

**FRONTRUNNERS**



Environmental  
Defenders Office



# Sports, Climate Change and Legal Liability

2024 Report



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# Foreword

**Australia is a land of extremes, and climate change is pushing those extremes even further.** A long-term warming trend from the burning of coal, oil and gas and ongoing deforestation is supercharging extreme weather events in Australia.

**Australia's climate has warmed by more than 1°C since 1910<sup>1</sup>. Every year since 2013 has been amongst the hottest years on record for Australia<sup>2</sup>.**

All extreme weather events are now occurring in an atmosphere that is warmer and wetter than it was in the 1950s<sup>3</sup>. Generally, this means more intense extreme weather events and more devastation<sup>4</sup>.

Climate change is making many types of extreme weather worse, especially heatwaves. Heatwaves are lasting longer, reaching higher maximum temperatures and are occurring more frequently over many regions of Australia<sup>5</sup>.

Like every part of the Australian economy, climate change will dramatically affect the future of sport in Australia. These impacts are already being felt with smoke<sup>6</sup>, extreme heat<sup>7</sup>, drought<sup>8</sup>, and flooding<sup>9</sup> impacting both the professional and grassroots levels of sport across the country.

We've seen this unfold at the Australian Open with athletes retiring from play due to extreme heat and

bushfire smoke<sup>10</sup>. The ACT Brumbies and Canberra Raiders had to relocate their 2020 pre-seasons as Canberra had the worst air-quality in the world<sup>11</sup>. In cricket we've seen numerous examples - the most publicised, perhaps, Joe Root's collapse in 2018 due to heat stress<sup>12</sup> and the cancellation of a Big-Bash League game mid-play<sup>13</sup>. Drought has also had devastating impacts, in 2007 alone, three-quarters of metro and rural AFL leagues in Victoria had delayed or shortened seasons due to ground closures<sup>14</sup>.

While we see these impacts unfold before our eyes, the effects of COVID-19, resource scarcity and a legacy of broader government inaction or inertia have meant most Australian sporting bodies have not yet integrated climate risk and climate action into their business plans.

This report from the Environmental Defenders Office (EDO) makes a compelling, and at times alarming, case for sports to seriously and comprehensively grapple with the risks climate presents to their future.

We know athletes want this - from the almost 500 athletes across more than 40 sports who signed The Cool Down<sup>15</sup>, an open letter calling on the government to lift our climate ambition, to the rise of athlete-led climate groups like Footy for Climate and Cricket for Climate, as well as the overwhelming support for climate action at the Professional Footballers Association.



We know fans want this - sports marketing agency, No 2nd Place, surveyed sports fans finding 77% identified climate change as an issue important to them<sup>16</sup>. This is borne out across many other surveys, for just three examples spanning sport and the broader population;

- Monash University surveyed AFL fans finding four out of five believe sport in Australia is already feeling the impacts of climate change, with a majority saying they would support their club and the league taking climate action,
- the 2019 ANU election study found 83% of 18 - 34-year-olds were concerned or extremely concerned about climate change, meanwhile,
- Australia SCAN 2020 found that even in the midst of COVID-19, almost half of all Australians agreed environmental credentials are important when they judge a brand, service or product<sup>17</sup>. These numbers are even higher for young people and women.

While this report demonstrates how necessary these changes are, that doesn't make them easy. Sporting organisations face a range of challenges in addressing climate risk - from resource scarcity to a lack of in-house expertise, as well as competing claims and ideas about where to begin, the efficacy of different types of action and the optimal trajectory, just to name a few.

Thankfully, when it comes to climate action, no one expects overnight perfection. In fact, a sports analogy is almost the perfect one to articulate the right approach to climate action. It's impossible to win the flag, or to set a record, on day one.

Any athlete or organisation sets that as their ultimate goal - perhaps this year, perhaps in a few years or maybe even on that four year Olympic cycle. Then they build a plan to get there - training, nutrition, recovery, so many tiny decisions help put them in the best position to achieve that ultimate goal. It requires partners, outside expertise and a continual commitment to incremental improvement.

Climate action is just the same.

The UNFCCC Sport for Climate Action Framework (which you'll see this report recommends) calls for sporting organisations to commit to halving their emissions by 2030 and reaching net zero by 2040. Those time

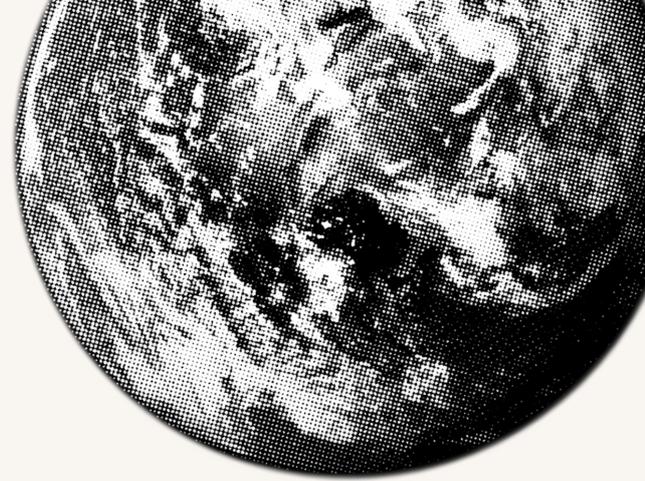
horizons give sport the opportunity to take stock of where they are and make plans to address the future of the games and communities they are responsible for across the next 17 years. Biting off the easiest to address issues first, and leaving plenty of lead time to tackle the biggest challenges.

The work the EDO has done here to understand where we are, the challenges before us, and a pathway to address these is important reading for anyone involved in sports administration. For organisations already taking action, many of these concerns will not come as a surprise. And for those yet to take climate action, it should provide a clear rationale for action, and some focused ways to help your organisation begin the work.

The future before us is undetermined, but this report makes clear we all have a responsibility to ensure it's a safe one for our employees, athletes, fans, members and community.



**Emma Pocock**  
FrontRunners Co-founder & CEO



## Executive Summary

As the most well-resourced and influential stakeholders in the sporting world, **sporting governing bodies (particularly national bodies) have an elevated duty** to ensure that they identify and comprehensively manage the risks of climate change in ways that do not exacerbate the problem, but rather contribute to mitigation and adaptation solutions. However, **our analysis of the top 314 of Australia's national and state sporting organisation's** climate responses suggest that this is far from the case. The results, as set out in detail in **Annexure H**, show that as of September 2023:

- a. **only 3** mentioned climate change in their annual report;
- b. **only 6%** referred to climate change or sustainability in their strategic plans;
- c. **only 3%** issued guidance or publications on their website on climate change or sustainability;
- d. **only 2%** have signed up to the UN Sports for Climate Action Framework, which means committing to a 50% reduction in emissions by 2030 and net-zero by 2040;
- e. **only 3%** discuss climate change anywhere on their website;
- f. of the 45 national sporting organisations, 29 have undertaken no climate change or sustainability initiatives whatsoever;
- g. the worst performing sports in terms of climate change and sustainability action include Volleyball, Rugby League, Athletics, Gymnastics, Cycling, Diving, Modern Pentathlon and Sailing. Each had (when excluding the publication of heat or extreme weather guidance) **zero climate change or sustainability initiatives**.

### Analysis of the government entities responsible for sport in Australia fare no better:

- h. the top national government entity for sports in Australia, the Australian Sports Commission (ASC) falls significantly below the standard for climate action relative to other national government sporting entities including those located in Europe and the US. Notably, the ASC has:
  - i. no reference to climate change or environmental sustainability in its 2020-2021 annual report or its 2021-2025 Corporate Plan;
  - ii. no substantive section of the website dealing with climate change and sustainability;
  - iii. no committee or specialist body advising on sustainable sport;
  - iv. no information or guidance as to how sports organisations, sporting facilities operators and/or sporting event organisers should mitigate against or adapt to climate change;
  - v. no leadership on climate-change or sustainability campaigns or initiatives;
  - vi. no consideration of climate change when planning for the future of sport; and
  - vii. an out of date and ineffectual environmental sustainability policy.
- i. in respect of the state and territory government sporting entities:
  - i. **only 1 entity** referred to climate change in their annual financial report, and even then, it stated that "the department has not identified any material climate related risks relevant to the financial report at the reporting date...";



- ii. **no entity** referred to climate change in their current strategic plan for 2020-2025;
- iii. **no entity** substantively discussed climate change on their website;
- iv. **only 4 out of 8 entities** provided any type of climate change guidance or publications on their website; and

**In addition to current legal impacts, the failure to respond adequately to climate change can seriously damage the reputation and social licence of the sport.** The recent controversies around Cricket Australia's sponsorship by Alinta Energy, Fremantle Docker's sponsorship by Woodside and Netball Australia's sponsorship by Hancock Prospecting lay bare what happens when commercial decisions are made which are out-of-touch with both player and spectator values.

Climate change is a critical business and financial risk that needs to be taken seriously by sporting organisations. This is because:

- j. **on the basis of current law**, there is a real possibility that a failure to manage and mitigate the risks arising from climate change could **expose sporting organisations to liability**. Potential sources of liability include:
  - i. breach of duty of care to players arising from heat-related illness and injuries caused by poor playing surface conditions, such as flooded sports grounds or surfaces hardened as a result of drought or extreme heat, or artificial snow;
  - ii. breach of duty of care to spectators arising from venue operators failing to take reasonable measures to protect spectators from reasonably foreseeable damage caused to venues from extreme weather;

- iii. vicarious liability arising from acts or omissions committed by employees such as referees who have failed to discharge their duty to enforce the rules in such a way as to avoid injury to players;
- iv. breach of contract caused by suspension or cancellation of matches arising from extreme weather events; and
- v. breach of director duties by failing to consider climate change as part of risk management and strategy in circumstances where it is a material risk.

**Only 4 out of 8**

**provided any type of climate change guidance or publications on their website**



# Impact of climate change on sport

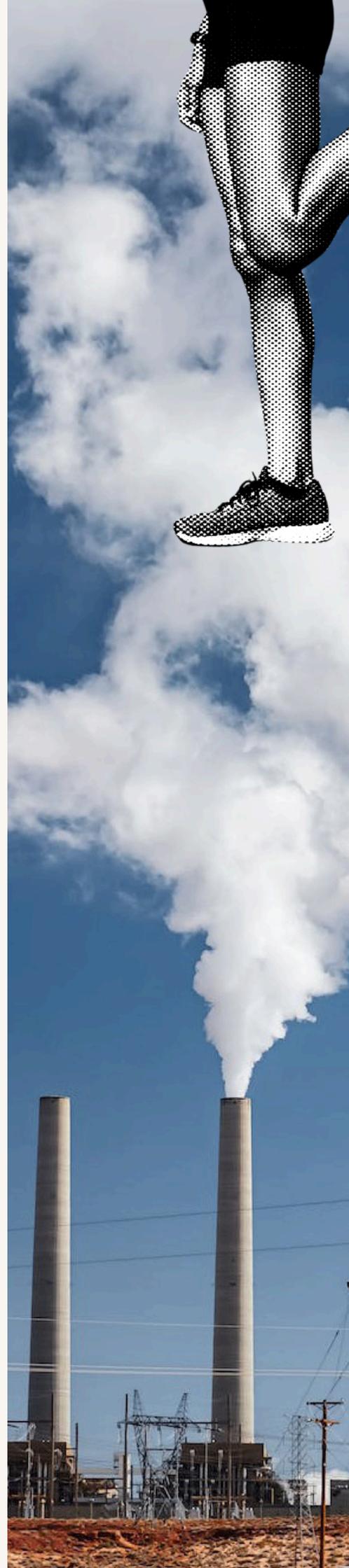
Examples of the impacts of climate change on sport already experienced in Australia include:

## a. Personal injury suffered due to temperature extremes:

- i. There were more than 4 days over 40° during the 2014 Australian Open, prompting more than 9 players to withdraw and more than 1,000 spectators and several ball-kids to be treated for heat exhaustion. There was also a financial impact — daily attendance fell by 12,000 to 15,000 during the worst of the heat-wave, with the Australian Financial Review reporting that the Australian Open was “set for a large financial loss from the hot Melbourne weather” with ticket sales plunging by 10 per cent, even though pre-sales had been up 8.5 per cent on 2013.<sup>18</sup>
- ii. In 2015 a tennis fan sued the Melbourne & Olympics Parks Trust (MOPT) in negligence for the failure to shut the arena’s retractable roof after she allegedly sustained injury as a result of falling down the stairs at Melbourne’s Hisense Arena (now John Caine Arena) in January 2013 whilst trying to escape the sun as temperatures hit 40° during an Australian Open match.
- iii. English Captain Joe Root was hospitalised from heat exhaustion after Ashes test match in Sydney in 2018. The air temperature at the time was 42° and a heat-tracker in the middle of the ground showed a reading of 57.6°.

## b. Suspension/cancellation of sporting matches:

- i. There were 3 days over 35°C during the 2018 Australian Open, leading to a number of games being postponed. Many matches proceeded to the detriment of players, who would later voice their concern over the decision to continue play in what they considered were dangerous conditions.
- ii. Temperatures of over 44°C on 11 February 2017 led to the cancellation of the A-league’s Newcastle v Melbourne Victory match, and all under-18s NSW football trial games.
- iii. Extreme heat in South Australia in 2018 and 2019 led to the shortening of the route of the Tour Down Under cycle race.
- iv. The December 2019 Perth Ascot horse race was cancelled due to extreme heat.
- v. A Big Bash League (BBL) cricket match at Manuka Oval in Canberra was suspended on 21 December 2019 after smoke from the 2019/2020 bushfires blew over the field.



### c. Damage to infrastructure/sporting venues:

- i. Extreme rainfall in January 2011 led to the inundation of Brisbane's Lang Park (formerly Suncorp stadium) in 1.5m of water requiring rugby league, rugby union and football matches to be played away from home grounds. The 2011 Queensland floods also caused the flooding of over 30 golf courses.<sup>19</sup>
- ii. Three sporting clubs reported damage of over \$250,000 each as a result of the extreme precipitation events in January 2018 to February 2020 in North Queensland.<sup>20</sup>
- iii. Australian ski fields experienced a 10% decline in annual maximum snow depth between 1962 and 2002<sup>21</sup>, and a 15% decrease in the average annual maximum snow depths in the period 2001 to 2010 compared to the 1961-1990 average.<sup>22</sup> Research indicates that poor snow coverage and lower snow depths result in higher crash and injury rates.<sup>23</sup>
- iv. The 2006 — 2009 Millennium Drought caused more than half of rural Victoria's community sporting leagues in 2017 to be delayed or cut short due to ground closures and caused \$1.3 million in damage to 74 sports grounds in Dandenong, Victoria.<sup>24</sup>



## Damage is forecast to increase as the world continues to warm.

In relation to Australia, projections include:

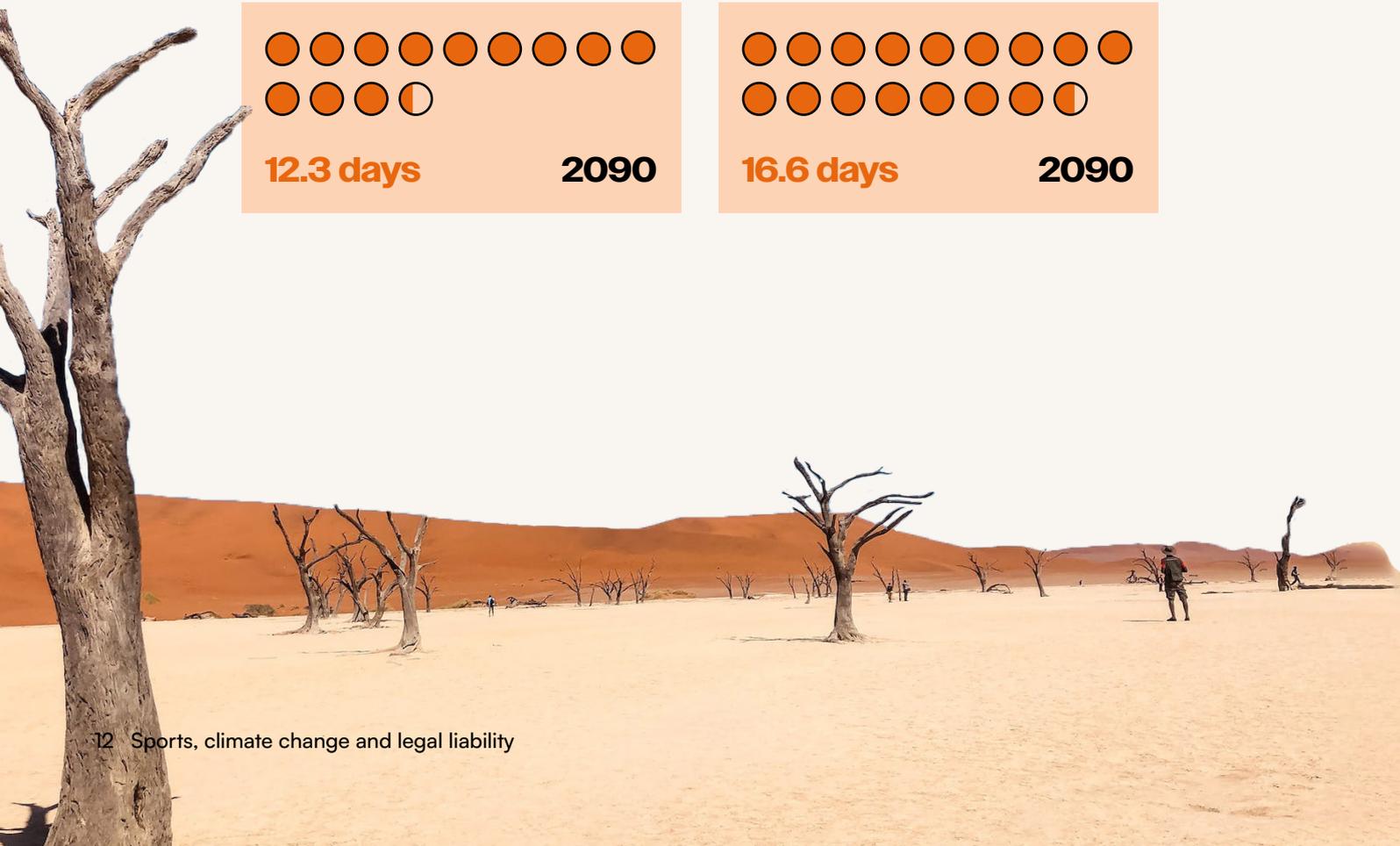
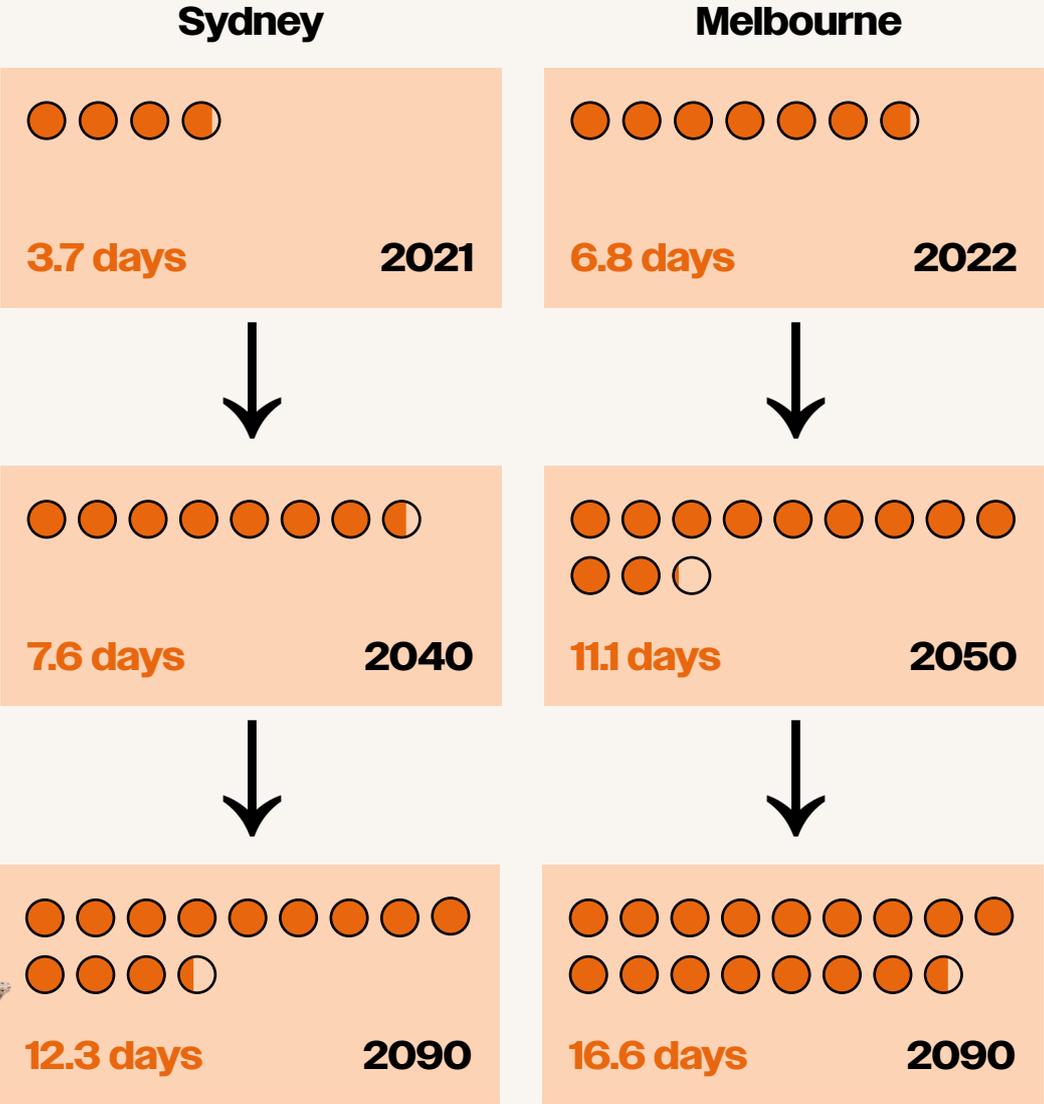
a. That the total area experiencing at least 60 days of snow coverage will decrease by 38.1-96.3% by 2050 relative to 1990 levels.<sup>25</sup> It is also projected that annual maximum snow depths will decline by 30-70% by 2050 at Falls Creek<sup>26</sup> (Vic) and Mt Hotham<sup>27</sup> (Vic) relative to 1990 levels under a low-emissions scenario, and by 15-20cm under a high emissions scenario.<sup>28</sup> It is also estimated that the length of the ski season<sup>29</sup> at Australia's low altitude ski resorts will decline by at least 30% by 2050 even under the low-emissions scenario.<sup>30</sup>

b. The inundation of a significant number of community sporting venues due to rising sea-levels.<sup>31</sup>

c. Increasing temperatures jeopardising the timing of summer sporting events, such as the Australian Open and the International Test Cricket.



# Predicted increase in the average number of summer days above 35°C<sup>32</sup>



As the world moves to decarbonise, consistent with the Paris Agreement's goal of limiting warming to well-below 2 degrees Celsius and pursuing efforts to limit warming to 1.5 degrees, sporting organisations, event organisers and venue owners and occupiers must proactively respond to changes in climate laws and regulations, and pressure from insurers, financiers and investors to decarbonise. Moreover, these organisations will need to adapt to changing consumer and player preferences as fans and players become more climate aware and demand climate action.

**This is already occurring:**

**69%**

of fans surveyed in a 2021 Yougov survey believed that brands should consider environmental sustainability when putting on events

**53%**

cared about what their carbon footprint was and 46% of fans try to only buy from companies who are social and environmentally responsible

**A 2021 survey specifically of AFL fans<sup>33</sup> found that...**

**76%**

of respondents were worried about climate change (with 29% of those being very worried)

**83%**

of respondents believed that sport in Australia had already felt the impacts of climate change (with 19% of this group believing that climate change had a significant impact)

**61%**

of respondents considered that the AFL has a responsibility to help AFL clubs reduce their carbon footprint

**59%**

considered that the AFL has a responsibility to help local football clubs switch to clean energy

# Key areas of liability risk

Our analysis has identified the below key areas of liability risks to key stakeholders including: governing and peak sport bodies, directors of sporting organisations, sporting clubs, event organisers, venue owners, occupiers and operators and referees/umpires.

## Governing and peak sport bodies

Sports bodies will be liable if they fail to create or amend the rules of the game/heat policy to avoid the risk of heat-related illness to players.

They will also need to consider contractual implications with broadcasters/service providers that may arise from the suspension and cancellation of matches caused by acute and chronic weather and climate events.

Breaches of the Corporations Act 2001 (Cth) may also arise for failing to disclose the impact of climate change on the financial performance and position of the sporting organisation in circumstances where climate change has a material impact. Most large unincorporated associations will also be required to disclose material risks to their financial position which will include climate impacts. More detailed climate change disclosure (including a mandated requirement to disclose in accordance with the TCFD) has become mandatory in the UK, New Zealand and is in the process of being mandated in the US. As Treasury recently issued a discussion paper on the topic in Australia, it is clear that it is only a matter of time before mandatory climate change disclosure occurs in Australia for medium to large corporations, and sports organisations need to be prepared for when this occurs.

Governing bodies must consider the damage to reputation and social licence by accepting fossil fuel sponsorship.

## Directors of sporting organisations

Directors could be liable if they don't turn their mind to the issue of climate change or give inadequate or superficial consideration of climate change risk. Determining whether there are climate risks requires the Directors to examine:

- a. Physical risks to players, match schedules and infrastructure from weather events and climate impacts
- b. Transition risks relating to financial risks of transitioning to lower-carbon economy
- c. Litigation risks relating to actions against organisation for duty of care to players/spectators or against directors for failing to consider climate risks

A short summary of Directors duties in relation to climate change can be found at **Annexure L**.

Directors must ensure they monitor and oversee a robust corporate risk and reporting system that identifies and manages climate risks, as failing to make proper inquiries as to whether climate-change related risk factors have been integrated into the company's strategy and risk management, financial statements and directors' report could give rise to liability.

Directors must also ensure they follow material changes in climate change laws including disclosure requirements and latest science on climate impacts. Failing to critically consider the impact of fossil fuel sponsorship on the sporting organisation in circumstances where such sponsorship could present a significant reputational risk could impact the financial position and performance of the organisation.

## Sporting Clubs

Sporting clubs could be liable if they fail to ensure a "safe system of work" for employed players by having an insufficient heat policy during training and any games organised by the Club and/or failing to ensure appropriate medical assistance is available to injured players at practice or at any games organised by the Club.

Vicarious liability for the acts and omissions of referees and umpires who are employed by the Club could also render clubs liable.

## Event organisers

### Event organisers could be liable for:

- Proceeding with an outdoor event despite adverse weather conditions. For example, carrying out a marathon race during exceedingly hot or wet conditions or failing to take adaptive measures to address these concerns;
- Failing to provide adequate medical assistance to injured players;
- Failing to undertake risk assessments considering the impact of extreme weather on players or warn players about risks that are not obvious;
- Vicarious liability for the acts and omissions of referees and umpires who are employed by the event organisers.

### Venue owners, occupiers (including sporting clubs) and operators

- Liability could result from failure to undertake adequate inspections of the relevant playing surfaces which have been impacted by adverse weather.
- Venue owners must also be aware that failure to implement adaptation or mitigation measures in respect of venue design and operation (such as the failure to close a retractable roof to increase shade or landscape a site) could result in player and/or spectator injury and rising property repair and insurance costs.

### Referees/umpires:

#### Referees and umpires could risk liability if they:

- Fail to enforce the rules of the game/heat policy such as to avoid the risk of heat-related illness to players;
- Fail to undertake adequate inspections of the relevant playing surfaces which have been impacted by adverse weather;
- Proceed with an outdoor event in weather conditions, such as when play is allowed to continue in extreme heat, or when the playing surfaces of a pitch or field have become dangerous due to extreme precipitation or extreme winds, leading to player injury.



# Recommendations

## **Action 1: Start a climate working group**

- a. Organisations should start a climate working group to help drive the necessary changes throughout the business.
- b. Ensure the working group has the representatives necessary to implement change in the relevant departments. This is particularly important given climate is relevant to different departments, not a single area (i.e. it has implications for membership, community, legal, high performance etc).
- c. Consider who is responsible for implementing the work of the climate working group and how they are kept accountable and to whom.
- d. Ensure the individual/team implementing the work of the climate working group has the relevant skills and authority to enable competent and timely execution.
- e. Consider the frequency of when the climate working group needs to update the board, as ultimately the board has ownership over all material organisational risks, including climate change risk.
- f. Conduct regular (at least annual) reviews of progress against climate goals.

## **Action 2: Consider climate at the board level**

### **Steps include:**

- a. Ensuring climate change is disclosed as a material risk in annual and financial reports. Ensuring disclosure includes both qualitative narrative reporting and quantitative reporting in the financial reports.
- b. Disclosing according to the Task Force on Climate-Related Financial Disclosures (TCFD) framework and the ISSB IFRS S2 Climate Change Disclosure standard.
- c. Appointing a board member to be responsible for climate change risk.
- d. Engaging in appropriate education and upskilling of the board.
- e. Consider convening a Sustainability Committee of the board and ensure there is adequate buy-in from the board and senior management.



### **Action 3: Ensure that your heat and extreme weather policy, equipment and venue and medical assistance policies are up-to-date**

- a. Heat policies are critical in mitigating against the risk of personal injury of players arising from heat. The best heat-related policies use the internationally accepted Wet-Bulb Globe temperature (WBGT) as the basis for assessment. The best heat policies set out the required actions at each level of heat.
- b. Governing sporting bodies should also have other extreme weather policies which provide guidance as to when a venue, field or pitch is considered too dangerous to play on account of flooding or extreme precipitation/inundation, cyclone, frost, snow, high winds, lightning/electrical storm or hail. They should also have Disaster Recovery Plans in response to natural disasters. Such guidance should refer to objective markers, rather than relying solely on the discretion of the referee or umpire.
- c. Organisations should assign a staff member to be in charge of extreme weather policies. This person will be in charge of communicating the heat and other extreme weather policies to relevant stakeholders (players, coaches, medical staff, other employees, spectators etc).
- d. Review extreme weather policies at least every two years to ensure they are up to date with best practice.

### **Action 4: Review risks to physical infrastructure from extreme weather**

- a. Governing bodies and event organisers should develop policies including Adaptation Plans for infrastructure and fields including Landscaping Plans for heat impacts. They should also set out requirements for venue/field/pitch inspections by referees/event organisers in advance of play.
- b. Include sustainability and climate considerations when planning new developments or upgrading existing facilities (e.g. installing solar and batteries as well as electrifying appliances where possible, reviewing material use for extreme weather impacts and risks, use of green roofs/infrastructure etc).

### **Action 5: Review contracts for extreme weather concerns**

- a. In particular, organisations should review contracts to see whether:
  - i. There is an express right to terminate under the contract, including a right to terminate for convenience;
  - ii. A force majeure clause in the contract, and whether the definition of “force majeure event” includes the main types of climate risk faced by the organisation. In particular, consider whether the definition of “force majeure event” includes chronic climate change effects, such as heat waves, sea-level rise or coastal inundation (most will not); and
  - iii. A clause requiring the parties to mitigate their loss and what the standard of mitigation is (most contracts impose a standard to take “reasonable steps”, however some provide more stringent standards); and
- b. Consider negotiating climate-specific and risk-sharing clauses into the contract, such as those proposed by the Chancery Lane Project (a repository of precedent contract clauses drafted by top international contract lawyers that deal specifically with climate-change issues).
- c. In relation to reviewing contracts for extreme weather concerns, consider the implications for external suppliers, venue hire, host city agreements, sponsorship agreements, broadcasting agreements, merchandise and licensing agreements, and ticketing agreements.
- d. Review contracts for reputational risk, e.g. fossil fuel companies or companies contributing significantly to climate change (superannuation, banks, etc.). Additionally, seek sponsorship from those who are aligned to a clean energy transition.
- e. Review sponsors and assess for potential reputational risk that could have an impact on fan engagement and revenue.



## **Action 6: Ensure adequate insurance**

Consider whether your current insurance covers all possible damage arising from climate change, including:

- a. First-party damage, namely property damage, business interruption and revenue loss arising from cancellation or suspension of a competition/event.
- b. Third-party damage, namely workers' compensation and employment liability, public liability, directors and officers and statutory liability.
- c. Consider any potential exclusions that may apply in respect of climate change risks. This may include damage caused by chronic (as opposed to acute) risks such as sea-level rise and coastal erosion. Consider discussing with your insurer/broker how these gaps in cover may be dealt with, including whether you need to seek additional climate-specific cover.
- d. Consider whether your insurance policy allows for "building back better" such that any rectification works are climate-resilient. If not, consider discussing this with your insurer/broker.

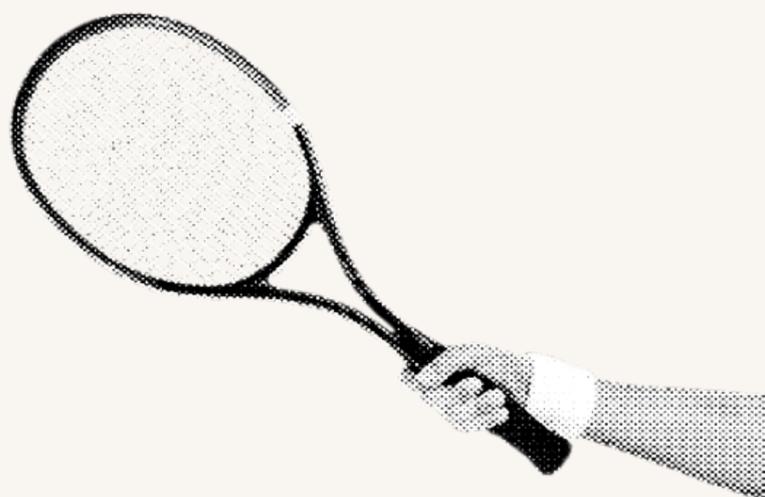
## **Action 7: Develop a climate communication strategy for key stakeholders**

Organisations should:

- a. Understand and develop a plan for communicating climate strategy to various stakeholders, including members, fans, sponsors, players, and other stakeholders.
- b. Consider how you are going to talk to stakeholders about climate.
- c. Publish a "Climate Change Statement" setting out your organisation's position on climate change.
- d. Publish the sustainability strategy and Climate Change Statement on your website.
- e. Consider having a stand-alone "climate change" section on your website.
- f. Consider approaching members/sportspeople to become "ambassadors" to communicate your sustainability strategy.
- g. Consider a fan-engagement strategy for your sustainability strategy.

## **Action 8: Sign the UNFCCC Sports for Climate Action Framework**

- a. The framework requires commitment to a number of minimum criteria, including reducing GHG emissions by 50% by 2030 and to reach net zero by 2040. Any net zero targets should ensure they are consistent with the findings of the United Nations High-Level Expert Group on Net Zero Emissions Commitments of Non-State Entities. As part of this commitment, conduct a carbon audit and develop a net zero roadmap.
- b. As part of signing the framework, begin developing a sustainability strategy that can be integrated into the broader strategic plan.
- c. Organisations should develop, implement and regularly review a sustainability plan and integrate it into the strategic plan. Organisations should:
  - i. consider governance and who is responsible for creating the strategy;
  - ii. identify priority sustainability issues, perhaps by reference to the UN SDGs;
  - iii. set sustainability and climate change objectives and metrics, perhaps by reference to the Charter of 15 Environmentally Responsible Commitments of Major Event Organisers and Managers of Large-scale Sports Facilities and Venues or the Responsible Sport Standard for Organisations; and
  - iv. consider how the identified sustainability issues fit into your current strategic plan.





## Introduction

**With many sports played in outdoor settings at the mercy of adverse weather conditions, the sporting world is particularly vulnerable to the physical effects of climate change.**

1. Impacts include:
  - a. Damage to playing surfaces due to rising temperatures, coastal erosion or rising sea levels, extended periods of drought, extreme rainfall and flooding, and/or pest species extending their natural range;
  - b. Cancellation, delays or changes to match schedules caused by unseasonal rainfall, extreme heat or other extreme weather events; and
  - c. Increased participant and fan injury caused by playing in hotter conditions and exposure to harder playing surfaces.
2. Even sports that are played inside venues or stadiums are subject to the impact of climate change as acute events such as floods or hailstorms can cause significant damage to stadium and venue infrastructure.
3. Further, as well as being subject to the physical and transitional effects of climate change, sporting organisations and events can themselves contribute
4. to the climate change problem. For example, research by the EU's Life Tackle Project<sup>34</sup> estimated that a single football match could generate 0.8 kg of waste per spectator, which corresponds to 4.2 tons of waste per match. A stadium could consume as much as 8,000,000 kWh of electricity in 1 year and use 100,000 m<sup>3</sup> of water in the same period.<sup>35</sup>
4. All in all, it is estimated that the direct and indirect cost of climate change on the global sports tourism market could amount to over US\$1800 billion by 2030.<sup>36</sup>
5. Such impacts have legal consequences. Individuals, companies or insurers who suffer personal injury, property damage or economic loss as a result of climate change are likely to seek compensation from those that they hold liable for failing to adequately mitigate against, or adapt to, the effects of climate change. In addition, as sporting organisations become more sophisticated, organisations that either completely fail to disclose and/or fail to provide adequate or meaningful disclosure of climate change risks in their annual and financial reports may face legal consequences. Further, as the tide of public opinion shifts towards a net-zero future, sporting organisations that associate themselves with fossil fuel companies may find themselves facing significant reputation risk.

6. This report will explore how legal liability can arise from the following risks associated with climate change:
  - a. Impact on player and spectator safety;
  - b. Economic impact of climate change on sport;
  - c. Impact on sporting infrastructure, including stadiums and sporting venues; and
  - d. The need to disclose climate risks.
7. As a result of the above risks, the following stakeholders involved in the world of sport may be legally liable:
  - a. Sporting organisations, including governing bodies, regional and local sporting bodies and local clubs;
  - b. Broadcasters, stadiums, equipment providers and other businesses contracted to provide goods or services in respect of sporting competitions or events;
  - c. Owners and occupiers of venues at which sporting events take place;
  - d. Referees and umpires; and
  - e. Team medical personnel.<sup>37</sup>
8. What is made exceptionally clear, is that there is no aspect of the world of sport that is not in some way impacted by climate change. As the most well-resourced and influential stakeholders in the sporting world, sporting governing bodies have an elevated duty to ensure that they identify and comprehensively manage the risks of climate change in ways that do not exacerbate the climate problem, but rather contribute to mitigation and adaptation solutions. A failure to do so will be detrimental to the sustainability of these bodies, and to the future of their sports and will also expose such bodies to the risk of legal liability.





## Section 1

# The impact of climate change

Increases in Greenhouse Gas (GHG) emissions in the atmosphere as a result of human activities during the industrial era have caused a rise in global surface temperature. The Inter-Governmental Panel on Climate Change report (IPCC AR6 report) has concluded that to date, global surface temperature has increased by a range of 0.95° to 1.20° since pre-industrial times.<sup>38</sup>

The risks arising from climate change have been characterised into 3 broad categories:

### Physical Risks

Which comprise of those risks arising from climate or weather-related events. Physical risks can further be sub-divided into chronic and acute risks:

**Chronic risks** are those that occur over a prolonged period of time and include changes in average precipitation rates, drought, ocean acidification, rising sea levels and rising average temperatures; and

**Acute risks** are those that are typically short-term but severe and include heatwaves, floods, landslides, bushfires (wildfires), cyclones and storms, torrential rains — all of which are occurring with increased frequency and intensity.

### Transitional Risks

Which comprise those risks that arise whilst the world adjusts to a low-carbon economy, such as changes in customer demand or technology.

### Liability Risks

Which comprise those risks arising as a result of changing laws and where parties, who have suffered loss or damage because of climate change, seek compensation from those they hold responsible, such as governments, carbon emitters.

