review of the EPBC Act' (<u>Final Report</u>, October 2020) 69.

¹⁴⁴ See Australian & New Guidelines for Fresh & Marine Water Quality, '<u>Indigenous principles for water quality</u>' (Australian Government Initiative), adapted from text written by Brad Moggridge, Kamilaroi Nation, North-West NSW, Australia; and Roku Mihinui, Te Arawa Iwi, Rotorua, Aotearoa (New Zealand).

¹⁴⁵ See Nina Lansbury Hall and Lucy Crosby (2020) 'Climate Change Impacts on Health in Remote Indigenous Communities in Australia', *International Journal of Environmental Health Research*; W. Nikolakis, Q. Grafton, A. Nygaard, 'Indigenous communities and climate change: A recognition, empowerment and devolution (RED) framework in the Murray-Darling basin, Australia' (2016) 7(1) *Journal of Water and Climate Change*, 169-183; Susan McIntyre-Tamwoy, Maureen Fuary & Alice Buhrich 'Understanding climate, adapting to change: indigenous cultural values and climate change impacts in North Queensland' (2013) (18:1) *Local Environment* 91.

¹⁴⁶ Australian Human Rights Commission (**AHRC**), 'Climate Change and Human Rights', 2008, (online article), citing John Von Doussa, 'Human Rights and Climate Change: A Tragedy in the Making' (Speech, HREOC Seminar Series for the 60th Anniversary of the Universal Declaration of Human Rights, 11 December 2007).

Gulf of Carpentaria coastline, of whom more than half are First Nations.¹⁴⁷ It is projected that rising sea levels may force people living in coastal areas off their country, and that remote Indigenous Australians will face a decline in native foods as temperature rises.¹⁴⁸ The infrastructure and services on which many communities rely, particularly in remote areas, may also be cut off for 'long periods' as a result of increasingly extreme weather events.¹⁴⁹ If impacts result in climate displacement, this could lead to 'the destruction of identity, history, knowledge, language, as well as the culture of entire nations'.¹⁵⁰

Migrants and displaced peoples

- 1.66 The IPCC has noted that there is 'high agreement' that climate change has the potential to 'drastically alter' migration flows. 151 This agreement exists while recognising that it is difficult to model changes in migration flows as a direct result of climate change, with migration driven by numerous and nuanced social, economic, demographic and other factors. 152
- 1.67 The UN High Commissioner for Refugees (**UNHCR**) has described climate change is a 'threat multiplier' for other factors which drive displacement including by increasing food insecurity, difficulty in accessing livelihoods and pressures for community and health resources and structures. The UNHCR stated in 2018, in a Global Compact for Safe, Orderly and Regular Migration, that climate, environmental degradation and natural disasters are having these impacts 'increasingly'. Subsequently, the UNHCR's Special Advisor for Climate Action linked what he described as the eight worst food crises of 2019 to climate shocks, as well as conflict. He noted South Asia and the South Pacific are regions where the interplay between climate change and displacement has already been observed, and observed that globally, 'the vast majority' of those displaced for climate-related reasons are 'internally displaced' as they remain within their country's borders.
- 1.68 The IPCC has found that around 57 per cent of the built infrastructure in Pacific Island countries are situated in coastal areas that are prone to the risk of coastal hazards. This is prompting discussions among Pacific Island countries and nearby territories on how to facilitate 'adaptive migration' as the region responds to sea-level rise. 159
- 1.69 Kaldor Centre for International Law scholars describe the Asia-Pacific region as the

¹⁴⁷ CSIRO and Griffith University, 'Climate Change in northern Australia: Information on climate change for Aboriginal people living in the north' slide 12; Queensland Government, 'Climate change in the Gulf region' (2019) Department of Environment and Science.

¹⁴⁸ Australian Indigenous Health Info Net, 'Climate change'.

¹⁴⁹ Ibid

¹⁵⁰ University of Queensland, 'Human rights and climate change: a conference summary' (22 October 2019).

¹⁵¹ Ibid 4.4.2.6.2.

¹⁵² Ibid.

¹⁵³ UNHCR, 'Strategic Framework for Climate Action' (2021); Tim Gaynor, 'Climate change is the defining crisis of our time and it particularly impacts the displaced' (30 November 2020) UNHCR.

¹⁵⁴ Report of the UN High Commissioner for Refugees, 'Part II: Global compact on refugees' *General Assembly, 73*rd sess A/73/12 2.

¹⁵⁵ Tim Gaynor, '<u>Climate change is the defining crisis of our time and it particularly impacts the displaced'</u> (30 November 2020) *UNHCR*.

¹⁵⁶ Ibid.

¹⁵⁷ Ibid.

¹⁵⁸ Michael Oppenheimer et al, 'Chapter 4: Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities' in H-O Portner et al (eds), *Special Report on the Ocean and Cryosphere in a Changing Climate* 4.3.

¹⁵⁹ Ibid 4.4.2.6.6.

'hardest hit' globally in terms of displacement due to natural disasters and climate change. 160 Pacific Island countries are described at particular risk of disaster in terms of economic harm and loss of total life-years per capita. 161 They predict that displacement events will occur with growing frequency in the Pacific 162 as disasters become more regular and intense due to climate change. 163

As well as posing critical challenges for Asian-Pacific States, these increases in migration may place pressure on the economies, development, emergency aid, welfare and services of their regional neighbours, including Australia. 164

Economic and financial impacts

- The impact of climate change on global and Australian economies arises from both physical risks stemming from the impacts caused directly by a changing climate, and from transition risks. 165 This section discusses the former, including with respect to the agricultural, insurance and finance sectors.
- 1.72 At an international level, the Financial Stability Board (FSB), which coordinates the work of national financial authorities and international standard-setting bodies towards effective financial sector policies, has been considering the impact of climate change on financial stability. 166 The Reserve Bank of Australia (RBA) has provided similar analysis from an Australian perspective, including by reference to the FSB's findings. 167
- 1.73 The FSB describes the physical risks which climate change poses for financial stability as follows:

The possibility that the economic costs of the increasing severity and frequency of climate-change related extreme weather events, as well as more gradual changes in climate, might erode the value of financial assets, and/or increase liabilities. 168

- 1.74 The FSB recognises that economic losses from natural catastrophes have increased in recent decades, with the number of extreme weather events globally steadily increasing, and the weight of scientific evidence suggesting that such events will become more likely and severe. The losses stem from changes in physical capital, including destroyed infrastructure and assets, and from resources being diverted towards reconstruction and replacement. 169
- 1.75 The FSB also notes that severe weather can impact natural capital, eg, through rising sea levels reducing the availability of land and agricultural productivity. Human capital can also be undermined through reduced health and living

¹⁶⁰ Jane McAdam and Jonathan Pryke, 'Climate Change, Disasters and Mobility: A Roadmap for Australian Action' (Policy Brief 10, October 2020) Kaldor Centre for International Refugee Law at 1.

¹⁶¹ Ibid 6.

¹⁶² Ibid. ¹⁶³ Ibid 1.

¹⁶⁴ Ibid.

¹⁶⁵ The Hon Josh Frydenberg MP, Treasurer of the Commonwealth of Australia, 2021 Intergenerational Report: Australia over the next 40 years, Commonwealth of Australia (2021) (Intergenerational Report). ¹⁶⁶ Financial Stability Board (**FSB**), *The Implications of Climate Change for Financial Stability*, Report, 23 November 2020 4 ('FSB Report').

¹⁶⁷ Reserve Bank of Australia, 'Financial Stability Review' (April 2021) 14. See also, Reserve Bank of Australia, 'Financial Stability Review' (October 2019) 57-61. The RBA notes that liability risk, being the risk that 'an inadequate response to [physical and transition risks] also raises the potential for reputational and legal risk.'

¹⁶⁸ FSB Report 4.

¹⁶⁹ Ibid 5.

conditions. Indirect effects caused by climate change include disruption to supply chains and reduced productivity of both human labour and physical assets. Investment may also be diminished given the prevailing uncertainty about future demand and growth prospects.¹⁷⁰ The impacts of climate change on jobs and labour productivity are also recognised by the International Labour Organisation (**ILO**), as discussed below.

- 1.76 The FSB notes that without action to reduce the effects of climate change, physical risks to the global economy are likely to continue to increase in future.¹⁷¹ This will impact a range of countries, including advanced economies, but developing markets are disproportionately at risk.¹⁷²
- 1.77 Other bodies have also recognised the global economic cost of direct damage from extreme climate-related weather events including from increasingly frequent natural disasters. For example, the Centre for Research on the Epidemiology of Disasters (CRED)¹⁷³ and UN Office for Disaster Risk Reduction (UNDRR) found that the cost of 'weather-related disasters' between 2000 and 2019 was US \$2.97 trillion in economic losses worldwide. By contrast, economic losses totalled US \$1.63 trillion from 1980 to 1999. The CRED and UNDRR explain much of the increase in disasters linked to natural hazards by 'a significant rise' in 'climate-related disasters'.¹⁷⁴
- 1.78 All industries and sectors are harmed to some extent when the environment is damaged or destroyed as a result of climate change-related events.¹⁷⁵ The IPPC's Fifth Assessment Report, published in 2014, studied the impact of climate change across industry sectors and lists transport infrastructure, energy and electricity, tourism, insurance and other financial services, health, water supply infrastructure, construction and housing, agriculture, forestry, fisheries and mining as particularly affected industries.¹⁷⁶
- 1.79 In Australia, Treasury has recognised that the agricultural sector is highly vulnerable to the physical impacts of climate change, and that such impacts are already being felt by this sector.¹⁷⁷ Treasury cites analysis by the Australian Bureau of Agricultural and Resource Economics and Sciences (**ABARES**)¹⁷⁸, stating that while methods are being developed to understand and manage these physical impacts, such as changes to crop selection, land management and improved water efficiency, the impacts have been reduced but not eliminated.¹⁷⁹ ABARES found that the profitability of broadacre farms in both cropping and livestock has been negatively affected by changes in climate from 2000 to 2019, by

¹⁷⁰ Ibid.

¹⁷¹ Ibid.

¹⁷² Ibid 5, 8-9.

¹⁷³ The Centre for Research on the Epidemiology of Disasters is based in the Belgian Université catholique de Louvain and 'promotes research, training and technical expertise on humanitarian emergencies, particularly in public health and epidemiology': Centre for Research on the Epidemiology of Disasters, 'About us'.

¹⁷⁴ Nima Yaghmaei et al, 'The human cost of disasters: an overview of the last 20 years (2000-2019)' (Report, October 2020) *CRED and UNDRR* 6.

¹⁷⁵ WEF, 'Nature Risk Rising Report' 7.

¹⁷⁶ IPCC, 'Part A Adaptation Report' 665, 677, 680, 684, 688. At the time of drafting, the IPCC planned to publish its most recent findings in an updated Report in February 2022.

¹⁷⁷ The Hon Josh Frydenberg MP, Treasurer of the Commonwealth of Australia, *2021 Intergenerational Report: Australia over the next 40 years,* Commonwealth of Australia (2021) (**Treasury Intergenerational Report**) 59.

¹⁷⁸ The ABARES is the science and economics research division of the Department of Agriculture, Fisheries and Forestry.

¹⁷⁹ Treasury Intergenerational Report 60, citing Neal Hughes, David Galeano and Steve Hatfield-Dodds, 'Analysis of the effects of drought and climate variability on Australian farms' (Report, December 2019) *ABARES Insights* 7.

comparison to the period of 1950 to 1999.¹⁸⁰ It estimated that annual broadacre farm profits had decreased by 22 per cent since 2000 and profits from cropping farms, by 35 per cent.¹⁸¹ ABARES also noted that beef farms only experienced an average profit reduction of 5 per cent, however certain regions were more affected than others; and that the Northern Territory was the only State or Territory where overall broadacre farming was not adversely affected in the relevant period.¹⁸²

1.80 The RBA noted in its April 2021 Financial Stability Review that Australia's financial stability currently faces climate-related risks which could become 'substantial' in future if not addressed. Risks have already been observed for Australia's insurance industry, with Geoff Summerhayes, then executive board member of the Australian Prudential Regulation Authority (APRA), estimating that 2018 was the 'fourth most costly year on record' for insurers, primarily because of natural disasters (of which 80 per cent were related to the climate). Treasury recognises that more frequent and severe climate-related natural disasters will increase costs for the insurance sector, with flow-on affordability impacts. This is consistent with the RBA's findings regarding the exposure of insurers to physical risks, where policies cover natural disaster damage to motor vehicles, crops, properties and other assets. The RBA explained exposure to insurers in 2019, as follows:

Insurers are most directly exposed to the physical impacts of climate change. This can arise through natural disaster claims, crop insurance, and health and life insurance. While insurers can increase their premiums to reflect higher risk, it is difficult to accurately price new and uncertain climate risks. If insurers under-price these risks, it could threaten their viability in the event of extreme weather events resulting in very large losses. On the other hand, over-pricing would impede the risk pooling function provided by insurance and unduly limit economic activity. Even if correctly priced, more of these risks may become uninsurable, forcing households, businesses or governments to bear this risk. 187

- 1.81 Lending institutions also face consequences from climate-related physical risk. The RBA notes that banks' mortgage exposures are projected to 'experience a material increase in climate damage', as the value of housing collateral in locations with particular climate risk, such as NSW and Queensland agricultural regions, and seaside metropolitan areas, could be negatively impacted due to climate change.¹⁸⁸
- 1.82 Broader industry impacts based on damage to Australia's ecosystems have also been predicted for tourism, recreation, forestry, and fishing. The AAS has particularly underlined the climate-related consequences for Australia's then \$54.7

¹⁸⁰ Ibid 6.

¹⁸¹ Ibid.

¹⁸² Ibid 7.

¹⁸³ Reserve Bank of Australia, 'Financial Stability Review' (April 2021) 37, 45.

 ¹⁸⁴ Geoff Summerhayes, 'Financial exposure: the role of disclosure in addressing the climate data deficit' (Speech, ClimateWise and University of Cambridge Institute for Sustainable Leadership, London, 22 February 2019) UN Environment Sustainable Insurance Forum ('Financial exposure and climate change') 2.
 185 Treasury Intergenerational Report 61.

¹⁸⁶ Reserve Bank of Australia, 'Financial Stability Review' (April 2021) 45-46.

¹⁸⁷ Reserve Bank of Australia, 'Financial Stability Review' (October 2019) 58.

¹⁸⁸ Ibid 45

¹⁸⁹ Australian Academy of Science, 'Risks to Australia' 8-9.

billion tourism industry, 190 as well as its fisheries and aquaculture supply chain. 191

Impacts on security

- 1.83 The United States Department of Defense (**US DoD**) has increasingly recognised the security threats posed by global climate change in a number of reports and roadmaps in recent years. For example, a 2015 report provided to Congress found that global climate change would have wide-ranging implications for US national security interests over the foreseeable future because it would aggravate existing problems—such as poverty, social tensions, environmental degradation, ineffectual leadership, and weak political institutions—that threaten domestic stability in a number of countries. 193
- 1.84 Following a series of Presidential executive orders on climate change in early 2021, the US DoD is now prioritising this issue in its operations. This includes assessing the security implications of climate change in its risk analyses, strategy development, and planning guidance.¹⁹⁴
- 1.85 The significance of climate change to Australia's national security has been recognised by Australian Government agencies. The Department of Defence (**Defence**) noted in its 2016 White Paper (**the Defence White Paper**) that six key drivers would shape the development of Australia's security environment to 2035. One of these was:

...state fragility, including within our immediate neighbourhood, caused by uneven economic growth, crime, social, environmental and governance challenges and climate change. 195

1.86 The Defence White Paper highlighted that the South Pacific region faced particular challenges, noting that 'instability in our immediate region could have strategic consequences for Australia'. It elaborated that:

Climate change will be a major challenge for countries in Australia's immediate region. Climate change will see higher temperatures, increased sea-level rise and will increase the frequency and intensity of extreme weather events. These effects will exacerbate the challenges of population growth and environmental degradation, and will contribute to

food shortages and undermine economic development. 197

1.87 The Defence White Paper emphasised that Australia would need to play a regional

¹⁹⁰ Ibid 9.

¹⁹¹ Ibid 48.

¹⁹² See, eg, Gregg Garfin, Donald A. Falk, Christopher D. O'Connor, Katharine Jacobs, Raphael D. Sagarin, Arin C. Haverland, Anna Haworth, Alastair Baglee, Jeremy Weiss, Jonathan Overpeck, Adriana A. Zuñiga-Terán, 'A new mission: Mainstreaming climate adaptation in the US Department of Defense,' Climate Services, Volume 22, 2021; Jean-Paul Chrétien, 'Adapting to Health Impacts of Climate Change in the Department of Defense' (2016) 14:2 Health Security 86.

¹⁹³ US Department of Defence, *National security implications of climate-related risks and a changing climate* (Washington, 2015).

¹⁹⁴ Aaron Mehta, 'Climate change is now a national security priority for the Pentagon', *Defense News* (online), 27 January 2021.

¹⁹⁵ Australian Government, Department of Defence, *Defence White Paper* (Commonwealth of Australia, 2016), ⁴¹

¹⁹⁶ '...should it lead to increasing influence by actors from outside the region with interests inimical to ours': ibid, 48.

¹⁹⁷ Ibid.

leadership role to support countries to respond, including through the development of national resilience in the region to reduce instability. 198 It forecast that there would be high expectations that Australia will respond to instability or natural disasters, and that climate change meant that it would be called upon to do so more often. 199

- 1.88 In response to an inquiry into climate change and national security, Defence submitted that climate change is a 'threat multiplier' with direct and indirect effects on its departmental business.²⁰⁰ These multipliers can result in national security threats for Australia, including 'inter-group rivalries, water, food and resource shortages and irregular migration'. 201 Defence is 'progressively embedding climate change in its core business functions'.202
- 1.89 The Attorney-General's Department (AGD) has similarly interpreted national security risks 'broadly', going to 'the threat posed by natural hazards' as well as intelligence, law enforcement and the resilience of critical infrastructure.²⁰³ AGD agrees that climate change may 'exacerbate national security risks, by heightening existing threats and accelerating instability'. 204

Responses to climate change: mitigation and adaptation

Mitigation

1.90 Mitigation is one of two generally accepted policy approaches to addressing the physical impacts of climate change. Mitigation measures are intended to limit or prevent anthropogenic GHG emissions (ie reduce emissions from 'sources') and to reduce the concentrations of GHGs in the atmosphere (through carbon 'sinks'). 205 The Paris Agreement, for example, aims:

> ...to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century. 206

The UN Environment Programme (UNEP)²⁰⁷ and the IPCC agree that 'strong' 1.91 mitigation is 'the most effective option' in escaping the expected post-2050 consequences of 'exponentially rising damages and costs'. 208 As set out above,

¹⁹⁸ Ibid.

¹⁹⁹ Ibid 56.

²⁰⁰ Department of Defence, 'Submission to the Inquiry into the threat of climate change to Australia's national security' (August 2017) 3, citing United States Department of Defense, '2014 Quadrennial Defense Review' (4 March 2014) 3. See also, Defence's 2020 Strategic Update highlighting the compounding effects of climate change on threats to human security: Department of Defence, 'Defence Strategic Update 2020' (2020) 16. ²⁰¹ Ibid.

²⁰² Ibid 10.

²⁰³ See ibid.

²⁰⁴ Attorney-General's Department, 'Submission to the Inquiry into the threat of climate change to Australia's

national security' (30 August 2017) 1.

205 See Ottmar Edenhofer et al (eds), 'Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change' (Cambridge University Press, 2014) IPCC ('Mitigation Report') Foreword vii. ²⁰⁶ Paris Agreement art 4(1).

²⁰⁷ Department of Agriculture, Water and the Environment, 'United Nations Environment'.

²⁰⁸ See, for example, UN Environment Programme, 'Adaptation Gap Report 2020' (Nairobi, 2021) ('Adaptation Gap Report') 6 [2.2.1].

the Paris Agreement sets a long-term, temperature-based mitigation goal.

- 1.92 The IPCC warned in 2018 that any overshoot of a 1.5°C temperature increase above pre-industrial levels even to 2°C, and even if later reversed means 'high' risks for 'natural and human systems'.²⁰⁹ An overshoot could expose an extra 420 million people to extreme heatwaves²¹⁰ and 'substantially' increase the probability of extreme drought and water stress in some regions.²¹¹ Conversely, keeping to a 1.5°C increase would have 'substantial benefits' for many natural and human systems.²¹² Though there would still likely be 'robust differences' in regional climate as compared to the present day,²¹³ systems would have a greater ability to adapt.²¹⁴
- 1.93 The IPCC stated in 2018 that 'large, immediate and unprecedented global efforts' will be needed to achieve the target of 1.5°C.²¹⁵ Transformation must be 'profound' at a behavioural, economic and political level,²¹⁶ extending to energy and buildings, transport, cities and energy.²¹⁷ Further, 'most' pathways to reach the 1.5°C target would require greater emissions reductions by 2030 than would occur under the Paris Agreement.²¹⁸
- 1.94 Mitigation measures may include focussing on individual technologies and sectors, or, alternatively, undertaking systemic and cross-sectoral strategies.²¹⁹ The IPCC notes that the literature highlights the importance of the latter approach and the IPCC Working Group III Fifth Assessment Report found in 2014 that: 'approaches that emphasize only a subset of sectors or a subset of actions may miss synergies between sectors, raise the costs of mitigation, cause unexpected consequences, and prove insufficient to meet long-term mitigation goals'.²²⁰
- 1.95 Nonetheless, the IPCC Working Group grouped mitigation options into three broad sectors: (1) energy supply, (2) energy end-use sectors including transport, buildings, industry, and (3) agriculture, forestry and other land use. ²²¹ It further stated that:

Emissions from human settlements and infrastructures cut across these different sectors. Many mitigation options are linked. The precise set of mitigation actions taken in any sector will depend on a wide range of factors, including their relative economics, policy structures, normative values, and linkages to other policy objectives.²²²

1.96 There are numerous possible mitigation measures, including switching to low-carbon energy carriers, reducing energy demand in end-use sectors such as

²⁰⁹ IPCC, 1.5C Report, Executive Summary.

²¹⁰ Ibid.

²¹¹ Ihid

²¹² Ibid. This includes ocean ecosystems, human health and energy systems. For predictions on when benefits will become apparent, see the Appendix.

²¹³ Ibid.

²¹⁴ Ibid.

²¹⁵ Ibid. This recognises that in 2019, 70 per cent of the 'cumulative emissions of CO₂' permitted for humans to emit (containing temperatures to a 2°C increase) had already been emitted: BOM and CSIRO, 'State of the Climate Report'.

²¹⁶ IPCC, 1.5C Report, Chapter 2.

²¹⁷ Ibid, Summary for Policymakers.

²¹⁸ Ibid, Chapter 2.

²¹⁹ IPCC, 'Mitigation Report' 18.

²²⁰ IPCC, 'Part A Adaptation Report' 191.

²²¹ IPCC, Mitigation Report 64.

²²² Ibid.

transport, buildings and industry,²²³ changing consumption patterns, dietary change and food waste, enhancing energy efficiency, decarbonising electricity generation, afforestation and sustainable forest management, soil and vegetable carbon sequestration, amongst many others.²²⁴ The Australian Government CCA has also prepared a policy 'toolkit' of mitigation options in the Australian context,²²⁵ and many of these have been implemented to varying degrees.

Adaptation

- 1.97 Alongside mitigation, adaptation is the other main recognised policy mechanism to address climate change and its impacts.²²⁶ The UNEP defines adaptation as 'a process by which levels of risk are reduced at any given temperature level'.²²⁷ Otherwise stated by the Department of Agriculture, Water and the Environment (DAWE), adaptation 'reduces the negative effects of climate change.'²²⁸ By contrast to mitigation, which seeks to limit emissions and GHG concentrations, the aim of adaptation is to minimise risk within any assumed current temperature level.
- 1.98 Strategies designed to achieve adaptation to climate change include those which aim to promote 'resilience'²²⁹ and others to achieve a 'just' workforce transition by creating 'decent work and quality jobs' which enhance development goals.²³⁰ Broadly speaking, the IPCC identifies disaster risk management, technology and infrastructure adjustment, coastal and water management and agroforestry as examples of areas where adaptive measures have been taken. In Australasia, the IPCC notes that planning for reduced water availability in southern Australia and planning for sea level rise are examples of adaptive measures which have already taken place.²³¹

Transition risks and transformation

- 1.99 Mitigation and adaptation responses to climate change themselves have consequences or 'transition risks'. The FSB characterises transition risks as 'risks that relate to the process of adjustment towards a low-carbon economy'. Such a transition would imply 'significant structural changes to the economy, including a major reallocation of investment'. This, the FSB states, would not only heavily impact organisations involved in producing fossil fuels, such as coal, oil and gas, but also other sectors whose business models rely upon using such fossil fuels, or are energy intensive (eg, utilities, heavy industry and the transportation sector'. ²³⁴
- 1.100 The Treasury has recently remarked that:

Transition effects relate to the impacts of global and domestic efforts to reduce greenhouse gas emissions. This includes the costs of

²²³ Ibid.

²²⁴ 'Ibid 19-20; IPCC, 1.5C Report, Summary for Policymakers [C.1.1]-[C.1.2].; Chapter 2.

²²⁵ See, CCA, 'Prospering in a low-emissions world'.

²²⁶ 'Ibid 6 [2.1], 7 [2.3]. The UNEP concluded in 2021 that climate adaptation is an 'embedded' part of the language and planning process of policy internationally: XII.

²²⁸ Department of Agriculture, Water and the Environment, 'Adaptation'.

²²⁹ Resilience is defined as: 'the ability of a system, community or society exposed to hazards to resist, absorb, accommodate and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions'. See, CSIRO, 'Climate and Disaster Resilience' (Report, 30 June 2020) 'Overview' 2, citing the definition used by the UN.

²³⁰ See, Paris Agreement preamble.

²³¹ 6th IPCC Assessment Report, Summary for Policymakers 3.

²³² FSB Report 4.

²³³ Ibid 12.

²³⁴ Ibid.

Australia's own mitigation efforts, as well as changes to demands for our exports due to mitigation actions by our trading partners. There could also be impacts on global capital flows.²³⁵

1.101 In 2019, Deputy Governor of the RBA, Dr Guy Debelle observed that:

The transition path poses challenges, but it also presents opportunities. Particular industries and particular communities that are especially exposed to the costs of change in the climate will face lower costs if there is an early and orderly transition. Others will bear greater costs from the transition to a lower carbon economy. While others still, such as the renewables sector, may benefit from that transition. But ... it may not be possible for the winners to compensate the losers in a way that leaves no one worse off.²³⁶

- 1.102 While mitigation and adaptation are the two generally accepted policy approaches to addressing the physical aspects of climate change, the IPCC recently emphasised the importance also of transformation policies for dealing with transition risks.²³⁷
- 1.103 In the *Working Group II contribution to the IPCC Sixth Assessment Report*, the IPCC describes 'transformation' as referring to a change in the fundamental attributes of natural and human systems, and places particular focus on 'transformation and system transitions in energy; in land, ocean, coastal and freshwater ecosystems; in urban, rural and infrastructure; and in industry and society'.²³⁸
- 1.104 Some examples of transition risks are set out immediately below.

Trade impacts

1.105 Since 2019, Australia's trading partners have demonstrated increasingly strong commitments to addressing climate change. Treasury finds that:

129 countries have committed to net-zero emissions by 2050, including key trading partners such as Japan and South Korea, while China has committed to carbon neutrality by 2060. In 2019-20, these 3 countries accounted for 87 per cent of Australia's LNG export value, 74 per cent of Australia's thermal coal export value and 55 per cent of Australia's metallurgical coal export value. ²³⁹

1.106 It further concludes that:

These commitments by other countries, if fully implemented, are likely to reduce demand for unabated fossil fuels over some decades. The global transition is also likely to lead to increased demand for clean energy and associated critical minerals exports, and the creation of new markets such as clean hydrogen and carbon capture and storage.

²³⁵ Intergenerational Report 59.

²³⁶ Ibid.

²³⁷ IPCC Working Group II contribution to the Sixth Assessment Report of the IPCC, Summary for Policymakers 9. See detailed discussion in Full Report 1-64-1-70.

²³⁹ Treasury, Intergenerational Report 60.

These new or expanded markets will present new opportunities for Australia.²⁴⁰

- 1.107 As a result of changing global demand, CSIRO has recognised that access to export markets will increasingly depend upon reduced emissions intensity of Australian products.²⁴¹ CSIRO cites net zero emission goals by lead multinationals as an example of the growing importance of carbon reduction in order to access international supply chains.²⁴²
- 1.108 The Australian Government CCA has also noted that 'climate oriented trade policies' are emerging, and flags the prospect of trade competitiveness being impacted by emissions certification schemes, as well as the possibility that 'sectors with high levels of embedded emissions in countries without climate policies' may become the subject of carbon border adjustment mechanisms.²⁴³ The CCA sets out the value and emissions of Australia's most valuable merchandise goods exports as shown in **Table 2** below:

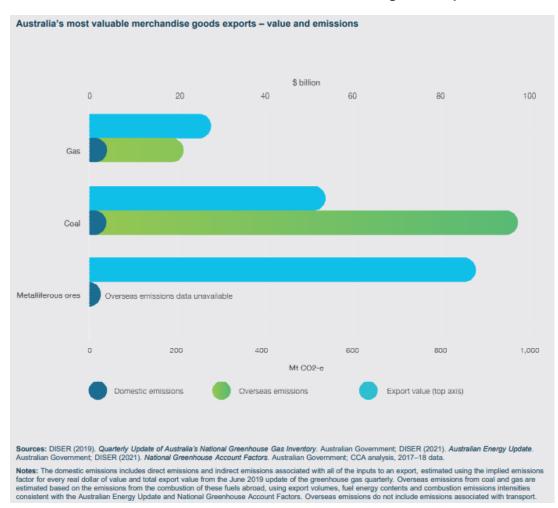


Table 2: Australia's most valuable merchandise goods exports:²⁴⁴

1.109 Similarly, the Australian Government CCA's October 2021 research paper posits

²⁴⁰ Ibid.

²⁴¹ See CSIRO, '<u>Enabling industry net zero emissions goals'</u> in *Business Envoy* (Australian Government Department of Foreign Affairs and Trade, December 2020) 20.

²⁴³ See Australian Government Climate Change Authority, 'Paris Plus: From cost to competitive advantage' 5.

²⁴⁴ Australian Government Climate Change Authority, 'Paris Plus: From cost to competitive advantage' 9.

that there are two ways for Australia to 'thrive' in trade and investment, in accordance with the goals of the Paris Agreement: first, to produce clean exports like low or zero emission industrial commodities or agricultural goods, and second, to take respond to increasing demand for particular goods and services in 'other export opportunities...such as low emissions technologies, clean technology minerals and finance and carbon market services'.²⁴⁵

Financial impacts

- 1.110 The FSB has recognised the global transition risks of climate change. It notes that such changes need not, of themselves, pose risks to financial stability, in that depreciation in some areas may be offset by the positive effects of growth in less carbon intensive sectors and firms. However, a disorderly transition to a low-carbon economy could have destabilising effects on financial systems, including due to unexpected changes in public policy, and physical and transition risks interacting.²⁴⁶
- 1.111 One example of the shifts in international financial systems in recent years, as identified by the Australian Government CCA, is the pattern of increasing funding by banks globally of 'green projects' as against decreasing funding of 'fossil fuels'. Researchers for Bloomberg Green have presented this pattern in the graph at Table 1 below:

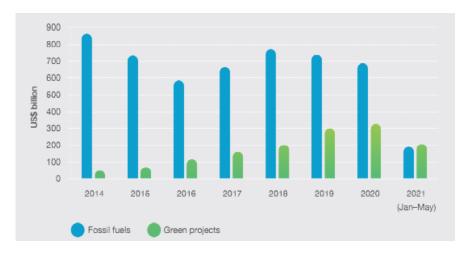


Table 1: Global fossil fuel and green project financing²⁴⁷

1.112 In Australia, Treasury and the RBA agree that the financial sector is also exposed to transition risks from the adjustment to a low-emissions economy globally.²⁴⁸ These risks include falling demand in some sectors prompting write-downs in the value of assets, as well as reduced sovereign creditworthiness and asset fire sales (where investors are forced to sell an asset under market value due to financial distress or constraints).²⁴⁹ The RBA enumerates various other transition risks for financial institutions, including: the risk of rendering assets or businesses economically unviable through 'sudden or unexpected regulatory change' or through the entrance of low-emissions technologies to the market; possible

²⁴⁵ Ibid 59.

²⁴⁶ FSB Report 12-14.

²⁴⁷ T Quinson and M Benhamou, 'Five takeaways from global banks' green vs. fossil financing' (2021) *Bloomberg Green*, cited in Australian Government Climate Change Authority, 'Paris Plus: From cost to competitive advantage' (1 November 2021).

²⁴⁸ Treasury, Intergenerational Report, 61; Reserve Bank of Australia, '<u>Financial Stability Review</u>' (April 2021) 14.

²⁴⁹ Ibid.

reputational damage for financial institutions perceived as contributing to climate change; and legal risks based on possible director liability for addressing climate-related risk (addressed further below).²⁵⁰ The RBA notes that approximately 20 per cent of the exposure of Australian banks results from lending to carbon-intensive industries, and that banks will need to measure and address these risks early in order to mitigate the risk of future financial instability.²⁵¹

Overarching economic picture

- 1.113 Several commentators and bodies draw on both the physical and transition risks of climate change – as well as the liability risks, which are discussed later in this Background Paper – in describing overarching economic challenges presented by climate change.
- 1.114 For example, Treasury summarises, within the 40-year forward projections of its Intergenerational Report, that:

The likely physical and social effects of climate change, the impacts of mitigation efforts and the benefits of early adaptation measures will also affect the economy and the budget over the next 40 years. The transition to lower carbon emissions globally will mean that some sectors will need to adjust to falling demand for some exports, while new opportunities will be created in other sectors. The effects will depend on domestic and global actions, as well as the pace, extent and impacts of climate change.²⁵²

GDP impacts

- 1.115 Several academics have conducted large-scale longer-term economic modelling regarding the effects of climate change which indicate the economic significance of complying with the targets set by the Paris Agreement. For example, in 2018, Kompas et al conducted such modelling regarding the effects of climate change on GDP by country, according to different global warming scenarios, and the global economic gains from complying with the Paris Agreement. ²⁵³ This considered impacts on the GDP of 139 countries who were parties to the Agreement, and factored in impacts such as lowered agricultural productivity, rising sea levels and effects on health.
- 1.116 In terms of the estimation of long-term GDP loss per year, this work estimated that the approximate global potential loss was US\$9,594 billion, or roughly 3 per cent of the world GDP in 2100, for 3°C global warming.²⁵⁴ At 4°C, losses from global warming increased significantly to US\$23,149 billion.
- 1.117 The largest losses in all cases, and for all temperature increases, were predicted to occur in Sub-Saharan Africa, India, and Southeast Asia. For example, if global surface temperature increased by 4°C, some countries in South East Asia could lose up to 21 per cent of their GDP per year.²⁵⁵ It was estimated that in Australia,

²⁵⁰ Reserve Bank of Australia, 'Financial Stability Review' (October 2019) 58.

²⁵¹ Reserve Bank of Australia, 'Financial Stability Review' (April 2021) 46.

²⁵² Ibid x.

²⁵³ This study did not calculate the costs of implementing the Paris Agreement, but instead measured the avoided damages (as potential losses in GDP) as the benefit of compliance: Tom Kompas et al, 'The effects of climate change on GDP by country and the global economic gains from complying with the Paris Climate Accord' (2018) *Earth's Future* 1.

²⁵⁴ Ibid Table A1.

²⁵⁵ Ibid Table 2.

- GDP would decrease by 0.29 per cent annually in 2100 if a 1°C increase occurred, by 0.64 per cent for a 2°C increase, by 1.08 per cent for a 3°C increase, and by 1.6 per cent for a 4°C increase.²⁵⁶
- 1.118 This work also showed considerable global economic gains from complying with the Paris Agreement. For example, with the comparative case of a temperature increase of 4°C, the global gains from complying with the 2° target were approximately US\$17,489 billion per year in the long run (that is, to year 2100).²⁵⁷
- 1.119 More recently, further economic modelling by Wei et al²⁵⁸ has resulted in predictions that following current emissions reduction efforts, the world would experience a loss of between US\$126.7 trillion and US\$616.1 trillion until 2100, compared to 1.5°C-commensurate action. If countries were even unable to implement their current NDCs, the global cost would be US\$150 trillion and US\$792 trillion by 2100 (or up to AUD\$1,231 trillion). However, all countries would have a significant positive cumulative net income before 2100 if they limited global warming to 1.5°C.²⁵⁹
- 1.120 The effect of the 'degree of climate variability' on economic growth was also assessed in a 2019 Working Paper prepared for the International Monetary Fund (the IMF Working Paper). This Paper found that Australia's per capita GDP would decline by 0.56 per cent in the case of a 2°C increase by 2100, and by 6.93 per cent 'in the absence of climate change policies'. 261
- 1.121 Treasury has not released specific projections regarding GDP impacts in Australia. It has, however, recently remarked that a reduction in real GDP associated with climate change would have a fiscal impact through reducing taxation revenue, as well as increasing pressure on expenditure. ²⁶² It anticipates that revenue sources such as fuel excise and mining royalties could also be affected by changes in demand and consumption related to a global transition away from fossil fuel use. Moreover, any reduction in GDP is likely to be unevenly distributed across sectors and regions. ²⁶³

Financial stability

- 1.122 As discussed, the FSB²⁶⁴ has raised the potentially destabilising global effects of climate change on financial systems, based on both physical and transition risks.
- 1.123 Domestically, in his 2019 speech, Debelle drew together how the physical and transition risks of climate change affect monetary policy, noting that both aspects 'are likely to have first-order economic effects'. He highlighted that the relevant dimensions meant that there was now a need to:

²⁵⁶ This is because the available modelling could not allow for 'random shocks…that may impact both technology or living standards in the economy', or the effects of natural disasters and extreme weather events.

²⁵⁷ Ibid 1-2. The authors did not factor the costs of implementation into this calculation.

²⁵⁸ Wei, YM., Han, R., Wang, C. *et al,* 'Self-preservation strategy for approaching global warming targets in the post-Paris Agreement era' (2020) *Nature Communication* 11, 1624.

 ²⁶⁰ Matthew Kahn et al, 'Long-Term Macroeconomic Effects of Climate Change: A Cross-Country Analysis' (IMF Working Paper WP/19/215, October 2019) *International Monetary Fund* 36.
 ²⁶¹ Ibid 54.

²⁶² Treasury, Intergenerational Report 59-60.

²⁶³ Ibid.

²⁶⁴ FSB Report.

²⁶⁵ Guy Debelle, 'Climate Change and the Economy' (Speech, Sydney, 12 March 2019) *Public Forum hosted by the Centre for Policy Development.*

- think in terms of trend, rather than cycles in the weather. Compared to droughts, which are cyclical and have temporary impacts, climate change is a trend change, with ongoing impacts;
- revisit assumptions about the frequency, severity and longevity of climate events. The supply shocks caused by climate change are 'no longer temporary, but close to permanent' making it more challenging to assess and respond; and
- think about how the economy is currently adapting and how it will adapt both to the trend change in climate and the transition required to contain climate change. Timeframes for both were 'very pertinent here'.²⁶⁶
- 1.124 Debelle signalled that these issues were 'central to businesses, households and government', with the policy environment, as well as the climactic environment, having a key effect.²⁶⁷
- 1.125 The RBA's work in this area is complemented by messages from the APRA and Australian Securities and Investment Commission (ASIC). APRA and ASIC are developing guidance to assist the entities they regulate to manage climate change risks, which they cite as a central concern for the economy and financial stability.²⁶⁸

Information gaps and policy uncertainty

- 1.126 The FSB's work on climate change risk indicates that there are significant information gaps relating to climate risk exposure. It notes that there is a 'shortage of data' available to regulators to measure the exposure of the financial institutions they regulate and that similarly, individual firms may lack data about their clients' exposure to climate change risk, undermining the efficacy of their efforts to mitigate climate change risk at an institutional level.²⁶⁹ The FSB is undertaking further work in 2021 to assess what data is available and data gaps.²⁷⁰
- 1.127 As further discussed in Part 2, APRA and ASIC have supported the use of the framework for climate reporting developed by the Task Force on Climate-related Financial Disclosures for the disclosure of climate change relate risk.²⁷¹ Australia' financial regulators are also working to improve their understanding of climate change risk exposure, for example through a climate change financial risk vulnerability assessment of Australia's large banks.²⁷²
- 1.128 The FSB's work on climate change risk also indicates that policy uncertainty is itself a transition risk, or has the potential to amplify the effects of the physical risks of climate change.²⁷³ As noted above, the RBA observes that:

Sudden or unexpected regulatory change could quickly lower the value of [carbon-intensive industries] some of which may become

²⁶⁶ Ibid.

²⁶⁷ Ibid.

²⁶⁸ See Geoff Summerhayes, '<u>Understanding and managing the financial risks of climate change: Letter to all APRA-regulated entities</u>' (24 February 2020) ('**APRA letter'**); Commissioner Cathie Armour, '<u>Managing climate risk for directors'</u> (February 2021) *AICD Magazine* ('**Managing climate risk for directors'**).

²⁶⁹ FSB Report 3, 28.

²⁷⁰ Ihid 32

²⁷¹ APRA Draft CPG 229 Climate Change Financial Risks. Australian Securities and Investment Corporation (**ASIC**) 'Climate change risk guidance for directors' point 4. 'ASIC recommends listed companies with material exposure to climate risk consider reporting under the TCFD framework'.

