

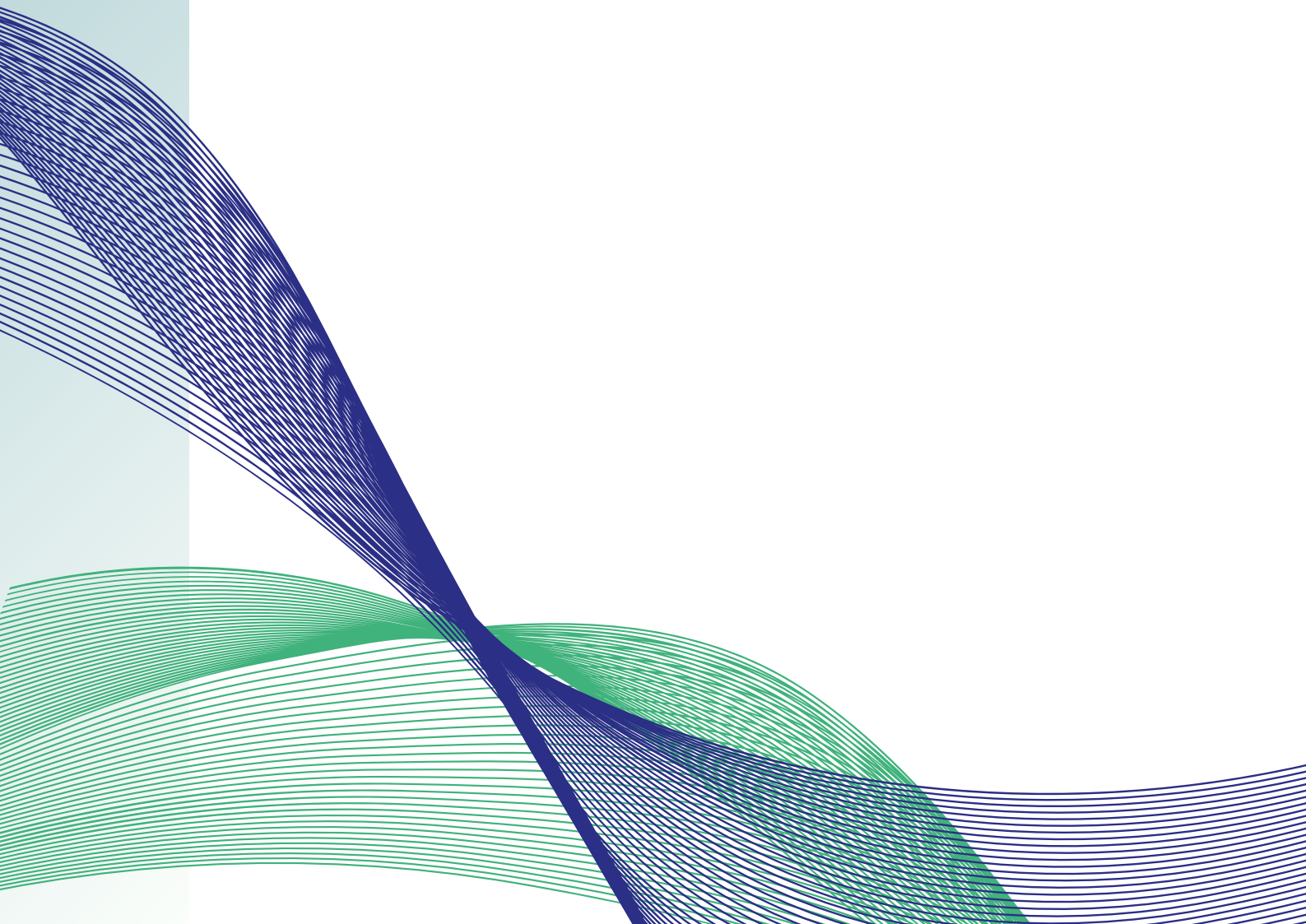
# ECO ANXIETY REPORT PORTUGAL

2023

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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