## Physical Risks - Global

11. Human-caused climate change and global warming is causing significant and damaging physical impacts. Globally, these include:
  - a. more frequent and intense heatwaves over most land areas;<sup>39</sup>
  - b. increases in the intensity of heavy rainfall with implications for flood risk;<sup>40</sup>
  - c. increases in the occurrences and intensity of drought,<sup>41</sup> dust storms,<sup>42</sup> desertification<sup>43</sup> and wildfire risk;<sup>44</sup>
  - d. loss of snow and ice with impacts on water security in high mountains and downstream areas;<sup>45</sup>
  - e. warming and destabilisation of permafrost, with potential amplifying effects on climate change through greenhouse gas release;<sup>46</sup>
  - f. rapid loss of Arctic Sea ice, with amplifying effects on climate change through accelerated temperature rise in the Arctic;<sup>47</sup>
  - g. intensification of wind and rainfall associated with tropical cyclones;<sup>48</sup>
  - h. oceans becoming hotter, more acidic and losing oxygen with implications for marine ecosystems and fisheries;<sup>49</sup>
  - i. rising sea levels as a result of melting of ice sheet and glaciers and the expansions caused by warming oceans, creating risk of inundation for low-lying coasts and islands (and necessitating coastal retreat or relocation);<sup>50</sup> and
  - j. increased probability of compound extreme events, including increases in the frequency of concurrent heatwaves and droughts, fires and compounding flooding.<sup>51</sup>
12. Some of the changes in the climate system that have already been set in motion, such as sea level rise, are irreversible, such that it will continue to occur for centuries to millennia in all future climate scenarios, even if global temperature is stabilised.<sup>52</sup> There is also the risk of passing irreversible tipping points. Tipping points are points at which, if triggered, mean that any further change (even small changes) will have abrupt, significant and irreversible changes and lead to further cascading effects on the climate.<sup>53</sup> IPCC AR6 Working Group 1 report (WG1) identified 13 tipping points, including but not limited to: the loss of Arctic sea ice, coral reef die off, shutdown of Atlantic deep ocean circulation, forest dieback and ocean acidification.<sup>54</sup> There are indications that we are close to reaching some of these tipping points.
13. The impact of physical climate change risks is significant, and includes:<sup>55</sup>
  - a. biodiversity loss;
  - b. increase in heat-related human mortality;
  - c. increase in the occurrence of climate-related food-borne and water-borne diseases;
  - d. increase in damage to infrastructure caused by extreme weather events;
  - e. economic damage caused by extreme weather events, including increasing insurance payouts and loss of productivity and economic output. Climate-related disasters are estimated to have resulted in global economic losses of US\$650 billion in the three years 2016–2018 (0.8% of Gross Domestic Product [GDP]);<sup>56</sup> and
  - f. reduction in food and water security driven by losses of food production and access to food.

## Physical risks - Australia

Warming of the Australian continent is occurring faster than the global average, and across Australia the climate has now warmed on average by 1.47°C since 1910<sup>59</sup> (when records first began to be kept). As a result, both chronic and acute physical impacts are already being felt, and are estimated to worsen in their frequency, intensity and impact. These physical impacts include:

### Increasing frequency and intensity of extreme heat

Australia has seen an increase in the number of days greater than 35°C. In 2019 there were more than 33 days that exceeded 39°C, more than the total observed number (24) from 1960-2018 combined, making it the hottest year on record.<sup>57</sup> In the IPCC AR6 Working Group 2 report (IPCC AR6 WG2), the IPCC predicted that under the current emissions trajectory, the annual number of days over 35°C will increase by 20-70% by 2030.<sup>58</sup>



### Drought/declining rainfall

In southwest Australia there has been a 16% loss of April-October rainfall since 1970, and in southeast Australia there has been a 12% loss in April-October rainfall since the late 1970s.<sup>60</sup> South-eastern Australia has also experienced a decreased amount of rainfall in the cooler months of the year (April — October).<sup>61</sup> The IPCC projects that under the “high emissions” scenario, Eastern Australia will spend an average of 47% of the year in drought by 2050 and up to 56% of the year in drought by 2090.<sup>62</sup>

### Heavy rainfall events/floods

The intensity of extreme rainfall events has increased by around 10% in some regions over recent decades, resulting in increased flooding.<sup>63</sup> The IPCC projects that the annual mean rainfall in Eastern Australia may increase up to 7% by 2050 under the lowest emission scenario, and by up to 8% under the highest emission scenario.<sup>64</sup>



## Bushfires

There has been an increase in the number of extreme fire days and the length of the fire season since the 1950s,<sup>65</sup> with the IPCC stating that the frequency and severity of bushfires will continue to grow.<sup>66</sup> The IPCC concludes that the 2019-2020 Bushfires were at least 30% more likely due to climate change.<sup>67</sup> There has also been an increase in the frequency of megafires (fires where more than 10,000 km<sup>2</sup> (1 Mha) is burned).<sup>68</sup>

Whilst a typical fire season would result in 2-3% of forests burned, the 2019/2020 summer fires caused 21% of forests to be burned/destroyed.<sup>69</sup> The IPCC estimates that the annual number of severe fire days will increase up by 30% to 2050 and even under the lowest emission scenario, and will increase to a maximum of 60% by 2050 under the highest emission scenario.<sup>70</sup>



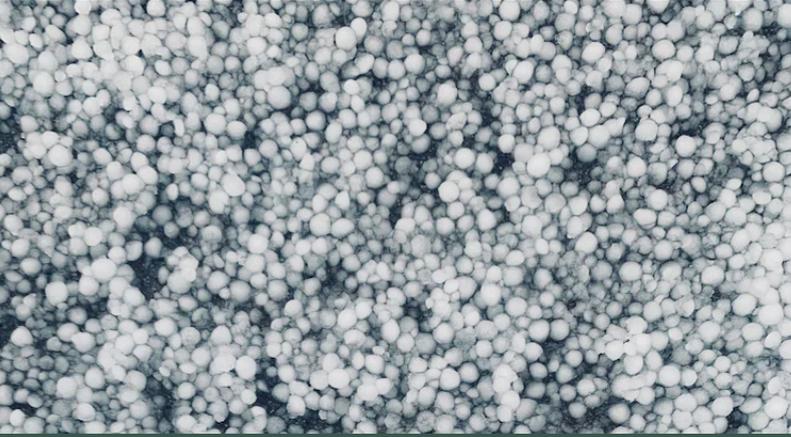
## Rising sea levels

Rising sea levels caused by climate change are increasing the risk of inundation and damage to low-lying coastal communities and infrastructure. At present, sea-levels have already risen by 3.4mm per year from 1993 to 2019, such that as at 2021 total sea-level rise for that period is 9.18 cm.<sup>71</sup> A 2009 assessment concluded that there will be a mid-range sea-level rise of 0.5 metres in the 21st century, the result being that storm events that currently occur every 10 years would occur about every 10 days in 2100.<sup>72</sup>

It is forecast that an even larger increase in the frequency of extremes is likely to occur around Sydney, with smaller increases around Adelaide and along parts of the Western Australian coast<sup>73</sup>. IPCC AR6 estimates that sea levels around Newcastle will amount to an average of 22cm by 2050 under the lowest emissions scenario, and by 25 cm under the highest emission scenario.<sup>74</sup> The IPCC also estimates that the cost of sea level rise of 1.1m will be damage to up to 274,000 residential, 8,600 commercial and 6,200 light industrial buildings, 35,000km of roads and 1,500km of rail and tramlines. The rectification cost is estimated to be between \$164 billion and \$226 billion+.<sup>75</sup>

## Marine heatwaves

Longer and more frequent marine heatwaves are damaging marine ecosystems including coral reefs, kelp forests and sea grasses causing flow-on damage to coastal fisheries and aquaculture.<sup>76</sup>

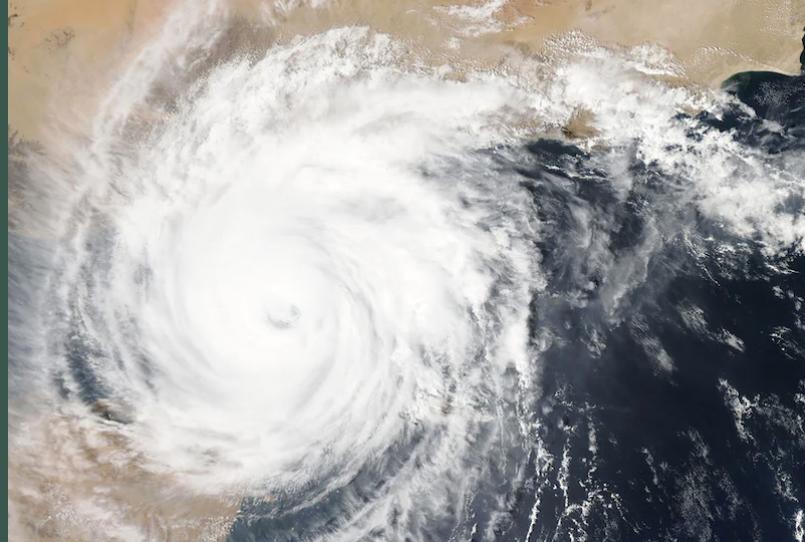


## Hailstorms

Climate change is increasing the frequency of hailstorms and the size of hailstones in Australia.<sup>77</sup>

## Cyclones

Climate change is leading to increasing intensity and geographical reach of cyclones in Australia.<sup>78</sup> Warming oceans also mean cyclones can reach further inland. As a result, economic and insured losses arising from such cyclones are doubling every 15 years.<sup>79</sup> The IPCC projects that by 2050-2070, tropical cyclone risk for properties not in flood plains or storm surge zones in south-eastern Queensland may increase by 33% under a 2° warming scenario, or by 317% under a 3° scenario.<sup>80</sup>



## Snow

Annual maximum snow depth has decreased in NSW by 10%, which has led to a decrease in the length of the snow season by 5% during 2000-2013 relative to 1954-1999.<sup>81</sup> In the Victorian ski fields, annual maximum snow depth has decreased by 15% for each decade between 1988 and 2013.<sup>82</sup> The IPCC predicts that under the highest emissions scenario, the length of the Victorian ski-season may contract by 65 to 90% between 2070 and 2090, and mean annual snowfall may decline by 60 to 85% relative to 2000-2010.<sup>83</sup>

15. **From an economic perspective,** a Climate Council report found that the cost of extreme weather disasters in Australia has more than doubled since the 1970s, reaching \$35 billion for the decade 2010-2019.<sup>84</sup> An October 2021 Deloitte Access Economics report stated that natural disasters (comprising of bushfires, floods, tropical cyclones, severe storms, hail, heatwaves, earthquakes, coastal inundation and tsunamis) are currently costing the Australian economy \$38 billion per year on average (amounting to 2% of Australia's 2020 GDP), and it is estimated that this will rise to at least \$73 billion per year by 2060, or 4% of Australia's 2020 GDP.<sup>85</sup> Another

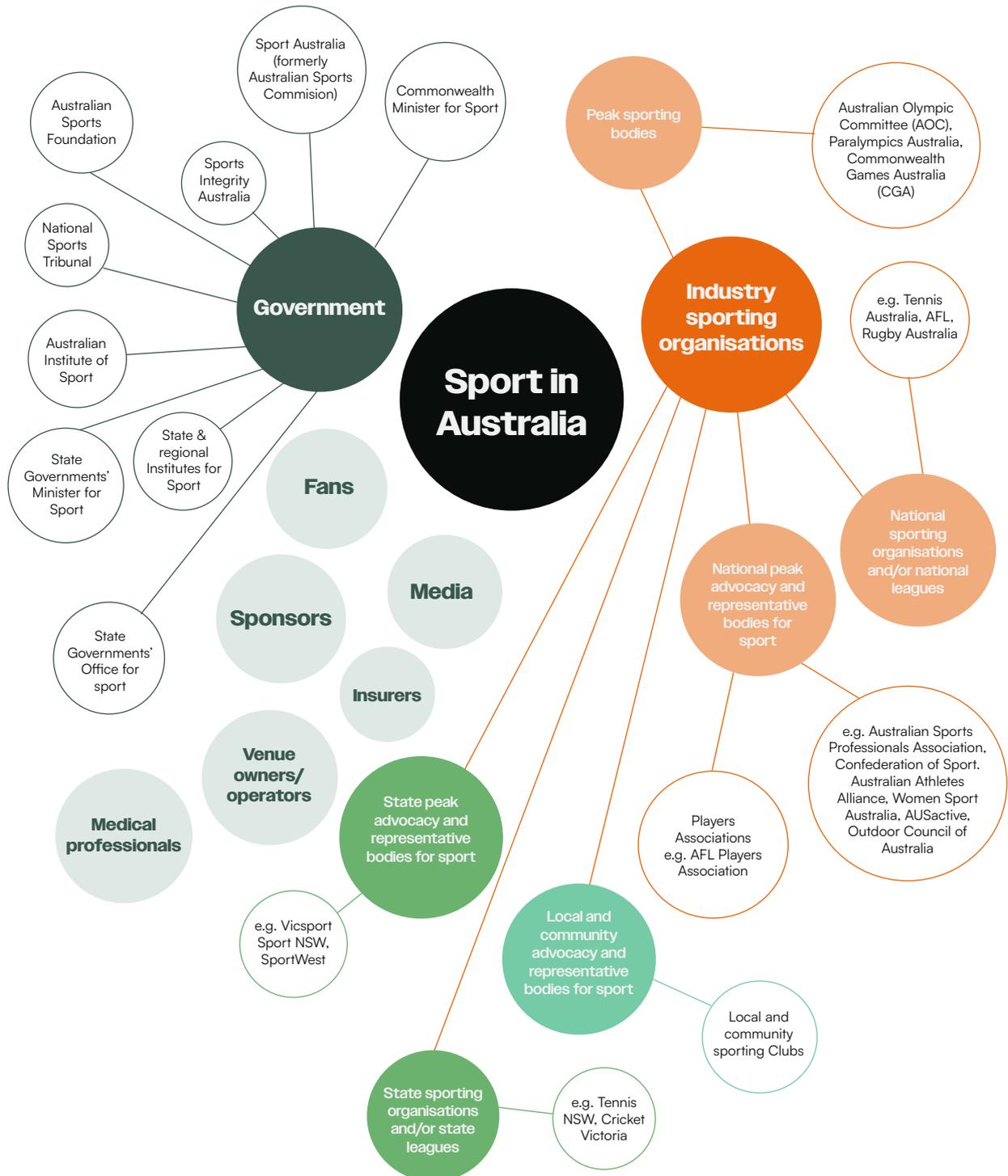
Deloitte Access Economics report stated that the economic cost to Australia of failing to act on climate change will amount to \$3.4 trillion dollars by 2070, with 880,000 in job losses.<sup>86</sup> Under the highest emission scenario, the IPCC estimates that total annual cost of damage due to floods, coastal inundation, forest fires, subsidence and wind (excluding cyclones) is estimated to increase 55% between 2020 and 2100.<sup>87</sup> Under this high emissions scenario, aggregate loss of wealth as a result of climate-induced reductions in productivity are projected to exceed \$19 billion by 2030, \$211 billion by 2050 and \$4 trillion by 2100.<sup>88</sup>



# Impact of climate change on sport

## The sporting landscape in Australia

The Australian sporting landscape is complex, and comprises of various stakeholders including government entities, industry organisations, sponsors, media, fans and community organisations. The below graphic details the complexity of the stakeholder relationship.



## Why climate change matters to sporting organisations

Figure 1 identifies the physical, transitional and liability risks that arise in respect of climate change.



Figure 1

17. Climate change is a critical business and financial risk that needs to be taken seriously by sporting organisations. This is because:

- a. **on the basis of current law**, there is a real possibility that a failure to manage and mitigate the risks arising from climate change as identified in figure 1 could **expose sporting organisations to liability**. Potential sources of liability include:
  - i. breach of duty of care to players arising from heat-related illness and injuries caused by poor playing surface conditions, such as flooded sports grounds or surfaces hardened as a result of drought or extreme heat, or artificial snow;
  - ii. breach of duty of care to spectators arising from venue operators failing to take reasonable measures to protect spectators from reasonably foreseeable risks of injury, such as the risk of heat stroke during summer sporting competitions;
  - iii. vicarious liability arising from acts or omissions committed by employees such as referees who have failed to discharge their duty to enforce the rules in such a way as to avoid injury to players;
  - iv. breach of contract caused by suspension or cancellation of matches arising from extreme weather events; and
  - v. breach of director duties by failing to consider climate change as part of risk management and strategy in circumstances where it is a material risk;
- b. As the law develops, including the inevitable introduction of mandatory climate change financial reporting, the failure of boards to disclose and respond to climate change risks could create additional liability for sporting organisations and directors; and
- c. The transition to a low carbon economy is already changing tastes and preferences, including the preferences of sporting fans and players. A failure of sporting organisations to recognise and respond to this may lead to

fan disengagement, reduced attendance at matches and/or player dissatisfaction which will harm the long-term sustainability of the sport.

## Economic Impact

### Economic benefits of sport

18. It is estimated that as of 2014, global sport has a market value of \$USD 620-700 billion, or approximately 1% of global GDP.<sup>89</sup> In relation to Australian sport, a 2020 report published by the Commonwealth Department of Health's Office for Sport estimated that the Australian Sports Industry generated approximately \$AUD32.2 billion in sales in 2016/17, resulting in a contribution to gross domestic product (GDP) of approximately \$AUD14.4 billion (equivalent to 0.8% of GDP and supporting approximately 128,000 full-time equivalent jobs (equivalent to 1.5% of total employment)).<sup>90</sup> The Boston Consulting Group (BCG) assesses it higher, at 2-3% of GDP.<sup>91</sup>
19. When taking into account the non-financial benefits of sport, including improved physical and mental health, higher productivity and improved educational outcomes and social capital, the value of sport to the Australian economy further increases, with BCG estimating its total value at \$AUD50 billion per year or 3% of GDP.<sup>92</sup>
20. Sporting events can have a significant economic impact, for example:<sup>93</sup>
  - a. The Australian Open has contributed more than \$2.7 billion to Victoria's economy in the period 2012 to 2021, and an injection of \$387.7 million in 2022 alone;<sup>94</sup>
  - b. The Tour Down Under cycling race injected \$66.4 million in economic benefits to South Australia in 2020;<sup>95</sup>
  - c. The Boxing Day Test injected \$93.5 million into the Victorian economy in 2017-2018;<sup>96</sup> and
  - d. The Margaret River Pro, which is part of the World Surf League Championship Tour, generates \$5.4 million in revenue each year, and has generated over \$20 million since 2013.<sup>97</sup>

21. Sporting infrastructure on its own has a significant economic value. A 2018 KPMG study estimated that community sport infrastructure was valued at \$16.2 billion annually,<sup>98</sup> comprised of:
- a. \$6.3 billion in economic benefits, including economic activity associated with the construction, maintenance and operation of community sport infrastructure and the increased productivity of those who are physically active as a result of the infrastructure;
  - b. \$4.9 billion in health benefits, including benefits to those that are less likely to contract a range of health conditions which are known to be associated with physical inactivity and the benefits to the health system from a healthier population; and
  - c. \$5.1 billion in social benefits, including the increased human capital resulting from the social interactions that are facilitated by community sport infrastructure and the broader community benefits of providing green space.

### Economic impact of climate change on sport

22. Climate change has a significant economic impact on sport, including:
- a. costs to repair or rebuild damaged sporting infrastructure (see paragraphs 215-222 which discuss the impact of climate change on sporting infrastructure);
  - b. rising insurance premiums as a result of the increasing uninsurability of sporting clubs and stadiums and/or the loss of insurance altogether. Nine cricket grounds in the City of Moonee Valley lost insurance during the Millennium drought of 1997 to 2009;<sup>99</sup> and
  - c. costs arising from the suspension and cancellation of matches as a result of the increase in frequency and intensity of extreme weather events.



## Section 3

# The social license to operate: fans, players and sponsor's views on, and response to, climate change

### Fan perceptions of climate change and sport

23. Sporting clubs have a powerful influence over people's attitudes and behaviours.
24. A 2020 Lifetackle and EU Life survey<sup>100</sup> of Italian and Swedish football (soccer) fans found that nearly 80% of respondents either totally agreed or agreed that what their football team stood for was important to them, nearly 60% considered that their club was an organisation they believed in and that it was an organisation that they could trust.<sup>101</sup> In terms of attitudes towards climate change, the survey found that:
  - a. 92.3% of respondents either totally agreed or agreed that it was important to fight climate change;<sup>102</sup>
  - b. 86% of respondents either totally agreed or agreed with the statement that "Football should take care of environmental protection in the same way it takes care of other issues (e.g. racism)";<sup>103</sup>
  - c. 69% of respondents either totally agreed or agreed with the statement that "If I know that football match is environmentally friendly, I will be happier to attend it";<sup>104</sup>
  - d. respondents considered that the football organisations at the international and regional level — being FIFA and UEFA — had the highest responsibility/accountability for responding to environmental issues, and nearly 82% considered that football event managers should promote environmental messages on their media channels;<sup>105</sup>
  - e. 77% of respondents either totally agreed or agreed that football players should release positive messages to influence football fans towards environmentally friendly behaviours;<sup>106</sup>
  - f. nearly 80% of respondents considered that football clubs and stadium owners should adopt specific organisational structures and rules and obtain an external environmental certification;<sup>107</sup>
  - g. only 37.2% of respondents thought that their team adequately protected the environment, with 45.8% being indifferent, and 11.1% considering that the team failed to do enough;<sup>108</sup> and
  - h. just over 80% of respondents considered that if their football club implemented sustainable initiatives, it would make it easier for fans to take environmentally friendly actions.<sup>109</sup>
25. **In Australia**, a survey from data analytics firm, YouGov Sport<sup>110</sup> found that 38% of Australian sports fans or 5.7 million Australians are more likely to support and purchase from a brand if it is involved

with a sport on tackling social issues. When asked which social issue is the most important in Australia right now, climate change was ranked as number 1 (with 19% of respondents) — a solid 9 percentage points higher than the second-most raised issue, being mental health. More specifically:

- a. 69% of fans believe that brands should consider environmental sustainability when putting on events;
  - b. 53% care about what their carbon footprint is;
  - c. 46% of fans try to only buy from companies who are social and environmentally responsible; and
  - d. according to Australian sports fans, sports teams and sports leagues are the most important vessels for supporting social causes, ranking ahead of actors, individual athletes, musicians, comedians and influencers.<sup>111</sup>
26. Notwithstanding the fact that climate change and sustainability are clearly areas that Australian sporting fans are concerned about, just 34% of fans agree that 'Australian sports codes and teams do enough to address and support key social issues'. A further 41% of fans remain neutral and only 25% think that Australian sports do enough on key social issues.
27. Looking specifically at Australian Rules Football, which YouGov Sport has found to be Australia's most popular sport,<sup>112</sup> in 2021 the Monash Climate Change Communications Research Hub (MCCCRH) on behalf of FrontRunners undertook a survey of 567 Australians on their views on the peak body, the Australian Football League (AFL)'s action on climate change.<sup>113</sup> The results were that:
- a. 70% of respondents agree that climate change is occurring;
  - b. 76% of respondents were worried about climate change;
  - c. 83% of respondents believed that sport in Australia had already felt the impacts of climate change;
  - d. 45% of respondents considered that climate change would have an impact on how AFL was played at the professional level;
  - e. 47% of respondents considered that climate change would have an impact on how AFL was played at the grassroots level;
  - f. 61% of respondents considered that the AFL has a responsibility to help AFL clubs reduce their carbon footprint;
  - g. 65% of respondents considered that AFL clubs have a responsibility to reduce their own carbon footprint;
  - h. 59% of respondents considered that the AFL has a responsibility to help local football clubs switch to clean energy;
  - i. 41% of respondents were willing to support their AFL club taking climate action with a slight increase in membership fees, with 18% being unwilling and 22% being unsure;
  - j. 54% of respondents would be excited for their AFL clubs to go carbon neutral;
  - k. 59% of respondents were in favour of AFL clubs communicating their climate action with their fan base;
  - l. 61% of respondents were in favour of an AFL player talking about how climate change has impacted them and their sport;
  - m. 58% were in favour of an AFL player talking about how climate action can safeguard the game for future generations; and
  - n. the most trusted source of information in respect of climate change in the AFL community are AFL players. The least trusted are environmental groups.
28. Some of the comments made by respondents were instructive as to how Australian AFL fans see the issue of climate change in sport. The comments could be broadly grouped into the following themes:
- a. a concern about climate change being a political issue, and that sports has traditionally been a politically neutral space;
  - b. a lack of understanding about how climate change impacts the relevant sport;
  - c. a lack of understanding of what sports organisations/those involved in sports can do in response to climate change; and

- d. a concern about AFL players who support climate change as “reading from a script” and spouting a political doctrine that does not reflect their authentic or legitimate views.
29. The above is relevant when considering what strategies stakeholders can take in responding to climate change, which we detail in section 6.

### **Player perceptions of climate change and sport**

30. In 2021, World Athletics published the findings of a survey of its global members as to their views on the impact of climate change on the sport of athletics. The results were that:<sup>114</sup>
- a. nearly 80% of respondents were seriously concerned about climate change;
  - b. over 50% of respondents considered that climate change had already personally impacted them;
  - c. 82% of respondents claimed they had already made changes to their lifestyle to reduce the damage they and their activities had on the environment;
  - d. 76% of respondents stated that they were extremely willing or very willing to change their lifestyle to reduce their damage to the environment;
  - e. 78% of respondents claimed they would actively encourage others to adopt lifestyle changes that are more environmentally friendly; and
  - f. Over 50% of respondents stated that they had participated in environmental advocacy activities, such as tree-planting, local clean-up campaigns or protests.
31. Annexure E sets out key sporting organisations, alliances and networks promoting climate action in sport. In the face of poor organisational response (discussed further at paragraph 60-74 and set out in detail in Annexure H), many of the Australian organisations are player-founded and player-driven.

### **Sporting event organisers and venue managers’ perception of climate change and sport**

32. A 2018 study looked at how 12 Major Australian sport stadiums were impacted by climate change.<sup>115</sup> The study found that stadium organisations perceived climate change as being a risk to their core product of sport event management. Notably:
- a. climate change was considered a cost risk, rather than an opportunity;
  - b. media reportage, particularly in TV and newspapers, was found to be the primary influence on how the organisations understood climate change –(including viewing it as a cost risk rather than an opportunity);
  - c. the majority of stadium managers sought to manage the risk of climate change through existing non-climate change-specific strategic plans, although the study found that 3 stadiums were in the process of undertaking/had undertaken a climate change risk assessment and/or had developed a climate change plan; and
  - d. the lack of financial resources (11 of the 12 organisations were SMEs)<sup>116</sup> and lack of climate-specific expertise at the management level were cited as the two main barriers to drafting and implementing climate-specific policies and plans.<sup>117</sup>

### **Fossil Fuel Sponsorship and Sports**

33. Companies have long used sports as a tool for engaging new audiences, namely sports fan and supporters. This is done for marketing purposes to promote awareness of their products and increase profits, but it is also used to build and strengthen their social licence to operate. This is supported by the research — a 2022 YouGov Sport study found that approximately 45% of Australian fans agreed that sponsorship is a way for a -company to maintain social relevance.<sup>118</sup>

34. Whilst early 20<sup>th</sup> century sponsorship was - commonly provided by local pubs hoping to attract patrons, the art of “sportswashing” was perfected by the tobacco industry. In 1990 more than 20 different televised sports were sponsored by cigarette brands in the United States, with one company, RJ Reynolds, sponsoring 2,736 sporting events in a single year.<sup>119</sup> With rising concerns about the impact of smoking advertising on health, the early 1990s in Australia saw the introduction of laws banning tobacco advertising, such as the Tobacco Advertising Prohibition Act 1992 which required changes to sponsors and advertising in many sports.
35. By 2019, the sports sponsorship industry had grown to a whopping \$46.1 billion.<sup>120</sup> And research suggests that sponsorship works. A 2022 YouGov Sport study found that 43% of global sports fans take notice of who sponsors the sporting events they watch and that 38% are more likely to buy products from sponsors of sports events they watch.<sup>121</sup>
36. Fossil fuel companies and high carbon emitters have seized the opportunity to associate their company with sport’s positive connotations. A 2021 study of global sports found that high carbon emitters sponsored more than 250 sporting associations/events.<sup>122</sup> In Australia, an October 2022 study by the Swinburne University of Technology Sport Innovation Research Group found that 69 sponsors across 14 of Australia’s top sports are directly linked to mining, electricity, gas, water and waste.<sup>123</sup> The study found that the four football codes of Australian rules, rugby league, rugby union and soccer are responsible for nearly 60% of the fossil fuel sponsorship deals.<sup>124</sup> By sponsoring sport, fossil fuel companies and high emitters seek to justify their social license to operate at a time when, in light of increasing acceptance of the science of climate change, this license is increasingly under threat.
37. Fossil fuel and high emitter sponsorship is prevalent across all sports within Australia - Annexure F lists the fossil fuel sponsors of major Australian sporting associations and events.

## Annexure F — List of fossil fuel sponsors of major Australian sporting organisations, teams and events

Sporting organisation/event	Fossil fuel sponsor
<b>TENNIS</b>	
Australian Open*	Santos <sup>125</sup>
<b>CRICKET</b>	
Cricket Australia	Alinta Energy <sup>126</sup>
Brisbane Heat	Alinta Energy
All Men’s National Cricket Teams (One Day, T20, Test)	Alinta Energy
Adelaide Strikers	Australian Gas Networks
<b>CYCLING</b>	
Tour Down Under	Santos
<b>RUGBY UNION</b>	
Wallabies	Santos
Wallerroos	Santos
Queensland Reds	Santos
NSW Waratahs	Santos
Western Force	Santos
Australian Women’s Sevens	Santos
Festival of Rugby, Narrabri	Santos
Brumbies	Synergy
<b>RUGBY LEAGUE</b>	
National Rugby League	Ampol Energy
North Queensland Cowboys	Bravus mining & resources (Adani)
Newcastle Knights	NSW Minerals Council
Queensland	Shell
<b>OLYMPICS</b>	
Australian Olympic Committee	Hancock Prospect-ing

SURFLIFESAVING	
Surf Lifesaving Australia	Ampol Energy
Surf Lifesaving WA	Woodside
NETBALL	
Netball Australia	Origin Energy
Majority of Super Netball teams, and overall Super Netball competition	Origin Energy
SWIMMING	
Swimming Australia	Hancock Prospecting
Swimming WA	Hancock Prospecting
Artistic Swimming Australia	Hancock Prospecting
VOLLEYBALL	
Volleyball Australia	Hancock Prospecting
ROWING	
Rowing Australia	Hancock Prospecting
ATHLETICS	
Athletics NT	Santos
GOLF AUSTRALIA	
Golf Australia	Hostplus <sup>127</sup>
AFL	
West Coast Eagles	BHP
Adelaide Football Club	BHP
West Coast Eagles	AGL
Hawthorn Football Club	BP
Carlton Football Club	Endeavour Petroleum
Port Adelaide Football Club	GFG
Port Adelaide Football Club	Santos
Geelong Cats	Viva Energy
Fremantle Football Club	Woodside
Port Adelaide Football Club	AGL
Port Adelaide Football Club	Australian Gas Networks
Geelong Cats	Momentum Energy

Richmond Football Club	United Petroleum
Freemantle Dockers	Woodside
AFL — Women’s Competition	BHP
AFL	Shell
BASKETBALL	
University of Canberra Capitals	ActewAGL
Bendigo Spirit	Elgas
SOCCER	
Perth Glory	BHP
Melbourne Victory Soccer Club	AGL
Melbourne City Football Club	Origin Energy

\*Partnership was ended in January 2022

38. The recent controversy surrounding Netball Australia’s decision to accept sponsorship from Hancock Prospecting, together with concerns around Alinta Energy’s sponsorship of cricket demonstrated the reputational risks associated with accepting fossil fuel sponsorship, particularly without player support.
39. The main legal risk around sports sponsorship is the regulatory risk of emerging future regulation. Invigorated by grass-roots campaigns to ban fossil fuel advertising (such as the ‘Fossil Ad Ban’ campaign run by Comms Declare<sup>128</sup>), NSW parliament has seen the introduction of the Public Health and Safety (Fossil Fuel Advertising) Bill 2022 which seeks to introduce a tobacco-style ban for fossil fuel companies. Since beginning in July 2022, the Fossil Ad Ban Campaign has seen significant support, with ten councils<sup>129</sup> across Australia agreeing to explore how they can restrict advertising and sponsorships for fossil fuel products on council-managed land and at council events. Given many community sporting clubs train and play on council-owned land and premises and many community sporting competitions and events are also held here, it will be interesting to see how the banning of fossil fuel sponsorship will affect how clubs and leagues can advertise any fossil fuel sponsors. For instance, whether a club that has a fossil fuel sponsor name or logo on their team jerseys will be allowed to play on a council’s premises in circumstances where the club is in breach of the council’s Fossil Fuel Ban position.



## Section 4

# Sporting organisations' response to climate change

### Responses available to sporting organisations

40. Organisations can respond to climate change in two main ways: **mitigation** and **adaptation**.
  41. **Mitigation** refers to an organisation's "attempt to form strategies to directly or indirectly reduce GHG emissions".<sup>130</sup> **Adaptation** refers to "strategies that enable organisations to move profitably into a future where extreme weather conditions are the norm."<sup>131</sup>
  42. Organisations will also need to **disclose** how climate change is impacting their organisation and how they are managing this risk (via mitigation and adaptation) in order to comply with disclosure laws.
- ### Mitigation
43. Mitigation actions could include:
    - a. developing a plan to reduce the carbon footprint of the organisation and specific events;
    - b. committing to emissions reduction short-term and long-term targets, including a net zero target consistent with the recommendation of the UN High Level Expert Group on Net Zero Commitments of non-state entities<sup>132</sup>;
    - c. using renewable energy for electricity use for stadiums, playing and practice grounds and other organisational infrastructure;
    - d. developing a plan to make energy use more efficient;
    - e. initiatives to reduce fan emissions such as initiatives to encourage walking, catching of public transport or biking to events, offering ticket holders free train and public transport services to/from events (which occurred in 2018 FIFA World Cup);<sup>133</sup>
    - f. undertaking environmental or climate change education within the community;
    - g. providing athletes, volunteers and spectators with locally grown and sustainably sourced food and beverage options;
    - h. tracking use of water at events and by the organisation more broadly;
    - i. developing a plan to reduce water use and/or make water use more efficient;
    - j. developing a waste diversion plan;
    - k. tracking the diversion of waste away from landfill for events and developing recycling plans;
    - l. creating an organic waste compost for the organisation and/or stadiums;
    - m. developing a sustainable procurement policy, including having regard to the environmental and social impact of raw and secondary materials and their use;
    - n. green certification of stadiums to ensure sustainable design and construction practices;

- o. prior to constructing new stadiums or infrastructure facilities, performing an environmental risk assessment to map the location of key biodiversity and natural sites requiring high sensitivity in terms of conservation and environmental protection;
- p. reviewing sponsorships, identifying existing sponsorship by fossil fuel producers and high emitters and committing to not extending those sponsorships, and implementing a ban on new fossil fuel sponsorship; and
- q. undertaking advocacy on climate change.

## Adaptation

### 44. Adaptation responses include:

- a. drafting disaster recovery plans in response to likely natural disasters (including fire and floods);
- b. making changes to the location, time and amount of training in response to changing climate conditions, including reducing the number of training sessions held on turf surfaces and altering the content of training activities (for example, by replacing sessions that would have been on turf with sessions held at indoor stadiums, gyms or swimming pools);
- c. if no guidance is available from state and/or national industry bodies — drafting and implementing heat and extreme weather policies;
- d. if the organisation has the relevant power - making changes to playing rules, including imposing limits on the number of players on team lists and implementing heat policies;
- e. in relation to **new sporting developments**:
  - i. incorporating green building design and construction practices, including those provided under the Leadership in Energy and Environmental Design (LEED), the Building Research Establishment Environmental Assessment Methodology (BREEAM) and the International Future Institute's Living Building Challenge.
- f. in relation to **existing sporting infrastructure**:
  - i. seeking to reduce emission from operations through making efficiency modifications and/or other modifications in line with green building design and construction practices;
  - ii. implementing flood-protection modifications, including:<sup>134</sup>
    1. installing shelving and/or cupboards at high levels to keep high value and vulnerable properties away from the flood waters;
    2. fixing any audio-visual equipment such as TV and sound systems to the wall and above the potential flood level;
    3. installing surfaces on the floor and walls that are flood-resilient;
    4. moving electrical sockets, fuse boxes, and other electrical controls to at least 1.5 m, being well above the flood-level;
    5. purchasing purpose-built flood boards that can be installed on the floor when flooding is imminent.
  - iii. implementing adaptation measures for grass fields, including:<sup>135</sup>
    1. planting drought-tolerant grasses (with a preference for native species) that require less water and are able to cope with extreme rainfall without being destroyed;
    2. Issuing and implementing best practice guidelines for field irrigation to avoid irrigation during the hottest times of the day;
    3. advancing the number of aeration practices to ensure the water seeps into the soil to avoid the hardening and compaction of soil in fields;
    4. implementing water saving measures by using for example, low-volume nozzles on hoses;

- 5. ensuring that grass fields include provision for adequate shade.
- iv. ensuring protection of native flora and fauna.
- g. implementing adaptation measures for ski-resorts such as:
  - i. artificial snow-making (although there are some environmental and sustainability concerns - see below paragraphs 54 to 59), which involves pumping stored water into air under pressure at Wet Bulb Temperatures below  $-2.5^{\circ}$ ;<sup>136</sup> and
  - ii. snow farming, in which ski resorts cover large areas of snow with insulating material (such as sawdust or tarpaulin) during the summer months in order to preserve the snow for the next winter.

### Potentially problematic adaptation responses

- 45. It is important that any adaptation responses do not add to the climate change problem. Two adaptation practices have recently been the subject of such criticism — synthetic grass and snowmaking.

#### Synthetic grass

- 46. Synthetic grass was initially offered up as a solution to problems posed to natural grass by climate change (namely rising temperatures, prolonged periods of drought and capacity to withstand extreme precipitation). Synthetic grass has the benefit of not requiring the same vast amounts of water for irrigation as natural turf, and of being durable and consistent in a broad range of weather scenarios, including during periods of extreme precipitation or drought. Further, no pesticides or herbicides are required to be used for pest and disease management.
- 47. However, there are significant environmental, health and liability risks associated with synthetic grass.

