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## Note from Iris Sustainable Development

Anxiety relating to a multitude of ecological crises, or eco-anxiety, is a subject of growing research significance. The main idea of the first report series is to establish an international overview of eco-anxiety rates in 20 countries utilizing the HEAS scale and correlate these rates with variables of geographical location (urban, rural), education as well as the type of experiencing climate crisis (indirectly via the media or public discourse).

More precisely, the main objectives of this report series is to:

- create an international overview of eco-anxiety rates in 20 countries
- contribute to the growing body of knowledge around to what extent the climate crisis affects mental health identifying possible differentiation on eco-anxiety determinants
- raise awareness on the impact of climate crisis on mental health

The target group of the Australian national report are citizens of Australia and/or people (ages 18-50) that are/have been experiencing climate change in the country.





## Climate change impacts in Australia

The Australian continent covers a large range of climate zones, from the tropics in the north to the arid interior and temperate regions in the south. Australia is the driest of all inhabited continents, with considerable rainfall and temperature variability both across the country and from year to year. Australia has a wide range of daily temperatures, with summer temperatures ranging from of 5.7°C in New South Wales to 30.8°C in Queensland, and to 8°C in Tasmania. (WorldBank, 2023)

#### Greenhouse gas emissions

Greenhouse gas emissions by Australia totalled 533 million tonnes CO2-equivalent based on greenhouse gas national inventory report data for 2019; representing per capita CO2e emissions of 21 tons, three times the global average. Coal was responsible for 30% of emissions. The national Greenhouse Gas Inventory estimates for the year to March 2021 were 494.2 million tonnes, which is 27.8 million tonnes, or 5.3%, lower than the previous year. It is 20.8% lower than in 2005 (the baseline year for the Paris Agreement). According to the government, the result reflects the decrease in transport emissions due to COVID-19 pandemic restrictions, reduced fugitive emissions, and reductions in emissions from electricity; however, there were increased greenhouse gas emissions from the land and agriculture sectors. Australia uses principally coal power for electricity, accounting for 66% of grid-connected electricity generation in 2020, but this is rapidly decreasing with a growing share of renewables making up the energy supply mix, and most existing coal-fired power station scheduled to cease operation between 2022 and 2048.



A kangaroo rushes past a burning house in Lake Conjola, Australia, on Dec. 31, 2019.Matthew Abbott / The New York Times via Redux Pictures



## Climate change impacts in Australia

#### Extreme weather events

VIncreasing frequency and intensity of extreme events such as droughts and floods alongside ocean warming and acidification, increasing fluctuation in air temperatures and rising sea levels are posing significant threats to communities, ecosystems and the built environment.

One of the defining chapters in Australia's recent climate narrative unfolded in 2019 and 2020 with the catastrophic bushfires that ravaged large swathes of the country. Fueled by prolonged drought, record-breaking temperatures, and gusty winds, the fires, often referred to as "Black Summer," claimed lives, destroyed homes, and devastated ecosystems. The fires were unprecedented in their scale and intensity, prompting global attention and sparking urgent conversations about the links between climate change and the increasing frequency of catastrophic bushfire events.

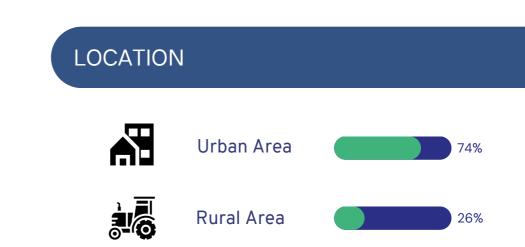
Australia's weather patterns are demonstrating increases in flash flooding, drought and fire conditions. Australia has warmed on average by up 1.47+/- 0.24 degrees Celsius since 1910. There is an increase in extreme heat events associated with warming and a decline of rainfall across the south-west and south-east of Australia. The urban landscapes face the impacts of extreme weather. Cities like Sydney and Melbourne witnessed heatwaves, with temperatures surpassing 40 degrees Celsius (104 degrees Fahrenheit) during the summer of 2020. The heatwaves strained infrastructure, impacted public health, and prompted discussions about the need for climate-resilient urban planning.

2022 will be remembered as the year of the Great Deluge, when record-breaking rain and floods lashed large parts of Eastern Australia, causing untold devastation for Australians and our economy. This year has seen large parts of Eastern Australia experience record-breaking rainfall and floods. From Queensland down to Tasmania, extreme weather events have taken people's lives, led to the evacuation of communities, damaged homes, belongings and businesses, destroyed crops and livestock, and saddled us with billions of dollars in rebuilding costs.

