



In support of the 2024 'Green Games,' organised by the Our Greener Pitch player group Canberra United v Wellington Phoenix, A-League Women, 24 March 2024 Brisbane Roar v Newcastle Jets, A-League Men, 13 April 2024







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We also acknowledge and pay our respects to the Traditional Owners and Elders past, present, and emerging throughout Australia, and recognise their continuing connection to land, waters, laws, and culture. They hold the memories, traditions, cultures, and hopes of Aboriginal and Torres Strait Islander peoples of Australia.



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ALKSU

Socceroo & PFA President



"I think climate change is arguably the most important issue facing our generation. It's an overwhelming issue and I think a lot of people struggle to grasp the magnitude of what it is we are dealing with, but I think through taking small steps individually, and pushing for collective change and industrial-level change, I think that's the way forward. We need to take immediate action because every day that goes by it becomes a more difficult situation to change.

"Through the PFA and Our Greener Pitch, that's a huge step, especially in football. I'm very aware of the hypocrisy of an International footballer preaching about the environment when I'll jump on a plane and travel around the world to play football matches, and that's an inevitable part of our industry and through Our Greener Pitch we are able to offset our emissions."

STOPPAGE TIME: A PFA REPORT ON THE A-LEAGUES AND CLIMATE CHANGE

"The Green Games are an awesome first step that we can take as a club. Also as a league, it's going to be really good for the future. As climate change becomes more of an issue, it's an opportunity for us as athletes to use our platform and showcase it to our fans. We have the education, carbon offsetting, and sustainability.

"I think the goal is to start something that you can personally change. We know that it's not going to be an easy change straight away. And our society obviously hasn't set us up for success. Athletes are also not the best examples – we have to travel and things like that. But whatever we can do to help, it has to start somewhere. With this game, hopefully it makes it more accessible for people to be able to say at home, hey, I can do this. Even though it's one thing, I'm still making an impact."

EMMA

Canberra United







NTRODUCTION

Football needs a safe, stable climate. The climate needs football to be sustainable. This report looks at how both impact the other in Australia and New Zealand.

It's a brief, introductory report designed to kick off the climate conversation in Australian football.

The report has been written by the PFA on behalf of Our Greener Pitch: the player-led movement for climate action.

Sport in general has been a bit slow to the climate party, but athletes have been at the forefront of the action:

- Players are young people who will face the consequences of global warming long into the future
- Players work outside in the weather generated by climate change
- Players want to give back to the game which has given them so much, which means providing a safe environment for grassroots and the next generation

Players from Our Greener Pitch have created the A-League's first 'Green Games', collaborating with their clubs and partner organisations to reduce the environmental impact of two A-Leagues matches and raise awareness among fans and other players.

These matches are just the start. Football, like every other industry, must have its own mini-revolution to take its place in a sustainable future.

This is a report of two halves.

The first half shows how the changing climate is impacting the A-Leagues already. Letting the problem get worse will threaten the future of the game we love.

The second half looks at the A-Leagues' impact on the climate. Luckily, we have most of the solutions we need to take action.



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CLIMATE'S INPACT



WHAT IS CLIMATE CHANGE?

The earth's atmosphere contains greenhouse gases which capture some of the heat from the sun. That's what makes the earth's climate suitable for life. But over the last 200 years, human activity has released a huge amount of extra greenhouse gases into the atmosphere, causing the planet to warm up.

Even though it's true that the climate has always changed, this usually occurs over millions of years. The climate has been really stable in the time that humans have been around – until now. Scientists say 2023 was the hottest year on record and probably the hottest for at least 125,000 years.

The last time the atmosphere had this much carbon dioxide (CO₂) in the atmosphere was around 3 million years ago. Back then, temperatures were about 3°C warmer, sea levels were 15-20 metres higher, and trees grew near the South Pole.

The human activities which release greenhouse gases include burning fossil fuels like coal, oil, and gas, as well as clearing trees and wetlands which normally store carbon.

Every part of society, including football, has depended on these activities to develop. The good news is that we have most of the solutions we need to continue to enjoy the things we love while also making the climate safe – we just need the will to make changes. **STOPPAGE TIME:** A PFA REPORT ON THE A-LEAGUES AND CLIMATE CHANGE



WHERE ARE WE NOW?

Global warming is accelerating, and 2023 was the hottest year on record at 1.5°C above pre-industrial levels (which means before we started burning large amounts of fossil fuels).¹

In Australia, 2023 was the eighth hottest year on record, at 0.98°C above the 1961-1990 average.² Our hottest year was 2019, which led into the 'Black Summer' bushfires.