²⁷² Council of Financial Regulators, Quarterly statement, June 2021.

²⁷³ FSB Report 4.

economically unviable or 'stranded'. Such regulatory changes could either be domestic or come from abroad, given the carbon intensity of Australia's exports.²⁷⁴

- 1.129 The Federal Treasurer has also noted, in the context of the mispricing of risk and a lack of understanding of who was exposed to the default risks that led to the global financial crisis, that in the case of climate change: 'a sharp and unanticipated adjustment in expectations around future policy could similarly see a sudden reassessment of risk and create uncertainty over exposure to those risks'. ²⁷⁵ Lack of policy certainty may therefore be seen to exacerbate climate change risks at an economy-wide level and for individual businesses.
- 1.130 The Business Council of Australia (**BCA**) supports greater climate change policy certainty. Its 2021 policy platform included private-sector investment in new technologies to achieve a net-zero by 2050 goal, build new export industries and improve environmental outcomes.²⁷⁶

Industry and employment shifts

Industry

- 1.131 The IPCC has identified a wide range of industries which will be affected by climate change, including transport infrastructure, energy and electricity, tourism, insurance and other financial services, health, water supply infrastructure, construction and housing, agriculture, forestry, fisheries and mining.²⁷⁷
- 1.132 The IPCC's Fifth Assessment Report, published in 2014, provides detailed information about the impact of climate change on a sector-by-sector basis. For example, it found that in the energy sector, climate change will reduce energy demand for heating and increase energy demand for cooling in the residential and commercial sectors and may influence the integrity and reliability of pipelines and electricity grids.²⁷⁸ The report also acknowledged limitations in the research available at the time and identified gaps in understanding where further research was needed.²⁷⁹
- 1.133 Industry shifts are occurring in response to climate change. One example in Australia is the agricultural sector, which is not only significantly exposed to the physical risks of climate change, as discussed, but also to its transition risks.²⁸⁰
- 1.134 ABARES has cited opportunities for this sector, including 'first mover advantages' for those producers in a position to accommodate the 'increasing' demand by consumers for food that is 'safe and sustainable' and high quality.²⁸¹
- 1.135 Recent ABARES research examines the effects of past and potential future

²⁷⁴ Reserve Bank of Australia, 'Financial Stability Review' (October 2019) 58.

²⁷⁵ The Hon Josh Frydenberg MP, 'Capital markets and the transition to a low emissions future', Address to the Australian Industry Group, Melbourne, 24 September 2021

²⁷⁶ Business Council of Australia, 2021 Policy Platform, online.

²⁷⁷ IPCC, 'Part A Adaptation Report' 665, 677, 680, 684, 688.

²⁷⁸ Ihid 693-694

²⁷⁹ For example the report observed that little literature exists on potential climate impacts on other economic sectors such as mining, manufacturing, and services (apart from health, insurance, and tourism), in particular assessments of whether these sectors are indeed sensitive to climate and climate change: ibid.

²⁸⁰ For example, this sector reportedly depends on exports for 80 per cent of revenue, making trade negotiations in the climate context highly significant: Mike Foley and Eryk Bagshaw, 'Agriculture Minister and Labor counterpart dismiss climate target trade threats', Sydney Morning Herald (online) (8 October 2020).

²⁸¹ Jared Greenville et al, 'Global responses to climate change' (Report, 10 December 2020) ABARES.

changes in climate, and how farmers have adapted to the drier and hotter conditions.²⁸² It draws attention new technologies and practices being adopted by Australian farmers, eg in the cropping sector to cope with lower rainfall, signifying that productivity growth can help offset the impact of a changing climate. However, climate change is likely to make future conditions tougher, and ongoing investment in research and development remains critical, including to improve productivity, reduce carbon footprints, and diversify farm incomes.²⁸³

- 1.136 Examples of Australian farmers and producers innovating to reduce the impact of GHG emissions include those who are:
 - implementing regenerative agricultural principles and practices,²⁸⁴ described as 'overwhelmingly the most effective and cheapest solution to addressing planetary climate change';²⁸⁵
 - developing carbon capturing technology for use in farming, for example, by applying a fungal treatment to crop seeds;²⁸⁶ and
 - processing red seaweed to produce cattle food which reduces their methane gas output.²⁸⁷
- 1.137 Another example of shifts occurring is in the energy sector. Investment in renewable energy technologies such as wind and solar has changed the way energy markets function and made older generation technologies uneconomic leading them to withdraw from the market.²⁸⁸ Ongoing efforts to decarbonise energy systems are anticipated to result in new markets such as clean hydrogen and carbon capture and storage, presenting new opportunities for Australia.²⁸⁹
- 1.138 According to the IEA, globally, renewables were the only energy source subject to increased demand during the COVID-19 pandemic.²⁹⁰ The IEA projected in 2020 that demand for all other sources would continue to fall while demand for renewables will increase.²⁹¹ In 2021, the IEA described renewables as the 'success story of the COVID 19 era' and forecast another increase in demand in 2021.²⁹²

²⁸² Neal Hughes, Senior Economist, ABARES, 'Australian farmers are adapting well to climate change, but there's work ahead', *The Conversation* (online), 29 July 2021.
²⁸³ Ibid.

²⁸⁴ Both completely, on city and rural land, and partially, on broadacre, whilst retaining partial broadacre monoculture.

²⁸⁵ Charles Massey, 'The Call of the Reed Warbler' (2017) *Penguin* xii.

²⁸⁶ This has reportedly been proven to increase tradable carbon by 2.6 tonnes per hectare, while also increasing crop yield per hectare by 7 per cent: Luke Wong, 'Soil carbon scientists explore fungi to enlist crop farmers in battle against climate change' (12 June 2021) *ABC*.

²⁸⁷ See, Nick Kilvert, 'Cows fed small amount of seaweed burp 86 per cent less methane in trial' (18 March 2021) *ABC Science* https://www.abc.net.au/news/science/2021-03-18/cows-fed-seaweed-methane-emissions-reduced-82-per-cent/13253102. It is noted that this method is considered relatively expensive at present. However, it is expected that overseas markets will in the future demand beef only if it is produced with greatly reduced or non-existent methane gas output.

 ²⁸⁸ Guy Debelle, 'Climate Change and the Economy' (Speech, Sydney, 12 March 2019) Public Forum hosted by the Centre for Policy Development.
 ²⁸⁹ For example, as outlined in the Technology Investment Roadmap: First Low Emissions Technology

Statement 2020, Commonwealth Department of Industry Science, Energy and Resources, https://www.industry.gov.au/sites/default/files/September%202020/document/first-low-emissions-technology-statement-2020.pdf

²⁹⁰ International Energy Association, 'Global Energy Review' (Report, April 2020).

²⁹¹ This is attributed to 'low operating costs and preferential access to many power systems: ibid.

²⁹² Ibid 'Overview'.

Employment

- 1.139 In its report to the 2018 G20 Climate Sustainability Working Group, the ILO estimates that globally, around one third of jobs in G20 countries rely directly on the effective management and sustainability of a healthy environment.²⁹³ These include jobs in farming, fishing, forestry and all those that rely on natural processes.²⁹⁴ It highlights that climate change and other forms of environmental degradation have already caused net negative impacts on jobs and work productivity. Between 2000 and 2015, 23 million working-life years were lost annually globally as a result of increasing and more intensive environmental-related hazards caused or exacerbated by human productivity.²⁹⁵
- 1.140 These impacts will become more pronounced in coming years. For example, with respect to the heat stress caused by temperature rises, the ILO estimates that the total number of work hours in G20 countries will be reduced by 1.9 per cent by 2030.²⁹⁶ It signals that vulnerable groups are more exposed to these challenges, as they have fewer resources to enable climate adaptation. Persons working in the informal economy and in small enterprises are especially vulnerable.²⁹⁷
- 1.141 The ILO considers that the transition to a low greenhouse gas economy will also lead to job creation, and that climate change mitigation can keep future adaptation costs down, and bring about net employment creation through strategies including a substantial reallocation of labour. Adaptation strategies will be needed to help displaced workers to move onto sectors where there is employment growth.²⁹⁸ The ILO reinforces the need for policies which promote a 'just transition' to a low emissions economy, and protect workers against the detrimental effects of climate change, including social and economic measures which protect people against events which may jeopardise their ability to earn income, or access essential services.²⁹⁹
- 1.142 The direct and indirect impacts of climate change on jobs is of concern to the Australian Council of Trade Union (**ACTU**) which states that 'Australian workers are on the forefront of climate change'. The ACTU considers that climate change will involve job creation, as well as decline in high emitting industries, with a consequential loss of regional jobs and economic activity. It reflects calls for a 'just transition for workers and the community'. 301
- 1.143 The Australian Council of Social Service (**ACOSS**)³⁰² similarly highlights potential impacts on employment and the severe effects of climate change on people with low incomes.³⁰³ ACOSS and the BCA agree that job loss can be minimised, job

²⁹³ ILO, *The Employment Impact of Climate Change Adaptation*, Input Document for the G20 Climate Working Group (2018).

²⁹⁴ Eg, air and water purification, soil renewal and fertilisation, pollution, pest control, the moderation of extreme temperatures, and the protection provided by natural infrastructure: Ibid 8.

²⁹⁵ Ibid.

²⁹⁶ Ibid.

²⁹⁷ Ibid 8.

²⁹⁸ Ibid.

²⁹⁹ Ibid 29.

³⁰⁰ Australian Council of Trade Unions (**ACTU**), 'Climate Change' (online statement).

³⁰¹ ACTU, 'The Need for a Justice Transition' (online <u>statement</u>).

³⁰² Australian Council of Social Service (**ACOSS**) considers that 'climate change impacts are happening now' and it is taking steps to increase adaptation, resilience and emergency response. See: ACOSS, '<u>Climate Change Resilience</u>' (online, accessed 11 January 2021).

³⁰³ ACOSS, Submission to the House Standing Committee on the Environment and Energy, Climate Change (National Framework for Adaptation and Mitigation) Bill 2020 and Climate Change (National Framework for Adaptation and Mitigation) (Consequential and Transitional Provisions) Bill 2020), 27 November 2020 ('ACOSS Submission').

gains enhanced and a transition to 'net zero' facilitated if Australia engages in a just transition.³⁰⁴ In ACOSS' view a 'just transition' would involve allocating costs equitably across the economy, avoiding 'unnecessary costs', supporting community organisations to improve resilience and assist marginalised Australians, and consulting all the while with the diverse Australian community.³⁰⁵ The BCA also emphasises the importance of 'economic diversification' and 'encourag[ing] investments' to ensure a fair transition.³⁰⁶

Social

1.144 Concerns have also been raised that lower-income communities may face economic hardship as a result of emissions-reducing policies which result in increased costs of essential goods and services, such as energy.³⁰⁷ Further, they may be excluded from climate change-friendly but price-prohibitive options.³⁰⁸ These concerns also highly relevant to the above discussion of 'just transitions'.

Part 1 - Conclusion

- 1.145 The recently published work of the IPCC on the causes of climate change confirms the contribution of anthropogenic GHG emissions to climate change. The IPCC and WMO agree that human activities are a major driver of climate change, particularly by increasing levels of GHGs in the Earth's atmosphere. Australian authorities have also attributed 'essentially all' recent global average temperature change to humans and Australia's contribution to climate change, as the fourteenth largest global emitter in 2020 and producer of approximately one per cent of global emissions, is recognised.
- 1.146 It is widely agreed that the direct physical impacts of climate change are already grave and expected to worsen. The IPCC projects that global warming will cause numerous future changes in weather patterns worldwide. Domestically, many changes have already taken place, including increasing heatwaves, droughts, bushfires, floods and other extreme weather events, ocean warming, coastal storm-surge inundation and land degradation.
- 1.147 The physical risks arising from these changes extend to almost all facets of natural and human life, from terrestrial and marine ecosystems to socio-economic systems. The impacts are serious for human health and wellbeing, peace and stability, and national security. Rural communities, children and older people, First Nations communities, migrants and displaced peoples are likely to be disproportionately affected. Displacement events prompting forced migration are more likely in the future, including across the Asia-Pacific region. On the economic side, physical risks result in lost productivity, disruption events and infrastructure damage.
- 1.148 Understanding the legal implications of climate change also requires an understanding of the two main umbrellas of policy responses to the phenomenon. Mitigation responses aim to limit GHG emission levels and concentration in the atmosphere, while adaptation responses aim to minimise risk within any assumed

³⁰⁴ Ibid, 5-6; BCA, Submission to the House Standing Committee on the Environment and Energy, Climate Change (National Framework for Adaptation and Mitigation) Bill 2020 and Climate Change (National Framework for Adaptation and Mitigation) (Consequential and Transitional Provisions) Bill 2020, 4 December 2020 2 (**'BCA Submission**').

³⁰⁵ ACOSS Submission 5-6.

³⁰⁶ BCA Submission 2.

³⁰⁷ National Consumer Law Centre, 'Climate Change Justice'.

³⁰⁸ Ibid.

- current temperature level. The IPCC underlines that 'large, immediate and unprecedented' global efforts are required in relation to both mitigation and adaptation measures.
- 1.149 The adverse consequences which may flow from adaptation or mitigation responses, described as 'transition risks', are many and varied. They impact all industries, business and employment, and pose a systemic risk to markets, as has been recognised by Australia's financial regulators and other financial sector leaders. Key stakeholders and regulators view transition risks as a central concern for Australia's economy, trade prospects and financial sector.
- 1.150 Businesses in a wide range of industries face pressure from employees, institutional investors and shareholder groups in the transition towards a low carbon economy. Many are already adapting to these new demands and taking up new opportunities as they arise. Fundamental shifts in employment are also anticipated. Across the business and community sectors, there is consensus about the need to minimise job losses, enhance job gains and ensure just transitions for all Australians.
- 1.151 Recognising the all-encompassing natural, social and economic shifts that come with a changing climate, Part 2 of this paper assesses the consequences for the law.

Part 2 – Implications for the law

Purpose of this Part

2.1 Part 1 of this Background Paper set out the scientific, social and economic context of climate change, globally and in Australia. Part 2 now draws upon that context to consider the implications of climate change for the law. Only when these implications are understood can the consequences for the legal profession be addressed, at Part 3.

The law, and the practice of law, is changing

2.2 International legal and regulatory frameworks are adapting to address new problems posed by global climate change. There are significant, ongoing efforts to test and clarify existing international obligations in light of this issue, as well as to delineate emerging areas of legal responsibility for future possible acceptance. In turn, changes have emerged in Australia's relevant domestic legal frameworks – although these are not always consistent or coherent – and further changes are foreshadowed. There are also shifts in legal practices occurring, and consequentially, new challenges for legal practitioners to resolve.

<u>International legal and regulatory frameworks are adapting to address climate change</u>

Climate and environmental law

2.3 In recent decades Australia has made commitments under international environmental law (**IEL**) which explicitly address climate change and/or its impacts on the environment.

UNFCCC and Paris Agreement

- 2.4 A seminal source of legally binding commitments is the UNFCCC, ratified by 197 countries (including Australia), which entered force in 1994. The UNFCCC's overarching objective is to achieve, in accordance with the provisions of the Convention, stabilisation of greenhouse gas concentrations in the atmosphere at a level which would prevent dangerous anthropogenic [human induced] interference with the climate system.³⁰⁹
- 2.5 The UNFCCC sets out certain principles to achieve this objective. These recognise that Parties must proceed on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, developed countries should take the lead in combating climate change and its adverse effects. The specific needs and special circumstances of developing countries, particularly those which are particularly vulnerable to the adverse effects of climate change, should be given full consideration. These
- 2.6 These principles also include the precautionary principle that Parties should take precautionary measures to anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects. Where there are threats of serious or

³⁰⁹ UNFCC art 2. This level must be achieved within a timeframe sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

³¹⁰ Ibid art 3.1.

³¹¹ Ibid art 3.2.

irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.³¹²

- 2.7 Further, the principles recognise that:
 - parties have a right to, and should, promote sustainable development.
 Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party, and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change;³¹³ and
 - parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change. Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.³¹⁴
- 2.8 All parties to the UNFCCC have accepted commitments to keep a national inventory of GHGs, take a range of measures relating to climate change prevention, mitigation and adaptation and to co-operate in a range of areas.³¹⁵ These include commitments to:
 - maintain an inventory of all national greenhouse gases and provide annual reports on emissions;³¹⁶
 - promote and cooperate in the development of technologies and practices to reduce greenhouse gases;³¹⁷
 - promote and cooperate in the full, open and prompt exchange of relevant ...
 legal information related to the climate system and climate change, and to the economic and social consequences of various response strategies;³¹⁸
 - promote and cooperate in education, training and public awareness related to climate change and encourage the widest participation in this process, including that of non-governmental organisations;³¹⁹
 - take climate change considerations into account 'to the extent feasible' in its 'relevant social, economic and environmental policies and actions', and employ methods such as impact assessments, while minimising adverse effects of mitigation and adaptation measures;³²⁰ and

³¹² Ibid art 3.3

³¹³ Ibid art 3.4

³¹⁴ Ibid art 3.5.

³¹⁵ Ibid art 1.

³¹⁶ Ibid art 4, Commitment 1(a).

³¹⁷ Ibid art 4(c).

³¹⁸ Ibid art 1(h).

³¹⁹ Ibid art 1(i).

³²⁰ Ibid art 4, Commitment 1(f).

- promote and cooperate in education, training and public awareness related to climate change and encourage the widest participation in this process.³²¹
- 2.9 As a developed country Party,³²² Australia has made additional commitments under the UNFCCC, which include the following:
 - adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs;³²³
 - engage in regional programs to mitigate climate change through addressing greenhouse gas emissions and facilitating adaptation;³²⁴ and
 - take steps, including the provision of financial resources and the transfer of technology, to assist developing countries to meet the obligations which are imposed upon them.³²⁵
- 2.10 Australia is an industrialised country under Annex 1 of the UNFCCC and must regularly report on its climate change policies and measures.
- 2.11 The Paris Agreement is a separate treaty made under the UNFCCC, which has now been adopted by 196 Parties, including Australia.³²⁶ Its objectives and obligations are formed having regard to key considerations set out in its Preamble, which is substantially quoted in the box below. These link climate change actions, responses and impacts with equitable access to sustainable development and the eradication of poverty and human rights.

Paris Agreement - Preamble excerpt

- In pursuit of the objective of the Convention, and being guided by its principles, including the principle of equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances;
- Recognizing the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge;

³²¹ Ibid art 4, Commitment 1(i).

³²² Note, the UNFCCC imposes obligations on countries based on the principle of 'common but differentiated responsibilities and respective capabilities'. This means that while all parties to the Convention are obliged to 'protect the climate system', developed countries (such as Australia) are to 'take the lead' and are subject to different obligations to their developing counterparts' See, UNFCCC at art 3(1).

³²³ UNFCCC art 4, Commitment 2(a).

³²⁴ Ibid art 4, Commitment 1(b). Note, those measures aimed at adaptation have been brought to the fore in more recent years and adaptation is now also provided for under the Cancun Adaptation Framework, part of the Cancun Agreements. See, United Nations Climate Change, 'What is the United Nations Framework Convention on Climate Change?' < What is the United Nations Framework Convention on Climate Change? | UNFCCC>; Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010. Addendum. Part two: Action taken by the Conference of the Parties at its sixteenth session.

³²⁵ UNFCCC at art 4, Commitments 3-5.

³²⁶ This follows the Kyoto Protocol, an instrument which extended the UNFCC and provided for emissions reduction commitments during a first commitment period of 2008-2012. This was extended by the Doha Amendment to the Kyoto Protocol, which provided for a second commitment period, which ended in 2020.

- Also recognizing the specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, as provided for in the Convention;
- Taking full account of the specific needs and special situations of the least developed countries with regard to funding and transfer of technology;
- Recognizing that Parties may be affected not only by climate change, but also by the impacts of the measures taken in response to it;
- Emphasizing the intrinsic relationship that climate change actions, responses and impacts have with equitable access to sustainable development and eradication of poverty;
- Recognizing the fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change,
- Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities;
- Acknowledging that climate change is a common concern of humankind,
 Parties should, when taking action to address climate change, respect,
 promote and consider their respective obligations on human rights, the
 right to health, the rights of indigenous peoples, local communities,
 migrants, children, persons with disabilities and people in vulnerable
 situations and the right to development, as well as gender equality,
 empowerment of women and intergenerational equity;
- Recognising the importance of the conservation and enhancement, as appropriate, of sinks and reservoirs of the greenhouse gases referred to in the Convention:
- Noting the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, recognized by some cultures as Mother Earth, and noting the importance for some of the concept of "climate justice", when taking action to address climate change;
- Affirming the importance of education, training, public awareness, public participation, public access to information and cooperation at all levels on the matters addressed in this Agreement;
- Recognizing the importance of the engagements of all levels of government and various actors, in accordance with respective national legislation of Parties, in addressing climate change;
- Also recognizing that sustainable lifestyles and sustainable patterns of consumption and production, with developed country Parties taking the lead, play an important role in addressing climate change...
- 2.12 The Paris Agreement contains an overarching objective of strengthening the global response to the threat of climate change, by holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing

efforts to limit the temperature increase to 1.5°C above pre-industrial levels.³²⁷ In order to reach the long-term temperature goal in article 2, article 4.1 provides that:

Parties aim to reach global peaking of GHGs as soon as possible, and to undertake rapid reductions thereafter in accordance with the best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.³²⁸

- 2.13 This provision 'equates to a global action to achieve 'net zero emissions' in the second half of the century a goal that will only be attainable with a phase-out of fossil fuel energy sources'. 329
- 2.14 The Paris Agreement requires signatory states to commit to a NDC. Each State's NDC is its vehicle to 'undertake and communicate ambitious efforts' that it will be taking to achieve the Paris Agreement targets for five-year periods, as against the various areas enumerated in the Agreement.³³⁰ Parties must pursue domestic mitigation measures with the aim of achieving the objectives of their NDC.³³¹ Each State's successive NDC must 'represent a progression' beyond the last, reflecting 'its highest possible ambition'³³² and NDCs must be communicated transparently every five years.³³³
- 2.15 Australia first communicated its NDC under the Paris Agreement in 2015, committing to an economy-wide target to reduce greenhouse gas emissions by 26 to 28 per cent below 2005 levels by 2030.³³⁴ It affirmed this target in its 2020 NDC Update, while outlining Australia's approach to emission reductions, and included new actions and measures.³³⁵
- 2.16 In late 2021, Australia provided a further NDC Update, in which it committed to net zero emissions by 2050, inscribed low emissions technology stretch goals, and reaffirmed the 2030 target above. It reported 2021 projections results showing Australia was on track to exceed this 2030 target.³³⁶
- 2.17 The Australian Government has indicated that Australia will submit its second NDC to the UNFCCC in 2025.³³⁷
- 2.18 The Paris Agreement also requires Parties to undertake adaptation planning and action, 338 and developed countries to provide support to developing countries in

³²⁷ Paris Agreement art 2.1(a). In the (non-binding) Glasgow Climate Pact agreed on 13 November 2021, the Conference of the Parties of the Paris Agreement resolved 'to pursue efforts to limit the temperature increase to 1.5 °C': cl 21. cma3 auv 2 cover decision (unfccc.int)

³²⁸ Ibid art 4.1.

³²⁹ Jacqueline Peel, Hari Osofsky and Anita Foerster, 'Shaping the 'Next Generation' of Climate Change Litigation in Australia' (2017) 41 Melbourne University Law Review 793, 811.

³³⁰ Paris Agreement arts. 3-4(1).

³³¹ See art 4(2).

³³² See art. 4(3).

³³³ See art. 4(8).

^{334 &}lt;u>Australia's Intended Nationally Determined Contribution to a new Climate Change Agreement</u> | August 2015, (submitted 9 November 2016) **Error! Hyperlink reference not valid.**.

³³⁵ Australian Government, <u>Australia's Nationally Determined Contribution Communication 2020</u>, (submitted 31 December 2020) **Error! Hyperlink reference not valid.**>.

³³⁶ By up to 9 percentage points. Australian Government, <u>Australia's Nationally Determined Contribution</u>, Communication 2021, October 2021 (submitted 28 October 2021).

³³⁷ DISER, 'International climate change commitments'.

³³⁸ Paris Agreement art 5.

their efforts to implement the Agreement. 339

The Paris Agreement requires all Parties to transparently report national emissions, progress towards targets, information on mitigation policies and adaptation actions and support provided to developing countries.³⁴⁰ Parties are also required to undergo international audit and peer review according to reporting and review rules.³⁴¹ The Agreement does not have a mechanism to enforce compliance by parties. However, it provides for a five yearly 'global stocktake' to assess the collective progress made in achieving the treaty's goals.342

COP26

- 2.20 The 26th Conference of the Parties for the UNFCCC (**COP26**) was held concurrently with the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) in October-November 2021.
- 2.21 In the lead-up to this event, UN Climate Change published a synthesis of climate action plans as communicated in countries' NDCs. This indicated that while there was a clear trend that greenhouse gas emissions are being reduced over time, nations must urgently redouble their climate efforts if they were to prevent global temperature increases beyond the Paris Agreement's goals. It referred to IPCC estimations that limiting global average temperature increases to 1.5°C required a reduction of CO2 emissions of 45 per cent in 2030.343
- At COP26, the Parties agreed to a 'package of policy commitments' known as the Glasgow Climate Pact. 344 While the Glasgow Climate Pact is 'formally not legally binding',345 it was made pursuant to the terms of the UNFCCC and Paris Agreement, 346 and builds on these efforts, most notably including a statement reinforcing and elevating the commitment of the Parties to pursue efforts to limit the global temperature increase to 1.5°C.347
- 2.23 It also includes a number of other measures to pursue the goals of the Paris Agreement, among these being to:
 - request Parties to 'revisit and strengthen the 2030 targets in their nationally determined contributions as necessary to align with the Paris Agreement temperature goal by the end of 2022'348 and to 'convene an annual high-level ministerial round table on pre-2030 ambition beginning at the fourth session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement' in 2022. British High Commissioner to Australia, H.E. Vicki

³³⁹ Paris Agreement art 6.

³⁴⁰ Paris Agreement art 13(7), (9)-(10)..

³⁴¹ Paris Agreement art 13(11)-(12).

³⁴² Ibid art 14.

³⁴³ United Nations Climate Change, 'Full NDC Synthesis Report: Some Progress, but Still a Big Concern', Media Release, 17 September 2021.

³⁴⁴ Mitchell Lennan and Elisa Morgera, 'The Glasgow Climate Conference (COP26)' (20 January 2022) to appear in the International Journal of Marine and Coastal Law forthcoming 2022. See United Nations Climate Change, 'Outcomes of the Glasgow Climate Change Conference' (website, November 2021). ³⁴⁵ Ibid.

³⁴⁶ Ibid. See, eg, UNFCCC art 7(2)(g); Paris Agreement art 16(4).

³⁴⁷ Glasgow Climate Pact [21]. The COP (UNFCCC) and Kyoto Protocol (CMP 16) mechanisms also took the decision. See also, Elisa de Wit, Caroline May and Anne Lapierre, 'Nov 15: Key takeaways and time for action as the curtains fall on COP26' Norton Rose Fulbright (November 2021).

348 Glasgow Climate Pact, Decision -/CMA.3 – Advance unedited version (13 November) (Glasgow Climate

Pact) [29]. The COP (UNFCCC) and Kyoto Protocol (CMP 16) mechanisms also took the decision.

Treadell MCG MVO, has described this as 'genuinely ground-breaking' and 'critical';³⁴⁹

- '...establish a work programme to urgently scale up mitigation ambition and implementation in this critical decade...';
- establish rules for a global carbon market (under article 6 of the Paris Agreement). This is a 'key pillar' for the post-Glasgow framework;³⁵⁰ and
- '[call] upon Parties to accelerate the development, deployment and dissemination of technologies, and the adoption of policies, to transition towards low-emission energy systems, including by rapidly scaling up the deployment of clean power generation and energy efficiency measures, including accelerating efforts towards the phase-down of unabated coal power and inefficient fossil fuel subsidies, recognizing the need for support towards a just transition...'.351
- 2.24 Views vary on the significance of this last 'call'. Some note it marks the first time a UN climate agreement has referred to ending fossil fuel usage³⁵² and that it 'sets a clear trajectory' for the reduction and eventual 'eradication' of coal-fired energy.³⁵³ However, others have noted that the commitment extends to a phase 'down', rather than a phase 'out'.³⁵⁴
- 2.25 The *Glasgow Climate Pact* also called upon relevant stakeholders to take measures for the provision of finance,³⁵⁵ technology transfer and capacity-building for mitigation and adaptation to developing countries,³⁵⁶ to urgently scale up action to minimise and address loss and damage in developing country Parties that are particularly vulnerable to the negative effects of climate change,³⁵⁷ and, with respect to the private and financial sectors, to 'deliver the scale of resources needed to achieve climate plans, particularly for adaptation'.³⁵⁸
- 2.26 A host of statements of intention were also made by various smaller groups of States.³⁵⁹ While non-binding, these agreements also indicate shifting global

³⁴⁹ HE Vicki Treadell CMB MVO, 'Post COP26: What happened, and where to from here?', Panel discussion hosted by the ANU Centre for Climate, Energy & Disaster Solutions (20 February 2017).

³⁵⁰ Ibid.

³⁵¹ See [31], [27], [78] and [36].

³⁵² See HE Vicki Treadell CMB MVO, 'Post COP26: What happened, and where to from here?', Panel discussion hosted by the ANU Centre for Climate, Energy & Disaster Solutions (20 February 2017); Washington Post Staff, 'The Glasgow climate pact, annotated' (13 November 2021); Elisa de Wit, Caroline May and Anne Lapierre, 'Nov 15: Key takeaways and time for action as the curtains fall on COP26' Norton Rose Fulbright (November 2021).

³⁵³ HE Vicki Treadell CMB MVO, 'Post COP26: What happened, and where to from here?', Panel discussion hosted by the ANU Centre for Climate, Energy & Disaster Solutions (20 February 2017).

³⁵⁴ Washington Post Staff, 'The Glasgow climate pact, annotated' (13 November 2021); Elisa de Wit, Caroline May and Anne Lapierre, 'Nov 15: Key takeaways and time for action as the curtains fall on COP26' Norton Rose Fulbright (November 2021).

³⁵⁵ See arts 44, 49 and 55.

³⁵⁶ See Parts III, V. This included by urging developed country Parties to at least double their collective provision of climate finance for adaptation to developing country Parties from 2019 levels by 2025, in the context of achieving a balance between mitigation and adaptation in the provision of scaled-up financial resources ([18]) and welcoming the increased pledges made by many developed country Parties and the *Climate Finance Delivery Plan: Meeting the US\$100 Billion Goal* and the collective actions contained therein: see, https://ukcop26.org/wp-content/uploads/2021/10/Climate-Finance-Delivery-Plan-1.pdf.

³⁵⁷ This included a decision to establish a Glasgow Dialogue between Parties to discuss arrangements to this end (eg [63] and [73]).

³⁵⁸ Glasgow Climate Pact, Decision -/CP.26 - Advance unedited version (13 November) [14].

³⁵⁹ See United Nations Climate Change, 'Outcomes of the Glasgow Climate Change Conference' (website, November 2021).

attitudes and expectations in industrial, financial and other sectors.³⁶⁰ They include the following:

- agreement by over 40 countries and approximately 150 companies to 'phase out' coal-powered electricity generation by the 2030s and 2040s, for developed and developing countries respectively.³⁶¹ As Peel notes, Australia was not party to this agreement;³⁶² and
- launch of the Glasgow Financial Alliance for Net Zero, comprising 450 firms in 45 countries with over \$130 trillion in private capital,³⁶³ with members committed to working towards net zero by 2050.³⁶⁴

Other environmental treaties

- 2.27 In addition to the above obligations, Australia must comply with two other binding treaties that are 'inextricably linked'³⁶⁵ to the UNFCCC, namely, the UN Convention on Biological Diversity (**CBD**)³⁶⁶ and UN Convention to Combat Desertification (**UNCCD**).³⁶⁷
- 2.28 Under the CBD, Australia is required to establish and implement a national biodiversity strategy and action plan to guide its implementation of the Strategic Plan for Biodiversity 2011-20 (and associated targets, known as the Aichi Biodiversity Targets). This is consistent with the Paris Agreement's statement of the importance of the 'protection of biodiversity' and 'integrity of all ecosystems'. 369
- 2.29 Under the UNCCD, Australia has certain obligations to cooperate, both internationally and regionally, in activities which address desertification; and is obliged to provide various kinds of support to developing countries affected by desertification.³⁷⁰

³⁶⁰ Mary Gagen, 'Glasgow Climate Pact: where do all the words and numbers we heard at COP26 leave us?' (18 November 2021) *The Conversation.*

³⁶¹ Matt McGrath, '<u>COP26: More than 40 countries pledge to quit coal</u>' (4 November 2021) *BBC News.*³⁶² Jacqueline Peel, 'What was achieved at COP26?' Pursuit, The University of Melbourne (15 November 2021).

³⁶³ GFANZ, 'Amount of finance committed to achieving 1.5°C now at scale needed to deliver the transition' (Media Release, 3 November 2021).

³⁶⁴ Jacqueline Peel, 'What was achieved at COP26?' Pursuit, The University of Melbourne (15 November 2021).

³⁶⁵ These are the other two agreements under IEL which were produced at the Rio Earth Summit in 1992 alongside the UNFCCC. See Department of Climate Change, Energy, the Environment and Water , 'UN Convention on Biological Diversity' (website), accessed on 6 July 2022.

³⁶⁶ United Nations Convention on Biological Diversity, opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993).

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³⁶⁸ See, <u>Aichi Biodiversity Targets</u>; Department of Climate Change, Energy, the Environment and Water, '<u>UN Convention on Biological Diversity</u>'; United Nations Convention on Biological Diversity (1992) at art. 6(a); United Nations Decade on Biodiversity, '<u>Goals</u>'.

³⁶⁹ Paris Agreement preamble.

³⁷⁰ The UNCCD requires African Parties who are affected by desertification to be prioritised, 'while not neglecting' those in other regions See UNCCD at arts. 4, 6-7, 17-18, etc.

'Soft' environmental law sources

Stockholm Declaration and Rio Declaration

- 2.30 Australia has made various commitments regarding the environment which, while not recognised as legally binding, may shape the context of its legal and policy commitments regarding climate change in important ways.
- 2.31 One source of such commitments is the Declaration of the Stockholm Conference of 1972 (**Stockholm Declaration**),³⁷¹ which situated the right to a quality environment as central to other rights and bestowed on 'man' the 'solemn responsibility to protect and improve the environment for present and future generations'.³⁷² Twenty years later, the Rio Declaration on Environment and Development (**Rio Declaration**)³⁷³ reinforced the inextricable relationship between the environment and human rights.

2030 Agenda for Sustainable Development and Sustainable Development Goals

- 2.32 Australia has also made commitments to further the objectives of sustainable development which, in their turn, give rise to commitments regarding climate change. The 2030 Agenda for Sustainable Development and Sustainable Development Goals (**SDGs**)³⁷⁴ agreed by the United Nations General Assembly in 2015, explicitly include the goal to 'take urgent action to combat climate change and its impact'.³⁷⁵ It also sets out various other objectives which are also intrinsically linked to climate change, such as eradicating poverty.³⁷⁶
- 2.33 The SDGs are not a treaty and are not legally binding. However, the Australian Government has committed to implementing them both domestically and internationally through its foreign affairs policy.³⁷⁷ As a result, Australia's state and territory and Commonwealth laws and policies regarding the environment and climate change will be an essential part of implementing these international political commitments.³⁷⁸

³⁷¹ The text of the Stockholm Declaration was developed at the first international conference on international environmental law (**IEL**), the United Nations Conference on the Human Environment on 5 June 1972. See, *Report of the United Nations Conference on the Human Environment*, UN Doc. A/CONF. 48/14, at 2 and Corr. 1 (1972) ('Stockholm Declaration').

³⁷² The *Stockholm Declaration* also recognised that '[b]oth aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights [including] the right to life itself': Chapter 1, Preamble [1].

³⁷³ Report of the United Nations Conference on Environment and Development, UN Doc A/CONF.151/26 (Vol. I) (12 August 1992) annex I, principles 5, 7, 13, 24, 27, Principles 1 and 10.

³⁷⁴ Transforming our world: the 2030 Agenda for Sustainable Development, A/RES/70/1 (21 October 2015) ('SDGs').

³⁷⁵ See SDGs Goal 13. The SDGs nevertheless acknowledge that the UNFCCC is the principal forum for organising the global response on this issue. This goal action is intended to occur through cooperation between national governments, civil society and the private sector.

³⁷⁶ This has been recognised by the IPCC in Intergovernmental Panel Climate Change, 'Special Report on Global Warming of 1.5C – Summary for Policymakers' (2018) at D2.1, D3, D4.1. Similarly, the Paris Agreement preamble recognises that climate change actions and associated effects have an 'intrinsic relationship' to 'sustainable development and eradication of poverty, and that sustainable lifestyles and consumption and production patterns are significant in addressing climate change.

³⁷⁷ See Australian Government, '2017 Foreign Policy White Paper' (2017). See, also, Law Council of Australia, 'Policy Statement – Sustainable Development' (14 September 2019) 2.

³⁷⁸ In addition to its commitment to the SDGs, Australia is a signatory to, and is bound by, a number of international treaties and agreements which include or rely upon sustainable development concepts, including the Ramsar Convention on Wetlands, UN Framework Convention on Climate Change and the Convention on the Conservation of Migratory Species of Wild Animals.

Task Force on Climate Change-Related Financial Disclosures

- 2.34 The TCFD was established by the G20 FSB, following a request by the G20 Finance Ministers and Central Bank Governors that it consider how issues regarding climate change could be taken into account in the financial sector.³⁷⁹ The sector perceived a need to take action in light of potentially 'disruptive changes across economic sectors and regions in the near term' flowing from the increased frequency of natural disasters and other disruptions, and their potential consequences for business losses, assets and infrastructure.³⁸⁰
- 2.35 The TCFD recommendations address the disclosures that an organisation should make in identifying, measuring, addressing and incorporating climate change risks, under the headings of four key 'themes' for an organisation's operations, being 'governance, strategy, risk management, metrics and targets'. 381
- 2.36 These recommendations range from 'describ[ing] the board's oversight of climate-related risks and opportunities', to 'disclos[ing] the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process'. They require companies to disclose qualitative data, including scenario analysis, which identify risks based on various climate change-drive scenarios. The recommendations are not confined to financial companies and the TCFD has produced specific guidance to assist 'non-financial companies' in complying with its recommendations.
- 2.37 There has been 'widespread business convergence'³⁸⁵ around the TCFD's 2017 recommendations for the voluntary disclosure of climate change-related financial risks. Despite their development as a voluntary framework, they have been recognised as 'rapidly becoming mainstream by virtue of their endorsement by major investors, regulators and many major companies worldwide'.³⁸⁶ Proponents have lauded the TCFD for exemplifying 'the power of voluntary engagement from the private sector'.³⁸⁷ The scope of its influence over regulators and businesses alike is borne out by its most recent status report, which recorded the support of more than 110 regulators and government entities worldwide.³⁸⁸
- 2.38 Signatories to the United Nations Principles for Responsible Investment³⁸⁹ (**UNPRI**) are required, from 2020, to adopt and report under the TCFD recommendations. This includes over 160 organisations headquartered in Australia, including major banks, investment managers and asset owners.³⁹⁰
- 2.39 Foreign governments (eg, New Zealand, the European Union (**EU**) and the United Kingdom (**UK**) are embedding the TCFD recommendations in policy and guidance

³⁷⁹ Task Force on Climate-related Disclosures (**TFCD**), 'Overview' (March 2020, Bloomberg) 7.

³⁸⁰ TFCD, 'About'.

³⁸¹ TFCD, '<u>Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures</u>' (June 2017) 11.

³⁸² Ibid 12.

³⁸³ See discussion in Allens Linklaters, 'Targeting net zero: A climate change <u>guide</u> for legal and compliance teams in Australia', May 2020 11.

³⁸⁴ TFCD, 'Guidance on Scenario Analysis for Non-Financial Companies' (October 2020).

³⁸⁵ Ibid.

³⁸⁶ Ibid.

³⁸⁷ TFCD, 'Overview' (March 2020, Bloomberg) 18, quoting Christian Thimann, TCFD Vice Chair and CEO and Chairman of the Management Board, Athora Germany, February 2020.

 ³⁸⁸ TFCD, '2020 Status Report' (October 2020) 2.
 ³⁸⁹ United Nations Environment Programme Finance Initiative and United Nations Global Compact, 'Principles for Responsible Investment' (2021).