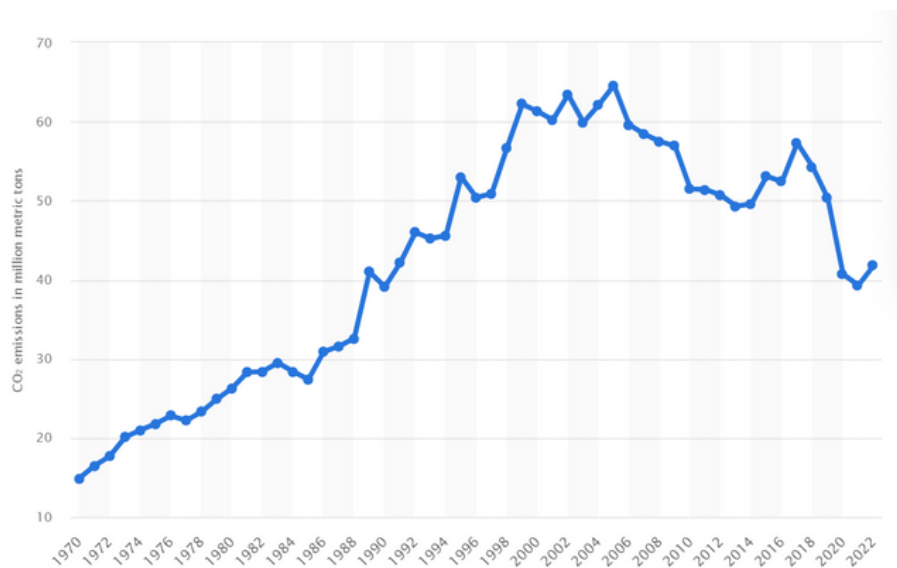
The target group of the Portuguese national report are citizens of Portugal and/or people (ages 18-50) that are/have been experiencing climate change in the country.

# Climate change impacts in Portugal

The climate in mainland Portugal is predominantly influenced by latitude, orography and its proximity to the Atlantic Ocean. Climate variables, such as precipitation and temperature, display strong north-south and west-east gradients as well as a very sharp seasonal and inter-annual variability. Average annual precipitation in mainland Portugal shows a strong spatial variability, with the highest values observed in the mountainous regions of Minho, exceeding 2,500 mm, and the lowest values, below 600 mm, in some northern and central inland regions (non-mountainous areas) and in inland Alentejo. On average, around 40% of annual precipitation occurs during winter (December to February) and only 7% of total annual precipitation occurs during summer (June to August). Transition seasons – spring (March to May) and autumn (September to November) – show a very variable inter-annual distribution, with approximately 24% and 28% of total average precipitation during these seasons, respectively. Average annual temperature is between 6°C and 9°C in inland North and Centre and higher, above 17°C in eastern Algarve and the Guadiana valley. (World Bank, 2023)

## Greenhouse gas emissions

Portugal produced 41.8 million metric tons of carbon dioxide (MtCO<sub>2</sub>) emissions in 2022. This was a year-on-year increase of around 6.4 percent. Portugal accounted for approximately 1.5 percent of EU carbon dioxide emissions in 2022.



Source: <https://www.statista.com/statistics/449812/co2-emissions-portugal/>

# Climate change impacts in Portugal

## Extreme weather events

Portugal has found itself thrust into the unforgiving grip of a changing climate, experiencing a series of extreme weather events that have reshaped the nation's landscape and tested the resilience of its people. From scorching heatwaves to intense wildfires and devastating storms, the Iberian Peninsula has become a battleground for the impacts of global climate change.

The rising temperatures are perhaps the most palpable sign of this transformation. Portugal has witnessed a surge in heatwaves, with record-breaking temperatures becoming the new normal. The sweltering sun beats down on the landscape, pushing mercury levels to unprecedented heights. Cities like Lisbon and Porto have endured blistering summer days, challenging the traditional expectations of a temperate Mediterranean climate.

But it's not just the heat that has pushed Portugal to its limits. The wildfire season has intensified, turning once-verdant landscapes into charred expanses. The confluence of prolonged droughts, high temperatures, and strong winds has created a perfect storm for wildfires. In the summer months, the countryside is often shrouded in a thick haze of smoke, as flames devour forests and threaten communities. The nation has had to grapple with the harsh reality that these wildfires are not isolated incidents but symptoms of a broader environmental crisis.

As if wildfires weren't enough, Portugal has also been battered by powerful storms and heavy rainfall, leaving communities flooded and infrastructure strained. The increase in extreme precipitation events has led to flash floods, wreaking havoc on towns and villages ill-equipped to handle the sudden deluge. Coastal areas, once shielded by natural barriers, now face the dual threat of rising sea levels and more frequent storm surges, further exacerbating the vulnerability of Portugal's coastal communities.