A degree or two on average might not seem like much, but small changes have a big impact. Global warming increases the frequency and severity of extreme weather events like heatwaves, bushfires, droughts, and floods. It also causes sea ice and glaciers to melt, which gradually increases the sea level.

We don't have to imagine these impacts on Australian football, because we've already seen them. Unless we make big changes, they will continue to get worse, threatening the sport we love.

The 'Climate Stripes' graphic shows global temperate change each year from 1850 to now, where blue is cooler than average and red is hotter. Its creator said that 2023 was so hot that he needs a new colour to show it.³



EXTREME HEAT

I felt sick in the game, it was very hard to breathe, some of the hardest conditions I've ever played in,

- A-League Men player, PFA post-match survey, 2022-23

A few of our girls had symptoms of heatstroke after the game and were vomiting in airport bathrooms as a result.

A-League Women player, PFA post-match survey, 2022-23

When you think of extreme weather events, you often think of visible disasters like fires or floods. But extreme heat is increasingly being recognised as the most dangerous type of event. It accounted for 78% of hospitalisations and 44% of deaths from extreme weather in Australia from 2013 to 2022.⁴

The A-Leagues, along with other sports played through the Australian summer like cricket and tennis, have already experienced harmful impacts due to extreme heat. These will become more severe and more frequent as the climate warms.

Health and safety are the top concerns, but football is also arguably the sport which suffers the greatest drop in quality when conditions are too hot.

It's important to take action to protect both the value of the competition and the welfare of players and fans. This means trying to limit global warming as much as possible while also creating measures to avoid or adapt to its worst effects. Three rounds in a row my teammates and I have played in very hot conditions. I am struggling to recover and feeling extremely low energy throughout the week - and many of my teammates are the same,

- A-League Women player, PFA post-match survey, 2022-23



SPORT VS THE AUSTRALIAN SUMMER

During the 2014 Australian Open, which coincided with a heatwave, Canadian tennis player Frank Dancevic said he suffered hallucinations on court before collapsing from heat stress. Other players fainted, vomited, retired due to cramps, and described their shoes and water bottles melting on court. A ball kid also passed out and more than 1,000 fans were treated for heat exhaustion.

Dancevic said the conditions were "hazardous" and "inhumane". Croatian player Ivan Dodig said he feared he "could maybe even die" before retiring from his match.

During the 2018 Sydney Ashes Test, with temperatures above 40°C, England captain Joe Root had to retire hurt due to heat illness. He was hospitalised after suffering from vomiting and diarrhoea.

These extreme examples from other sports reflect the scientific understanding of heat's effects on athletes. Medical experts laid out the potential health impacts on cricket players in the report *Hit for Six: The Impact of Climate Change on Cricket.*⁵ Physical responses range from cramps and fatigue up to chills, nausea, dizziness, and a rapid pulse. Cognitive symptoms include lack of concentration, irritability, and memory loss.

A-Leagues players are familiar with these symptoms. After one particularly hot A-League Women game in January 2023, one player said she could not remember the last ten minutes of the match.

What the headlines don't usually capture are the more basic impacts of heat on player welfare and performance. If the quality of football is compromised, fans will be turned off. If players can't perform to their best, their ability to impress overseas clubs or national team selectors will be diminished.

"I was dizzy from the middle of the "I was dizzy from the middle of the first set and then I saw Snoopy and I thought, wow, Snoopy, that's weird." - Canadian tennis player Frank Dancevic Australian Open, 2014

WHAT ABOUT IN THE A-LEAGUES?

Midway through 2019-20, the PFA added five questions about extreme weather to its regular post-match player surveys. Between then and the end of 2022-23, we surveyed 306 A-League Women (ALW) players and 353 A-League Men (ALM) players (generally one per match).

Nearly one in three (29%) A-League Women matches were affected by extreme weather, and 15% of A-League Men matches were affected, according to the players.