- 48. First, unlike natural turf which is a heat reflector, synthetic turf absorbs light and heat. Research suggests that synthetic turf fields are between 1.3 to 1.81 times hotter than a natural turf equivalent.<sup>137</sup> A study undertaken into unshaded synthetic turf at a school found that the turf reached higher temperatures than bare soil or asphalt.<sup>138</sup> This creates significant health risks for players, including children, as well as liability risks (through the doctrine of occupier liability) for venue owners and operators. Some research suggests that first or second generations of synthetic turf led to greater injuries relative to natural turf, although studies in respect of third generation synthetic turf suggests that there is no difference in injury rates.<sup>139</sup>
- 49. Second, during periods of rainfall, black crumb used for the base of synthetic fields and microplastics from the astroturf has been shown to make its way as runoff into stormwater drains and eventually into the oceans and in Northern Australia, the Great Barrier Reef.<sup>140</sup> Research by the Australian Microplastic Assessment Project (AUSMAP) and the Northern Beaches Council found that 80% of the waste entering stormwater drains in areas with synthetic fields was black crumb and microplastics, compared with just 5% of microplastic waste in areas without synthetic playing fields.<sup>141</sup>
- 50. Third, even though supporters argue that artificial turf is more eco-friendly because it is often made using recycled material (such as rubber granules made from recycled tyres), artificial turf itself does not decompose, meaning that at the end of its 8–10-year product life span, it will make its way into landfill.<sup>142</sup>
- 51. Finally, whilst natural turf can act as a carbon sink, synthetic grass produces a higher amount of carbon emissions through its production, transportation, disposal and maintenance.<sup>143</sup> A 2007 Canadian study which compared emissions from synthetic grass relative to natural grass concluded that for a 9,000 square metre facility over a 10-year period, a synthetic grass field emitted 55.6 tons of Co2.<sup>144</sup> To offset this, the study found that 1,861 trees would need to be planted.<sup>145</sup>

52. Following a number of high-profile cases in the media about unsafe heat generated by synthetic turf (one February 2022 Channel 9 news report stated that the surface of a sporting field in Sydney's south-west measured up to 88°C despite the weather at the time only being 28°C<sup>146</sup>) and a number of complaints from community groups against proposed synthetic turf installations, in November 2021 the Minister for Planning and Public Spaces requested that the NSW Chief Scientist & Engineer conduct an independent expert review into the use of synthetic turf in public open spaces in NSW. The Chief Scientists interim report was released in February 2022.<sup>147</sup> The NSW Government is also currently preparing guidelines on the use of synthetic playing surfaces. It should be noted that most sporting codes have their own synthetic playing surfaces guides. For example, in March 2018 the AFL and Cricket Australia released a joint Handbook for Testing of Synthetic Turf.<sup>148</sup>
54. Artificial snowmaking also creates an abundance of environmental issues and is itself a carbon emitting activity. For a start and perhaps unsurprisingly, artificial snow-making requires significant water input. The 2022 Beijing Winter Olympics' pre-game Sustainability Report estimated that the games would need around 49 million gallons of water to create approximately 1.2 million cubic meters of artificial snow generated by 130 fan-driven snow generators, 8 water cooling towers, 300 snowmaking guns and 3 water pumping stations. The city of Zhangjikou alone was estimated to use 730,000m<sup>2</sup> of water for snowmaking, equivalent to almost 300 Olympic-sized swimming pools.<sup>153</sup> Further, the lower the altitude at which a ski resort sits, the more snow guns, power and water is required to produce artificial snow. This is because snowmaking requires a Wet Bulb Temperature reading of below -2.5°C, and ski resorts at lower altitudes have fewer nights that reach that temperature. That means that resorts need to operate more snow guns simultaneously in order to produce the required amount of artificial snow.<sup>154</sup>

### Artificial snow

53. Given the impact of rising temperatures on snow depth and coverage and the length of the snow season (discussed in paragraphs 119 to 123), snowmaking uptake by ski resorts and winter sports competitions has significantly increased. In fact, the last two Winter Olympics in Sochi and Beijing, relied on 80% and 98% artificial snow, respectively.<sup>149</sup> US researchers estimated that due to a warming climate, between 2007 and 2020 an additional 11–27% of snowmaking capability was needed to offset the loss of natural snow.<sup>150</sup> Research undertaken in 2008 on Australian ski resorts estimated that to compensate for reduced snowfall through snowmaking, Australia's six main resorts would need to make artificial snow from over 700 additional snow guns by 2020, requiring approximately \$USD 100 million in capital investments and 2,500– 3,300 ML of water per month (by comparison, Canberra's monthly estimated use of water in 2008 was 2,800 ML per month).<sup>151</sup> Artificial snow, which is icier and harder than natural snow, has also been linked to increasing the number and seriousness of skier and snowboarder injuries.<sup>152</sup>
55. Second, the snowmaking process is extremely energy-intensive. Research suggests that at some ski resorts, the cost of powering artificial snowmaking represents more than 50% of the total annual energy use (67% in the USA).<sup>155</sup> Increased energy use itself creates carbon emissions which contribute to climate change, although continued innovation is increasing energy efficiency, and many ski resorts are now shifting to electricity powered by renewable energy.
56. Third, during the snowmaking process, some snow-makers add chemicals into the artificial-snow in order to aid the quality of the snow. At the 2010 Vancouver winter Olympics, organisers added pesticides to allow the water to freeze at hardened temperatures.<sup>156</sup>
57. Fourth and finally, the use of artificial snow can damage the fragile alpine flora through ice damage, which can have a flow-on effect on the biodiversity and sustainability of the entire ecosystem.<sup>157</sup>
58. In addition to the health and environmental costs

of snowmaking, there are concerns about the financial viability of snowmaking. Given the water and energy use and associated costs, particularly to resorts operating at lower temperatures, Griffith University researchers Pickering and Buckley concluded in their 2010 study that “whilst ski resorts are likely to promote increased snowmaking as a short-term solution to climate change, this is in fact financially realistic only for the higher-altitude resorts.”

### Use of standards — mitigation and adaptation

59. Many of the above mitigation and adaptation actions are set out (with appropriate metrics to assess against) in sustainable sports standards including:
- a. The Responsible Sport Standard for Organisations, developed by the Council for Responsible Sport;<sup>158</sup>
  - b. the International Organisation for Standardisation (ISO) standard IOS 20121:2012 for Sustainable Events;<sup>159</sup>
  - c. The Charter of 15 Environmentally Responsible Commitments of Major Event Organisers and Managers of Large-scale Sports Facilities and Venues,<sup>160</sup> developed by the World Wildlife Fund (WWF) in conjunction with the French Ministry for Sport; and
  - d. The Responsible Sport Standard for Events,<sup>161</sup> developed by the Council for Responsible Sport.

### Disclosure

60. With climate change being a material risk to the current and future operations, financial performance and position of their organisations and of sport in general, medium and large sporting organisations are required by current law to disclose this risk, and their strategy for mitigating it, in their annual and financial reports. This should include examining physical risks, transition risks and litigation risks. A short summary of Directors duties in relation to climate change can be found at **Annexure L**.

61. As set out in paragraph 186, climate change can be quantitatively disclosed in the financial report by:
- a. disclosure of key metrics including:
    - i. scope 1, 2 and 3 emissions;
    - ii. energy use of the organisation and at specific events, including the fuel mix of electricity provided and its source (e.g. black coal, brown coal, gas, wind, solar<sup>162</sup>, etc) and (if possible to quantify), energy saved due to conservation and efficiency initiatives;
    - iii. water use, including the total volume of bottled water distributed, total volume transported to the event site, total volume of water withdrawn by event specific metrics, e.g., per attendee per day, and (if possible to quantify) volume of water saved due to initiatives, including conservation and efficiency improvements. Organisations should also clarify key assumptions and methodologies of the initiatives;
    - iv. modes of transport taken by attendees as a percentage of total transportation;
    - v. Any increases in the uptake of more sustainable transport options (compared to a baseline); and
    - vi. total weight of waste by type and disposal method;
  - b. provisioning for increased costs associated with dealing with the consequences of chronic physical climate change risks, such as remedial and rectification works in the event of stadium or other sporting infrastructure damage following an extreme weather event;
  - c. provisioning for increased costs associated with adaptation works necessary to deal with mitigating against future acute and/or chronic climate change risks;
  - d. provisioning for increased costs associated with implementing a climate change strategy; and
  - e. provisioning for increased costs associated with increased insurance premiums.

62. As set out in paragraph 188, climate change can also be qualitatively disclosed in the financial and other report by setting out:
- a. the ways in which climate change has already impacted the organisation, including its operations, revenue and risk management;
  - b. how the organisation anticipates climate change will impact its organisation in the future, including impact on future sports participation, audience attendance, broadcast take-up, sponsorship, revenue forecasts and ultimately - financial position and performance. The Task Force for Climate-related Financial Disclosures (TCFD) and other guidance recommends the use of scenario analysis. This includes worst case physical risk scenarios (warming of 3 to 4°) and most-rapid transitional risk scenarios (orderly transition consistent with 1.5° or disorderly transition consistent with 1.5°), as well as various other possible scenarios (such as a scenario based on current physical risk and transition risk trajectories);
  - c. the ways in which the organisation currently responds to climate change risk, including mitigation and adaptation solutions (see paragraphs 4 to 5 above);
  - d. the ways in which the organisation plans to respond to climate change risk in the future. This can be undertaken in the context of updating existing strategic and/or risk management frameworks to include climate change or by developing a separate Climate Change or Sustainability Strategy. Use of the ISSB IFRS S1 General Requirements for Disclosure of Sustainability and IFRS S2 — Climate-related disclosures Standards is encouraged.<sup>163</sup>
63. Disclosure frameworks and standards that can be adopted when disclosing climate change risk include:
- a. The Task Force for Climate-related Financial Disclosures (TCFD) framework;<sup>164</sup>
  - b. The International Sustainability Standards Board (ISSB) IFRS S2 Climate-related disclosures standard;<sup>165</sup>
  - c. Australian Accounting Standards Board (AASB), Sustainability Reporting Exposure Draft (ED SRI)- Australian Sustainability Reporting Standards- Disclosure of Climate-related Financial Information;<sup>166</sup>
  - d. The Sustainability Accounting Standards Board (SASB) Leisure Facilities Sustainability Accounting Standard;<sup>167</sup> and
  - e. The Global Reporting Initiative (GRI) Event Organiser’s Sector Disclosures document.<sup>168</sup>
- Sporting government entities’ response to climate change**
64. Our review of the top government entities responsible for sport in Australia reveals that the top national government entity for sports in Australia, the Australian Sports Commission (ASC) falls significantly below the standard for climate action relative to other national government sporting entities including those located in Europe and the US.
65. The ASC’s response to climate change is lacking in the following ways, being that the ASC has:
- a. **No substantive section of the website dealing with climate change and sustainability.** Climate change and environmental sustainability is not referred to as a “Sport Australia Topic” or a “AIS Topic” on the website. A search of the website provides no documents relevant to climate change or sustainability. This is in contrast to Sport England, which has a section devoted to Sustainability in the “facilities and planning” section of its website.<sup>169</sup>
  - b. **No committee or specialist body advising on sustainable sport.** The German Federal Ministry for the Environment, Nature Conservation Building and Nuclear Safety has had an Advisory Board for Environment and Sport advising the government on the impact of sport on the environment since 1994. Its responsibilities include publishing guidance to sporting organisations and stakeholders on sport and environmental issues, including climate change.

- c. **No reference to climate change or environmental sustainability in the ASC’s 2022 – 2026 Corporate Plan,**<sup>170</sup> which is in contrast to other national peak bodies, such as UK Sport, which refers to climate change in its 2021-31 Strategic Plan, with a goal to “power positive change for people and the environment” as part of its “Ambition 3” which states that “we will harness the platform of sport to drive positive change across well-being, diversity, inclusion and sustainability; walking the walk and using our voice to inspire others to act.”<sup>171</sup>
- d. **No reference to climate change or environmental sustainability in its 2021-2022 annual report.**<sup>172</sup> This is in contrast to the 2021 Annual report of UK Sport which specifically dealt with climate change and sustainability reporting.<sup>173</sup>
- e. **No information as to how sports organisations, sporting facilities operators and/or sporting event organisers should mitigate against or adapt to climate change.** This is in contrast to other national sporting bodies which provide detailed advice and guidance on these issues:
  - i. **Sport England** provides an Environmental Sustainability checklist,<sup>174</sup> information on designing environmentally sustainable infrastructure,<sup>175</sup> and information on dealing with droughts<sup>176</sup> and what to do to minimise the impact of future flooding on sports facilities<sup>177</sup> including developing a Club Flood Plan, making sporting facilities resilient to flooding through flood resilient design, and recovering from a flood safely and quickly.
  - ii. **The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety** has had an Advisory Board for Environment and Sport advising it since 1994. In 2007 the Ministry and the Öko-Institut Darmstadt, the German Olympic Sports Confederation (DOSB) published a paper entitled “Green Champions for

Sports and the Environment. Guidelines for environmentally friendly large sports events. In 2015 this paper was used as the blueprint to launch an internet portal called “Green Champions 2.0 for Sustainable Sports Events”<sup>178</sup> with the purpose of providing a centralised database of information to sport event organisers and sporting organisations interested in hosting environmentally sustainable events. The website offers advice and practical guides, including downloadable PDF checklists, as well as the provision of best practice case studies. In December 2021, the Advisory Board for Environment and Sport, released a position paper entitled ‘Sustainable Sport 2030 – Responsibility for Nature, the Environment and Society’<sup>179</sup> which is intended to operate as a guide for policy-makers, sports associations, sportspersons and all other stakeholders in the fields of environment and sport. The sporting industry’s response to climate change is a key component of the strategy.

- iii. **The Swedish Sports Confederation** has published a guide<sup>180</sup> providing examples of sustainability initiatives, with the stated goal of sharing knowledge and inspiring sporting organisations to develop their own sustainability strategies and initiatives.
- iv. **The French Ministry of Sports**, in conjunction with the World Wildlife Fund (WWF) France, drafted the Charter of 15 eco-responsible commitments for Event Organisers in 2017, with the aim of creating a binding set of principles for event organisers to follow to enhance the sustainability of events. Currently around 80 organisers of sporting events have signed the charter, including the Paris 2024 Olympic organising Committee.<sup>181</sup>
- f. **No leadership on climate-change or sustainability campaigns or initiatives.** This is in contrast to peak bodies overseas, such as Germany and France, who as set out above,

have launched sustainability and climate-change focused initiatives. In 2022, Sport England, Sport Scotland, Sport Wales and UK Sport (together with other non-government sporting entities), came together to form the Sport Environment and Climate Coalition (SECC) to “lead and coordinate the [sport and recreation] sector’s efforts on climate change and environmental sustainability.”<sup>182</sup>

- g. No consideration of climate change when planning for the future of sport.** The latest government planning document, entitled “Sport 2030” makes no reference to climate change. Strangely, a 2013 report entitled ‘The Future of Australian Sport’ co-authored by the Australian Sports Commission and the CSIRO, did not list climate change as a “mega trend” impacting the future of Australian sport, stating that “prominent factors such as technology, climate change and globalisation are relevant to the future of sport in Australia. However, these have not been included as separate megatrends. They are considered cross-cutting factors that will impact all the megatrends.”<sup>183</sup> This is in contrast to NZ Sport’s 2019 project which identified climate change as a key trend in the future of play, active recreation and sport in NZ.<sup>184</sup> The resulting document setting out NZ’s Plan for Sport to 2040 identified, as one of the five Preferred Future characteristics” of sport, the goal of ‘Strengthening NZ sport’s relationship with the environment.’<sup>185</sup> This goal specifically referred to climate change adaptation and mitigation and included sub-goals of ensuring that every sporting organisation and enterprise is carbon neutral and “eco-literate,”<sup>186</sup> and ensuring that national, regional and local community facilities are future proof and sustainable to meet challenges of extreme weather events, climate change and resource scarcity.
- h. An out of date and ineffectual environmental sustainability policy:** the ASC’s Environmental Sustainability Policy was apparently last revised in 2018, but still refers to an out-of-date Kyoto-era economy-wide emissions reduction target

of 5% relative to 2000 levels by 2020, rather than the post-November 2016 target of 26 — 28% reduction by 2030 relative to 2005 levels under the Paris Agreement.<sup>187</sup> Further, unlike its foreign counterparts, there is no part of the ASC’s policy that refers to the ASC’s role in enabling the proliferation of knowledge and information to sporting organisations on the adoption of sustainable sports practices.

- 66.** A review of the state and territory government sporting entities reveals that:
- a. only 1 entity** referred to climate change in their annual financial report, and even then, it was stated that “the department has not identified any material climate related risks relevant to the financial report at the reporting date...”;
  - b. no entity** referred to climate change in their current strategic plan for 2020-2025;
  - c. no entity** substantively discussed climate change on their website;
  - d. only 50% of entities** provided any type of climate change guidance or publications on their website; and
  - e. only 3 out of 8 entities** provided any type of extreme heat guidance.
- 67.** A summary of the disclosures of climate change initiatives undertaken by federal and state government entities responsible for sport can be found at Annexure G.
- 68.** The only substantive government guidance to sporting organisations on climate change was the roadmap issued in November 2020 by the Victorian Government in partnership with the Sports Environment Alliance, entitled, ‘Future Proofing Community Sport & Recreation Facilities - A Roadmap for Climate Change Management for the Sport and Recreation Facilities Sector’ (the Roadmap)<sup>188</sup> The Roadmap was issued with the aim of raising awareness of climate change’s impact on Victorian sport and recreation facilities, and to provide support to those within the industry in terms of how to respond to these challenges. Key recommendations include for sporting organisations/venues to:

- a. **incorporate principles of Environmentally Sustainable Design (ESD) into the design and construction of sporting facilities and infrastructure,**<sup>189</sup> including by consulting internationally and locally recognised standards for 'green' and 'healthy' infrastructure, conserving water resources, minimising energy use, reducing GHGs, using long-lasting environmentally and socially responsible materials, minimising waste and maximising reuse and recycling of materials;
- b. **mitigate emissions** through sustainable site management, efficient water and energy use, switching to renewables, using low embodied carbon building materials and considering material life-cycle, and raising awareness and educating the sport community about pro-environmental behaviours; and
- c. **adapt to climate change** by:
  - i. making changes to the location, time and amount of training in response to changing climate conditions, including reducing the number of training sessions held on turf surfaces and altering the content of training activities (for example, by replacing sessions that would have been on turf with sessions held at indoor stadiums, gyms or swimming pools);
  - ii. making changes to playing rules, including imposing limits on the number of players on team lists and implementing heat policies;
  - iii. making changes to playing scheduling, durations and locations, including altering the scheduling of matches, reducing the duration of playing season, changing the arrangements and locations of finals series, and cancelling matches when grounds are closed or not available;
  - iv. planning for climate change and acute and chronic physical risks, by drafting disaster recovery plans and increasing the resilience of infrastructure (primarily through the incorporation of ESD principles in any upgrades or new builds).

## Sporting industry organisations' response to climate change

69. We have analysed publicly available Annual Reports and other key documents issued by **314 of Australia's national and state sporting organisations** setting out their climate action initiatives. The results, as set out in detail in Annexure H, show that as of September 2023;
  - a. **only 3** mentioned climate change in their annual reports;
  - b. **only 6%** referred to climate change or sustainability in their strategic plans;
  - c. **only 3%** issued guidance or publications on their website on climate change or sustainability;
  - d. **only 2%** have signed up to the UN Sports for Climate Action Framework, which means committing to a 50% reduction in emissions by 2030 and net-zero by 2040;
  - e. **only 3%** discuss climate change anywhere on their website;
  - f. of the 45 national sporting organisations, 29 have undertaken no climate change or sustainability initiatives whatsoever;
  - g. Surf Life Saving Australia, Surfing Australia, Athletics Australia, Swimming Australia, Netball Australia, National Basketball League, Basketball Australia, and Australian Sailing were the only (high profile) national sporting organisations that did not have a heat policy.
  - h. In many cases the state organisations are outperforming the national organisations. For example, none of the national organisations for Tennis, Aussie Rules, Hockey, Surf Life Saving or Swimming refer to Climate Change in their Strategic Plan. However, at least one state organisation in each of those sports referred to climate change in their state strategic plan. In fact, 50% of the state tennis organisations refer to climate change in their strategic plan, whereas Tennis Australia does not;
    - i. the best performing sport in terms of climate change and sustainability action is tennis and AFL;
    - j. the worst performing sports in terms of climate change and sustainability action

include Volleyball, Rugby League, Athletics, Gymnastics, Cycling, Diving, Modern Pentathlon and Sailing. Each had (when excluding the publication of heat or extreme weather guidance) **zero climate change or sustainability initiatives.**

70. A comparison with international industry sporting organisations is instructive. European national sporting organisations are much more likely to refer to climate change in a substantive way in their annual report and strategic plan, publish guidance or publications on sustainability or climate change and/or discuss climate change substantively on their website. Annexure I provides some of these examples.
71. A 2015 study of 114 sporting organisations across Asia-Pacific, including 25 teams across the AFL, NRL and A-league, and their environmental sustainability initiatives revealed that only 17 of the 114 (or 14.9%) reported Environmental sustainability practices, compared with 73.8% of teams in a previous US study.<sup>190</sup> In respect of the AFL, NRL and A-league, more than 2/3rds of NRL and AFL teams did not disclose any sustainability initiatives.<sup>191</sup> Alarming, **0 out of 5 A-league clubs disclosed any sustainability initiatives.**<sup>192</sup> Across the Asia-Pacific, only **1 out of the 114 sporting organisations** sporting organisations studied had disclosed any climate change initiatives.<sup>193</sup> While it is tempting to hope that the age of the research (being 7 years old) would mean that real progress has been made on sustainability and climate change, at least in respect of the latter, the results will disappoint.
72. A 2021 study undertaken by the Danish ethical sports initiative 'Play the Game' as to how the governance of 100 national peak sporting organisations responsible for administering football, handball, swimming, tennis, and athletics in 15 countries over 3 continents performed against 46 broad principles of good governance and 274 indicators. One of these principles of good governance (Principle 43) is that "the organisation implements a policy for the promotion of environmental sustainability." The indicators that accompany Principle 43 include:
- a. Does the organisation have a written policy that defines specific objectives and actions, specifically aimed at mitigating environmental degradation / harm through the practice of sport?
  - b. Does the organisation have a designated staff member who formally acts as a single point of contact and is responsible for all matters regarding the promotion of environmental sustainability?
  - c. Does the organisation undertake actions aimed at promoting the environmental sustainability of the sporting events it (co-)organises?
  - d. Does the organisation undertake actions aimed at promoting the exchange of best practices on environmental sustainability among its member organisations?
  - e. Does the organisation undertake other actions (not related to the exchange of best practices) aimed at promoting the environmental sustainability of sporting activities?
  - f. Does the organisation cooperate with other organisations with a view to promoting the environmental sustainability of sporting activities?
  - g. Did the organisation carry out an evaluation of the impact of its relevant actions? Specifically - Does the organisation have a written report that analyses the impact of the specific actions?
73. The study ultimately found that only 11% of the organisations had a formal policy that outlined objectives and specific actions aimed at promoting environmental sustainability. In fact, out of the 46 principles assessed, the organisations performed the worst in respect of having sufficient policies for promoting environmental sustainability. All 15 countries had at least one organisation which was ranked "not fulfilled" (being a score of 0-19%), meaning that they failed to demonstrate any of the above sustainability indicators. A previous 2018 study of 80 organisations across 10 countries (8 European countries and 2 others) found that<sup>194</sup>:
- a. only 20% had a formal policy that outlined objectives and actions aimed at promoting environmental sustainability;
  - b. only 22% of the federations undertake actions aimed at promoting the environmental sustainability of the sporting events it (co-)organises; and
  - c. only 13% evaluate the impact of their

environmental sustainability policies and initiatives.

74. As with the 2021 study, all 10 participating organisations had at least 1 organisation that was ranked “not fulfilled.”

## Club and venue-level responses to climate change

75. Whilst research has been done on AFL fan attitude towards climate change and the rooftop solar potential of Australian sporting stadiums, our research could not locate any macro-levels surveys undertaken of Australian sporting organisations at a Club level to investigate current engagement with sustainability and climate mitigation and adaptation measures.
76. In 2021 the Green Sports Hub Europe, a EU-funded project, published the findings<sup>195</sup> of an online survey of European organisations operating in the sport, fitness and leisure industry which sought to (1) understand how important sustainability was for these organisations; (2) discover what the barriers and motivators were to organisations becoming more sustainable; (3) understand how organisations could be better supported to become more sustainable; and (4) establish if organisers were measuring sustainability, and (if so), which policies or guidelines they were following. 300 organisations responded, comprised of 16% of professional sports clubs and 30% of governing bodies. The results revealed the following:
- a. over 50% of organisations followed published standards or policies in setting their sustainability processes. The standards or policies followed were extremely broad and included:
    - i. governing body guides, such as those issued by the International Olympic Committee<sup>196</sup> or bodies such as European Athletics<sup>197</sup> and the Federation Internationale de l'Automobile (FIA);<sup>198</sup>
    - ii. country-specific policies, guides and certification systems;
    - iii. UN standards, such as the UNFCCC Sports for Climate Action, UN Climate Pact for Sports and UN Sustainable Development Goals;
    - iv. NGO guides, such as the WWF sustainability guides and the International

Union for Conservation of Nature's 'Mitigating biodiversity impacts of sport events' guides;<sup>199</sup>

- v. external certification standards, such as the GRI Standards, B Corp standards, SO Standards and the PAS 2060.

- b. for the 63% of organisations that had sustainability process in place, the top three initiatives were in respect of operations (such as energy use), events and waste reduction;
- c. only 22% of organisations measured their sustainability through mechanisms including (but not limited to): flight tracking, paper consumption measurement, carbon footprint measurement, energy reduction targets, waste and recycling and energy usage; and
- d. cost was the most commonly cited barrier preventing organisations from undertaking further sustainability action (conversely over 50% stated that cost savings would be an incentive to promote sustainability), followed by lack of time and knowledge, and inability to obtain organisational buy-in, including from senior management.<sup>200</sup>

## Key trends and developments in sport sustainability

77. A review of the literature and case studies suggests the following key trends and developments in climate change response by sporting organisations in Australia and around the world:
- a. development of sport and climate change frameworks and standards as a basis for disclosure;
  - b. information gathering to collect and standardise data, analyse trends and highlight best practice in respect of action taken by sports organisations on climate change and sustainability;
  - c. development of tools to measure climate impact and assist in disclosure and target setting;
  - d. proliferation of sustainable sporting infrastructure and venue design and construction practices, including green certification and transition to renewable energy use; and
  - e. development of sustainability and climate change initiatives for fans.
78. These key trends are explored below.

In 2021 the Sustainable Sport Index released its first report<sup>233</sup> tracking environment and social sustainability practices of stakeholders within the US sport industry. An updated 2022 report was recently issued covering the sustainability behaviours of 25 participants. The key findings from the 2022 report were that:

### Carbon emissions:

**17%**

of respondents tracking their carbon emissions. This was relatively unchanged from the 16.67% in 2021

**50%**

of venues offered some type of program to incentivise fans to take alternative transportation rather than a personal vehicle, up from 21% in 2021

**96%**

of participants had bike parking available to attendees

**62%**

of participants offered electric vehicle charging stations

### Energy:

**33%**

of venues produced renewable energy on-site via solar panels

**79%**

of venues are using LED sport lighting

### Water:

**32%**

of venues capture rainwater

**38%**

of venues use water sensors

### Food and drink:

**48%**

of venues say their Food and Beverage provider has a formal sustainability policy at the venue



## Sustainability governance:

**33%**

of respondents had a sustainability policy in place, up from 24% in 2021

**24%**

of respondents had a dedicated sustainability staff position, up from 17% in 2021

**28%**

of venues had an environmental procurement policy, up from 6% in 2021

**46%**

of venues had a green or sustainability committee

**26%**

of venues conduct sustainability training, up by 2% relative to 2021

## Sustainability communications and initiatives:

**52%**

of venues had sustainability messaging on their website

**36%**

of participants had branded sustainability programs

**20%**

of venues had in-venue sustainability messaging

**8%**

of participants produced an annual sustainability report, up by 2% relative to 2021



Significantly, participants who invested in sustainability initiatives were already seeing a return on investment, with 63% of participants reporting that involvement in sustainability programs had reduced their operating costs. The highest barrier to engaging in sustainable activities was lack of executive support and lack of capital.

## Sports and climate change frameworks and standards

79. The last few years has seen a proliferation of sustainability disclosure standards applicable to sporting organisations and/or sporting event organisers including, but not limited to:
- the International Organisation for Standardization (ISO) standard IOS 20121::2012 for Sustainable Events;
  - the Global Reporting Initiative (GRI) Event Organiser's Standard;
  - the Sustainability Accounting Standards Board (SASB) Leisure Facilities Sustainability Accounting Standard;
  - the Council for Responsible Sport (CRS)'s 'Responsible Sport Standard for Organisations';
  - the CRS's 'Responsible Sport Standard for Events'; and
  - the Charter of 15 Environmentally Responsible Commitments of Major Event Organisers and Managers of Large-Scale Sports Facilities and Venues.

## Sustainability mapping for sporting organisations

80. There has been considerable recent work undertaken to collate and amalgamate existing sustainability responses and initiatives, identify trends and barriers to sustainability, and highlight best guidance or suggest key performance indicators for measurement of metrics and comparison. Some of these initiatives include:
- National Sports Governance Observer (NSGO):** In November 2018 the Danish ethical sports initiative 'Play the Game' run by the Danish Institute for Sports Studies published the findings of research it conducted into mapping sports governance practices of 80 national sport governing bodies located in Europe, as well as two non-European partners. The research was done using the National Sports Governance Observer tool, which is a benchmarking tool for good governance in national sports federation, comprising

of 274 indicators which are based on the NSGO's 46 principles of good governance. Principle 43 is "the organisation implements a policy for the promotion of environmental sustainability" and includes 7 indicators which are set out in paragraph 73. Play the Game has subsequently released another study looking at a further 100 organisations across 15 countries in 2021. The results of the 2021 and 2018 study are discussed at paragraphs 73-74. Play the Game also undertook a study of five international governing bodies being FIFA, the International Swimming Federation (FINA), the International Handball Federation (IHF) and the International Tennis Federation (ITF). Only FIFA scored a "very good" grade for its environmental sustainability, whilst FINA, IHF and ITF were scored as "not fulfilled" (IAAF was given a "moderate" grade).<sup>201</sup>

- Sustainable sports index (US):** The Sustainable Sports Index seeks to create a consolidated database of sustainability best practices and challenges across the US Sports Industry. The first step was to set up a baseline or benchmark study from which all progress could be measured. The results of this baseline study were published in the 2021 report<sup>202</sup> which we discussed at paragraph 78.
- Green Sports Hub (Europe):** Launched in January 2021 and with a funding window of 3 years, the hub seeks to gather a set of recognised experts from various fields including sport stakeholders, public authorities and environmental NGOs, to develop tools to support the sports sector to become more sustainable.<sup>203</sup> In December 2021 the Green Sports Hub released its benchmarking report into sustainability and sports, which is discussed at paragraph 77.
- Sports Positive League (Europe):** Launched in 2019, the Sports Positive League collates key environmental sustainability information for professional football (soccer) clubs in various football leagues in Europe, and allocates points to clubs for reaching certain sustainability outputs,<sup>204</sup> and compiles them in a league table matrix.<sup>205</sup> Teams obtain points for undertaking

actions such as having a publicised sustainably policy/strategy, being a signatory of the UN Sports for Climate Action Framework or having 100% energy at stadiums and other club sites from renewable sources. Current participants in the Sports Positive League includes clubs in UK's Premier League, Germany's Bundesliga and France's Ligue 1. The Sports Positive League is someone different that other information depositories discussed in this section, as it incorporates a ranking or competitive component which allows users to compare sustainability performance. In this way it is more akin to market-based solutions such as the Dow Jones Sustainability World Index.

- e. **Sustainability.sport online platform:** this online repository of sustainability information was developed by the Global Association of International Sports Federations (GAISF) with the support from Sport & Sustainability International (SandSI), Sustainability Report and SportandDev.org. According to its website, it is the largest library on sports and sustainability in number of entries.<sup>206</sup>

## Measuring climate impact

81. In order to set targets for emissions reduction, it is first necessary to consider the baseline or current position. To do this, sporting organisations need to measure what their current greenhouse gas emissions are. As well as seeking external expertise to provide this, there are various free and paid emissions calculators that can assist with this. Some of these calculators include:

- a. **the Carbon Footprint's Carbon Calculator,**<sup>207</sup> which provides calculations for carbon emission from household (or in the case of sporting organisations, the club headquarters and any office spaces), flights, car, motorbike, bus and rail and secondary emissions in the form of food and drink, pharmaceuticals, clothes, textiles and shoes, paper-based

products, computer and IT, TV, radio and phone, motor vehicles, furniture and other manufactured goods, restaurants and pubs, telephone and mobile, banking and finance, insurance, education and recreational, cultural and sporting activities.

- b. **Carbon Neutral's Carbon Calculator,**<sup>208</sup> which is Australian-based and provides calculations for vehicles, electricity, gas, waste, water, paper, food and drink, air travel, public transport and events.
- c. **The International Civil Aviation organisation**<sup>209</sup> calculates carbon dioxide emissions from air travel.
- d. **Carbon Footprint Methodology for the Olympic Games** is a document issued by the International Olympic Committee in December 2018 which is intended to provide detailed guidance to Olympic host cities as to how to measure the carbon footprint of their Olympic games. Since June 2018, all Olympic Host City contracts have a clause requiring that the Host City develop a "Carbon Management Plan."<sup>210</sup> The Carbon Management Plan requires host cities to (1) undertake an initial estimate of the emissions likely to arise from the games; (2) develop a carbon footprint reduction plan and estimate reduction potential; (3) to measure the actual carbon footprint of the games; and (4) to publish carbon footprint figures.<sup>211</sup>
- e. **ReScore app:** The Council of Responsible Sport in conjunction with Tata Consulting Services developed a cloud-based app called 'ReScore' which allows event organisers and sporting organisations to input activities to track their progress in the fields of planning and communications, procurement, resource management, access and equity and community legacy as against the Council of Responsible Sport's two standards, being the Responsible Sport Standard for Organisations and the Responsible Sport Standard for Events. The app provides dashboards which show progress towards the goals and provides access to case studies and other resources. The app has already been adopted by Chicago Event Management, the organiser of the Chicago Marathon.

## Sustainable Sporting Venues and Infrastructure

82. Sporting venues can both contribute to emissions and be themselves the victims of damage from the physical effects of climate change. To address this dual role, sporting venues around the world are leading the way in terms of sustainability.
83. Annexure J sets out the adaptation and mitigation practices adopted by global leaders in sustainable infrastructure. Annexure K sets out the adaptation and mitigation actions undertaken by Australian stadiums.

### Solar potential of AFL, Cricket and Football stadiums and facilities

84. In 2021, UNSW and the Australian Photovoltaic Institute (APVI) conducted research commissioned by the Australian Conservation Foundation (ACF), into the potential of AFL, cricket and soccer to adopt rooftop solar energy at their stadiums and associated facilities. Key findings were that:
  - a. the rooftops of AFL clubs, national and state soccer federations and administrative facilities and each of the major cricket stadiums in each state could host more than 77,000 m<sup>2</sup> of solar power which could potentially generate 20,000 megawatt-hours (MWh) of energy. 20,000 MWh amounts to 10–20% of the annual energy use of a typical Australian household;
  - b. in the long term, these sports could save approximately \$3.7m annually by using solar power;
  - c. a high-level assessment of regional and community clubs across the sports suggests that they may be able to further support 400,000 m<sup>2</sup> of viable roof area on club facilities and generate 100,000 MWh of solar power each year.
85. The biggest solar opportunities identified were:
  - a. **Metricon Stadium (aka. Carrara Stadium)**, with 1647 kW of solar energy potential
  - b. **Sydney Cricket Ground (SCG)**, with 1004 kW of solar energy potential; and
  - c. **Football NT's headquarters and the Larrakia Park Stadium**: with 406 kW of solar energy potential.

## Environmentally Sustainable Design (ESD)

86. The two most widely used standards for environmentally sustainable building design are:
  - a. **Leadership in Energy and Environmental Design (LEED)**, developed and operated by the US Green Building Council; and
  - b. **the Building Research Establishment Environmental Assessment Methodology (BREEAM)**, developed and operated by the Building Research Establishment (BRE) based in the UK.
87. Both BREEAM and LEED are certification systems which assess sustainability criteria for building, venue and infrastructure design and construction, and provide certification upon satisfaction of key criteria. Both systems offer different levels of certification depending on the nature of the compliance — LEED offers Certified, Silver, Gold or Platinum, whilst BREEAM offers a rating system from pass to outstanding.
88. In addition to BREEAM and LEED, the International Future Institute provides the Living Building Challenge, which, in addition to requiring compliance with design and construction criteria and projected operational criteria (as with BREEAM and LEED), the Living Building Challenge requires that venues are operational for 1 whole year and that data is provided on its actual operational use prior to certification being awarded.
89. Critics cite the prohibitive cost of sustainable design and construction as a barrier to broader uptake in the sporting infrastructure sector. However, whilst there may be a greater initial capital cost, analysis reveals that such sustainable designs lead to reduced ongoing operational costs, a higher return on investment overall, and increased asset value over time.<sup>212</sup> A 2017 study by LEED found that from 2015 to 2018 LEED-certified buildings in the US will have saved more than \$2.1 billion in combined energy, water, maintenance and waste savings.<sup>213</sup> Other studies suggest that incorporating Environmentally Sustainable Design (ESD) features may reduce energy-related operating costs by as much as 20%,<sup>214</sup> with a 7 year return on investment for switching to renewable energy.<sup>215</sup> The World Green Building

Council has noted that there is a financial benefit to incorporating ESD features into design and construction, including that<sup>216</sup>:

- i. ESD may not necessarily attract a higher price tag in terms of design and construction costs if ESD principles are incorporated from the very beginning of the project;
  - ii. ESD-incorporated buildings (colloquially known as “green buildings”) often attract higher rent and sales prices;
  - iii. Green Buildings save money through reduced operating costs of energy, water and ongoing maintenance costs; and
  - iv. Green buildings can improve worker productivity, health and wellbeing.
90. As the world progresses towards decarbonisation, there is increasing likelihood that inefficient building practices will be outlawed, such that ESD and green buildings are likely to be the norm going forward.

## Fan engagement

91. The US-based Green Sports Alliance provides comprehensive guidance to sporting organisations hoping to kick-start a sustainability fan engagement initiative.<sup>217</sup> Case studies of fan engagement initiatives include:
- a. **Australia - AFL “Green Round”** was launched in August 2009 with the goal of making AFL “more climate friendly.” As part of the initiative, fans were encouraged to “Make Green Their Second Team” by adopting climate-friendly home efficiency measures, such as undertaking energy saving measures at home, adopting low-carbon modes of transport and recycling.<sup>218</sup> The AFL sought to reinforce the message through green-marketing including replacing the centre circles at each AFL venue with three-arrow recycling logos and having umpires wear green uniforms and use green flags.<sup>219</sup> The initiative was supposed to be part of a longer-term strategy of climate action within AFL to include the introduction of a

new program to support local clubs to take action on climate change and reduce their greenhouse emissions, an interactive climate change awareness program for families and children involved in AFL programs, and a targeted carbon pollution reduction program across the AFL industry.<sup>220</sup> Whilst the initiative was launched to much fan-fare by then-Prime Minister Kevin Rudd and former Carlton captain Chris Judd, there is no information as to whether the long-term aims of climate action within the AFL has been achieved. The AFL “Green Round” has not been revived since 2009.

- b. **USA - The NHL Green Initiative** was launched by the National Hockey League in 2010 with the overarching aim of promoting sustainable business practices across the League and engage fans around environmental awareness.<sup>221</sup> In 2014 the NHL Released its first Sustainability Report, and this was followed by a second Sustainability Report in 2018. To promote the release of the second sustainability report and further increase awareness and fan engagement with sustainability, in 2018 the NHL launched the “NHL Green month” during which time all 31 clubs in the NHL took part in sustainability initiatives. For example, the Chicago Blackhawks ran a “Go Green Night” when, on a game night, pre-game entertainment featured activities and demonstrations to educate fans on sustainability. Other club initiatives included running a gear donation drive, removing single use plastic bags and handing out re-usable bags and committing to purchasing water and energy offsets. The NHL set up a “NHL Green” website and launched a website and social media campaign, supported by players as green ambassadors.<sup>222</sup>
- c. **UK - The Ipswich Town Football Club’s “Save your Energy for the Blues” campaign** was launched in October 2006 with the goal of drawing attention to the climate crisis and encouraging behavioural change amongst fans of the Ipswich Town Football Club. The

objective of the campaign was to offset the approximately 3,000 tonnes of CO<sub>2</sub> emitted by the Club, by asking fans to pledge their homes to become energy efficient and assist in the offset. The Club's sponsors committed to donating £300,000 to the club if the club and fans offset the 3,000 tonnes of CO<sub>2</sub> to achieve carbon neutrality. Fans were further incentivised through offers of free season tickets and the opportunity to become a match day mascot. The club ultimately achieved carbon neutrality on 4 May 2007, with over 3,000 fans participating in the campaign and pledging to make carbon emissions reductions totalling over 3,000 tonnes of CO<sub>2</sub> p.a.<sup>223</sup>

## Case Studies

92. The below highlights a number of sporting organisations that have taken on climate-action initiatives.

### De Groene Club and GO — the Dutch Football Association

93. The Dutch Football Association (KNVB) has run two large sustainability initiatives since 2017 — 'De Groene Club' (translated as 'The Green Club') and 'GO.'
94. **The 'De Groene Club' initiative** is aimed at making Netherland's 3,000 grassroots sports clubs more sustainable through transforming their energy use to being powered by renewable sources. In the Netherlands, energy has been estimated to amount to approximately 16% of grassroots club's costs.<sup>224</sup> To do so, KNVB partnered with a utilities company and the Climate Neutral Group to offer these grassroot clubs energy advice and favourable prices for the installation of solar panels, new boilers and insulation. Whilst initial costs for clubs could be €30,000-€50,000, eligible clubs could apply for financial assistance from the KNVB's social investment fund, Stichting Waarborgfonds Sport (SWS). KNVB estimated that the initial investment by clubs to switch to renewables would show a return on investment after around

5/6 years, bringing an estimated saving of up to €7,000 per year. Similar initiatives are being rolled out by the Dutch Tennis Association and Royal Dutch Hockey Association.