## Survey results

### LOCATION



Urban Area



Rural Area



### EDUCATION

Elementary School Degree  0%

High School's Degree  22%

Bachelor's Degree  54%

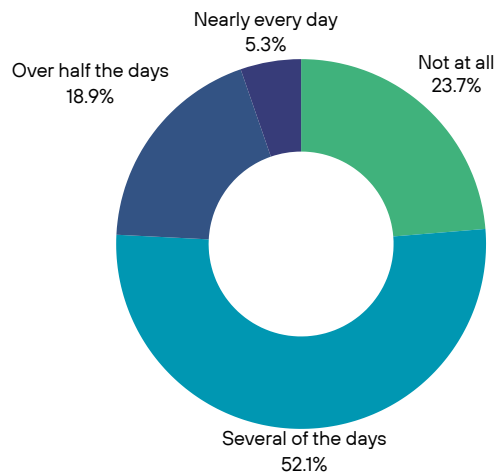
Master's Degree or higher  24%

## Survey results: The Hogg Scale

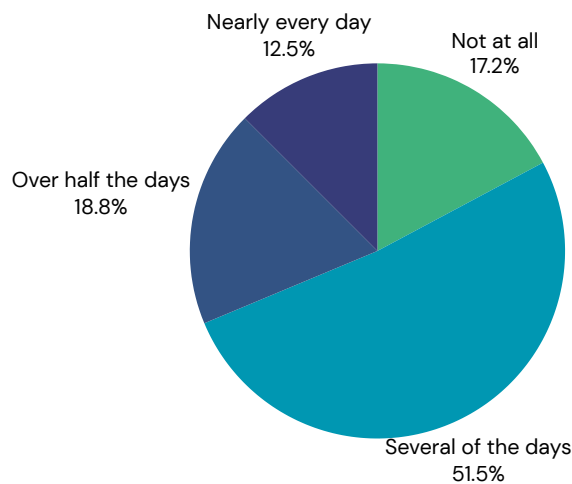
*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?*

*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

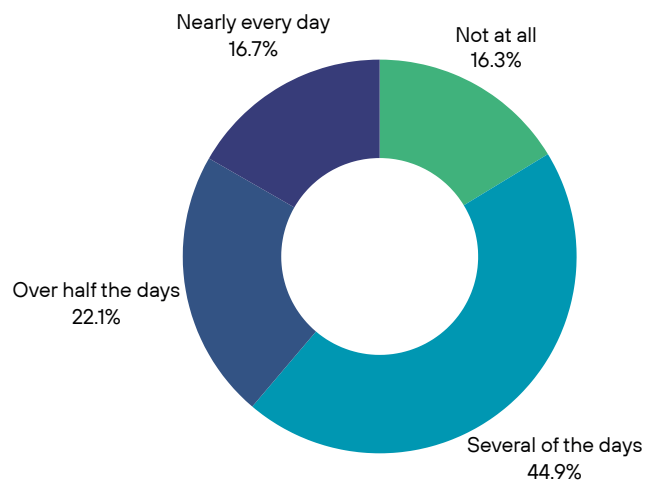


## Survey results: The Hogg Scale

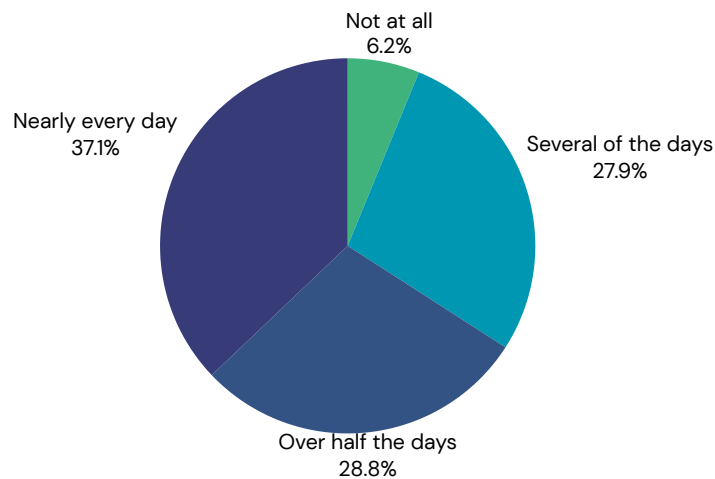
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### Worrying too much