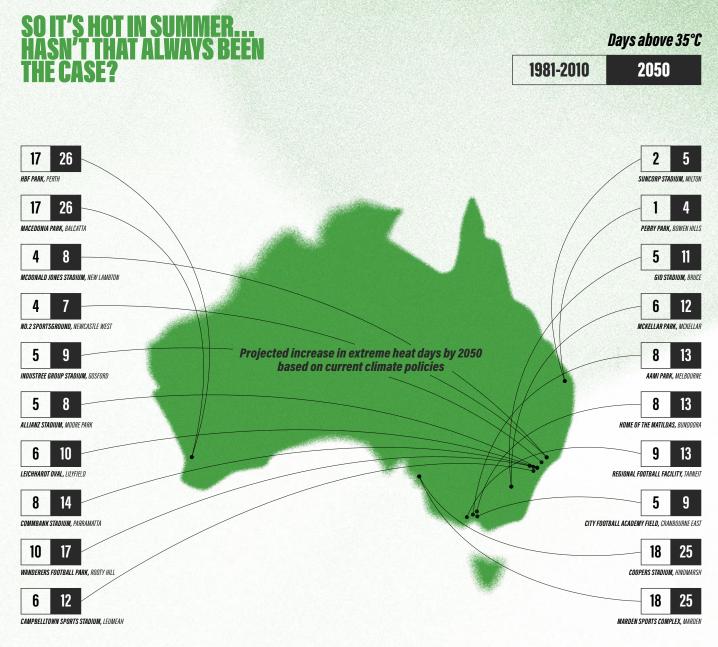
This could have included other weather events such as lightning or poor air quality, but the overwhelming majority of responses related to heat.

Nineteen ALW players and 15 ALM players during the period (total 34) felt their match should have been delayed or postponed due to the conditions.

In the ALW, one in six matches had its quality impacted by the weather, according to the players. One out of every 28 ALW players said they had health problems resulting from the match conditions.

In the ALM, which has generally been played in larger stadiums with better facilities and more shade, as well as with later kick-off times, 5% of matches had their quality impacted by the weather and 1% of players suffered health effects.





Source: https://www.climatecouncil.org.au/resources/heatmap/

Hot summer days aren't new... but climate change is causing the number and severity of them to increase. The Climate Council's Heat Map tool shows us the number of additional extreme heat days (above 35°C) expected in every Australian suburb based on different scenarios.⁶

The graphic shows the number of very hot days we should expect at A-Leagues venues each summer by 2050 if we continue only with current action on climate change, compared to the average number of such days from 1981-2010.

The average total number of extreme heat days across all main Australian A-Leagues venues will rise from 162 to 267 by 2050: a 65% increase. Brisbane has the warmest year-round climate in the league, but it does not have as many extreme heat days. It tends to be impacted more by humidity and high overnight temperatures.

Western Sydney is particularly susceptible because of the 'urban heat island' effect, meaning it gets hotter due to a lack of water or vegetation. A report by Western Sydney University said there could even be as many as 93 days over 35°C each year by 2050 based on current trends.⁷



YIKES... SO WHAT DO WE DO?

The most important thing to do is reduce emissions so the problem doesn't get even worse. That's what the second half of this report deals with.

But the climate is already hotter, and more warming is 'locked in' for the future, so we also need to *adapt* to the new conditions.

The fact that the ALM has had fewer issues than the ALW, despite both being played through the same season, proves that scheduling and facilities can make a major difference.



HEAT POLICIES:

The A-Leagues, the Australian Open, and Cricket Australia all have guidelines to protect players from unsafe conditions, with measures ranging from drinks breaks through to postponement. These consider not just the temperature but humidity, breeze, and shade.



SCHEDULING:

From 2023-24, the A-Leagues agreed to move away from afternoon kick-offs during the summer months, which has resulted in fewer heat-affected matches, particularly for ALW.





All A-Leagues venues should have shaded benches, adequate ice baths and showers, and air conditioned changerooms. Some smaller ALW venues still fall short.



The Australian Conservation Foundation's *Caught Behind* report suggested that the iconic Melbourne Boxing Day test match may need to be moved to November or March to avoid peak summer heat.8 Such a break with tradition seems extreme, but the FIFA Men's World Cup in 2022 was moved to the northern winter to accommodate Qatar's climate. If the A-Leagues stay in summer, we could consider later kick-offs, more games in New Zealand during the hottest months, a 'summer break' in February, or a vacant weekend in Autumn to capture any summer matches which need to be pushed back.



BUSHFIRES

I still think it's hazardous to the players. A few of my players went out for a run and they came in and they couldn't really breathe all that well. Some of the smoke was stuck in their throats.



I think breathing this air for a day is like smoking 50 cigarettes. It is difficult to play in this situation. The smoke is something incredible. It is hard to describe if you have never seen it."

- Alexander Baumjohann, Sydney FC, January 2020

It is now clear that human-induced climate change is creating ever more dangerous conditions for fires in Australia. We need to be ready for Australia. We need to be ready for more Black Summers – and worse.