³⁹⁰ Allens Linklaters, 'Targeting net zero: A climate change <u>guide</u> for legal and compliance teams in Australia', May 2020 11.

and moving towards requiring TCFD disclosures through legislation and regulation.³⁹¹ In June 2021, the G7 endorsed a move towards 'mandatory climate-related financial disclosures that provide consistent and decision-useful information for market participants' based on the TCFD framework.³⁹² This prompted speculation about imminent global support for mandatory disclosure.³⁹³

- 2.40 In July 2021, G20 Finance Ministers and Central Governors committed to promoting disclosure that built on the TCFD recommendations.³⁹⁴ As well as welcoming and committing to address aspects of broader FSB reports regarding climate-related financial stability risks, they committed to working to promote the implementation of disclosure requirements or guidance, building on the TCFD Framework, in line with domestic regulatory frameworks, to pave the way for future global coordination efforts, taking into account jurisdictions' circumstances, aimed at developing a baseline global reporting standard. They further welcomed the work programme of the International Financial Reporting Standards Foundation (IFRSF) to develop a baseline global reporting standard under robust governance and public oversight, building upon the TCFD frameworks and the work of sustainability standard-setters, involving them and consulting with a wide range of stakeholders to foster global best practices³⁹⁵ (discussed further below).
- 2.41 In Australia, the then federal Treasurer, the Hon Josh Frydenberg MP, made a speech to the Australian Industry Group in Melbourne in September 2021, in which he underlined the G20 Finance Ministers' and Central Governors' commitments to build on the TCFD recommendations.³⁹⁶ With respect to Australia's response, he stated that Government regulators had focused on the disclosure of material financial risks, and promoting a best-practice framework following these TCFD recommendations. In particular, he indicated that:
 - ASIC had been working to establish clear reporting frameworks to ensure disclosure of material risks so the market is informed and investors can make decisions with confidence. Australian businesses were responding, with an estimated 78 per cent of ASX companies acknowledging climate change as a business risk in 2020, and 58 per cent drawing on the TCFD framework in their reporting;³⁹⁷ and
 - APRA had also been developing guidance on governance, risk management and vulnerability assessments for Australia's largest financial institutions, to assist them to effectively assess and manage any material climate risks that they faced.
- 2.42 Some of these shifts by ASIC and APRA are further discussed below.
- 2.43 In his speech, the then Treasurer further welcomed the new initiative by the IFRSF to develop a baseline global reporting standard for climate risk. He noted that the development of new global standards would be particularly important to developing a consistent, comparable global framework for disclosure that built on existing frameworks and could be adopted flexibly to meet the needs of different

³⁹¹ TFCD, '2020 Status Report' (October 2020) 2-3.

³⁹² See, Grant Thornton, 'G7 endorses move towards mandatory TCFD Recommendation' (15 June 2021).

³⁹⁴ G20 Finance Minsters and Central Bank Governors Meetings, *Communique*, Third Finance Ministers and Central Bank Governors Meeting, Venice, 10 July 2021.

³⁹⁵ Ihid

³⁹⁶ Federal Treasurer, the Hon Josh Frydenberg MP, 'Capital markets and the transition to a low emissions future', Address to the Australian Industry Group, Melbourne, 24 September 2021.
³⁹⁷ Ibid, citing a 2020 KPMG study.

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These developments preceded the launch at COP26, by the IFRSF Trustees of the International Sustainability Standards Board (ISSB), of a new standard-setting board with the aim of producing a 'comprehensive global baseline of sustainabilityrelated disclosure standards' which investors and other participants in the capital market can use to obtain information about risks and opportunities in the sustainability area, and to make informed decisions. 399 The standards are intended to cover environmental, social and governance topics on which investors wish to be informed, complementing the TCFD and other existing standards (and developed with input from representatives of the TCFD and other fora). 400 Commentators note that the ISSB's standards will be voluntary, 401 but that there is a 'possibility' that they will be formally endorsed by the International Organization of Securities Commissions (IOSCO). 402 This appears a credible possibility given statements by representatives of the IOSCO at COP26, namely that the IOSCO will assess the ISSB proposals and consider whether they meet investors' needs with a view to endorsing the new standards if they think appropriate. 403 IOSCO's membership regulates more than 95 per cent of the world's securities markets in more than 130 jurisdictions.404

International human rights law

2.45 Australia has ratified a series of international treaties for the protection and promotion of human rights. These include the International Covenant on Civil and Political Rights (ICCPR)⁴⁰⁵ and International Covenant on Economic, Social and Cultural Rights (ICESCR),⁴⁰⁶ as well as the other 'core' human rights treaties.⁴⁰⁷ These relevantly include the rights to life,⁴⁰⁸ self-determination,⁴⁰⁹ development,⁴¹⁰ health,⁴¹¹ food, water, sanitation and housing,⁴¹² work,⁴¹³ social security,⁴¹⁴ an

³⁹⁸ Ibid.

³⁹⁹ See International Financial Reporting Standards Foundation, '<u>International Sustainability Standards Board</u>'.

⁴⁰⁰ International Financial Reporting Standards Foundation, '<u>ISSB: Frequently Asked Questions</u>'; IFRS, '<u>IFRS Foundation announces International Sustainability Standards Board, consolidation with CDSB and VRF, and publication of prototype disclosure requirements' (3 November 2021).</u>

⁴⁰¹ Illona Millar, Andrew Hedges, David Hackett and Beatriz Araujo, 'International: COP26 – Mandatory climate risk disclosures announced amidst focus on finance' (4 November 2021) Baker McKenzie.

402 Ihid.

⁴⁰³ Deloitte, 'Two IOSCO speeches at COP26 focus on new ISSB' (5 November 2021).

⁴⁰⁴ Millar et al.

⁴⁰⁵ International Covenant on Civil and Political Rights (ICCPR), opened for signature 19 December 1966, 999 UNTS 171 (entered into force 23 March 1976).

⁴⁰⁶ International Covenant on Economic, Social and Cultural Rights (ICESCR), opened for signature 16 December 1966, 993 UNTS 3 (entered into force 3 January 1976).

⁴⁰⁷ Eg, *Convention on the Elimination of All Forms of Racial Discrimination*, opened for signature 21 December 1965, 660 UNTS 195 (entered into force 4 January 1969 (**CERD**); *Convention on the Rights of the Child* (**CRC**) opened for signature 20 November 1989, 1577 UNTS 3 (entered into force 2 September 1990); *Convention on the Rights of Persons with Disabilities* (**CRPD**), opened for signature 13 December 2006, 2515 UNTS 3 (entered into force 30 March 2008); *Convention on the Elimination of All Forms of Discrimination Against Women* (**CEDAW**), opened for signature 18 December 1979, 1249 UNTS 13 (entered into force 3 September 1981); *Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment* (**CAT**), opened for signature 10 December 1984, 1465 UNTS 85 (entered into force 26 June 1987).

⁴⁰⁸ ICCPR art 6.

⁴⁰⁹ ICCPR art 1; ICESCR art 1.

⁴¹⁰ ICESCR and ICCPR art 1.

⁴¹¹ See ICESCR article 12.

⁴¹² See ICESCR article 11-12

⁴¹³ See ICESCR arts 6-7.

⁴¹⁴ See ICESCR art 9.

- adequate standard of living, 415 non-discrimination 416 and a range of cultural rights. 417
- 2.46 Australia is bound to comply with and implement these treaties domestically, in good faith. There are three levels of obligations: the obligation to *respect* human rights requires States to refrain from interfering with the enjoyment of human rights; the obligation to *protect* requires States to protect against human rights abuses; and the obligation to *fulfil* requires States to adopt positive measures to facilitate the enjoyment of human rights. 419
- 2.47 The United Nations Declaration on the Rights of Indigenous Peoples (**UNDRIP**)⁴²⁰ is also highly relevant. While not a treaty, many of its provisions are recognised as reflecting customary international law.⁴²¹ Its provisions include rights of self-determination,⁴²² and the requirement that States obtain the free, prior and informed consent of Indigenous peoples before adopting legislative or administrative measures that may affect them.⁴²³
- 2.48 There has been an accelerating acceptance of the danger that climate change poses to the enjoyment of human rights, as well as the role of human rights in measures taken to mitigate and adapt to climate change. The Paris Agreement preamble emphasises that parties should, in taking climate action:
 - ...respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity...⁴²⁴
- 2.49 The United Nations human rights mechanisms include the Human Rights Council (**HRC**) and its subsidiary bodies, the special procedure mechanisms⁴²⁵ and the universal periodic review, as well as the human rights treaty bodies. Across these bodies, along with the OHCHR, there has been a significant and increasing recognition of the link between human rights and climate change (and more

⁴¹⁵ See ICESCR art 11.

⁴¹⁶ See ICCPR arts 2-3, 26.

⁴¹⁷ See ICCPR articles 1, 27; ICESCR articles 1(1), 3, 6(2), 15.

⁴¹⁸ Article 26 of the Vienna Convention on the Law of Treaties, opened for signature 23 May 1969, 1155 UNTS 331 (entered into force 27 January 1980).

⁴¹⁹ Law Council of Australia, HR Policy [18].

⁴²⁰ GA Res 61/295, UN GAOR, 61st sess, 107th plen mtg, Agenda Item 68, Supp No 49, UN Doc A/RES/61/295 (2 October 2007) annex (**UNDRIP**).

⁴²¹ International Law Association, *Rights of Indigenous Peoples*, 75th Conference, ILA Resolution No 5/2012 (30 August 2012); Federico Lenzerini, 'Implementation of the UNDRIP around the world: achievements and future perspectives' (2019) 23 *International Journal of Human Rights* 51. See also Adam McBeth, Justine Nolan and Simon Rice, *The International Law of Human Rights* (Oxford University Press, 2011) 456.

⁴²³ UNDRIP art 19.

⁴²⁴ Paris Agreement preamble. The importance of the Paris Agreement and UNFCCC, with respect to the risks posed by climate change to specific human rights, is also made clear in broader commentary. For example, the World Health Organization (**WHO**) has described the Paris Agreement as 'the strongest public health agreement of the century'. The organisation has estimated that if the goals of the Paris Agreement are met, approximately one million lives per year could be saved worldwide by just reductions in air pollution. The WHO also notes that health is a 'key element in the UNFCCC, namely in articles 1 and 4.1.f (WHO, 'COP24 Special report: Health & Climate Change' (Report, 3 December 2018) 27). Hunger is specifically addressed in the preamble to the Paris Agreement, which recognises that food production systems are uniquely vulnerable to the impacts of climate change, and links action on climate change to 'safeguarding food security and ending hunger'.

⁴²⁵ See OHCHR, 'Frequently Asked Questions on Human Rights and Climate Change', <u>Factsheet</u> No 38, 2021, 69, outlining the special procedure mechanisms that have addressed climate change in their work.

- broadly, the link between human rights and the environment), through a series of resolutions, 426 concluding observations, 427 reports and activities on the subject, 428 advocating for a human rights-based approach to climate change. 429
- 2.50 In the course of reporting to the United Nations Committee on the Rights of the Child (**UNCROC**) on actions to give effect to its obligations under the Convention on the Rights of the Child (**CROC**), the Australian Government submitted that '[a]s a matter of international law, the [CROC] does not extend to include a general right to the environment or protection against climate change'. The UNCROC reported that it was 'very concerned' with that position, emphasising that 'the effects of climate change have an undeniable impact on children's rights'. 431
- 2.51 The Secretary General of the UN has stated that 'the climate crisis is the biggest threat to our survival as a species and is already threatening human rights around the world. The OHCHR has stated that:

Climate change threatens the effective enjoyment of a range of human rights including those to life, water and sanitation, food, health, housing, self-determination, culture and development. States have a human rights obligation to prevent the foreseeable adverse effects of climate change and ensure that those affected by it, particularly those in vulnerable situations, have access to effective remedies and means of adaptation to enjoy lives of human dignity.⁴³³

2.52 The OHCHR has synthesised work occurring across multiple UN human rights mechanisms on climate change in recent documents, 434 highlighting that:

2008).

26/27 (July 2014), Resolution 18/22 (September 2011), Resolution 10/4 (March 2009), Resolution 7/23 (March

⁴²⁶ Eg, see Resolution 44/7 (July 2020), Resolution 42/21 (July 2019), Resolution 38/4 (July 2018), Resolution 35/20 (July 2017), Resolution 32/33 (July 2016), Resolution 29/15 (July 2015), Resolution 26/27 (July 2014), Resolution 18/22 (September 2011), Resolution 10/4 (March 2009), Resolution 7/23 (March 2008).

427 Eg, see Committee on the Elimination of Discrimination against Women concluding observations (CEDAW/C/THA/CO/6-7, CEDAW/C/BRB/CO/5-8 and CEDAW/C/NOR/CO/9); Committee on the Rights of the Child (CROC) concluding observations (CRC/C/MWI/CO/3-5, CRC/C/VCT/CO/2-3, CRC/C/MNG/CO/5 and CRC/C/AUT/CO/5-6) and General Comment No 15 (2013) (CRC/C/TUV/CO/2-5, CRC/C/COK/CO/2-5 and CRC/C/FSM/CO/2), Human Rights Committee General Comment No 36 (right to life) (CCPR/C/CPV/CO/1/ADD.1), Committee on the Rights of Persons with Disabilities concluding observations (CRPD/C/GTM/CO/1, CRPD/C/BOL/CO/1, CRPD/C/HND/CO/1 and CRPD/C/PAN/CO/1) and the issuance by five treaty bodies of a joint statement in relation to the Climate Action Summit in 2019 (HRI/2019/1). See also, the resolution by the CROC on 4 June 2021 to prepare a General Comment on 'Children's rights and the environment with a special focus on climate change' to 'provide authoritative guidance to the governments of the 196 countries that have ratified the Convention on the Rights of the Child', and to 'serve as an impetus for global-level change and as a powerful tool for children and young people as well as their advocates to hold governments and other relevant actors accountable: Office of the High Commissioner UNHR, 'The UN Committee on the Rights of the Child commits to a new General Comment on Children's Rights and the Environment with a Special Focus on Climate Change' (Media Release, June 2021). 428 Eg, for the HRC, see <u>Resolution 44/7</u> (July 2020), <u>Resolution 42/21</u> (July 2019), <u>Resolution 38/4</u> (July 2018), <u>Resolution 35/20</u> (July 2017), <u>Resolution 32/33</u> (July 2016), <u>Resolution 29/15</u> (July 2015), <u>Resolution 29/15</u>

⁴²⁹ OHCHR, 'OHCHR and climate change', online.

⁴³⁰ Australian Government, 'List of issues in relation to the combined fifth and sixth reports of Australia – Addendum - Replies of Australia to the list of issues' to the United Nations Committee on the Rights of the Child (UNCROC), CRC/C/AUS/Q/5-6/Add.1, 28 June 2019 [58].

⁴³¹ UNCROC, 'Concluding observations on the combined fifth and sixth periodic reports of Australia', CRC/C/AUS/CO/5-6, 1 November 2019 [40].

⁴³² Secretary-General, 'The highest aspiration: a call to action for human rights', remarks made to the Human Rights Council on 24 February 2020.

⁴³³ OHCHR, 'OHCHR and climate change' (online).

⁴³⁴ See eg, OHCHR, 'Frequently Asked Questions on Human Rights and Climate Change', <u>Factsheet</u> No 38, 2021; OHCHR, 'Key Messages on Human Rights and Climate Change' (undated).

Climate change impacts, directly and indirectly, an array of internationally guaranteed human rights. States have an affirmative obligation to take effective measures to prevent and redress these climate impacts, and therefore, to mitigate climate change, and to ensure that all human beings have the necessary capacity to adapt to the climate crisis.⁴³⁵

- 2.53 It outlines that the negative impacts of climate change are disproportionately felt by persons and communities who are already in a disadvantageous situation, including Indigenous persons, women, children, migrants, persons with disability, the poor and older persons. People occupying and relying on low-lying coastal lands, tundra, Arctic ice, arid lands and other delicate ecosystems face the greatest threats. The OHCHR advocates for urgent and ambitious climate change mitigation and adaptation, as well as a rights-based approach to climate action. This includes effective international cooperation based on the principles of equity, accountability, inclusiveness, transparency, equality and non-discrimination.
- 2.54 The OHCHR states that as part of their legal obligations to respect, protect, promote, and fulfil all human rights, States are obliged to prevent foreseeable harms such as those caused by climate change.⁴³⁷ That is, they must:
 - mitigate climate change and prevent its negative human rights impacts;
 - ensure that all persons have the necessary capacity to adapt to climate change;
 - ensure accountability and effective remedy for human rights harms caused by climate change;
 - mobilise maximum available resources for sustainable, human rights-based development;
 - cooperate with other states;
 - ensure equity in climate action;
 - quarantee that everyone enjoys the benefits of science and its applications;
 - protect human rights from business harms;
 - guarantee equality and non-discrimination; and
 - ensure meaningful and informed participation. 438
- 2.55 A 2009 OHCHR report⁴³⁹ stopped short of determining whether the serious impacts of climate change for human rights could be legally characterised as human rights violations, noting causation obstacles. However, more recently, the OHCHR has underlined its view that accountability and effective remedies for human rights

⁴³⁵ OHCHR, 'Key Messages on Human Rights and Climate Change' (undated).

⁴³⁶ OHCHR, 'Frequently Asked Questions on Human Rights and Climate Change', <u>Factsheet</u> No 38, 2021 19. ⁴³⁷ Ihid.31.

⁴³⁸ Ibid 31-36.

⁴³⁹ Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights, 15 January 2009, A/HRC/10/61 (the **2009 UN Report**), available at https://documents-dds-ny.un.org/doc/UNDOC/GEN/G09/103/44/PDF/G0910344.pdf?OpenElement (accessed on 15 February 2019)

harms caused by climate change must be ensured, stating that:

The Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights and other human rights instruments require States to guarantee effective remedies for human rights violations. Climate change and its impacts, including sea-level rise, extreme weather events and droughts, have already inflicted human rights harms on millions of people. For States and communities on the front line, survival itself is at stake. Those affected, now and in the future, must have access to meaningful remedies, including judicial and other redress mechanisms. The obligations of States in the context of climate change and other environmental harms extend to all rights holders and to harm that occurs both inside and beyond boundaries. States should be accountable to rights holders for their contributions to climate change, including for failure to adequately regulate the emissions of businesses under their jurisdiction regardless of where such emissions or their harms actually occur.⁴⁴⁰

- 2.56 There are also recent indications that treaty bodies may be prepared to make such findings, although this is not a 'given' conclusion. This is discussed in the **Appendix** (Human Rights United Nations Treaty Communications).
- A significant development occurred in October 2021, when the HRC adopted a 2.57 resolution (HRC Resolution) recognising the right to a clean, healthy and sustainable environment as a human right that is important for the enjoyment of human rights.441 The HRC Resolution notes that the right to a clean, healthy and sustainable environment is related to other rights and existing international law. 442 It affirms that the promotion of the human right to a clean, healthy, and sustainable environment requires the full implementation of the multilateral environmental agreements under the principles of international environmental law. 443 The resolution further encourages states to undertake various actions, including building capacity to protect the environment in order to fulfil human rights obligations and commitments, to share good practices in fulfilling human rights obligations relating to the enjoyment of a clean, healthy and sustainable environment, to develop policies to secure such enjoyment, and to continue to take into account human rights obligations and commitments relating to such enjoyment.444
- 2.58 The HRC Resolution's preamble specifically recognises that the impact of climate change⁴⁴⁵ and the resulting loss of biodiversity and decline in services provided by ecosystems, interferes with the enjoyment of a clean, healthy and sustainable environment, and that environmental damage has negative implications, both direct, and indirect for the effective enjoyment of all human rights.⁴⁴⁶ Further, it considers that:

... environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats

OHCHR, 'Frequently Asked Questions on Human Rights and Climate Change', <u>Factsheet</u> No 38, 2021, 32.
 The human right to a safe, clean, healthy and sustainable environment, HRC Res 48/13, UN Doc A/HRC/48/L.23/Rev.1 (8 October 2021) (HRC Resolution) [1].

⁴⁴² Ibid [2].

⁴⁴³ Ibid [3].

⁴⁴⁴ Ibid [4].

⁴⁴⁵ Along with other key factors: unsustainable management and use of natural resources, the pollution of air, land and water, the unsound management of chemicals and waste: Ibid, Preamble.

⁴⁴⁶ Ibid.

to the ability of present and future generations to enjoy human rights, including the right to life.⁴⁴⁷

- 2.59 The HRC Resolution further invites the UN General Assembly to consider the matter. While the HRC Resolution is not binding on Australia, it nevertheless signifies continuing evolution and gradual crystallisation of consensus on this matter.
- 2.60 At the same time, through a second resolution,⁴⁴⁸ the HRC also increased its focus on the human rights of climate change by establishing a Special Rapporteur dedicated specifically to that issue.

Climate-related displacement and international law

- 2.61 The threat of climate change and its consequences for large-scale displacement have been of substantial concern in international fora for many years. The UN Refugee Agency, the UNHCR, has described climate change as a risk multiplier, driving displacement and protection needs around the world. It highlights that the impacts of climate change are disproportionately experienced by people in vulnerable situations, and that displaced and stateless persons, including women, children, older persons, people with disabilities, LGBTIQ+ people and Indigenous peoples, are among those in the greatest need for protection.
- 2.62 The Refugee Convention⁴⁵¹ depends on the definition of a refugee, which requires a 'well-founded fear of being persecuted'⁴⁵² for specified reasons of race, religion, nationality, political opinion or membership of a particular social group. These do not include environmental factors. However, and as the Special Advisor on Climate Action of the UNHCR has confirmed, where the effects of climate change interact with violence, conflict or persecution that leads to displacement, individuals may be refugees under the Convention.⁴⁵³
- 2.63 Furthermore, non-refoulement obligations also apply in a broader context than the Refugee Convention. International human rights law precludes countries from sending people to places where they face a real risk of being arbitrarily deprived of their life, tortured, or exposed to other cruel, inhuman or degrading treatment or punishment, among other things. The Human Rights Committee has observed in its recent *Teitiota* communication (discussed in the **Appendix**) that:

⁴⁴⁷ Ihid

⁴⁴⁸ Mandate of the Special Rapporteur on the promotion and protection of human rights in the context of climate change, HRC Res 48/14, UN Doc A/HRC/48/L.27 (8 October 2021).

⁴⁴⁹ Barney Thompson, Climate change and displacement, 15 October 2019 (UNHCR online publication). ⁴⁵⁰ UNHCR, 'Strategic Framework for Climate Action' (2021) 4.

⁴⁵¹ Convention Relating to the Status of Refugees, opened for signature 28 July 1951, 189 UNTS 150 (entered into force 22 April 1954), as amended by the Protocol relating to the Status of Refugees, opened for signature 31 January 1967, 606 UNTS 267 (entered into force 4 October 1967) (**Refugee Convention**). ⁴⁵² Refugee Convention art 1A(2).

⁴⁵³ Tim Ğaynor, '<u>Climate change</u> is the defining crisis of our time and it particularly impacts the displaced' (30 November 2020) *UNHCR*.

⁴⁵⁴ For further commentary on this, see UNHCR, '<u>Strategic Framework for Climate Action</u>' (2021) 8-9.
⁴⁵⁵ Eg, ICCPR, arts 6 and 7. There is a general legal obligation imposed on States Parties to the ICCPR not to extradite, deport, expel or otherwise remove a person from their territory when there are substantial grounds for believing that there is a real risk of irreparable harm such as that contemplated in articles 6 and 7: HRC, *General Comment No 31: The nature of the general legal obligation imposed on States Parties to the Covenant*, 80th sess, Un Doc CCPR/C/21/Rev.1/Add.13 (29 March 2004). Article 3 of the CAT also prevents States Parties from refoulement of persons to another State where there are substantial grounds for beliefing that the person would be subject to torture. See also articles 6 and 7 of the CRC.

⁴⁵⁶ Human Rights Committee, Views: Communication No 2728/2016, 127th sess, UN Doc CCPR/C/127/D/2728/2016 (24 October 2019) ('New Zealand v Teitiotia').

Both sudden-onset events, such as intense storms and flooding, and slow-onset processes, such as sea level rise, salinization and land degradation, can propel cross-border movement of individuals seeking protection from climate change-related harm. The Committee is of the view that without robust national and international efforts, the effects of climate change in receiving States may expose individuals to a violation of their rights under articles 6 or 7 of the Covenant, thereby triggering the non-refoulement obligations of sending States. Furthermore, given that the risk of an entire country becoming submerged under water is such an extreme risk, the conditions of life in such a country may become incompatible with the right to life with dignity before the risk is realized.457

- While the HRC communication was not in favour of the author of the complaint, 458 2.64 the communication appears to leave the door ajar for future climate change-related claims for protection. 459 The UNHCR's Special Advisor on Climate Action has described the outcome as a 'huge acknowledgement' of the potential future need for international protection as a result of the impacts of climate change; it is also cited in the UNHCR's Strategic Framework for Climate Action. 460
- 2.65 In terms of gauging possible developments in the law, the UNHCR's Strategic Framework incorporates an objective of guiding the interpretation and application of relevant legal and policy frameworks in the context of climate change and disaster-induced displacement. This includes supporting States to develop and implement institutional policy frameworks to prevent and respond to displacement and to facilitate solutions to internal displacement due to disaster. 461 It does not necessarily prioritise the development of new treaties, given its emphasis on the interpretation and application of existing legal and policy frameworks, and associated fora.462
- For example, it has identified that, amongst other frameworks, the (non-binding) 2.66 Global Compact on Refugees⁴⁶³, adopted by the UN General Assembly on 17 December 2018 effectively acknowledges the reality of increasing displacement in the context of disasters, environmental degradation and climate change, and provides a basis for measures to tackle the many challenges arising in this area. This provides for the four yearly Global Refugee Forum, which is envisioned to provide predictable and sustainable support to reach the Global Refugee Compact's goals.464
- 2.67 The UNFCCC relevantly makes some provision for developed countries to assist in

⁴⁵⁸ The author did not establish that he faced a risk of an imminent, or likely, risk of arbitrary deprivation of life on return to Kiribati. Further, the Government of Kiribati had taken steps to address the effects of climate change, and the time frame of 10 to 15 years for sea level rise to render Kiribati uninhabitable could allow for intervening acts by Kiribati, with the assistance of the international community, to take affirmative measures to protect and where necessary, relocate its population: Ibid [9.6], [9.12].

459 Camille Malafosse and Domenico Zipoli, "Climate refugees": an historic decision of the UN Human Rights

Committee?', The Conversation (France) 12 February 2020.

⁴⁵⁷ Ibid [9.11].

⁴⁶⁰ Tim Gaynor, 'Climate change is the defining crisis of our time and it particularly impacts the displaced' (30 November 2020) UNHCR; UNHCR, 'Strategic Framework for Climate Action' (2021) 8.

⁴⁶¹ UNHCR, 'Strategic Framework for Climate Action' (2021) 9. ⁴⁶² Ibid 3.

⁴⁶³ Office of the United Nations High Commissioner for Refugees, GA Res 73/151, UN Doc A/RES/73/151 (17 December 2018).

⁴⁶⁴ While Australia supported the Global Refugee Compact, it abstained from supporting the Global Compact for Safe, Orderly and Regular Migration, GA Res 73/195, UN Doc A/RES/73/195 (adopted 19 December 2018). This latter compact is also relied upon by the UNHCR Strategic Framework as part of the legal and policy framework which underpins climate and displacement responses.

meeting the needs of developing countries which arise from climate change or from measures responding to it, particularly in the case of small island countries, those with low-lying coastal areas, or those with a variety of other geographical or environmental fragilities or vulnerabilities. Further acute concerns presenting for threatened nations in situations of dire urgency, such as the Pacific Island nations, include the unsolved problem as to how a nation which has lost its territory can somehow retain its identity as a nation.

Business and human rights

- 2.68 While governments have the primary duty to protect and promote human rights, businesses also have a distinct responsibility to respect human rights. In this context, the United Nations Guiding Principles on Human Rights (**UNGPs**)⁴⁶⁶ are relevant.
- 2.69 While they do not create new international law obligations, the UNGPs provide a recognised global standard for preventing and addressing the risk of adverse human impacts linked to business activity. The UNGPs comprise three pillars:
 - the State duty to protect against human rights abuses by third parties, including business, through appropriate policies, regulation, and adjudication;
 - the corporate responsibility to respect human rights, which means to avoid infringing on the human rights of others and addressing adverse human rights impacts with which they are involved; and
 - the need for greater access by victims to effective remedies, judicial and nonjudicial.
- 2.70 The OHCHR has cited the UNGPs as the source of States' responsibility 'to take adequate measures to protect all persons from human rights harms caused by businesses' and that of businesses to 'protect human rights from business harms' related to climate change. 467 It argues that it is 'widely accepted that the business responsibility to respect human rights and environmental rights includes the responsibility to identify, prevent, mitigate, and account for impacts related to climate change', again citing the UNGPs (and the Organisation for Economic Cooperation and Development Guidelines for Multinational Enterprises 468 (OECD Guidelines)). 469
- 2.71 In at least some international jurisdictions, domestic courts are being asked to enforce climate change related obligations in line with the frameworks provided in these documents (albeit, in conjunction with other frameworks). As at the date of this paper, it would be unlikely for Australian businesses to be similarly held to account, given that the UNGPs are neither a treaty nor incorporated into domestic

⁴⁶⁵ UNFCCC art 4, Commitment 8.

⁴⁶⁶ The Guiding Principles were developed by the Special Representative of the Secretary-General, on the issue of human rights and transnational corporations and other business enterprises. They were annexed to his final report to the United Nations Human Rights Council (UN Doc A/HRC/17/31) and endorsed by the Human Rights Council in its resolution 17//4 of 16 June 2011.

⁴⁶⁷ OHCHR, 'Submission of the Office of the High Commissioner for Human Rights to the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change' message 8.

⁴⁶⁸ OECD Guidelines for Multinational Enterprises (2011 edition), OECD Publishing.

⁴⁶⁹ 'The business and human rights dimension of climate change: addressing access to remedy' (9 December 2019, Concept note) *COP 25 Side Event, OCHR and OECD organisers*

https://mneguidelines.oecd.org/Concept-note-COP25-The-business-and-human-rights-dimension-of-climate-change.pdf.

⁴⁷⁰ Millieudefensie et al v Royal Dutch Shell C/09/571932 / HA ZA 19-379 cls 4.4.11-4.4.14.

- law. However, they may be increasingly viewed as a standard against which business conduct may be assessed.
- 2.72 The OECD Guidelines are not legally binding, but contain multiple recommendations agreed by governments and directed towards multinational enterprises regarding responsible business conduct, including with respect to the environment. ⁴⁷¹ The Australian National Contact Point (ANCP) promotes the OECD Guidelines in Australia and provides conciliation services to resolve complaints. At least one ANCP complaint has been brought regarding alleged climate changerelated breaches (see Climate Change Litigation discussion below).
- 2.73 The principle of 'taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities', as described in the Paris Agreement Preamble and reflected above, is also relevant in the business and human rights context. The ILO has affirmed that a 'just transition for all towards an environmentally sustainable economy needs to be well managed and contribute to the goals of decent work for all, social inclusion and the eradication of poverty'. 472

Future global directions?

International peace and security

- 2.74 In 2011, the UN Security Council (Security Council) adopted a Presidential Statement naming climate change as a relevant potential source of aggravation of international peace and security. Members of the Security Council have also increasingly used a range of informal and formal Security Council fora to highlight their concerns on the subject. As these developments have occurred in the most powerful UN body, whose decisions must, under the Charter of the UN, be accepted and carried out by UN Member States, 473 they raise the prospect of a potential future decision by the Security Council which may impose new international obligations on Member States, including Australia, with respect to climate and security.
- Traditionally, ideas of international peace and security as defined and maintained 2.75 by the Security Council have focussed on a lack of violent conflict. 474 It has been recognised that the relationship between climate change and conflict is not straightforward. 475 However, in 2011, the Security Council adopted a presidential statement which noted that while the UNFCCC remains the 'key instrument' to address climate change:

⁴⁷¹ OECD Guidelines, Part I, Chapter VI 'Environment'. These include establishing and maintaining robust environmental management systems and environmental performance objectives or targets, and monitoring these; being open about environmental, health and safety effects of the enterprise's activities, and undertaking appropriate consultation with communities affected; taking into account the environmental, health and safety effects of products and services over their life cycle and preparing environmental impact assessments when effects might be significant; making cost-effective investment to reduce environmental damage from products; maintaining contingency plans for preventing, mitigating, controlling and reporting environmental and health damage; continually seeking to improve environmental performance. Other relevant areas of the OECD Guideilnes include Chapter II concerning 'Disclosure', and Chapter VII concerning Consumer Interests'. ⁴⁷² International Labour Organization, Guidelines for a just transition towards environmentally sustainable economies and societies for all, (2015) 4[4].

⁴⁷³ See UN Charter arts 24-25; Karin Landgren et al, 'The UN Security Council and Climate Change' (Research Report, June 2021) Security Council Report 3-4 ('UN Security Council and Climate Change'); United Nations Association of Australia, 'Australia and UN Security Council'.

⁴⁷⁴ See UN Charter art 24; Karin Landgren et al: ibid 3.

- existing threats to international peace and security may be aggravated 'in the long run' by climate change;
- there may arise 'security implications of loss of territory of some States caused by sea-level rise', particularly in 'small low-lying island States'; and
- it is important to have 'conflict analysis and contextual information' on possible security implications of climate change where these issues drive conflict, challenge 'the implementation of Council mandates [in relation to the maintenance of international peace and security] or endanger the process of consolidation of peace.' Such contextual information should be included in reports by the Secretary-General – while the UNFCCC remains the 'key instrument' to address climate change.
- 2.76 What has been described as a 'significant institutional architecture' has, in the years since 2018, also been established to support the work of the Security Council and the UN more broadly on the relationship between climate change and security. In various Security Council settings, members have described climate change as a 'threat multiplier' which puts pressure on resources, environmental degradation and existing conflict risks. In open debates as well as Arria-formula (informal) Security Council meetings, the impacts of climate change have been linked to other matters on the Security Council's agenda, including women and youth, as well as 'peacekeeping, peacebuilding and sustaining peace'.
- 2.77 In June 2021, the Security Council Research Report raised the possibility that ongoing debates between members regarding the role for the Council in combating the acknowledged threats of climate change⁴⁸¹ may result in a further presidential statement or thematic resolution on the topic of climate change and security.⁴⁸² The dynamics of the Council's membership make this uncertain, particularly with respect to permanent members with veto power. The active steps recently taken by the Biden administration to reverse the United States' formerly more reserved position on the part to be played by the Security Council in this domain have been described as a particularly significant change in recent Council dynamics.⁴⁸³ However, China, India and Russia as well as Brazil, which will assume a seat on the Council in 2022 remain less supportive of its role in this area.⁴⁸⁴
- 2.78 UN Secretary-General António Guterres has spoken publicly on several occasions about security concerns with the climate crisis. At the Security Council's February 2021 debate, he described the climate emergency as 'the defining issue of our time' and noted the need for 'preparations for the escalating implications of the climate crisis for international peace and security'. A number of other UN bodies with security-related mandates have also spoken and/or embarked on projects on

⁴⁷⁶ Impact of climate change, United Nations Security Council, 6587th mtg, Resumption 1, UN Doc S/PV.6587 (20 July 2011) 6, 32.

⁴⁷⁷ See UN Security Council and Climate Change 2.

⁴⁷⁸ Ibid 7.

⁴⁷⁹ Ibid 2.

⁴⁸⁰ Ibid. For more detail, see the Appendix.

⁴⁸¹ Ibid 12.

⁴⁸² Ibid.

⁴⁸³ Ibid.

⁴⁸⁴ Ibid 13-14.

⁴⁸⁵ Ibid 10-11.

the interaction between climate change and security. 486

Oslo Principles and Enterprise Principles

- 2.79 In 2015, legal experts in international law, human rights law, environmental law, and other law produced a document with the aim of clarifying States' international legal obligations to protect the environment (and means of meeting them). The Oslo Principles seek to articulate both the current obligations of all States and enterprises to defend and protect the Earth's climate; and their basic means of meeting those obligations, deriving from 'broad fundamental principles and a widerange of well-established law'. The Oslo Principles characterise action on climate change as a 'moral and legal duty'.
- 2.80 Central to the Oslo Principles is the precautionary principle, requiring that GHG emissions be reduced to prevent against the threats of climate change that can still be avoided, with the levels of reduction based on the credible worst case scenario. States and enterprises must take measures to ensure that the global average surface temperature increase do not exceed pre-industrial temperature by more than two degrees Celsius. States must accept the jurisdiction of independent courts or tribunals in adjudicating their compliance.
- 2.81 The Oslo Principles are not a treaty and are not, therefore, formally binding. However, the Principles have recognised significance as an expression of agreement by highly respected experts in their field, and have been described as 'interpretive' in the sense that they are based on binding obligations. ⁴⁹³ It has been recognised that interpretive law has the potential to develop and clarify international law norms and even if the authors of the Principles acknowledged at the time of publication that they contain obligations which currently exceed the 'international 'consensus', ⁴⁹⁴ this may not remain the case.
- 2.82 The PCOEs, also developed by global legal experts including Chief Justice Brian Preston of the New South Wales Land and Environment Court (**NSW LEC**) and now in their second edition, ⁴⁹⁵ offer a 'follow-up project' to the Oslo Principles by proposing that certain obligations apply to enterprises in addressing climate change. ⁴⁹⁷ The PCOEs seek to fill the gap in international discussions about the

⁴⁸⁶ These include the Department of Political and Peacebuilding Affairs (**DPPA**) (see, DPPA, 'Addressing the Impact of Climate Change on Peace and Security' and DPPA, 'Strategic Plan 2020-2022' 11, 15); and the UN Regional Working Group on climate change, environment, security and development in West Africa: Kouider Zerrouk, 'In Partnership with IOM, UNFCCC and UNEP, UNOWAS Launches UN Regional Working Group on Climate Change, Environment, Security and Development in West Africa' (Media Release, 11 June 2021) *Relief Web* <.

⁴⁸⁷ Oslo Principles.

⁴⁸⁸ Ibid 1.

⁴⁸⁹ Ibid 2.

⁴⁹⁰ Oslo Principles Principle 1.

⁴⁹¹ Ibid, Principle 6

⁴⁹² Ibid, Principle 25.

⁴⁹³ Satvindar Nagra, 'The Oslo Principles and Climate Change Displacement: Missed Opportunity or Misplaced Expectations?' (1 April 2017) *Carbon & Climate Law Review* (2) 123.

⁴⁹⁴ Ibid, citing Daniel Thürer, *Soft Law* (2009) Oxford Public International Law [37]; Oslo Principles Preamble at 15.

Founding members (some also featuring as authors or editors) are: Thomas Pogge, Brian Preston, James Silk, Jaap Spier, Elisabeth Steiner, Philip Sutherland and Daniël Witte: PCOEs' 'Climate Principles for Enterprises: Members of the Expert Group'. For commentary on the authority of this group of experts, see, Satvindar Nagra, 'The Oslo Principles and Climate Change Displacement: Missed Opportunity or Misplaced Expectations?' (1 April 2017) Carbon & Climate Law Review (2) 122, citing Margaret Young, 'Climate Change Law (LAWS70293)' (Lecture delivered at Melbourne Law School, University of Melbourne, 11 May 2016).
 Glimate Principles for Enterprises, 'Climate Principles for Enterprises: About the First Edition'.

'responsibilities and liabilities' of companies in meeting commitments made under the Paris Agreement. They are presented as a guide to enterprises and their advisers regarding both their existing obligations and obligations as the law 'will likely develop'. These are frequently based upon hard or soft law, with the French law of 'due diligence obligations of parent companies' offering an 'overarching legal basis'. 500

- 2.83 The PCOEs set the GHG reduction obligations of enterprises generally, then consider duties which arise in more specific circumstances, including for buyers of fossil fuels, in outsourcing, for insurers and accountants, and for 'attorneys'. The relevant principle for attorneys requires them: 'to investigate the material climate change consequences of any activity in which they are engaged and inform their clients about these consequences'. The commentary attached to the PCOEs justifies this on the basis that attorneys, alongside 'accountants' and 'credit rating agencies', 'play an important role in present-day society'. 503
- 2.84 The PCOEs are not binding on Australia nor reflected in its domestic law, and have been created drawing on certain legal frameworks which currently have no Australian counterpart eg, French due diligence laws. However, the commentary to the PCOEs cites developments in Australian case law and regulation,⁵⁰⁴ and the PCOEs have been described as a 'practical and implementable blueprint for enterprises' by Dr Lisa Benjamin.⁵⁰⁵
- 2.85 The PCOEs have been endorsed by a range of eminent jurists, including a number of current and former Judges and numerous Australian legal academics, and have been cited by the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment. In this context, they may be influential in shaping expectations of the broader global and Australian legal professions.

Australian domestic legal frameworks

- 2.86 It is clear that Australian domestic legal and regulatory frameworks are changing and adapting to address new problems posed by climate change, and that momentum is building across a range of areas.⁵⁰⁷ However, there are recognised gaps, uncertainties and divergences in these frameworks.
- 2.87 In 2018, Ilona Millar and Sophie Whitehead charted the history and current state of play of climate change law in Australia. They concluded that the lack of stability and certainty characterising the development of climate change law in Australia

⁴⁹⁸ PCOEs, Preface by Gordon Brown xvii; Preface by Jaap Spier xxv.

⁴⁹⁹ Ibid xvii.

⁵⁰⁰ Ibid 71.

⁵⁰¹ Ibid Principles 5, 7, 12, 13, 15.

⁵⁰² Ibid Principle 15, 19.

⁵⁰³ Ibid 284.

⁵⁰⁴ See for example 23, 146, 191 and 225-226;

⁵⁰⁵ See Lisa Benjamin, 'Book Review: Principles on Climate Obligations of Enterprises by the Expert Group on Global Climate Change (2nd edn)' (21 July 2021) *Journal of Energy & Natural Resources Law* 1.

⁵⁰⁶ See, Climate Principles for Enterprises, '<u>Endorsers</u>'. Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment,' (15 July 2019) UN General Assembly, 74th sess, UN Doc A/74/161, 20.