### Feeling afraid

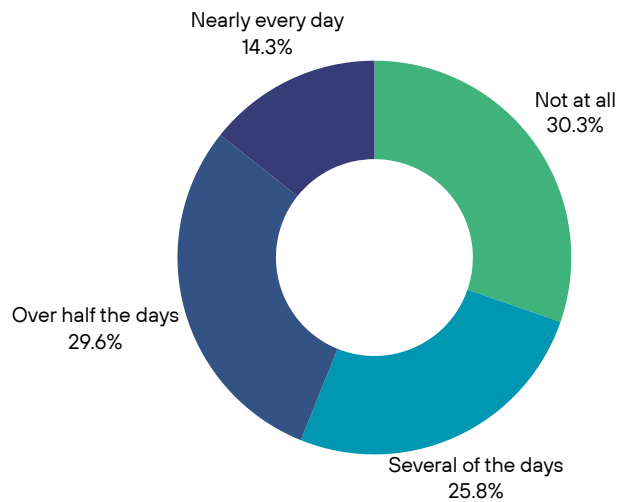




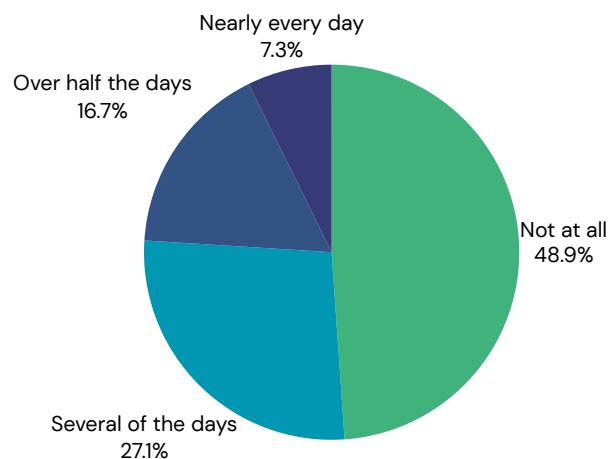
## Survey results: The Hogg Scale

*“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



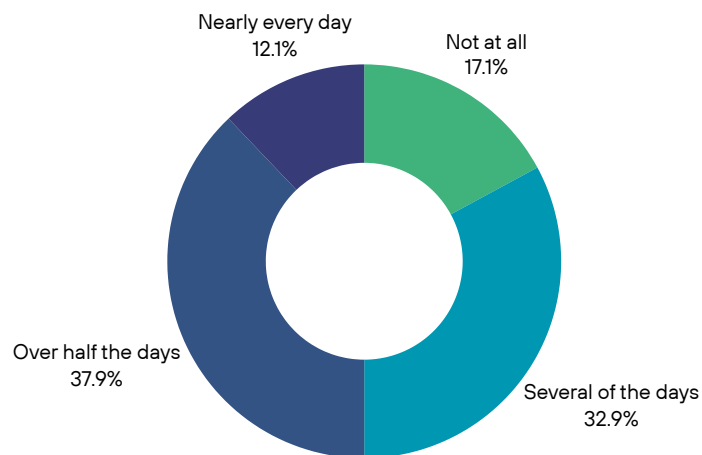
Unable to stop thinking about past events related to climate change