At the end of 2019, Australia's hottest and driest year on record, the 'Black Summer' bushfires burned millions of hectares, killed three billion animals, and destroyed thousands of buildings. The fires directly killed 33 people and another 445 died from smoke inhalation.⁹ The smoke from the fires blanketed Australian cities and reached as far as South America.

These horrific consequences far outweigh the importance of sport. Nonetheless, we can't ignore the impact on football, especially since the scientists at the CSIRO say "the Black Summer fires are part of a clear trend of worsening fire weather and ever-larger forest areas burned".

In other words, this is going to happen again.



IMPACT ON THE A-LEAGUES

The smoke from the fires caused poor air quality over Australia's eastern cities through December and January, impacting 80% of the population.

Two ALW matches in Canberra and Newcastle were postponed due to the conditions, along with several Y-League fixtures.

Other matches proceeded despite concerns. Western United coach Marko Rudan said his side's ALM fixture against Melbourne City should have been called off in the interests of player safety. Ernie Merrick said his Newcastle side had been unable to train, harming their match fitness.

During an ALW match in Adelaide, players were given Ventolin inhalers to assist with breathing and referee Isabella Blaess became so ill she had to be replaced.

Football Australia had to develop an air quality protocol on the fly. The A-Leagues commissioner at the time, Greg O'Rourke, said "we've never needed a policy in this area".

SPORT FORCED TO CONFRONT 'NEW NORMAL'

Football was not the only sport impacted. Tennis player Dalila Jakupovic had to retire from Australian Open qualifiers, saying: "It was really scary, I couldn't breathe, I didn't know what to do, I had a feeling like I'm going to collapse on the court."

After a Sheffield Shield cricket match in Sydney, NSW's Stephen O'Keefe said the air was "toxic" and that kids shouldn't be outside in it.

In Canberra, several sports were cancelled, and a star American baseball import abandoned the country a month after arriving due to concerns about respiratory issues in his family's history.

Like football, other sports lacked a policy for air pollution. It was an example of the unprecedented challenges climate change will throw at us.

The events led the Australian Institute of Sport to develop a position statement titled *Exercise in Bushfire Smoke for High Performance Athletes*, released in 2023.¹⁰ It found that exercising in the smoke put athletes at "elevated risk for acute adverse health events". According to the report, a person would fill their lungs with as many pollutants during one hour of high-intensity exercise as during ten hours at rest.

The report makes recommendations for different levels of particulate matter in the atmosphere:

During December 2019, Canberra reached over 300 PM_{2.5} mcg/m³

300

150

50

25

Likely to be hazardous to exercise outdoors

Poor conditions for exercise

Caution for those who are sensitive to air pollution

Normal exercise conditions

PM_{2.5} micrograms per m³





FLOODING & RAIN

Brisbane Roar midfielder Massimo Murdocca said it was "heartbreaking" to see images of Suncorp Stadium flooded up to the height of the crossbar in January, 2011.

The men's team was top of the table under Ange Postecoglou when the stadium was inundated. The water reached chest height in the change rooms and caused an electrical fire.

Roar was forced to move two home matches to the Gold Coast during the month it took to repair the stadium. They played a third match on the Gold Coast against North Queensland Fury after that club's home game had to be moved from Townsville due to Cyclone Yasi.

Ultimately, three quarters of Queensland was declared a disaster zone. The floods killed dozens of people and caused billions of dollars of damage. Brisbane Roar's epic Grand Final victory over Central Coast back at Suncorp brought much-needed joy to the people of Queensland, but the episode was a warning of things to come. We get caught up in the winning and losing of football games but just take a moment to think about how many people were affected this time last year. Whether it was football clubs, sporting clubs, or people in general, a lot of our supporters were badly affected, some have never moved back.

- Ange Postecoglou, Brisbane Roar, January 2012

Of the 92 league teams in England, 23, almost one in four, can expect partial or total annual flooding of their stadiums by 2050,