⁵⁰⁷ Note Damien Carrick has observed that from a legal perspective, 'things are moving pretty fast' with respect to climate change: ABC Law Report with Damien Carrick, 'Climate change litigation' (13 July 2021). ⁵⁰⁸ Illona Millar and Sophie Whitehead, 'Climate Change Law in Australia – A History and the Current State of Play' (2018) *Australian Law Journal* 756, 756.

could be attributed to three factors:

- it was an emerging field that required lawmakers to address novel challenges and develop innovative regulations;
- it had become a highly political issue in Australia and there was significant divergence between the major political parties on the solutions to climate change; and
- climate change was a 'super wicked problem' that was multi-disciplinary, cross-sectoral and had complex causes, consequences and solutions.⁵⁰⁹
- 2.88 However, these authors emphasised that the next phase of climate change law would need to offer long-term solutions with significantly higher levels of ambition and predictability. This was necessary in order to increase the effectiveness of such laws in Australia, to enable businesses to plan for a low-carbon future and for Australia to make an equitable contribution to global efforts to prevent dangerous anthropogenic climate change.⁵¹⁰

Federal frameworks

Policy overview

- 2.89 As at the date of this Background Paper, the Australian Government's mitigation response to climate change is set out in *Australia's Long-Term Emissions Reduction Plan* (**Climate Change Plan**),⁵¹¹ which is described as a 'whole-of-economy plan to achieve net zero emissions by 2050' and has as its 'cornerstone' the Technology Investment Roadmap (**Technology Investment Roadmap**).⁵¹² The policies presented in the Climate Change Plan are 'Technology-Led' and principally involve direct action and investment.⁵¹³
- 2.90 The Technology Investment Roadmap is an Australian Government strategy to accelerate development and commercialisation of new and emerging low emissions technologies.⁵¹⁴ More than \$20 billion in government investment in low emissions technologies over the decade to 2030 has been committed to the Roadmap. The Roadmap targets categories for action as follows:
 - priority technologies (eg, ultra low-cost solar, carbon capture and storage and soil carbon and livestock feed supplements, amongst others);
 - enabling infrastructure (that which is 'fundamental' to a low emission economy and a prerequisite for large-scale deployment of low emissions technologies, such as electric vehicle charging and refuelling infrastructure);
 and
 - emerging technologies (those which 'have transformative potential, but require continual monitoring of global learning rates, and research and

⁵⁰⁹ Ibid 765

⁵¹⁰ Ibid

⁵¹¹ DISER, 'Australia's Long-term Emissions Reduction Plan: A whole-of-economy Plan to achieve net zero emissions by 2050' (26 October 2021).

⁵¹² DISER, 'Australia's Long-Term Emissions Reduction Plan' (16 November 2021).

⁵¹³ Ihid 10

⁵¹⁴ See DISER, 'Technology Investment Roadmap: Low Emissions Technology Statement 2021'.

investment trends', such as early-stage technologies to remove carbon dioxide from the atmosphere, and low emissions building materials).⁵¹⁵

- 2.91 Examples of specific emissions reduction policies, many of which are outlined in the Climate Change Plan, include:
 - the National Hydrogen Strategy and National Hydrogen Infrastructure
 Assessment, outlining actions for a clean hydrogen industry that will benefit
 the Australian economy and help other countries transition;⁵¹⁶
 - emissions abatement strategies such as the emissions reduction fund (ERF), which enables voluntary emissions reduction and storage of carbon across the economy;⁵¹⁷
 - new measures in response to the recent 'King Review',⁵¹⁸ such as consultation on a Safeguard Crediting Mechanism to open up opportunities for emissions abatement from large facilities under the Safeguard Mechanism or ERF;⁵¹⁹
 - the Future Fuels and Vehicles Strategy, which outlines the Australian Government's support of reducing transport sector emissions;⁵²⁰
 - the Climate Solutions Package, an additional \$3.5 billion investment package
 which includes the Climate Solutions Fund (to continue the purchase of lowcost abatement through the ERF), energy efficiency measures for homes and
 businesses, a national strategy for electric vehicles, and pumped hydro
 projects; and
 - significant investment in renewable energy projects through Australian Renewable Energy Agency (**ARENA**).
- 2.92 The Australian Government also supports the Climate Active Carbon Neutral Standard (**Climate Active**), against which Australian businesses can certify their actions in respect to voluntary emissions reduction, with certification awarded to businesses and organisations that achieve net zero carbon emissions.⁵²¹ Under the Technology Investment Roadmap, Climate Active is expanding recognition of different kinds of voluntary climate action including matching electricity use with renewables, and using Australian carbon credit units (**ACCUs**) in all offsets in a carbon neutral certification.⁵²²

⁵¹⁵ Including measures announced in the Federal Budget 2021-2022: as discussed later in this section. See ibid, '<u>Emerging technologies</u>'. The Australian Renewable Energy Agency (**ARENA**), the Australian Research Council, Commonwealth Scientific and Industrial Research Organisation (**CSIRO**), Clean Energy Finance Corporation and the Clean Energy Regulator have all been funded to deliver these actions: DISER, '<u>Investing in the research-to-commercialisation pipeline</u>'.

 ⁵¹⁶ DISER, 'Australia's National Hydrogen Strategy'
 COAG Energy Council Hydrogen Working Group (2019).
 517 Australian Government Clean Energy Regulator, 'About the Emissions Reduction Fund' (9 September 2021).

⁵¹⁸ DISER, 'Report of the Expert Panel examining additional sources of low cost abatement', 14 February 2020. Its 16 recommendations cover three broad themes: 1. Enhancing the ERF to encourage greater participation; 2. Incentivising voluntary emissions reductions on a broader scale; and 3. Unlocking the transformative low emissions technologies that businesses need. The Government has accepted in whole or in part 23 recommendations.

 ⁵¹⁹ See DISER, '<u>Safeguard Crediting Mechanism: discussion paper</u>'; DISER, '<u>Emissions Reduction Fund</u>'.
 ⁵²⁰ DISER, '<u>Future Fuels and Vehicles Strategy</u>' (November 2021).

⁵²¹ See Clean Energy Regulator, '<u>About Carbon Markets'</u> (9 September 2021); Climate Active, '<u>What is climate</u> active?'.

⁵²² DISER, 'Emissions Reduction Fund'.

- 2.93 Australia's climate adaptation framework is guided by the *National Climate Resilience and Adaptation Strategy 2021-2025* (**the CRA Strategy**).⁵²³ The Strategy outlines how the Australian Government intends to support national adaptation efforts.⁵²⁴
- 2.94 The CRA Strategy has three objectives: driving investment and action through collaboration, improving climate information and services, and assessing progress and improving over time. 525 Various actions to achieve these objectives are listed, according to the roles and responsibilities of state, territory and local governments, as well as private parties. 526 These include:
 - establishing a National Adaptation Policy Office tasked with coordinating cross-government adaptation and resilience measures and serving as a central point of contact for businesses and communities;⁵²⁷
 - providing access to national climate science and adaptation information to support government, business and communities in managing disaster risks;⁵²⁸ and
 - developing and delivering regular five yearly assessments of national climate impacts and adaptation progress, considering economic modelling and analysis of the costs and benefits of adaptation impacts and efforts.⁵²⁹
- 2.95 The CRA Strategy also establishes a cycle of national assessments, action, monitoring and review for Australia's adaptation response to climate change (including via international engagement).⁵³⁰

Existing legislative architecture

- 2.96 The range of Australian Government policy initiatives outlined above are supplemented and/or administered by a federal legislative architecture addressing climate change, including the following:⁵³¹
 - National Greenhouse and Energy Reporting Act 2007 (Cth) (NGER Act) –
 establishes the National Greenhouse and Energy Reporting Scheme, which
 provides the framework for reporting on GHG emissions, energy production,
 energy consumption and other information to support the Australian
 Government's international treaty obligations and domestic climate programs.
 Entities with GHG emissions above a certain threshold have reporting

⁵²³ See, Australian Government Department of Agriculture, Water and the Environment, 'National Climate Resilience and Adaptation Strategy 2021-2025' (2021).

⁵²⁴ Complementary to the National Recovery and Resilience Agency's work, the National Disaster Risk Reduction Framework and reforms coming out of the Royal Commission into National Natural Disaster Arrangements: Ibid 8.

⁵²⁵ Ibid 7, 14.

⁵²⁶ Ibid 8, 13.

⁵²⁷ Ibid 21.

⁵²⁸ Ibid 29.

⁵²⁹ Ibid 34-35.

⁵³⁰ Ibid 7.

⁵³¹ As noted by Department of Industry, Science, Energy and Resources in its Submission to the Standing Committee on the Environment and Energy regarding the Climate Change (National Framework for Adaptation and Mitigation) Bill 2020 and the Climate Change (National Framework for Adaptation and Mitigation) Consequential and Transitional Provisions) Bill 2020, 23 December 2020.

- obligations under the Act, which also establishes the Safeguard Mechanism applying emission limits to Australia's highest emitting facilities.⁵³²
- Australian National Registry of Emissions Units Act 2011 (Cth) establishes
 the electronic system used to track the location and ownership of Australian
 carbon credit units issued under the ERF.
- Carbon Credits (Carbon Farming Initiative) Act 2011 (Cth) (CFI Act) –
 establishes a framework to credit action to reduce emissions, by issuing
 ACCUs. Credits are issued to projects across the economy, for reducing
 emissions or storing carbon and then can be offered for sale to the
 Commonwealth in bi-annual reverse auctions or sold through the voluntary
 national carbon market.⁵³³ Registered ERF projects must meet eligibility
 criteria, including additionality tests and comply with approved methods.
- Renewable Energy (Electricity) Act 2000 (Cth) encourages the additional generation of electricity from renewable sources, to reduce greenhouse gas emissions from the electricity sector and to ensure that such sources are ecologically sustainable. This includes the Renewable Energy Target (RET) scheme. The RET set a target of 33GWh of renewable energy by 2020, which was achieved.
- Clean Energy Regulator Act 2011 (Cth) establishes the Clean Energy Regulator as a Commonwealth entity with responsibilities for the above four Acts.
- Australian Renewable Energy Agency Act 2011 (Cth) establishes the ARENA, to improve the competitiveness of renewable energy technologies and increase the supply of renewable energy.
- Clean Energy Finance Corporation Act 2012 (Cth) establishes the Clean Energy Finance Corporation as a statutory authority responsible for facilitating increased flows of finance into the clean energy sector.
- Climate Change Authority Act 2011 (Cth) establishes the Australian
 Government CCA, an independent statutory body to provide the Government
 with expert advice on climate change policies, including through reviews of
 the CFI and NGER Acts.

Corporate and financial regulation

2.97 Close consideration is being given to how the existing statutory obligations of corporations and directors, including under the *Corporations Act 2001* (Cth) (Corporations Act), apply in the climate change context – for example, to foresee, mitigate, or adapt to climate change risks, as well duties of disclosure relating to material risks. This follows notable opinions on company directors' duties and climate change by Noel Hutley SC and Sebastian Hartford-Davis,⁵³⁴ reinforcing the need for improved board-level governance of this issue (see litigation trends

⁵³² The Safeguard Mechanism covers Australia's largest emitters (being facilities which emit over 100 000 tonnes of CO2 annually), requiring them to emit at the level of their baseline or less. Select emissions are covered, being some scope 1 emissions: Clean Energy Regulator, 'National Greenhouse and Energy Reporting Coverage' (18 June 2020).

⁵³³ Clean Energy Regulator, 'About Carbon Markets' (17 December 2020).

⁵³⁴ Noel Hutley SC and Sebastian Hartford Davis, 'Climate Change and Directors' Duties', Memorandum of Opinion, 7 October 2016. See also their 2019 supplementary opinion of 26 March 2019.

below).535

- 2.98 Important changes in financial regulation also stem from the TCFD's recommendations as described above. As indicated by the Federal Treasurer's remarks above, Australian regulators have released guidance endorsing the TCFD framework and climate-related risk disclosure more broadly, and signalled that they will be monitoring entities' management of climate change risk by reference to this framework.
- 2.99 For example, ASIC confirmed in 2018 regulatory guidance that a listed entity must disclose any material business risks including, where relevant, climate-related risks⁵³⁶ affecting future prospects in its operating and financial review in accordance with paragraph 229A(1)(c) of the Corporations Act. ASIC recently published updates to clarify its expectations concerning the application of its existing regulatory guidance to the disclosure of climate change-related risks and opportunities.⁵³⁷ It has also strongly encouraged companies to adopt the TCFD recommendations⁵³⁸ finding that reporting on TCFD is 'generally' associated with 'material improvements' in disclosure standards.⁵³⁹ In February 2021, ASIC advised that it had been conducting 'surveillance' of listed companies' governance structures with respect to addressing climate-related risk.⁵⁴⁰
- 2.100 In October 2021, ASIC Commissioner Sean Hughes indicated to the Governance Institute of Australia Fellows Roundtable that ASIC's core messages on climate-related matters remained unchanged from those set out in 2018 under ASIC Report 593, and summarised its guidance as follows:⁵⁴¹
 - Consider climate risk Directors and officers of listed companies need to understand and continually reassess existing and emerging risks that may be applicable to the company's business, including both physical and transitional climate risk.
 - Develop and maintain strong and effective corporate governance Strong governance facilitates better information flows within a company and supports active and informed engagement and oversight by the board in identifying and managing risk. Boards should consider if they are comfortable with the level of oversight they maintain over climate risks and opportunities and the governance structures in place to assess, manage and disclose these risks and opportunities.
 - Comply with the law Directors of listed companies should carefully consider the statutory requirements relating to the operating and financial review for listed companies and other requirements for prospectuses or continuous

⁵³⁵ Ibid, also Governance Institute of Australia, 'Climate change risk disclosure: A practical guide to reporting against ASX Corporate Governance Council's Corporate Governance Principles and Recommendations', February 2020 5.

⁵³⁶ ASIC Report 593 on Climate Risk Disclosure by Australia's Listed Companies.

⁵³⁷ Eg, RG 247 and RG 228. See also the ASX Guidance Notice 9, amended 1 January 2020, which recommends that a listed entity should disclose 'whether it has any material exposure to environmental and social risks and, if it does, how it manages or intends to manage those risks': ASX Compliance, 'ASX Listing Rules,' (Guidance Note 9, amended 1 January 2020).

⁵³⁸ See Managing climate risk for directors.

⁵³⁹ Ibid.

⁵⁴⁰ Ibid.

ASIC Commissioner Sean Hughes 'Corporate governance update: climate change risk and disclosure', Speech to Governance Institute of Australia Fellows Roundtable, Thursday 14 October 2021, referring to ASIC Report 593 on Climate Risk Disclosure by Australia's Listed Companies.

- disclosure announcements. Boards should ask if material climate-related disclosures have been made and updated where necessary and appropriate.
- Disclose useful information to investors the voluntary disclosure recommendations issued by the TCFD are specifically designed to help companies produce information useful for investors. ASIC recommends listed companies with material exposure to climate risk consider reporting under the TCFD framework.⁵⁴²
- 2.101 In November 2021, APRA finalised its financial risk guidance aligned with the TCFD recommendations.⁵⁴³ APRA's final prudential practice guide on financial risks (CPG 229)⁵⁴⁴ is designed to assist banks, insurers and superannuation trustees to manage the financial risks of climate change. The guide imposes no new regulatory requirements or obligations, but will instead assist APRA-regulated entities to manage climate-related risks and opportunities within their existing risk management and governance practices. It addresses APRA's perspective of sound practice in areas such as governance, risk management, scenario analysis and disclosure of climate-related financial risks. The guide is designed to be flexible in allowing each institution to adopt an approach that is appropriate for its size, customer base and business strategy.⁵⁴⁵
- 2.102 In May 2021, APRA commissioned a Climate Vulnerability Assessment of physical risk to Australia's largest (non-finance) businesses and companies for the purpose of evaluating banks' exposure to climate risk.⁵⁴⁶ It has further indicated its intention for a survey to help gauge the alignment between institutions' management of climate change financial risks, the guidance set out in CPG 229, and the FSB Taskforce for Climate-related Financial Disclosures.
- 2.103 In 2019, the ASX released the fourth edition of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations. Under this edition, listed entities must disclose whether they have any material exposure to environmental or social risks, and, if they do, how they manage or intend to manage those risks.⁵⁴⁷

Key issues and areas of possible change

Legislated emissions reduction targets

- 2.104 There is currently no federal emissions reduction target enshrined in legislation. The Prime Minister (as at the date of this Background Paper) indicated that Australia's approach would not be to legislate targets, indicating that the plan for net zero by 2050 was intended to enable Australians to achieve the goal, rather than mandating or forcing them to do so.⁵⁴⁸
- 2.105 By late 2021, of the top ten GHG emitters, Japan, Canada and the EU had legally binding net zero commitments. In 2000, the EU's member states jointly committed

⁵⁴² Ibid.

⁵⁴³ See 'APRA finalises prudential guidance on managing the financial risks of climate change', (Media Release, 26 November 2021).

⁵⁴⁴ APRA, <u>'Prudential Practice Guide CPG 229 Climate Change Financial Risks'</u> (November 2021).

⁵⁴⁵ APRA, 'APRA releases guidance on managing the financial risks of climate change' (Media Release, 22 April 2021).

⁵⁴⁶ Daniel Ziffer, '<u>Financial regulator APRA to stress-test banks on climate change, to examine what would happen in a 3-degrees-hotter world'</u> (29 May 2021) *The Age*.

⁵⁴⁷ ASX Corporate Governance Council, 'Corporate Governance Principles and Recommendations' (4th Ed, February 2019).

⁵⁴⁸ Prime Minister of Australia, Press Conference, Canberra, <u>Transcript</u>, 26 October 2021.

to a binding target,⁵⁴⁹ with targets agreed for individual EU countries under a burden sharing agreement. Outside the EU, the UK, Japan, Korea, Canada and New Zealand had passed laws committing to achieving net zero by 2050 while Ireland, Chile and Fiji had proposed legislation. The UK has a legally binding net zero target by 2050 and new interim targets to reduce emissions by 78 per cent by 2035.⁵⁵⁰

- 2.106 It has been noted that it is unclear how the legally binding nature of these targets would be enforced if a government failed to meet them. However, such targets can make governments more strategic and focus on long-term goals.⁵⁵¹
- 2.107 The Law Council has previously expressed the preliminary view that a legislated target would provide certainty to policy makers about the guiding policy goal and timing, and to the business and community sectors about the long-term policy framework and reduced legal and regulatory risks. It would further enhance transparency about current policies, increase visibility, and have a unifying objective. 552

National climate legislation framework

- 2.108 There have been significant calls made across a range of sectors, business and public, for Australia to adopt, in conjunction with a legislated and ambitious target, a broader legislated federal framework for achieving progress on climate change mitigation and adaption.
- 2.109 There are concerns that Australia must address its lack of an institutional legal infrastructure, which is required to drive emissions down.⁵⁵³ These concerns include that Australia 'currently has no national mechanism to put a legally binding cap on emissions' and instead has a variety of 'voluntary schemes and incentive mechanisms'.⁵⁵⁴
- 2.110 Given that this area of policy and law has fluctuated strongly for the last decade at least, the current uncertainty and calls for change are unsurprising. From a business law perspective, Allens-Linklaters has described Australia's climate policy landscape as presenting 'considerable risk'555 due to multiple factors including increasing divergence between the major federal political parties' positions, divergence between federal, state and territory directions, divergence between Australia and other nations. From a social perspective, ACOSS has highlighted the need to ensure the transition towards a net zero economy in an inclusive and equitable manner, so that people experiencing poverty and disadvantage are not worse off. Consequently, there have been calls for a long-term, cohesive

⁵⁴⁹ Of at least 55 per cent in GHG emissions by 2030, compared to 1990 levels.

⁵⁵⁰ United Kingdom Parliament House of Commons Library, 'Global Net Zero Commitments', 12 November 2021.

⁵⁵¹ Ibid.

⁵⁵² Law Council of Australia, Supplementary submission to the Standing Committee on Environment and Energy regarding the Climate Change (National framework for Adaptation and Mitigation) Bill 2020 and Climate Change (National framework for Adaptation and Mitigation) Consequential and Transitional Provisions) Bill 2020, 22 February 2021.

⁵⁵³ Professor Tim Stephens, 'Analysis - Mr Morrison, please enshrine our climate targets in law', University of Sydney Law School online <u>article</u>, 21 February 2021.

⁵⁵⁵ Allens Linklaters, 'Targeting net zero: A climate change guide for legal and compliance teams in Australia', May 2020 6

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⁵⁵⁷ ACOSS, Submission on the Climate Change (National Framework for Adaptation and Mitigation) Bill 2020, 27 November 2020.

- approach and 'a defined pathway'558 to be set in stone.559
- 2.111 In this context, there has been multifaceted support for national legislation which provides an overarching legal framework on addressing climate change, including guiding principles to which decision makers on climate-related matters must have regard, and setting a long-term emissions target. 560
- 2.112 A legislative example which has attracted interest is the Climate Change Act 2008 (UK) (UK Act), which was passed with bipartisan support and is considered to have been instrumental in decarbonising the UK economy. 561
- 2.113 The UK Act, as amended in 2019, commits the UK to reducing greenhouse gas emissions by at least 100 per cent of 1990 levels (net zero) by 2050.562 As well as setting a statutory 2050 target, with accompanying five-yearly carbon budgets leading to the long-term target, its key features include:
 - establishing an independent advisory and watchdog body (the Committee on Climate Change (CCC));
 - a suite of reporting requirements, based around mandatory reporting to Parliament: and
 - in addition to climate change mitigation provisions, a framework to drive action on adapting to climate change.⁵⁶³
- 2.114 A 2018 Grantham Institute report considered the impact of the UK Act in its first ten years, and considered that it had been instrumental in advancing climate action but further reform would be needed if the UK was to meet its international climate obligations. ⁵⁶⁴ One subsequent reform strengthened its legislative targets, in 2019.
- 2.115 A 2017 New Zealand Productivity Commission research note also considered that

⁵⁵⁸ Philip Coorey, 'IMF backs the need for policy certainty on climate change', Australian Financial Review

⁽online), 20 November 2018.

559 Lisa Cox and Adam Morton, 'Q&A recap: business council calls for legislated target of net zero emissions by 2050', The Guardian (online), 11 February 2020.
560 See, eg, submissions from the Australian Medical Association, Australian Institute of Architects, Council of

Small Business Organisations Australia, New South Wales Nurses & Midwives Association, Australian Industry Group, Business Council of Australia, ACOSS, Unilever Australia and New Zealand, Property Council of Australia, Australian Council of Trade Unions and Science Technology Australia.

⁵⁶¹ Eg, Sam Fankauser, Alina Averchenkova and Jared Finnegan, 10 Years of the UK Climate Change Act (2018) Centre for Climate Change Economics and 'Policy (University of Leeds and London School of Economics and Political Science (LSEPS) and Grantham Research Institute on Climate Change (LSEPS). These authors conclude that the introduction of the Act and its carbon budgets has helped to reduce emissions, particularly in the power sector, while the UK economy has continued to grow: 1. See also Anna Malos, Cameron Hepburn, Matthew Ives, 'The UK has a national climate change act - why don't we?', The Conversation (online article), 15 May 2019.

⁵⁶² The original Act, passed in 2008, committed the UK to an 80 per cent reduction of greenhouse gas emissions by 2050, compared to 1990 levels. In 2019, the Climate Change Act 2008 (2050 Target Amendment) Order 2019 was passed which increased the UK's commitment to a 100 per cent reduction in emissions by 2050.

⁵⁶³ As summarised by Teresa Weeks, Examining the UK Climate Change Act 2008, New Zealand Productivity Commission Research Note, September 2017.

⁵⁶⁴ Its achievements included the transformation of the power sector and improvement of the debate around climate change issues. Issues included that the UK Act provided certainty about carbon targets, but not carbon policies, greater enforcement was needed, there was uneven policymaker buy-in and adaptation action was slow. Sam Fankhauser, Alina Averchenkova and Jared Finnegan, 'Policy brief: 10 years of the UK Climate Change Act', Grantham Research Institute on Climate Change, Centre for Climate Change Economics and Policy (2018), online article.

while it was premature to judge the UK Act's long-term success, the Act had 'performed very well to date'. ⁵⁶⁵ It had driven action, including on the setting of carbon budgets, its reporting requirements had enhanced transparency and accountability to Parliament and the independent CCC was highly regarded. ⁵⁶⁶ However, more detailed policy commitments were needed to deliver the 'step change' required to meet future carbon budgets.

- 2.116 The UK Act provided a background model for the *Climate Change Act 2017* (Vic), which has incorporated decision-making principles including the principles of:
 - informed decision making;
 - integrated decision making;
 - risk management;
 - equity;
 - community engagement; and
 - compatibility.⁵⁶⁷
- 2.117 At the federal level, one proposed version of such legislation has been the Climate Change (National Framework for Adaptation and Mitigation) Bill 2020 (Cth) and consequential amendments⁵⁶⁸ introduced by federal Independent Zali Steggall OAM MP. This was introduced into the House of Representatives in late 2020, but removed from the notice paper on 22 June 2021.

Legislated emissions trading or carbon pricing scheme

- 2.118 Another key area of contention is that Australia does not currently have either an emissions trading or carbon pricing scheme.
- 2.119 Until its repeal in 2013, the *Clean Energy Act 2011* (Cth) (**Clean Energy Act**) established an Australian Emissions Trading Scheme (**ETS**). The Clean Energy Act provided for a carbon-pricing mechanism, with a carbon price to be paid by liable entities. It provided for an initial fixed carbon price, set in legislation, to allow for a manageable transition to carbon pricing, with the scheme to transition to a fully flexible 'cap and trade' ETS after three years. This would have involved a cap placed on national emissions and the carbon price would be determined by the market.
- 2.120 More recent research by leading Australian economists has concluded that ETS schemes are effective globally.⁵⁷⁰ Based on a data study of 142 countries over more than twenty years, they found that countries with carbon prices had an average CO2 emission growth rate of approximately two percentage points lower

⁵⁶⁵ Teresa Weeks, *Examining the UK Climate Change Act 2008*, New Zealand Productivity Commission Research Note, September 2017 1.

⁵⁶⁷ See Climate Change Act 2017 (Vic) ss 23-28.

⁵⁶⁸ Introduced with the Climate Change (National Framework for Adaptation and Mitigation) (Consequential and Transitional Provisions) Bill 2020 (Cth).

⁵⁶⁹ Covering approximately 60 per cent of Australia's carbon emissions: Australian Government Clean Energy Regulator, 'About the mechanism', 11 May 2015.

⁵⁷⁰ Paul Burke, Frank Jotzo and Rohan Best, 'Carbon pricing works: the largest-ever study puts it beyond doubt' *The Conversation* (online) (14 July 2020).

than those without one.⁵⁷¹ The size of the effect 'was often enough to make the difference between a country having a rising or declining emissions trajectory'.⁵⁷² Such research indicates that 'carbon pricing almost certainly works, and typically to great effect'.⁵⁷³

- 2.121 ETSs are employed by the EU in respect of energy-intensive industries and power generation, and in India in respect of various industries.⁵⁷⁴ China is launching a national ETS, which once implemented, will be the largest ETS in the world, covering approximately 40 per cent of China's CHG emissions.⁵⁷⁵ China has also signed a bilateral plan with New Zealand to cooperate on carbon markets and is reportedly identifying opportunities for collaboration or linking markets with other countries in the Asia-Pacific region.⁵⁷⁶ In late 2020, the UK introduced specific legislation for this purpose, as post-Brexit it would no longer participate in the EU ETS.⁵⁷⁷ This was in conjunction with its announcement in late 2020 of a new target to reduce the UK's emissions by at least 68 per cent by 2030.⁵⁷⁸
- 2.122 The UNFCCC Secretariat indicates that more generally, 40 national and 25 subnational jurisdictions put a price on carbon, with momentum building around the world in this area.⁵⁷⁹ Around half of these are ETSs, applied mainly across subnational jurisdictions, and 23 are carbon taxes, primarily implemented on the national level. By May 2021, twelve states of the United States had introduced carbon pricing mechanisms.⁵⁸⁰
- 2.123 Global institutions including the International Monetary Fund, the World Bank and the OECD have continued to call for the expanded use of carbon pricing.⁵⁸¹ In Australia, the BCA has indicated that it 'supports the need for a market-based carbon price to drive the transition and incentivise investment in low and noemissions technology'.⁵⁸² Such factors may lead to Australia eventually adopting further legislation implementing an ETS or carbon pricing scheme in some form.

Environment

2.124 The independent review by Professor Samuel AC of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (**EPBC Act**) released its final report⁵⁸³ in late 2020 (**Samuel Report**).⁵⁸⁴ The report found that 'the EPBC Act is outdated and requires fundamental reform', and did not enable the Commonwealth to effectively fulfil its environmental management responsibilities to protect nationally

⁵⁷¹ Ibid.

⁵⁷² Ibid.

⁵⁷³ Ibid.

⁵⁷⁴ Tiffany Vass and Peter Levi, '<u>A policy framework for accelerating sustainable energy transitions in heavy industry</u>' (21 December 2020).

⁵⁷⁵ United Nations Climate Change, 'About Carbon Pricing' (undated) . ⁵⁷⁶ Ihid

⁵⁷⁷ The Greenhouse Gas Emissions Trading Scheme Order 2020, which provides for a UK ETS, was made on 11 November 2020 and the majority of the order came into force on 12 November 2020.

⁵⁷⁸ Compared to 1990 levels: Roger Harrabin, 'Climate change: UK aim of 68% emissions cut a 'colossal challenge', BBC News (online article), 4 December 2020.

⁵⁷⁹ United Nations Climate Change, 'About Carbon Pricing' (undated), <<u>About Carbon Pricing | UNFCCC</u>> ⁵⁸⁰ Center for Climate and Energy Solutions, 'US State Carbon Pricing Policies' (<u>online</u>), June 2020.

⁵⁸¹ Paul Burke, Frank Jotzo and Rohan Best, 'Carbon pricing works: the largest-ever study puts it beyond doubt' *The Conversation* (online) (14 July 2020).

⁵⁸² Business Council of Australia, 'We support strong action on climate change', <u>online policy</u>, undated.
⁵⁸³ Professor Graeme Samuel AC, '<u>Independent Review of the EPBC Act – Final Report</u>', October 2020 (**the Samuel Report**).

⁵⁸⁴ The Law Council was a substantial contributor to this inquiry: eg, Law Council of Australia, 'Statutory Review of the Environment Protection and Biodiversity Conservation Act 1999 (Cth)', 20 April 2020. Its representative also participated in a review working group convened by Professor Samuel AC.

important matters.585

2.125 This included headline findings that 'climate change is a significant and increasing threat to Australia's environment'586 and that:

Australia's natural environment and iconic places are in an overall state of decline and are under increasing threat. The environment is not sufficiently resilient to withstand current, emerging or future threats, including climate change. The environmental trajectory is currently unsustainable.⁵⁸⁷

- 2.126 The Samuel Report made 38 recommendations and a staged pathway towards reform. At the centrepiece, the Report recommended new, legally enforceable National Environmental Standards (NES) to ensure clear outcomes of matters of national environmental significance and the fundamental processes for sound decision-making.⁵⁸⁸
- 2.127 Regarding climate change, the Samuel Report cautioned against duplicating the Commonwealth's existing framework for regulating GHGs.⁵⁸⁹ However, the Report recommended that the new NES should require development proposals to:
 - explicitly consider the likely effectiveness of avoidance or mitigation measures on nationally protected matters under specified climate change scenarios; and
 - transparently disclose the full emissions of the development.⁵⁹⁰
- 2.128 The Samuel Report further recommended that the EPBC Act be amended to support more effective planning that accounts for cumulative impacts and past, present and future key threats, as well as build environmental resilience in a changing climate.⁵⁹¹ These amendments would (amongst other things) enable the development of strategic national plans, regional recovery plans, ecologically sustainable development plans and strategic assessments to be approved, and the Commonwealth to accredit plans made by other parties, all consistent with the NES.⁵⁹²
- 2.129 These changes reflect the Law Council's previous calls for 'greater, more explicit consideration of the impact of climate change and climate change adaptation principles in the EPBC Act's decision-making processes and management tools'. 593 They show that implementation of the Samuel Report would require more explicit recognition of climate change in decision making under the EPBC Act, which could be replicated at the state and territory level.
- 2.130 The Samuel Report also strongly emphasised better harnessing the value and recognising the importance of First Nations knowledge, recommending immediate

⁵⁸⁵ The Samuel Report, ii.

⁵⁸⁶ Ibid 5.

⁵⁸⁷ Ibid viii.

⁵⁸⁸ Ibid.

⁵⁸⁹ Ibid 5.

⁵⁹⁰ Ibid 26 (Rec 2).

⁵⁹¹ Ibid 32 (Rec 25).

⁵⁹² Ibid 32.

⁵⁹³ Law Council of Australia, '<u>Statutory Review of the Environment Protection and Biodiversity Conservation Act 1999 (Cth)</u>', 20 April 2020 5.

amendments to the EPBC Act to this effect⁵⁹⁴ and Indigenous engagement and participation in decision-making.595

Natural disasters

2.131 Another source of possible future law reform is the Royal Commission into National Natural Disaster Arrangements, which reported in late 2020. 596 The Royal Commission was established in response to the extreme bushfire season of 2019-2020 which resulted in devastating loss of life, property and wildlife, and environmental destruction. It found that:

> Natural disasters have changed, and it has become clear to us that the nation's disaster management arrangements must also change.

> Extreme weather has already become more frequent and intense because of climate change; further global warming over the next 20 to 30 years is inevitable. Globally, temperatures will continue to rise, and Australia will have more hot days and fewer cool days. Sea levels are also projected to continue to rise. Tropical cyclones are projected to decrease in number, but increase in intensity. Floods and bushfires are expected to become more frequent and more intense. Catastrophic fire conditions may render traditional bushfire prediction models and firefighting techniques less effective.

Natural disasters are expected to become more complex, more unpredictable, and more difficult to manage. We are likely to see more compounding disasters on a national scale with far-reaching consequences...

Australia needs to be better prepared for these natural disasters. 597

- 2.132 Its focus on climate change in this context reflects calls made by the Australian Environment and Planning Law Group of the Law Council's Legal Practice Section for acknowledgement of this increasing driver of natural disasters. 598
- 2.133 The Royal Commission concluded that Australia needs a national approach to natural disasters, involving all levels of government, but specifically calling for the Australian Government to play a greater role. 599 For disasters occurring on a national scale, it recommended that the Australian Government should be able to declare a state of national emergency, to quickly mobilise support. 600
- 2.134 The Royal Commission further concluded that Australian, state and territory governments should prioritise the harmonisation of data governance, the creation of national data standards, and the sharing of common technologies. This would

⁵⁹⁴ The Samuel Report, Rec 5 (EPBC Act should be amended to: establish a new Indigenous Engagement Participation Committee, whose mandate will be to refine, implement and monitor the National Environmental Standards (NES) for Indigenous engagement and participation in decision-making; adopt the recommended NES for Indigenous engagement and participation in decision-making; and amend the Act to require the Environment Minister to transparently demonstrate how Indigenous knowledge and science is considered in decision-making.

⁵⁹⁵ Ibid Recs 6 and 8.

⁵⁹⁶ Royal Commission into National Natural Disaster Arrangements, Report, 28 October 2020 (**Royal** Commission report).

⁵⁹⁷ Ibid 22.

⁵⁹⁸ Australian Environment & Planning Law Group of the Law Council of Australia's Legal Practice Section, Royal Commission into National Natural Disaster Arrangements, 30 April 2020, 10. 599 Royal Commission Report, 23-24.

⁶⁰⁰ Ibid.

enable greater collaboration and build Australia's collective knowledge of climate and disaster risks and lead to better decision-making. 601 It made several recommendations to this end including:

- creating common information platforms and sharing technologies to enable collaboration in the production and exchange of information about climate and disaster risks;⁶⁰²
- implementing the National Disaster Risk Information Services Capability (NDRISC) and aligned climate adaptation initiatives;⁶⁰³ and
- including tools and systems in the NDRISC to support operational and strategic decision making, including integrated climate and disaster risk scenarios.⁶⁰⁴
- 2.135 Further, it recommended that the Commonwealth and state and territory governments produce downscaled climate projections to inform the assessment of future natural disaster risk by relevant decision makers, including state and territory government agencies with planning and emergency management responsibilities. These would be underpinned by an agreed common core set of climate trajectories and timelines, and subject to regular review.⁶⁰⁵
- 2.136 The Commonwealth Parliament has since passed legislation for the purpose of declaring a state of national emergency. The extent to which further legislation may be required to implement the Royal Commission's recommendations is currently unclear.

Water

- 2.137 The National Water Initiative (**NWI**) is a shared commitment by federal, state and territory governments to increase the efficiency of Australia's water use. 607 Responsibility for water resources is primarily vested in the state and territory governments; however, at the federal level, the *Water Act 2007* (Cth) provides the legislative framework for managing Australia's largest water resource, the Murray Darling Basin. It also provides for other measures, such as providing the Australian Competition and Consumer Commission (**ACCC**) a key role in developing and enforcing water charge and water market rules.
- 2.138 The Productivity Commission's recent 2021 assessment report found that overall, the NWI had served Australia well. 608 However, significant challenges had arisen from extreme and prolonged droughts, with devastating environmental consequences in some regions. 609 It emphasised that communities would need the capacity to deal with severe droughts, floods and extreme water shortages, noting

⁶⁰¹ Ibid 29.

⁶⁰² Ibid 121 (Rec 4.2).

⁶⁰³ Ibid (Rec 4.3)

⁶⁰⁴ Ibid (Rec 4.4).

⁶⁰⁵ Ibid 126 (Rec 4.5).

⁶⁰⁶ National Emergency Declaration Act 2020 (Cth).

⁶⁰⁷ 'Intergovernmental Agreement on a National Water Initiative between the Commonwealth of Australia and the Governments of New South Wales, Victoria, Queensland, South Australia, the Australian Capital Territory and the Northern Territory' (<u>link</u>). The National Water Initiative requires signatory governments to commit to: prepare comprehensive water plans; achieve sustainable water use in over-allocated or stressed water systems; introduce registers of water rights and standards for water accounting; expand trade in water rights; improve pricing for water storage and delivery; and better manage urban water demands.

⁶⁰⁸ Productivity Commission, 'National Water Reform 2020', Inquiry Report no. 96, Canberra (28 May 2021) 4. ⁶⁰⁹ Ibid.

their links to climate change, and adapt to its effects.⁶¹⁰ It found that future water resource management and service provision would have to respond to changing demands within the context of a growing population and the effects of climate change,⁶¹¹ both of which presented significant risks to the security of Australia's water resources.⁶¹²

- 2.139 Reforms were also needed to allay community concerns and mistrust, including with respect to non-compliance with water licence conditions and lack of transparency of water management decisions. Improved consultation and engagement with Traditional owners was also needed, recognising their aspirations for greater access to, and control over, water resources, with regard to the 2020 Closing the Gap Agreement and the UNDRIP.⁶¹³
- 2.140 The Productivity Commission found that the overarching goal of the NWI remained sound, but should be modernised through reference to adaptation to climate change, and recognition of the importance of water in the lives of Aboriginal and Torres Strait islander people. It proposed six overarching reform principles embedded in all policy areas:
 - strong capacity to deal with droughts, floods and shocks and to adapt to a changing climate;
 - fit-for-purpose regulatory, governance and management arrangements;
 - use of the best available information in decision making;
 - innovation and adaptive management;
 - effective community engagement; and
 - information provision that enables that engagement.
- 2.141 There should also be a shift from water resource management, to give greater emphasis to water service provision.
- 2.142 The Productivity Commission emphasised the role of statutory frameworks in implementing a nationally consistent planning, market and regulatory based system of managing surface and groundwater resources for rural, urban and remote use effectively. This would involve:
 - clear, nationally-consistent statutory systems for secure water access entitlements;
 - transparent, statutory water planning that:
 - was risk-based;
 - included all sources of water;

⁶¹¹ Ibid 4-5.

⁶¹⁰ Ibid 19.

⁶¹² Ibid 19.

⁶¹³ Ibid 4-5.

⁶¹⁴ Productivity Commission, 'National Water Reform 2020: Findings, recommendations and renewal advice', Inquiry Report no. 96, Canberra (28 May 2021) 1.

- clearly identified environmental, cultural and other public benefit outcomes to be met through the water planning process;
- included processes for water sharing and management during periods of water scarcity;
- included clear pathways to an agreed and improved balance between the environment and consumptive water use in overallocated/overused systems; and
- o included clear triggers and processes for reviewing the balance between water for the environment and consumptive use, such as in response to the effects of climate change. 615
- 2.143 It also envisaged, for example, that implementation would involve statutory water provisions for the environment which were integrated with complementary natural resource management to achieve agreed environmental outcomes.⁶¹⁶
- 2.144 Jurisdictions should recommit to the key outcomes and actions related to water access entitlements, which were fundamental to the integrity of water management and a necessary prerequisite for water trading and markets. This included ensuring that water entitlements were statutory-based, provided a perpetual or an open-ended share of the consumptive pool, and were separate from land.⁶¹⁷

Migration

- 2.145 Professor Jane McAdam of the UNSW and Jonathan Pryke of the Lowy Institute have argued Australia should develop laws and policies that are both preventative in reducing future displacement risks, and also enable people in the Pacific to move out of harm's way, thereby harnessing migration as a climate change adaptation strategy.⁶¹⁸
- 2.146 While no refugee claim which is based on the risks of climate impacts alone has yet succeeded, 619 McAdam and Pryke have observed that the *Teitiota* communication (see above and the **Appendix**) 'effectively puts governments on notice to ensure that their national laws enable people to claim and receive protection from the impacts of disasters and climate change, or otherwise move out of harm's way'. 620 Further, they predict that over time, given UNHCR signals (as outlined above), more people will be recognised as having international protection needs. However, existing available avenues of domestic legal protection 621 will provide only a 'partial solution'. 622
- 2.147 These authors have proposed a range of answers, including:

620 Ibid 8.

⁶¹⁵ Ibid 2.