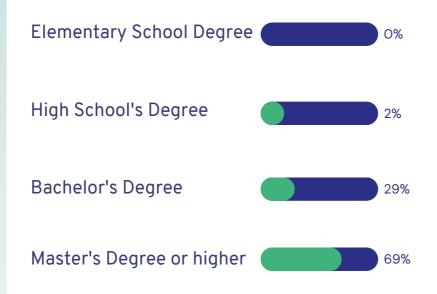
Climate change is driving a new era of 'unnatural disasters' – and as a country we are not prepared to cope. This year, we have seen how consecutive, record-breaking events can overwhelm emergency services and devastate communities. (Climate Council, 2022)



## Survey results



## **EDUCATION**

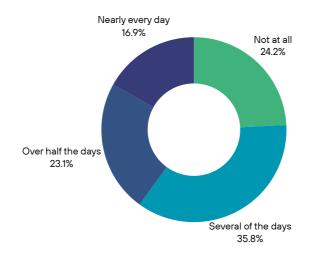




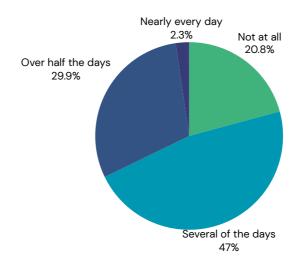
"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Response scale: 0 = not at all, 1 = several of the days, 2 = over half the days, 3 = nearly every day.

#### Feeling nervous, anxious or on edge



#### Not being able to stop or control worrying

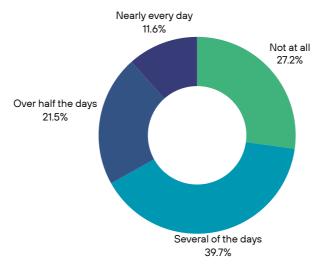




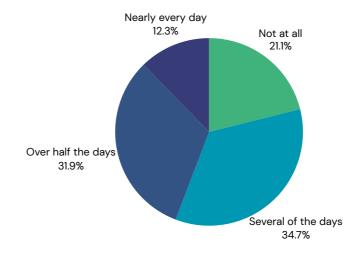
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Response scale: 0 = not at all, 1 = several of the days, 2 = over half the days, 3 = nearly every day.

#### Worrying too much



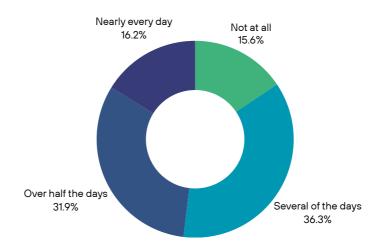
### Feeling afraid



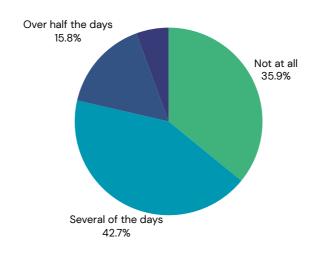


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Unable to stop thinking about future climate change and other global environmental problems



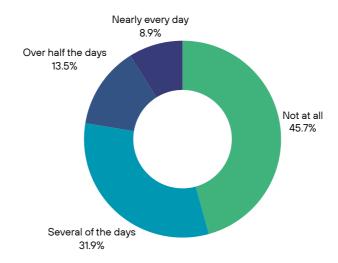
Unable to stop thinking about past events related to climate change



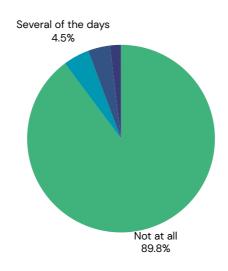


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

#### Unable to stop thinking about losses to the environment



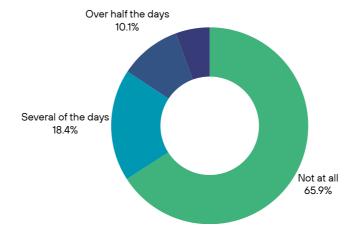
#### Difficulty sleeping



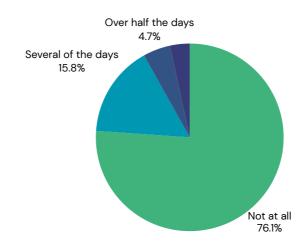


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

#### Difficulty enjoying social situations with family and friends



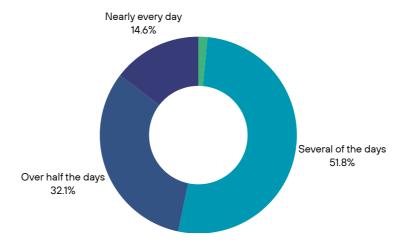
#### Difficulty working and/or studying



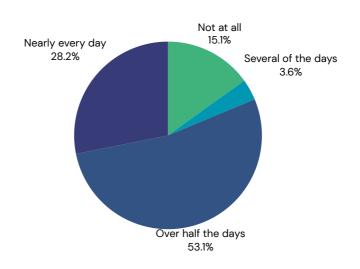


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Feeling anxious about the impact of your personal behaviours on the earth