16

Playing Against the Clock report, 2020

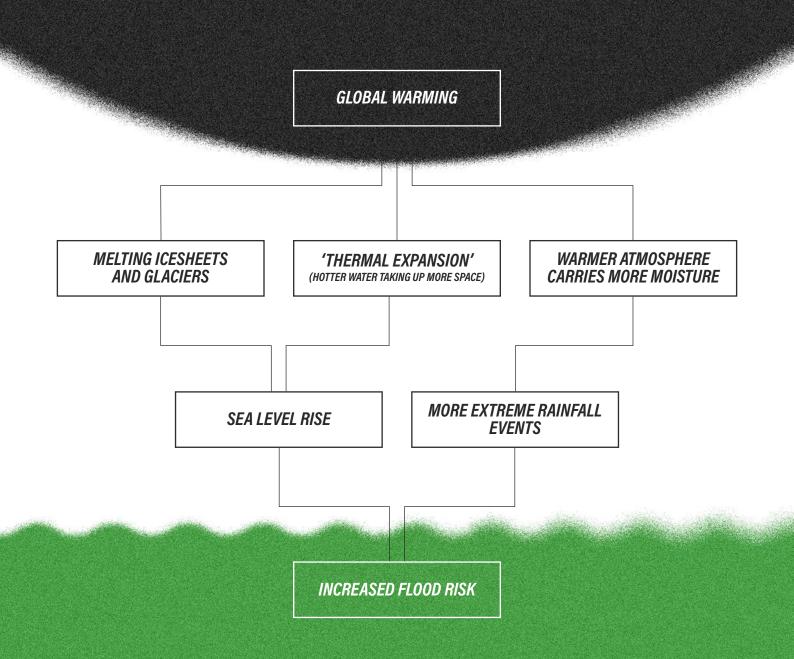


CLIMATE x WATER: WHEN IT RAINS, IT POURS

No one weather event can be attributed solely to climate change. But the science is clear that global warming increases the likelihood of extreme rainfall and flooding."

Things have already got worse, and the intensity of the largest downpours is expected to increase by up to 20% in the next 25 years. $^{\rm 12}$

Sea levels are projected to increase by the height of a football by 2050.





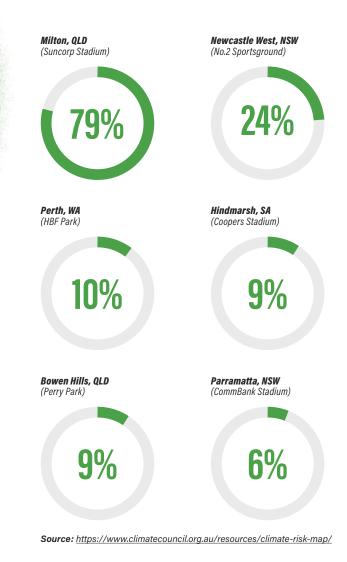
FLOODING AND FOOTBALL

A sport and climate report in the UK, *Playing Against the Clock*, found that 23 of the 92 football league stadiums are at risk of annual flooding by 2050.¹³

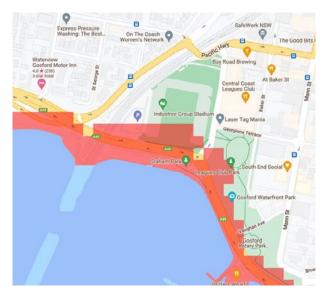
Using the same methodology as the UK report, Central Coast's Industree Group Stadium on Gosford waterfront is at risk of going under each season.

The A-Leagues' other seaside venue, Wellington's Sky Stadium, also faces regular inundation in the near future.¹⁴

Several A-Leagues stadia are situated near rivers that will break their banks more often. By 2050, the proportion of properties at risk of riverine flooding in these suburbs will be:¹⁵



Parts of Gosford waterfront projected to be below annual flood level by 2050



Source: https://coastal.climatecentral.org/



COUNTING THE COST FOR FOOTBALL

Flooding is the most costly natural disaster in Australia, averaging \$8.8 billion per year.¹⁶ Australian people and businesses are paying higher insurance premiums to protect against the growing risk. Football infrastructure is not immune from these trends.

The other way that heavy rainfall impacts the A-Leagues is by forcing matches to be postponed. When games have to be moved, the APL and clubs can suffer the costs of venue changes, cancelled contracts, lower attendance and broadcast figures, and rearranged flights and travel.

Anyone involved in football at any level knows that the weather will occasionally make it impossible to play. But the science says this will happen more and more. Rainfall patterns are being affected differently in different places. The years 2010 and 2011 – when Suncorp went under – were Australia's third and second wettest on record respectively.

2022 was only the ninth-wettest nationally but it was the wettest on record for parts of southeast Queensland, NSW, and Victoria.¹⁷ At least eight A-Leagues matches in the eastern states were postponed due to storms or flooding that year.



STOPPAGE TIME: A PFA REPORT ON THE A-LEAGUES AND CLIMATE CHANGE

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A-LEAGUES' INPACION ON CLIMATE



HOW DOES FOOTBALL CONTRIBUTE TO GLOBAL WARMING?

Solving climate change is a collective action problem.