⁶¹⁶ Ibid 3.

⁶¹⁷ Ibid 7.

⁶¹⁸ Jane McAdam and Jonathan Pryke, '<u>Policy Brief 10: Climate Change, Disasters and Mobility: A Roadmap for Australian Action</u>', Kaldor Centre for International Refugee Law, October 2020 (**McAdam and Pryke**).
⁶¹⁹ As it is difficult to show that these impacts on their own amount to 'persecution', and are occasioned 'for reasons of' one's race, religion, nationality, political opinion or membership of a particular social group: Ibid 7.

⁶²¹ Including complementary protection protections available under the *Migration Act 1958* (Cth), ss 36(2)(aa), (2A)–(2C).

⁶²² McAdam and Pryke 8.

- creating humanitarian visas for people from the Pacific who are adversely affected by the impacts of disasters or climate change;
- providing protection on a prima facie basis to Pacific Islanders already in Australia, at the time a disaster strikes where it is unsafe or unreasonable for them to return home;
- developing bilateral and/or regional plans to address climate change-related displacement and mobility, which could include a regional, rights-based framework. These could enable free movement and the right to find work abroad;
- creating special visa categories for people living in at-risk areas; and
- providing preferential access to existing labour, education or family visas.⁶²³
- 2.148 At the more general policy level, Erica Bower and Sanjula Weerasinghe of the UNSW Sydney's Andrew & Renata Kaldor Centre for International Refugee Law have also argued for 'continuing efforts to monitor and research planned relocation, to guide policy and practice that minimises risks and harms, and protects the human rights, security and dignity of people'. 624

State and Territory frameworks

- 2.149 Australian state and territory governments have adopted different positions to the Australian Government in responding to climate change and its impacts.⁶²⁵
- 2.150 All states and territories have adopted net zero targets by 2050, and four have legislated targets. The majority of states and territories have also set interim emissions targets. In October 2021, state and territory interim targets combined translated to an estimated 37-42 per cent reduction on 2005 emissions Australia-wide by 2030. All states and territories have also implemented their own climate change multi-portfolio policy frameworks.
- 2.151 ClimateWorks Australia, an independent non-profit working within the Monash Sustainable Development Institute,⁶²⁸ has provided an early analysis of state and territory actions toward achieving net zero emissions since the start of 2020 (characterised as the decade of action).⁶²⁹ It notes that:

State and territory governments have a central role to play in enabling the changes required this decade. They have constitutional power and responsibility over many key enablers – such as transport infrastructure

⁶²³ Ibid 2-3.

⁶²⁴ Andrew & Renata Kaldor Centre for International Refugee Law, 'New global dataset: What 'planned relocation' looks like in the context of disasters and climate change' (31 March 2021).

⁶²⁵ Ilona Millar, Guy Dwyer and Sophie Whitehead, 'The Environment and Climate Change Law Review: Australia', online article (4 March 2021).

⁶²⁶ As at May 2020: Victoria, South Australia, Tasmania and the Australian Capital Territory: Climate Change Act 2017 (Vic); (Climate Change and Greenhouse Gas Reduction Act 2010 (ACT); Climate Change (State Action) Act 2008 (Tas) (the Tasmanian Act); Climate Change and Greenhouse Emissions Reduction Act 2007 (SA). Climate Council 'What does Net Zero Emissions Mean', online resource, 9 July 2020. The Tasmanian Act has recently been reviewed and amendments were tabled on 24 November 2021, through the Climate Change (State Action) Amendment Bill 2021 (Tas) to amend it to strengthen Tasmania's legislative framework for action on climate change.

⁶²⁷ ClimateWorks Australia, '<u>State and Territory Climate Action: leading policies and programs in Australia</u>' (October 2021) ('**ClimateWorks Australia Report**').

⁶²⁸ And co-funded by Monash University and the Myer Foundation.

⁶²⁹ ClimateWorks Australia Report.

– and have the important levers available to incentivise change – such as registration and stamp duty for electric vehicles. State and territory governments can also drive change in the private sector, addressing key barriers to development and deployment through grant programs and regulatory and legislative changes. States and territories can develop sector-wide emissions reduction plans, such as Victoria's transport emissions pledge. They can also enable collaboration between sectors, such as New South Wales' Electricity Infrastructure Roadmap, which connects renewable energy zones to low carbon industry development. 630

- 2.152 The analysis highlights that there has been accelerated momentum in state and territory climate policy, as demonstrated both through spending on emissions reduction measures, and 'significant and inventive regulatory and legislative changes'. ⁶³¹ Key examples of progress include:
 - Electricity, for which state and territory targets translate to a 55 per cent renewable energy target Australia-wide by 2030, with substantial action occurring to ensure their implementation.
 - Transport, for which the two most populous states have targeted 50 per cent of new car sales being electric by 2030, translating to around 30 per cent of new car sales Australia-wide. Public transport emissions are also a focus in many jurisdictions.
 - Building, noting that Australia is a world leader on solar uptake and has increased its focus on energy efficiency and electrification.⁶³²
- 2.153 While it is not possible within the scope of this paper to examine all relevant legislative reforms, the following offers a snapshot of some developments:
 - in Victoria, the *Climate Change Act 2017* (Vic) draws on the UK Act, as described above. Establishing an overarching legal framework to implement the majority of Victorian Government climate change commitments, it:
 - establishes a long-term emissions reduction target of net zero by 2050;
 - requires five yearly interim targets, for Victoria to meet this long-term target;
 - o introduces a new set of policy objectives and an updated set of guiding principles to embed climate change in government decision making;
 - o requires the government to develop a Climate Change Strategy every five years, which will set out how Victoria will meet its targets and adapt to the impacts of climate change;
 - requires Adaptation Action Plans for key systems that are either vulnerable to the impacts of climate change or essential to ensure Victoria is prepared;

⁶³⁰ Ibid 8.

⁶³¹ Ibid 4.

⁶³² Ibid.

- establishes a pledging model to reduce emissions from government's own operations and from across the economy; and
- establishes a system of periodic reporting to provide transparency, accountability and ensure the community remains informed.
- Victoria has a RET to meet 50 per cent of its electricity consumption needs by renewable energy sources by 2030, as enshrined in the Renewable Energy (Jobs and Investment) Act 2017 (Vic). The Planning and Environment Act 1987 (Vic) and the Victorian Planning Provisions and Environment Protection Act 2017 (Vic), contain various objectives and duties relevant to climate change.⁶³³
- The Electricity Infrastructure Investment Act 2020 (NSW) (NSW Act), described as 'the most ambitious energy plan in the country' has the purpose of co-ordinating investment in new generation, storage and network infrastructure in NSW. It gives effect to the NSW Government's Electricity Infrastructure Roadmap, its policy framework for investment to deliver a modern electricity system and maintain its supply as NSW transitions from coal to renewable generated power. The NSW Act has been characterised as representing 'a fundamental shift in policy towards the encouragement of renewable energy projects and is targeted at reducing investment risk and providing the industry and investors with certainty in relation to new energy infrastructure'. 635
- In South Australia, the *Planning Development and Infrastructure Act 2016* (SA) requires the Minister to ensure that there is a specific climate change planning policy that specifies the policies and principles which are to be applied with respect to minimising adverse effects of decisions made under the Act on the climate and promoting development that is resilient to climate change. An environmental impact statement must further include a statement of the expected effects of the development on the climate and any proposed measures designed to mitigate or address those effects.
- 2.154 However, while states and territories play a fundamental role, ClimateWorks Australia has also emphasised that achieving the goals of the Paris Agreement will require ambitious action at all levels of government. Key policy levers also require coordination across all states and territories, such as minimum energy requirements in the National Construction Code. It highlights that ambitious and consistent national approaches to key policy areas are needed, suggesting the need for a strong, national-level policy framework.⁶³⁸

Climate litigation is testing legal boundaries

2.155 Globally and in Australia, courts are increasingly being approached as arbiters for remedy or review in matters regarding climate change. According to one 2020 report, over 75 per cent of cases had been brought in the United States, with Australia being the next greatest source of cases brought, at 6 per cent – ahead of

⁶³³ See, for example, *Planning and Environment Act 1987* (Vic) at s 4; Victoria Planning Provisions cls 11, 13-14, 17 and 19; *Environment Protection Act 2017* (Vic) ss 52, 431 and 434.

 ⁶³⁴ Tim Kennedy and Adela Smith, Gilbert & Tobin, 'NSW set to become a renewable energy superpower',
 Lexology <u>article</u>, 17 December 2020.
 ⁶³⁵ Ibid.

⁶³⁶ Planning Development and Infrastructure Act 2016 (SA) s 62.

⁶³⁷ Ibid s 113 (4).

⁶³⁸ ClimateWorks Australia Report 8.

- the UK (4 per cent) and EU (3.5 per cent).⁶³⁹ New Zealand, Canada and Spain then followed.⁶⁴⁰
- 2.156 At the international level, multinational law firm Norton Rose Fulbright quantified the number of climate change cases filed globally as at November 2020 at 1,650.⁶⁴¹ The IBA Climate Change Justice and Human Rights Task Force (**IBA HR Taskforce**), which has produced a *Model Statute for Proceedings: Challenging Government Failure to Act on Climate Change*,⁶⁴² has recognised that 'climate change litigation' is now a class of its own, encapsulating 'a broad range of disputes before domestic or international courts and tribunals, where a party's claim is based on harms allegedly being caused by environmental factors'.⁶⁴³ The IBA HRA Taskforce also has linked the advent of climate change litigation to the adoption of the Paris Agreement.⁶⁴⁴
- 2.157 Climate change litigation has been classified as falling into four main types of action:
 - challenges to government decisions approving projects or developments;
 - claims against governments for failing to take action to address climate change;
 - civil claims against companies regarding their assessment and disclosure of climate change risks within or to their business; and
 - civil claims against large emitters.⁶⁴⁵
- 2.158 The nature of the relevant remedy or action tends to depend upon the type of action, with mitigation measures, adaptation measures, and/or compensation commonly sought.⁶⁴⁶

Foreign jurisdictions

2.159 Preston has pointed towards an emerging trend of increasing reliance on rights in climate change litigation around the world. Litigation in this context has focused the rights of the public under the 'public trust doctrine', constitutional rights, particularly the right to life and the right to a quality environment; and human rights. Broader actions have included: actions in tort, including public nuisance, private nuisance, negligence and trespass; actions in consumer law and

⁶³⁹ Sarah Barker, Joshua Dellios and Ellie Mulholland, '<u>Liability risk and adaptation finance</u>' *UN environment program* (April 2021) 18.

⁶⁴⁰ Governance Institute of Australia, '<u>Climate change risk disclosure: A practical guide to reporting against ASX Corporate Governance Council's Corporate Governance Principles and Recommendations</u>', February 2020 9.

⁶⁴¹ Elisa de Wit and Sonali Seneviratne, 'Climate change litigation update', *Norton Rose Fulbright* (<u>Article</u>, December 2020).

 ⁶⁴² International Bar Association, 'Model Statute for Proceedings: Challenging Government Failure to Act on Climate Change: An International Bar Association Climate Change Justice and Human Rights Task Force Report' (February 2020) (2020 IBA HR Taskforce Report).
 643 Ibid 3.

⁶⁴⁴ Ibid 3.

International Bar Association, '<u>Achieving Justice and Human Rights in an Era of Climate Disruption:</u>
 International Bar Association Climate Change Justice and Human Rights Task Force Report', (July 2014) 77.
 2020 IBA HR Taskforce Report at 3.

 ⁶⁴⁷ Brian J Preston SC, '<u>The Evolving Role of Environmental Rights in Climate Change Litigation</u>', Chinese Journal of Environmental Law 2 (2018) 131, 132.
 ⁶⁴⁸ Ibid 136.

corporations law; and judicial or merits review. 649

- 2.160 The arguments and decisions made in foreign courts may assist in predicting future Australian litigation challenges and prospects of success. A snapshot of some key developments in climate litigation occurring internationally in foreign domestic courts and tribunals is set out in the **Appendix**. Of particular note, as described in the **Appendix**, are three cases which the IBA HR Taskforce has described as foundational for domestic claims against government decisions, and assachusetts et al v Environmental Protection Agency et al, Leghari v Federation of Pakistan.
- 2.161 Based on the cases described in the **Appendix**, while several foreign decisions have struck important new ground, there is also a common thread in certain other decisions showing a judicial reluctance to encroach on the executive's function of determining policy, particularly where remedies are sought which require governments to adopt broad ranging policy or legislative responses. It is also relevant that there are important differences between Australian and foreign domestic legal systems and frameworks, which may affect whether certain kinds of climate litigation are likely to be pursued domestically.
- 2.162 In any event, there is an increasing variety of climate litigation across expanding foreign jurisdictions, which continually raises novel causes of action. These put global 'climate change litigation on the map for a wider range of actors'. 655
- 2.163 The approaches adopted by UN treaty bodies to date are also discussed in the **Appendix**, noting that several communications remained under consideration at the time of writing.

Australia

- 2.164 Recognising this movement on the international level, in 2017, Peel, Osofsky and Foerster foreshadowed generational shifts in climate change litigation in Australia. They observed that while much activity had occurred with respect to environmental and development projects and approvals, 'next generation' climate change litigation in Australia was likely to see a shift to legal interventions designed to test the accountability of governments and corporations directly for the climate change implications of their activities. 657
- 2.165 The University of Melbourne's Australian Climate Change Litigation database tracks cases on issues relating to climate change in Australia. Lit tracks these cases according to litigation type: Project Approval (mitigation) cases; Project Approval (adaptation) cases; Corporate Accountability cases; Constitutional and Human Rights/ State Accountability cases; and cases that broaden access to

⁶⁴⁹ Brian J Preston SC, 'Mapping Climate Change Litigation' 92 ALJ 774 (2018).

⁶⁵⁰ Professor Paolo Davide Farah, 'Urgenda vs. Juliana: Lessons for Future Climate Change Litigation Cases' *UCLA* (2020) 2.

⁶⁵¹ 2020 IBA HR Taskforce Report.

⁶⁵² Massachusetts et al v Environmental Protection Agency et al 549 U.S. 497 (2007).

⁶⁵³ State of the Netherlands v Urgenda Foundation, ECLI:NL:HR:2019:2007, Judgment (Sup. Ct. Neth. Dec. 20, 2019) (Neth.).

⁶⁵⁴ Asghar Leghari v Federation of Pakistan (2015) WP No. 25501/2015.

 ⁶⁵⁵ Jacqueline Peel, Hari Osofsky and Anita Foerster, 'Shaping the 'Next Generation' of Climate Change
 Litigation in Australia' (2017) 41 Melbourne University Law Review 805-806 ('Peel, Osofsky and Foerster').
 656 Ibid.

⁶⁵⁷ Ibid, 803.

⁶⁵⁸ University of Melbourne, Australian Climate Change Litigation (webpage, accessed on 6 July 2022).

justice in climate cases.

2.166 In 2021, there were 46 climate change judgments or new proceedings in Australia, an increase on the number in previous years 2020 (31) and 2019 (27). Markey-Towler and Peel state that this increase suggests a growing presence of climate change issues in the courts. Commonwealth jurisdictions had the highest number of cases. They also note an increase in the number and proportion of strategic climate judgments or new proceedings in Australia. There has been a growth of 'next generation' cases (compared to 'first generation' cases) in recent years.

Administrative law – environment and planning

- 2.167 The bulk of climate change litigation in Australia has generally involved 'first generation' cases challenges to administrative decision-making (either judicial review or merits review) under planning or environmental legislation. These have generally focused on improving government decision-making under environmental statutes regarding emissions-intensive projects. Many of the cases with the most far-reaching impacts have been NSW LEC decisions. 663
- 2.168 Most of these cases have consolidated in an 'incremental and iterative fashion', 664 the importance of including climate change considerations in environmental impact assessments undertaken for projects with substantial GHG emissions or the potential to be impacted by climate change consequences such as sea level rise.
- 2.169 The 2019 decision by Preston CJ in *Gloucester Resources Limited v Minister for Planning*⁶⁶⁵ (*Gloucester*) has been recognised as a 'landmark judgment'. 666 It confirmed a decision to refuse the proposed Rocky Hill open-cut coal mine in the Hunter Valley. The likely climate change contribution of the mine was one of several key reasons cited for refusing the application. Preston CJ determined that:

The construction and operation of the mine, and the transportation and combustion of the coal from the mine, will result in the emission of greenhouse gases, which will contribute to climate change.⁶⁶⁷

2.170 With respect to causation issues, Preston CJ took a 'broad view', 668 determining that:

There is a causal link between the Project's cumulative CHG emissions and climate change and its consequences. The Project's cumulative

⁶⁵⁹ Rebekkah Markey-Towler & Jacqueline Peel, Melbourne Climate Futures, '<u>Trends in Australian Climate</u> <u>Litigation 2021</u>', February 2021.

⁶⁶⁰ The Commonwealth had 15 of the climate change related cases followed by Victoria(14), New South Wales (11), Queensland (3), Western Australia (2) and international (1): Ibid. ⁶⁶¹ Peel, Osofsky and Foerster 795.

⁶⁶² Ibid 802-803. Eg, with respect to judicial review, see Australian Conservation Foundation Inc v Minister for the Environment (2016) 251 FCR 308; [2016] FCA 1042; Platford v van Veenendaal (2018) 229 LGERA 101; [2018] NSWLEC 27; Gray v Minister for Planning (2006) 152 LGERA 258; [2006] NSWLEC 720; Re Australian Conservation Foundation (2004) LGERA 100; [2004] VCAT 2029; Walker v Minister for Planning(2007) 157 LGERA 124; [2007] NSWLEC 741; Aldous v Greater Taree City Council (2009) 167 LGERA 13; [2009] NSW LEC 17. With respect to merits review, decisions include Northcape Properties Pty Ltd v District Council of York Peninsula and Gippsland Coastal Board v South Gippsland Shire Council No 2 [2008] VCAT 1545.

⁶⁶⁴ Ibid 796.

⁶⁶⁵ Gloucester Resources Limited v Minister for Planning [2019] NSWLEC 7 ('Gloucester').

⁶⁶⁶ Justine Bell-James, 'Landmark Rocky Hill ruling could pave the way for more courts to choose climate over coal', *The Conversation* (Australia, online), 11 February 2019.

667 Gloucester [8].

⁶⁶⁸ Justine Bell-James, 'Landmark Rocky Hill ruling could pave the way for more courts to choose climate over coal', *The Conversation* (Australia, online), 11 February 2019.

emissions will contribute to the global total of CHG concentrations in the atmosphere. The global total of CHG concentrations will affect the climate system and cause climate change impacts. The Project's cumulative CHG emissions are therefore likely to contribute to the future changes to the climate system and the impacts of climate change. In this way, the Project is likely to have indirect impacts on the environment, including the climate system, the oceanic and terrestrial environment, and people. 669

- 2.171 While recognising that there was no legal proscription in the Paris Agreement or NSW Government Climate Change Policy regarding the approval of new coal mines, Preston CJ found that 'nevertheless, the exploitation and burning of a new fossil fuel reserve, which will increase [greenhouse gas emissions], cannot assist in achieving the rapid and deep reductions in GHG emissions that are necessary in order to achieve a "balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century". 670 He referred to specific articles of the Paris Agreement⁶⁷¹ in reaching these conclusions.
- 2.172 As a superior court decision, Gloucester has been characterised by some commentators as 'revolutionary', 672 noting that it 'sets out a whole new line of legal reasoning in this area, which will be studied by climate change litigators around the world' 673

Government disclosure duties

- 2.173 A current Federal Court case is Kathleen O'Donnell v Commonwealth of Australia & Ors⁶⁷⁴. The plaintiff, an investor, has filed against the Commonwealth for failing to disclose to investors in relevant disclosure documents material climate-related risks in issuing Treasury bonds.
- 2.174 The claim was originally founded on three causes of action, alleging that:
 - the Commonwealth had breached its duties under the Australian Securities and Investments Commission Act 2001 (Cth)⁶⁷⁵ by engaging in conduct that is misleading or deceptive in respect of its duties of disclosure in promoting the bonds by failing to disclose information about these risks;
 - the Commonwealth and two Australian Government officials (also named respondents), had, as promoters of the bonds, owed a fiduciary duty of candour and honesty to investors who acquire or intend to acquire such bonds. The respondents were alleged to have breached that duty: and
 - the two Australian Government officials had breached and continued to breach their obligation to exercise their powers, perform their functions and discharge their duties with care and diligence pursuant to subsection 25(1) of the Public Governance, Performance and Accountability Act 2013 (Cth).

⁶⁶⁹ Gloucester [525].

⁶⁷⁰ Ibid [527].

⁶⁷¹ Ibid citing Paris Agreement arts 4(1) and 2.

⁶⁷² Don C Smith, '<u>Landmark climate change-related judicial decisions handed down in the Netherlands and Australia: a preview of what's to come?</u>' (2019) 37:2 *Journal of Energy & Natural Resources Law* 145, 146.
673 Ibid, citing Emeritus Professor Ben Boer of the University of Sydney.

⁶⁷⁴ O'Donnell v Commonwealth of Australia [2021] FCA 1223.

⁶⁷⁵ Australian Securities and Investments Commission Act 2001 (Cth), s 12DA(1).

2.175 In October 2021, the Federal Court of Australia struck out two of the three claims, but allowed the third claim to proceed against the Commonwealth as a class action.⁶⁷⁶

Company law and climate risk

- 2.176 As noted above, companies and company directors may have obligations to consider and disclose climate-related risks, and may face action from regulators or civil claims for failing to meet these obligations. Regulators such as ASIC have given guidance on these matters, including in light of TFCD recommendations.
- 2.177 A further significant influence has been the 2016 opinion on company directors' duty and climate change by Noel Hutley SC and Sebastian Hartford-Davis.⁶⁷⁷ This stated that company directors should consider all relevant climate change risks and take any necessary actions accordingly or risk liability for breaches of duties of care and due diligence.⁶⁷⁸ A 2019 supplementary opinion⁶⁷⁹ found an elevated need for directors to consider climate risks, reinforcing the urgency of improved board-level governance, signalling that that the potential liability of directors in relation to climate change is 'increasing exponentially'.⁶⁸⁰ A more recent opinion by Noel Hutley SC, this time with James Mack and Equity Generation Lawyers,⁶⁸¹ has further concluded that superannuation trustees 'must act prudently and in the best financial interests of a beneficiary'.⁶⁸²
- 2.178 There have been proceedings instituted to test the legal boundaries on such issues, although these have not, generally, reached final adjudication in the courts to date.
- 2.179 For example, in 2017, two Commonwealth Bank of Australia (**CBA**) shareholders filed in the Federal Court against the CBA for misleading shareholders over the risks that climate change posed to their business interests. CBA's annual report had not disclosed climate change-related business risks, including possible coal mine investments. The shareholders alleged it had contravened statutory reporting requirements to give a 'true and fair' view of its financial position and performance, ABA and allowing shareholders to make an 'informed assessment' of its operations and prospects.
- 2.180 They argued that the CBA knew or ought to have known that climate-related risks could have a material or major impact on the bank's operations and prospects. Therefore, investors should have been told the CBA's strategies for managing those risks so they could make informed investment decisions. They sought a declaration that the Corporations Act had been breached, and an injunction either restraining the bank from continuing to fail on such reporting, or

Kathleen O'Donnell v Commonwealth of Australia and Ors, Order of Justice Murphy, Federal Court of Australia District Registry: Victoria Division, 28 October 2021, Melbourne (General No: VID482/2020).
 Noel Hutley SC and Sebastian Hartford Davis, 'Climate Change and Directors' Duties', Memorandum of Opinion, 7 October 2016.

⁶⁷⁸ Ibid.

⁶⁷⁹ Noel Hutley SC and Sebastian Hartford Davis, 'Climate Change and Directors' Duties', Supplementary Memorandum of Opinion, 26 March 2019 ('The Second Hutley Opinion').

⁶⁸¹ Equity Generation Lawyers, Noel Hutley SC and James Mack, 'Superannuation Trustee Duties and Climate Change', Memorandum of Opinion, 16 February 2021.

⁶⁸³ Guy Abrahams v Commonwealth Bank of Australia, Notice of Filing, VID879/2017.

⁶⁸⁴ Corporations Act 2001 (Cth), s 297.

⁶⁸⁵ Ibid, s 299A (1).

- requiring the bank to report on them.
- 2.181 Prior to the court's deliberations, CBA released an annual report which acknowledged the risk of climate change and pledged to undertake scenario analysis to estimate these risks to its business. The shareholders withdrew their suit. This case was noted as 'the first in the world to pursue a bank over failing to report climate change risks'.⁶⁸⁶
- 2.182 Relevant proceedings have also included *McVeigh v Retail Employees*Superannuation Pty Ltd, 687 filed in the Federal Court. An Australian pension fund member filed against the Retail Employees Superannuation Trust (**REST**), claiming that the fund had breached the Corporations Act by failing to provide information regarding climate change business risks, and any plan to address those risks. He later alleged that REST had violated the Superannuation Industry (Supervision) Act 1993 (Cth), which requires trustees to act with care, skill, and diligence, and to perform their duties and exercise their powers in beneficiaries' best interests. He claimed that a prudent trustee would have provided the kind of information requested, and ensured that its investments management processes and disclosure of climate change business risks complied with the TCFD's recommendations.
- 2.183 In late 2020, the parties settled, with REST publicly acknowledging that climate change was a material, direct and current financial risk to the superannuation fund. REST made several commitments, including achieving a net zero carbon fund footprint by 2050, monitoring and reporting outcomes on its climate related progress in line with the TCFD recommendations, publicly disclosing its portfolio holdings, enhancing its consideration of climate change risks when setting its investment strategy and asset allocation, and requiring its investment managers and advisers to comply.
- 2.184 A different financial sector matter has involved a January 2020 complaint filed by bushfire survivors with the ANCP alleging a breach by ANZ Bank of the OECD Guidelines. The complaint alleged that aspects of ANZ's disclosures, target-setting and scenario analysis had not adhered to its standards regarding due diligence, disclosure, environment, and consumer interests. The ANCP's initial assessment in November 2020 accepted that the issues raised merited further assessment and offered its offices to facilitate a mutually agreed resolution. 690
- 2.185 In late November 2020, the ANZ published an updated change policy statement supporting the Paris Agreement's goal of net zero emissions by 2050, and acknowledging that some stakeholders' views that financing fossil fuel industries conflicts with its position of reducing emissions. It also committed to improved transparency with respect to its financing decisions and supporting Paris Agreement goals, reducing the carbon intensity of its electricity generation lending

⁶⁸⁶ Anita Foerster and Jacqueline Peel, 'Climate change is a financial risk, according to a lawsuit against the CBA', The Conversation (online), 17 August 2017.

These proceedings were settled prior to determination by the Federal Court. The case was filed in the Federal Court of Australia in July 2018. See decision regarding application for maximum costs order *McVeigh v Retail Employees Superannuation Pty Ltd* [2019] FCA 14 (17 January 2019).

⁶⁸⁹ Friends of the Earth Australia & Ors v Australia and New Zealand Banking Group (Complaint to the Australian National Contact Point, 30 January 2020). This complaint alleges breach of provisions of the OECD Guidelines with respect to Ch II (General policies); Chapter III (Disclosure); Chapter VI (Environment); and Chapter VIII (Consumer Interests).

⁶⁹⁰ Australian National Contact Point (**ANCP**), Initial Assessment, Complaint by Friends of the Earth Australia and others, against Australia and New Zealand Banking Group Limited (AusNCP case #20), 24 November 2020.

- portfolio by only directly financing low carbon gas and renewable projects by 2030, and not directly financing any new coal-fired power plants or thermal coal mines, including expansions.⁶⁹¹
- 2.186 The ANCP's final assessment was issued on 15 December 2021. 692 It determined that ANZ's actions were consistent with the OECD Guidelines. It considered that reports had found that climate change, from CHG emissions including those arising from bank financing, was increasing bushfire risk, but that this did not mean that any funding enabling CHG emissions was a breach of the OECD Guidelines. 693
- 2.187 However, the ANZ further noted that the OECD Guidelines' expectations specifically addressing GHG and climate change are limited. These encouraged companies to improve performance regarding GHG emissions, and ANZ was doing so. There was, the ANCP considered, some ambiguity about the OECD Guidelines' expectations regarding climate change. It recommended that this issue be brought to the OECD's attention as part of its current stocktake and review of the OCED Guidelines.⁶⁹⁴

Consumer law

- 2.188 False or misleading representations concerning environmental credentials of products and services may give rise to customer claims in tort or contract or actions under the *Competition and Consumer Act 2010* (Cth). The ACCC has taken action in respect of misrepresentations about product carbon emissions.
- 2.189 For example, this has involved 'green' claims made by GM Holden Ltd in advertising Saab cars. Saab promoted the green credentials of its motor vehicles, including 'switch to carbon neutral motoring' messages. The ACCC considered such claims misleading for several reasons, including that there any Saab vehicle operating would result in a net release of carbon dioxide. It obtained Federal Court declarations⁶⁹⁵ that GM Holden had breached section 52 and paragraph 53(c) of the former *Trade Practices Act 1974* (Cth). GM Holden accepted enforceable undertakings not to publish the advertisement and to train its marketing staff. It would also offset its vehicles' carbon emissions.⁶⁹⁶
- 2.190 Other 'green washing' proceedings have been brought by the ACCC against De Longhi, GM Holden and Goodyear Tyres. These include misrepresentations about an 'environmentally friendly' air conditioner, the supply and sale of carbon credits, 'environmentally friendly' tyres, and the V8 Championship series. The ACCC has relevantly guidance to educate businesses about their obligations under the Australian Consumer Law in this context. 698

Human rights

2.191 Waratah Coal Pty Ltd v Youth Verdict Ltd & Ors⁶⁹⁹ (Waratah Coal) involved a youth representative group challenging a mining lease approval for the proposed

⁶⁹¹ ANZ Climate Change Statement, 9 November 2020, available online.

⁶⁹² ANCP, Final Statement, Complaint by Friends of the Earth Australia and others, against Australia and New Zealand Banking Group Limited (AusNCP case #20), 15 December 2021.

⁶⁹³ Ibid 4

⁶⁹⁴ Ibid.

⁶⁹⁵ ACCC v GM Holden Ltd [2008] FCA 1428.

⁶⁹⁶ Ibid.

⁶⁹⁷ See Preston, Brian J. 'Climate Change Litigation (Part 1)' *Carbon & Climate Law Review*, vol. 5, no. 1, 2011, 3, 12–14.

⁶⁹⁸ ACCC, 'Green marketing and the Australian Consumer Law' (2011).

⁶⁹⁹ Waratah Coal Pty Ltd v Youth Verdict Ltd & Ors [2020] QLC 33.

Waratah Galilee Coal Project on the basis that it will violate the right to life, the rights of children, non-discrimination, and cultural rights under the new *Human Rights Act 2019* (Qld) (**Qld HRA**).⁷⁰⁰ Under the Qld HRA, it is unlawful for a public entity to act or make a decision in a way that is not compatible with human rights; or in making a decision, to fail to give proper consideration to a relevant human right.⁷⁰¹

- 2.192 Waratah sought to strike out the Qld HRA grounds on the basis that the Land Court of Queensland did not have jurisdiction to consider them. However, in August 2020, the Court dismissed this application, finding that it could consider the Qld HRA on the basis that the Court was a public entity⁷⁰² whose functions include acts or decisions.⁷⁰³ It further noted that the Qld HRA applied to all Queensland Acts and statutory instruments, whether passed or made before or after its commencement.⁷⁰⁴
- 2.193 An interlocutory application filed by Waratah seeking further and better particulars from the applicants in relation to their claim was largely refused.⁷⁰⁵ At the time of writing, the Court had yet to rule on the substantive arguments in these proceedings.

Duty of care

- 2.194 In a recent action, *Sharma v Minister for the Environment* (*Sharma*),⁷⁰⁶ a group of school students representing all children ordinarily residing in Australia, sought an injunction to restrain the federal Minister for the Environment from approving the NSW Vickery Extension Project, an open-cut coal mine. They claimed that:
 - the Minister had a duty to exercise her EPBC Act powers with reasonable care so to avoid causing the children harm, in breach of the asserted duty of care;
 - the approval would result in substantial climate-related harm given increased carbon dioxide emissions from extracting, exporting and burning the coal; snf
 - the Minister knew or should know that the claimants were vulnerable to foreseeable risks of serious harm.
- 2.195 On 27 May 2021, Justice Bromberg of the Federal Court of Australia found that the Minister had a duty to exercise her EPBC Act powers with reasonable care so as to avoid causing personal injury to the children, when making a decision to approve or not approve the project under the EPBC Act. The effect of the decision was that the Minister in deciding whether or not to approve the Extension Project...must take into account, as a mandatory relevant consideration, the avoidance of personal injury to people. Bromberg J subsequently considered the issue of whether any applicable declaration or order made by the Court should

⁷⁰⁰ A nature refuge body is a joint applicant and argues that it further violates rights to property and privacy.

⁷⁰¹ Human Rights Act 2019 (Qld), s 58(1).

⁷⁰² Ibid s 9.

⁷⁰³ Ibid s 58(1)(a).

⁷⁰⁴ Ibid s 108.

⁷⁰⁵ Waratah Coal Pty Ltd v Youth Verdict Ltd & Ors (No 2) [2021] QLC 4.

⁷⁰⁶ Anjali Sharma & Ors (by their Litigation Representative Sister Marie Brigid Arthur) v Minister for the Environment (Commonwealth), Federal Court of Australia, Victoria Registry, VID 607/2020, 8 September 2020.

⁷⁰⁷ Sharma by her litigation representative Sister Marie Brigid Arthur v Minister for the Environment [2021] FCA 560 [513].

⁷⁰⁸ Ibid [503].

- extend to the children who were represented by the applicants (being children who reside in Australia).⁷⁰⁹ His Honour found that it should.⁷¹⁰
- 2.196 On the facts, however, Bromberg J was not satisfied that it was probable that the Minister would breach the duty of care, such that an injunction should be granted restraining the Minister from exercising the relevant power under the EPBC Act in a manner that would permit the extraction of coal from the Extension Project.⁷¹¹ Accordingly, no such injunction was granted. The Minister subsequently approved the NSW Vickery Extension Project.⁷¹²
- 2.197 The recognition of a novel duty of care in *Sharma* was considered 'significant'.⁷¹³
- 2.198 Subsequently, in October 2021, Torres Strait Islander Elders Wadhuam Pabai Pabai and Wadhuam Paul Kabai filed a Statement of Claim at the Federal Court of Australia for a class action against the Commonwealth of Australia, on behalf of persons of Torres Strait Islander descent who have suffered loss and damage as a result of alleged conduct from around 1985 'and continuing' (*Pabai Pabai & Anor v Commonwealth*).⁷¹⁴
- 2.199 The applicants argued that the Commonwealth Government had breached the duty of care it owed to Torres Strait Islander peoples by failing to take reasonable steps to ensure a range of outcomes, having regard to the best available science (as defined).⁷¹⁵ These outcomes included identifying relevant impacts and risks for the Torres Strait Islands and avoiding injury and harm to their peoples, implementing the measures necessary to reduce Australia's GHG emissions commensurate to the target, and implementing the measures necessary to protect 'the land and marine environment of the Torres Strait Islands and the cultural and customary rights of Torres Strait Islanders, including the applicants and the Group Members, from GHG emissions into the Earth's atmosphere'. The applicants requested that the court require the Commonwealth to reduce Australia's GHG emissions to a level where they did not pose harm to Torres Strait Islander peoples.
- 2.200 The applicants allege that the Commonwealth's duty of care arose from the common law of negligence, as well as the Torres Strait Treaty⁷¹⁸ and Torres Strait

⁷⁰⁹ Ibid [515]. His Honour noted that until submissions have been made on this point the Judge will not make orders or declarations that may be binding on a represented person, or that confine or stop the representative nature of the proceeding [516]. This includes not making any declaration reflecting his conclusion regarding the Minister's duty of care [518] – the utility of any such declaration and its terms should also be addressed by further submissions.

⁷¹⁰ Sharma by her litigation representative Sister Marie Brigid Arthur v Minister for the Environment (No 2) [2021] FCA 774 [1].

⁷¹¹ Ibid [513].

⁷¹² See, Michael Slezak and Patrick Bell, '<u>Environment Minister approves Vickery coal mine extension after teenagers' climate change legal challenge</u>' (16 September 2021) *ABC News*.

⁷¹³ Jillian Button et al, 'Australian and Dutch courts find climate-related duties of care in Sharma and Shell' Allens (8 June 2021).. The Law Council notes that subsequent to this paper being prepared in November 2021, the Full Federal Court upheld the Commonwealth's appeal from Sharma: see Minister for the Environment v Sharma [2022] FCAFC 35.

⁷¹⁴ See, <u>Statement of Claim</u> for the case of *Pabai Pabai & Guy Paul Kabai v Commonwealth of Australia*. The Applicants are supported by the Urgenda Foundation (Dutch Non-Governmental Organisation) and the Grata Fund ('public interest advocacy' charity).

⁷¹⁵ Ibid [82]-[83].

⁷¹⁶ Ibid [82].

⁷¹⁷ Bridget Brennan and Kirstie Wellauer, 'Rising sea levels push Torres Strait Islanders Paul and Pabai to take legal action against the Australian government' (27 October 2021) *ABC News*.

⁷¹⁸ See, *Treaty between Australia and the Independent State of Papua New Guinea concerning Sovereignty and Maritime Boundaries in the area between the two Countries, including the area known as Torres Strait, and Related Matters*, signed on 18 December 1978 (entered into force 15 February 1985), arts 10, 13. See also, Australian Government Department of Foreign Affairs and Trade, 'The Torres Strait Treaty'.

Islander peoples' native title rights.⁷¹⁹ At the time of writing, this matter had not been determined. Its significance includes its illustration of the 'continued commitment to country [by traditional owners] over countless generations'.⁷²⁰

Statutory Duty to Protect against Climate Change

2.201 A significant 2021 decision was *Bushfire Survivors for Climate Action Incorporated v Environment Protection Authority*⁷²¹ (**BSCA v EPA**). The NSW Land and Environment Court made an order of mandamus that the EPA 'develop environmental quality objectives, guidelines and policies to ensure environment protection from climate change' in accordance with paragraph 9(1)(a) of the *Protection of the Environment Administration Act 1991* (NSW) (**POEA Act**).⁷²²

2.202 This order was made on the basis that:

- the EPA had a duty to make environmental quality objectives, guidelines and policies, under para 9(1)(a) of the POEA Act, to ensure 'environment protection' in NSW;
- the purpose of 'environment protection' as described under the PEA Act includes to protect the environment from significant threats;
- climate change (a term Preston CJ considered 'sufficiently wide to embrace the phenomenon itself, as well as its causes and consequence')⁷²³ is a significant threat; and
- the EPA had not presented in evidence any instruments it had developed to ensure the protection of the environment from climate change.⁷²⁴
- 2.203 Significantly, the parties provided the Court with an Agreed Statement of Facts setting out the causes and consequences of climate change, as described by Professor Penny Sackett, former Chief Scientist for Australia.⁷²⁵ The BSCA also drew upon the findings of the recent IPCC Sixth Assessment Report.
- 2.204 Notably, Preston CJ rejected BSCA's further contention that the duty specifically required developing the requisite instruments 'in ways that are "consistent with limiting global temperature rise to 1.5 degrees Celsius above pre-industrial levels". The stated, the EPA had discretion to the content of the instruments it develops. The stated: 'there are legitimate policy choices to be made in formulating the regulatory approaches and local actions that should be pursued to protect the environment from climate change'.
- 2.205 As observed by Laura Schuijers, this is the first time a government body has been ordered to take meaningful action on climate change by a court in Australia. It may

⁷¹⁹ See Statement of Claim in the case of Pabai Pabai & Guy Paul Kabai v Commonwealth of Australia [54], [81]. See also, Native Title Act 1993 (Cth) ss 3-4, 10-11, 226-227 and 233.

⁷²⁰ Eddie Synot, 'Why the Australian government must listen to Torres Strait leaders on climate change' (10 November 2021) *The Conversation*.

⁷²¹ Bushfire Survivors for Climate Action Incorporated v Environment Protection Authority [2021] NSWLEC 92.

⁷²² Ibid [18].

⁷²³ Ibid [101].

⁷²⁴ Ibid [17].

⁷²⁵ Ibid [76].

⁷²⁶ Ibid [16].

⁷²⁷ Ibid.

⁷²⁸ Ibid [97].