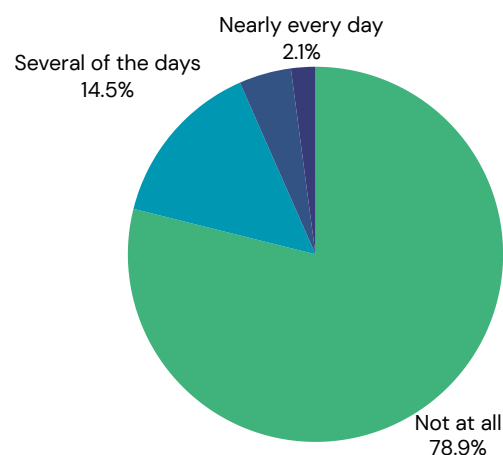
## Survey results: The Hogg Scale

*“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



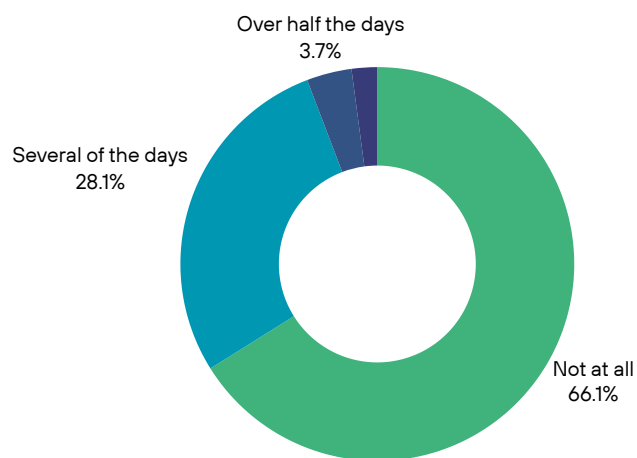
### Difficulty sleeping



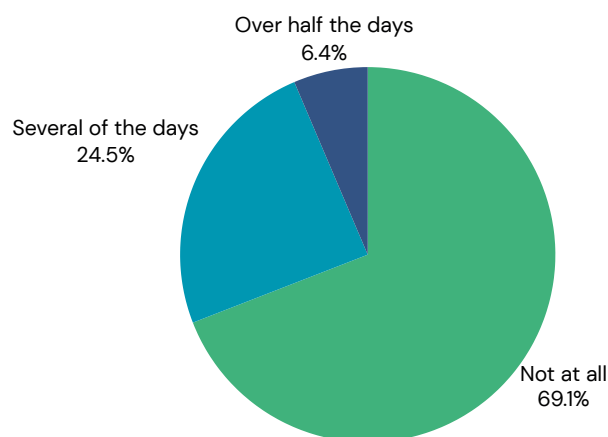
## Survey results: The Hogg Scale

*“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



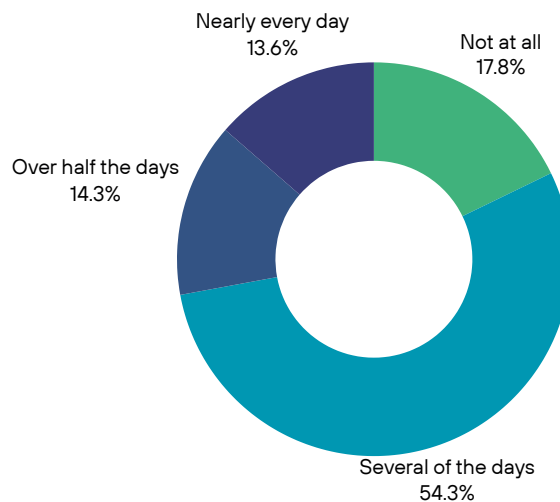
### Difficulty working and/or studying



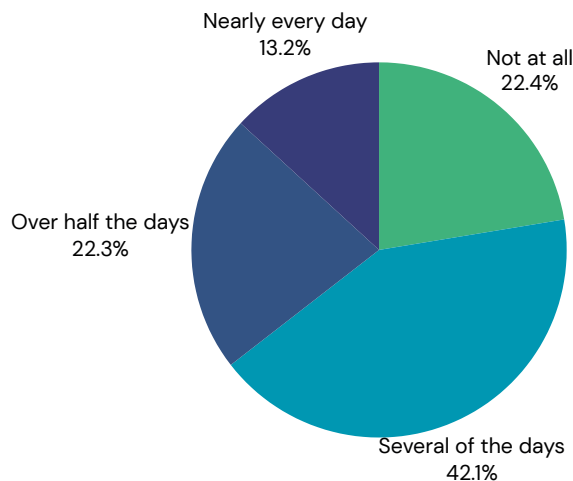
## Survey results: The Hogg Scale

*“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



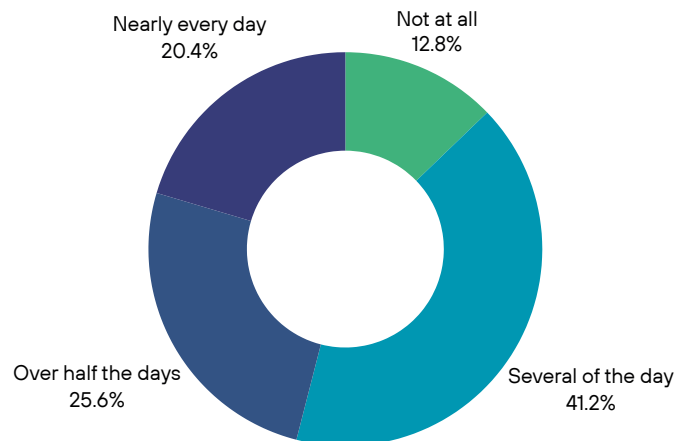
Feeling anxious about your personal responsibility to help address environmental problems