That means no one person has the power to fix it by themselves, so there's a risk that no one does their part.

You could say the same for playing football. One player can't win a game alone. You need to do your job and trust that everyone else on the team will do theirs.

This is a game we can't afford to lose.

The best approach is for every individual, business, and community to take care of their backyard, and watch all those changes add up to a winning result. We need a mini-revolution in every industry; the good news is the solutions exist and this work is already happening.

Sport has typically been a bit behind other sectors, but that's also a big opportunity. This section looks at how the A-Leagues are contributing to the climate crisis and what changes could make a big difference.

STOPPAGE TIME: A PFA REPORT ON THE A-LEAGUES AND CLIMATE CHANGE



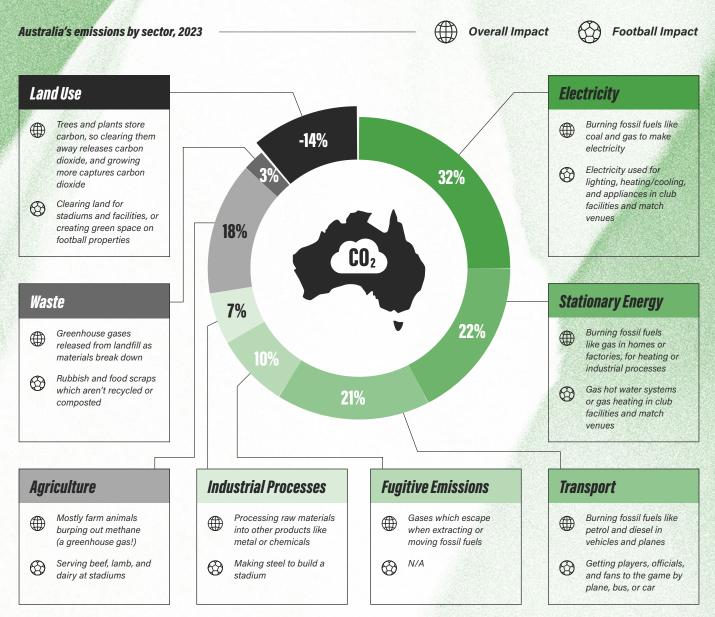
WHAT'S THE PICTURE IN AUSTRALIA?

Australia is the 14th largest emitter of carbon pollution in the world, even though we only have the 55th largest population.

That doesn't include the coal and gas we dig up here and export overseas. We're one of the biggest suppliers for other countries' dirty habits.

Because fossil fuels have been central to our society, almost everything we do impacts the climate, including what we eat, what we wear, and how we get around.

The graphic shows a breakdown of all emissions in Australia, and gives an example from football under each category.



Source: https://www.dcceew.gov.au/sites/default/files/documents/nggi-quarterly-update-sept-2023.pdf



HOW BIG IS THE A-LEAGUES' IMPACT?

As far as we can tell, none of the A-Leagues clubs nor the APL itself have reported (or measured) their carbon emissions.

But we can get an idea using work done elsewhere.

The Brazilian club Fluminense FC conducted an audit of its emissions for 2012, which found it released the equivalent of 2,581 tonnes of CO_2 that year, across senior and youth team operations.¹⁸



The main contributors were:



As we can see, two thirds of emissions related to Fluminense's operations related to transport.

Since transport accounts for just 21% of Australia's total emissions, it's clear that is a disproportionately important area for football to tackle.

Manchester City FC publishes a comprehensive breakdown of its emissions each year. Its 2023 report showed that the club emitted the equivalent of 31,475 tonnes of CO_2 in 2022-23.¹⁹

Manchester City's audit covers everything from the police horses on matchday, to concerts at the stadium, to the 'embedded emissions' in the materials used to build the stadium. Last season, the club participated in a US tour and reached the Champions League final in Istanbul, increasing emissions.

A-League clubs are more likely to be closer to Fluminense's scale than Man City's, but it's still illustrative that the majority (56%) of City's emissions across the board came from all types of travel, including fans, teams, and staff.

Man City has conducted surveys to find out how its fans get to home games (Fluminense only estimated this information). Fans of City's men's and women's teams emitted 7,750 tonnes of CO_2 -e in 2022-23, mostly coming from car travel.



WHAT WE DO KNOW... The A-leagues' aviation Emissions

The A-Leagues are two of the most geographically spread sports leagues in the world, stretching from Perth to Wellington (and Auckland, soon). Air travel will make up a disproportionately large share of the leagues' carbon pollution, compared to other leagues.