Part 2 - Conclusion

- 2.206 This Part confirms that rapid shifts are occurring as international legal frameworks adapt to climate change and its drivers, impacts and risks. Climate-specific instruments are being created with binding legal obligations for their parties. Under the UNFCCC and Paris Agreement, for example, Australia has made a number of significant commitments with a view to holding the increase in global average temperature, compared to pre-industrial levels, 'well below 2°C' and pursuing efforts to limit temperature gain to 1.5°C. Environmental treaties and instruments also contain highly relevant commitments.
- 2.207 Human rights obligations, too, have increasingly been engaged when considering climate change mitigation and adaption responsibilities. Australia is bound by a number of treaties to respect, protect and fulfil human rights. UN authorities are underlining that States have a human rights obligation to prevent the foreseeable adverse effects of climate change and ensure that those affected by it, particularly those in vulnerable situations, have access to effective remedies and means of adaptation to enjoy lives of human dignity. There are also suggestions that treaty bodies may hold State parties to human rights treaties accountable for human rights harms caused by climate change.
- 2.208 Concurrently, the relationship between large-scale displacement and climate change is being scrutinised by reference to existing international law frameworks. Some states are increasingly voicing concerns that climate change is a relevant potential source of aggravation to international peace and security.
- 2.209 Alongside this evolution in international legal frameworks for State responsibilities, Australian businesses are also subject to increasing guidance on their role in responding to climate change. The recommendations by the TCFD have, for example, been widely adopted and have driven significant regulatory change. There are also attempts to outline responsible business conduct on climate change by reference to existing international standards, including with respect to human rights. The development of instruments such as the Oslo Principles on Global Climate Change Obligations and the Principles on Climate Obligations of Enterprises may contribute to an emerging body of international law and practice over time.
- 2.210 Domestically, a range of legislation exists at federal level, including to regulate national emissions reduction. There are substantial policies and programs implementing direct action policies and backed by significant investment. National financial regulators have also released guidance regarding climate-related risk disclosure.
- 2.211 However, Australia's domestic policy and laws tend to diverge at the state, territory and federal levels, and there are gaps and inconsistencies. A national climate response may assist in setting out long-term objectives, roles and responsibilities. As part of this national response, an overarching federal legislative framework for achieving progress on climate change mitigation and adaption measures, including a legislated emissions reduction target, may assist in achieving certainty, stability and predictability in the domestic implementation of Australia's obligations.

⁷²⁹ See Laura Schuijers, 'Bushfire survivors just won a crucial case against the NSW environmental watchdog, putting other states on notice' *The Conversation* (online) (27 August 2021).

- 2.212 Specifically, the possibility of federal legislative change has been canvassed (and in some cases, implemented) across diverse fields, from environmental to corporations, natural disaster, water, and migration laws. The possibility of future legislated emissions trading or carbon pricing schemes remains under debate, given their increased global take-up.
- 2.213 Australia's states and territories are working towards a target of net zero emissions by 2050, four of them pursuant to specific climate change legislation. A national climate action plan, underpinned by legislative frameworks as required, could more clearly set out respective roles and responsibilities of federal, state and territory governments, as a way to aligning and achieving long-term objectives.
- 2.214 Finally, foreign and Australian courts are increasingly being asked to adjudicate on relevant duties with respect to the risks posed by climate change, across multiple areas of the law. Foreign climate litigation continues to raise novel causes of action. Some of these cases may prompt future Australian litigation challenges. In Australian courts, the pace of litigation has become more rapid across a variety of matters.
- 2.215 These evolving client demands in turn pose challenges for the legal profession, as discussed in Part 3.

Part 3 – Implications for the legal profession

Introduction

- 3.1 Part 3 assesses how the Australian legal profession is and will be affected by the scientific, social, economic and legal developments in response to climate change which have been set out at Parts 1 and 2 of the Background Paper.
- 3.2 It then considers the role to be played by the Law Council, as the legal profession's national representative, in assisting the profession to address the new challenges it faces. It has regard to other professional bodies and their responses to the challenges posed by climate change in their respective domains, and draws on the Law Council's mandate in this area as the basis for its policy.

Legal practices are changing

- 3.3 Client needs are changing in response to the physical and transition risks associated with climate change. Legal practices too are adapting.
- 3.4 The evolution in legal practice in Australia is not only evident from the patterns of litigation outlined in Part 2 of the Appendix. It is also informed by changes which have occurred in the law and regulatory frameworks, and further changes which are anticipated. Further, it is the subject of a growing body of commentary by lawyers themselves, from large corporate firms to community legal centres, on the way their practice is changing.
- 3.5 The evolution and development of legal needs in Australia is considered below. What is revealed is a landscape in flux, with many lawyers facing untested questions across multiple practice areas. At the same time, different groups of clients and industries are presenting, or likely to present, Australian lawyers with specific legal needs, given the risks, liabilities and opportunities that they face in light of climate change.
- 3.6 The emergence of new legal issues must also be considered in the context of shifting structures of legal practice and the legal system, as well as changes in the teaching and understanding of law in higher education, and continuing professional development. New climate-focused or climate-adjacent practice areas are being formed, along with new topics for academic and professional instruction. Similarly, access to justice is under pressure as existing legal service providers face increased legal demands in climate-related areas.

Novel needs for legal advice

- 3.7 The legal profession must advise and represent clients in light of a rapidly changing tide of climate-related law encompassing new statutes, new common law precedents, new commentary regarding the interpretation of existing laws, new litigation challenges, and new questions posed by clients.
- 3.8 A broad range of potential scenarios face Australian lawyers, depending on the nature of their practice and their clients. Possible examples of evolving challenges include:
 - a commercial practitioner ensuring that a corporate client is meeting their disclosure obligations with respect to climate risk;

- a migration lawyer advising a person who has been displaced from their home country by reason of climate change on obtaining a visa to live in Australia;
- a government lawyer advising on the legal implications of new legislation containing climate-related duties for public decision-makers;
- a construction lawyer advising client on the likely scope of a client's responsibilities to identify and address climate-change related risks, eg, for the building of a dam wall in a flood-prone area, or for bushfire-resistant dwellings;
- a workplace relations lawyer advising an employer on meeting occupational health and safety standards in light of the heightened risks of increased heat stress; and
- a property lawyer advising on future risk, eg, sea level rising, bushfires and floods more often and more dangerous, or for rural land to take into account that droughts are likely to be longer and more severe.
- 3.9 Some of these examples are further elaborated upon below.

Example 1 - Corporate governance: disclosing and managing risk

- 3.10 As outlined in Part 2 of this Background Paper, recognised legal duties with respect to corporate governance and disclosure extend to climate change risks. These mean that Australian corporations, and in some cases, their directors may face fresh and diverse sources of liability if they fail to take these risks into account.
- 3.11 Barristers Noel Hutley SC and Sebastian Hartford Davis consider that directors who fail to consider the impact of climate change risks on their business are exposed to potential liability for breach of their duty of care and diligence.⁷³¹ They concluded in 2019 that a 'diligent' director was now obliged to:
 - assess what steps are necessary or appropriate to 'adapt to global warming of 1.5°C (possibly within five years)';
 - 'seek to predict, influence and respond in the short to medium-term' to the adaptation and mitigation measures which would be required to avoid global warming of 1.5°C; and
 - assess the business impact of 'escalating physical changes' that will likely arise in either case.⁷³²

Example 2 – Employment and health and safety law risks

3.12 The climate-related impacts upon Australian employment may give rise to many workplace issues, both due to shifts occurring across employment and industries in coming decades and the direct impacts of climate change itself. These may have legal dimensions. For example:

⁷³⁰ See The Hon Robert French AC, 'The Law in a Climate of Change: Inaugural Sir Francis Burt Oration' (Speech, 6 November 2019) 13-14; The Second Hutley Opinion.

⁷³² In other words, what steps will be required in the absence of 'concerted decarbonisation efforts': ibid [14].

- large-scale jobs losses may occur in some industries, there will be increasing demands in others, and many workplaces will transition their functions this may have implications for negotiations concerning redundancy entitlements, redeployment and reskilling arrangements. Should principles of 'just transition' be incorporated into legislative frameworks, 733 this may heighten the need for targeted legal advice in these scenarios;
- employers may need to shut down due to climate-related natural disasters and emergencies, or employees may be unable to attend work – this may require advice regarding the employer's obligations and employee entitlements:
- climate change will pose health risks in workplaces: for example, heat exposure and/or compromised air quality may arise in outdoor workplaces in the construction industry or locations for emergency response work, or in hot indoor environments such as manufacturing facilities.⁷³⁴ These may pose serious occupational health and safety challenges for employers;⁷³⁵ and
- heat stress and damage to human health may also affect labour productivity⁷³⁶ – terms in employment contracts or enterprise bargaining agreements may need to be restructured to reflect this new reality, or the terms of existing agreements re-interpreted.
- 3.13 Many workplaces may be yet to address these issues.⁷³⁷ Canadian practitioners Meredith James and Aladdin Diakun note the justice system is 'only beginning to grapple' with these developments but note their significant implications for legal practice.⁷³⁸

Example 3 - Environment and planning law

3.14 The impacts of climate change have had a pronounced effect on environment and planning law in Australia. Jordan Elliott and Amy Macguire argue that certain developments in recent case law indicate a 'growing openness' in decision-makers, executive and judicial, to 'interpret the law with regard to environmental concerns'. While the identified pattern of increased concern for principles of ecologically sustainable development go to matters of law at the state and territory level, these commentators emphasise the significance of 'bottom-up efforts' and developments at the state judicial and quasi-judicial level in creating legal

⁷³³ See Part 2.

⁷³⁴ Meredith James and Aladdin Diakun, 'Three reasons why lawyers should engage with climate change', online article, 16 February 2021, The Lawyers Daily, Lexis Nexis Canada.
⁷³⁵ Ihid

⁷³⁶ Ibid.

⁷³⁷ For example, in a 2014 study, Markey et al found that of the (minority of) businesses analysed that acknowledged responsibility and act on climate change and reduce their emissions, a low proportion had changed work practices (39 per cent), conducted training and development for staff (24 per cent) or 'changed the mix of skills in the workplace' (9 per cent): Ray Markey, Joseph McIvor, Chris F Wright, Professor Ray Markey, Dr Joseph McIvor, Dr Chris F Wright, 'Climate Change and Australian Workplaces: Final Report for the Australian Department of Industry on State of Knowledge on Climate Change, Work and Employment' (February 2014), Macquarie University Centre for Workplace Futures.

⁷³⁹ Jordan Elliott and Amy Maguire, 'Detouring "Business as Usual": Alternative Pathways through the Australian Legal System for Individuals and Communities Seeking Action on Climate Change' *Australian Law Journal* (2020) 94 ALJ 439, 451.

⁷⁴⁰ Ibid 452. For example, this pattern is noted in decisions by bodies such as the Independent Planning Commission established under the *Environmental Planning and Assessment Act 1979* (NSW).

- precedents and influencing governments at higher levels.⁷⁴¹ Any increasing weight given to environmental concerns may factor into lawyers' advice regarding the strength and risk of certain climate-related arguments.
- 3.15 New legal questions may also be arising under current biodiversity laws due to the impacts of climate change. For example, Dr Phillipa McCormack notes the difficulties which managers of protected areas will face in fulfilling their legal obligations to 'protect, conserve, present, and transmit' natural and cultural heritage for future generations, given the protection of ecosystems 'as they are' may be rendered impossible by biodiversity losses. T42 Other changes which will affect the nature of legal advice include an increasing trend for statutory protected area management plans to acknowledge climate change implications and incorporate innovative planning approaches to address them, even where this is not explicitly required in existing Commonwealth and State or Territory legislation. Alida McKern also notes that some local planning scheme controls now contain reference to climate change, with direct impacts on the decisions of state judicial bodies.

Example 4 – Strategic and climate-related litigation

- 3.16 The increasing risk of climate litigation means that individuals, corporations or other groups may require legal advice and representation across an increasingly broad range of practice areas to navigate novel legal questions. For example:
 - distinctive questions of standing, causation and evidence are likely to be raised for all sides in climate litigation matters.⁷⁴⁵ As Tim Baxter notes, discerning the effects of events such as heatwaves on communities may be simple, but predicting their impacts on individuals is 'virtually impossible.'⁷⁴⁶ It has been said that climate litigation revolves around climate attribution science,⁷⁴⁷ a still-developing field;⁷⁴⁸
 - in particular, difficulties in attributing responsibility for harm deriving from an act (or omission) to a particular entity or entities, in the context of the everchanging impacts of climate change and the scientific evidence base to demonstrate them, raise complex legal questions with respect to proving causation and harm.⁷⁴⁹ In particular Nelson has identified the chronic lack of

⁷⁴¹ Ibid 454.

⁷⁴² Philippa C McCormack, 'Biodiversity conservation law and climate change adaptation' (2018) 92(1) *Australian Law Journal* 839, 842.

Australian Law Journal 839, 842.

743 See, for example, Ngootyoong Gunditi Ngootyoong Mara South West Management Plan 2015 (Parks Victoria, 2015); Wellington Park Management Plan 2013 (Wellington Park Management Trust, 2013), as cited at McCormack, Ibid 844.

⁷⁴⁴ See Alida McKern, 'Climate change and planning, land management, and development' *Planning News* 46(1) (February 2020) 10-11. McKern gives the example of how the case of *Walsh v Nillumbik SC* [2018] VCAT 415 was decided based in part upon relevant zones and overlays which incorporated climate change considerations.

⁷⁴⁵ Peter A. Allard School of Law, '<u>Beverley McLachlin Public Lecture: The Future of Law in a Changing World</u>', (undated), *The University of British Columbia* ('**The Future of Law**').

⁷⁴⁶ Tim Baxter, 'Urgenda-Style Climate Litigation Has Promise in Australia' (2017) 32(3) *Australian Environment Review* 70, 71-72.

⁷⁴⁷ Namely, 'the ability to detect environmental changes and attribute these to increases in greenhouse gas emissions': Michael Burger, Jessica Wentz and Radley Horton, 'The Law and Science of Climate Change Attribution' (2020) 45(1) Columbia Journal of Environmental Law 57. The authors note that attribution science is central in evidence for many of the elements to a successful cause of action, from the establishment of standing to sue, to liability of emitters for damages resulting from the impacts of climate change and claims against Government for not regulating GHG emissions, among others: 62.
⁷⁴⁸ Ibid; The Second Hutley Opinion 5.

⁷⁴⁹ Daisy Mallett, Partner, King and Wood Mallesons, 'Climate change litigation – what is it and what to expect?' (27 February 2020).

baseline studies in Australia so that the cumulative impact of development has been dealt with on a piecemeal basis, instead of a cumulative basis, and

a related challenge involves the remedies available in the context of irreversible harms. Baxter has previously argued that although historically damages have been the only successful primary remedy for a negligence claim, broader case law suggests that there is potential for an equitable injunction to be granted before a wrong has occurred. ⁷⁵¹

Managing demands from key industries and clients

Industry demands

- 3.17 Physical and transition risks may also give rise to industry-specific legal needs. As noted in Part 1, a wide range of industries are predicted to be affected by climate change, including transport infrastructure, energy and electricity, tourism, insurance and other financial services, health, water supply infrastructure, construction and housing, agriculture, forestry, fisheries and mining.⁷⁵²
- 3.18 A key example is the insurance industry. The increased likelihood (and corresponding foreseeability) of severe natural disasters may increase legal need amongst both insurers and the insured in Australia.
- 3.19 The increasing frequency of extreme weather events makes them more predictable and less insurable. Because of this, the Royal Commission into National Natural Disaster Arrangements Report (**Natural Disaster Report**) focused on insurance as a key element of natural disaster risk management. Conversely, it recognised that the benefits of insurance could be threatened if a person or business has inadequate coverage, or if difficulties in properly pricing insurance to factor in natural hazard risk (as foreshadowed by the RBA) cannot be overcome.
- 3.20 These factors overlay the pre-existing complexities of the general insurance markets. The second coverage in light of climate-related events, to renegotiate new insurance agreements describing foreseeable risks and containing new risk transfer mechanisms, and to represent clients on insurance litigation on such matters.
- 3.21 Another key example is the energy sector. The sector faces a range of challenges due to climate change, from physical risks affecting energy infrastructure to transition risks arising from regulatory responses to climate change and the transitions to less carbon intensive energy sources. Participants in the sector have also been some of the prime beneficiaries of climate change policies intended to support decarbonisation. Lawyers advising in the sector have for many years been

⁷⁵⁰ Rebecca Nelson, 'Breaking Backs and Boiling Frogs: Warnings from a Dialogue between Federal Water Law and Environmental Law' (2019) 42(4) UNSW Law Journal 1179.

⁷⁵¹ Tim Baxter, 'Urgenda-Style Climate Litigation Has Promise in Australia' (2017) 32(3) *Australian Environment Review* 70, 71 citing *Plaintiff S99/2016 v Minister of Immigration and Border Protection* (2016) 243 FCR 17.

⁷⁵² IPCC, 'Part A Adaptation Report' 665, 677, 680, 684, 688.

⁷⁵³ The Future of Law 6.

⁷⁵⁴ See, Royal Commission into National Natural Disaster Arrangements, Final Report at [20.1]-[20.3]. The Report notes the importance of general insurance in assisting individuals to manage risk financially, creating price signals to communicate risk and aiding recovery after a disaster ([20.7], [20.9]).
⁷⁵⁵ Ibid.

⁷⁵⁶ Ibid at [20.11].

assisting their clients to navigate these changes.

Impact on community groups

3.22 Specific client group demands may also pose specific and evolving climate-related legal challenges, including those below.

First Nations communities

- 3.23 The risks which climate change poses for First Nations people, as outlined in Parts 1 and 2, may give rise to new areas of legal need and amplify existing areas.
- 3.24 Bedford, McAvoy and Stephenson-Graf have recently argued that First Nations peoples must be centred as a priority in any examination of climate change, recognising their long-standing practices and cultural connection to the land.⁷⁵⁷ They consider that both international and domestic human rights laws are potential avenues to protect both First Nations interests and the environment.⁷⁵⁸
- 3.25 First Nations peoples in Australia (and globally) have already been at the forefront of testing the scope of legal responsibility for climate-related harms which may be caused to their communities. This includes the current HRC communication made by Torres Strait Islander peoples on low-lying lands affected by sea level rises, 759 and the *Waratah Coal* case concerning potential breaches of human rights, such as cultural rights and rights to life, non-discrimination and children's rights. Report of Australia by Torres Strait Islander leaders, challenging Australia's failure to cut emissions and asserting that this inaction will force their communities to migrate to new areas. The applicants allege that the Commonwealth owes a duty of care to Torres Strait Islanders to take reasonable steps to protect them, their culture and traditional way of life, and their environment from harms caused by climate change, and that the Commonwealth has breached this duty as its targets are not consistent with the best available science. Strait leads of the science.
- 3.26 The potential for other such matters is further evident from foreign jurisdictions, as in *Lho'imggin*. Such claims may not always be successful, or have comparable foundations in current Australian law, depending on the jurisdiction. However, in 'human rights charter' states and territories like Victoria and Queensland, challenges to decisions which fail to consider First Nations rights to life or cultural rights may continue noting, for example, predictions that climate impacts to First Nations communities include water security risks, food insecurity, and health risks. ⁷⁶³
- 3.27 Bedford, McAvoy and Stevenson-Graf canvassed a number of potential avenues to test legal boundaries of climate change with respect from the perspective of First Nations persons.⁷⁶⁴ They consider that the international human rights framework,

⁷⁵⁷ Bedford, McAvoy and Stevenson-Graf 371.

⁷⁵⁸ Ibid.

⁷⁵⁹ Petition of Torres Strait Islanders to the United Nations Human Rights Committee Alleging Violations Stemming from Australia's Inaction on Climate Change (2019).

⁷⁶⁰ Waratah Coal Pty Ltd v Youth Verdict Ltd [2020] QLC 33.

⁷⁶¹ Pabai Pabai and Anor v Commonwealth Australia, Federal Court of Australia, VID 622/2021.

⁷⁶² Linda Hansen, 'Carbon in Country: Legal Pathways and Barriers to Indigenous Participation in Australia's Carbon Market Through Savanna Fire Management Under the Carbon Farming Initiative' (<u>Working Paper 3</u>, September 2015) *Melbourne Law School: Centre for Resources, Energy and Environmental Law* 10.

⁷⁶³ Melissa Nursey-Bray, 'Not passive victims: Indigenous Australians respond to climate change', *Foreground* (online) 30 August 2019.

⁷⁶⁴ Bedford, McAvoy and Stevenson-Graf 371.

- in particular the UNDRIP, provides a positive starting point for nations to acknowledge the rights of First Nations peoples and to increase accountability. Recent developments around the globe demonstrate that human rights instruments have the potential to protect First Nations' interests in a climate change context.
- 3.28 In the Australian legal system, Bedford, McAvoy and Stevenson-Graf consider that certain domestic human rights laws offer potential utility, such as the *Human Rights Act 2019* (Qld), as it requires decision-makers to take into account, among other matters, the effect of their decisions on the cultural rights of Aboriginal and Torres Strait Islander peoples.⁷⁶⁵ However, they call for a broader commitment to domestic legal reform, with options to be informed by advances from other nations that recognise and respect the connection between First Nations peoples and the land. In the interim, they consider that human rights arguments in Australia rely predominately on anti-discrimination legislation, the articulation and acceptance of novel interpretations of international instruments and the evolution of international human rights norms through common law.⁷⁶⁶
- 3.29 First Nations groups may also seek other bases for legal redress for actual or likely harm to their homes, traditions and sacred sights, such as protection under environmental and cultural heritage laws. Significant federal reforms have been recommended which may, if implemented, provide greater opportunities for First Nations groups both to seek to prevent climate-related harm and take up a greater role in preventative decision-making.⁷⁶⁷
- 3.30 The potential nexus between native title law and rights in carbon, water and biodiversity has been the subject of legal commentary, noting that new climate change-related laws, regulations and markets may further limit Indigenous peoples rights and interests through the regulation, extinguishment or suspension of native title and by restricting rights in relation to access and use of land, natural and biological resources. 169
- 3.31 There is broader renewed recognition of the importance of water to Aboriginal and Torres Strait Islander people, noting that under the UNDRIP, Indigenous peoples have rights to waters that they have traditionally owned, including the right to own, use and develop those resources. The Productivity Commission NWI review report recognises that efforts to meet First Nations aspirations concerning water to date have been insufficient while at the same time, climate change poses threats

⁷⁶⁵ Ibid.

⁷⁶⁶ Ibid 401.

⁷⁶⁷ Eg, the Samuel Report's recommendations for new NES which consider the likely effectiveness of avoidance or litigation measures on nationally protected matters under specified climate change scenarios; amendments to support more effective planning that accounts for cumulative impacts and past and present and future key threats, and build environmental resilience in a changing climate; and to entrench greater Indigenous engagement and participation in decision-making. Following recommendations made by the Joint Standing Committee on Northern Australia, there are also commitments made to review and modernise the federal *Aboriginal and Torres Strait Islander Protection Act 1984* (Cth).

⁷⁶⁸ Emily Gerrard, 'Climate Change and Human Rights: Issues and Opportunities for Indigenous Peoples' (2008) 31(3) *UNSW Law Journal* 942 ('**Gerrard**'). Also, in 2008 Warwick Baird observed the 'absolutely crucial' – but 'largely unexplored' – importance of understanding the nexus between Native Title law and rights in carbon, water and biodiversity: Warwick Baird, 'Climate Change and Indigenous Peoples' (<u>Speech</u>, Native Title conference 2008, 4 June 2008). See also for a discussion of the interaction between native title law and the Carbon Farming Initiative: Linda Hansen, 'Carbon in Country: Legal Pathways and Barriers to Indigenous Participation in Australia's Carbon Market Through Savanna Fire Management Under the Carbon Farming Initiative' (<u>Working Paper 3</u>, September 2015) *Melbourne Law School: Centre for Resources, Energy and Environmental Law* 10, 1-2.

⁷⁶⁹ Gerrard 942, 950.

⁷⁷⁰ UNDRIP arts 25 and 26.

to water access generally.771

3.32 Other climate-related legal rights or causes of action which may also be available to First Nations peoples have previously been projected to involve intellectual property law – recognising the importance of protecting, and avoiding the exploitation, of Indigenous intellectual property and traditional knowledges of biological diversity.⁷⁷²

Marginalised groups

- 3.33 Frontline services such as Community Legal Centres (**CLCs**) Australia and the ACOSS note that vulnerable people are often less equipped to respond to transition risks and the socio-economic impacts of climate change, a problem compounded by the fact that they are also less likely to be heard as adaptation and mitigation policies are developed.⁷⁷³ These groups are 'first and disproportionately' affected by the impacts of climate change, and CLCs are often at the 'forefront' of their resulting legal needs.⁷⁷⁴ The effects are not discrete or isolated: Monica Taylor anticipates that climate change events will 'constantly shape' clients' intersectional legal problems.⁷⁷⁵
- 3.34 Severe climate-related weather and natural disaster events have generated particular legal need for vulnerable groups, as well as the broader Australian community, seeking support or compensation. As Taylor notes, Australians without access to air-conditioning or council facilities who are, therefore, more vulnerable to the effects of bushfire and drought are often clients for publicly funded legal services.⁷⁷⁶
- 3.35 Taylor also observes that older Australians and those with chronic disease will face worse health outcomes from climate change, including as a result of the heat, and that the ageing of a population will correspondingly result in an increase in legal need in areas such as health, elder and succession law, as well as potentially elder abuse issues.⁷⁷⁷ She foresees that displaced persons, and people with disabilities, will also encounter difficulties with accessing justice due to climate change and its impacts.⁷⁷⁸
- 3.36 The physical risks represented by natural disasters both exacerbate existing legal issues and create new legal problems for vulnerable clients. In this context, Community Legal Centres NSW lists numerous examples, from insurance claims to credit and debt issues and destroyed documents and wills.⁷⁷⁹ In addition to these issues, greater civil legal needs are likely to include social security, housing, compensation, and employment due to climate change.⁷⁸⁰ The potential mental health impacts upon individuals having to deal with these issues may also have

⁷⁷¹ See discussion in Part 2.

⁷⁷² Gerrard 942, 946.

⁷⁷³ Ibid; ACOSS, 'Submission on the Climate Change (National Framework for Adaptation and Mitigation) Bill 2020' (27 November 2020) 4.

⁷⁷⁴ CLCs Australia, 'CLCs Australia Positions on the Global Climate Crisis' (December 2019).

⁷⁷⁵ Monica Taylor, 'Why we must be climate conscious: How legal needs are changing' (December 2019) *Proctor* 40 ('**Taylor**').

⁷⁷⁶ Ibid 41.

⁷⁷⁷ Ibid.

⁷⁷⁸ Ibid.

⁷⁷⁹ Riley Brooke, '<u>Community Legal Centres NSW Position on Climate Justice</u>' (3 April 2020) *Community Legal Centres NSW.*

⁷⁸⁰ Ibid.

broader legal consequences, such as family violence needs.⁷⁸¹

RRR communities

- 3.37 Rural, regional and remote (**RRR**) communities in Australia may experience greater legal needs as a result of climate change.⁷⁸² The physical and transition risks from climate change and Australia's response to it outlined in Part 1 will place upward pressure on legal issues regarding water rights allocation, environment and planning restrictions, farm succession and planning, responses to natural disasters and laws with special relevance to First Nations peoples all areas in which RRR communities already present particular legal needs.⁷⁸³
- 3.38 Community Legal Centres Queensland anticipates that Queensland RRR communities will be 'disproportionately' impacted by climate crises, which will place further pressure on existing social and financial strain for these communities.⁷⁸⁴ It expects 'property law, employment, bankruptcy, family and disputes about water allocation' to emerge as issues which will increase demand for its services.⁷⁸⁵
- 3.39 Remote legal practitioners more frequently offer generalist services⁷⁸⁶ and so may face particular difficulties serving clients effectively in the context of the novel, emerging and multifaceted areas of law discussed in this background paper. This feeds into the already recognised structural challenges for recruitment and retention of RRR legal practitioners.⁷⁸⁷ Data on practising solicitors in 2020 indicated that only 10 per cent practised in a country or rural area in Australia.⁷⁸⁸ While suburban areas have experienced 87 per cent employment growth in the past nine years, the equivalent figure for country or rural areas is only 9 per cent.⁷⁸⁹ Of all locations, country and rural areas were also found to have the lowest proportion of young lawyers (being those admitted for five years or less).⁷⁹⁰
- 3.40 Legal practitioners based in RRR areas also often assist farming communities and so may be asked to address questions regarding agricultural innovations, as discussed at Part 2.

Structural trends

Resource allocation in the legal sector

3.41 Evidence of changing legal practice on climate change related issues lies, at the corporate level, in the resources being expended by private law firms to create and develop practice groups which are dedicated to advising clients on these issues. This speaks to an appreciation of the growing and long-term importance of climate-

⁷⁸¹ Ibid

⁷⁸² Note, for example, that Taylor expects the RRR communities in Queensland will be those who 'most directly' feel climate change in that State: Taylor, 40.

⁷⁸³ Ibid.

⁷⁸⁴ Ibid 41.

⁷⁸⁵ Ibid.

⁷⁸⁶ Law Council of Australia, 'The Justice Project – Final Report – Part 1, 'Rural, Regional and Remote (RRR) Australians' (August 2018), 23.

⁷⁸⁷ Law Council of Australia, '<u>Rural, Regional and Remote Lawyers and Communities: National Strategic Plan</u>' (13 November 2020).

⁷⁸⁸ Law Society of NSW, '2020 National Profile of Solicitors' (1 July 2021) Urbis 32.

⁷⁸⁹ Ibid 35.

⁷⁹⁰ Ibid 37.

- related legal services to clients.791
- 3.42 As Jennifer Henderson notes, these practices are distinguished from standard planning and environment divisions by the subjects of their strategic advice, from clean-tech opportunities to resilient infrastructure projects.⁷⁹²
- 3.43 A survey conducted by *Lawyers Weekly* in December 2019 generated a range of responses by participating firms, several of which attested to their opinion of the importance of firms 'step[ping up and tak[ing]...action' on the protection of the natural environment (both in terms of their firm's sustainability activities, and accommodating client concerns).⁷⁹³
- 3.44 Lawyers for all levels of government and regulators are also likely to be engaged by the trend in litigation against government decision-makers.⁷⁹⁴ Further, there are examples of new kinds of private firm emerging in Australia focusing exclusively on public interest climate change litigation across a wide range of areas such as corporate duties to shareholders, duty of care arguments and human rights.⁷⁹⁵

Access to justice pressures

- 3.45 Legal assistance bodies are already grappling with climate change pressures, and anticipate these to increase into the future.
- 3.46 For example, Taylor predicts that residential tenancy disputes in Queensland will increase as a result of climate 'events,' as the significant portion of Queenslanders who rent (over 33 per cent) face increased maintenance and repair needs.⁷⁹⁶ Increased client need also arises, often 'urgently,' in respect to family violence flowing from disasters linked to climate change impacts.⁷⁹⁷
- 3.47 Communities also rely upon legal assistance service support during natural disasters to access government support and compensation, deal with insurance matters, as well as accommodation, debt and family law (amongst others).⁷⁹⁸
- 3.48 The key role of legal assistance bodies was reflected in the Natural Disaster Report recommendations, which included that federal and State and Territory governments should 'expedite' the development of pre-agreed recovery programs such as legal assistance services (including domestic violence legal services). The Report also raised the possibility of targeting funding to the legal assistance

⁷⁹¹ Amongst many examples, these firms include Allens, HerbertSmith Freehills, Minter Ellison and Clayton Utz. These recognise climate change as a 'critical long-term challenge for businesses', spanning a variety of practice areas.

practice areas.

792 Jessica Henderson, 'Ignited agents: the legal profession's role in the challenge of climate change', in
University of Western Australia and UWA Public Policy Institute, <u>The Preparedness Report: Climate change</u>
and the challenges facing universities and professions (2020) 34 ('Henderson').

⁷⁹³ Jerome Doraismey, 'Which firms believe in climate change and take meaningful action?' (12 December 2019) *Lawyers Weekly*. See, for example, quotes from the Lander & Rodgers chief executive partner Genevieve Collins, Clayton Utz partner Brendan Bateman and Ashurst partner John Briggs.

⁷⁹⁴ See also, Kate Allman, '<u>This is how to sue your government over climate change, say experts'</u> (13 March 2020) *Law Society Journal Online*; Norton Rose Fulbright, '<u>Climate change and sustainability</u>' (webpage, accessed 6 July 2022).

⁷⁹⁵ Eg, Equity Generation Lawyers: Charlotte Grieve and Nick O'Malley, '<u>Climate lawyer who sued super fund sets sights on federal government over bond risks</u>' *The Sydney Morning Herald* (3 November 2020).
⁷⁹⁶ Taylor, 40.

⁷⁹⁷ See Royal Commission into National Natural Disaster Arrangements, '<u>List of recommendations</u>' at recommendation 22.5, 22.100.

⁷⁹⁸ Law Council of Australia, 'Submission to the Royal Commission into National Natural Disaster Arrangements: Draft Propositions by Counsel Assisting' (16 September 2020) ('**LCA Submission to RC**') [4]. ⁷⁹⁹ Natural Disaster Report, Recommendation 22.5.

- sector 'more responsive[ly] in the midst and in the aftermath of a natural disaster. 800
- 3.49 To date, the legal assistance sector has responded with agility to unfolding pressures, such as in the context of the Black Summer 2019-20 bushfires which involved community legal centres across NSW in local emergency responses.⁸⁰¹ The Environmental Defender's Office notes the climate space in which it operates is 'rapidly changing' and has observed the growth in interest about the current trajectory of the climate from 'organisations, businesses and individuals'.⁸⁰²
- 3.50 The pro bono sector is also affected, with many Australian lawyers responding to high levels of demand for pro bono assistance in cases of natural disaster. This sector is similarly gearing towards an expanded role on climate change issues. 804
- 3.51 Legal assistance and pro bono service collaborations include programs such as:
 - the Disaster Legal Help Victoria initiative in Victoria, which brought together Victoria Legal Aid, the Federation of Community Legal Centres, the Law Institute of Victoria, the Victorian Bar and Justice Connect; and
 - Justice Connect's Pro Bono Portal, an online referral pathway through which law firms could register interest in providing assistance in the aftermath of a natural disaster so that legal aid commissions and CLCs could easily refer people to Justice Connect.⁸⁰⁵
- 3.52 Against this recognition of the growing strain on legal assistance services as a result of climate change, it is also well-understood that the sector is already critically under-funded. Robert The Law Council has estimated that current Commonwealth funding levels under the National Legal Assistance Partnership are approximately half of the level required to meet demand on the sector, with civil law matters particularly underfunded. This has additional structural impacts on the ability of legal assistance and pro bono lawyers to act in climate-related matters noting in particular that increased civil law pressures are likely in this context.

Legal education

University curricula and programs

3.53 Many Australian universities are progressively giving more attention to climaterelated legal issues. This is evident from a range of new practical programs established in recent years, including 'climate justice clinics' as partnerships between law firms and universities, such as Monash University's Climate Justice

⁸⁰⁰ Ibid [22.104].

⁸⁰¹ Community Legal Centres NSW, 'Legal help for NSW bushfire-affected communities',

⁸⁰² EDO Impact Report 2019/2020 at 6.

⁸⁰³ Natural Disaster Report at [22.22]. See also, Justice Connect, 'Natural Disaster Community Support'; Chris Povey, 'Australian bushfires: getting legal help to where it's needed' (16 January 2020) Justice Connect.
804 Australian Pro Bono Centre, 'The Future of Pro Bono: Global perspective on growing areas of legal need and sector trends' 7. For example, through a strategic partnership with the Conservation Ecology Centre, Hall & Wilcox provides pro bono legal advice regarding not-for-profit structuring, charity registration, employment issues and more. Wotton + Kearney has similarly assisted the not-for-profit Climate Justice Programme with legal research and drafting.

⁸⁰⁵ See LCA Submission to RC [20]; Justice Connect, 'Pro bono response to disasters' (webpage, accessed 6 July 2022).

⁸⁰⁶ See Law Council of Australia, '2021-22 Pre-Budget Submission' (8 February 2021) [16]; Law Council of Australia, Justice Project (Final Report, August 2018), Recommendations and Group Priorities Chapter, Recommendation 2.1.

⁸⁰⁷ Ibid [19], [116].

- Clinic,⁸⁰⁸ the University of Melbourne's Sustainability Business Clinic; the Climate Justice Initiative at the University of Queensland's Pro Bono Centre, and GreenLaw, established at the Australian National University (**ANU**) College of Law.
- 3.54 The priority being afforded to climate change at Australian law schools is also evident from a number of dedicated centres and institutes for research.⁸⁰⁹ These include:
 - the University of Sydney Law School's 'Australian Centre for Climate and Environmental Law';
 - the Centre for Climate Law and Policy at the ANU College of Law;
 - the Australian Centre for Agriculture and Law at the University of New England; and
 - the Centre for Resources, Energy and Environmental Law at the University of Melbourne Law School.
- 3.55 Australian universities are offering an increasing and diverse range of academic courses on relevant issues, with numerous electives available on the subject at both undergraduate and postgraduate level.⁸¹⁰ At the end of 2020 Bond University announced its first-of-a-kind undergraduate degree on climate change law'.⁸¹¹
- 3.56 In a recent University of Western Australia report, David Hodgkinson⁸¹² noted the 'multi-faceted and wide-ranging' scope of the discipline of climate change law.⁸¹³ He listed numerous, multi-disciplinary matters which could be covered in a climate change law course: from the international regime to geo-engineering, the ERF and the ethics of climate change law and policy, amongst others.⁸¹⁴ At the ANU, post-graduate law studies include a human security law specialisation, which incorporates the role of climate change as a global security threat.⁸¹⁵
- 3.57 The crucial influence of universities as a key source and driver of knowledge regarding climate law is also illustrated by the fact that strategic litigators have frequently drawn upon their expertise and resources. Professor Jacqueline Peel notes that academic expertise is often sought by groups wanting litigation

⁸⁰⁸ The Law Council understands that the Climate Justice Clinic is frequently oversubscribed and considered one of the Law School's most popular courses.

⁸⁰⁹ See, for example, University of Sydney Law School, '<u>Australian Centre for Climate and Environmental Law</u>'; Centre for Climate Law and Policy, ANU College of Law; Australian Centre for Agriculture and Law, University of New England; Centre for Resources, Energy and Environmental Law, University of Melbourne Law School: The University of Sydney, '<u>Environmental Law: Australia</u>'.

⁸¹⁰ See, for an example of offerings in 2021, Australian National University, '<u>Climate and Sustainable Energy Law</u>'; Newcastle Law School, '<u>Study climate change law and policy</u>'; University of Tasmania, '<u>Climate Change Law and Policy</u>'.

⁸¹¹ See, for example, Jordan Baker, "We need people who are trained": University offers first climate change law degree (10 December 2020) The Sydney Morning Herald.

⁸¹² Consultant at Herbert Smith Freehills and Associate Professor at the law school of the University of Western Australia.

 ⁸¹³ David Hodgkinson, 'Mitigation of climate change: Law, policy and ethics', in University of Western Australia and UWA Public Policy Institute, *The Preparedness Report: Climate change and the challenges facing universities and professions* (2020) 30.
 814 Ibid 31. Hodgkinson also quoted a US-based academic who noted that in the near future 'students who

want to be employable in a carbon-constrained world while contributing to the solution will have a great many choices and options available to them.'

⁸¹⁵ ANU Law School, 'Human Security Law', online (undated).

advice.816

- 3.58 Regardless of whether university programs, courses and initiatives are framed in the language of an entire new discipline of 'climate change law'⁸¹⁷ or in that of pre-existing disciplines, the increasing prevalence of related programs suggests a consistently growing demand for academic and practical knowledge in the area. It also evidences awareness on the part of universities of the vocational value of education on climate-related law for current and prospective students.
- 3.59 Bedford, McAvoy and Stevenson-Graf argue that Australian legal education must adapt so as to 'embed Indigenous cultural awareness and climate change consciousness', in order that lawyers have the skills to recognise environment and First Nations interests through international and domestic human rights laws. ⁸¹⁸ The importance of cultural competency around First Nations issues has already been recognised by various stakeholders, including Universities Australia, and the Council of Australian Law Deans. ⁸¹⁹

Legal education for practitioners

- 3.60 As well as the foundations of legal study in universities and colleges of law, legal practitioners are also apparently taking up increasingly more post-practice opportunities to learn about climate change related legal issues.
- 3.61 One common forum for this is continuing professional development (**CPD**) courses. Legal conferences are also increasingly focusing on climate change issues, such as the 2021 Climate Change, Law and Legal Education Conference hosted by Bond University.
- 3.62 The significant time and resources dedicated to ventilating climate-related legal issues with the assistance of legal experts further underlines the structural shifts occurring in the legal profession as a result of climate change.

Lawyers' professional obligations

3.63 Growing awareness of the risks and legal implications of climate change has sparked debate about whether Australian lawyers are obliged to consider and/or factor these issues into legal advice in order to comply with their legal professional obligations. The key elements of this debate are set out below.

Ethical obligations for Australian legal practitioners under domestic law

3.64 The existing regulatory framework applying to Australian lawyers sets out a number of core standards to be observed by lawyers in their interactions with the court, their clients and each other. Broadly speaking, these professional and statutory obligations are designed to promote the highest standards of professional conduct

⁸¹⁶ Sarah Marinos, 'Melbourne's Real-World Impact on Climate Change' (18 March 2021) University of Melbourne.

⁸¹⁷ For an early discussion on the possible emergence of a new legal discipline of 'climate change law' see, Jacqueline Peel, 32(3) 'Climate Change Law: The Emergence of a New Legal Discipline" (2008) *Melbourne University Law Review* 922.

⁸¹⁸ Bedford, McAvoy and Stevenson-Graf, 371, 394-400.

⁸¹⁹ Universities Australia, *National Best Practice Framework for Indigenous Cultural Competency in Australian Universities* (2011) and Universities Australia, '<u>Universities Australia's Indigenous Strategy 2017-2020'</u> < >; Professor Larissa Behrendt et al, '<u>Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People</u>' (Final Report, July 2012) xxiv (Rec 32); Marcelle Burns et al, '<u>Indigenous Cultural Competency for Legal Academics Program</u>' (2019); Council of Australian Law Deans, 'CALD Statement on Australian Law's Systemic Discrimination and Structural Bias Against First Nations Peoples (<u>Statement</u>, 3 December 2020)

and ethical standards in the provision of legal services to clients. In general terms, legal profession legislation such as the Uniform Law and state and territory Legal Profession Acts addresses matters of practice management, 820 whereas the state and territory conduct rules concern legal professional ethics.