95. **The 'GO' initiative** is aimed at reducing emissions from transportation associated with football in the Netherlands. The KNVB has estimated that amateur football results in travel of 335 million km every football season, leading to the emission of 48,635 tonnes of CO<sub>2</sub>. In 2021, the KNVB, in partnership with French utility company Engie SA and Volkswagen, launched a campaign called 'Volle Bak!' as part of the effort to reach a 20% reduction target in CO<sub>2</sub> emissions arising from transport emissions arising from football by 2023. The campaign seeks to encourage football players and supporters to carpool so as to reduce emissions from transportation.<sup>225</sup>

### German Sports Climate Fund

96. As part of its winning bid to host the Euro 2024 competition, the German Football Association has committed to setting up a 'German Sports Climate fund' to assist its 25,000 amateur clubs to become more sustainable.<sup>226</sup> The Fund would provide financial support to clubs seeking to swap out polluting infrastructure for more sustainable carbon-friendly options, such as replacing old boilers, investing in e-mobility facilities or buying efficient electrical appliances. The initiative is being positioned as an alternative to carbon offsetting, which attracts criticism for being an unregulated mechanism which fails to properly mitigate emissions.

### Forest Green Rovers — "the most sustainable football club in the world"

97. The Forest Green Rovers Football Club is a professional club in League Two, the fourth tier of English football, and in 2018 became the world's first UN certified carbon-neutral football club.<sup>227</sup> After being on the brink of insolvency in 2010, with the assistance of a local entrepreneur, the club commenced a major overhaul, which included

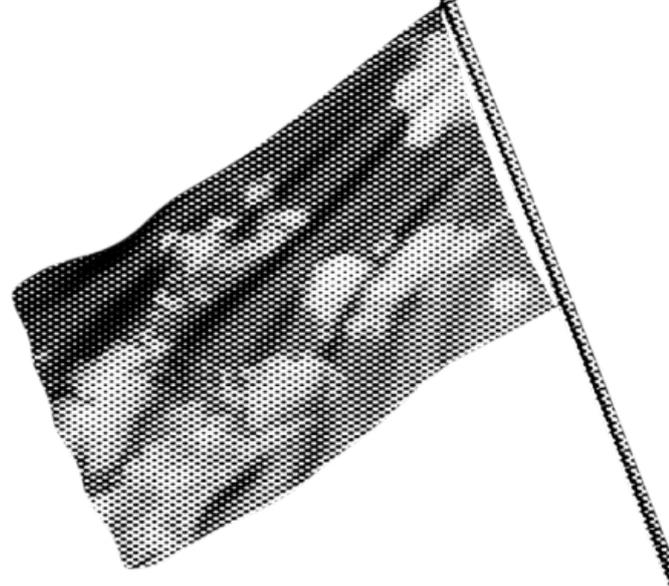
implementing a broad sustainability agenda. Key initiatives include the following:

- a. the club is entirely powered by 100% green energy supply, including some directly generated on-site from solar panels on the stadium roof;
  - b. the playing pitch is organic, meaning no pesticides or herbicides are used, and the pitch is watered entirely via rainwater;
  - c. the club's grass is cut with a GPS-directed electric lawnmower powered by solar energy;
  - d. the Rovers are the first football club in the world to sign up to the Eco- Management and Audit Scheme of the EU<sup>228</sup>, a sustainability management scheme which requires validation by a third party auditor/verifier;
  - e. the Rovers were a founding member of the UN Sports for Climate Action Framework and signatory of the UN Climate Neutral Now pledge<sup>229</sup>;
  - f. the club has installed electric vehicle charging points;
  - g. the club and its players are 100% vegan, and the club offers vegan food to visitors; and
  - h. the club has also created an 'eco-trail' at the home ground which allows visitors to view the various sustainability initiatives being undertaken.
98. Since 2011 the club has been measuring its carbon footprint. Between the 2017/2018 and 2018/2019 seasons the club estimated that it reduced its carbon footprint by nearly 30%.<sup>230</sup>

### Formula 1 and Formula E

99. For obvious reasons, the sport of motor racing has been on the receiving end of criticism in respect of its contribution to climate change. In response, the Fédération Internationale de l'Automobile (FIA) has done two main things: (1) integrated an ambitious Net Zero strategy into their business model and events; and (2) set up the Formula E, a motor racing sport exclusive to electric vehicles.
100. In respect of the first initiative, the Formula 1 has committed to a Net Zero Carbon Footprint by 2030 goal achieved through four limbs:
- a. **"On the Track"**: Delivering net zero carbon, sustainability-fuelled hybrid power units, including developing a hybrid engine for increased efficiency and running cars on sustainable fuels. Current progress has included the adoption of 100% advanced sustainable fuels across all participating F1 teams, and increasing the percentage of bio-component in fuel from 5.75% in 2021 to 10% ethanol in 2022, as well as advances in the adoption of hybrid engine technology;
  - b. **"On the Move"**: Focusing on reducing Co2 emissions from logistics and travel. Progress has included increasing sustainability of broadcasting, using fuel-efficient means of transport and designing 'flexible' shipping containers;
  - c. **"Where we Work"**: shifting to 100% renewable powered facilities, factories and venues. Progress has included installing solar panels at the French and Canadian circuits, and having the Circuit de Catalunya being 100% renewably powered; and
  - d. **Offsetting unavoidable emissions** through "robust and verifiable" biological and technical sequestration programmes.
101. Formula E's stated aim is to "counteract climate change by accelerating the adoption of electric vehicles."<sup>231</sup> The Formula E World Championship is the first and only sport to be certified as net zero since its inception.<sup>232</sup> Other climate change initiatives by the Formula E include:
- a. achieving third party ISO 2012:2021 (Event sustainability management systems) certification;
  - b. being a signatory of the UN's EU 2030 letter, which supports the UN's global Race to Zero campaign for a decarbonised economy;
  - c. hosting the FIA Smart Cities Programme on-site at events to advance the development of more sustainable, safer and more connected cities;

- d. accurately measuring carbon emissions using a life cycle assessment;
- e. working with its logistic partner to reduce emissions arising from freight and logistics, including optimising travel times and calendars, prioritising rail and road over air freight and increasing packaging efficiency;
- f. drafting and implementing a sustainable travel policy;
- g. as a last step, offsetting only unavoidable emissions through investments in Gold Standard, Verified carbon Standard and Clean Development Mechanism projects; and
- h. being a signatory of RE100 from The Climate Group to show commitment to achieve a target of 100% renewable energy use.



## Section 5

# Liability of sporting organisations and directors

104. This section will consider the liability of sporting organisations and their directors, focusing on two different tiers of sporting bodies:

- a. **national sporting bodies** whose duties and responsibilities broadly include:
  - i. the creation and modification of rules of the game;
  - ii. licensing of teams and/or leagues;
  - iii. accreditation and (possibly) training of referees; and
  - iv. organisation of large-scale competitions or leagues, such as the Australian Open (Tennis Australia), International Test Cricket/Big Bash Cricket matches (Cricket Australia), AFL, NRL, Super Rugby and A-League games.

Examples include: Tennis Australia, Cricket Australia, AFL, Rugby League Commission, Rugby Australia, Football Australia, Hockey Australia, Surf Life Saving Australia, Surfing Australia, Athletics Australia and Swimming Australia. State and district bodies (such as NSW Tennis, the Queensland Cricket Association or Western Australian Rugby Union Incorporated) then implement and enforce the rules codified by the national organisations. It should be noted that in some cases national

sporting organisations may be subject to rules set by international bodies. For example, international test cricket is still organised by Cricket Australia, but is subject to the rules of the International Cricket Council.

- b. **clubs** whose duties and responsibilities include:
  - i. employing professional players;
  - ii. training their players; and
  - iii. providing a safe working environment.

This includes specific teams in the AFL, A-league or NRL, such as the Geelong Cats, Western Sydney Wanderers or Wests Tigers.

105. In summary, liability for **governing and rule-setting sporting bodies** can arise out of:

- a. failing to create or amend the rules of the game/heat policy to avoid the risk of heat-related illness to players.
- b. breach of contracts with broadcasters and service providers arising from the suspension and cancellation of matches caused by acute and chronic weather and climate events. For example, in February 2017, temperatures of over 44° temperatures led to the cancellation of the A-league's Newcastle v Melbourne Victory match, and all under-18s NSW football trial games;

- c. failing to disclose the impact of climate change on the financial performance and position of the sporting organisation in circumstances where climate change has a material impact;
  - d. failing to consider the impact of fossil fuel sponsorship on the sporting organisation in circumstances where such sponsorship could present a significant reputational risk which could ultimately impact the financial position and performance of the organisation; and
106. Liability for **sporting event organisers** (which can include clubs or regional bodies) can arise out of:
- a. making a decision to proceed with an outdoor event despite adverse weather conditions, such as proceeding with surfing competition during dangerous swell conditions or proceeding with a marathon race during exceedingly hot or wet conditions;
  - b. failing to provide adaptive measures on the day to mitigate the risk of heat-related illness (such as deciding to suspend or cancelling the match);
  - c. failing to implement existing adverse weather policies or extreme heat rules in circumstances where those policies ought to have been triggered/implemented;
  - d. failing to provide adequate medical assistance to injured players and spectators;
  - e. failing to undertake risk assessments considering the impact of extreme weather on players and spectators;
  - f. failing to ensure that events are adequately supervised by competent referees who have been provided with adequate training; and
  - g. failing to warn players and spectators of any risks that would not be obvious.
108. The **content and scope of duty of care** will vary on a fact-by-fact basis depending on a number of 'salient features' which include, relevantly:
- a. the nature of the organisation, including whether it is professional or amateur, its resources and its control and power (which often is determined depending on where it stands in the hierarchy of the particular sport);
  - b. the nature and foreseeability of the injury, including whether the risk of injury could be said to have been voluntarily assumed by the participant, having regard to the nature of the sport, and the inherent risks associated with it.
  - c. the degree and nature of control able to be exercised by the sporting organisation to avoid harm to the player/spectator;
  - d. the degree of vulnerability of the player to the injury, namely the inability of the player to protect themselves from the specific harm. It is important to consider the capacity and reasonable expectation of players to take steps to protect themselves from risks of this type;
  - e. whether the player is an adult or minor; and
  - f. the degree of reliance the player has upon the organisation to protect them from risks of this type.
109. In the sporting context, broadly the case law provides that:
- a. **international and national peak professional sporting organisations** which assume responsibility and control over the rules of the game will, in most cases, owe a duty to ensure, either through the creation of new rules or amendment of existing rules, that these rules avoid foreseeable risks of injury to players;
  - b. **organisers of sporting leagues (such as the AFL or NRL)** which employ referees will have vicarious liability for the acts or omissions of these referees, including liability for where a referee fails to implement/fails to adequately implement rules which cause player injury;
  - c. **event organisers and venue owners** who control the condition of the playing surfaces and grounds owe a duty to avoid foreseeable risks of injury, including risk arising from dangerous playing conditions or surfaces; and

## Player safety

### The legal position

107. It is clear that sporting organisations would owe a duty of care to the players to avoid foreseeable harm to players within their leagues or sporting code.

- d. **clubs** will owe a general duty of care to avoid the foreseeable risk of injury to their players. Clubs who employ athletes also owe a non-delegable duty to their employee-athletes to avoid the foreseeable risk of injury. It includes duties to provide a safe workplace, a safe system of work, proper supervision and safe plant and equipment.<sup>234</sup> However, the model Work Health & Safety (WH&S) laws have a specific-carve out for professional athletes, such that injured players do not have recourse to compensation. Victoria has not enacted the model Work Health & Safety Laws but has state-based provisions to the same effect. Whilst Victoria, Queensland, WA, SA, Tasmania and the ACT exclude sportspersons explicitly, in NSW a sporting participant will be covered unless their sporting organisation is registered under the Sporting Injuries Insurance Scheme (in which case, that scheme will apply and not the WH&S law.)<sup>235</sup>
110. Liability for negligence has now been the subject of legislation in all states. Legislation in NSW,<sup>236</sup> Queensland,<sup>237</sup> WA<sup>238</sup> and Tasmania<sup>239</sup> specifically provides that no liability exists in respect of negligence arising from the materialisation of an “obvious risk” of a “dangerous recreational activity.” In South Australia the legislation does not specifically address obvious risks arising from “dangerous recreational activities,” but rather excludes liability for the materialisation of “obvious risks” broadly.<sup>240</sup> Legislation in Victoria does not exclude liability but assumes that a person is aware of the risk, unless the person proves on balance of probabilities that the person was not aware of the risk.<sup>241</sup> Similarly, legislation in the ACT<sup>242</sup> does not limit liability in respect to obvious risks, however it does provide that a reasonable person is to take precautions against a risk of harm if that risk of harm is foreseeable and not insignificant. There is no express provision in the NT removing the duty to warn of obvious risks.<sup>243</sup>
111. In those jurisdictions which refer specifically to “dangerous recreational activities,” legislation varies state-by-state as to whether professional (as distinct from amateur) sports fall within the definition of “dangerous recreational activities.” The 2020 NSW Court of Appeal decision of Singh *bhnf Ambu Kanwar v Lynch* (2020) 103 NSWLR 568 definitively settled that in NSW, professional sports fall within the definition of “dangerous recreational activity.” Western Australia’s legislation is framed in a similar manner to NSW and is therefore likely to be interpreted in a similar vein. In Tasmania however, the Court concluded that “dangerous recreational activity” only extended to amateur sports (rather than professional sports). Further complicating the distinction, is that not all sports (professional or amateur) will fall within the definition of “dangerous recreational activities” — only those deemed to carry a “significant risk of harm.” This is determined objectively by considering the nature and degree of harm that might be suffered and the likelihood of the risk materialising. For instance, in *Falvo v Australian Oztag Sports Association*,<sup>244</sup> the Court found that Oztag, a sport requiring athleticism but whose rules restricted tackling did not include the risk of being struck by a hard ball.<sup>245</sup>
112. Queensland’s legislation’s definition is framed in similar terms to Tasmania’s, focusing on activities engaged in for “enjoyment, relaxation or leisure.” A “dangerous” recreational activity has been defined to mean an activity with a significant risk of harm,<sup>246</sup> which is an objective test which has regard to the activity itself and also the circumstances surrounding it.<sup>247</sup> “Significant” has been defined by authorities to mean more than trivial (but the risk does not need to be likely).<sup>248</sup>
113. However, for liability to be excluded, the injury must be both a “dangerous recreational activity” and the materialisation of an “obvious risk.” The statutory tests for “obvious risk” are similar in NSW, Victoria, Queensland, South Australia, Western Australia and Tasmania. Each of these jurisdictions effectively define “obvious risks” as being a risk that, in the circumstances, would be obvious to a reasonable person in the position of the plaintiff exercising ordinary perception, intelligence and judgement.<sup>249</sup> “Obvious” is defined by its ordinary meaning as being something which is “clearly apparent or easily recognised or understood.”<sup>250</sup> Whether a risk

is “obvious” requires consideration of the precise harm which results in a particular factual scenario. The obviousness of the risk must be considered from the perspective of the plaintiff, taking into account the plaintiff’s personal circumstances (such as level of experience in the sport, age, etc) prior to the accident occurring.<sup>251</sup>

114. Traditionally, courts have recognised that sports, by their very nature, involve the acceptance of a high degree of certain types of risk. Chief Justice Gleeson in the High Court case of *Agar v Hyde* stated:

“People who pursue recreational activities regarded as sports often do so in hazardous circumstances; the element of danger may add to the enjoyment of the activity. Accepting risk, sometimes to a high degree, is part of many sports.”<sup>252</sup>

115. The concept of “obvious risks” particularly in sport, often intersects with “inherent risks.” “Inherent risks” are risks that cannot be said to be avoided by the exercise of reasonable care and skill.<sup>253</sup> In addition to the exclusion of the materialisation of obvious risks (whether or not arising from taking part in a dangerous recreational activity), legislation in some state also excludes liability for the **materialisation of “inherent” risks.**

116. Risks that have been considered judicially to be “inherent” in the sport include the risk of collision while competing for a ball in the air in football,<sup>254</sup> the risk of being dumped by a wave while body surfing,<sup>255</sup> the risk of sustaining a serious injury caused by turbulence during landing during a skydive,<sup>256</sup> or colliding whilst skiing.<sup>257</sup> are likely to be construed as being obvious risks. Plaintiffs are said to have accepted inherent risks in sports when they agree to take part in that activity.<sup>258</sup>

117. However, courts have also recognised that voluntary participation in a sporting activity does not mean acceptance of all risks associated with that activity such as to automatically negate the existence of any duty of care. As argued in dissent by Justice McHugh in the High Court case of *Woods v Multi-Sport Holdings*,<sup>259</sup> “the law of negligence applies in the sporting arena with the

same force and effect as it does in the factory and on the roadway.”<sup>260</sup> By way of example, case law has **found negligence** in circumstances including where:

- a. a personal trainer was found to have breached his duty because he required or permitted his client to carry out a medicine ball exercise when the client was not fit enough, or well-conditioned enough to do so, causing injury.<sup>261</sup> The Court held that a reasonably competent personal trainer would be aware of the risks of injury associated with different exercises and of the physical condition of the persons for whom they are appropriate, and have some knowledge of the physiological consequences of requiring a client whose abs had not advanced to the point where such an exercise would be undertaken without risk of injury, to undertake that exercise;<sup>262</sup>
- b. a ski resort was negligent in failing to situate a ski operator near or close to the loading point of a chairlift to ensure that the bar of any incoming chairlift would be raised in a timely manner. The court held that a reasonable person familiar with the operation and layout of the relevant chair lift would have realised that, absent precautions, the arrival of a chair with its safety bar in the down position would be likely to result in injury to some of the skiers who were at the loading point facing uphill;<sup>263</sup>
- c. a quad bike instructor and the quad bike facility were found negligent by accelerating the instructor’s quad bike to an excessive speed in such a way as to oblige, (on the basis of his own instructions to “follow the instructor”), the participant to speed up, thereby causing her to fall;<sup>264</sup> and
- d. an aerial sling exercise operator was found negligent when it failed to provide thick crash matting to ensure class participants were protected from injury occasioned by a fall from the greatest anticipated height.<sup>265</sup>

## Winter sport accidents caused by decreasing snow depth and coverage

118. Winter sport is particularly susceptible to the impact of climate change. A 2021 study found that the onset of winter has shifted, and the average length of winter has decreased and was 3 days shorter in the 2000s compared to the 1950s (73 days v. 76 days).<sup>266</sup> The study concluded that due to climate change, by 2100 the average winter could be less than 2 months (including potentially a 166 day summer and 31-day winter).<sup>267</sup> In the European Alps, temperatures have risen by just under 2°C over the past 120 years, amounting to nearly twice the global average, leading to a 10-50% reduction in average winter snow depth and a 5 - 15% shortening of the ski season in the period 1931 to 2010.<sup>268</sup>
119. With low altitudes, Australian ski fields are particularly susceptible to reduction in snow depth and cover caused by a warming climate. A 2005 study by Nicholls identified a 10% decline in annual maximum snow depth between 1962 and 2002, whilst a 2013 study by Davis found that the average annual maximum snow depths were 15% lower in the period 2001 to 2010 compared to the 1961-1990 average.<sup>269</sup>
120. With a warming climate caused by anthropogenic climate change, snow coverage and depth is projected to continue to shrink, endangering the very existence of winter sports. A 2016 research paper found that even under a low emissions scenario, only 13 of the 21 previous winter Olympics host cities would have reliable enough snow conditions to enable the hosting of a winter Olympics in the 2050s.<sup>270</sup> This decreases to 10 under the high emissions scenario.<sup>271</sup> The research also predicted that February temperatures at past host cities would increase by an average of 1.9° - 2.1° by 2050s and by 2.7° - 4.4° by the 2080s.<sup>272</sup> The science shows that for every 1° temperature increase, the snowline elevation will rise by 150m, endangering the very existence of ski resorts lying below 1000 metres.<sup>273</sup>
121. Whilst a temperature range of between -10° and -1° is considered as optimum,<sup>274</sup> recent Olympic winter host cities have been experiencing significantly warmer temperatures<sup>275</sup>, with the 2014 Sochi Winter games being the warmest city to ever host the winter Olympics with average day-time highs of 10°.<sup>276</sup> The 2022 Beijing Winter Olympics was the first games which relied on 100% artificial snow.<sup>277</sup>
122. In Australia, studies by Hennessy et al. in 2003 and 2008 projected that the total area experiencing at least 60 days of snow cover would decrease by 17.5-60.3% by 2020 and 38.1-96.3% by 2050, relative to 1990 levels.<sup>278</sup> They also estimated that the length of the ski season<sup>279</sup> at low altitude ski resorts would decline by at least 30% by 2050 even under the low-emissions scenario.<sup>280</sup> A 2015 study by Pepler et al. projected a 30-70% decline in annual maximum snow depth relative to 1990 levels by 2050 at Falls Creek<sup>281</sup> (Vic) and Mt Hotham<sup>282</sup> (Vic), the major alpine resorts in Victoria, under a low-emissions scenario and average maximum snow depth declines of 15-20 cm under a high emissions scenario.<sup>283</sup> These grim projections are seemingly reflected in observed conditions, with only one year between 2005-2014 recording above-average peak snow depths at Spencers Creek (NSW)<sup>284</sup> and particularly poor ski conditions in 2006.<sup>285</sup>
123. Research also indicates that poor snow coverage and lower snow depths result in higher crash and injury rates. The four conditions responsible for unfair or unsafe conditions for snow sports include (1) narrow snow coverage (snow depth of less than 10cm is considered the most dangerous, although anything less than 30cm is considered sub-optimum<sup>286</sup>); (2) rain; (3) wet snow (caused by temperatures over +5°) and unacceptable temperatures of over 10° or below -20°.<sup>287</sup> Tellingly, the last 3 Winter Olympic games had 55% higher incident rates recorded among Olympic and paralympic alpine skiing/snowboarding/freestyle athletes than at previous winter Olympics.<sup>288</sup> It is predicted that that occurrence of the four unfair and unsafe conditions will continue to increase as a result of climate change.<sup>289</sup>

## Case study: Heat related illness and legal liability

124. Heat-related illness can occur as a result of exposure to extreme temperatures. Those participating in intense activity such as sport are particularly vulnerable. With climate change increasing the number of extreme heat days, the number of sporting heat-related illnesses will also undoubtedly rise.
125. Heat-related illnesses includes three main sub-categories of illnesses, being heat stroke/heat exhaustion, exertional heat injury (EHI) and exertional heat stroke (EHS), with exertional heat stroke being considered the most serious and deadly. A summary of these conditions is set out below:
- Heat stroke/heat exhaustion is classified as a mild to moderate condition involving symptoms of fatigue, transient ataxia, dizziness, headache.
  - Exertional heat injury (EHI) is classified as an immediate condition which occurs when core temperature is 38° or over and in which the patient can exhibit neurological symptoms including mild confusion and disorientation. A recent review of studies and academic literature on the incidence of EHI in sport found that EHI cases accounted of an average of 6.6% of total sporting injuries and medical encounters around the world.<sup>290</sup> The study revealed that running reported the highest rate of EHI per 100 participants, followed by tennis and cycling.<sup>291</sup>
  - Exertional heart stroke (EHS) is the most serious of the heat-related injuries and involves central nervous system dysfunction (which presents as symptoms of delirium and agitation. Exertional heat stroke generally occurs when the body temperature is over 40.5°. EHS is one of the top three causes of sudden death in athletes.<sup>292</sup> The US National Centre for Catastrophic Sport Injury Research found that since 1995, 47 high school and 13 college American football players have died from heat stroke.<sup>293</sup>
126. Whilst death is much more likely to occur when the

air temperature is over 40°, fatal injuries caused by heat-related illness have occurred in American football players when the air temperature was as low as 26-30° and relative humidity was 50 – 80%.<sup>294</sup> More recently, the Wet Bulb Globe Temperature (WBGT) has been used to measure extreme heat in sport and is considered more reliable than an external air temperature reading, as it takes into account temperature, humidity, wind speed, sun angle and cloud cover (solar radiation). The American College of Sports Medicine (ACSM) classifies WBGT readings into 5 zones, with Zone 5 being the zone of highest risk of serious injury and death. These zones include:<sup>295</sup>

Zone no.	WBGT
1	<22.2°C
2	22.3-27.9°C
3	27.9-30°C
4	30.1-32.2°C
5	>32.3°C

127. The ACSM has stated that continuing play a WBGT reading of 28° and over is considered 'extreme risk' for heat-related injury. Because of this, published advice recommending the cancellation of competitions if the WBGT reading is over 28°. <sup>296</sup>
128. A 2018 study into heat stress prevalence in the 360 matches in the first 4 rounds of the 2014, 2015 and 2016 Australian Open men's draw found that<sup>297</sup> with each increase in estimated WBGT zone there was a 47% increase in total doctor calls, a 41% increase in trainer calls for heat-related incidents, an 87% increase in post-match heat-related incident consults, a 55% increase in total heat-related incident consult, and a 53% increase in total calls for cooling devices. When medical and behavioural events were examined as a rate per 1000 hours, the largest increases in total heat-related incidents and total trainer calls occurred from zone 4 to zone 5 (76.5% and 22.6% increases, respectively). Further, the number of retirements significantly

increased in zone 5 (29.44 retirements per 1000 hours of match-play), with 2 of those retirements being specifically heat-incident related, whereas zone 4 had no heat-related retirements.

129. Whilst any sport played in relatively hot conditions may result in heat-related illness, an Australian-only study which looked at hospital admission data for 2002-2004 as provided by the Australian Institute of Health and Welfare<sup>298</sup> found that the most common sports for heat-related admissions were bat and stick sports (primarily cricket and softball), target and precision sports (golf and lawn bowls), and individual endurance sports (marathon running, jogging, triathlon and cycling).<sup>299</sup>

### Impact of heat-related injury in Australian sport

130. Extreme heat has already made an impact on Australian sport. Some examples include:
- English Captain Joe Root was hospitalised from heat exhaustion after an Ashes test match in Sydney in 2018.<sup>300</sup> The air temperature at the time was 42° and a heat-tracker in the middle of the ground showed a reading of 57.6°. The incident prompted calls by some former players and commentators for the ICC and Cricket Australia to adopt a heat policy.<sup>301</sup>
  - There were more than 4 days over 40° during the 2014 Australian Open prompting more than 9 players to withdraw<sup>302</sup> and for more than 1,000 spectators and several ball-kids were treated for heat exhaustion.<sup>303</sup> Players later criticised the organisers for proceeding with play despite the conditions.<sup>304</sup>
  - There were 3 days over 35° during the 2018 Australian Open,<sup>305</sup> leading to a number of games being postponed.<sup>306</sup> Many matches proceeded to the detriment of players, who would later voice their concern over the decision to continue play in what they considered were dangerous conditions.<sup>307</sup>
  - In 2006, the Tour Down Under race saw four consecutive days over 42°C and melting bitumen on parts of the racing track.<sup>308</sup>

131. Under the current emissions trajectory, the IPCC projects that the annual frequency of days over 35° may increase by 20-70% by 2030.<sup>309</sup> This means that more sporting competitions are likely to take place on extreme heat days.

### Extreme Heat Policies

132. In response to the increase in extreme heat days (and likely spurred by recent criticism by players and commentators for inadequate action), many sporting organisations have implemented extreme heat policies. A summary of the heat policies of national organisations and international organisations holding events in Australia can be found at **Annexure A**.

### Legal liability arising from heat-related injury

133. In the climate change context, we may see liability for player and spectator injury in a range of contexts against:
- the **governing body of the sport**, be it international (such as the International Cricket Council or FIFA) or national (such as Cricket Australia or Tennis Australia), for failing to create or amend the rules of the game/heat policy to avoid the risk of heat-related illness to players;
  - the **event organisers** (such as a regional or local club) for failing to provide adaptive measures on the day to mitigate the risk of heat-related illness (such as deciding to suspend or cancelling the match) and/or failure to provide adequate medical assistance (discussed in detail in section 3);
  - the **venue owner or operator** for failing to implement adaptive or mitigation measures in respect of stadium design and operation (such as the failure to close a retractable roof to increase shade (discussed in detail in section 4); and
  - the **referee or umpire** for failing to enforce the rules of the game/heat policy such as to

avoid the risk of heat-related illness to players (discussed in detail in section 5).

## Liability of Clubs

134. Under the model Work Health and Safety (WHS) laws which have been enacted in all states other than Victoria, any “person conducting a business or undertaking” (PCBU) owes a duty to ensure, so far as is reasonably practicable, for the health and safety of workers engaged or caused to be engaged by them, or whose work activities they influence or direct. PCBU includes sporting clubs that employ athletes, and governing bodies that manage and oversee events and competitions. There are also separate obligations on “officers” of the PCBU to exercise due diligence to ensure that the PCBU complies with its health and safety duties.

135. The WHS laws’ requirement to ensure, so far as reasonably practical, the health and safety of workers extends to the:

- provision and maintenance of a safe work environment;
- provision and maintenance of safe plant and structures;
- provision and maintenance of safe systems of work;
- safe use, handling and storage of plant, structures, and substances;
- provision of accessible and adequate facilities (for example access to washrooms, lockers, and dining areas);
- provision of any instruction, training, information, and supervision;
- monitoring of workers health and conditions at the workplace; and
- maintenance of any accommodation owned or under their management and control to ensure the health and safety of workers occupying the premises.

136. **In the context of minimising or avoiding heat-related illness**, a duty to provide a “safe system of work” may include a duty on the Club to:

- a. ensure, at the Club level, that any heat policy is implemented during training and any games organised by the Club; and
- b. that there is appropriate medical assistance available at practice or at any games organised by the Club to avoid injury.

137. However, as discussed in paragraphs 110-118 above, all jurisdictions apart from NSW exclude professional athletes from works compensation schemes (NSW excludes those athletes which are part of the Sporting Injuries Insurance Scheme). There are however some obligations that still apply under State provisions.<sup>310</sup>

## Economic Liability Risks

### Cancellations and suspensions due to extreme weather events

138. Examples of cancellations and suspensions of sporting events in Australia due to extreme weather events include the following:<sup>311</sup>

- a. extreme rainfall led to the inundation of Lang Park (formerly Suncorp stadium) in Brisbane in 1.5m of water in January 2011 requiring rugby league, rugby union and football matches to be played away from home grounds;
- b. over 44° temperatures on 11 February 2017 led to the cancellation of the A-league’s Newcastle v Melbourne Victory match, and all under-18s NSW football trial games;
- c. the December 2019 Safety of Life at Seat Trusts (SOLAS) Big Boat Challenge, one of Sydney’s premier yacht races and a warm-up event for the Sydney to Hobart race, was cancelled due to poor visibility on Sydney Harbour arising from bushfire smoke;
- d. the suspension of a Big Bash League (BBL) cricket match at Manuka Oval in Canberra on 21 December 2019 after a curtain of thick noxious smoke from the 2019/2020 bushfires blew over the field;
- e. the 2006 — 2009 Millennium Drought caused more than half of rural Victoria’s community sporting leagues in 2017 to be delayed or cut short due to ground closures;<sup>312</sup>

- f. electrical and thunderstorms in Perth postponed an A-league match between Sydney FC and Perth Glory in December 2011 because it was not safe to travel;
  - g. extreme heat in South Australia in 2018 and 2019 led to the shortening of the route of the Tour Down Under cycle race; and
  - h. the December 2019 Perth Ascot horse race was cancelled due to extreme heat.
  - i. On 19 March 2023, high temperatures of around 38° in Western Sydney led to delay of start of the A league match between Macarthur and Melbourne City until the evening. The AFL and NRL chose to continue to play. Some reserve NRL players vomited due to extreme heat and a stadium employee collapsed an hour before the NRL game between Bulldogs and Tigers started.
139. Examples of cancellations and suspensions globally include:
- a. the cancellation of 25 English Football League fixtures during the 2015-2016 season;<sup>313</sup>
  - b. the cancellation of the New York triathlon in 2019 following a forecast temperature of 37°;<sup>314</sup>
  - c. the cancellation of Cycle Oregon in 2017 as a result of unhealthy and hazardous air quality following the wildfires;<sup>315</sup>
  - d. the loss of over 20% more playing time at golf courses across Greater Glasgow in 2016-2017 compared to 2006-2007 due to intense rainfall;<sup>316</sup>
  - e. the cancellation of 3 matches at the 2019 Rugby World Cup in Japan as a result of Typhoon Hagabis. This was the first time in Rugby World Cup history that matches were cancelled;<sup>317</sup>
  - f. the cancellation of 1 Premier League game, 6 Women's Super League matches and widespread postponements of matches in the Dutch and Belgian football leagues due to Storm Ciara in 2020;<sup>318</sup>
  - g. the cancellation of the January 2017 American Birkebeiner Challenge, North America's largest cross-country skiing event<sup>319</sup>; and
  - h. the December 2017 cancellation of the St.

Moritz Para Alpine Skiing World Cup in Switzerland.<sup>320</sup>

### Legal consequences of cancellation and suspensions

140. Cancellation and suspensions of matches have significant economic flow-on effects because of the complex network of contractual arrangements, including broadcaster/media agreements, venue hire agreements, sponsorship agreements, merchandise and licensing agreements and ticketing agreements. These are discussed in detail at paragraphs 143 to 144. Broadcasters in Australia have a significant vested interest in sport given it represented 30.2% of total Free-to-Air and 29.2% of pay TV revenue in 2017.<sup>321</sup> The total value of sports media was assessed as being \$3.9 billion in 2016/2017.<sup>322</sup>
141. The cancellation and suspension of games arising from the physical effects of climate change also has legal consequences for sporting organisations and event organisers which can lead to economic loss. This may include the following:
- a. claims brought by broadcasters and/other parties arising from a breach of contract; and
  - b. claims brought by players in respect of loss of potential earnings arising from a competition that has been suspended or cancelled. Such a claim would more likely arise in circumstances such as the Tennis Grand Slams, where payment occurs after winning each round.<sup>323</sup>

### Breach of contract arising from a suspension or cancellation of a sporting event

142. Large sporting events are subject to complex contractual arrangements. In respect of the Tokyo 2020 Olympic Games, this included:
- a. host city agreement between the International Olympic Committee (IOC) and the local organising committee (LOC) granting Tokyo the rights to host the games;
  - b. venue hire agreements between the LOC and venue owners and sub-contracts between venue owners and caterers, cleaners, ticketing and equipment providers;

- c. sponsorship agreements between the IOC, LOC and sponsors;
  - d. broadcasting agreements between the IOC, LOC and national and international broadcasters; and
  - e. merchandise and licensing agreements; and
  - f. ticketing agreements with consumers attending the Olympic events.
143. The impact of a sporting event cancellation (such as the Olympics) will depend on the specific wording of the agreement. Relevant questions include:
- a. whether there is an express right to terminate under the contract;
  - b. whether there is a force majeure clause in the contract;
  - c. whether the general law principle of “frustration” applies; and
  - d. whether the parties are under an obligation to mitigate their loss.
144. Finally, in the event that loss is suffered as a result of a cancellation or postponement, event organisers should have insurance coverage.

## Termination

145. Contracts may contain express termination clauses. For example, the Melbourne 2006 Commonwealth Games Host City Agreement reportedly had an express cancellation clause which provided that “If the Games are not held for any reason, save as expressly stated in this Agreement, M2006 [the Local Organising Committee] will not be liable in any way to the Provider [the Commonwealth Games Governing Body] by reason of the termination or cancellation.”
146. If a contract contains an express termination clause, a number of issues should be considered:
- a. What are the permitted grounds for termination? More specifically, is there a right for termination for convenience (aka termination for any reason), or only a right to termination arising out of one party’s breach of the contract?

- b. What are the steps that need to be taken to exercise a termination right e.g. are there specific notice periods and notice requirements that need to be taken into account?
- c. What are the consequences of termination? Contracts may contain:
  - i. liquidated damages clauses, pursuant to which the party that is in breach and/or terminates the contract pays the innocent party a sum of money specified as compensation; and/or
  - ii. indemnity clauses, which provides that the breaching/terminating party pay the innocent party for loss or damage arising out of the breach; and/or
  - iii. refund clauses (generally in terms of tickets to consumers), which allow for the event organiser to institute a refund in the event of event cancellation. By way of example, AFL ticket terms and conditions contain the following clauses:

*The AFL may delay, reschedule or cancel the Match, event or function, including as a result of COVID-19 restrictions, regulations or directions issued by the relevant State or the Federal Government or the AFL.*

*In such circumstances, you will only be entitled to a refund for your ticket in accordance with these Conditions or where otherwise required by law.*

*If a Match, event or function is cancelled or rescheduled to another date and/or venue, you will be entitled to a full refund of the face value of your ticket(s) purchased for that Match, event or function (excluding in respect of any complimentary tickets). Where a refund is made, the relevant ticket agent may, to the extent permitted by law, retain any fee it has charged for its ticketing services.*

*The AFL will not be liable for any indirect losses as a result of the postponement, cancellation, rescheduling or relocation of the Match, event or function including losses in relation to accommodation and flights*

147. Under the Australian Consumer Law, three consumer guarantees are implied into the contract between ticket-holders of a sporting event and the event organisers. These include that:
- (1) services will be provided with due care and skill;
  - (2) that services are fit for their purpose; and
  - (3) that the services will be supplied within a reasonable time. The termination of a contract as a result of cancellation of a game will usually give rise to a legal requirement to issue a refund under the ACL.<sup>324</sup>

### Force Majeure

148. Some contracts may contain a ‘force majeure’ clause which sets out the parties’ obligations during an unforeseeable event. A ‘force majeure’ event is one which is:<sup>325</sup>
- a. irresistible, in the sense that it was completely beyond the parties’ control, and they could not have prevented its consequences;<sup>326</sup>
  - b. unforeseeable;
  - c. external to the person/party relying on it (i.e. cannot be an event that arises out of a party’s own acts or omissions); and
  - d. makes contractual performance impossible and not merely onerous or difficult.
149. Courts generally construe force majeure clauses narrowly, meaning that any event that is not explicitly listed in the force majeure clause as a triggering event would be unlikely to trigger the operation of the clause. Expressly named triggering events in force majeure clauses typically include “Acts of God” and natural disasters. “Natural disasters” would generally cover acute physical climate change events, such as tropic cyclones, floods and bushfires. Physical climate change events — such as sea-level rise — are unlikely to fit this definition. Events such as heat waves are also unlikely to meet the definition of “natural disaster.” This could be problematic where sporting events are either postponed or cancelled due to extreme heat. In such circumstances, sporting event organisers may be forced to choose between potentially breaching their duty of care to

players and spectators to avoid the foreseeable risk of heat-related injury or breaching their contract and being potentially liable for damages.