For the 2023-24 regular seasons, A-League Women teams will fly a combined 352,200km and A-League Men teams will fly 434,500km. Collectively, the teams will fly far enough to circumnavigate the world 20 times.

If we assume travelling parties of 22 players and staff for ALW and 25 for ALM, the combined carbon emissions of all this air travel will be 3,686 tonnes.²⁰

That's equivalent to the average annual emissions of 244 Australians, which is more people than have ever played for the Matildas.

Aviation emissions are based on the distance, the type of plane, and also the class of ticket. Business class seats do more harm because you can fit less of them on each flight. The fact that A-Leagues players and staff fly economy keeps emissions down per flight compared to Man City or Taylor Swift.

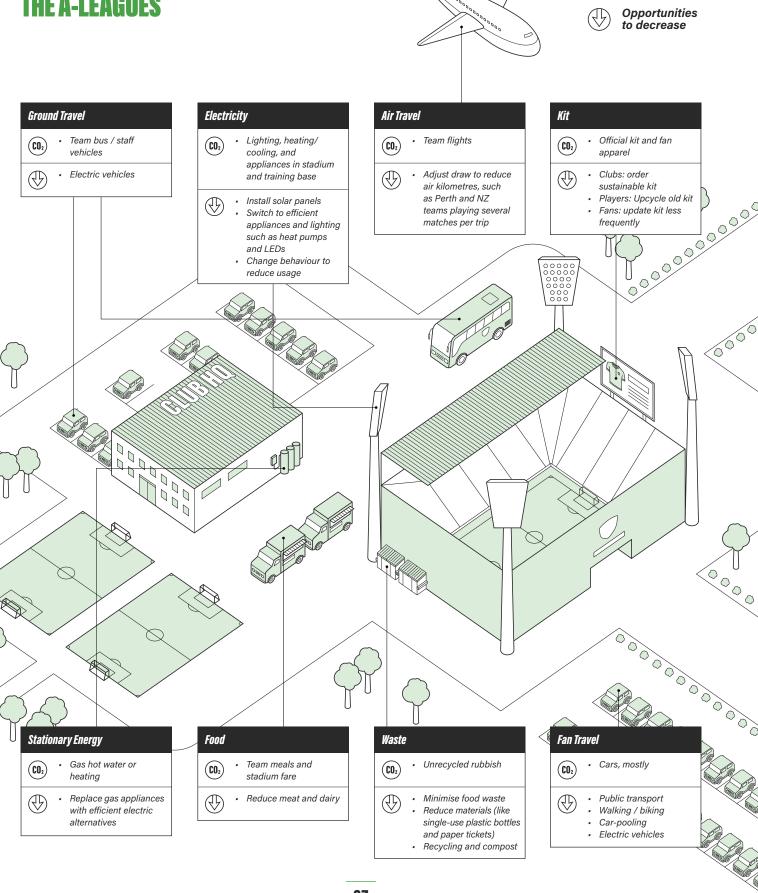




Sources of

emissions

HOW TO REDUCE EMISSIONS IN THE A-LEAGUES



Recycling and compost



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The football-for-climate movement in the UK now has an annual weekend which encompasses clubs up and down the pyramid. High-profile players and media figures encourage clubs and fans to take action to reduce emissions and raise awareness. In 2023, it reached up to 30 million fans and inspired 63,370 actions or pledges. Could the A-Leagues take it global?

LEARN MORE

CRICKET FOR CLIMATE

Cricket for Climate is a player-led movement involving leading players such as Pat Cummins and Alyssa Healy. It collaborates with cricket at all levels and industry partners to help cricket reduce emissions and save money. The group has worked with grassroots clubs to install solar on their roofs and upgrade to energy-efficient fridges. Professional players have contributed financially to their junior clubs' initiatives.

LEARN MORE

RICHMOND FC'S ENVIRONMENTAL SUSTAINABILITY ACTION PLAN

Richmond FC was the first Australian sports club to sign on to the UN's Sports for Climate Action framework. It has committed to reach net zero emissions by 2040. Its 2022-2024 Environmental Sustainability Action Plan (ESAP) is industry-leading in the Australian context, and provides a good model for A-Leagues clubs. It was developed in conjunction with external experts and lays out a detailed roadmap for how the club will achieve its goals across emissions reductions, waste management, biodiversity, and climate leadership and education.

LEARN MORE

With support from Common Goal and Football For Future, 44 players from four different nations competing at the 2023 Women's World Cup offset* the environmental impacts of their flights to the tournament. It was described as the biggest player-led climate action in football history. The players personally donated to projects focused on carbon offsetting and climate

resilience and adaptation.