- 3.65 Some of the duties and obligations of key relevance for the purposes of this paper are contained in the Professional Conduct Rules, including:
 - Australian Solicitors' Conduct Rules (ASCR), which were endorsed by Law Council Directors in June 2011 and have been adopted as the professional conduct rules for solicitors in: South Australia,⁸²¹ Queensland,⁸²² NSW and Victoria,⁸²³ the ACT,⁸²⁴ and recently Tasmania. A Bill which would introduce the ASCR to Western Australia was, at the time of writing, being considered by that State's Standing Committee on Uniform Legislation and Statutes Review,⁸²⁵ while the Northern Territory continued to maintain its own professional conduct rules.⁸²⁶
 - Australian Bar Association (ABA) professional conduct rules, which have existed in various iterations since 1993. These were implemented in NSW and Victoria, 827 Queensland, 828 South Australia, 829 Western Australia, 830 and Tasmania. The Northern Territory has maintained earlier conduct rules. 832 For ease of reference the Uniform Law version of the Barristers' Rules (Barristers' Rules) are referred to in this paper.
- 3.66 The **Appendix** sets out some of these fundamental duties.
- 3.67 Australian lawyers (barristers and solicitors) are also subject to general common law principles regarding their dealings with clients, including standard principles of negligence and fiduciary duties to exercise 'the standard of care and skill expected of a qualified and ordinarily competent and careful lawyer in the exercise of their profession' and avoid conflicts of interest.⁸³⁴
- 3.68 Beyond such legal obligations, lawyers have for many years been expected under principles at common law to be 'morally neutral,' on the basis that citizens have

⁸²⁰ For example, Chapter 4 of the Uniform Law is concerned with business practice and professional conduct, and includes detailed provisions have been enacted relating to, for example, trust money and trust accounts, and business management and control (including compliance audits and management system directions).

⁸²¹ Effective from July 2011 as the Law Society of South Australia, Australian Solicitors' Conduct Rules.

⁸²² Effective from June 2012, as the Australian Solicitors' Conduct Rules 2012.

⁸²³ Effective 1 July 2015, as the *Legal Profession Uniform Law Australian Solicitors' Conduct Rules 2015.*

⁸²⁴ Effective 1 January 2016, as the Legal Profession (Solicitors) Conduct Rules 2015.

⁸²⁵ See, Parliament of Western Australia, 'Legal Profession Uniform Law Application Bill 2021'.

⁸²⁶ Northern Territory has the Rules of Professional Conduct and Practice (effective from 10 April 2002).

⁸²⁷ Legal Profession Uniform Conduct (Barristers) Rules (effective 1 July 2015).

⁸²⁸ Bar Association of Queensland Barristers' Conduct Rules (effective 23 December 2011).

⁸²⁹ South Australian Bar Association Inc Barristers' Conduct Rules (effective 14 November 2013).

⁸³⁰ Western Australian Bar Association *Barristers' Rules* (effective 5 October 2011). See also, Legal Profession Uniform Law Application Bill 2021 which was being considered by that State's Standing Committee on Uniform Legislation and Statutes Review at the time of drafting.

⁸³¹ Legal Profession (Barristers) Rules 2016 (Tas) (effective 1 October 2016).

⁸³² Northern Territory has the *Barristers' Conduct Rules* (effective 20 March 2003), and Tasmania has the Tasmanian Bar Association's *Professional Conduct Guidelines*.

⁸³³ Legal Profession Uniform Conduct (Barristers) Rules 2015 (Barristers Rules).

⁸³⁴ Mirko Bagaric and Penny Dimopoulos, '<u>Legal Ethics is (Just) Normal Ethics: Towards a Coherent System of Legal Ethics</u>' (2003) 3(1) *Queensland University of Technology Law and Justice Journal* 367; The Hon Justice Brian J Preston SC, 'Climate Conscious Lawyering' (2021) 95 ALJR 51, 54, citing *Hawkins v Clayton* (1988) 164 CLR 539.

- recognised rights 'to give effect to [their] own reasonable life plans'. 835 Accompanying this expectation is the acknowledged 'corollary' that no moral responsibility for the outcomes of the work of a lawyer is to be attributed to the lawyer. 836
- Views differ regarding the extent to which considerations of 'ethics,' beyond the 'ethical' obligations set out in the ASCR and Barristers Rules, should inform a solicitor's or barrister's practice. ⁸³⁷ In view of the impacts of climate change and corresponding changes to the substance and practice of law, some commentators and practitioners have raised questions about when and how lawyers will be required to advise on climate-related issues as part of compliance with their ethical obligations under Australian law. Public debate has also raised a lawyer's choice to represent a client.

Obligations regarding choice of client

- 3.70 Solicitors and law firms are under no legal obligation to serve a particular client who seeks their advice. 838 The decision to serve a particular client is an ethical (not legal) issue which solicitors and firms must decide for themselves. 839 A client's activities in relation to climate change or the environment are one factor which may inform such a decision, along with any number of other issues which a particular solicitor or firm considers relevant. 840 Nonetheless, such decisions necessarily raise questions of access to justice, noting that inhibiting a person's access to justice is inconsistent with the function of the legal profession. 841
- 3.71 Some senior members of the legal profession take a dim view of solicitors who refuse legal assistance to particular clients. For example, NSW Supreme Court judge Francois Kunc has written in his personal capacity as Australian Law Journal editor⁸⁴² that an:
 - ... aspect of the rule of law that everyone, no matter how unpopular their cause, is entitled to legal representation. Notwithstanding the ability of solicitors to choose their clients, the rule of law is hampered if a person in need is unable to obtain competent assistance.⁸⁴³
- 3.72 Meanwhile the former President of the Law Council, Dr Jacoba Brasch, has indicated her view that: '...save where a conflict of interest might exist, litigants

⁸³⁵ Reid Mortensen, 'Professional Legal Ethic in Australia' (2018) 192 Advances in Social Science, Education and Humanities Research 12, 15.

Mirko Bagaric and Penny Dimopoulos, '<u>Legal Ethics is (Just) Normal Ethics: Towards a Coherent System of Legal Ethics</u>' (2003) 3(1) *Queensland University of Technology Law and Justice Journal* 367. See also Reid Mortensen, 'Professional Legal Ethic in Australia' (2018) 192 Advances in Social Science, Education and Humanities Research 12. Moretenson describes the so-called 'abdication of moral responsibility' as 'vexed' but hypothesise that 'it may not matter, as long as moral neutrality holds in the important and ethically distinctive area of criminal defence, where it is tied closely to the defendant's rights of due process.' Moretenson reasons that moral neutrality may be less important in civil legal practice given 'the extensive and highly pluralised market for legal services inevitably means there is still a lawyer who will help the citizen achieve his life plans': 15.

⁸³⁸ See also Rufus Black, '<u>The ethics of choosing clients</u>' (Jan/Feb 2015) 89 (1/2) *Law Institute Journal* 46. ⁸³⁹ Ibid.

⁸⁴⁰ Ibid.

⁸⁴¹ GE Dal Pont, Lawyers' Professional Responsibility (6th ed. Thomson Reuters, 2016) 126; Lamb, Littrich and Murray, Lawyers in Australia (3rd ed, Federation Press, 2015) Chs 7-9.

⁸⁴² See Justice Francois Kunc, 'Current issues' (2021) 95 *Australian Law Journal* 311. See also Michael Pelly, 'Judge questions firms on social licence after Minters affair', *Australian Financial Review* (online) 25 May 2021.

⁸⁴³ Pelly, ibid.

ought to be able to have the solicitors and counsel of their choice'.844

3.73 The obligations of barristers are tighter than those of solicitors given the operation of the above-mentioned cab-rank principle, which means that barristers may only refuse an applicable brief in limited circumstances. The cab-rank principle is a fundamental aspect of our legal system, ⁸⁴⁵ as addressed by Brennan J in *Giannarelli v Wraith:* ⁸⁴⁶

Whatever the origin of the rule, its observance is essential to the availability of justice according to law. It is difficult enough to ensure that justice according to law is generally available; it is unacceptable that the privileges of legal representation should be available only according to the predilections of counsel or only on the payment of extravagant fees. If access to legal representation before the courts were dependent on counsel's predilections as to the acceptability of the cause or the munificence of the client, it would be difficult to bring unpopular causes to court and the profession would become the puppet of the powerful. If the cab-rank rule be in decline - and I do not know that it is - it would be the duty of the leaders of the Bar and of the professional associations to ensure its restoration in full vigour.

- 3.74 There are few exceptions to this principle, which include 'the client's interest in the matter or otherwise is or would be in conflict with the barrister's own interest'. The exceptions are narrowly framed and directed towards situations in which there is a fundamental conflict of interest, to the extent that the barrister cannot act independently for the client in either practice or public perception. Having strong personal views is not in and of itself a ground for a barrister to decline a brief.⁸⁴⁷
- 3.75 This is consistent with the objects of the Barristers Rules, which include to ensure that barristers 'provide services of the highest standard unaffected by personal interest,'848 and the Principles underlying the Rules include that:

'The provision of advocates for those who need legal representation is better secured if there is a Bar whose members...must accept briefs to appear regardless of their personal beliefs [and] must not refuse briefs to appear except on proper professional grounds'.⁸⁴⁹

3.76 When Brian Walters QC⁸⁵⁰ was criticised in 2010 for having once taken a brief for a brown coal company, other members of the Bar wrote in his defence that the acceptance of this brief simply complied with the cab-rank rule.⁸⁵¹ The Hon Sir Gerard Brennan AC KBA, then Chief Justice of Australia, has also noted that the cab-rank rule is 'a cornerstone of the profession's ethical standards'.⁸⁵² Jennifer Robinson states that 'there is nothing jarring' in representing 'those promoting the

⁸⁴⁴ Ihid

⁸⁴⁵ Arthur J S Hall & Co (a firm) v Simons [2002] 1 AC 615 at 739 per Lord Hobhouse.

⁸⁴⁶ Giannarelli v Wraith (1988) 165 CLR 543 at 580.

⁸⁴⁷ GE Dal Pont, Lawyers' Professional Responsibility (6th ed. Thomson Reuters, 2016), 97.

⁸⁴⁸ Barristers Rules, Rule 3.

⁸⁴⁹ Barristers Rules, Rule 4.

⁸⁵⁰ Brian Walters QC was in 2016 lead Counsel for the Tasmanian Aboriginal Centre Inc in a case to restrain several 4 wheel drive tracks from being opened in the Tarkine on the basis of protection of national heritage values under the EPBC Act: <u>Tasmanian Aboriginal Centre Inc v Secretary, Department of Primary Industries, Parks, Water and Environment [2014] FCA 1443 and (No 2) [2016] FCA 168.</u>

 ⁸⁵¹ See, Michael Colbran QC, 'Attacking barristers over their clients undermines justice' (2 November 2020)
 Sydney Morning Herald; Stephen Warne, 'The cab rank principle' (1 November 2020)
 Lawyerslawyer.
 852 The Hon Sir Gerard Brennan AC KBE, 'Profession or service industry: the choice' (Opening Address, 18 August 1996)
 Australian Bar Association Conference, San Francisco.

fossil-fuel projects'; in the case of litigation, for example, the role of lawyers 'has always been to facilitate the rule of law and assist the courts to reach the better outcome by providing [their] knowledge of legislation and authority to both sides of each case'.⁸⁵³

Obligations regarding substance of advice

- 3.77 Once a client has engaged a lawyer (that is, a solicitor or barrister), the lawyer's fundamental ethical duties remain unchanged in the sense that they must, relevantly:
 - act in the best interests of their client;
 - deliver legal services competently; and
 - provide clear and timely advice to assist a client to understand relevant legal issues and to make informed choices about action to be taken during the course of a matter, consistent with the terms of the engagement (as set out above).
- 3.78 Lawyers have fiduciary duties to not, without informed consent, place themselves in a position of a conflict of interest.⁸⁵⁵ As discussed above, a discrepancy between a lawyer's personal views versus a client's actions or views on particular subject matter does not generally, in and of itself, amount to a conflict of interest.
- 3.79 The duty to provide competent legal advice, while that term has no generally accepted meaning,⁸⁵⁶ is typically considered in terms of the lawyer:⁸⁵⁷
 - having the required and relevant expertise for the field of law in which he or she is practising;
 - executing the delivery of legal services with skill⁸⁵⁸ and efficiency;
 - identifying areas beyond the lawyer's skill, and raising those with the client;
 - properly preparing and carrying through the subject case or matter; and
 - being intellectually, emotionally and physically capable to perform the above.
- 3.80 Also, as Preston CJ, writing extra-judicially, points out, 859 providing legal advice includes advising on a broad range of risks to not only the legal licence a business may have to operate, but also its social licence or latitude which society will allow it to operate, and consequent financial risk, reputational risk and liability risk of Directors in failing to assess, manage and disclose risks.

⁸⁵³ Henderson 34.

⁸⁵⁴ See, eg, Australian Solicitors' Conduct Rules (ASCR) rules 4, 7.

⁸⁵⁵ GE Dal Pont, Lawyers' Professional Responsibility (6th ed. Thomson Reuters, 2016), 120; ASCR, Rules 10, 11 and 12.

⁸⁵⁶ Ibid 116.

⁸⁵⁷ Ibid; *ABA-ALI Committee on Continuing Professional Education Model Peer Review System*, 11 (Discussion Draft, 15 April 1980).

⁸⁵⁸ Lawyers much exercise the standard of care and skill expected of a qualified and ordinarily competent and careful lawyer in the exercise of their profession: *Hawkins v Clayton* (1988) 164 CLR 539.

⁸⁵⁹ The Hon Justice Brian J Preston SC, 'Climate Conscious Lawyering' (2021) 95 ALJR 51.

Discussion

- 3.81 The precise meaning of some of the obligations outlined above may be complex in context. For example, is it 'consistent with the terms of [an] engagement' for advising a mining company about the contracts for a new coal mine to include in that advice an assessment of relevant legal issues arising from climate change (such as the possible need for extra insurance to respond to the increased risk to the mine of extreme weather events, or to protect the company in case the law changes to encourage emissions reduction such that their asset is no longer viable)? If so, is it necessary to include such advice to assist the client in understanding these issues, are they actually 'relevant,' and what level of detail must be provided to ensure that the client's choices about future action will be 'informed'?
- 3.82 These questions also tie into broader concerns regarding the incorporation of climate law issues in legal education. James and Diakun have stressed that given they are 'trusted advisers', all lawyers should understand climate change at least to the extent they are able to identify the relevant legal issues and seek more expert assistance where necessary. Similarly, Preston and David Estrin 101 note that any 'ordinarily competent and careful lawyer' will need to draw upon their own understanding of the background issues, laws, policies and litigation trends surrounding climate change when advising their clients on specific legal matters. This will only be possible if they have acquired and exercised appropriate levels of skill and applied appropriate levels of diligence, including by familiarising themselves with the broader context, conducting research, and seeking education on such issues, whether at university or through CPD programs.
- 3.83 Whether or not such matters should be raised with a client is subject to the individual facts and circumstances of the subject case. However, where the impacts of climate change have manifested themselves into clear or prospective legal obligations or liability risks, it is evident that in certain circumstances, these will be 'relevant legal issues' about which clients must be advised 'to make informed choices about action to be taken during the course of a matter'. 863 Whether a lawyer will, in exercise of a professional duty, advise on these issues may then depend on whether such advice is consistent with the terms of the engagement.
- 3.84 It is noted, however, while it is open to practitioners to attempt to limit their duty of care to their client via the scope of their retainer, 864 not all matters can be excluded. A practitioner has an obligation to alert his or her clients to all relevant legal risks that would have a negative impact on the client, regardless of the retainer, and to address all matters that reasonably arise in the course of carrying out a client's instructions. 865

⁸⁶⁰ Meredith James and Aladdin Diakun, 'Three reasons why lawyers should engage with climate change', online article, 16 February 2021, The Lawyers Daily, Lexis Nexis Canada.

⁸⁶¹ Co-Chair, International Bar Association Task Force on Climate Change Justice and Human Rights.

⁸⁶² The Hon Justice Brian J Preston SC, 'Climate Conscious Lawyering' (2021) 95 ALJR 51. See also David Estrin, 'Climate Conscious Lawyering' (3 February 2021).

⁸⁶³ For commentary on this point, see, the Hon Justice Brian J Preston SC, 'Climate Conscious Lawyering' (2021) 95 ALJR 51; Robyn Glindemann, 'Environmental law and lawyers' ethics' (2010) 4 *National Environmental Law Review* 30-31.

⁸⁶⁴ Hawkins v Clayton (1988) 164 CLR 539 at 582; GE Dal Pont, Lawyers' Professional Responsibility (6th ed. Thomson Reuters, 2016), 154.

⁸⁶⁵ See: Hawkins v Clayton (1988) 164 CLR 539 at 579; Boyce v Rendells [1983] 2 EGLR 146 at 149; Credit Lyonnais SA v Russell Jones & Walker (a firm) [2003] Lloyd's Rep PN 7 at [28]; Cadoks Pty Ltd v Wallace

How far do a lawyer's ethical obligations with respect to climate change extend?

- 3.85 There are arguments by authoritative and experienced members of the legal profession that lawyers are responsible for 'adopt[ing] a climate-conscious rather than a climate-blind approach in their daily legal practice'. 866 Preston is a key proponent of 'climate conscious lawyering' which he explains as 'requir[ing] an active awareness of the reality of climate change and how it interacts with daily legal problems'. 867 Possessing such an 'awareness' would seem to be generally consistent with the obligations outlined above.
- 3.86 The Law Council considers that existing professional ethical standards provide appropriate guidance as to the proper professional role of a legal practitioner. Lawyers should be aware that advice regarding a legal problem should be provided in a manner which meaningfully addresses any identified climate change issues and related consequences, including the possible risks, liabilities and reputational damage which may flow from activity that has a negative impact on climate change. It is not suggested that lawyers should offer advice on matters unconnected to legal issues or outside the scope of their retainer, but rather, that legal advice should take into account the full range of contextual circumstances in which it is given, consistently with professional obligations.

Role of the Law Council

3.87 Given the substantial global and domestic challenges posed by climate change, as set out in Part 1, the wide-ranging legal impacts of climate change, as set out at Part 2, and the implications for the legal profession itself, as set out in this Part, the Law Council, as the peak body for the legal Australian profession, has an important role to play on multiple fronts. This is also underlined by reference to the Law Council's objects, as briefly discussed below. The positions on climate change which have been adopted by other international law associations and other national peak body associations, some examples of which are set out in the **Appendix**, are also relevant.

Object to promote and defend the rule of law in the public interest⁸⁶⁸

- 3.88 Many principles of the rule of law are engaged by the contents of this Background Paper, noting that the Law Council consistently refers to its Rule of Law Principles⁸⁶⁹ as informing its analysis of federal legislation and federal Executive action. These principles include that:
 - The law must be both readily known and available, certain and clear. This is engaged by the 'shifting sands' of laws which relate to climate change, as identified above. As discussed, while there have been many developments in diverse areas of law, statutory law reforms may increasingly be introduced to respond to climate-related gaps and uncertainties. These reforms may encompass areas as diverse as environmental, water, migration and industrial relations. It will be incumbent on the Law Council to assist in

Westley & Vigar Pty Ltd (2000) 2 VR 569 at [120]; Gilbert v Shanahan [1998] 3 NZLR 528 at 537; GE Dal Pont, Lawyers Professional Responsibility (2017), 6th ed, Thomson Reuters (Professional) Australia Ltd,156, 158.

⁸⁶⁶ The Hon Justice Brian J Preston SC, 'Climate Conscious Lawyering' (2021) 95 ALJR 51 .

⁸⁶⁷ Ibid.

⁸⁶⁸ LCA Constitution, cl 2.1(a),

⁸⁶⁹ Law Council, Policy Statement: Rule of Law Principles (2011).

⁸⁷⁰ Ibid Principle 1.

identifying areas in which clarification is needed, and advising on the precise nature and content of any laws under consideration.

- The law should be applied to all people equally and should not discriminate between people on arbitrary or irrational grounds. This Background Paper flags that climate change is likely to have disproportionate impacts on various marginalised groups in the Australian community. There are also calls, reflected in the Paris Agreement Preamble, for 'just transition' measures which minimise these impacts. Solutions in law will be required which are non-discriminatory in form and effect, as well as directed towards achieving a 'just transition'.
- Everyone should have access to competent and independent legal advice in order to establish and defend their rights. As Part 2 demonstrates, climate change litigation is occurring as individuals and entities seek to test courts on the parameters of parties' obligations and liabilities in various guises. At the same time, climate change is contributing to emerging and novel questions of law, and increasing areas of legal need amongst clients, industries and populations, as discussed in this Part. The Law Council must represent and lead a profession which is skilled and ready to assist clients in light of such demands. It will also need to advocate for public funding to support legal assistance services to assist impecunious clients, eg, from flood-affected persons seeking disaster assistance, to Indigenous communities looking to uphold water rights.
- The Executive should be subject to the law and any action undertaken by the Executive should be authorised by law. Given the increasing importance of climate change to Australians in years ahead, the Law Council is likely to be required to monitor the development of laws for compliance with these principles on an ongoing basis. For example, it will be important to ensure that climate change responses of substantial weight are dealt with in primary rather than delegated legislation. It will also be important to ensure that key Executive decision-making powers (eg, approval of development applications with significant likely emissions, to declarations of climate-related emergencies) should be framed carefully in light of their purpose. They should be carefully defined, based on specified criteria, and subject to administrative and judicial review as appropriate, as well as independent oversight and reporting requirements.
- States must comply with international legal obligations whether created by treaty or arising under customary international law. This includes obligations relating to the promotion and protection of human rights. States should also avoid inconsistencies between their international legal obligations and their domestic laws and policies under this principle. As Part 2 of this paper sets out, Australia has specific treaty obligations to mitigate and adapt to climate change under the UNFCCC and Paris Agreement. Under this principle, the Law Council would have a role in ensuring that Australia's obligations are domestically implemented. The increasing relevance of climate change to the interpretation and performance of Australia's

⁸⁷¹ Ibid Principle 2.

⁸⁷² Ibid Principle 4.

⁸⁷³ Ibid Principle 6.

⁸⁷⁴ Ibid Principle 8.

obligations under core human rights treaties is also likely to inform the Law Council's response.

Object to be the national peak body for lawyers on national and international issues in furthering the betterment of law in the public interest⁸⁷⁵

- Given the physical and transition risks of climate change (as set out at Part 1), it seems clear that comprehensive action to address these risks, including their legal implications, will be in the public interest. Corresponding actions will engage all levels of government, the Executive, Parliament, and often, the courts – as well as business and the community. Some elements of the public climate change response will principally involve policy, program and funding responses. However, other elements will involve statutory law reform and the development of the common law, and the expertise and involvement of the legal profession in this process will be central.
- 3.90 Determining precisely what falls within the 'public interest' is a subjective and sometimes contentious assessment. As with many major law reform topics addressed by the Law Council, climate change is a complex issue. Depending on the nature of any particular measure under consideration, it may attract multiple perspectives across the legal profession. However, the strength of the Law Council's contribution to laws which are in the 'public interest' relies on its ability to draw together numerous levels of expertise across an informed profession of 90,000.

Object to promote the administration of justice and the development and improvement of law throughout the Commonwealth

- 3.91 The administration of justice is also an important consideration with respect to the legal impacts of climate change. This includes ensuring that information about relevant laws is readily accessible, and that the roles and functions of legal practitioners and the courts are understood and upheld. It also involves ensuring that lawyers' ethical obligations are well understood.
- The object to promote the development and improvement of all law throughout the 3.92 Commonwealth is also engaged by the challenges arising from climate change. The global impacts of climate change are clearly relevant throughout the Commonwealth. This is evident from the prevalence of climate-related legislation and court challenges in, eg, the UK, Canada and New Zealand, as discussed in Part 2.
- 3.93 There is a particular interest in how key Commonwealth nations are moving forward on these issues, given the significant commonalities in their laws and legal systems. For instance, the Commonwealth Climate and Law Initiative is an Oxford University-based research, education and outreach project focused on Australia, Canada, South Africa and the UK.876 It is examining the legal basis for directors and trustees to take account of physical climate change risk and societal responses to climate change under prevailing statutory and common law.
- 3.94 There is also ample scope for Australia to learn from, and on the basis of its own experience, to inform, legal developments occurring both regionally and globally. Within fora such as the IBA, LawAsia and Commonwealth Lawyers Association, the Law Council is likely to play an ongoing role exchanging and facilitating ideas

⁸⁷⁵ LCA Constitution cl 2.1(a).

⁸⁷⁶ Commonwealth Climate and Law Initiative, 'Overview' (webpage, accessed 6 July 2022).

and commentary regarding evolving statutory and common law, a changing legal profession and the role of peak legal associations.

Object to develop and promote advancement of the profession and the ethical standards of practitioners and legal institutions

- 3.95 As discussed in this Part, the legal profession is changing rapidly to meet the compounding and evolving challenges of climate change, including rapidly unfolding statutory and common law, novel and unresolved legal questions, and emerging client pressures. It has been observed by Ellyn Rosen, Regulation and Global Initiatives Counsel of the American Bar Association Center for Professional Responsibility, that 'the importance of climate change and the impact of the [legal] profession on its proliferation is becoming a more frequent topic of conversation inside the Bar'.⁸⁷⁷ The Law Council will have a vital role in leading, supporting and arming the profession to respond with confidence, knowledge and skill.
- 3.96 As also discussed, ongoing advances in legal education at the university and CPD level are building momentum for the further development and promotion of advancement of the profession. The Law Council, consultation with its constituent bodies, university peak bodies and other bodies, which are primarily responsible for the delivery of legal education and professional development, will have a role in this context. Similarly, there may be calls for continued guidance regarding the precise nature and scope of ethical obligations of legal practitioners going forward.

Part 3 - Conclusion

- 3.97 Australian individuals and businesses face new risks, liabilities and challenges requiring legal advice. Novel questions of law are arising across many legal practice areas. Legal risks are emerging with respect to corporate governance and directors' duties, for example, and insurers and reinsurers are under increasing international pressure to reduce the GHG emissions of their portfolios, while also facing more predictable and less insurable natural disasters. Other key client groups encountering specific and evolving climate-related legal challenges include First Nations peoples, RRR communities, and other marginalised groups.
- 3.98 Structural changes show that private and community lawyers are already responding to changing market demands. However, access to justice concerns prevail given the critical underfunding of legal assistance services. Legal educators are also responding to changing legal practices by giving more focus to climate-related legal issues, indicating growing demand for academic and practical knowledge in the area, and an awareness on the part of universities of the vocational value of education in climate-related law.
- 3.99 Alongside these very tangible shifts, questions are emerging about the extent to which Australian legal practitioners must consider the risks and legal implications of climate change when preparing their advice, if they are to comply with their legal professional obligations. Existing professional ethical standards provide appropriate guidance as to the appropriate role for legal practitioners.
- 3.100 Lawyers should be aware that advice regarding a legal problem should be provided in a manner which meaningfully addresses any identified climate change issues and related consequences, including the possible risks, liabilities and reputational damage which may flow from activity that has a negative impact on climate

⁸⁷⁷ See IBA '<u>Burning Down the House: The Role of Lawyer Regulators in Addressing Climate Change for</u> Domestic and International Legal Services' (14 June 2021).

- change. It is not suggested that lawyers should offer advice on matters unconnected to legal issues or outside the scope of their retainer, but rather, that legal advice should take into account the full range of contextual circumstances in which it is given, consistently with professional obligations.
- 3.101 Having regard to the matters outlined in the Background Paper, it is evident that several of the Law Council's key functions are likely to be engaged on climate change and its legal implications into the future. These functions include promoting and defending the rule of law, including to ensure that it is certain and clear, non-discriminatory, ensures access to justice, transparent and accountable Executive decision-making and Australia's compliance with its international legal obligations. Broader functions include furthering the betterment of the law in the public interest, promoting the administration of the law, and promoting the development and promote advancement of the profession, and the ethical standards of practitioners and legal institutions. This also underlines the role of the Policy, as agreed by the Law Council's Directors, in drawing together the Law Council's current thinking and future engagement on this issue of critical importance.

Appendix

Multilateral treaty complaints

1. Relevant complaints include the following.

United Nations treaty communications

- In 2019, the HRC delivered the 'landmark decision'878 of Portillo Cáceres v 2. Paraguay. 879 which recognised that a State's failure to take action against environmental harm can violate its obligations to protect the rights to life, and to private and family life.880 This decision concerned massive aerial spraying with agro-toxic substances which constituted a threat to the lives of complainants, and was reasonably foreseeable by Paraguay.881 The HRC determined that Paraguay had not acted in accordance with its ICCPR obligations.882
- 3. This was followed by the views adopted by the HRC in Teitiota v New Zealand⁶⁸³ (Teitiota), regarding a communication by an asylum seeker who was a citizen of Kiribati. He claimed that New Zealand had breached his right to life under the ICCPR by rejecting his claim. His life, he claimed, was endangered because of the effects of climate change on Kiribati – due to sea level rise resulting in scarcity of habitable space and causing violent land disputes; and environmental degradation, including contamination of the water supply.
- 4. The HRC rejected the claim. It reinforced that the risk must be personal, that it could not derive merely from the general situation of violence except in the most extreme cases, and that a high threshold applied to establish a real risk of irreparable harm.884 It was unable to find that the author had demonstrated clear arbitrariness in authorities' assessment of whether such a risk.885 The risk was general and not extreme or imminent: Kiribati would not be uninhabitable for another 15 years and its government might remedy matters.886
- However, the HRC nevertheless recognised the connection between the right to 5. life, climate change and the principle of non-refoulement, 887 in particular, that 'environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present

⁸⁷⁸ Ginevra Le Moli, 'The Human Rights Committee, Environmental Protection and the Right to Life' (2020) 69 International and Comparative Law Quarterly 735, 736.

⁸⁷⁹ Portillo Cáceres v Paraguay (HRC, 9 August 2019, Comm No. 2751/2016), CCPR/C/126/D/2751/2016. 880 Under articles 6 and 17 of the ICCPR.

⁸⁸¹ Portillo concerned the application of pesticides to soy farms which had caused the death of an individual and the poisoning of the complainants. Despite a domestic court decision that the Ministry and government services had enabled serious physical harm to be caused, soybean production had continued with large quantities of agrochemicals without environmental permits or environmental protection measures.

⁸⁸² Including article 2(3)(a) of the ICCPR, requiring the provision of an effective remedy. The HRC underlined that a State party must properly investigate the events in question, impose penalties on those parties responsible for the events in that instance and make full reparation to the complainants. Further, Paraguay had an obligation to take measures to prevent similar offences being committed in the future.

⁸⁸³ Teitiota v New Zealand (HRC, 24 October 2019, Comm No. 2728/2016), CCPR/C/127/D/2728/2016 (**Teitiota**). 884 Ibid [9.3].

⁸⁸⁵ Eg, as a result of violent acts resulting from overcrowding or private land disputes: ibid, [9.7] 886 With international assistance: ibid, [9.15].

⁸⁸⁷ The Committee observed that it had been established that environmental degradation can compromise effective enjoyment of the right to life, and that severe environmental degradation can adversely affect an individual's well-being and lead to a violation of the right to life: Teitiota [9.5], recalling General Comment 36 and decisions of regional tribunals.

and future generations to enjoy the right to life'.888 It was, therefore:

.. of the view that without robust national and international efforts, the effects of climate change in receiving States may expose individuals to a violation of their rights under articles 6 or 7 of the Covenant, thereby triggering the non-refoulement obligations of sending States. Furthermore, given that the risk of an entire country becoming submerged under water is such an extreme risk, the conditions of life in such a country may become incompatible with the right to life with dignity before the risk is realized.⁸⁸⁹

- 6. The Teitiota findings were welcomed by some as historic. The OHCHR considered that it has 'potentially far-reaching implications for the international protection of displaced people in the context of climate change and disasters'. However, other commentators pointed to the high threshold it set for individual complainants to claim a violation of their human rights, arguing that overly-generalised conclusions about enforceable rights should not be drawn.
- 7. An unresolved communication to the HRC has been made by eight Torres Strait Islander peoples on low-lying lands affected by sea level rises, with support by the current and former UN Special Rapporteur for Human Rights and the Environment as amicus curiae.⁸⁹⁴ The authors allege that the Australian Government has failed to address the impacts of climate change upon their homes, traditions, sacred sites and burial grounds.⁸⁹⁵ The alleged breaches relate to the rights to life, to culture, and to be free of arbitrary interference with privacy, family and home.⁸⁹⁶ The Government has twice sought to have this claim dismissed, reportedly⁸⁹⁷ on the basis that the case 'concerns future risks, rather than impacts being felt now,' that climate impacts were not being felt today, and that 'effects constituting a human rights violation are yet to be suffered'.⁸⁹⁸
- 8. Meanwhile, another 2019 communication by 16 children contended that Argentina, Brazil, France, Germany and Turkey were violating standards under the CROC. The authors of the communication argued that in failing to take necessary precautionary measures in relation to climate change, the petitioners' rights to life, health, and culture had been violated (**Saachi v Argentina**).⁸⁹⁹
- 9. In October 2021, the UNCROC found that the authors had not exhausted domestic

⁸⁸⁸ See *Teitiota* [9.3]-[9.4].

⁸⁸⁹ Ibid.

⁸⁹⁰ Camille Malafosse and Domenico Zipoli, "Climate refugees': an historic decision of the UN Human Rights Committee?', The Conversation (France) 12 February 2020, <u>reproduced</u> translated from the original French version by the Andrew & Renata Kaldor Centre for International Refugee Law.

⁸⁹¹ UNHCR, 'UN Human Rights Committee decision on climate change is a wake-up call, according to UNHCR' (online media release) 24 January 2020.

⁸⁹² Eg, due to the need to demonstrate personal, rather than general risk, as well as imminent harm.

⁸⁹³ See, for example, Simon Behrmann and Avidan Kent, 'The Teitiota Case and the limitations of the human right framework' (2020) 75 *Questions in International Law 25.*

⁸⁹⁴ ClientEarth, 'Australia doubles down on climate inaction in Torres Strait complaint' (Media Release, 29 September 2021).

⁸⁹⁵ Ibid.

⁸⁹⁶ Ibid.

⁸⁹⁷ Noting that submissions to the HRC are not publicly available.

⁸⁹⁸ ClientEarth, 'Australia doubles down on climate inaction in Torres Strait complaint' (Media Release, 29 September 2021); Katharine Murphy, 'Australia asks UN to dismiss Torres Strait Islanders' claim climate change affects their human rights' (14 August 2020) *The Guardian*.

⁸⁹⁹ See, eg, Committee on the Rights of the Child, *Communication No. 104/2019*, 88th sess, UN Doc CRC/C/88/D/104/2019 (8 October 2021) ('Saachi v Argentina').

remedies, a prerequisite for the UNCROC's adjudication powers.⁹⁰⁰ Given this, the communication was inadmissible and the UNCROC was unable to adjudicate on whether the States parties in this specific case had violated their obligations under the Convention.

- 10. However, the UNCROC decision was also considered significant as it 'provides valuable guidance on protecting children's rights in the context of climate change and opens the door to future child-centric climate-related cases'. 901 Drawing on the reasoning concerning extraterritorial responsibility and environmental protection by the Inter-American Court of Human Rights, 902 it found that the appropriate test for jurisdiction was that when transboundary harm occurred, children were under the jurisdiction of the emitting State if there was a causal link between its acts or omissions, and the negative impact on the rights of children located outside its territory, when the State of origin exercised effective control over the sources of emissions in question. The alleged harm suffered by the victims needed to have been reasonably foreseeable to the State party at the time of its acts or omissions. 903
- 11. The UNCROC concluded that the authors had sufficiently justified, for the purposes of establishing jurisdiction, that the impairment of their Convention rights as a result of the State party's acts or omissions regarding the carbon emissions originating within its territory was reasonably foreseeable. It also concluded that the authors had established prima facie that they had personally experienced real and significant harm in order to justify their victim status.⁹⁰⁴
- 12. The OHCHR describes this decision as 'historic' for finding that State party 'can be held responsible for the negative impact of its carbon emissions on the rights of children both within and outside its territory'. 905

European Court of Human Rights

13. On 3 September 2020, four Portuguese children and two young adults applied to the European Court of Human Rights alleging violations of their rights, including to life, to a private life, a home, a healthy, protected environment, and non-discrimination under the European Convention on Human Rights⁹⁰⁶ (ECHR).⁹⁰⁷ The applicants in the case, *Cláudia Duarte Agostinho and others v Portugal and 33 other States*, have listed the Member States of the EU as respondents, as well as several other States.⁹⁰⁸ They allege that the respondents contribute to climate change, including by 'permitting release of emissions [within their areas of jurisdiction]', export of fossil fuels and import of goods whose production involves emissions release, and permitting entities to 'contribute to the release of emissions overseas' through extraction of fossil fuels.⁹⁰⁹

⁹⁰⁰ Under article 7(e) of the Optional Protocol to the Convention: Saachi v Argentina, [10.21].

⁹⁰¹ Maria Antonia Tigre and Victoria Lichet, 'The CRC Decision in Saachi v Argentina', ASIL Insights, Issue

^{26,} Volume 25, American Society of International Law online article, 13 December 2021.

⁹⁰² In its Advisory Opinion OC-23/17

⁹⁰³ Saachi v Argentina [10.7].

⁹⁰⁴ Ibid [10.14].

⁹⁰⁵ OHCHR, 'UN Child Rights Committee rules that countries bear cross-border responsibility for harmful impact of climate change' (Media Release, 11 October 2021).

⁹⁰⁶ Convention for the Protection of Human Rights and Fundamental Freedoms, opened for signature 4 November 1950, 213 UNTS 221.

⁹⁰⁷ '<u>European Court of Human Rights – Application form</u>' (3 September 2020) 5, 9. The claim included that the applicants' rights under articles 2, 8 and 14 of the ECHR had been breached.

⁹⁰⁹ Russia, Norway, Switzerland, Turkey, Ukraine and the United Kingdom, Ibid 2.

14. The applicants argue that the personal impacts of climate change 'include harm to human health'. They also cite their vulnerability to climate change impacts, with Portugal already having experienced climate change impacts including heatwaves, wildfires, and the risks in their residential areas 'set to increase significantly'. The applicants seek a declaration that responsibility for climate change is shared between the 'independent contributions of multiple states to environmental harm, in breach of each state's international obligations' and therefore that the respondents share responsibility for the violations of the applicable rights, and for achieving the mitigation goal of 1.5°C under the Paris Agreement. This application has not yet been determined.

Climate litigation in foreign domestic jurisdictions

15. The following is a snapshot, rather than an exhaustive overview, of relevant matters.

Administrative Review

- 16. Significant decisions include *Massachusetts et al v Environmental Protection Agency et al*,⁹¹⁵ in which the United States Supreme Court held that its Environment Protection Agency (**EPA**) was obliged to consider whether it would regulate GHG emissions under the federal Clean Air Act⁹¹⁶ which allowed the EPA to regulate 'air pollution.'⁹¹⁷
- 17. The Court did not decide that the EPA *must* regulate GHGs, only that it had to consider whether to do so, and to justify its decision. Significantly, the Court acknowledged that 'the harms associated with climate change' were 'serious and well recognized'. The 'widely shared' nature of climate change impacts did not lessen the complainants' interest in the outcome. Similarly, the scale of the problem of climate change and the level of mitigation required did not, in the Court's view, justify the EPA's failure to consider the issue'.
- 18. In New Zealand, in *Thomson v Minister for Climate Change Issues*⁹²¹ the plaintiff alleged failures by the Minister for Climate Change relating to its 2030 and 2050 greenhouse gas emission reduction targets. The plaintiff claimed that the Minister had breached the *Climate Change Response Act 2002* (NZ) (NZ Act) by failing to review New Zealand's 2050 target following the IPCC's fifth report, and failing to set a new target that would prevent dangerous anthropogenic climate change. She also alleged that the Minister failed to take into account the costs of dealing with climate change in deciding the 2030 target as a relevant consideration. Finally, she alleged that there was no rational basis for the Minister's belief that New Zealand's NDC would prevent dangerous climate change.

⁹¹⁰ Ibid.

⁹¹¹ Ibid 6-7.

⁹¹² Under articles 2, 8 and 14 of the ECHR: Ibid 4-6.

⁹¹³ Ibid 6.

⁹¹⁴ Global Legal Action Network, 'The Case'.

⁹¹⁵ Massachusetts et al v Environmental Protection Agency et al, 05–1120.

⁹¹⁶ Clean Air Act of 1963 (42 U.S.C. § 7401).

⁹¹⁷ See, IBA HR Taskforce Report, 4; *Massachusetts et al v Environmental Protection Agency et al* No. 05–1120 1

⁹¹⁸ Massachusetts et al v Environmental Protection Agency et al No. 05–1120 3.

⁹¹⁹ As evidenced by affidavits outlining the effects of global warming on Massachusetts' coastal land, for example: *Massachusetts et al v Environmental Protection Agency et al* No. 05–1120 3.

⁹²⁰ IBA HR Taskforce Report 3-4.

^{921 [2018] 2} NZLR 160; [2017] NZHC 733.