150. To counter this issue, there has been development in drafting climate-specific termination and risk sharing clauses. The Chancery Lane Project<sup>327</sup> is a repository of precedent contract clauses drafted by top international contract lawyers which deal specifically with climate-change issues. One such precedent clause states:<sup>328</sup>

*“If a party is prevented from performing its obligations under this Agreement due to a **Climate Change Event** or Pandemic, the party shall as soon as reasonably practicable after the start of the Period of Disruption [or earlier date], notify the other party and provide details of:*

*(a) Its understanding of the existence, location and nature of the Climate Change Event or Pandemic; and*

*(b) how the Climate Change Event or Pandemic has prevented and will continue to prevent it from performing its obligations under the Agreement.”*

151. ‘Climate Change Event’ is defined as:

*“an event, series of events or circumstance arising from the physical impacts of climate change that is either Pan-terra or Epi-terra in scope and prevents a party from performing its obligations under this Agreement [including an obligation to pay money], and includes but is not limited to:*

*a) unavailability of water, clean air or other natural capital required by a party to manufacture or supply the [Products/ Services];*

*b) damage to a party’s premises, including flooding due to sea level rise or an increased intensity of rain and storms;*

*c) disruption of logistics and transport systems relied on for the supply and distribution of key inputs or outputs;*

*d) unsafe working conditions due to heat stress, extreme weather or increased disease;*

*e) damage or disruption to food supply chains, housing or transport affecting the availability of food, shelter or transport for workers;*

- f) unavailability of insurance; and
- g) unavailability of workers for other reasons caused by the event”

### Frustration

152. When a contract is no longer capable of being performed as agreed because of the impact of an intervening act outside the parties’ control, the common law doctrine of ‘frustration’ applies such as to discharge the parties from their contractual obligations.<sup>329</sup> For an event to give rise to the doctrine of frustration, it will need to:
- a. significantly/radically change the nature of the outstanding obligations and rights;
  - b. not to have been caused by the contracting parties;
  - c. not be anticipated by the contract or reasonably contemplated by the parties; and
  - d. render performance of the contract unjust in the circumstances.
153. Courts have traditionally kept a tight grip on the doctrine of frustration and have sought to keep it within narrow bounds. For example, the NSW Court of Appeal held that a contract for the purchase of a hotel which was due for completion a few days after the COVID-19 lockdown came into effect in Sydney (such that the only options for the hotel were to operate as a take-away venue) was not frustrated because the risk did not create a “fundamentally different situation for which the parties had no provision.”<sup>330</sup> Ultimately, the Court held that all the critical components of the contract, being the sale and transfer of assets for an agreed price, remained actionable. Further, the vendor had not provided any warranties guaranteeing the future financial performance of the business, such that a reduction in revenue occasioned by the COVID-19 lockdown was considered to be a risk that the purchaser was prepared to accept.
154. The doctrine of frustration would generally only be triggered where there is no force majeure clause. This is because frustration refers to an event that could not be anticipated by the contract or reasonably contemplated by the parties.<sup>331</sup> Having an event captured by a force majeure clause would

suggest that such an eventuality was contemplated by the parties (and therefore contracted in).

155. The question of whether an acute or chronic climate change impact is not anticipated or reasonably contemplated by the parties is a difficult one. Given the state of climate change science, there is a general knowledge and foreseeability about the impact of the physical effects of climate change, including acute and chronic impacts. However, the authorities also provide that the mere fact that the parties foresaw an event of the same “kind” as that relied upon (in arguing frustration) is not a sufficient ground for saying that the event was foreseen.<sup>332</sup> Rather, the parties must have foreseen the occurrence of the event as a serious possibility.<sup>333</sup> Of course, it could be argued that where sporting events take place outdoors and at the ‘mercy of the elements,’ chronic conditions such as heatwaves or moderate to heavy rain is likely to be something that is a serious possibility. However, other acute weather events, such as a tropical cyclone may not be regarded as being a “serious possibility”, particularly in circumstances where the historic occurrence of such events has been very low and therefore such events would not have been in the contemplation of the parties.

### Loss mitigation

156. Mitigation refers to the steps that a party could take to reduce its loss.<sup>334</sup> Often contracts contain a clause which requires parties to mitigate their loss in the event of a breach or the activation of the force majeure clause.
157. The most common standard of mitigation is to take “reasonable steps,” however contracts may provide more stringent standards, including a requirement to take “all reasonable steps” (which courts have interpreted as meaning “best endeavours” or “best efforts”) or to take certain specific steps which are spelled out in the contract.
158. In the context of loss arising from a climate-change event, mitigation measures may include following the steps set out in the organisation’s disaster management plan (such as a flood management

plan) or heat-policy, following industry practice in respect of heat management, and/or following medical advice.

## Insurance

159. One way in which event organisers can manage risk associated with postponement and cancellation caused by adverse weather, is by taking out insurance policies. There are specific sports event insurance policies which provide cover in the event of cancellation or postponement of events. It is important that any cancellation or postponement clauses cover adverse weather conditions, as many policies exclude this, and/or require the payment of additional premiums to cover this risk. An example of one insurance policy that covers cancellation or abandonment and postponement or rearrangement caused by adverse weather includes (the title of the cover states "Cancellation, Abandonment or Postponement including Adverse Weather conditions):

### **Part 1 — Cancellation or Abandonment including adverse weather conditions**

We will reimburse irrecoverable expenses incurred by You (less any income You have received from any source relating to the Event), up to the amount shown in the certificate.

The Cancellation or Abandonment of the Event must be because of circumstances which are unforeseen, unavoidable and beyond Your control (unless excluded under this section); where the Event cannot go ahead at any time in the future.

Alternatively, we will pay all necessary additional expenses incurred by You to avoid or reduce a loss under this section provided such expenses do not exceed the sum of the original loss.

### **Part 2 — Postponement or Rearrangement**

If circumstances arise that threaten Postponement or Cancellation of the Event, We will either pay the additional costs incurred to enable the Event to take place on the Event Date or We will pay the additional costs incurred to enable the Event to take place at a future date. We will not pay more than the

sum Insured shown under section 4 of the certificate in respect of claims arising under both Part 1 and Part 2 of section 4.

160. 'Adverse weather' is defined in the Policy as:

*Weather conditions which:*

1. *Pose a threat to the life or limb of the public attending the Event as agreed by the event's Health and Safety Official (or an appropriate emergency authority).*
2. *Cause the venue to become inaccessible or unusable.*
3. *Pose a threat to the life or limb of the participants due to take part in the event.*

*Evidence will be needed to support any claim, including Photographic evidence, Met Office records and the Health and Safety official's statement.*

161. Conditions that apply to the policy require that the Insured:

- i. *Take all necessary precautions to prevent or reduce the likelihood of a loss, destruction, damage, accident, or injury from occurring,*
- ii. *Maintain the Venue (including its fixtures & fittings), machinery, Event Equipment in a good and safe state of repair whilst in Your custody, care, and control,*
- iii. *Take care in the selection, supervision, and training of any Employees.*
- iv. *Comply with any manufacturers guidelines and instructions of any Event Equipment used at the Event,*
- v. *Comply with all relevant statutory requirements i.e. lawful requirements relating to the safety of persons and property used at and during the Event*

162. It is important to take note of any applicable exclusion clauses. Relevant exclusion clauses may include (and included in this example policy):

- a. *circumstances expected to cause cancellation, abandonment, or postponement of the game day/event, which were known to the Insured prior to and/or at the commencement of the policy; and/or*

- b. claims arising directly or indirectly from inclement or adverse weather where the Policy was purchased a number of days (commonly 14 days) before/after the date of the event.

## Conclusion

163. Sporting event organisers are exposed to the potential for economic loss arising from the failure to fulfill obligations under contracts as a result of acute and chronic impacts of climate change leading to event postponement or cancellation. Whilst force majeure clauses and/or the doctrine of frustration could assist, as the impacts of climate change become more prevalent in managing loss caused by unexpected and unforeseen acute climate change impacts, in order to manage the chronic impacts of climate change (such as heatwaves), event organisers will ultimately need to manage risk through insurance, being cognisant of applicable conditions and exclusions.

## Climate Change Disclosure

### The legal position

164. Our review of 314 Australian national and state sporting organisations reveals that all organisations are either public companies limited by guarantee or incorporated associations. As such, the below analysis focuses on the disclosure obligations position in respect of these two corporate structure types.
165. Whilst the specific content and scope of disclosure requirements on sporting organisations varies depending on the corporate structure, size, revenue and (for incorporated associations), the state of incorporation, the general observations below apply. Climate risk does however require a considered response from companies and directors. The failure to consider climate risks could give rise to breaches of directors' duties and the benchmark for expectations of regulators and consumers is continuing to rise. A short summary of Directors duties in relation to climate change can be found at **Annexure L**.

### Obligations on sporting organisations

166. All mid-sized<sup>335</sup> and large **public companies limited by guarantee**<sup>336</sup> are required, under Part 2M.3 of the Corporations Act (2001) (Cth) ('Corporations Act'), to annually prepare:
- a. a financial report, which includes financial notes and directors' declarations as to the statements and notes to the financial report; and
  - b. and directors' report.
167. The Financial Report (including notes) must give a "true and fair view" of the company's financial position and performance. All public companies limited by guarantee other than companies with less than \$250,0000 in revenue for the financial year are also required to comply with the Australian Accounting Standards when drafting their financial reports. Only large public companies limited by guarantee (defined as companies with annual revenue of \$1 million or more) are required to have their financial report audited.
168. Directors' reports prepared by companies limited by guarantee are required to<sup>337</sup>:
- a. contain a description of the short- and long-term objectives of the organisation;
  - b. set out the organisation's strategy for achieving those objectives;
  - c. state the organisation's principal activities during the year;
  - d. state how those principal activities assisted in achieving the organisation's objectives; and
  - e. state how the organisation measures its performance, including any key performance indicators used by the organisation.
169. Reporting requirements for **incorporated associations** vary from state to state, however all states require incorporated associations to comply with a basic level of disclosure and, in all jurisdictions apart from South Australia and Western Australia, they must lodge a copy of their accounts and financial statements with the relevant regulating department (such as the Department of Fair Trading in NSW).

170. By way of example, NSW operates a two-tier system for financial reporting of incorporated associations. A ‘Tier 1 association’, which is subject to more rigorous reporting obligations, includes organisations with annual total revenue over \$250,000 or current assets worth more than \$500,000. Tier 1 associations are further sub-divided into associations with total revenue of more than \$2 million in a financial year, and those with less than \$2 million. Whilst all Tier 1 associations are required to disclose financial reports, ensure that they give a “true and fair view” and have the statements independently audited, only Tier 1 associations with total revenue of more than \$2 million in a financial year must prepare their financial statements in accordance with Australian Accounting Standards Board (AASB) standards. This effectively means that these organisations are subject to the same disclosure obligations as companies limited by guarantee. ‘Tier 2 associations’ are only required to prepare simplified financial reports that give a true and fair view of the association’s affairs which comprise of a balance sheet, details of any mortgages, charges and other securities, and a separate income and expenditure statement and balance sheet for each trust for which the association is the trustee. Tier 2 associations are not required to audit or review their financial statements independently (although NSW Fair Trading can direct that an audit be carried out).
171. “True and fair” is not defined in the Corporations Act. Early English law provides a conservative interpretation of “true and fair” as requiring that the balance sheet shows that the financial position of the company “is at least as good as stated, not showing that it was not or may not be better.”<sup>338</sup> Accounting Standards AASB 101 defines the “fair presentation” of financial reports as requiring that they are:
- a. relevant, in the sense of being material; and
  - b. a faithful representations of the effects of transactions, other events and conditions in accordance with the definitions and recognition criteria for assets, liabilities, income and expenses.
172. A “material” risk or (material information) is defined by AASB Accounting Standard 1031 as being any “*information which if omitted, misstated or not disclosed has the potential to adversely affect decisions about the allocation of scarce resources made by users of the financial report or the discharge of accountability by the management or governing body of the entity.*”
173. In April 2019 the Australian Accounting Standards Board and the Auditing and Assurance Standards Board issued a Guidance note entitled ‘Climate-related and other emerging risks disclosures: Assessing financial statement materiality using AASB/IASB Practice Statement 2’ (AASB/IASB Practice Statement 2)<sup>339</sup> which, whilst not mandatory, reflects the “best practice” in terms of the application of materiality assessments to climate change risk. The guidance recommended that where investors reasonably expect that climate-related risks have a significant impact on the reporting organisation or would qualitatively influence investors’ decisions (regardless of the quantitative impact on the financial statements), disclosure should occur.<sup>340</sup> In October 2023, the AASB issued a Sustainability Reporting Exposure Draft (ED SRI)- Australian Sustainability Reporting Standards- Disclosure of Climate-related Financial Information, with submissions requested by 1 March 2024.<sup>341</sup>
174. ASIC has recommended listed companies with material exposure to climate risk consider reporting under the TCFD framework.<sup>342</sup>
175. In June 2023 the International Sustainability Standard Board (ISSB) released Exposure Draft IFRS S2 Climate-Related Disclosures, which requires disclosure based on the TCFD’s Governance, Strategy, Risk Management and Metrics and Targets Framework. In respect of disclosure of financial information, it provides that:
- “An entity shall disclose information that enables users of general purpose financial reporting to understand the effects of significant climate-related risks and opportunities on its financial position, financial performance and cash flows for the reporting period, and the anticipated effects over the short, medium and long*

*term—including how climate-related risks and opportunities are included in the entity's financial planning. An entity shall disclose quantitative information unless it is unable to do so."*

176. In December 2022, the Commonwealth Treasury also released a discussion paper on climate related disclosures seeking initial views on key considerations for the design and implementation of the Government's commitment to standardised, internationally aligned requirements such as with the ISSB, for disclosure of climate related financial risks and opportunities in Australia.<sup>343</sup>
177. Financial disclosure of Climate Change risk can take the form of:
- a. taking into account climate change risk in assumptions regarding revenue or demand projections. This should occur even in circumstances where the company forms a view that climate change has no impact. AASB/IASB Practice Statement 2 states that "entities in sectors particularly impacted by climate-related risks should disclose their assumptions regarding climate-related risks, regardless of the quantitative impact";
  - b. recognising the impairment of assets, such as property, plant and equipment, intangible assets and goodwill, caused by climate-change. AASB/IASB Practice Statement 2 recommends disclosure of how climate-related risks have been factored into the recoverable amount calculation of assets. Impairment of assets could also affect future estimated cash in-and outflows;
  - c. recognising a reduction in the useful life of assets caused by climate change which impacts the amount of depreciation or amortisation recognised;
  - d. provision for increases costs associated with climate change, such as disruptions to the supply chain, or increased costs to rectify damage to property caused by climate change;
  - e. factoring climate-change risk into assumptions used in the calculation of an asset's fair value;
  - f. recognising an increase in credit risk caused by climate-change risk as a result of changes to the regulatory, economic or technological environment of the borrower that results in a significant change in the borrower's ability to meet its debt obligations;
  - g. recognising an onerous contract provision as a result of potential loss of revenues or increased costs under different climate-change risk scenarios; and
  - h. recognising a provision and contingent liability as a result of responding to the risks of climate-change. For example, recognising a contingent liability for potential litigation and fines/penalties due to stricter climate change regulations.
178. There can be a potential breach of disclosure obligations where an organisation:
- a. fails to account for climate change risk in the financial report where climate change is a material risk;
  - b. fails to disclose information that materially impacts key assumptions underpinning financial position and performance;
  - c. in its directors' report, fails to provide adequate information on the impact of climate change on the operations, financial position, business strategy and prospects for future years;
  - d. fails to disclose the impact of new climate change legislation, in circumstances where the legislation materially affects the company's operations, financial position and/or performance; and
  - e. overstates or misrepresents its resilience to climate change risk.

### **Obligations on Directors**

179. Directors of sporting organisations may be liable for both disclosure breaches and for breaching their directors' duties under the Corporations Act and equity.
180. In terms of disclosure, directors are required to sign the Directors' declaration to the Financial Reports, which confirms that (if a mid or large sized

public company limited by guarantee), the financial reports are in compliance with the accounting standards, and (for all companies limited by guarantees), that the financial statement and notes provide a true and fair view of the organisation's financial performance and position. Directors who fail to take all reasonable steps to comply with the disclosure requirements required for their organisation will be liable for a civil penalty.<sup>344</sup>

181. Directors also have duties under the Corporations Act to:

- a. exercise their powers and discharge their duties with the degree of care and diligence that a reasonable person would exercise if they were a director or officer of a corporation in the corporation's circumstances and had the same responsibilities within the corporation as the director or officer (**Due Care and Diligence Duty**);
- b. exercise their powers and discharge their duties in good faith and in the best interest of the corporation and for a proper purpose; and
- c. not improperly use his or her position to gain an advantage for themselves or someone else or to cause detriment to the corporation;

182. Directors also have an equitable duty as fiduciaries to avoid conflicts of interest and to not make undisclosed personal profits while acting in their position as directors.

183. In 2016 Noel Hutley SC and Sebastian Hartford Davis issued a Legal Opinion which held that directors who fail to consider climate change risks now could be found liable for breaching their Due Care and Diligence Duty in the future.<sup>345</sup> In their supplementary opinions in 2019<sup>346</sup> and 2021,<sup>347</sup> it was noted that the standard of care to be exercised by directors with respect to climate change has risen and continues to rise, and that regulators now expect more than cursory acknowledgment and disclosure of climate change risk — there is an expectation of “rigorous financial analysis, targeted governance, comprehensive disclosures and, ultimately, sophisticated corporate response at the individual, firm and system level.”<sup>348</sup>

184. A director may be in breach of their Due Care and Diligence Duty by:

- a. failing to turn his/her mind to the issue of climate change;
- b. giving inadequate or superficial consideration of climate change risk;
- c. failing to critically evaluate the impact of climate change risk on the company, including the impact on the financial position and performance of the company, and on the company's strategy and risk management. If directors lack the skill set to properly consider and analyse climate change risks, they will need to obtain specialist advice from those that have that skill set (employees or experts);
- d. failing to critically evaluate any advice provided on the impact of climate change risk. This is particularly critical when directors are provided with information and advice by employees or experts which downplays climate change risk and/or the company's resilience to climate change risk and/or recommends that no action is taken; and
- e. failing to monitor and oversee a robust corporate risk and reporting system that identifies and manages climate risks, including:
  - i. failing to make proper inquiries as to whether climate-change related risk factors have been integrated into the company's strategy and risk management; and
  - ii. failing to make proper inquiries as to whether climate-related risk factors have been accounted for in the financial statements and notes and/or the directors' report; and
- f. failing to review strategy and risk management following material changes in climate change laws. For example failing to consider revenue forecasts after a major customer announces net zero or emissions reductions targets which materially affect projected demand and/or revenue.

185. Other potential breaches of directors' duties include:

- a. failing to take all reasonable steps to comply with the company's financial reporting requirements;<sup>349</sup>

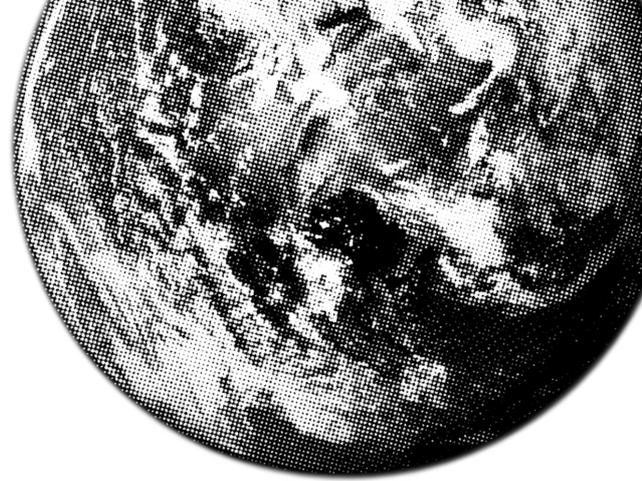
- b. failing to disclose his/her affiliation with an external body, company or individual which has a material impact on the director's assessment of climate change risk. Such circumstances may include where the director has a significant shareholding in a fossil fuel company or is on the board of a political organisation that takes a position on climate change that deviates from that which is considered by peer professional opinion to be reasonable (such as a group adopting a climate change denial position). Whilst this is a very novel argument, such a failure to disclose could potentially be a breach of the director's duty to act in the best interests of the corporation and for a proper purpose and be a breach of the director's equitable duty to avoid conflict.

### How climate change risks can be disclosed by sporting organisations

186. Climate change can be quantitatively disclosed in the financial reports of sporting organisations by:
- a. provisioning for increased costs associated with dealing with the consequences of chronic physical climate change risks, such as remedial and rectification works in the event of stadium or other sporting infrastructure damage following an extreme weather event;
  - b. provisioning for increased costs associated with adaptation works necessary to deal with mitigating against future acute and/or chronic climate change risks;
  - c. provisioning for increased costs associated with implementing a climate change strategy; and
  - d. provisioning for increased costs associated with increased insurance premiums.
187. Climate change can also be qualitatively disclosed in the financial (and other) reports of sporting organisations by setting out the ways in which climate change:
- a. has already impacted the organisation, including its operations, revenue and risk management. This could include the impact of extreme weather on competition suspensions

or delays or on damaged infrastructure or equipment; as well as how the organisation anticipates climate change will impact its organisation in the future; and

- b. the ways in which the organisation will respond to climate change risk, including mitigation and adaptation strategies. This can be undertaken in the context of existing strategic and/or risk management frameworks or can involve the development of a separate Climate Change or Sustainability Strategy.
  - i. examples of mitigation strategies include actions to reduce the organisation's emissions, such as investing in more energy-efficient energy systems, using renewable energy or reducing emissions from waste by implementing landfill-reduction policies; and
  - ii. examples of adaptation strategies include actions to adapt to the effects of climate change, such as adapting infrastructure for adverse weather through the installation of retractable roofs, or, in respect of governing bodies who have authority to make changes to the rules of the sport — considering further changes to heat and adverse weather policies to ensure the safety of players and/or whether tournaments need to be moved to cooler months of the year. For example, the FIFA World Cup in 2022 was moved to November to address the extreme heat in Qatar during the summer months when the World Cup is generally played.



## Section 6

# Liability of owners and occupiers of sporting venues

188. Many sporting organisations lease or operate their sporting venues (including ovals and training facilities) from premises owners, who either are private owners or councils. Under common law, occupiers are under a duty to take reasonable care to avoid foreseeable risk of injury to another person on the premises by reason of the state or condition of the premises.<sup>350</sup> In some states, the common law has been abolished by statute and now incorporated into the relevant statutory duties. An “occupier” is defined at law as a person (or entity) who is in control of the particular venue or place and decides how it is used and can control who to admit or exclude from the land/premises.<sup>351</sup> “Foreseeable risks” in law are all risks caused by the state or condition of the premises which are not “far-fetched or fanciful.”<sup>352</sup>
189. Sporting associations who either own or lease properties or sporting fields are likely to be occupiers. This means that sporting associations, as occupiers, will owe a duty to take reasonable care to avoid foreseeable risk of injury to any person, including to players, spectators, referees and umpires, as a result of the state or condition of the premises.
190. Where an occupier is a tenant, there can be some ambiguity as to whether liability for an injury is owed by the tenant or the landlord. Ultimately, both can be held to be liable, however the liability of the landlord is limited to injury that occurred because the landlord did or failed to fulfill an obligation to maintain or repair the premises.<sup>353</sup> Landlords generally satisfy this duty by undertaking an inspection for defects at the start of the tenancy. Landlords will not be liable if they engage either a lay person or an expert (if circumstances require the attention of an expert) to undertake an inspection for defects and the inspector is unable, after undertaking a reasonably competent inspection, to locate a defect.<sup>354</sup>
191. Once the existence of a duty is established, the content and scope of the occupier’s duty of care may be affected by factors such as:<sup>355</sup>
1. the magnitude of the risk, as perceived by a reasonable occupier;
  2. the degree of probability of the risk’s occurrence;
  3. the expense, difficulty and inconvenience of taking reasonable precautions;
  4. the obviousness of the harm;
  5. the type of occupier;
  6. the degree of the entrant’s skill or knowledge;
  7. any dangerous behaviour engaged in on the part of the entrant,<sup>356</sup> and whether the occupier knew of a specific risk of harm arising from known dangerous behaviour by the entrant,<sup>357</sup>

8. the purpose of entry by the entrant;<sup>358</sup> and
  9. whether the entrant was a trespasser, and whether the presence of the trespasser was reasonably foreseeable.<sup>359</sup>
192. Whilst common law governs occupier's liability in NSW, Queensland and Tasmania, in the remaining states and territories (being ACT, NT, SA, Victoria and WA) occupier's liability is governed by statute.<sup>360</sup>
193. In addition to the occupier's duty of care that will be owed to spectators, sporting organisations who organise sporting events will owe a general law duty of care to take reasonable steps to plan the sporting event. This duty requires that organisers take adequate and reasonable steps to mitigate against foreseeable loss or damage to players. The same defences of obvious risk and inherent risk and dangerous recreational activity apply, as discussed in paragraphs 111-117 above.

## Occupiers duty to ensure Player safety

### The legal position

194. In the sporting context, the owner and occupier of a sporting venue and/or the organiser of a sporting event may owe a duty to players to ensure that:<sup>361</sup>
- a. land and buildings are properly maintained;
  - b. dangerous areas and equipment are secured;
  - c. sporting equipment is maintained and is as safe as possible;
  - d. playing fields, racing tracks and recreational areas are maintained at the standard that will not cause or exacerbate injuries;
  - e. appropriate inspections are carried out on equipment and playing surfaces/fields to ensure safety and appropriate maintenance; and
  - f. risk assessments and safety audits are carried out in respect of events organised by the sporting organisation-occupier.
195. The authorities suggest that in considering the content, scope and standard of care owed by occupiers they will take into account the same factors outlined in paragraph 192. Relevant case examples are set out in Annexure B.

## Application to climate change

196. In the context of climate change, liability for owners and occupiers of sporting fields and venues could arise where:
- a. players are injured because of poor weather conditions that impact the condition of the premises or the grounds from heat/water impact.
  - b. a stadium owner/operator has failed to implement mitigation measures, such as failing to expand a retractable roof such as to provide shade during an exceedingly hot day, to keep out the rain during an excessive period of heavy rain, or to keep out bushfire smoke;
  - c. a sporting organiser fails to undertake adequate inspections of the relevant playing surfaces which have been impacted by adverse weather; and
  - d. a sporting event organiser has failed to undertake risk assessments considering the impact of extreme weather on players.
197. Sporting organisations may also be vicariously liable for the negligence of their officials, referees and coaches. For referee liability see section 5 of this report.
198. In determining whether a duty of care exists in respect to the above, the court will likely consider factors such as:
- a. whether the player is a professional or an amateur/volunteer;
  - b. whether the owner or occupier is carrying on a business for profit, or is a volunteer;
  - c. whether adverse weather conditions have impacted on the state or condition of the premises. Whilst all outdoor sports are ultimately played at the "mercy" of the weather, courts will seek to balance the unpredictability of the weather against the need to ensure that athletes/players are not exposed to an additional risk that could have been avoided through reasonable mitigating conduct; and
  - d. whether the player had an opportunity to leave the game in the event they considered the risk was too significant.

199. Factors relevant to the standard and content of the duty, include:

- a. how significant (in terms of severity) the injury to the player could be and ultimately was;
- b. what experts say around the state or condition of the premises;
- c. what the player was doing to respond to and/or mitigate against the risk of harm;
- d. the expense, difficulty and inconvenience of taking appropriate measures to mitigate against the state or condition of the premises.

200. Factors relevant to the breach of the duty, include:

- a. whether the owner/occupier sporting organisation had followed the rules and regulations;
- b. what the recognised practices of the sport in question are in respect of adverse weather conditions, which in turn affect the state or condition of the premises;
- c. the expense, difficulty and inconvenience of taking appropriate measures to mitigate against that particular harm; and
- d. what experts say are “reasonable precautions” that the sporting association could have, or ought to have taken, to decrease or avoid the risk of foreseeable injury to the player due to the state or condition of the premises.

## Spectator safety

### The legal position

201. The authorities suggest that both venue owners and occupiers and event organisers generally owe a duty of care to take reasonable precautions to reduce the risk of foreseeable harm to spectators by reason of the state or condition of the premises. The content of this duty has been held to include:

- a. undertaking a safety assessment of any spectator areas to ensure that reasonable safety precautions are undertaken, taking into account the geography of the spectator area and any foreseeable risks. Examples of unsafe spectator areas have included where

a spectator area was located in a “bend” of a motorcycle racing racetrack,<sup>362</sup> and where a spectator car-park was adjacent to an area housing horses which had a reasonably foreseeable prospect of becoming unruly and galloping through the carpark injuring spectators;<sup>363</sup> and

- b. reviewing any safety inspection undertaken by a third party to ensure that the inspection adequately took into account the safety requirements of spectators as well as competitors and officials. “Passive reliance” on a third party’s safety inspections will not be enough to discharge the occupier’s duty.<sup>364</sup>

202. An occupier/owner’s duty will not extend to risks inherent in observing the sport, which are taken to be “assumed” by the spectator. This proposition was expressed by Diplock LJ in the UK case of *Wooldridge v Sumner*<sup>365</sup>, who stated “a person attending a game or competition takes the risk of any damage caused to him by any act of a participant done in the course of and for the purposes of the game or competition.”<sup>366</sup>

203. When considering whether there has been a breach of duty of care, the court considers:

- a. the extent of compliance or non-compliance with relevant codes;
- b. whether there has been any precautions taken by the occupier to minimise the risk of harm;
- c. the magnitude of the risk;
- d. the degree of probability of the risk’s occurrence; and
- e. the expense difficulty and inconvenience of taking alleviating action.

204. Relevant case examples are set out in Annexure C.

### Application to climate change

205. As with players, the main risk to spectators in the context of climate change is the risk of injury arising from adverse weather conditions or the impacts of heat/water on grounds or stadium, such as:

- a. where an event organiser makes the decision to proceed with an outdoor event in the event of adverse weather conditions and a spectator is injured;
  - b. a stadium owner/operator failing to undertake mitigation measures, such as failing to expand a retractable roof such as to provide shade during an exceedingly hot day, to keep out the rain during an excessive period of heavy rain, or to keep out bushfire smoke;
206. In determining whether a duty of care exists, the court will likely consider factors such as:
- a. whether the spectator is a paying spectator;
  - b. whether the sporting organisation is carrying on a business for profit, or is a volunteer;
  - c. whether the adverse /extreme weather condition is considered to be obvious; and
  - d. whether the spectator had an opportunity to leave the game in the event they considered the risk was too significant.
207. Factors relevant to the standard and content of the duty, include:
- a. what experts say are “reasonable precautions” in the context of the condition of the premises that the sporting association could have, or ought to have taken, to decrease or avoid the risk of foreseeable injury to the spectator;
  - b. what the spectator itself was doing to respond to and/or mitigate against the risk of harm;
  - c. the expense, difficulty and inconvenience of taking appropriate measures to mitigate against that particular harm. In respect of the decision not to terminate a game for extreme for example, one a court may consider the expense and inconvenience of the refund of tickets, etc.
208. Factors relevant to the breach of the duty, include:
- a. whether the owner/occupier has followed the rules and regulations;
  - b. what are the recognised practices of the sport in respect of adverse weather conditions that may impact the premises; and
  - c. the expense, difficulty and inconvenience of taking appropriate measures to mitigate against that particular harm.

### Case Study — Spectator Injury at the 2013 Australian Open

209. It was reported in the media that in 2015 a tennis fan sued the Melbourne & Olympics Parks Trust (MOPT) for negligence after she allegedly sustained injury as a result of falling down the stairs at Melbourne’s Hisense Arena (now John Caine Arena) in January 2013 whilst trying to escape the sun as temperatures hit 40° during an Australian Open match.<sup>367</sup> Whilst detailed particulars of the claim are not publicly known, the news coverage suggested that the Claimant alleged that as occupier, MOPT was negligent for failing to shut the arena’s retractable roof.
210. From the limited publicly available information, it appears that roof retraction at all Australian Open stadiums (including the Hisense Arena) was governed by the broader Australian Open Extreme Heat Policy (Heat Policy). It appears that the Heat Policy in place in January 2013 required the suspension of play when the air temperature reached 35° and when the WBGT reached 28° or over. The policy stated that the retractable roofs were authorised to close only once play was suspended on the outdoor courts.<sup>368</sup> It is not clear whether there is a mandatory requirement to close the roofs, or merely that it was permissible to close the roof, although the latter appears more likely. It also appears that when making the decision as to whether to close the roof the organisers of the event, Tennis Australia, act on the professional advice of the Bureau of Meteorology who have staff on site, as well as the tournament’s Chief Medical Officer.<sup>369</sup> It is unclear from publicly available information what role MOPT plays in the decision as to whether or not to close the roof.
211. It does not appear that the case reached judgment. However, had it done so, the court may have considered the following issues when considering whether MOPT, as occupier, owed the Claimant a duty of care. As a starting point, as occupier, MOPT would owe a duty of care to take reasonable precautions to reduce the risk of foreseeable harm to spectators as a result of the state of the arena. The scope and content of that harm would depend on:

- a. how much control MOPT had over the decision to open or close the roof (for example, whether the decision was controlled by it or by Tennis Australia);
  - b. how much control MOPT had for spectator safety (or whether it was up to Tennis Australia);
  - c. whether MOPT assumed responsibility for the decision to open or close the roof;
  - d. whether MOPT assumed responsibility for spectator safety;
  - e. the fact that the Claimant was a paying spectator;
  - f. the fact that MOPT is a profit-making corporation, and the Australian Open is a profit-making event;
  - g. the fact that the Claimant was not impeded by MOPT from exiting the stadium;
  - h. the fact that the Claimant was a competent adult who was capable of observing the heat conditions for herself.
212. Applying the reasoning of the US cases of Patton and Dykema, it could be said that it was ultimately up to the Claimant to choose to leave the venue as soon as she felt that her health was in jeopardy. Had she done so earlier (without spending a significant time in the heat) she potentially could have avoided her injury.
213. In terms of breach of duty of care, the court may have had regard to:
- a. whether the Extreme Heat Policy/the policy governing the opening and closing of the roof was followed by MOPT;
  - b. if the decision to close the roof was subject to discretion, whether it was reasonable not to close the roof in the circumstances, having regard to how closing the roof would impact conditions of play. It may be the case that expert evidence needs to be adduced as to how significantly conditions of play are affected under a closed roof and whether this would “clash” with the nature and style of the Australian Open competition (the Australian Open is supposed to be an “outdoors” competition). One sports news

- article for example, suggested that playing in a stadium with a closed roof means that playing in more humid conditions which means the ball bounces faster, which would affect the style and pace of play;<sup>370</sup> and
- c. what other measures (if any) did the MOPT take to ensure reasonable precautions for spectator safety were taken.

214. Following determination of breach, causation would also be at issue. This is because the cause of the Claimant’s injuries was arguably the fall she suffered down the stairs, rather than the exposure to the heat. The Claimant would likely argue that the impact of sitting in the heat in the stadium caused disorientation and/or other heat-related effects which then contributed to her later fall. Whilst it is not clear from the limited information how long the Claimant remained in the heat, MOPT could argue that it was open to the Claimant to leave the stadium as soon as she started feeling the impact of the heat. In the event that she did not do so, and chose to remain at the stadium, MOPT could potentially argue that the Claimant was contributorily negligent.

## Sporting infrastructure

215. The UN Sports for Climate Action Framework<sup>371</sup> identifies the following effects of climate change on sporting infrastructure:
- a. damage to playing surfaces due to extreme temperatures, extended periods of drought, flooding and/or pest species extending their natural range;
  - b. damage to buildings, playing surfaces such as courts and stadiums and other infrastructure due to violent storms and flooding;
  - c. coastal erosion and sea level rise directly affecting sport properties in coastal locations; and
  - d. climate adaption measures being required in the design of new or refurbished sport venues.
216. Specific examples of the impact of physical effects of climate change on sporting infrastructure in Australia include:

- a. flooding to Lang Park (formerly Suncorp Stadium) in Brisbane following the January 2011 Queensland floods;<sup>372</sup>
  - b. flooding of more than 30 golf courses following the January 2011 Queensland floods;<sup>373</sup>
  - c. the 2006 – 2009 Millennium Drought causing \$1.3 million in damage to 74 sports ground in Dandenong, Victoria;<sup>374</sup> and
  - d. damage caused to community sporting facilities in the wake of exceptional rainfall events in North Queensland from late January 2018 to February 2020. According to a Climate Change Council report, three sporting clubs reported damage of over \$250,000 each.<sup>375</sup>
217. Examples of the impact of physical effects of climate change **that have already occurred** on sporting globally include:
- a. English football club Carlisle United’s Brunton Park stadium was unplayable for 49 days due to damage from Storm Desmond. The cost of the damage amounted to £200,000;<sup>376</sup>
  - b. the grounds of the Glamorgan County Cricket Club in Wales were flooded 6 times between 2000 and 2016, resulting in the loss of 1,300 hours of play;<sup>377</sup>
  - c. the Tairua Rugby Field in NZ was submerged following flooding in April 2018;<sup>378</sup> and
  - d. the James Ronald Webster Park in Anguilla and the Windsor Park cricket stadium in Dominica in the Caribbean was seriously damaged in 2017 by Hurricane Irma and Hurricane Maria respectively.<sup>379</sup>
218. **Projections of the future impact of climate change** on sporting venues in Australia include:
- a. with over 63% of Australia’s Surf Life Saving Clubs located in coastal areas classified as zones of “potential instability,” rising sea-levels caused by climate change will endanger the physical premises of Surf Life Saving clubs and their equipment and lead to changes in coastal beach safety techniques as a result of altered beach forms;<sup>380</sup> and
  - b. sea-level rise mapping by Coastal Risk Australia<sup>381</sup> predicts that by 2100, under a high inundation scenario (which scientists have medium confidence we are currently on track for), a significant number of community sporting fields will be inundated.<sup>382</sup>
219. **Projections of the future impact of climate change** on the sporting venues globally include:
- a. 23 out of 92 (or 25%) of English league football grounds will face partial or total annual flooding of their stadiums by 2050;<sup>383</sup>
  - b. flooding will affect the Boston TD Garden, Citi Field in New York, MetLife Stadium and Petco Park;<sup>384</sup>
  - c. 16% of surf sports in California are at risk of disappearing altogether by 2100, and a further 18% threatened, as a result of sea-level rise;<sup>385</sup>
  - d. 1 in 6 of the British Open championship golf courses are at risk of being submerged by sea water by 2100;<sup>386</sup> and
  - e. Bordeaux’s Matmut Atlantique stadium will, by 2050, be completely flooded on an annual basis.<sup>387</sup>
- Major Australian Stadiums**
220. A 2018 study<sup>388</sup> which considered the impact of climate change on 12 Major Australian sport stadiums found that impacts included:
- a. higher rates of water evaporation from grass playing surfaces due to a warmer, drier climate;
  - b. the inadequacy of traditional grass varieties for coping with the persistently above average temperatures that now characterize the climate zones in which the stadiums are located;
  - c. the flooding of stadiums caused by extreme weather events;<sup>389</sup>
  - d. increased energy costs arising from Scope 2 carbon emissions,<sup>390</sup> carbon pricing, energy efficiency, energy and the increased cost of GHG emission reporting compliance;<sup>391</sup> and
  - e. GHG emissions from stadium waste disposal and higher solid waste disposal costs.<sup>392</sup>

221. The study revealed that (a) and (b) were the most commonly cited problems by stadium management.<sup>393</sup>

### Grass-fields

222. Another 2020 study looked at the impact of climate change on community-level sports fields across Australia and Canada. The impacts on Australian sports fields included:
- a. an increase in disruption on training and competition schedules caused by extreme weather events;
  - b. greater field compaction and a hardening of soils underneath turf playing fields caused by extreme heat and prolonged drought, causing an increase in participant injuries. The increased safety risk triggered either field closure and match cancellation, or increased access to and/or cost of insurance;
  - c. field inundation and grass decay caused by extreme precipitation;
  - d. increase in demand for irrigated water for sports fields due to inadequate rainfall, requiring, in many cases, community-level sports organisations to purchase additional water at a significant cost<sup>394</sup>; and
  - e. some sports fields burned down or damaged in bushfires.

### Injury caused by damaged infrastructure

223. With climate change increasing the intensity and frequency of acute and chronic weather events, venue owners and operators need to be cognisant of the risk that damaged infrastructure may cause personal injury to players, spectators or venue staff.
224. One example is the collapse of the roof of the Humphrey Metronome in Minneapolis in Minnesota as a result of extreme heavy snowfall and strong winds, which occurred five times in the years 1981 to 2010.<sup>395</sup> Whilst as far as we are aware no injuries were reported as a result of these collapses, it is foreseeable that personal injury may occur in similar situations.