Feeling anxious about your personal responsibility to help address environmental problems

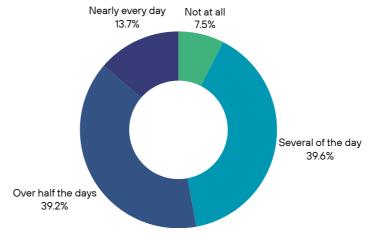




# Survey results: The Hogg Scale and Beliefs about climate change

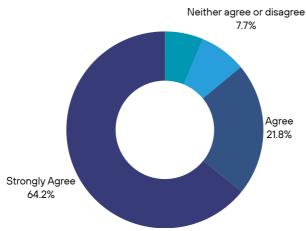
"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Feeling anxious that your personal behaviours will do little to help fix the problem



Beliefs about Climate Change

Climate change is real

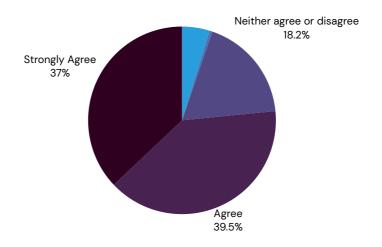




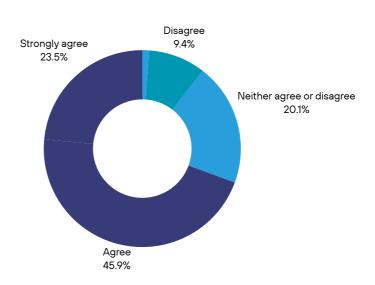
# Survey results: Beliefs about climate change

Beliefs about Climate Change

#### Climate change is caused by humans



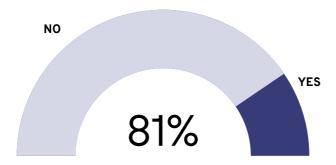
#### Climate change is reversible





# Survey results: Beliefs about climate change

Do you have direct experience of environmental crisis?



I am experiencing climate crisis indirectly via the media or public discource



Which climate disaster made you feel nervous (in your country or globally), if any

	Floodings	
Wildfires		
Global Warming	Ice melting	



## **Key Conclusions**

Our research reveals a notable prevalence of eco-anxiety among the Australian population, reporting varying degrees of eco-anxiety.

In terms of the interplay between eco-anxiety and specific variables significant differences in eco-anxiety rates were observed across various demographics. Notably, the geographical location of participants was strongly linked with eco-anxiety. It is important that the 81% of the respondents are urban residents and they are exhibited higher levels of eco-anxiety compared to their rural counterparts. Additionally, while a slight interconnection with education was observed, we address that eco-anxiety can be experienced via media and public discourse, since the 84% has expressed that is experiencing eco-anxiety indirectly. This indicates that the media and information consumption play a substantial role in shaping eco-anxiety levels since participants who reported frequent exposure to alarming environmental news or content experienced higher levels of eco-anxiety. Simultaneously, the study found a strong interplay between eco-anxiety and heightened concerns about environmental issues. Respondents who expressed high levels of eco-anxiety consistently cited factors and events such as wildfires, ice melting, and floodings as major sources of distress.

The findings of this research underscore the urgency for policymakers to address ecoanxiety as a public health concern. Developing sustainable environmental policies, educational campaigns, and psychological support services can help mitigate ecoanxiety and its associated mental health issues. This study provides a foundation for future research on eco-anxiety. However, further investigations into the long-term consequences of eco-anxiety, the effectiveness of interventions, and potential policy changes are essential for a comprehensive understanding of this emerging issue.

In conclusion, our research highlights the notable eco-anxiety rates in Australia and the need for multidisciplinary efforts to address this concern. Addressing eco-anxiety is not only crucial for the mental well-being of individuals but also for the sustainable future.

Disclaimer:

This report provides an intention of the eco-anxiety rates in the country and cannot be generalised since the survey is not responded by a representative sample comparing to the country's population.



## References

Climate Council. (2022). The Great Deluge: Australia's New Era of Unnatural Disasters. Climate Council. Retrieved from https://www.climatecouncil.org.au/resources/the-great-deluge-australias-new-era-of-unnatural-disasters/

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