19. While the New Zealand High Court dismissed the application for judicial review, it accepted that it may be appropriate for courts to play a role in government decision making about climate change policy. The Minister's decision in setting the 2050 target pursuant to the NZ Act was considered justiciable. However, the court considered that a remedy was unnecessary because the newly elected government intended to set a new target. It found that the Minister's decision setting the 2030 target under the Paris Agreement was also justiciable under the common law. 922 However, it could not intervene in this decision because the Paris Agreement did not stipulate any specific criteria or process for setting NDCs.

Tort

- 20. In the United States, public nuisance actions against high emitters have generally not been successful. These include *Connecticut v American Electric Power*, ⁹²³ in which states sued major electric power company emitters, and *People of the State of California v General Motors*, ⁹²⁴ in which California sued the world's largest automobiles manufacturers, based on their contributions to climate change impacts. Both were unsuccessful on the ground of non-justiciability, as they required an 'initial policy determination of a kind clearly for non-judicial application'. ⁹²⁵ Further, the Clean Air Act displaced federal common law claims against emitters of GHGs. ⁹²⁶
- 21. Native Village of Kivalina v. ExxonMobil Corp, 927 a public nuisance suit against oil, power and coal companies by an Inupiat village, also failed for lack of justiciability and standing. Meanwhile, in 2018, New York City's nuisance and trespass lawsuit seeking to hold oil and gas companies liable for climate harms was dismissed by the Federal Court. 928
- 22. In New Zealand, *Smith v Fonterra Co-Operative Group Limited*⁹²⁹ has currently further tested these issues. The High Court struck out two public nuisance and negligence claims made by the plaintiff (a community elder who was representing Māori living in coastal areas of New Zealand) against seven GHG emitters. However, it was unwilling to strike out claims regarding a novel duty of care, stating that this should be properly explored at trial.⁹³⁰
- 23. However, upon appeal, the Court of Appeal agreed with the defendants that the third cause of action should also have been struck out. It considered 'whether common law tort claims are as a matter of principle and policy [were] an appropriate vehicle for addressing the problem of climate change'. 931 Its view was that:

In our view, the magnitude of the crisis which is climate change simply cannot be appropriately or adequately addressed by common law tort

⁹²² Under which the exercise of a public power by the executive having important public consequences was potentially amenable to review by the courts.

⁹²³ 406 F Supp 2d 265 (SDNY, 2005), revd 582 F 3d 309 (2nd Cir, 2009).

^{924 (}ND Cal, C06-05755 MJJ, 17 September 2007) slip op.

⁹²⁵ Brian J Preston SC, "Mapping Climate Change Litigation" 92 ALJ 774, 774 citing Connecticut v American Electric Power, 406 F Supp 2d 265, 272 (SDNY, 2005); American Electric Power v General Motors (ND Cal, C06-05755 MJJ, 17 September 2007) slip op 9.

⁹²⁶ American Electric Power v American Electric Power, 131 US 2527 (2011).

⁹²⁷ Native Village of Kivalina v. ExxonMobil Corp., 696 F.3d 849 (9th Cir. 2012)

⁹²⁸ City of New York v. BP P.L.C. No. 18 Civ. 182 (JFK).

⁹²⁹Smith v Fonterra Co-operative Group Ltd [2021] NZCA 552 (Court of Appeal); [2020] NZHC 419 (High Court).

⁹³⁰ Smith v Fonterra Co-operative Group Ltd [2020] NZHC 419 [101]-[104].

⁹³¹ Smith v Fonterra Co-operative Group Ltd [2021] NZCA 552 [13].

claims pursued through the courts. It is quintessentially a matter that calls for a sophisticated regulatory response at a national level supported by international co-ordination.⁹³²

24. In late 2021, the plaintiff applied for leave to bring an appeal to the New Zealand Supreme Court. At the time of drafting, this had not been determined.

Human rights

- 25. A notable decision in both the human rights and negligence context is *Netherlands v Urgenda Foundation*. In this decision, the Dutch Supreme Court upheld earlier decisions that the Netherlands Government should reduce greenhouse gases by the end of 2020 by at least 25 per cent compared to 1990'. This was the first time a court recognised that a government had a legal duty towards its citizens to revent dangerous climate change'. While this duty was founded in the Netherlands' legally binding commitments made under the ECHR, two was informed by UNFCC commitments.
- 26. The Supreme Court agreed that the standard of care owed by the Government to its citizens under the Dutch Civil Code was not met by its emissions regime. ⁹³⁸ It concluded that the UNFCCC obliged the Netherlands, as a party, to 'reduce GHG emissions from its territory in proportion to its share of the responsibility'. This obligation was linked to Dutch law via the ECHR and its rights to life and 'respect for private and family life': ⁹³⁹ if the Netherlands did not do 'its part' under the UNFCC, there was a 'grave risk' that climate change would endanger people's lives and welfare. ⁹⁴⁰ It must therefore act in line with the UNFCC and IPCC-based consensus on the urgent reduction of GHG emissions by at least 25-40 per cent in 2020. ⁹⁴¹
- 27. This case, with others discussed in the following paragraphs, has been assessed as a 'milestone in climate change litigation'⁹⁴² and a contribution to understanding governments' accountability for 'outcome duties' such as Paris Agreement targets.⁹⁴³ However, Minnerop also cautions that further academic and judicial consideration is required before concluding that there is a 'global consensus' on using the Paris Agreement as a tool in enforcing states' targets through human

⁹³² Ibid, [16].

⁹³³ State of the Netherlands v. Urgenda Foundation, ECLI:NL:HR:2019:2007, Judgment (Sup. Ct. Neth. Dec. 20, 2019) (Neth.).

⁹³⁴ By the Court of Appeal in 2018, in turn confirming the order of the District Court: <u>The State of the Netherlands (Ministry of Infrastructure and the Environment) v Urgenda Foundation C/09/456689/ HA ZA 13-1396</u>.

⁹³⁵ State of the Netherlands v. Urgenda Foundation, ECLI:NL:HR:2019:2007, 'Summary of the Decision' 1.

⁹³⁶ Urgenda, 'Landmark decision by Dutch Supreme Court' (webpage, accessed on 6 July 2022).

⁹³⁷ The State of the Netherlands (Ministry of Economic Affairs and Climate Policy) v Stichting Urgenda 19/00135 (judgment).

⁹³⁸ Note, in so concluding, the Supreme Court recognised that its role was not to make decisions about greenhouse gas emissions (a task for the Executive) but, rather, to ensure the Executive 'remained within the limits of the law' in exercising its discretion in this area. See, 'Summary of the Decision' at 5.
⁹³⁹ See, ECHR at arts 2 and 8.

⁹⁴⁰ State of the Netherlands v. Urgenda Foundation, ECLI:NL:HR:2019:2007, 'Summary of the Decision' 4.
941 Ibid 3.

⁹⁴² Jacqueline Peel and Hari M. Osofsky, '<u>A Rights Turn in Climate Change Litigation?</u>', *Transnational Environmental Law* (December 2017) 1 (abstract).

⁹⁴³ Dr Petra Minnerop, 'Integrating the 'duty of care' under the European Convention on Human Rights and the science and law of climate change: the decision of The Hague Court of Appeal in the Urgenda case,' 37(2) *Journal of Energy & Natural Resources Law* (12 April 2019).

rights.944

- 28. Human rights arguments were sought to be extended to companies in *Millieudefensie et al v Royal Dutch Shell*, ⁹⁴⁵ in which the plaintiffs requested a declaration that Shell had failed to reduce its CO2 emissions sufficiently, breaching a duty of care which it owed under domestic law to 'prevent dangerous climate change'. ⁹⁴⁶ They argued that Shell owed this duty given its responsibility 'to respect human rights,' derived from the ECHR and various UN and OECD instruments. ⁹⁴⁷ The plaintiffs sought a ruling that Shell must reduce its CO2 emissions by 45 per cent by 2030 compared to 2010 levels and to zero by 2050, in line with the Paris Agreement. The defendants argued that there was no legal basis for the plaintiff's claims and that court interference would be inappropriate in this matter of politics. ⁹⁴⁸
- 29. The Hague District Court ordered Shell to reduce its emissions by 45 per cent, relative to 2019, across all activities including its own emissions and end-use emissions. It considered that the reduction obligation ensued from the unwritten standard of care in the Dutch Civil Code, which meant that acting in conflict with what was generally accepted was unlawful. It is interpretation of this standard rested on various matters, including: the consequences of Shell's emissions for the Netherlands and relevant region; the right to life and right to respect for private and family life of Dutch residents and the region's inhabitants; the responsibilities of enterprises in relation to human rights under the UN Guiding Principles, as an authoritative and internationally endorsed 'soft law' instrument, law' instrument; and what was needed to prevent dangerous climate change, including by reference to the Paris Agreement and IPCC findings. As at the time of drafting, Shell had not appealed.
- 30. This 2015 decision of *Asghar Leghari v Federation of Pakistan*⁹⁵³ by the Lahore High Court involved a Pakistani agriculturalist arguing that the Government had offended his rights by failing to implement adaptative capacity and resilience actions to address climate change. He successfully argued that climate change was a serious threat to food, water, energy and security, and the failures breached his Constitutional right to life. The Court accepted that several international

⁹⁴⁴ Ibid. Further, as Liston has observed (and as was noted in the applicants' Statement of Facts in *Cláudia Duarte Agostinho and others v Portugal and 33 other States*, set out above), the Court in *Urgenda* ordered the Dutch Government to reduce emissions by the lowest possible amount required for the Netherlands' compliance with the Paris Agreement. While this is significant, if all parties to the Paris Agreement pursued the minimum amount of emissions reductions allowed for them individually, the Paris Agreement's goal would not be met: European Court of Human Rights – Application form' (3 September 2020) [36]-[37]; Gerry Liston, 'Enhancing the efficacy of climate change litigation: how to resolve the 'fair share question' in the context of international human rights law' 9(2) *Cambridge International Law Journal* 241, 242-243.

⁹⁴⁵ Vereniging Milieudefensie et al. v. Royal Dutch Shell PLC, Hague District Court, Judgment of May 26, 2021 ('Milieudefensie et al v Royal Dutch Shell'). An English version is available at<C/09/571932 / HA ZA 19-379 >.

⁹⁴⁶ Milieudefensie et al v Royal Dutch Shell [3.2].

⁹⁴⁷ Ibid, citing United Nations Guiding Principles on Human Rights, OECD Guidelines for Multinational Enterprises, and the UN Global Compact.

⁹⁴⁸ Ibid [4.1.2]

⁹⁴⁹ Ibid [5.3.1].

⁹⁵⁰ Dutch Civil Code, Book 6, Section 162.

⁹⁵¹ Milieudefensie et al v Royal Dutch Shell [4.4.1].

⁹⁵² Ibid, [4.4].

⁹⁵³ Asghar Leghari v Federation of Pakistan (2015) W.P. No. 25501/2015, Order Sheet, 4 September 2015 ('Leghari').

⁹⁵⁴ Leghari [2]-[3], [10].

- environmental law principles⁹⁵⁵ fell within the Constitution's commitments.⁹⁵⁶ It ordered the establishment of a Climate Change Commission to implement the national climate change framework.⁹⁵⁷
- 31. A further example of a youth claim currently on foot is *Do-Hyun Kim et al v South Korea*,⁹⁵⁸ arguing breaches of constitutional human rights and seeking a declaration that South Korea's low-carbon framework is unconstitutional as it is insufficient to meet its Paris Agreement commitments. This case is the first of its kind in East Asia.
- 32. In *Lho'imggin et al. v Her Majesty the Queen,* an Indigenous group, the Wet'suwet'en, alleged that the Canadian Government had failed to meet its international commitments to reduce GHGs to necessary levels. ⁹⁵⁹ The claim drew upon Canada's Constitution and its *Charter of Rights and Freedoms* ⁹⁶⁰ (**Charter**), alleging that group faced climate change impacts including insect infestations, wildfires, and declining numbers of animals and fish. The claimants sought declaratory relief and orders that the Government amend the relevant environmental assessment legislation. ⁹⁶¹ However, the Federal Court struck out the motion, stating the matter was not justiciable and that '[t]he issue of climate change, while undoubtedly important, is inherently political, not legal, and is of the realm of the executive and legislative branches of government'. ⁹⁶² The decision has been appealed.
- 33. The Federal Court of Canada was similarly unwilling to entertain the plaintiffs' claims in *La Rose v Her Majesty the Queen.*⁹⁶³ They alleged that the Canadian Government had breached their Charter rights to life, liberty, security of the person and equal opportunity by not taking adequate action to address climate change. As well as the Charter, they relied on the Public Trust Doctrine (**Doctrine**). The Court held that the claims under the Charter were not justiciable, and while the Doctrine was justiciable, a reasonable cause of action was not disclosed. Again, this decision has been appealed.
- 34. In *Greenpeace Norway v Government of Norway*, ⁹⁶⁴ non-government organisations alleged that the Ministry of Petroleum and Energy had violated Norway's constitution, particularly the 'right to environment', by issuing licences for oil and gas deep-sea extraction. ⁹⁶⁵ The Borgarting Court of Appeal held that the licenses were valid, because courts should show restraint in reviewing political decisions, a breach would require a high-level act, and it was not demonstrated with requisite certainty that the licences would result in emissions, and to what extent. ⁹⁶⁶ This was upheld by Norway's Supreme Court in late 2020. However, it was appealed to

⁹⁵⁵ These included: 'sustainable development, the precautionary principle, environmental impact assessment, inter and intragenerational equity and public trust doctrine': Ibid, [7].
956 Ibid.

⁹⁵⁷ Ibid [13].

⁹⁵⁸ For an overview of this case to date, see <u>Global Climate Change Litigation online database</u> (Joint project of the Sabin Center for Climate Change Law at Columbia Law School and Arnold & Porter) (**'Global Climate Change Litigation Database**'), 'Do-Hyun Kim et al. v. South Korea'.

⁹⁵⁹ For an overview of this case, see Grantham Research Institute on Climate Change and the Environment, 'Lho'imggin et al. v. Her Majesty the Queen' (webpage) London School of Economics .
960 Ibid.

⁹⁶¹ Ibid

⁹⁶² Ibid.

⁹⁶³ La Rose v Her Majesty the Queen 2020 FC 1059. For an overview, see Global Climate Change Litigation database (online), 'La Rose v. Her Majesty the Queen'.

 ⁹⁶⁴ Grantham Research Institute on Climate Change and the Environment, 'Greenpeace Norway v.
 Government of Norway' (webpage) London School of Economics.
 ⁹⁶⁵ Ibid.

⁹⁶⁶ Ibid.

the European Court of Human Rights in mid-2021.967

- 35. In the 2019 decision of *Family Farmers and Greenpeace Germany v Germany*, ⁹⁶⁸the Administrative Court of Berlin dismissed an action by German families and Greenpeace challenging the government's failure to adhere to a target, set out in the Climate Protection Plan, to reduce GHGs by 40 per cent below 1990 levels by 2020. The plaintiffs claimed the government was bound by the Climate Protection Plan and that its non-adherence to the targets breached Constitutional rights to life and health, occupational freedom and property.
- 36. The court held that the target was not legally binding. However, the government's climate policy was held subject to judicial review and must be compatible with its duties to protect Constitutional rights. The court considered that the government was entitled to wide discretion in determining how to fulfil its constitutional obligations, as long as precautionary measures to protect rights were not wholly unsuitable or inadequate.
- 37. Another 2021 decision is Germany's Federal Constitutional Court's (**the FCC**) decision of *Neubauer, et al. v. Germany*. In that case, a group of young Germans alleged that their human rights, as conferred by the German Constitution, the Basic Law, had been violated by the Federal Climate Protection Act (**CPA**) because the target contained in the CPA to reduce greenhouse gases by 55 per cent of 1990 levels by 2030 was insufficient. 970
- 38. The complainants pointed to the reduction that would be required to meet the Paris Agreement targets, and invoked the principle of human dignity, right to life and physical integrity, and natural foundations of life in responsibility for future generations, as set out in the Basic Law.⁹⁷¹ The complainants sought declarations that the legislature set new quotas to keep Germany's emissions to the lowest possible level, taking account of the principle of proportionality, and prohibit emissions allocations being transferrable.⁹⁷²
- 39. The FCC agreed that the principle of proportionality had been breached as, 'one generation must not be allowed to consume large parts of the CO2 budget under a comparatively mild reduction burden if this would at the same time leave future generations with a radical reduction burden...and expose their lives to serious losses of freedom'. Accordingly, it ordered the legislature to update 'the reduction targets for periods after 2030 in more detail until 31 December 2022, taking into account the requirements of this decision'.

Public interest

1.152 The United States Court of Appeals for the Ninth Circuit (**the Ninth Court**) in *Juliana v United States*⁹⁷⁵ considered a claim by 21 American minors who argued that government actions in continuing to 'permit, authorize and subsidize' fossil fuel⁹⁷⁶ had violated their substantive rights under the Due Process Clause of the

⁹⁶⁷ Ibid.

⁹⁶⁸ For an overview, see Global Climate Change Litigation database (online), 'Family Farmers and Greenpeace Germany v Germany' (webpage).

⁹⁶⁹ Global Climate Change Litigation database, 'Neubauer, et al. v. Germany' (webpage).

⁹⁷⁰ Ibid.

⁹⁷¹ Ibid.

⁹⁷² As they currently were between Germany and other member states of the EU: Ibid.

⁹⁷³ Ibid.

⁹⁷⁴ Ibid.

⁹⁷⁵ Juliana v United States 947 F.3d 1159 (9th Cir. 2020) ('Juliana v United States').

⁹⁷⁶ Juliana v United States, 12.

Fifth Amendment, the Fifth Amendment to equal protection of the law, the Ninth Amendment, and the public trust doctrine.⁹⁷⁷ They sought an injunction ordering government to 'phase out fossil fuel emissions and draw down excess atmospheric [carbon dioxide]'.⁹⁷⁸

- 1.153 On 17 January 2020, the Ninth Court majority accepted that the plaintiffs had presented compelling evidence that government promotion of fossil fuels was likely to cause catastrophic climate change, and that failure to change existing policy may hasten an environmental apocalypse. Property However, it reluctantly have found that the plaintiffs did not have standing for these claims, as the Ninth Court did not have the power to order or otherwise facilitate the remedy sought. The host of complex policy decisions required for the requested phase-out plan would need to be entrusted to the wisdom and discretion of the executive and legislative branches Judge Staton entered a strong dissent. The Ninth Circuit Court of Appeals denied the plaintiffs petition for rehearing en banc of this ruling, but at the time of drafting, the plaintiffs have continued to challenge these decisions.
- 1.154 A case upholding the public trust doctrine to some extent is *Foster v Washington Department of Ecology*, in which the Washington Superior Court reaffirmed that the Washington State Constitution imposes a 'constitutional obligation to protect the public's interest in natural resources held in trust for the common benefit of the people of the State'. However, it held that the Department was acquitting its public trust obligations because it was engaging in rulemaking to address GHGs. It was beyond the Court's judicial review power to assess the merits of the Department's approach. This decision was eventually upheld. 985

Consumer protection

- 40. Claims have also been made against companies for misleading consumers or investors on the impact of the fossil fuel products that they have marketed and sold, and the climate change-driven risks to their businesses, particularly in the United States.
- 41. In one example, *People of the State of New York v. Exxon Mobil Corporation*, ⁹⁸⁶ the Attorney General of New York drew upon the outcome of a four-year investigation to argue that Exxon's statements regarding accountancy for climate change regulation costs were fraudulent, being misaligned with the company's actual projections. While the Court found that the requirement of 'material misrepresentation' for the purposes of the fraud claim was not met, it stressed that this did not absolve Exxon of any climate change related responsibilities. ⁹⁸⁷

⁹⁷⁷ Ibid 11.

⁹⁷⁸ Ibid.

⁹⁷⁹ Ibid (Circuit Judge Hurwitz).

⁹⁸⁰ Ibid.

⁹⁸¹ Ibid 25.

⁹⁸² District Judge Staton dissented on the basis that the plaintiffs had standing, given their claims had been 'articulated…under the Constitution' and had been presented alongside 'sufficient evidence': Ibid 64.

⁹⁸³ For an overview, see Global Climate Change Litigation database, 'Juliana v United States' (webpage).

 ⁹⁸⁴ Foster v Washington Department of Ecology (Wash Super Ct, 14-2-25295-1-SEA, 19 November 2015) 8.
 985 Foster v Washington Department of Ecology (Wash Super Ct, 14-2-25295-1, 29 April 2016); Foster v Washington Department of Ecology (Wash Super Ct, 14-2-25295-1, 16 May 2016); Foster v Washington

Department of Ecology (Wash Ct App, 75374-6-1, 5 September 2017).

986 New York v. Exxon Mobil Corp. N.Y. Sup. Ct, 452044/2018.

⁹⁸⁷ For an overview, see Global Climate Change Litigation database, 'People of the State of New York v. Exxon Mobil Corporation' (webpage).

- 42. Further recent claims have been filed, which are yet to be resolved, against:
 - Exxon Mobil, BP, Chevron and Shell by the Attorney General for District of Columbia based on fraud, failure to warn and violations of statutory prohibitions on consumer fraud, deceptive trade practices and false statements in advertising. This alleges that the defendants systemically and internationally misled consumers in Washington DC about the central role their products play in climate change;⁹⁸⁸ and
 - American Petroleum Institute, ExxonMobil, Koch Industries and Flint Hills
 Resources on the basis of internal historical documents which allegedly
 confirm that the defendants 'well understood the devastating effects that their
 products would cause to the climate'. 989 These are based on fraud, failure to
 warn, and multiple violations of Minnesota statutes that prohibit consumer
 fraud, deceptive trade practices and false statements in advertising.

Planning

- 43. Recent claims in the UK include:
 - claims that government plans to build a third runway at Heathrow Airport
 were initially blocked by its Court of Appeal on the basis that the UK
 Government had committed to the Paris Agreement as 'Government policy' at
 the relevant time and so was required to expressly consider its goals under
 the Paris Agreement when making its policy statement.990 However, UK
 Supreme Court overturned this decision in late 2020, holding that the
 Government had in fact taken climate change impacts into account by
 reference to earlier climate goals;⁹⁹¹ and
 - in *R* (on the application of ClientEarth) v Secretary of State for Business, Energy and Industrial Strategy and Drax Power Limited⁹⁹² ClientEarth argued that under the UK's national energy policy statement, the Secretary of State was required to assess any project's specific contribution towards fulfilling the overarching commitment to certain types of energy infrastructure.⁹⁹³ It argued this assessment should have been made regarding Drax's application to build a gas mega plant.⁹⁹⁴ However, these arguments were unsuccessful at the High Court and on appeal at the Court of Appeal.⁹⁹⁵

Professional ethical duties

44. The fundamental duties of solicitors in Australia, as set out in the ASCR, relevantly

⁹⁸⁸ Global Climate Change Litigation database, 'District of Columbia v. Exxon Mobil Corp.'

⁹⁸⁹ Global Climate Change Litigation database, 'State v American Petroleum Institute'.

⁹⁹⁰ *R* (*Plan B Earth and ors*) v Secretary of State for Transport [2020] EWCA Civ 214. The Court found that the Secretary needed to expressly consider and address the Paris Agreement goals during the Airport National Policy Statement process. By failing to consider the Paris Agreement the Secretary violated the Planning Act and the requirement to undertake a strategic environmental assessment pursuant to EC Council Directive 2001/42/EC. The ANPS was therefore invalid.

⁹⁹¹ The Government's actions further 'reflected the uncertainty over the climate change effects of non-CO2 emissions and the absence of an agreed metric which could inform policy: *Plan B Earth v. Secretary of State for Transport* [2020] UKSC 52.

 ⁹⁹² R (on the application of ClientEarth) v Secretary of State for Business, Energy and Industrial Strategy and Drax Power Limited [2021] EWCA Civ 43 (21 January 2021).
 ⁹⁹³ Richard Griffiths and Tom Edwards, 'High Court upholds Drax development consent order' (29 May 2020).

⁹⁹³ Richard Griffiths and Tom Edwards, 'High Court upholds Drax development consent order' (29 May 2020). ⁹⁹⁴ ClientEarth, 'Court upholds gas plant approval but sets important climate planning precedent' (21 January 2021).

⁹⁹⁵ Ibid.

include the following.

3. PARAMOUNT DUTY TO THE COURT AND THE ADMINISTRATION OF JUSTICE

3.1 A solicitor's duty to the court and the administration of justice is paramount and prevails to the extent of inconsistency with any other duty.

4. OTHER FUNDAMENTAL ETHICAL DUTIES

- 4.1 A solicitor must also:
- 4.1.1 act in the best interests of a client in any matter in which the solicitor represents the client;
- 4.1.2 be honest and courteous in all dealings in the course of legal practice;
- 4.1.3 deliver legal services competently, diligently and as promptly as reasonably possible;
- 4.1.4 avoid any compromise to their integrity and professional independence; and
- 4.1.5 comply with these Rules and the law.
- 45. The ASCR also impose the following obligations with respect to a solicitor's relationship with clients:

7. COMMUNICATION OF ADVICE

7.1 A solicitor must provide clear and timely advice to assist a client to understand relevant legal issues and to make informed choices about action to be taken during the course of a matter, consistent with the terms of the engagement.

. .

8. CLIENT INSTRUCTIONS

- 8.1 A solicitor must follow a client's lawful, proper and competent instructions.
- 46. Further, the ASCR addresses conflicts involving the solicitors' own interests:

12 CONFLICT CONCERNING A SOLICITOR'S OWN INTERESTS

12.1 A solicitor must not act for a client where there is a conflict between the duty to serve the best interests of a client and the interests of the solicitor or an associate of the solicitor, except as permitted by this Rule.

47. Another relevant legal obligation, applicable only to barristers, is the 'cab-rank principle' set out at Rule 17 of the Barristers' Rules:

17 CAB-RANK PRINCIPLE

A barrister must accept a brief from a solicitor to appear before a court in a field in which the barrister practises or professes to practise if:

- (a) the brief is within the barrister's capacity, skill and experience,
- (b) the barrister would be available to work as a barrister when the brief would require the barrister to appear or to prepare, and the barrister is not already committed to other professional or personal engagements which may, as a real possibility, prevent the barrister from being able to advance a client's interests to the best of the barrister's skill and diligence,
- (c) the fee offered on the brief is acceptable to the barrister, and
- (d) the barrister is not obliged or permitted to refuse the brief under rule 101, 103, 104 or $105.^{996}$
- 48. Similarly, Rule 3 of the Barristers' Rules are relevant (emphasis added):

Objects

The object of these Rules is to ensure that barristers:

act in accordance with the general principles of professional conduct;

act independently;

recognise and discharge their obligations in relation to the administration of justice; and

provide services of the highest standard unaffected by personal interest.

International legal professional bodies- climate policies

49. A few examples of climate policies or resolutions made by legal professional bodies globally are listed below, noting that this is a rapidly moving area of interest and development.

International Bar Association

Policy position on climate change

50. In May 2020, the IBA issued a Climate Crisis Statement (**IBA Statement**) in which it called upon the profession internationally and at a domestic level to lead the way in maintaining the rule of law and supporting 'responsible, enlightened governance in an era marked by a climate crisis'.⁹⁹⁷

⁹⁹⁶ Note, these rules set out the circumstances in which briefs *must* be refused or returned (r 101), exceptions and clarifications to and of these circumstances (rr 102-104) and circumstances in which briefs *may* be refused or returned (r 105).

⁹⁹⁷ See, IBA, 'International Bar Association Climate Crisis Statement' (5 May 2020).

51. As President of the IBA, Horacio Bernardes Neto ratified the IBA Statement. In a message to IBA members, Mr Neto outlined the IBA's responsibilities as the global voice of the legal profession, stating:

I believe the legal profession must be prepared to play a leading role in maintaining and strengthening the rule of law, and supporting responsible enlightened governance in an era marked by climate crisis. 998

52. The IBA Statement has been widely reported by legal profession groups and/or organisations.⁹⁹⁹ The resolutions in the Statement are set out below:

The IBA urges lawyers, acting in accordance with their professional conduct rules and the rule of law, to consider:

- taking a climate conscious approach to problems encountered in daily legal practice;
- advising clients of the potential risks, liability, and reputational damage arising from activity that negatively contributes to the climate crisis:
- encouraging corporate clients to voluntarily disclose the risks posed by the climate crisis to the corporation's entire business operation (including supply chains) when reporting to regulators, investors, and stakeholders; and
- engaging in climate dispute resolution generally (including mediation, negotiation or litigation), and specifically on a probono, volunteer or reduced fee basis, for those negatively affected by the climate crisis.

The IBA encourages lawyers to engage with current and future legislative and policymaking efforts to address the climate crisis and consider:

- supporting a just transition towards carbon neutrality in a fair, sustainable and inclusive manner to support the global regions and industry sectors most affected by the transition towards carbon neutrality on account of their current dependence on fossil fuels or carbon-intensive processes;
- supporting the removal of legal barriers to the reduction of carbon emissions to achieve climate neutrality as soon as practicable;
- supporting proactive laws and policies to address future risk to populations that are, or potentially could be, vulnerable to the devastating effects of the climate crisis;
- encouraging industry sectors, especially those in developing countries, to engage in and advance efforts towards creating

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⁹⁹⁸ Ibid

⁹⁹⁹ See, for example, Jerome Doraisamy, '<u>International Bar adopts Climate Crisis Statement</u>' (10 May 2020); Neil Rose, '<u>IBA urges lawyers to adopt "climate-conscious" approach</u>' (7 May 2020); Campaign for Greener Arbitrations, 'Lawyers and the Climate Crisis' (undated).

sustainable business models that actively address and mitigate the impacts of the climate crisis;

- promoting legal innovation so impact investors and environmental funders can further engage with and address the climate crisis through supporting social and environmental entrepreneurs with specific incentives; and
- supporting the recommendation in the IBA report Achieving
 Justice and Human Rights in an Era of Climate Disruption that
 calls for the immediate creation of an international ad-hoc arbitral
 body specifically for environmental litigation, and the eventual
 establishment of an International Court for the Environment.

The IBA implores lawyers to support and engage with the Sustainable Development Goals, particularly Goals 1, 7, 13 and 16, 1000 on the understanding that the rule of law is enshrined in Goal 16, which all lawyers should already respect and promote.

The IBA recommends that bar associations, law societies and similar bodies around the world each consider:

- engaging with law students and schools concerning education on legal elements of the climate crisis and its impact on human rights;
- developing practical educational tools for qualified lawyers to use in continuing their legal education and implementing the IBA's forthcoming publication, Framework Model Curriculum on Continuing Legal Education in Environmental Law;
- establishing a committee focusing on the climate crisis and its consequences (where not already in place) to encourage lawyers and legal practices to actively support, engage with and record their efforts in combatting the climate crisis; and
- calling upon lawyers and legal practices in their respective jurisdictions to report their efforts in combatting the climate crisis to the climate crisis committee for analysis and cross comparison to develop best practice guidelines for others in the jurisdiction.

The IBA urges lawyers, as influential figures and thought leaders within society, to live responsibly in the face of the climate crisis and, where possible, take steps to:

- reduce their environmental footprint through awareness of the impact of everyday actions; and
- supporting positive changes in the workplace, including adoption of more sustainable practices, such as greater reliance on electronic file storage facilities and digital technologies, more

¹⁰⁰⁰ SDGs (See Part 2 discussion, above). Goals 1, 7, 13 and 16 refer respectively to no poverty; affordable and clean energy; climate action and peace, justice and strong institutions: United Nations, Department of Economic and Social Affairs, Sustainable Development, 'The 17 Goals', available online.

energy efficient office infrastructure and more climate-friendly travel and procurement choices.

American Bar Association

Policy position on climate change

- 53. The American Bar Association (**ABA**) adopted its current Climate Change Policy in August 2019 (**ABA's Climate Change Policy**). In substance, the ABA's Climate Change Policy:
 - '...urges the adoption of a wide range of legal measures to both reduce greenhouse gas emissions and to adapt to climate change;
 - ... [is] addressed to federal, state, local, territorial and tribal governments, as well as the private sector;
 - ...reflects the greater urgency of climate change [than the ABA's first Policy in 2008;
 - ...recognizes the need for, and urges a greater role for lawyers in addressing climate change': 1002
 - is directed at lawyers as well as governments at all levels. It urges lawyers to perform pro bono work targeted at addressing climate change and to advise clients of 'risks and opportunities' associated with climate change, in addition to taking a 'greater role' in 'addressing' the issue; 1003 and
 - is accompanied by a supporting 'report', which explains the ABA's aim to 'take urgent action to combat climate change and its impacts' in accordance with the SDGs. 1004 Further, the report describes the ABA's prior endorsements of sustainable development, which are considered 'the conceptual framework for addressing climate change. 1005
- 54. When the ABA's Climate Change Policy was developed, the ABA planned for its sponsoring firms to host an educational series on legal issues regarding climate change, prepare 'white papers', and offer their attorneys as contact points for governments that wished to adopt emissions-reducing legislation. Since publishing the ABA's Climate Change Policy, the ABA has through advocacy, including by producing its biweekly 'Climate Update', publishing relevant articles on its website, and hosting regular virtual networking events. In a published article on the ABA's climate change work the Chair of the ABA referred to the ABA's Climate Change Policy as evidence of the organisation's strong support of action

¹⁰⁰¹ See, American Bar Association House of Delegates, Res 111 (12-13 August 2019). Note, this updated the House of Delegates' previous climate change resolution dated 8 February 2008.

¹⁰⁰² Ibid 1.

¹⁰⁰³ Ibid.

lbid 2. Note, the ABA Representative to the United Nations is responsible for advocating the SDGs.lbid 17.

¹⁰⁰⁶ Ibid

¹⁰⁰⁷ These have taken place through the Climate Change, Sustainable Development, and Ecosystems Committee of its Section of Environment, Energy, and Resources and have included public facing events. See, Karen Mignone, 'Views from the Chair' (7 July 2020) *American Bar Association*; ABA Groups, 'Climate Change, Sustainable Development, and Ecosystems Committee'; ABA Groups, 'Climate Change and the Legal Profession: Beyond Environmental Law' (31 July 2020),

The Law Society of England and Wales

- 55. In October 2021, the Law Society of England and Wales (**LSEW**) agreed on a new Climate Change Resolution. This Resolution highlights that the LSEW:
 - 1. resolves to develop plans and take rapid action, in a manner which is consistent with restricting global warming to 1.5°C, by adopting science-based targets.
 - resolves to:
 - (a) support solicitors to be fully informed on how they might act to mitigate the climate crisis;
 - (b) provide guidance to solicitors on how, when approaching any matter arising in the course of legal practice, to take into account the likely impact of that matter upon the climate crisis in a way which is compatible with their professional duties and the administration of justice;
 - (c) develop, disseminate and publicise educational tools and resources to support solicitors to incorporate into their daily practice advice on the impacts of climate change, and prepare for the likely impacts of climate change upon their daily practice in line with paragraphs 3 and 4 below;
 - (d) engage with current and future climate change-related legislative, regulatory and policy reform so far as it impacts on the practice of law, access to justice and the rule of law;
 - (e) influence the regime governing legal training and education on issues pertaining to climate change;
 - (f) collaborate actively with others for the greatest impact in addressing the climate crisis, including clients, regulators, bar associations, other professional bodies and legal networks focused on ameliorating the climate crisis; and
 - (g) report on the steps taken to meet these commitments and the outcomes of such steps and share its learning with the solicitors' profession.
 - 3. Urges solicitors, always in a way which is compatible with their professional duties and the administration of justice, to engage in climate conscious legal practice by:
 - (a) continuing legal education on matters pertaining to climate change, in recognition of the pervasive impact of climate change on society and legal practice;
 - (b) approaching any matter arising in the course of legal practice with regard to the likely impact of that matter upon the climate crisis;

¹⁰⁰⁸ Judy Perry Martinez and Tracy Hester, 'Views from the Chair' (7 July 2020).

¹⁰⁰⁹ Law Society of England and Wales, 'Climate Change Resolution' (October 2021).

- (c) providing (whether themselves or through others) competent advice to their clients on:
 - how they can achieve their objectives in ways which mitigate the effects of the climate crisis and promote adaptation to climate change; and
 - the potential legal risks and liabilities that may arise from action or inaction that negatively contributes to the climate crisis; and
- (d) advising clients, where applicable, about the benefits of disclosure of climate-related risks and opportunities related to their entire business operation (including supply chains) when reporting to regulators, investors, and stakeholders and on the assessment, monitoring, management, mitigation and reporting on such risks.
- 4. Urges law firms and organisations that support the legal industry to operate in a way which restricts the increase in global warming to well below 2°C and to pursue efforts to limit the increase to above 1.5°C pre-industrial levels by:
 - (a) adopting science-based targets to reduce the direct and indirect greenhouse gas emissions associated with daily legal practice;
 - (b) adopting practical measures to reduce the environmental impact of their business and policies which mitigate their contribution to the climate crisis through the provision of legal services; and
 - (c) reporting publicly on the steps taken to meet these commitments and the outcomes of such steps.
- 5. Encourages solicitors, law firms and organisations that support the legal industry to take a holistic and proactive approach to mitigating the climate crisis and promoting climate change adaptation by taking action which includes:
 - (a) developing well-supported career paths for lawyers who wish to transition into distinct disciplines related to climate change or enhance their practice area by focusing on ways in which that practice can advance net-zero targets, such as clean energy, green real estate, ESG, sustainable finance law and similar climate related aspects;
 - (b) engaging in pro bono activities which support this objective;
 - (c) engaging in climate change dispute resolution on a basis which ensures affordable access to justice for those negatively affected by the climate crisis, considering the clients' resources; and
 - (d) engaging with current and future legislative and policymaking efforts to mitigate the climate crisis and protect the human rights of those most affected by it and promoting the development and application of legal rules, transparency requirements and policies in a manner that is consistent with climate change mitigation and the climate commitments under international treaties and domestic law.

Broader professional and representative bodies in Australia

56. Various peak professional bodies in Australia have adopted a position on climate

change and pursued that position through often sophisticated advocacy targeting the issues and concerns facing their members. These include:

- the AMA, which in 2015 released a revised policy on 'Climate Change and Human Health'. This confirms that 'human health is ultimately dependent on the health of the planet and its ecosystem'. It notes the latest findings regarding the science of climate change and the role of humans and recognises that the consequences of climate change have serious health impacts both globally and in Australia. Further the AMA's policy states (amongst other things) that:
 - because climate change involves potentially serious or irreversible harm to the environment and to human health, urgent international cooperation is essential to mitigate climate change. Reducing GHGs within a global carbon budget is necessary to prevent further climate harm as a result of human activity;
 - Australia should adopt mitigation targets within an Australian carbon budget that represents Australia's fair share of global GHG emissions, under the principle of common but differential responsibilities;
 - regional and national collaboration across all sectors, including a comprehensive and broad reaching adaptation plan is necessary to reduce the health impacts of climate change; and
 - o renewable energy presents relative benefits compared to fossil fuels with regard to air pollution and health. Therefore, active transition from fossil fuels to renewable energy sources should be considered;¹⁰¹²
- Engineers Australia, which accepts the 'comprehensive scientific basis regarding climate change' and notes that engineers are 'uniquely placed' to assist with mitigation and adaptation. The organisation's Energy Position Statement also highlights the need for a 'new energy paradigm' to meet Australia's commitment under the Paris Agreement; 1013
- the Planning Institute of Australia, which has released a Position Statement on Planning in a Changing Climate recognising the scientific reality of climate change and setting out guiding principles for 'planning for climate change,' as well as the Institute's 'preferred approach' with respect to leadership, policy and practice, capacity development, education, research and innovation, community engagement and collaboration and partnership;¹⁰¹⁴
- the BCA, which has maintained a position in support of action on climate change, including calling for 'a comprehensive energy and climate change plan... [and supporting] Australia's commitment to the Paris Agreement'. The BCA also advocates for a 'national, bipartisan, economy-wide, and technology neutral

¹⁰¹² Ibid.

¹⁰¹⁰ Australian Medical Association, '<u>Climate Change and Human Health</u>' (28 August 2015). This replaced earlier 2004 and 2008 versions of the policy.

¹⁰¹¹ Ibid.

¹⁰¹³ See, Engineers Australia, '<u>Climate Change Policy</u>' (November 2014); Engineers Australia, '<u>Energy Position Statement</u>' (October 2016).

¹⁰¹⁴ Planning Institute of Australia, 'Planning in a Changing Climate - Position Statement March 2021'.

approach' and has publicly called for a legislated target of net zero emissions by 2050:1015

- the Insurance Council of Australia, whose Climate Change Action Committee (convened following publication of its statement on climate change) has pursued 33 partnership projects;¹⁰¹⁶ and
- ACOSS, which has stated that Australia faces major climate change risks unless it changes and transitions to a low carbon economy. It highlights that people experiencing disadvantage and poverty are most vulnerable to the impacts of climate change, and to a poorly managed transition to clean energy. It underlines that the transition to a cleaner economy presents the opportunity to create a more just, equitable and sustainable nation.¹⁰¹⁷

¹⁰¹⁵ See, Grant King, 'The BCA has always supported responsible climate action' (1 April 2019) Business Council of Australia; More recently, in February 2020 the BCA published a scoping paper to develop an updated energy and climate change policy. See, Lisa Cox and Adam Morton, 'Q&A recap: business council calls for legislated target of net zero emissions by 2050' (11 February 2020) The Guardian. Business Council of Australia, 'Scoping Paper – energy and climate change policy' (10 February 2020). The results of this have not yet been published.

¹⁰¹⁶ See, Insurance Council of Australia, '<u>Public Statement on Climate Change</u>' (June 2019) . See, also, Insurance Council of Australia, 'Climate Change Action'.

¹⁰¹⁷ ACOSS, 'Action on climate change and affordable clean energy' (undated)

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