225. In such circumstances, it would be likely that court would find that a venue operator, venue designer and builder (and potentially various design and construction sub-contractors) owed a duty of care to the player/spectator to avoid a foreseeable risk of injury. Whilst accidents may be unavoidable, the court would likely consider factors such as:

- a. whether the design and construction of the building took into account how the building would withstand reasonably foreseeable conditions. One could argue that builders and designers (and relevant contractors involved in any part of the design and building process) knew or ought to have known that climate change is increasing the frequency and intensity of extreme weather events, and therefore their designs should take this into account;
- b. whether the operator took reasonable care in maintaining the venue; and
- c. whether there was anything the operator could have done to mitigate the damage caused. This became a central issue in the 2011 Queensland Floods class action, where Plaintiffs whose properties were flooded argued that flood engineers employed by the Queensland Bulk Water Supply Authority (“Seqwater”) which owned and operated two dams in south-east Queensland, breached their statutory duty of care by failing to follow a Flood operations manual which, if followed, would have seen substantial releases from the dams before the heaviest of the forecast rain to create extra storage capacity, rather than making substantial releases of water during the time of high flood water flows (leading to flooding). The two dams play a key role during floods by mitigating downstream flooding by storing water at the peak of heavy rains and releasing it over time. In 2019 a single judge of the Supreme Court of NSW (the case was in relation to the Queensland floods but heard in NSW) found that the flood engineers were negligent, and that the company that employed the engineers, Sunwater, was vicariously liable for the engineers’ breaches. This decision was overturned by the NSW Court of Appeal in

September 2021, because the Court found that Seqwater and its engineers owed a lower statutory standard of care (that of public authorities) than the ordinary standard.<sup>396</sup> Such an outcome was specific to the facts of the case where Seqwater was found to be a “public authority.” In most instances the ordinary standard of care would apply to venue operators responding to extreme weather events.

## Insurance issues

226. Most sporting organisations and venues would have insurance, including a Property Liability Policy. Such a policy would cover the cost of any damage (generally defined as physical loss, damage or destruction) of insured property, subject to any exclusions and conditions of the policy.
227. One issue that becomes important in the context of adaptation to climate change, is that many property insurance policies only cover the cost of *“reinstating, replacing or repairing the insured property to a condition substantially the same as, but not better or more extensive than its condition at the time of the Damage, taking into consideration age, condition and remaining useful life.”*<sup>397</sup> This principle arises from the basic compensatory principle that individuals should be placed in the same position (but not a better position) as they would be had the damage not occurred. Unfortunately, this principle becomes problematic in the climate change context. This is because where the property that is damaged is old and does not incorporate effective climate change adaptation measures, this principle perpetuates a cycle of poor design and construction practices that exacerbates and/or contributes to damage suffered as a result of extreme weather events.
228. There has been growing recognition that in order to decrease the cost of damage arising out of extreme weather events, rebuilding and reconstruction must be guided by a “build back better” principle. A “building back better” programme can be actioned either by insurers covering the risk (subject to increased premiums), or by governments. Both have taken place.
229. In terms of the market-based approach, some property policies allow coverage for capital additions and improvements to property, buildings and contents (although this is generally subject to a dollar limit). For example, one policy that we reviewed contained a specific clause which covered additional costs *“incurred solely to minimise potential harm to the environment utilising the latest available technology in the rebuilding, replacement, repair or restoration of Building Contents.”* Such improvements are defined as including (but not limited to) the upgrading of taps, showers, grey water and rainwater systems, air conditioning and building cooling systems, ventilation systems, lighting, the provision of hot water and heating system and the provision of “green” roofs. However, under this policy such an amount was limited to a cost that was 20% more than under a “no-upgrade scenario,” or \$50,000 in total.
230. In terms of government assistance, there have been some programs specifically focused on “building back better.” One example is the ‘Australian and Queensland Government Betterment Program,’ which was jointly funded by the Australian and Queensland Governments and administered by the Queensland Reconstruction Authority, and which provided funding specifically so that those impacted by the 2019 Monsoon Trough could rebuild in a more resilient and adaptive way such as to reduce the impact of future extreme weather events on infrastructure.<sup>398</sup>
231. Further, as building laws, codes and regulations change and require more stringent standards on climate mitigation and adaptation for new buildings, there is a risk that insurance taken out on older buildings (which would not comply with these new, stringent standards) would be insufficient to meet the cost of rectification, thereby creating an under-insurance problem.



## Section 7

# Liability of referees and umpires

This section considers the liability of referees and umpires to manage player safety risks arising from climate change. It also considers the novel claim of whether referees or umpires could owe a duty to avoid pure economic loss to players.

233. Referees and umpires have three main roles in sporting competitions, namely<sup>399</sup>:
- to act as a judge, so as to enforce the rules and make the decisions;
  - to act as manager, so as to manage all of the people on the field; and
  - to act as a mediator in disputes and resolve any conflicts.
234. The referee can either be an independent contractor or an employee. Most often, referees are either employed by a particular club, or a “referee association.” As such, whichever organisation employs the referee will be vicariously liable for him/her, provided the referee was acting within the scope of his/her employment.
235. Liability for can arise out of:
- failing to suspend a match in adverse weather conditions such as extreme heat or where the playing surfaces are made dangerous due to extreme precipitation or extreme winds, leading to player injury; and

- failing to undertake adequate inspection of the playing pitch such as to ensure the playing surfaces were safe for play.

## Player safety

### The legal Position

236. A referee owes a duty to ensure the safety of players. Authorities have held that this duty includes a duty to:
- enforce the rules and laws of the sport so as to minimise the inherent dangers of injury<sup>400</sup>;
  - inspect the ground so as to evaluate the conditions and reach a decision as to the suitability of the ground for play;<sup>401</sup> and
  - exercise reasonable supervision of the players and the game;<sup>402</sup>
237. Other potential actions which arguably may need to be taken by a referee to discharge his duty of care, include:<sup>403</sup>
- take corrective, or (if appropriate) mitigating measures, in the event that grounds, facilities or equipment are not suitable for use/unsafe;<sup>404</sup>
  - if no other corrective measures can be taken, to postpone the game;<sup>405</sup>
  - keep the playing area free of equipment and spectators which could lead to players’ injury;
  - warn competing athletes of any dangers that are known to them or should have been

discovered during pre-competition inspection. However, this duty does not extend to obvious dangers or dangers that the competitor has actual notice of;

- e. consider weather and climate conditions and terminate the game if adverse weather increases the probability of injury to players; and
  - f. offer adequate response in the event of player injury, such as stopping play in a timely manner, and calling for adequate medical assistance in a timely manner.
238. The scope and standard of care will depend on the circumstances of the case. The court may look at factors such as:
- a. the grade of the referee, for example, whether a top international-grade referee vs. a local club referee;<sup>406</sup>
  - b. whether the referee is a professional or amateur;
  - c. whether the referee is being paid or is volunteer;
  - d. the qualifications and experience of the particular referee;<sup>407</sup>
  - e. whether the players are professional or amateurs;
  - f. whether the players are adults or minors;<sup>408</sup> and
  - g. whether the decision was made during a “fast moving game” (such as a call made about whether a particular move by a player is against the rules or unsafe) or whether the referees had considerable time to assess and evaluate the decision (such as a decision about the suitability of grounds for play).<sup>409</sup>
239. When considering whether a referee breached his/her duty of care a court could look to:
- a. whether the referee applied the rules of the game or whether he deviated from them;<sup>410</sup> and
  - b. whether a reasonable and responsible referee could, on the evidence available to them, have made that particular decision.<sup>411</sup> This may require expert evidence as to what a “reasonable and responsible” referee would do in the circumstances.

240. Relevant case examples are set out in Annexure D.

## Application to Climate Change

241. The most likely scenario in which referee liability could arise in the climate change context is for liability arising out of a referee’s decision to continue play in adverse weather conditions. Such a scenario could occur when play is allowed to continue in extreme heat, or when the playing surfaces of a pitch or field have become dangerous due to extreme precipitation or extreme winds.
242. There is precedent in this regard. The case of *Bartlett v English Cricket Board Association of Cricket Officials*<sup>412</sup> held that a referee does have a duty to inspect the playing ground so as to ensure the conditions are safe enough for play. A ground is not safe enough for play if the prevailing conditions make play dangerous or unreasonable to proceed,<sup>413</sup> having regard to the application of the rules in place at the time, as well as balancing up factors for and against match suspension. In *Barlett*, the court noted that:
- “the fact that another person, let alone another umpire, might have reached a different decision on the evidence available does not establish liability on the part of the Defendant. In order to succeed, the Claimant must show that the decision of the umpires was clearly wrong and that no reasonable and responsible umpire could, on the evidence available, have made a decision to allow play.”*
243. Using cricket as an example, Cricket Australia’s policies provide discretion to the umpires as to whether to continue play. Play is to be discontinued in the event that it would be “dangerous or unreasonable for play to take place”. For example, the 2020/21 T20 BBL Match Playing Conditions<sup>414</sup> provide that:
- a. conditions shall not be regarded as either dangerous or unreasonable merely because they are not ideal;<sup>415</sup>
  - b. conditions shall be regarded as unreasonable if, although posing no risk to safety, it would not be sensible for play to proceed;<sup>416</sup>
  - c. the fact that the grass and the ball are wet

does not warrant the ground conditions being regarded as unreasonable or dangerous;<sup>417</sup>

- d. if the umpires consider the ground is so wet or slippery as to deprive the bowler of a reasonable foothold, the fielders of the power of free movement, or the batters of the ability to play their strokes or to run between the wickets, then these conditions shall be regarded as so bad that it would be dangerous and unreasonable for play to take place;<sup>418</sup>
  - e. if conditions during a rain stoppage improve and the rain is reduced to drizzle, the umpires must consider if they would have suspended play in the first place under similar conditions. If the on-field umpires agree that the current drizzle would not have caused a stoppage, then play shall resume immediately;<sup>419</sup> and
  - f. conditions shall be regarded as dangerous if there is actual and foreseeable risk to the safety of any player or umpire. Conditions shall also be regarded as dangerous if the heat conditions are such that it invokes the Australian Cricket Heat Policy to the extent that the application of the policy recommends play be suspended.<sup>420</sup>
244. Provided a referee follows the above rules and makes a reasonable assessment of the state of the field, referees and the sporting organisations who employ them, should generally be protected, unless it is the case that the referee's decision was clearly inappropriate in the circumstances.
245. Whether referees will be held liable for decisions to stop or continue play in respect of adverse weather conditions is likely to depend on the nature of the particular adverse weather condition. For instance, in the US case of *Patton v United States of America Rugby Football US*,<sup>421</sup> the Court held that the referee (and sporting organisers) were under no duty to protect and warn the player of lightning strikes and other acts of nature which were held to be obvious.
246. It is unclear whether this reasoning is specific to the nature of lightning storms and to the Court's reasoning that lightning storms are "acts of nature" which a referee or sporting organiser has no

control over. Whilst it is true that no person can control the weather, with advances in technology it is certainly the case that referees are able to utilise technology to make a considered decision, having regard to all factors, as to whether the prevalent weather conditions make the continuation of a match unreasonable or dangerous. Calls as to the suitability of play on a wet pitch or during the onset of a potentially harmful lightning storm are more open to judgment calls, as there is little by way of objective evidence which provides a basis for when a pitch is "dangerously wet" or a storm is "dangerously close." In contrast, in respect of playing in extreme heat, there is substantive medical evidence that continuing play when there is a WBGT rating of 28° and over is considered 'extreme risk' for heat-related injury, and as such, the American College of Sports Medicine recommends the cancellation of competitions.



## Section 8

# Recommendations

**It is clear that on the current law, a sporting organisation and its directors that fails to mitigate and adapt to climate change may face liability risks. These include suits brought by players, spectators and commercial partners who have been impacted by the physical and economic effects of climate change, including personal injury caused by adverse weather conditions and economic loss caused by cancellations and interruptions of sporting events.**

248. In addition to current legal impacts, the failure to respond adequately to climate change can seriously damage the reputation and social licence of the sport. The recent controversies around Cricket Australia's sponsorship by Alinta Energy, Fremantle Docker's sponsorship by Woodside and Netball Australia's sponsorship by Hancock Prospecting lay bare what happens when commercial decisions are made which are out-of-touch with both player and spectator values. A review of Australia's peak government and industry bodies shows how far behind Australia is relative to the rest of the developed world in respect of climate change integration into sport. However,

the good news is that there are simple steps that governing bodies of sport and their boards can take to elevate Australia's position in respect of its climate change response.

249. As a start, we recommend that all sporting organisations commit to these eight impactful actions:

### Action 1: Start a climate working group

- 250. Organisations should start a climate working group to help drive the necessary changes throughout the business.
- 251. Ensure the working group has the representatives necessary to implement change in the relevant departments. This is particularly important given climate is relevant to different departments, not a single area (i.e. it has implications for membership, community, legal, high performance etc).
- 252. Consider who is responsible for implementing the work of the climate working group and how they are kept accountable and to whom.
- 253. Ensure the individual/team implementing the work of the climate working group has the relevant skills and authority to enable competent and timely execution.
- 254. Consider the frequency of when the climate working group needs to update the board, as

ultimately the board has ownership over all material organisational risks, including climate change risk.

255. Conduct regular (at least annual) reviews of progress against climate goals.

### Action 2: Consider climate at the board level

#### 256. Steps include:

- a. Ensuring climate change is disclosed as a material risk in annual and financial reports. Ensure disclosure includes both qualitative narrative reporting and quantitative reporting in the financial reports.
- b. Disclosing according to Task Force on Climate-Related Financial Disclosures (TCFD) framework and the ISSB IFRS S2 Climate Change Disclosure standard.
- c. Appointing a board member to be responsible for climate change risk
- d. Engage in appropriate education and upskilling of the board.
- e. Consider convening a Sustainability Committee of the board and ensure there is adequate buy-in from the board and senior management.

### Action 3: Ensure that your heat and extreme weather policy, equipment and venue and medical assistance policies are up-to-date

257. Heat policies are critical in mitigating against the risk of personal injury of players arising from heat. The best heat-related policies use the internationally accepted Wet-Bulb Globe temperature (WBGT) as the basis for assessment. The best heat policies set out the required actions at each level of heat
258. Governing sporting bodies should also have other extreme weather policies which provide guidance as to when a venue, field or pitch is considered too dangerous to play on account of flooding or extreme precipitation/inundation, cyclone, frost, snow, high winds, lightning/electrical storm or hail. They should also have Disaster Recovery Plans in response to natural disasters. Such guidance

should refer to objective markers, rather than relying solely on the discretion of the referee or umpire.

259. Organisations should assign a staff member to be in charge of extreme weather policies. This person will be in charge of communicating the heat and other extreme weather policies to relevant stakeholders (players, coaches, medical staff, other employees, spectators etc).
260. Review extreme weather policies at least every two years to ensure they are up to date with best practice.

### Action 4: Review risks to physical infrastructure from extreme weather

261. Governing bodies and event organisers should develop policies including Adaptation Plans for infrastructure and fields including Landscaping Plans for heat impacts. They should also set out requirements for venue/field/pitch inspections by referees/event organisers in advance of play.
262. Include sustainability and climate considerations when planning new developments or upgrading existing facilities (e.g. installing solar and batteries as well as electrifying appliances where possible, reviewing material use for extreme weather impacts and risks, use of green roofs/infrastructure etc).

### Action 5: Review contracts for extreme weather concerns

263. In particular, organisations should review contracts to see whether:
- a. There is an express right to terminate under the contract, including a right to terminate for convenience;
  - b. A force majeure clause in the contract, and whether the definition of “force majeure event” includes the main types of climate risk faced by the organisation. In particular, consider whether the definition of “force majeure event” includes chronic climate change effects, such as heat waves, sea-level rise or coastal inundation (most will not); and

- c. A clause requiring the parties to mitigate their loss and what the standard of mitigation is (most contracts impose a standard to take “reasonable steps”, however some provide more stringent standards); and
264. Consider negotiating climate-specific and risk-sharing clauses into the contract, such as those proposed by the Chancery Lane Project (a repository of precedent contract clauses drafted by top international contract lawyers that deal specifically with climate-change issues).
265. In relation to reviewing contracts for extreme weather concerns, consider the implications for external suppliers, venue hire, host city agreements, sponsorship agreements, broadcasting agreements, merchandise and licensing agreements, and ticketing agreements.
266. Review contracts for reputational risk, e.g. fossil fuel companies or companies contributing significantly to climate change (superannuation, banks, etc.). Additionally, seek sponsorship from those who are aligned to a clean energy transition.
267. Review sponsors and assess for potential reputational risk that could have an impact on fan engagement and revenue.

### Action 6: Ensure adequate insurance

268. Consider whether your current insurance covers all possible damage arising from climate change, including:
- a. First-party damage, namely property damage, business interruption and revenue loss arising from cancellation or suspension of a competition/event.
  - b. Third-party damage, namely workers’ compensation and employment liability, public liability, directors and officers and statutory liability.
  - c. Consider any potential exclusions that may apply in respect of climate change risks. This may include damage caused by chronic (as opposed to acute) risks such as sea-level rise and coastal erosion. Consider discussing with

your insurer/broker how these gaps in cover may be dealt with, including whether you need to seek additional climate-specific cover.

- d. Consider whether your insurance policy allows for “building back better” such that any rectification works are climate-resilient. If not, consider discussing this with your insurer/broker.

### Action 7: Develop a climate communication strategy for key stakeholders

269. Organisations should:
- a. Understand and develop a plan for communicating climate strategy to various stakeholders, including members, fans, sponsors, players, and other stakeholders.
  - b. Consider how you are going to talk to stakeholders about climate.
  - c. Publish a “Climate Change Statement” setting out your organisation’s position on climate change.
  - d. Publish the sustainability strategy and Climate Change Statement on your website.
  - e. Consider having a stand-alone “climate change” section on your website.
  - f. Consider approaching members/sportspeople to become “ambassadors” to communicate your sustainability strategy.
  - g. Consider a fan-engagement strategy for your sustainability strategy.

### Action 8: Sign the UNFCCC Sports for Climate Action Framework

270. The framework requires commitment to a number of minimum criteria, including reducing GHG emissions by 50% by 2030 and to reach net zero by 2040. Any net zero targets should ensure they are consistent with the findings of the United Nations High-Level Expert Group on Net Zero Emissions Commitments of Non-State Entities. As part of this commitment, conduct a carbon audit and develop a net zero roadmap.

271. As part of signing the framework, begin developing a sustainability strategy that can be integrated into the broader strategic plan.
272. Organisations should develop, implement and regularly review a sustainability plan and integrate it into the strategic plan. Organisations should:
- a. consider governance and who is responsible for creating the strategy;
  - b. identify priority sustainability issues, perhaps by reference to the UN SDGs;
  - c. set sustainability and climate change objectives and metrics, perhaps by reference to the Charter of 15 Environmentally Responsible Commitments of Major Event Organisers and Managers of Large-scale Sports Facilities and Venues or the Responsible Sport Standard for Organisations; and
  - d. consider how the identified sustainability issues fit into your current strategic plan.

## Annexure A

### Australian sporting Organisations' heat policies

Sport/code	Heat Policy?	Objective trigger for policy?	Trigger	Response when policy triggered
AFL	✓	✗	Decision of when policy triggered left up to AFL officials.	<p>Responsibility for managing heat left to players clubs, medical officers.</p> <p>More breaks, shorter games, postponement/delay and more water delivery to the field, clubs must provide cooling aids such as ice vets, report heat stress and assign an official to monitor heat stress during and after matches or training, medical officers must identify and monitor vulnerable players' hydration and performance, weigh players to manage fluid requirements manage symptoms of heat stress and report incidents of heat stress and ensure proper medical equipment on hand</p>
South Australian National Football League	✓	✓	26°C - 32°C	Training hours are cut back and extra breaks implemented
			If >32°C or "conditions reach that temperature"	Extra breaks at the 15 minute mark of each quarter for 2 minutes following a next break in play
			31°C - 35°C	Matches can be shortened, postponed or cancelled
			>36°C	Training and marches are not to be held between 10am — 4pm without consultation with the league
AFL Victoria Country	✓	✓	Forecasts of 34°C and over	<p><u>Children and adolescents</u> - matches or training involving should be postponed or cancelled</p> <p><u>Adults</u> — training or matches can be rescheduled. If they continue, additional shading areas and water is to be provided, sessions shortened and more interchange made between players</p>
International Cricket Council (ICC)	✗	✗	No explicit trigger for heat. General policy is triggered when "the conditions of ground, weather or light are so bad that there is obvious and foreseeable risk to the safety of any player or umpire, so that it would be unreasonable or dangerous for play to take place"	<p>Immediately suspend play or not allow play to commence or to restart.</p> <p>Umpires have discretion to allow for extra drink intervals in hot conditions</p>
Cricket Australia	✗	✗	No explicit trigger for heat	Umpires can permit extra water breaks in "extreme heat"
South Australian Cricket Association	✓	✓	<p>≥36°C for adults</p> <p>≥34°C for kids</p>	Umpires can cancel play, vary the starting time and length of a match and increase hydration and rest breaks
Cricket Victoria	✓	✗	"Extreme Heat" (not defined)	Recommendation to cancel play or if continued, for matches to include hydration breaks every 30 — 60 minutes

International Cycling (Union Cycliste International)			N/A — no policy in place	N/A — no policy in place
Cycling South Australia			If BOM forecasts the Adelaide temperature to be 32°C - 37°C in the 4:00pm forecast issued the day before	Race can be modified by the Chief Commissaire
			If BOM forecasts the Adelaide temperature to be ≥37°C in the 4:00pm forecast issued the day before	Race cancelled
Cycling Victoria			38°C - 40°C	Races modified and postponed, endurance events cancelled
			≥41°C	Races halted or cancelled.
Australian Open			≥40°C	Implementation of the heat policy is at the discretion of the referee, advised by when ambient temperature exceeds 40°C and the WBGT reading exceeds 32.5°C, whilst considering the forecast and state of play  Matches can be suspended at the end of an even number of games or completion of a tiebreak.
Tennis Australia <sup>422</sup>			≥30°C	At WBGT of 30°C+, extended breaks are given, and the number of sets in a game is reduced.
			≥34°C	At WBGT of 34°C+, matches can be suspended or delayed.
Soccer - Football Federation Australia (FFA)			≥26-28°C	A match may be delayed or postponed when the WBGT reaches 28 degrees Celsius.  FFA's Heat Policy mandates that a 90 seconds drinks break is implemented in each half of a match when the WBGT is measured between 26 and 27.9 degrees Celsius, or the ambient temperature is 31 degrees Celsius or greater.
Hockey			≥31°C for kids	<u>Children:</u> Limit intensity of the games, take more breaks
			≥30°C for adults	
			≥30°C for adults	<u>Adults:</u> Consider postponing to a cooler part of the day or cancelling
			≥36°C for adults	<u>Children:</u> Must postpone to cooler conditions or cancel the game

NRL <sup>423</sup>	✓	✓	Points-based trigger	<p>The NRL applies a points-based system, which takes into account factors such as air temperature, time of day, surface of play and the age of the players to determine what action should be taken.</p> <p>Over a certain number of points (75), the NRL recommend that an event is cancelled, or training stopped.</p>
Rugby Australia	✓	✗	<p>Utilising the Heat Stress Index, a guide to acceptable levels would be:</p> <p>a) temperature <math>\leq</math> 30 degrees Celsius</p> <p>b) humidity <math>\leq</math> 60%</p> <p>In extreme weather conditions an objective assessment of the environment may be required ('extreme weather' not defined).</p> <p>Recommended that all the Heat Illness Prevention Interventions listed in policy are applied if the Index is above 150.</p>	<p>Any player demonstrating signs or symptoms of heat stress should be removed immediately from training or playing.</p> <p>Lists various measures for Game Day Interventions that should be implemented when the Heat Stress Index is above 150: fans, shade etc..</p>
Equestrian Australia <sup>424</sup>	✓	✓	28°C $\geq$	<ul style="list-style-type: none"> <li>• Shaded areas for warm up and events where possible</li> <li>• Avoid non-grassy areas</li> <li>• Access to at least two wash bays with freely running water</li> </ul>
	✓	✓	$\geq$ 30°C	<ul style="list-style-type: none"> <li>• Timing of events should be considered and should be held in cooler parts of the day</li> <li>• Make PA announcements frequently</li> <li>• Aggressive cooling measures are compulsory for CCI (Concours Complet International) 2*/3* Eventing horses with the mandatory provision of ad lib ice for use in cooling these horses after cross country phase.</li> </ul>
	✓	✓	$\geq$ 33°C	<ul style="list-style-type: none"> <li>• Deems the environmental conditions 'very high risk'</li> <li>• Veterinary consultation needed before continuing</li> <li>• Must consider the event time</li> <li>• Competitions or high exertion phase of an event must be held during cooler parts of the day</li> <li>• Aggressive cooling measures are compulsory for all horses</li> </ul>

Polo			>28-32°C	Refer the Club Horse Welfare Officer for approval to play, it is at their discretion, but the guidelines include a number of factors to take into account.
			≥32°C	Polo must not be played
Triathlon Australia			Roughly 30°C	<p>Uses the recommendations that have been developed by Sport Australia</p> <p><u>Adults:</u> 30°C: Consider postponing to a cooler part of the day or cancelling</p> <p>Triathlon Australia then sets recommendations based on:</p> <ul style="list-style-type: none"> <li>• Duration and intensity of the event</li> <li>• Training regimes</li> <li>• Time of day of the event</li> <li>• Local environment</li> <li>• Clothing</li> <li>• Acclimatisation of the person</li> <li>• Fitness levels of a person</li> <li>• Age</li> <li>• Predisposed medical conditions</li> </ul>
Golf Australia			≥36°C	<p>Uses the guidelines that have been developed by Sports Medicine Australia.</p> <p>The guidelines are typically for more strenuous sports than golf but suggest that they should consider postponement to a cooler part of the day or cancellation.</p>
Rowing Australia			The heat index is 35 or greater.	<p>The heat index uses the ambient temperature and the relative humidity to determine the relationship between both factors.</p> <p><u>Competitors 16 or under:</u> All racing must be suspended and no further races are to commence with a heat index of 35 or absolute temperature of 34°C.</p> <p><u>Competitors over 16 years of age:</u> All racing must be suspended and no further racing are to commence with a heat index of 35.</p>
Basketball Australia			N/A — no policy in place	N/A — no policy in place

Basketball WA			35°C - 39°C	<p>They must implement the following mitigation strategies:</p> <ul style="list-style-type: none"> <li>Referees to call a time-out at the halfway point of each period, if one has not already been called</li> <li>Half time breaks to be extended by a minute Water stations and ice are to be made available Competition managers may reduce game times if deemed necessary</li> <li>Air-conditioning to be turned on in venues that have this capability</li> <li>Competition managers to monitor internal temperature gauges.</li> </ul>
			≥40°C	Games should be abandoned when the on-court temperature reaches this point.
Basketball NSW			31°C - 35°C	Teams should be encouraged to call a timeout, if not the referee should ensure breaks are taken at an appropriate time.
			≥36°C	Games should be postponed, cancelled or abandoned when the on-court temperature reaches this point
Hockey Australia			WBGT (shade) 31°C - >36°C	<p>In the case of extreme heat conditions, the following shall be adhered to:</p> <p>a. Where the ambient temperature is between 31 — 35 degrees Celsius, with humidity exceeding 50% — the Tournament Director can consult with the team managers to instigate a drinks break at the 17.5 minute mark in each half.</p> <p>b. Where the ambient temperature is in excess of 36 degrees Celsius, with humidity exceeding 30% — the Tournament Director can consult with the team managers to postpone and reschedule matches to cooler periods of the day.</p> <p>Indoor heat policy:</p>
		(outdoors, independent trigger for indoors)	WBGT (shade) 30 — 33°C	(Dependent on age of competitors) - Postponement to a cooler part of the day or cancellation. Consider postponing to a cooler part of the day or cancellation. Limit intensity. Limit duration to less than 60 minutes per session. Take more breaks and for longer.
			WBGT (shade) 34°C and above	Postponement/Cancellation.

## Annexure B

### Case examples - Negligence claims against occupiers, event organisers and venue owners and occupiers for player safety

Case title	Court and jurisdiction	Sport	Injury	Description	Outcome
Woods v Multi-Sport Holdings Pty Ltd <sup>425</sup>	High Court, originally WA claim	Indoor Cricket	Right eye injury caused by being hit by a ball which ricocheted off the plaintiff's bat and struck him in the eye	The defendant was the organiser of the game. The Plaintiff argued that it breached its duty of care by failing to provide players with helmets with face guards, and that it failed to display a sign at the premises warning players of the dangers of indoor cricket and the risk of serious eye injury.	No breach in circumstances where the rules of the game forbade the use of helmets, and where no satisfactory helmet had yet been designed and manufactured which was adapted to the peculiarities of indoor cricket.
Wagga Wagga City Council v Mark Sutton <sup>426</sup>	NSW Court of Appeal	Football	Right ankle injury caused by plaintiff's foot landing in a hole near a sprinkler on the field	The player sued the Wagga Wagga City Council as occupier of the field, arguing that it breached its occupiers' duty to ensure that the field was safe for use by failing to adequately inspect and maintain the field.	Breach by the Council in circumstances where, had the Council undertaken an inspection, it would have located the sprinkler hole and therefore rectified it, which would have avoided the injury.
Nowak v Waverly Council <sup>427</sup>	NSW Court of Appeal	Rugby League	Broken foot caused by plaintiff tripping over a water sprinkler which protruded 1-1.5 inches above ground level.	The player sued the council which owned the sporting field on which his team played on, as well as his Club and League for negligence.	<p>Breach as against the Club and League in circumstances where the Club and League were responsible for designating the grounds on which the games were to be played, notwithstanding that they were aware of the danger posed by the sprinklers. The court found that by doing so, The League went beyond making the field available for play but inferred that the field was appropriate for the game and invited the plaintiff to play upon it.</p> <p>No breach as against the Council. Relevantly, the Claimant had, a few days earlier, played a match on that pitch and was taken to have been aware of the existence of the sprinkler. On the day of the match the game had only gone ahead after the Plaintiff's team had collectively agreed to play after being informed by their coach of the poor state of the field because of the existence of the sprinklers. On that basis, the court concluded that the Plaintiff was fully aware of the nature and extent of the danger posed by the sprinklers and accepted this risk.</p>

Sutton v System Rugby Football Club <sup>428</sup>	UK	"Tag" rugby	Knee gashed on a broken-off part of a cricket marker which had been left submerged in the grass.	<p>The Plaintiff sued his community volunteer soccer club, who was the occupier of the ground, arguing that the Club's coaches (for whom the Club was vicariously liable) should have inspected the pitch before the training match commenced, and that had they done so, they would have discovered the broken-off cricket marker.</p> <p>The Club admitted that they owed a duty to ensure that the pitch was reasonably safe, that this duty required a general inspection of the pitch before the commencement of the training session and that the duty was breached because no inspection took place. The key issue became the standard of inspection required to have been carried out - whether it should have been done at a "reasonable" v. quick walking pace, and whether a slightly more careful degree of attention should have been paid to the touch down ends.</p>	No breach. The Court of Appeal held that the duty of inspection was satisfied by undertaking an inspection over the whole ground at a reasonable walking pace -that is, a more detailed inspection at the touch down ends was not required. The Court of Appeal found that such an inspection would not have revealed the broken-off cricket marker. This conclusion was based on witness evidence that the marker was located beneath the level of the grass, and that the plaintiff's teammates were not able to observe the marker immediately following the accident. The Court also noted that "it is important that neither the game's professional organisation nor the law should lay down standards that are too difficult for ordinary coaches and match organisers to meet." This was particularly relevant in this case, given the Club was a local amateur club run by volunteers, rather than a well-resourced professional club.
Lilley v Alpine Resorts Commission & Anor <sup>429</sup>	Victorian Court of Appeal	Skiing	Injuries suffered as a result of the plaintiff skier colliding with a snowboarder after descending down a run that contained patchy and minimal snow and ended in a narrow convergence area (the collision happened in this narrow convergence area).	<p>The Plaintiff sued the Ski Resort and the company that operated the Ski Lift alleging that they owed her a duty to take care of her safety. She argued this was breached by the Ski Resort in circumstances where the run in question contained patchy and minimal snow such that towards the end of the run, the run tapered, obliging all skiers to converge into a narrow area at the bottom of the run (the Funnel). It was at this point on the run that the Claimant was struck by a snowboarder. In respect of the Ski Resort, the Plaintiff argued that the Ski Resort should have taken reasonable steps including inspecting the run, observing the potential danger at the Funnel, and erecting a sign warning for skiers and snowboarders to slow down in that particular location.</p> <p>The Ski Resort and Lift Operators did not dispute that they owed a duty of care but disputed the nature and extent of the duty.</p>	Breach by the Ski Resort, but not the Lift Operator. The court held that the Ski Resort's duty to exercise reasonable care to ensure that the ski run was safe for use by skiers at the start of the day and remained safe for skiers to use throughout the day was breached by the Ski Resort's failure to (1) carry out a repeat inspection of the run later in the day (after an inspection had been performed early in the day) in circumstances where it ought to have known that there was an increased risk of skiers falling, losing control and colliding with another skier or snowboarder in the Funnel; and (2) failure to erect a warning stating "Slow Down" or "slow" somewhere in the vicinity of the Funnel and before the commencement of the run. Ultimately however, it was found that the breach did not cause the Plaintiff's injuries — the snowboarder did. The court also concluded that the Court of Appeal concluded that even if a sign was erected by the Ski Report, there was no evidence that the snowboarder would have avoided the accident.

Butler Ski Lifts Ltd v Mt Buller Alpine Management Board <sup>430</sup>	Victorian Court of Appeal	Skiing	Injuries suffered after the plaintiff lost control of his skis and slid through a gap between a cyclone wire fence at the end of the ski run.	The Plaintiff sued both the ski resort and the operator of the chairlift which the Plaintiff rode up in order to access the relevant run on which he was injured. The lift operator leased land from the Ski Resort, operated equipment which groomed and manufactured snow, and attended to the repair of structures including fences, but only at the request of the Ski Resort. The accident took place on land owned by the Ski Resort (i.e. not on land leased by the Lift Operator). It was admitted by the Ski Resort that it had not instructed the Lift Operator to mend the gap in the fence.	Breach admitted by the Ski Resort for failing to observe the gap in the fence, and subsequent failure to rectify the gap.  No breach on the part of the Lift Operator as the responsibility for instructing the lift operator to mend the gap rested with the Ski Resort.
Hames v Tennessee <sup>431</sup>	US	Golf	Death of a golfer from a lightning strike which struck him whilst he was playing at a public golf course owned and operated by the State of Tennessee.	The Plaintiff (via his estate) argued that the defendant's failure to provide lightning proof shelters or devices to warn golfers of thunderstorms was negligent. The Plaintiff noted that the United States Golf Association's rules specifically warned of the dangers of lightning to golfers and made suggestions for the pension of this danger including the posting of notices outlining these dangers and precautions to minimise them. However, the expert evidence provided that there was no recognised standard that required golf courses be equipped with lightening proof shelters or warning devices.	No duty of care owed or breach of duty by the owner of the golf course because it was reasonable for the defendant to infer that a reasonably prudent adult player could recognise the approach of a severe thunderstorm and exercise his own judgment as to when to leave. Further, lightning storms are highly unpredictable, and therefore it was not reasonable to require an occupier to anticipate when and where it would strike (and therefore to provide warning to players).

Ohlstein by her tutor Ohlstein & 3 Ors v E&T Lloyd trading as Otford Farm Trail Rides <sup>432</sup>	NSW Court of Appeal	Horse-riding	Injuries sustained after falling from a horse with her foot in the stirrup.	The Plaintiff, who was aged five, participated in a group trial ride operated by Otford Farm Trail Rides (the Operator) and was injured when her horse moved to the side, causing the Plaintiff to lose her balance and fall from the horse with her foot in the stirrup. The Plaintiff (via her tutor) sued the Operator in negligence for allowing a child of her age to go on a trial ride, and for failure to use a lead rope for the trail leaders/ instructors to lead the Plaintiff's horse individually. The Operator argued that there was no breach of duty because appropriate safety equipment (helmets, saddles and stirrups) were used during the ride, proper supervision was maintained during the course of the ride, appropriate instructions were given to the riders prior to the ride, qualified and experienced leaders were used during the ride, the horses were suitable to the Plaintiff, and the ride was suitable for the Plaintiff.	Breach of the Operator's duty by failing to initially put the Plaintiff's horse on a lead. The Court held that the risk of injury was foreseeable in the sense of not being far-fetched or fanciful, and that the Operator's system of leaving the decision to lead a horse to the complete discretion of the trial leaders based on their experience and observations of seeing how the rider (or in this case, the five-year-old rider) was sitting on and controlling the horse, was negligent. Critically, the Court held that the Plaintiff, because of her age, was incapable of knowing and/or accepting the risks inherent in the activity of horse-riding.
Uren v Corporate Leisure (UK) Ltd & Anor <sup>433</sup>	UK	Pool obstacle course	Serious injuries suffered after the plaintiff hit his head on the base of the pool whilst entering the pool head-first during a series of competitive games organised for a "Heath and Fun day" by his employer.	The Plaintiff sued his employer, the organiser of the "Health and Fun day," and the sport and leisure company which provided the equipment and supervision personnel for the event (Corporate Leisure), for failing to carry out suitable and adequate risk assessments. The employer argued that it was entitled to rely on Corporate Leisure as a reputable contractor to undertake a risk assessment.	Breach by the employer, in circumstances where the employer failed to satisfy themselves of the reasonableness of Corporate Leisure's risk report. Whilst the Court accepted that employers who engage competent professionals and satisfy themselves as to the thoroughness of the contractor's risk assessment may be excused from undertaking their own detailed risk assessment, the court held that in this case, "it was clear" that the contractor had not carried out a suitable or sufficient risk assessment and it was therefore not reasonable for the employer to rely it.
Reynolds v Strutt & Parker LPP <sup>434</sup>	UK	Cycling	Injuries sustained after falling of a bike without a helmet during a "team-building" cycle race organised by the plaintiff's employer	The Plaintiff argued that his employer breached his duty of care and relevant WH&S Laws by failing to undertake a risk assessment, failing to provide relevant information to the Plaintiff as those risks and relevant preventative or protective measures to mitigate those risks, and in failing to provide protective equipment and ensure it was worn.	Breach by employer in negligence (rather than of WH&S laws) failed to undertake a safety assessment which. At the very least recommended the wearing of helmets by participants.

## Annexure C

### Case examples – Negligence claims against occupiers, event organisers and venue owners and occupiers for spectator safety

Case title	Court and jurisdiction	Sport	Injury	Description	Outcome
Green v Perry <sup>435</sup>	High Court of Australia	Camp Drafting – where a horse rider steers a bullock along a path	Injuries suffered after a bullock escaped over the barrier surrounding an arena.	The spectator sued the organiser of the competition. The substance of this allegation was that the organiser had negligently failed to take precautions to make the premises safe having regard to the nature of the entertainment.	Breach in circumstances where the organiser failed to take precautions to ensure the fence was reasonably sufficient to prevent a bullock from surmounting it.
Langham v Connell Point Rovers Soccer Club <sup>436</sup>	New South Wales Court of Appeal	Football (Soccer)	Sustained fractured left elbow and wrist, numerous facial injuries and leg and knee injuries after tripping over rope hung between two vertical posts.	The plaintiff sued the occupier of the ground, Connells Point Rovers Playing Club, for negligence on the basis that the rope she tripped over should have been identified by a flag or some form of marking. The defendant did not deny they had a duty of care but argued that the plaintiff had not taken care for her own safety.	Breach in circumstances where the risk of injury was foreseeable in the sense of not being far-fetched or fanciful. Reasoned that there was a clearly foreseeable risk of harm which required a response in the form of a warning to those unfamiliar with the area. Insofar as no such warning was given the club breached their duty of care.
Evans v Waitemata District Pony Club ('Evans') <sup>437</sup>	Supreme Court Auckland	Equestrian	Injuries caused by a runaway horse which bolted across a car park.	The plaintiff sued the both the members of the pony club and the person in charge of the horse. The horse was tethered to a log. It was determined that there was an inadequate supply of hitching rails. The defendant attempted to argue that spectators "volunteered" to accept risks which prudent management and control cannot be expected to avoid.	Breach as against the pony club in circumstances where organisers do not take sufficient precautions to make the spectator area as safe as reasonably possible in the circumstances. The organiser made no attempt to a) separate horses from people, b) provide sufficient space to tether the horses and c) prevent people from bringing their horses into close proximity with cars.
Fenton v Thruxton (BARC) Ltd <sup>438</sup>	England and Wales Court of Appeal	Motorcycle Racing	Injuries sustained after motorcycle left the track and crashed into the spectator area.	The plaintiff brought a claim against the British Superbike Championship (BSC) after a motorcycle crashed through the barrier into the spectator area in which he was sitting. The allegation against the defendant was that the spectator area was insufficiently protected and should have been fitted with debris fencing. The BSC attempted to argue that the Motor Circuit Racing Control Board (MCRCB) had a responsibility to ensure tracks were safe. The MCRCB had conducted an inspection and deemed the track adequate.	Breach by the Motor Circuit Racing Control Board. The Court found that there had been no proper review of spectator safety in respect of the part of the racing track where the spectator area was located despite inspections on other sections.  Breach by the British Superbike Championship. The Court held that the occupier was under an obligation to satisfy itself that reasonable steps had been taken to ensure the safety of spectators. They were not able to outsource their duty of care to MCRCB.