WOMEN'S WORLD CUP PLAYER

ACTION

LEARN MORE

*Offsetting: Refers to taking a positive action to cancel out the negative impacts of some other action. It's better to reduce emissions directly, but where emissions are unavoidable (such as from air travel), offsetting is the next best option

THE PFA'S OUR GREENER PITCH

Climate action in Australian football has been led by the players and their association. The PFA undertakes an annual carbon audit and offsets its unavoidable emissions to be certified carbon neutral. The emissions from the Socceroos' and Matildas' World Cup campaigns have been offset. More recently, a group of climate-conscious players from the A-Leagues and National Teams has taken charge of the initiative, organising the first ever 'Green Games' in the A-Leagues in March and April 2024.

LEARN MORE



LET'S TAKE ACTION!



(SOME) ACTIONS FOR FA, APL, CLUBS, AND VENUES

- Sign the UN Sports for Climate Action Declaration
- Hire a head of sustainability
- Audit and report your carbon
 emissions
- Create a sustainability action plan
- Partner with climate-forward organisations (and leave dirty companies behind)
- Educate fans and players
- Reduce carbon emissions and offset unavoidable emissions
 - Create a draw with less air travel
 - Use and support electric vehicles
 - Offer vegan options
 - Add solar, improve energy efficiency, and get off gas
 - Reduce waste



(SOME) ACTIONS FOR Players

- Join the PFA's Our Greener Pitch
 movement
- Use your platform to raise
 awareness
- Upcycle your gear with Unwanted FC
- Push your club to do more

(SOME) ACTIONS FOR Players, Fans, And Staff who care

- Drive and fly less
- Eat less meat and dairy
- Electrify your home
- Buy less 'fast fashion'
- Support green businesses
- Get political! (if you want)
- Influence your local club or your workplace
- Spread the word



REFERENCES

- 1 https://climate.copernicus.eu/copernicus-2023-hottest-year-record
- 2 <u>http://www.bom.gov.au/climate/current/annual/aus/2023/Annual-Statement-2023.pdf</u>
- 3 <u>https://www.reading.ac.uk/news/2024/University-News/Climate-</u> stripes-off-the-scale-for-hot-2023
- 4 <u>https://www.aihw.gov.au/reports/injury/extreme-weather-injuries/</u> contents/about
- 5 <u>https://basis.org.uk/wp-content/uploads/2021/09/Hit-for-Six-The-</u> Impact-of-Climate-Change-on-Cr.pdf
- 6 <u>https://www.climatecouncil.org.au/resources/how-hot-will-your-neighbourhood-be-by-2050</u>
- 7 <u>https://www.westernsydney.edu.au/__data/assets/pdf_____file/0010/1967167/2022_Wicked_Urban_Challenges_Report.pdf</u>
- 8 <u>https://www.acf.org.au/caught_behind_climate_change_extreme_heat_and_the_boxing_day_test</u>
- 9 <u>https://www.csiro.au/en/news/all/articles/2021/november/</u> bushfires-linked-climate-change
- 10 <u>https://www.ais.gov.au/__data/assets/pdf_file/0003/1111098/37016</u> Exercise-in-bushfire-smoke.pdf
- 11 <u>https://www.acs.gov.au/pages/floods</u>
- 12 <u>https://www.csiro.au/en/research/disasters/floods/causes-and-impacts</u>
- 13 https://rapidtransition.org/resources/playing-against-the-clock/
- 14 <u>https://www.stuff.co.nz/environment/114669039/higher-sealevel-</u> calculations-push-more-of-wellington-under-water
- 15 <u>https://www.climatecouncil.org.au/resources/climate-risk-map/</u>
- 16 <u>https://www.csiro.au/en/research/disasters/floods/causes-and-impacts</u>
- 17 <u>https://media.bom.gov.au/social/blog/2701/annual-climate-</u> statement-2022-australias-ninth-wettest-year-on-record/
- 18 <u>http://www.fluminense.com.br/site/futebol/wp-content/</u> uploads/2016/06/Report_Fluminense-FC_version4-1.pdf
- 19 <u>https://www.mancity.com/meta/media/cgpmcj2l/2023-mcfc-</u> sustainability-report.pdf
- 20 Calculated at <u>https://co2.myclimate.org/en/</u> using Boeing 737 for all flights, assuming flights between Newcastle and Canberra but not between other clubs within NSW and ACT

STOPPAGE TIME: A PFA REPORT ON THE A-LEAGUES AND CLIMATE CHANGE





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