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

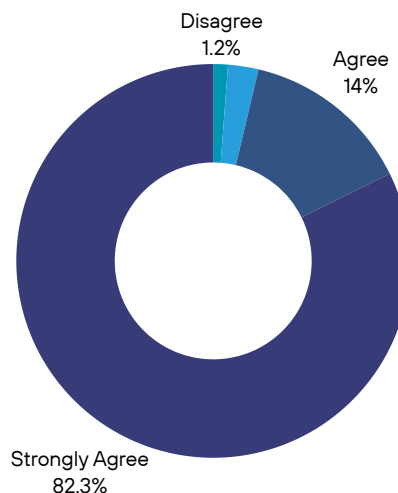
*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?”*

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



## Beliefs about Climate Change

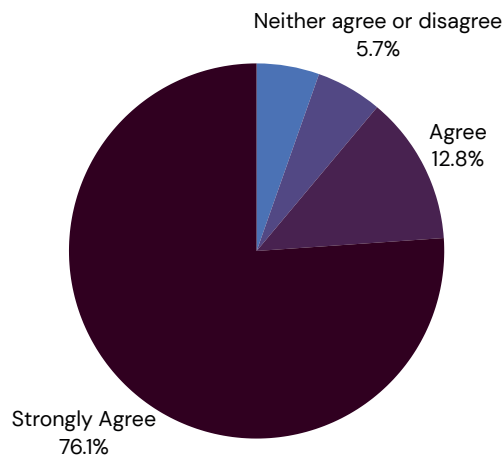
Climate change is real



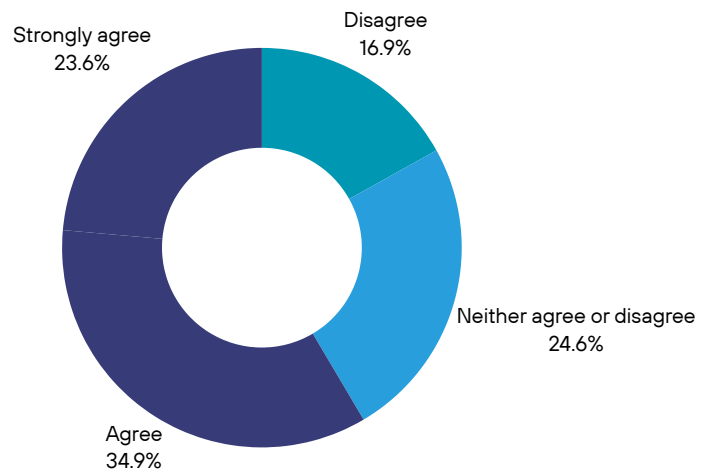
# Survey results: Beliefs about climate change

## Beliefs about Climate Change

### Climate change is caused by humans

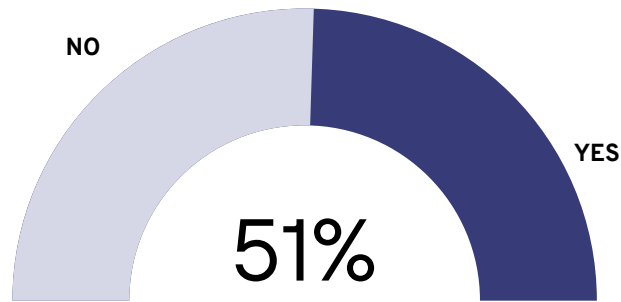


### Climate change is reversible



## 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 discourse



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



## Key Conclusions

Our research reveals a notable prevalence of eco-anxiety among the Portuguese population, reporting varying degrees of eco-anxiety. This underscores the significance of the issue and the need for further investigation and intervention.

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 80% of the respondents are urban residents and they are exhibited higher levels of eco-anxiety compared to their rural counterparts. Additionally, while a slight interrelation with education was observed, we address that eco-anxiety can be experienced via media and public discourse, since the 93% 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 Pedrogão Grande Wildfires, ice melting, and storms as major sources of distress.

The findings of this research underscore the urgency for policymakers to address eco-anxiety as a public health concern. Developing sustainable environmental policies, educational campaigns, and psychological support services can help mitigate eco-anxiety 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 significant eco-anxiety rates in Portugal 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

Middle East Institute (MEI). (2021). Climate Change in Georgia. Retrieved from <https://mei.edu/publications/climate-change-georgia>

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