Queenstown Lakes District Council v Palmer <sup>439</sup>	Court of Appeal Wellington	White Water Rafting	Wife drowned due to a capsized raft. Plaintiff suffered serious mental injuries including PTSD, a depressive disorder and an associated speech impediment as a result of nervous shock associated with witnessing the death of his wife.	The plaintiff claimed, though he had suffered no physical injury, he had suffered mental injuries as a result of witnessing his wife's death from drowning in a river-rafting accident. The plaintiff alleged that the negligence of the defendant council and rafting companies led to his wife's death and in turn his mental injuries. The main argument relied upon whether s 14(1) of the Accident Rehabilitation and Compensation Insurance Act 1992, which stated, no proceedings for damages arising directly or indirectly out of personal injury covered by this act... shall be brought independently of this act, precluded the plaintiff from bringing a claim in respect of this matter.	The defendants were found to be in breach regardless of this point as s 14(1) did not extend to secondary victims of the accident who are otherwise not covered by the act.
Dykema v Gus Macker Enterprises Inc <sup>440</sup>	Court of Appeals Michigan	Basketball	Injured by falling tree limb after running to take shelter to escape thunderstorm during outdoor basketball tournament.	The injured party argued that a special relationship existed at sporting events whereby the defendant corporation (the organiser) had a duty to warn him of an approaching thunderstorm.	No breach in circumstances where the corporation was not engaged in a business invitee-inviter relationship. Further, there was no indication in the record that the injured party entrusted himself to the control and protection of the corporations or that he had lost the capacity to protect himself.
Murray v Harringay Arena <sup>441</sup>	England and Wales Court of Appeal	Ice Hockey	Injury incurred from ice hockey puck to eye.	The plaintiff, claimed damages from the defendants, Harringay Arena, in respect of his injury on the basis that the arena had negligently failed to make sure the premises was as safe as reasonable care and skill could make them.	No breach as the danger that the puck might leave the arena was not an unusual danger.
Browning (Courtney Harris) v Odyssey Trust company Limited & Anor <sup>442</sup>	High Court of Justice Northern Ireland	Ice Hockey	Injury incurred from ice hockey puck.	Plaintiff alleges that the defendant, the owners of Belfast Giants Hockey team and Odyssey Arena were guilty of negligence and in breach of the Occupiers' Liability Act (Northern Ireland) 1957 in failing to provide sufficient protection for spectators such as nets or barriers.	No breach. It was determined that the arena was as safe a place as could reasonably be expected. There was netting behind each goal and glass at a lower level. This was considered sufficient and any other damage could be seen to be a danger inherent in the sport itself.
Austin v Miami University <sup>443</sup>	Court of Claims of Ohio	Ice Hockey	Injury incurred from ice hockey puck.	Plaintiff argued that the defendant, Miami University, should be responsible for her medical expenses incurred as the result of being struck by a puck during the warmup of a hockey game.	No breach. Defendant denied liability on the basis that the plaintiff assumed the risk associated with a hockey game — that you may be struck by a puck.

## Annexure D

### Case examples - Negligence of referees resulting in player injury

Case title	Court and jurisdiction	Sport	Injury	Description	Outcome
Vowles v Evans <sup>444</sup>	UK Court of Appeal	Rugby Union	Injury sustained by player in the position of “hooker” after a scrum failed to engage properly following the substitution of the original front row forward player by another player who had insufficient training and experience playing in that crucial position.	The Plaintiff sued the referee arguing that his decision to allow a player with inadequate experience and training to substitute into the front row forward position, rather than continue the match with non-contestable scrums, was negligent.	Breach by referee by failing to satisfy himself that the substituting player was suitably trained/experienced to be tried in the front row, and that as such, the referee breached the rules of the game. Further, the Court agreed with the trial judge that the negligent choice of player for the front row prop caused and/or contributed to the Plaintiff’s injury.
Bartlett v English Cricket Board Association of Cricket Officials <sup>445</sup>	UK	Cricket	Injury caused by slipping over whilst playing on a wet field.	The Plaintiff argued that the umpire breached his duty of care by allowing play when the pitch was unfit because of heavy rain.	No breach by referee in circumstances where the referee was held accountable by reference to the laws of the game in place, which required the referee to make an assessment of whether the grounds were “dangerous or unreasonable” such that that there was an “obvious and foreseeable risk to the safety of the players.” The Court accepted the evidence of the umpires that the conditions of the ground, whilst not ideal, were not dangerous and unreasonable. Therefore, the court held that there was no breach of duty by the umpires.
Smoldon v Whitworth & Anor <sup>446</sup>	UK Court of Appeal	Rugby Union (U18s)	Paralysis sustained after a scrum collapsed during a match.	The Plaintiff alleged that the referee owed him a duty of care to enforce the Laws of the Game of Rugby Union, to apply fairly the Laws of the Game without variation of omission, to affect the control of the match so as to ensure that the players were not exposed to unnecessary risk of injury, and to have particular regard to the fact that at least some of the players, including the Plaintiff, were under the age of 18.	Breach by referee by acting below the standard of a reasonably competent referee by failing to enforce the Crouch-Touch-Pause-Engage scrummaging sequence (which seeks to reduce the impact of engagement of a scrum to an acceptable level), and in failing to call no-side. The court (trial judge and Court of Appeal) also rejected the referee’s reliance on the assumption of responsibility defence, holding that whilst the Plaintiff had consented to the risk of injury in the game of rugby, this did not extend to consenting to the referee’s breach of duty. The trial judge (whose decision was upheld on appeal) was clear that his finding of liability was reached on the “very special facts” of the case, having regard to the rules designed for under 19s and evidence that the number of collapsed scrums which occurred in the match was well in excess of what any informed observer considered to be acceptable.

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Carabba v Anacortes Sch. Dist <sup>447</sup>	US	Wrestling (U8s — high school game)	Injury sustained as a result of the plaintiff's wrestling opponent making a sustained "full Nelson hold" for a period of time longer than the rules allowed.	The Plaintiff commenced proceedings in negligence against the referee for failure to adequately supervise the contestants, that the referee's attention had been diverted from the actions of contestants, that the referee had failed to immediately cause the hold to be broken, that the referee had allowed the hold to be prolonged for a substantial period of time, and that the referee violated the provisions of the 1963 official Wrestling Guide of the National Collegiate Athletic Association. The referee was employed by the School District, who was vicariously liable for his actions.	Breach by referee and that the School District was vicariously liable. The School District Appealed. On appeal, the Court held that the duty owed by the School District to the student participants of the wrestling match amounted to a duty to provide non-negligent supervision.
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## ANNEXURE E

### Key Sporting organisations/alliances/networks promoting climate action in sport

GLOBAL/ NON- AUSTRALIAN			
Name of Organisation	Purpose	No. of members	Australian sporting organisations who are signatories
UN Sport for Climate Action Framework <sup>448</sup>	Supports and guides sports actors in achieving global climate change goals for a low carbon economy.	272	<ul style="list-style-type: none"> <li>Tennis Australia</li> <li>Melbourne Cricket Club</li> <li>Australia Sail GP Team</li> <li>Australian Olympic Committee</li> <li>Bowls Australia Ltd</li> <li>Richmond Football Club</li> </ul>
Race to Zero <sup>449</sup>	To rally non-state actors to take rigorous and immediate action to halve global emissions by 2030 and deliver a healthier, fairer zero carbon world.	10,081	<ul style="list-style-type: none"> <li>Richmond Football Club</li> </ul>
Protect our Winters <sup>450</sup> (includes Protect our Winters Australia)	Mobilising the global snow sports community to act on climate change	65 athletes 99 brands 24 resorts 22 creatives 16 scientists	<ul style="list-style-type: none"> <li>Thredbo</li> </ul>
Council for Responsible Sport <sup>451</sup>	Provides sports certification, sets ESG standards for sports (The Responsible Sport Standard for Organisations and the Responsible Sport Standard for Events) and launched a cloud-based app called ReScore, which allows sporting event organisers to measure, track, report, and verify their progress against the Council's Responsible Sport Standards.	N/A	Unknown
Sustainable Sport Index <sup>452</sup>	To understand the environmental and social impacts of sports venues and teams through benchmarking data and sharing industry best practices	Unknown	Unknown
Sport and Sustainability International <sup>453</sup>	To accelerate sustainability in and through Sport	12 + athletes and students	Unknown
Sports Consortium <sup>454</sup>	UK group with explores and acts on the impact sports broadcasting has on the environment	11 sports broadcasters	N/A (seems only open to UK members)
British Association for Sustainable Sports <sup>455</sup>	UK association providing expert help to sports clubs, venues, and governing bodies to help them understand their impacts, set targets and implement processes to improve their environmental performance	71	N/A (only open to UK members)

Sports Positive <sup>456</sup>	UK-based organisation that focuses on supporting global sports organisations to increase ambition and action on climate change. Key initiatives include: <ul style="list-style-type: none"> <li>annual Summit in collaboration with UNFCCC Global Climate Action and the International Olympic Committee</li> <li>compile data and release 'Sport Positive Leagues' for various UK and European soccer leagues<sup>457</sup></li> </ul>	Unknown	Unknown
Pledgeball <sup>458</sup>	UK -based initiative whereby fans and teams make "pledges" to undertake small environmental-friendly actions in support of their team as part of a team-based "Pledge-Off" competition in the "Pledgeball League" which is won by the teams whose fans save the most carbon emissions	Unknown	N/A — UK only
Football for Future	A UK group of climate experts promoting sustainability and climate action in English football	Unknown	N/A — UK only
The Sport Ecology Group <sup>459</sup>	A group of academics dedicated to publishing research and reports on sports and ecology	21 academics	N/A as group is for academics. Members include an academic from La Trobe University, Melbourne
Life Tackle <sup>460</sup>	EU programme aimed at improving the environmental management of football matches and the overall level of awareness and attention towards environmental issues in the football sector	8	N/A — EU members only
Charter of 15 Eco-responsible commitments <sup>461</sup>	Provide 15 guiding principles for Event Organisers and Managers of Facilities and Venues, in line with the Sustainable Development Goals, which support environmental responsible practices in sport.	17 <sup>462</sup>	N/A — only open to French members
Athletes for the Earth <sup>463</sup>	Launched at the 2010 Olympic Winter games, the network uses Olympic and professional athletes as spokespeople for Earth, focusing on climate action.	13+	N/A — player-led. It appears from our review that no Australian athletes are currently part of the programme.
Green Sports Hub Europe (GSHE)	Launched in February 2021 and funded by the EU, the project's purpose is to make the sport sector more sustainable and green.		

## AUSTRALIA

Name of Organisation	Purpose	No. of members	Australian sporting organisations who are signatories
Sports Environmental Alliance <sup>464</sup>	Protecting and enhancing the natural environment of Australasia by promoting sustainability, sustainable development, regeneration and use of resources	51	<ul style="list-style-type: none"> <li>• AFL</li> <li>• Tennis Australia</li> <li>• Cricket Australia</li> <li>• Cricket Victoria</li> <li>• Football Australia</li> <li>• Australian Olympic Committee</li> <li>• Bowls Australia</li> <li>• Essendon Football Club</li> <li>• Hawthorn Football Club</li> <li>• Melbourne Football Club</li> <li>• Motorsport Australia</li> <li>• Netball Australia</li> <li>• Paralympics Australia</li> <li>• Western Force Rugby Union</li> </ul>
Protect our Winters Australia <sup>465</sup>	Engage and mobilise the Australian snow sport and outdoor community to: <ol style="list-style-type: none"> <li>1. protect the integrity of Australian winters now and for the future and to:</li> <li>2. Achieve Net Zero by 2035</li> <li>3. Hold global heating to no more than 1.5c above pre-industrial levels</li> </ol>	Unknown	Thredbo (Protect our Winters International 1 athlete 1 brand
Australian Sports Climate <sup>466</sup>	A sports targeted climate organisation assisting the sport industry to transition to a carbon neutral future by: <ol style="list-style-type: none"> <li>1. raising and directing funds into sporting clubs and events, in order to decarbonise</li> <li>2. assisting sports fans, player associations, the sporting organisations and their members, to measure and reduce their own carbon footprint.</li> </ol>	N/A	N/A
Frontrunners <sup>467</sup>	Supporting sport — from athletes to administrators — to tackle the climate and environmental challenges facing all of us.	N/A	N/A - player led (co-founded by Emma and David Pocock — Rugby Union)
Cricket for Climate <sup>468</sup>	To help reduce the load of carbon emissions that the sport of Cricket produces.	15 Local Cricket Clubs	N/A - player led (led by Pat Cummins — Cricket)
Footy for Climate <sup>469</sup>	Taking steps to address the contribution of AFL players to climate change.	260+ AFL players	N/A - led by AFL Players Association
The Cool Down <sup>470</sup>	To push for emissions cuts of at least half by 2030 and to reach net zero by 2050.	450+ athletes	N/A - player led (David Pocock — Rugby Union)

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Surfers for Climate <sup>471</sup>	<ol style="list-style-type: none"> <li>1. To mobilise and empower an alliance of surfers to care about climate</li> <li>2. To help the surfing community play a powerful role in stopping coastal and offshore fossil fuel developments</li> <li>3. To take action on implementing climate solutions</li> <li>4. To make MPs representing surfing communities take action on climate change.</li> </ol>	32+	N/A — player led (founded by Johnny Abegg and Belinda Baggs)
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## Annexure F

### List of fossil fuel sponsors of major Australian sporting organisations, teams and events

Sporting organisation/event	Fossil fuel sponsor
<b>TENNIS</b>	
Australian Open*	Santos <sup>472</sup>
<b>CRICKET</b>	
Cricket Australia*	Alinta Energy <sup>473</sup>
Brisbane Heat	Alinta Energy
All Men's National Cricket Teams (One Day, T20, Test)	Alinta Energy
Adelaide Strikers	Australian Gas Networks
<b>CYCLING</b>	
Tour Down Under*	Santos
<b>RUGBY UNION</b>	
Wallabies*	Santos
Walleraroos*	Santos
Queensland Reds*	Santos
NSW Waratahs*	Santos
Western Force	Santos
Australian Women's Sevens	Santos
Festival of Rugby, Narrabri	Santos
Brumbies	Synergy
<b>RUGBY LEAGUE</b>	
National Rugby League	Ampol Energy
North Queensland Cowboys	Bravus mining & resources (Adani)
Newcastle Knights	NSW Minerals Council
Queensland	Shell
<b>OLYMPICS</b>	
Australian Olympic Committee	Hancock Prospecting
<b>SURFLIFESAVING</b>	
Surf Lifesaving Australia	Ampol Energy
Surf Lifesaving WA	Woodside
<b>NETBALL</b>	
Netball Australia	Origin Energy
Majority of Super Netball teams, and overall Super Netball competition	Origin Energy
<b>AFL</b>	
Richmond Football Club	United Petroleum
Freemantle Dockers	Woodside
Australian Football League — Women's Competition	BHP

<b>SWIMMING</b>	
Swimming Australia	Hancock Prospecting
Swimming WA	Hancock Prospecting
Artistic Swimming Australia	Hancock Prospecting
<b>VOLLEYBALL</b>	
Volleyball Australia	Hancock Prospecting
<b>ROWING</b>	
Rowing Australia	Hancock Prospecting
<b>ATHLETICS</b>	
Athletics NT	Santos
<b>GOLF AUSTRALIA</b>	
Golf Australia	Hostplus <sup>474</sup>
<b>AUSTRALIAN RULES</b>	
West Coast Eagles	BHP
Adelaide Football Club	BHP
West Coast Eagles	AGL
Hawthorn Football Club	BP
Carlton Football Club	Endeavour Petroleum
Port Adelaide Football Club	GFG
Port Adelaide Football Club	Santos
Geelong Cats	Viva Energy
Fremantle Football Club	Woodside
Port Adelaide Football Club	AGL
Port Adelaide Football Club	Australian Gas Networks
Geelong Cats	Momentum Energy
<b>BASKETBALL</b>	
University of Canberra Capitals	ActewAGL
Bendigo Spirit	Elgas
<b>SOCCER</b>	
Perth Glory	BHP
Melbourne Victory Soccer Club	AGL
Melbourne City Football Club	Origin Energy

## Annexure G

### Climate change initiatives disclosed by key national and state government entities responsible for sport

FEDERAL						
Name of organisation	Climate change referred to in latest annual report?	Climate change referred to in current strategic plan?	Climate change guidance/ publications published on website?	Climate change substantively discussed anywhere on the website?	Extreme heat guidance issued?	Scorecard
Australian Sports Commission	✗	✗	✗	✗	✗	F
STATE						
WA Department of Local Government, Sport and Cultural Industries	✗	✗	✓ <sup>475</sup>	✗	✓ <sup>476</sup>	B
Vic Sport	✗	✗	✓ <sup>477</sup>	✗	✓	B
Queensland Government Department of Tourism, Innovation and Sport	✓ <sup>478</sup>	✗	✗	✗	✗	B-
SA Office for Recreation, Sport and Racing	✗	✗	✓ <sup>479</sup>	✗	✓ <sup>480</sup>	B-
Tasmanian Department of Communities	✗	✗	✓ <sup>481</sup>	✗	✗	C
NT Department of Territory families, housing and communities	✗	✗	✗	✗	✗	F
NSW Office of Sport	✗	✗	✗	✗	✗	F
ACT Government — Sport and Recreation	✗	✗	✗	✗	✗	F

## Annexure H

### Climate change initiatives disclosed by key national and state sporting organisations

Sport	No. orgs	Annual Report reference	Strategic plan reference	CC Guidance/ Publication Issued	Initiatives - no. of initiatives listed	CC on website	Heat guidance	Other (non-heat) weather guidance	Total ticks	Total ticks excl. weather policy (but including heat guidance/ policy)
Tennis	9	0	4	2	2	1	7	7	23	16
AFL	8	1	2	1	5	0	7	7	23	16
Netball	9	0	2	1	3	0	7	6	19	13
Soccer	9	0	2	1	1	0	9	5	18	13
Hockey	9	0	1	1	1	0	9	9	21	12
Rugby Union	9	0	0	0	1	0	9	9	19	10
Rowing	8	0	1	0	2	1	6	3	13	10
Softball	9	0	0	0	0	0	8	8	16	8
Cricket	9	0	2	0	2	2	2	2	10	8
Basketball	10	0	0	0	1	1	6	1	9	8
Equestrian	8	0	0	0	0	1	7	1	9	8
Surf Life Saving	8	0	2	2	3	0	1	1	9	8
Olympics/ international	3	1	0	0	6	1	0	0	8	8
Canoeing	7	0	0	0	0	0	7	7	14	7
Rugby League	8	0	0	0	0	0	7	7	14	7
Baseball	9	0	0	0	0	0	6	6	12	6
Volleyball	9	0	0	0	0	0	6	6	12	6
Triathlon	9	0	0	0	2	1	3	3	9	6
Athletics	9	0	0	0	0	0	5	6	11	5
Swimming	9	0	2	0	1	0	2	0	5	5
Water Polo	8	0	0	0	2	0	2	4	8	4
Golf	6	0	0	1	2	0	1	1	5	4
Table Tennis	9	1	0	0	0	0	3	0	4	4
Badminton	9	0	0	0	0	0	4	0	4	4
Gymnastics	9	0	0	0	0	0	3	0	3	3
Judo	9	0	0	0	0	0	2	1	3	2
Fencing	7	0	0	0	0	0	2	0	2	2
Archery	9	0	0	0	0	0	2	0	2	2
Skateboarding	9	0	0	0	0	0	1	1	2	1
Cycling	1	0	0	0	0	0	1	1	2	1
Surfing	7	0	0	0	1	0	0	1	2	1
Artistic Swimming	9	0	0	0	0	0	0	6	6	0
Diving	7	0	0	0	0	0	0	1	1	0

Modern Pentathlon	1	0	0	0	0	0	0	0	1	1	0
Sailing	1	0	0	0	0	0	0	0	0	0	0
Shooting	1	0	0	0	0	0	0	0	0	0	0
Wrestling	7	0	0	0	0	0	0	0	0	0	0
Boxing	9	0	0	0	0	0	0	0	0	0	0
Karate	8	0	0	0	0	0	0	0	0	0	0
Taekwondo	7	0	0	0	0	0	0	0	0	0	0
Sport Climbing	6	0	0	0	0	0	0	0	0	0	0
Handball	7	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>314</b>	<b>3</b>	<b>18</b>	<b>9</b>	<b>35</b>	<b>8</b>	<b>135</b>	<b>111</b>	<b>319</b>	<b>208</b>	
<b>% of total<sup>482</sup></b>		<b>1%</b>	<b>6%</b>	<b>3%</b>	<b>11%</b>	<b>3%</b>	<b>43%</b>	<b>35%</b>			

## Annexure H

### Climate change initiatives disclosed by key national and state sporting organisations

No.	Name of organisation	Organisational structure	Climate change referred to in latest annual report?	Climate change referred to in current strategic plan?	Climate change guidance/publications on website?	Key climate Change actions	Climate change discussed anywhere on the website?	Extreme heat guidance issued?	Other (non-heat) extreme weather guidance published?
<b>NATIONAL</b>									
1.	Australian Olympic Committee	Incorporated Association	✓	✗	✗	<ul style="list-style-type: none"> <li>Signatory of the United Nations Sports for Climate Change Action Framework, such that they are committed to 50% reduction in emissions by 2030 and net zero by 2040.</li> <li>In 2022 established a Sustainability Advisory Working Group within AOC.<sup>486</sup></li> <li>Received the International Olympic Committee's Carbon Action Award for its efforts to reduce Greenhouse Gas emissions after providing the IOC with a carbon reduction plan.<sup>2F484</sup></li> <li>Brisbane's 2032 Olympics are the first Olympic games which are contractually obligated to operate as "climate positive" i.e. has to offset more carbon emissions than it produces.<sup>485</sup></li> </ul>	✓ <sup>486</sup>	N/A	N/A
2.	Paralympics Australia	Public unlisted company limited by guarantee <sup>487</sup>	✗	✗	✗	Member of the Sports Environmental Alliance (SEA)	✗	N/A	N/A
3.	Commonwealth Games Australia	Public unlisted company limited by guarantee	✗	✗	✗	Various sustainability disclosure and initiatives as part of the Gold Coast 2018 Commonwealth Games. <sup>488</sup>	✗	N/A	N/A

4.	Tennis Australia	Public unlisted company limited by guarantee	✗	✗	✓ 489	<ul style="list-style-type: none"> <li>Signatory of the UN Sports for Climate Change Action Framework, such that they are committed to 50% reduction in emissions by 2030 and net zero by 2040</li> <li>Member of the Sports Environmental Alliance (SEA)</li> </ul>	✓ 490	✓ 491	✓ 492
5.	Cricket Australia	Public unlisted company limited by guarantee	✗	✓ 11F493	✗	Member of the Sports Environmental Alliance (SEA)	✓ 12F494	✓ 495	✓ 496
6.	Australian Football League	Public unlisted company limited by guarantee	✓ 15F497	✗	✓ 16F498	<ul style="list-style-type: none"> <li>"Green Round" in 2009 with the aim of making AFL more climate-friendly.</li> <li>Member of the Sports Environmental Alliance (SEA)</li> <li>AFL and AFLW players have formed the Players for Climate.</li> <li>AFL Responsible Business Policy 2023-2024 - discusses minimising environmental impact.</li> <li>Appointed a Head of Sustainability</li> </ul>	✗	✓ 499	✓ 500
7.	Australian Rugby League Commission (NRL)	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 501	✓ 502
8.	Rugby Australia	Public unlisted company limited by guarantee	✗	N/A	✗	In 2015 the Qantas Wallabies announced that they would offset their entire carbon footprint through the Qantas Fly Carbon Neutral Program, in partnership with Carbon Trade Exchange	✗	✓ 21F503	✓ 504
9.	Football Australia	Public unlisted company limited by guarantee	✗	✗	✗	Member of the Sports Environmental Alliance (SEA)	✗	✓ 23F505	✗
10.	Hockey Australia	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 506	✓ 507

11.	Surf Life Saving Australia	Public unlisted company limited by guarantee, registered with the ACNC			 508	Commissioned a consultant to assess the risks that climate change may pose to Surf Life saving Australia (SLSA), review available strategies to address the identified risks and develop a program of works to implement the identified strategies. The outcome included publication of a report. <sup>509</sup> and a Climate Change Adaptation Road Map. While the Road Map was stated to be the "first step" in SLSA's climate change response, it is not clear whether it has been implemented and/or progressed.		N/A	N/A
12.	Surfing Australia	Public unlisted company limited by guarantee				Partnering with renewable energy company, ACCIONA. ACCIONA CEO of Aust & NZ stated in 2020: "ACCIONA is delighted to renew our partnership with Surfing Australia and align with a like-minded organisation that shares our passion for a sustainable and emissions-free future. Through our partnership, we hope to raise awareness of the impact of climate change and water pollution as well as to inspire and encourage diversity while also advocating a healthy lifestyle for our employees." Initiatives include the ACCIONA 'Recycle Station' powered by Envirobank, and an ACCIONA beach clean-up on the finals of the Australian Boardriders Battle.		N/A	 510
13.	Athletics Australia	Public unlisted company limited by guarantee				None		 511	 512

14.	Swimming Australia	Public unlisted company limited by guarantee	✗	✗	✗	The Australian Swim team (the Dolphins) undertook a tour of the great Barrier Reef expedition in July 2018 to raise awareness of the health of the Great Barrier Reef and the ways it is being impacted by issues including climate change and plastic pollution. <sup>513</sup>	✗	N/A	N/A
15.	Netball Australia	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✗	✗
16.	Rowing Australia	Public unlisted company limited by guarantee	✗	✓ 514	✗	Acting in accordance with the UN Sports for Climate Action Framework in their strategic plan for 2022-2032.  Creating and implementation of the Rowing Australia Environmental Sustainability policy and guidelines. <sup>515</sup>	✓ 516	✓ 517	✗
17.	Golf Australia	Public unlisted company limited by guarantee	✗	✗	✓ 518	Published a roadmap for 2030 for problems presented by climate change called Golf Course 2030.  Member of the Sports Environmental Alliance (SEA)	✗	✓ 519	✓ 520
18.	National Basketball League	Private company	✗	N/A	✗	None	✗	N/A	N/A
19.	Basketball Australia	Public unlisted company limited by guarantee	✗	✗	✗	In partnership with FIBA, Basketball Australia's collaboration of hosting the Women's World Cup in 2022 was the first of its kind to be carbon neutral by buying its offsets. FIBA's sustainability program was guided by the UN Framework Convention on Climate Change Sports for Climate Action through sourcing responsibly, and reducing environmental impacts e.g., 90% of attendees used the trains to arrive to the games. <sup>521</sup>	✓ 522	✗	✗

20.	AusCycling	Company limited by guarantee	✗	✗	✗	None	✗	✓ 523	✓ 524
21.	Water Polo Australia	Company limited by guarantee	✗	✗	✗	Water Polo Australia (WPA) established the WPA Climate Sustainability Panel. Led by WPA Board Director Susie Smith, the panel will meet regularly to map out a climate sustainability plan for Water Polo Australia. <sup>525</sup>  Forming a working group to develop the "Water Polo Australia Climate Sustainability Plan" using the principles of the "United Nations Sport for Climate Action" framework. <sup>526</sup>	✗	✓ 45F527	✓ 528
22.	Australian Sailing	Company limited by guarantee	✗ 529	✗ 530	✗	None	✗	✗	✗
23.	Volleyball Australia	Company limited by guarantee	✗	✗	✗	None	✗	✓ 531	✓ 532
24.	Baseball Australia	Company limited by guarantee	✗	✗	✗	None	✗	✗	✓ 533
25.	Modern Pentathlon Australia	Incorporated Association	✗	✗	✗	None	✗	✗	✓ 534
26.	Canoeing	Company limited by guarantee	✗	✗	✗	None	✗	✓ 535	✓ 536
27.	Archery	Incorporated Association	✗	✗	✗	None	✗	✓ 537	✗
28.	Triathlon	Company Limited by Guarantee	✗	✗	✗	Establish the Triathlon Australia Environmental Sustainability Advisory Committee. <sup>538</sup>	✓ 539	✓ 540	✓ 541
29.	Diving Australia	Company Limited by Guarantee	✗	Plan Pending	✗	None	✗	✗	✗
30.	Softball Australia	Company Limited by Guarantee	✗	✗	✗	None	✗	✓ 542	✓ 543
31.	Shooting Australia	Company Limited by Guarantee	✗	✗	✗	None	✗	✗	✗
32.	Wrestling Australia	Company Limited by Guarantee	N/A	✗	✗	None	✗	✗	✗

33.	Artistic Swimming	Company Limited by Guarantee	✗	N/A	✗	None	✗	✗	✓ 544
34.	Boxing Australia	Company Limited by Guarantee	✗	✗	✗	None	✗	✗	✗
35.	Judo Australia	Company Limited by Guarantee	✗	✗	✗	None	✗	✗	✗
36.	Australian Karate Federation	Company Limited by Guarantee	✗	N/A	✗	None	✗	✗	✗
37.	Australian Taekwondo	Company Limited by Guarantee	✗	✗	✗	None	✗	✗	✗
38.	Fencing Australia	Company Limited by Guarantee	✗	✗	✗	None	✗	✗	✗
39.	Badminton Australia	Company Limited by Guarantee	✗	✗	✗	None	✗	✗	✗
40.	Equestrian Australia	Company Limited by Guarantee	✗	✗	✗	None	✓ 545	✓ 546	✗
41.	Gymnastics Australia	Company Limited by Guarantee	✗	✗	✗	None	✗	✗	✗
42.	Sport Climbing Australia	Company Limited by Guarantee	✗	✗	✗	None	✗	✗	✗
43.	Table Tennis Australia	Company Limited by Guarantee	✓ 547	✗	✗	None	✗	✗	✗
44.	Handball Australia	Company Limited by Guarantee	N/A	✗	✗	None	✗	✗	✗
45.	Skate Australia	Company Limited by Guarantee	N/A	✗	✗	None	✗	✗	✗
<b>STATE</b>									
<b>Tennis</b>									
46.	Tennis NSW	Public unlisted company limited by guarantee	✗	✗	✓ 548	None	✗	✓ 549	✓ 550
47.	Tennis ACT	Public unlisted company limited by guarantee	✗	N/A	✗	None	✗	✓ 551	✓ 552
48.	Tennis Victoria	Incorporated Association	✗	✓ 553	✗	None	✗	✓ 554	✓ 555

49.	Tennis Queensland	NFP public unlisted company limited by guarantee	✗	✓ 556	✗	None	✗	✗	✗
50.	Tennis SA	Incorporated Association	✗	✗	✗	None	✗	✓ 557	✓ 558
51.	Tennis WA	Incorporated Association	✗	✓ 559	✗	None	✗	✓ 560	✓ 561
52.	Tennis Tasmania	Incorporated Association	✗	✓ 562	✗	None	✗	✗	✗
53.	Tennis NT	NFP Incorporated Association	✗	✗	✗	None	✗	✓ 563	✓ 564
<b>Cricket</b>									
54.	Cricket NSW	Public unlisted company limited by guarantee	✗	✓ 565	✗	None	✗	✗	✗
55.	Cricket ACT	Incorporated Association	✗	✗	✗	None	✗	✓ 566	✓ 567
56.	Cricket Victoria	Public unlisted company limited by guarantee	✗	✗	✗	Member of the Sports Environmental Alliance (SEA)	✗	✗	✗
57.	Queensland Cricket	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✗	✗
58.	South Australian Cricket Association	Public unlisted company limited by guarantee	✗	N/A	N/A	None	✓ 86F568	✗	✗
59.	Western Australian Cricket Association	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✗	✗
60.	Cricket Tasmania	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✗	✗
61.	Northern Territory Cricket	Incorporated Association	✗	✗ 569	✗	None	✗	✗	✗
<b>AFL</b>									
62.	Australian Football League Victoria	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 570	✓ 571

63.	AFL (NSW/ACT) Commission	Public unlisted company limited by guarantee	N/A	N/A	✗	None	✗	✓ 572	✓ 573
64.	AFL Queensland	Public unlisted company limited by guarantee	N/A	✓ 574	✗	None	✗	✓ 575	✓ 576
65.	AFL Northern Territory	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 577	✓ 578
66.	AFL Tasmania	Unknown	N/A	✓ 579	✗	None	✗	✓ 580	✓ 581
67.	Southern Australian National Football League	Incorporated Association	✗	N/A	✗	None	✗	✗	✗
68.	Western Australian Football Commission	Incorporated Association	✗	✗	✗	None	✗	✓ 582	✓ 583
<b>Rugby League</b>									
69.	NSW Rugby League	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 584	✓ 585
70.	NRL Victoria	N/A	N/A	N/A	✗	None	✗	✓ 104F586	✓ 105F587
71.	Queensland Rugby League	NFP Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 588	✓ 107F589
72.	NRL SA	Incorporated Association (SA)	Not publicly available	✗	✗	None	✗	✓ 108F590	✓ 109F591
73.	NRL WA	Public unlisted company limited by guarantee	Not publicly available	✗	✗	None	✗	✓ 110F592	✓ 111F593
74.	NRL NT	Public company limited by guarantee	N/A	N/A	✗	None	✗	✓ 112F594	✓ 113F595
75.	NRL Tasmania - No website								
<b>Rugby Union</b>									
76.	New South Wales Rugby Union	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 596	✓ 597

77.	Australia Capital Territory and Southern New South Wales Rugby Union	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 598	✓ 599
78.	Victorian Rugby Union	Incorporated Association	✗	✗	✗	None	✗	✓ 600	✓ 601
79.	Queensland Rugby Union	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 602	✓ 603
80.	South Australian Rugby Union	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 604	✓ 605
81.	Western Australian Rugby Union	NFP Incorporated Association	✗	✗	✗	None	✗	✓ 606	✓ 607
82.	Tasmanian Rugby Union	Incorporated Association	✗	✗	✗	None	✗	✓ 608	✓ 609
83.	Northern Territory Rugby Union	Incorporated Association	✗	✗	✗	None	✗	✓ 610	✓ 611
<b>Soccer</b>									
84.	Football NSW	Public unlisted company limited by guarantee	✗	✓ 612	✗	None	✗	✓ 613	✓ 614
85.	ACT Football Federation	Public unlisted company limited by guarantee	✗	✓ 615	✓ 134F616	None	✗	✓ 617	✓ 618
86.	Football Queensland	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 619	✓ 620
87.	Football Federation Tasmania	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 621	✗
88.	Football Federation SA	Incorporated Association	✗	✗	✗	None	✗	✓ 622	✓ 623

89.	Football Federation Northern Territory	Incorporated Association	✗	N/A	✗	None	✗	✓ 624	✓ 625
90.	Football West	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 626	✗
91.	Football Victoria	Incorporated Association	✗	✗	✗	None	✗	✓ 627	✗
<b>Hockey</b>									
92.	Hockey NSW	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 628	✓ 629
93.	Hockey Victoria	Incorporated Association	✗	✗	✗	None	✗	✓ 148F630	✓ 149F631
94.	Hockey Queensland Limited	Public unlisted company limited by guarantee	✗	✗	✓ 632	<ul style="list-style-type: none"> <li>Reduced its energy intensity by 59% and waste intensity by 65% between 2017 and 2020</li> <li>Upgraded all office, gate entries, courtyard and grandstand lighting to LED and installed energy-efficient lighting on both fields</li> <li>New changing rooms and amenities use LED lighting</li> <li>changed hot water system in change rooms from electric to instantaneous gas so that water is only heated when the tap is turned on or when someone walks in for showers</li> <li>Electric air vents are used in the change rooms rather than air conditioning. The vents are automatically switched on and off with the lights.</li> </ul>	✗ 633	✓ 634	✓ 635
95.	South Australian Hockey Association	Incorporated Association	✗	✗	✗	None	✗	✓ 636	✓ 637

96.	Hockey Northern Territory	Incorporated Association	✗	✗	✗	None	✗	✓ 638	✓ 639	
97.	The Western Australian Hockey Association	Incorporated Association	✗	✓ 640	✗	None	✗	✓ 641	✓ 642	
98.	Hockey ACT	Incorporated Association	✗	✗	✗	None	✗	✓ F643	✓ 644	
99.	Hockey Tasmania	Incorporated Association	✗	✗	✗	None	✗	✓ 163F645	✓ 164F646	
<b>Surf Life Saving</b>										
100.	Surf Life Saving NSW	Public unlisted company limited by guarantee registered with the ACNC	✗	✗	✗	None	✗	N/A	N/A	
101.	Surf Life Saving Victoria	Public unlisted company limited by guarantee registered with the ACNC	✗	✗	✓ 647	None 648	✗	N/A	N/A	
102.	Surf Life Saving Queensland	Public unlisted company limited by guarantee registered with the ACNC	✗	✗	✗	None	✗	N/A	N/A	
103.	Surf Life Saving South Australia	Incorporated Association	✗	✓ 649	✗	<ul style="list-style-type: none"> <li>Member of the Sports Environmental Alliance (SEA)</li> <li>Although not climate-change specific, the Board has an Environment Advisory Committee which makes recommendations to the Board "on all matters relating to the natural environment of SA" including challenges and concerns related to local environmental challenges, environmental impact or general environmental participation.<sup>650</sup></li> </ul>	✗	N/A	N/A	

104.	Surf Life Saving Western Australia	Incorporated Association	✗	✗	✗	None	✗	N/A	N/A
105.	Surf Life Saving Northern Territory	Incorporated Association	✗	✗	✗	None	✗	N/A	N/A
106.	Surf Life Saving Tasmania	Incorporated Association	✗	✓ 651	✗	None	✗	✓ 170F652	✓ 171F653
<b>Surfing</b>									
107.	Surfing NSW	Incorporated Association	✗	N/A	✗	None	✗	N/A	N/A
108.	Surfing Victoria	Incorporated Association	✗	✗	✗	None	✗	N/A	N/A
109.	Surfing Qld	Public unlisted company limited by guarantee	N/A	✗	✗	None	✗	N/A	N/A
110.	Surfing South Australia	Incorporated Association	N/A	N/A	✗	None	✗	N/A	N/A
111.	Surfing Western Australia	Incorporated Association	✗	✗	✗	None	✗	N/A	N/A
112.	Surfing Tasmania	Incorporated Association	✗	✗	✗	None	✗	N/A	N/A
<b>Athletics</b>									
113.	Athletics NSW	Public unlisted company limited by guarantee	✗	N/A	✗	None	✗	✓ 654	✓ 655
114.	Athletics Victoria	Incorporated Association	✗	✗	✗	None	✗	✓ 656	✓ 657
115.	Athletics ACT	Incorporated Association	✗	✗	✗	None	✗	✓ 176F658	✓ 177F659
116.	Athletics Queensland	Public unlisted company limited by guarantee	✗	N/A	✗	None	✗	✗	✗
117.	Athletic Association of South Australia	Incorporated Association	✗	✗	✗	None	✗	✓ 660	✓ 661
118.	Athletics West	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✗	✗
119.	Northern Territory Athletics	Incorporated Association	✗	✗	✗	None	✗	✓ 662	✓ 663
120.	Athletics Tasmania	Incorporated Association	✗	✗	✗	None	✗	✗	✗

Swimming									
121.	Swimming New South Wales	Public unlisted company limited by guarantee	✗	N/A	✗	None	✗	✓ 664	N/A
122.	Swimming Victoria	Incorporated Association	✗	✓ 665	✗	None	✗	✗	N/A
123.	Swimming ACT	Incorporated Association	N/A	✗	✗	None	✗	✗	N/A
124.	Queensland Swimming	Incorporated Association	✗	✗	✗	None	✗	✗	✗
125.	Swimming SA	Incorporated Association	✗	✗	✗	None	✗	✗	N/A
126.	Swimming Northern Territory	Incorporated Association	✗	✗	✗	None	✗	✗	N/A
127.	Swimming Tasmania	Unknown	✗	✗	✗	None	✗	✗	N/A
128.	Swimming WA	Incorporated Association	✗	✓ 666	✗	None	✗	✓ 667	N/A
Netball									
129.	Netball NSW	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 668	✓ 669
130.	Netball WA	Incorporated association	✗	N/A	✗	None	✗	✓ 670	✓ 671
131.	Netball SA	Unknown	✗	✗	✗	None	✗	✓ 672	✓ 673

132.	Netball Victoria	Unknown		 674	 192F675	<ul style="list-style-type: none"> <li>Member of the Sports Environmental Alliance (SEA)</li> <li>Netball Victoria Environment Working Group (EWG) was established in 2020 to focus on "empowering our netball community to live healthier lives in a healthier environment".</li> <li>In September 2023, Netball Victoria released its first "Green Action Plan". The purpose of the plan is to signal Netball Victoria's intention to take positive and practical steps towards becoming a greener organisation.</li> </ul>		 676	 677
133.	Netball Tasmania	Unknown		N/A		None			
134.	Netball Northern Territory	Incorporated Association				None		 678	
135.	Netball Queensland	Public unlisted company limited by guarantee		 679		None		 680	 681
136.	Netball ACT	Unknown				None		 682	 683
<b>Rowing</b>									
137.	Rowing NSW	Unknown	N/A			None		 684	
138.	Rowing WA	Unknown				None			
139.	Rowing South Australia	Incorporated Association				None		 685	 686

140.	Rowing Victoria	Incorporated Association	✗	✗	✗	None	✗	✓ 687	✓ 688
141.	Rowing Tasmania	Incorporated Association	✗	✗	✗	None	✗	✗	✗
142.	Rowing Queensland	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 689	✓ 690
143.	Rowing ACT	Incorporated Association	✗	✗	✗	None	✗	✓ 691	✗
<b>Golf</b>									
144.	Golf Victoria	Company limited by guarantee	✗	N/A	N/A	None	N/A	N/A	N/A
145.	Golf Queensland	Company limited by guarantee	✗	N/A	N/A	None	N/A	N/A	N/A
146.	Golf SA	Incorporated Association	✗	N/A	N/A	None	N/A	N/A	N/A
147.	Golf NT	Incorporated Association	✗	N/A	N/A	None	N/A	N/A	N/A
148.	Golf Tasmania	Incorporated Association	✗	N/A	N/A	None	N/A	N/A	N/A
<b>Basketball</b>									
149.	Basketball NSW	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 692	✗
150.	Basketball Victoria	Incorporated Association	✗	✗	✗	None	✗	✓ 693	✗
151.	Basketball NT	Incorporated Association	N/A	✗	✗	None	✗	✗	✗
152.	Basketball WA	Incorporated Association	✗	✗	✗	None	✗	✓ 694	✗
153.	Basketball SA	Incorporated Association	✗	✗	✗	None	✗	✓ 695	✗
154.	Basketball ACT	Incorporated Association	✗	✗	✗	None	✗	✓ 696	✓ 697
155.	Queensland basketball	Public unlisted company limited by guarantee	✗	✗	✗	None	✗	✓ 698	✗

156.	Basketball Tasmania	Incorporated Association	✗	✗	✗	None	✗	✗	✗
<b>Water Polo</b>									
157.	Water Polo NSW	Incorporated Association	✗	✗	✗	None	✗	✗	✓ 699
158.	Water Polo Victoria	Incorporated Association	✗	✗	✗	None	✗	✗	✗
159.	Water Polo ACT	Incorporated Association	✗	✗	✗	None	✗	✗	✗
160.	Water Polo Queensland	Incorporated Association	✗	✗	✗	None	✗	✗	✗
161.	Water Polo SA	Incorporated Association	✗	✗	✗	None	✗	✓ 700	✓ 701
162.	Water Polo WA	Incorporated Association	✗	✗	✗	None	✗	✗	✓ 702
163.	Water Polo Tasmania	Incorporated Association	✗ 703	✗	✗	None	✗	✗	✗
<b>Volleyball</b>									
164.	Volleyball NSW	Incorporated Association	✗	✗	✗	None	✗	✗	✗
165.	Volleyball Victoria	Incorporated Association	✗	✗	✗	None	✗	✓ 704	✓ 705
166.	Volleyball ACT	Incorporated Association	✗	✗	✗	None	✗	✓ 706	✓ 707
167.	Volleyball Queensland	Incorporated Association	✗	✗	✗	None	✗	✗	✗ 199F
168.	Volleyball NT	Unknown	N/A	✗	✗	None	✗	✗	✗
169.	Volleyball SA	Incorporated Association	✗	✗	✗	None	✗	✓ 225F708	✓ 709
170.	Volleyball WA	Incorporated Association	✗	✗	✗	None	✗	✓ 710	✓ 711
171.	Volleyball Tasmania	Incorporated Association	✗	✗	✗	None	✗	✓ 712	✓ 713
<b>Baseball</b>									
172.	Baseball NSW	Incorporated Association	✗	N/A	✗	None	✗	✓ 714	✓ 715
173.	Baseball Victoria	Incorporated Association	✗	✗	✗	None	✗	✓ 716	✓ 717
174.	Baseball Canberra	Incorporated Association	N/A	✗	✗	None	✗	✓ 718	✓ 719
175.	Baseball Queensland	Incorporated Association	✗	✗	✗	None	✗	✗	✗

176.	Baseball NT	Incorporated Association	✗	✗	✗	None	✗	✓ 720	✓ 721	
177.	Baseball SA	Incorporated Association	✗	✗	✗	None	✗	✓ 722	✓ 723	
178.	Baseball WA	Incorporated Limited by Shares	✗	✗	✗	None	✗	✓ 724	✗	
179.	Baseball Tasmania - Website unavailable									
<b>Canoeing</b>										
180.	Paddle NSW	Incorporated Association	✗	✗	✗	None	✗	✓ 725	✓ 726	
181.	Paddle Victoria	Incorporated Association	✗	✗	✗	None	✗	✓ 727	✓ 728	
182.	Paddle Queensland	Incorporated Association	✗	✗ Adopts Paddle Australia's Strategic Plan.	✗	None	✗	✓ 729	✓ 730	
183.	Paddle SA	Incorporated Association	✗	✗ Adopts Paddle Australia's Strategic Plan.	✗	None	✗	✓ 731	✓ 732	
184.	Paddle WA	Incorporated Association	✗	✗ Adopts Paddle Australia's Strategic Plan.	✗	None	✗	✓ 733	✓ 734	
185.	Paddle Tasmania	Incorporated Association	✗	✗ Adopts Paddle Australia's Strategic Plan.	✗	None	✗	✓ 735	✓ 736	
<b>Archery</b>										
186.	Archery NSW	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗	
187.	Archery Victoria	Incorporated Association	✗	✗	✗	None	✗	✗	✗	
188.	Archery ACT	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗	

189.	North Queensland Archery	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
190.	South Queensland Archery	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
191.	Archery SA	Incorporated Association	N/A	✗	✗	None	✗	✓ <small>737</small>	✗
192.	Archery WA	Incorporated Association	N/A	✗	✗	None	✗	✗	✗
193.	Archery Tasmania	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
<b>Triathlon<sup>255F738</sup></b>									
194.	Triathlon NSW	Company Limited By Guarantee	✗	✗	✗	None	✗	✗	✓ <small>739</small>
195.	Triathlon Victoria	Incorporated Association	✗	✗	✗	None	✗	✗	✗
196.	Triathlon ACT	Incorporated Association	✗	✗	✗	Have a Sustainability Policy. <sup>740</sup>	✗	✗	✓ <small>741</small>
197.	Triathlon Queensland	Company Limited By Guarantee	✗	✗	✗	None	✗	✗	✗
198.	Triathlon NT	Incorporated Association	✗	✗	✗	None	✗	✓ <small>742</small>	✗
199.	Triathlon SA	Incorporated Association	✗	✗	✗	None	✗	✓ <small>743</small>	✗
200.	Triathlon WA	Incorporated Association	✗	✗	✗	None	✗	✗	✗
201.	Triathlon Tasmania	Incorporated Association	✗	✗	✗	None	✗	✗	✗
<b>Diving</b>									
202.	Diving NSW	Incorporated Association	✗	N/A	✗	None	✗	✗	✗
203.	Diving Victoria	Incorporated Association	Cannot access	✗	✗	None	✗	✗	✗
204.	Diving Queensland	Incorporated Association	✗	✗	✗	None	✗	✗	✓ <small>744</small>
205.	Diving SA	Incorporated Association	✗	✗	✗	None	✗	✗ <sup>235</sup> F262F	✗
206.	Diving WA	Incorporated Association	✗	✗	✗	None	✗	✗	✗
207.	Diving Tasmania	N/A	N/A	N/A	✗	None	✗	✗	✗

Softball									
208.	Softball NSW	Incorporated Association	✗	✗	✗	None	✗	✓ 745	✓ 746
209.	Softball Victoria	Incorporated Association	✗	✗	✗	None	✗	✓ 747	✓ 748
210.	Softball ACT	Incorporated Association	✗	✗	✗	None	✗	✓ 749	✓ 750
211.	Softball Queensland	Incorporated Association	✗	✗	✗	None	✗	✓ 751	✓ 752
212.	Softball NT	Incorporated Association	Cannot access	Cannot access	✗	None	✗	✓ 753	✓ 754
213.	Softball SA	Incorporated Association	✗	N/A	✗	None	✗	✓ 755	✓ 756
214.	Softball WA	Incorporated Association	✗	✗	✗	None	✗	✓ 757	✗
215.	Softball Tasmania	Incorporated Association	N/A	✗	✗	None	✗	✗	✓ 758
Wrestling									
216.	NSW Wrestling	N/A	N/A	N/A	✗	None	✗	✗	✗
217.	Victoria Wrestling	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
218.	ACT Wrestling	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
219.	Wrestling Queensland	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
220.	Wrestling SA	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
221.	Wrestling WA	Incorporated Association	N/A	✗	✗	None	✗	✗	✗
Artistic Swimming <sup>250F</sup>									
222.	Artistic Swimming NSW	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
223.	Artistic Swimming Victoria	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
224.	Artistic Swimming ACT	N/A	N/A	✗ Adopts ASA Strategic Plan	✗	None	✗	✗ 251	✓ 759
225.	Artistic Swimming Queensland	Incorporated Association	N/A	✗	✗	None	✗	✗	✗

226.	Artistic Swimming NT	N/A	N/A	✗	✗	None	✗	252 ✗ <sub>F</sub>	✓ 760
				Adopts ASA Strategic Plan					
227.	Artistic Swimming SA	N/A	N/A	✗	✗	None	✗	253 ✗ <sub>F</sub>	✓ 761
				Adopts ASA Strategic Plan					
228.	Artistic Swimming WA	Incorporated Association	✗	✗	✗	None	✗	254 ✗	✓ 762
229.	Artistic Swimming Tasmania	N/A	N/A	✗	✗	None	✗	255 ✗	✓ 763
				Adopts ASA Strategic Plan					
<b>Boxing</b>									
230.	Boxing Australia NSW	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
231.	Boxing Victoria	N/A	N/A	N/A	✗	None	✗	✗	✗
232.	Boxing Australia ACT	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
233.	Boxing Australia Queensland	N/A	N/A	N/A	✗	None	✗	✗	✗
234.	Boxing Australia SA	Incorporated Association	N/A	✗	✗	None	✗	✗	✗
235.	Boxing Australia NT	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
236.	Boxing Australia WA	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
237.	Boxing Australia Tasmania	Incorporated Association	N/A	✗	✗	None	✗	✗	✗
<b>Judo</b>									
238.	Judo NSW	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
239.	Judo Victoria	Incorporated Association	✗	✗	✗	None	✗	✗	✗
240.	Judo ACT	Incorporated Association	N/A	✗	✗	None	✗	✗	✓ 764
241.	Judo Queensland	Incorporated Association	✗	✗	✗	None	✗	✗	✗
242.	Judo NT	Incorporated Association	N/A	N/A	✗	None	✗	✓	✗ 765

243.	Judo SA	Incorporated Association	✗	N/A	✗	None	✗	✓ 766	✗
244.	Judo WA	Incorporated Association	Cannot access	Cannot access	✗	None	✗	✗	✗
245.	Judo Tasmania	N/A	N/A	✗	✗	None	✗	✗	✗
<b>Karate</b>									
246.	Karate NSW	N/A	N/A	N/A	✗	None	✗	✗	✗
247.	Karate Victoria	N/A	N/A	N/A	✗	None	✗	✗	✗
248.	Karate Queensland	N/A	N/A	N/A	✗	None	✗	✗	✗
249.	Karate NT	N/A	N/A	N/A	✗	None	✗	✗	✗
250.	Karate SA	N/A	N/A	N/A	✗	None	✗	✗	✗
251.	Karate WA	Incorporated Association	✗	✗	✗	None	✗	✗	✗
252.	Karate Tasmania	N/A	N/A	N/A	✗	None	✗	✗	✗
<b>Taekwondo</b>									
253.	Australian Taekwondo NSW	N/A	N/A	N/A	✗	None	✗	✗	✗
254.	Australian Taekwondo Victoria	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
255.	Australian Taekwondo ACT	Pty Ltd.	N/A	N/A	✗	None	✗	✗	✗
256.	Australian Taekwondo Queensland	Incorporated Association	N/A	✗	✗	None	✗	✗	✗
257.	Australian Taekwondo SA	N/A	N/A	N/A	✗	None	✗	✗	✗
258.	Australian Taekwondo WA	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
<b>Fencing</b>									
259.	NSW Fencing	Incorporated Association	N/A	✗	✗	None	✗	✓ 767	✗
260.	Victoria Fencing	Incorporated Association	✗	N/A	✗	None	✗	✗	✗
261.	ACT Fencing	Incorporated Association	N/A	✗	✗	None	✗	✗	✗

262.	Queensland Fencing	Incorporated Association	✗	✗	✗	None	✗	✗	✗
263.	Fencing SA	Incorporated Association	N/A	✗	✗	None	✗	✓ 768	✗
264.	Fencing WA	Incorporated Association	✗	✗	✗	None	✗	✗	✗
<b>Badminton</b>									
265.	Badminton NSW	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
266.	Badminton Victoria	Incorporated Association	✗	✗	✗	None	✗	✗	✗
267.	Badminton ACT	Incorporates Association	N/A	✗	✗	None	✗	✗	✗
268.	Badminton Queensland	N/A	N/A	N/A	✗	None	✗	✓ 769	✗
269.	Badminton SA	Incorporated Association	✗	✗	✗	None	✗	✓ 770	✗
270.	Badminton NT	Incorporated Association	N/A	✗	✗	None	✗	✓ 771	✗
271.	Badminton WA	Incorporated Association	✗	✗	✗	None	✗	✓ 772	✗
272.	Badminton Tasmania	Incorporated Association	✗	✗	✗	None	✗	✗	✗
<b>Equestrian</b>									
273.	Equestrian NSW	Incorporated Association	✗	✗	✗	None	✗	✓ 773	✗
274.	Equestrian Victoria	Incorporated Association	✗	✗	✗	None	✗	✓ 774	✗
275.	Equestrian Queensland	Incorporated Association	✗	✗	✗	None	✗	✓ 775	✗
276.	Equestrian SA	Incorporated Association	✗	✗	✗	None	✗	✓ 776	✗
277.	Equestrian NT	Incorporated Association	✗	✗	✗	None	✗	✗	✗
278.	Equestrian WA	Incorporated Association	✗	✗	✗	None	✗	✓ 777	✓ 778
279.	Equestrian Tasmania	Incorporated Association	✗	✗	✗	None	✗	✓ 779	✗

Gymnastics									
280.	Gymnastics NSW	Company Limited by Guarantee	✗	✗	✗	None	✗	✗	✗
281.	Gymnastics Victoria	Incorporated Association	✗	N/A	✗	None	✗	✗	✗
282.	Gymnastics ACT	Incorporated Association	✗	✗	✗	None	✗	✗	✗
283.	Gymnastics Queensland	Incorporated Association	✗	✗	✗	None	✗	✓ 780	✗
284.	Gymnastics NT	Incorporated Association	✗	✗	✗	None	✗	✓ 781	✗
285.	Gymnastics SA	Incorporated Association	✗	✗	✗	None	✗	✗	✗
286.	Gymnastics WA	Incorporated Association	✗	✗	✗	None	✗	✓ 782	✗
287.	Gymnastics Tasmania	Incorporated Association	✗	✗	✗	None	✗	✗	✗
Sport Climbing									
288.	Sport Climbing NSW/ACT	N/A	N/A	N/A	✗	None	✗	✗	✗
289.	Sport Climbing Victoria	Incorporated Association	N/A	✗	✗	None	✗	✗	✗
290.	Sport Climbing Queensland	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
291.	Sport Climbing SA	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
292.	Sport Climbing WA	N/A	N/A	N/A	✗	None	✗	✗	✗
Table Tennis									
293.	Table Tennis NSW	Incorporated Association	✗	✗	✗	None	✗	✓ 783	✗
294.	Table Tennis Victoria	Incorporated Association	✗	✗	✗	None	✗	✗	✗
295.	Table Tennis ACT	Incorporated Association	N/A	✗	✗	None	✗	✗	✗
296.	Table Tennis Queensland	Incorporated Association	✗	✗	✗	None	✗	✗	✗
297.	Table Tennis NT	Incorporated Association	N/A	✗	✗	None	✗	✓ 784	✗
298.	Table Tennis SA	Incorporated Association	N/A	✗	✗	None	✗	✓ 785	✗

299.	Table Tennis WA	Incorporated Association	N/A	✗	✗	None	✗	✗	✗
300.	Table Tennis Tasmania	Incorporated Association	✗	✗	✗	None	✗	✗	✗
<b>Handball</b>									
301.	NSW Handball Association	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
302.	Handball Victoria	N/A	N/A	✗	✗	None	✗	✗	✗
303.	ACT Handball Association	N/A	N/A	✗	✗	None	✗	✗	✗
304.	Handball Queensland	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
305.	Handball SA	N/A	N/A	N/A	✗	None	✗	✗	✗
306.	Handball West (WA)	Cannot access website							
<b>Skating</b>									
307.	Skate NSW	N/A	N/A	N/A	✗	None	✗	✗	✗
308.	Skate Australia Victoria - Website unavailable								
309.	Skate ACT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
310.	Skate Queensland	Incorporated Association	N/A	N/A	✗	None	✗	✗	✗
311.	Skate NT - No Website								
312.	Skate SA	Incorporated Association	✗	N/A	✗	None	✗	✓ 786	✓ 787
313.	Skate WA		N/A	N/A	✗	None	✗	✗	✗
314.	Skate Tasmania - No website								

## Climate initiatives disclosed by selected international sporting organisations

Name of organisation	Climate change referred to in latest annual report?	Climate change referred to in current strategic plan?	Climate change guidance/publications published on website?	Key climate Change actions	Climate change substantively discussed anywhere on the website?	Extreme heat guidance issued?	Other (non-heat) extreme weather guidance published?
<b>OLYMPIC COMMITTEES</b>							
German Olympic Sports Confederation (DOSB)	Cannot locate	 <sup>788</sup>		<p>In 2018/2019 DOSB launched a "Sustainability in Sports Organisations" project with the aim of developing sustainability strategies for sports associations and developing sustainability projects with a focus on environmental protection and nature conservation<sup>789</sup></p> <p>Adopted sustainability strategy in 2019<sup>790</sup> whose pillars included promoting climate protection, developing employees and the organisation, reducing resource consumption, more sustainable procurement and catering, and improving communication. The first measures in the area of climate protection were successfully implemented in 2020, including the issue of a climate balance sheet for the DOSB office.<sup>791</sup></p>	 <sup>792</sup>	N/A	N/A
<b>SOCCER</b>							
English Football Association (FA)	 <sup>793</sup>		 <sup>794</sup>	<p>2021 - Implemented a sustainability policy and a Sustainable Events Policy</p> <p>Implemented an FA Climate Action Plan, developed a carbon strategy and introduced a sustainable procurement policy and process within the tender process</p> <p>Has a Sustainability Team which in 2019 was shortlisted for the Business Green 2019 Sustainability Team of the Year Award</p> <p>2019 — Obtained ISO 20121 (Sustainable Events) certification for Wembley Stadium</p> <p>Implemented sustainability strategies for Wembley and St George's Park Stadiums</p> <p>Wembley Stadium powered by 100 % renewable energy and installed EV charging points outside the stadium. Also implemented electric mowers, installed water bottle refill stations at all concourse levels at Wembley stadium and donated waste soil from the pitch to local parks. Wembley stadium has also been a zero waste to landfill venue since 2015.</p> <p>Signatory to the UN Sports for Climate Action Framework</p> <p>Working with FIFA and UEFA on sustainable event management</p> <p>Introduced a compulsory sustainability training module for all new FA joiners</p>	 <sup>795</sup>	 <sup>796</sup>	 <sup>797</sup>

Deutsche Fussball LIGA (DFL) <sup>798</sup> including Bundesliga and Bundesliga 2	✓ <sup>799</sup>	✓ <sup>800</sup>	✓ <sup>801</sup>	<p>On 14 December 2021 the DFL Members Assembly resolved that the Bundesliga and Bundesliga 2 are integrating sustainability as a guiding principle in the preamble of the DFL e.V Constitution (and binding on all 36 professional football clubs in Germany). As part of this change, all clubs must now include sustainability criteria in licensing regulations.<sup>802</sup> This makes Bundesliga and Bundesliga 2 the world's first major football leagues to include mandatory sustainability criteria in their licensing regulations. Sustainability Criteria are currently being developed and are expected to be voted on by the DFL Members Assembly sometime in 2022<sup>803</sup>.</p> <p>DFL planning to host a Sustainability Conference in 2022</p> <p>Commitment to publishing a regular sustainability report for Bundesliga and Bundesliga 2</p> <p>Bundesliga been releasing sustainability reports since 2013<sup>804</sup></p>	✗	✗	✗
Deutscher Fussball-Bund (German Football Association)	Cannot locate annual report	✓ <sup>805</sup>	✓ <sup>806</sup>	<p>Publish a Sustainability report with financial information published in accordance with the Global Reporting Initiative (GRI) reporting standards, a sustainability reporting mechanism which requires publication of various environmental data (such as energy, water and emissions, amongst others) and audited.</p> <p>'Run for the Oceans' campaign with Adidas in 2019 for the minimisation of waste<sup>807</sup></p> <p>Sustainability a core component of the successful Euro 2024 German bid<sup>808</sup></p> <p>Host an annual Social Responsibility Conference</p> <p>Have a Social Responsibility Committee</p> <p>Have committed to the creation of a German Sports Climate Fund to provide investments in climate friendly technologies in sport facilities</p> <p>DFB have a Commission for Social Responsibility</p> <p>Former members of the men's and women's national teams are sustainability ambassadors</p> <p>Signatory to the UN Sports for Climate Action Framework</p>	✓ <sup>809</sup>	✗	✗

TENNIS								
LTA Tennis for Britain	✓ <sup>810</sup>	✗	✗	Signatory to the United Nations Sports for Climate Action Framework	✗	✓ <sup>811</sup>	✓ <sup>812</sup>	
All England Lawn Tennis Club (organiser of Wimbledon)	Can only locate epure firnancial reports	Cannot locate strategic plan	✓ <sup>813</sup>	<p>Signatory to the United Nations Sports for Climate Action Framework</p> <p>Currently buying renewable electricity to power our operations</p> <p>Currently measuring and reporting our operational emissions</p> <p>Embarked on a programme of lighting upgrades installing high efficiency LED lights around our estate</p> <p>Using electric lawnmowers and horticulture equipment around the Grounds</p> <p>Added 10 electric iPace vehicles to the vehicle fleet</p> <p>Embarked on a programme to 'mothball' areas of the estate to save energy</p> <p>Offering plant-based food options</p> <p>Calculate emissions associated with AELTC staff, player and official flights</p> <p>Installed solar panels on our maintenance building at our Community Tennis Centre at Raynes Park and on the Indoor Covered Courts</p> <p>Seeking to implement further actions to achieve the goals of reducing emissions from operations to net zero by 2030, becoming a resource-efficient organisation by 2030, contributing to a 'net gain' in biodiversity by 2030 and using its influence to inspire wider sustainability action.</p>	✓ <sup>814</sup>	✓ <sup>815</sup>	✗	

RUGBY								
England Rugby	✓ <sup>816</sup>	✗	✗	<p>Implemented a reusable EcoCup programme at Twickenham Stadium which it estimates has saved over 2.2 million single-use plastic cups from entering landfill each year</p> <p>Has an objective that only 5% of plastic waste is single use</p> <p>95% of food at Twickenham Stadium is prepared and cooked onsite</p> <p>use a fleet of electric single deck shuttle buses for fans</p> <p>meet the International Standards Organisation ISO 20121 for sustainable event management, the Carbon Reduction Commitment Energy Efficiency Scheme, and Energy Saving Opportunity Scheme</p> <p>Commenced planning a 2050 Net Zero Corporate Strategy</p>	✗	✗	✗	

## Adaption and mitigation practices adopted by global leaders in sustainable infrastructure

Name of Stadium/ Infrastructure Initiative	Location	Sustainability features
AAMI Park Stadium	Melbourne, Australia	<ul style="list-style-type: none"> <li>Roof constructed with 50% less steel than a typical stadium roof</li> <li>Rainwater collection system is estimated to be saving up to 2 million litres of water every year</li> </ul>
Johan Crujiff Arena	Amsterdam, the Netherlands	<ul style="list-style-type: none"> <li>Arena powered by over 4,200 solar panels and 1 wind turbine</li> <li>Escalator that uses kinetic energy</li> <li>Energy storage system powered by re-engineered batteries from used electric vehicles</li> <li>Residual energy from the Arena is capable of powering 7,000 households in the surrounding neighbourhoods for up to 1 hour</li> </ul>
Levi's Stadium	San Francisco, USA	<p>In 2014 was the first professional sports stadium to achieve a Gold Leadership in Energy &amp; Environmental Design (LEED) certificate (a global standard for measuring the sustainability of buildings). In 2016 it received a second Gold certification for operations and maintenance. Features include:</p> <ul style="list-style-type: none"> <li>A live dashboard located inside the stadium which displays real-time measurements of energy, water and air</li> <li>100% renewable energy powered by solar-panelled pedestrian bridges and solar-panelled roof deck</li> <li>The "green roof" features solar panels and 16 species of vegetation native to the California bay area. In 2016 the roof was transformed into a vegetable and herb garden (the Faithful Farm) which are harvested for use in dishes served inside the Stadium and at Club events</li> <li>100% of the wood used in the Citrix Owners Suites is reclaimed wood from a local airplane hangar</li> </ul>
Mercedes-Benz Stadium	Atlanta, USA	<p>In November 2017 became the first professional sports stadium to receive a platinum LEED certificate in the US. Features include<sup>817</sup>:</p> <ul style="list-style-type: none"> <li>Powered by 4,000 solar PV panels generating approximately 1.6 million kilowatt hours per year</li> <li>LED lighting lasts 10 times as long as standard lights</li> <li>Save 29% in energy usage v. a typical stadium design</li> <li>Uses 47% less water than baseline designs</li> <li>Rainwater is collected in a 680,000-gallon cistern which is then used for water and landscape irrigation</li> <li>1-million-gallon cooling tower</li> <li>Facility for charging of up to 48 EV vehicles</li> <li>Edible landscaping includes apples and blueberries</li> </ul>
Golden 1 Centre	Sacramento, California, USA	<p>Awarded the world's greenest and most technologically advanced sports and entertainment facility for 2017 and is in the top 3% of high-performance buildings in the world. Features include:<sup>818</sup></p> <ul style="list-style-type: none"> <li>100% powered by solar energy (through a smart grid)</li> <li>Using 45% less water and 30% less energy than allowed under the California water restriction laws</li> <li>Living wall gardens on the exterior of the arena consisting of local plants are edibles watered by water runoff collected from the roof</li> <li>Displacement ventilation system channels conditioning air through vents located directly beneath their seats. A phone app allows people in the stands to control the temperature in their specific seating section</li> <li>36% of construction materials from recycled sources (including material repurposed from the department store that was demolished to make way for the Golden 1 Centre)</li> <li>30% of construction materials from regional sources</li> <li>99% of demolition materials recycled and 95% of construction waste diverted</li> </ul>

Stadium 974	Qatar	<p>Features include:<sup>819</sup></p> <ul style="list-style-type: none"> <li>• First fully demountable stadium moulded out of 974 shipping containers. The stadium will be disassembled after the FIFA World Cup and will be provided as assistance to developing countries in Africa</li> <li>• The shape and gaps between the seats is designed to allow floor natural ventilation and artificial cooling</li> <li>• The location of the stadium was chosen to maximise the natural cool breeze from the Persian Gulf to alleviate energy use</li> <li>• Use of water will be reduced by 40% compared to conventional</li> <li>• Use of recycled steel to reduce carbon footprint in the materials</li> </ul>
Greener Rinks Initiative	Canada and USA	<p>In 2016 the National Hockey League (the USA' professional ice hockey league) launched its "Greener Rinks Initiative" with the goal of making ice rinks more environmentally sustainable and efficient, such as to both reduce the industry's carbon footprint, and to drive down operating costs for ice rink operators. The program has been implemented across more than 100 ice rinks across the USA and Canada.<sup>820</sup></p>
Climate Pledge Arena	Seattle, USA	<p>Completed in November 2021 and funded by Amazon, this arena is seeking to be the first sporting venue to achieve net-zero carbon certification from the International Living Future Institute (ILF). ILF is a leading not-for-profit organisation which certifies sustainable building practice<sup>821</sup>. To achieve certification, the building must be operational for at least one year to obtain data on operations. Key features include:</p> <ul style="list-style-type: none"> <li>• The arena is named after 'Climate Pledge' — pledge taken by 315 business to be net-zero by 2040.<sup>822</sup> The arena is the first to be named after a cause/movement rather than a company</li> <li>• No fossil fuel consumption in the arena for daily use — all electrified and powered 100% by solar panels and off-site supplementary renewable energy</li> <li>• Used less materials due to re-using/re-purposing the prior building's roof and being built "below grade" such that there are fewer materials used throughout the venue</li> <li>• Uses a "rain to rink" system that uses rainwater to supply ice for the stadium's ice rink</li> <li>• On-site retention tanks to reduce stormwater run-off</li> <li>• Waterless urinals and ultra-efficient showers</li> <li>• All game tickets are electronic and double as free public transit passes</li> <li>• A minimum of 95% of all arena waste will be diverted from landfills</li> <li>• Compostable containers for waste in the stands</li> <li>• At least 75% of the arena's food ingredients will be sourced locally within approximately 500km from the stadium</li> <li>• All viable unused food from events will be donated to local community food programs</li> <li>• Arena has a public-facing dashboard which shows the arena's sustainability data and commitments on carbon, energy, waste, food and other areas</li> <li>• Commitment to being 100% single-use plastic free by 2024</li> <li>• Partnering with educational institutions to use the arena as a classroom for environmental education</li> </ul>

## Adaptation and Mitigation practices adopted by Australian stadiums

Name of stadium	State	Adaptation measures	Mitigation measures
Optus Stadium	WA	Unable to locate	<p>Developers claimed it was built with a view to encourage public transport, purposefully limiting car parking space.</p> <p>Lack of concession parking, even on match days, to further encourage public transport.</p> <p>There is a new dedicated train station, bus hub, ferry terminal and pedestrian and cycling links.</p>
Melbourne Cricket Ground	VIC	Installation of a water recycling plant in Yarra Park that has reduced consumption of potable water by up to 50 per cent.	<p>Energy efficient upgrade to their light towers, now using efficient LEDs.</p> <p>28 refill stations now located throughout the venue to avoid single-use plastic.</p> <p>In 2018 the MCG became the first sports venue in the world to close the loop on organics recycling, with the installation of an innovative organics dehydrator.</p>
Suncorp Stadium	QLD	<p>Reconstruction of stadium post 2011 floods:</p> <p>The main switchboard room being elevated above the flood level so that it can continue to operate via generator power until mains power is reinstated to the building, meaning no future loss of power to the Stadium.</p> <p>The fire panel system also been raised above the flood level to ensure the Stadium continues to be connected to Brisbane's Fire Services body and that fire alarms are monitored at all times.</p> <p>Flood resistant materials being used wherever practical, such as block walls and elevated and re-locatable fixtures and fittings.</p>	<p>Hydration stations to mitigate plastic use.</p> <p>Diverts all organic waste generated onsite away from landfill.</p> <p>Rainwater harvested and stored for use on the fields.</p> <p>Sports lights / daily operational lighting — all to be replaced with LED by end of 2020.</p> <p>Introduction of energy policies, such as audits, bulb changes, window tinting leading to a reduction in air conditioning requirements and the promotion of public transport.</p>
Adelaide Oval	SA	Unable to locate	<p>Lighting strategies implemented to reduce the amount of time that lights are on.</p> <p>Window operating system shuts off air-conditioning in large spaces when open.</p>
Bankwest Stadium (Parramatta)	NSW	Has a Flood Emergency Response Plan in place	<p>LEED v4 Gold certified (first Australian building to achieve this)</p> <p>Water efficiency through plants and capturing rainwater through a 260,000 litre rainwater tank</p> <p>Installation of 100 kilowatts of photovoltaic solar panels</p> <p>Use of LED lighting in the roof.</p> <p>Solar panels incorporated into the roof.</p> <p>Capture of rainwater from the roof and used in toilet flushing.</p> <p>Highly reflective roof to lower heat transmission</p> <p>100% run on green power.</p> <p>Numerous spaces for bike storage onsite, to lower the number of cars used.</p> <p>Trains, buses, shuttle buses, ferry, bicycle and pedestrian routes are integrated into the existing transport links to the stadium</p> <p>Achievement of over 90 per cent waste diversion from landfill, including recycling 700 kilograms of soft plastics from new seat covers, which have contributed to asphalt for roads and plastic wheel-stops</p>

ANZ Stadium	NSW	Unable to locate	<p>200 tonnes of waste are recycled each year at ANZ Stadium.</p> <p>Rain capture system.</p> <p>Ventilation facilitation, and natural cooling/heating.</p> <p>Goal of achieving net zero carbon emissions by 2030</p>
AAMI Park	VIC	Unable to locate	<p>A number of LEED Gold awards for sustainability</p> <p>Car park ventilation is designed to be triggered by the CO2 monitors, so it runs only when required.</p> <p>A number of buildings fitted with LED systems to reduce energy.</p> <p>Eco-packaging and utensils are used to reduce waste.</p> <p>13.5 per cent reduction in electricity use across Melbourne Arena, Margaret Court Arena and Rod Laver Arena during the Australian Open period as a result of mechanical plant optimisation initiatives.</p>
Thredbo	NSW	Investment in new SNOWsat technology to more accurately map snow depth across the resort. This means that snow grooming and snow making is more efficient, saving fuel and energy.	<p>Merritts Gondola is driven by an industry leading Direct Drive electric motor system.</p> <p>New Closed Loop organics recycling machine has doubled capacity in food waste recycling.</p> <p>All of Thredbo's major resort operations are powered by renewable energy.</p> <p>All of Thredbo's outlets are using LED lights.</p> <p>Since 2009, Thredbo has partnered with Greenfleet to offset the operation emissions of their entire fleet of snow groomers and company vehicles.</p> <p>Merritts Gondola rehabilitation work saw Thredbo plant over 1,700 native trees, shrubs and poa grass with a further 5,500 to be planted post winter.</p> <p>The new Friday Flat car park will see over 2,000 native shrubs planted and the new and existing mountain bike trail network will see 2,500 native shrubs and grasses planted.</p>
Perisher	NSW	<p>Since 2007, Perisher has spent over \$22 million on improving and expanding the resort's snowmaking system, including the installation of new automated, energy efficient snow-gun</p> <p>Perisher plans to increase snowmaking coverage to 110 hectares, aiming to have all the trails linking the four ski areas covered from the seasons start to finish</p>	<p>Purchasing 100 percent renewable energy equivalent to their total electrical energy use.</p> <p>2030 emissions reduction commitments, such as improving operating practices and investing \$25 million in innovative, energy-saving projects such as low-energy snowmaking equipment, green building design and construction, and more efficient grooming practices and equipment.</p> <p>Vail Resorts (the company that own Punisher) also committed to zero landfill waste by 2030, as well as a zero net operating impact to forests.</p>

Allianz Stadium	NSW	<p>The stadium is designed to minimise the effect of urban structures raising temperatures — also known as the heat island effect. To combat this, the stadium uses native vegetation for shade, light surfaces, and reflective roofing.</p> <p>Roof's dripline coverage of 100% of seats (doesn't directly reference climate in relation to this upgrade).</p>	<p>The new stadium includes onsite dehydration machines to process all food waste, with the odourless outputs used as fertiliser in the precinct. Forecast to reduce food waste volumes by 90%.</p> <p>Recycling approximately 87% of construction and demolition waste, as well as exceeding energy and water efficiency benchmarks by 20%. The stadium's lightweight roof structure uses 40% less steel than a typical venue of the same size, and the building hosts integrated solar panels and water harvesting solutions.</p> <p>Designed to meet the standards of LEED (Leadership in Energy &amp; Environmental Design) Gold accreditation.</p> <p>Offers electric vehicle charging points and bicycle parking, light rail, and bus stops, and a two-kilometre pathway from Sydney's Central Station.</p>
Marvel Stadium  Currently undergoing major upgrades.	VIC	Unable to locate (details re: upgrades not available)	<p>In collaboration with BottleCycler and cleaning contractors Quayclean, the stadium is on track to recycle 60,000kg of glass in a 12-month period. 11 BottleCycler machines have been installed throughout the venue.</p> <p>This equates to removing ten cars from the road or saving 157 cubic metres of landfill.</p> <p>An initiative undertaken in 2008 has reduced the venue's water usage by close to 25%. This has involved 17 rainwater tanks (with a combined capacity to store up to one million litres of rainwater), along with related infrastructure.</p> <p>The rainwater captured is used for flushing the venue's network of toilets and irrigation of the venue's playing surface. The project is fully automated through a building management system (BMS) to ensure the capability to both capture and distribute rainwater is maximised.</p>

## Summary of Directors Duties on Climate

**Board directors must consider the impacts of climate-related risks in order to satisfy their duty of care and diligence under the Corporations Act 2001 (Cth).**

### Summary

- Climate risk requires a considered response from companies and directors;
- The failure to actively consider climate risks could give rise to a breach of directors' duties; and
- The benchmark for directors' compliance is rising, with significant shifts in the expectations of regulators, stakeholders and consumers.

### Accordingly, ALL Boards should:

1. Determine whether there are any climate-related risks posed to their organisation. These risks may include:
  - **Physical risks** (being risks associated with greater frequency and severity of weather events like floods, droughts and bushfires and latest science on climate impacts), such as:
    - » Incorporating green building design and construction practices, including those provided under the Leadership in Energy and Environmental Design (LEED), the Building Research Establishment
    - » Match cancellations/delays including associated contractual arrangements and insurance;
    - » Player illness/injury (eg. heat stroke);
  - **Transition risks** (being indirect financial risks arising from a transition to a lower-carbon economy), such as:
    - » Changes in the expectations of players, sponsors and fans as they become more environmentally conscious;
    - » Changes in regulation (eg. anticipated mandatory climate change reporting obligations/changes to Accounting Standards).
    - » Reputational risks associated with poor sustainability practices;
  - **Litigation Risks** such as:
    - » Litigation brought against the club for breach of duty of care to players and potentially spectators (eg. heat related illness);
    - » Litigation brought against directors for breach of directors' duties by failing to consider climate change; as part of risk management and strategy including director's reports and financial statements;
2. Consider when and how those risks might impact the business; and
3. Decide what action, if any, should be taken to address the risk

**This does not mean that Directors have to prioritise climate risks over any other governance matter. However, climate risks must be afforded the same robust consideration as any other issue that may have a material impact on the business.**

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