

# ECO ANXIETY REPORT

SPAIN

2023

# Table of Contents

1. Note from IRIS Sustainable Development.....	4
2. Climate change impacts in Spain.....	5
3. Survey Results.....	6
4. Key Conclusions.....	16
5. References.....	17

## 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 Spain national report are citizens of Spain and/or people (ages 18-50) that are/have been experiencing climate change in the country.



## Climate change impacts in Spain

The country's mainland is bordered to the south and east by the Mediterranean Sea except for a small land boundary with Gibraltar, to the north and northeast by France, Andorra, and the Bay of Biscay, and to the west and northwest by Portugal and the Atlantic Ocean. Spain's population is approximately 47.4 million (2020), of which about 80% live in urban areas. Spain has a service-based economy, with industry and construction sectors also contributing to its economy. Spain is particularly affected by droughts, with a huge variation in its precipitation rates. Given Spain's orography and geographical location, the Iberian Peninsula experiences temperatures that exceed 45°C and minimums that reach values lower than -20°C. Average annual temperatures range between lower than 2.5°C, and higher than 18°C

### Greenhouse gas emissions

Spain produced nearly 261 million metric tons of carbon dioxide (MtCO<sub>2</sub>) emissions in 2022. This was an increase of over seven percent compared to the previous year. In 2020, Spain's CO<sub>2</sub> emissions dropped significantly as a result of the COVID-19 pandemic and the subsequent restrictions imposed. This dramatic reduction in emissions was the largest ever recorded in Spain. The second biggest over the past 50 years occurred in 2009 during the global financial crisis. In general, emissions in Spain experienced a period of significant growth between 1970 and 2007, peaking at 380.5 MtCO<sub>2</sub>. Since then, they have mostly been on a downward trajectory. Despite these reductions, Spain is the EU member with the smallest decline in GHG emissions when compared to 1990 levels. Transportation is a main source of pollution in Spain, with transportation-related GHG emissions increasing by approximately 35 percent between 1990 and 2020.



The Entrepeñas reservoir in late 2017. JAIME VILLANUEVA  
Source: El País

# Climate change impacts in Spain

## Extreme weather events

In the sultry embrace of the Iberian Peninsula, Spain has unfolded a dramatic narrative of extreme weather events over the past decade, painting vivid strokes on its diverse landscapes. From scorching heatwaves to erratic rainfall patterns, the nation grapples with the tangible impacts of climate change across its historic cities and arid expanses.

One of the defining chapters in Spain's recent climate history unfolded in 2017 when the country faced an onslaught of wildfires, particularly in the regions of Galicia and Asturias. Fanned by strong winds and fueled by dry conditions, the fires swept through forests and rural areas, leaving behind a landscape scarred by the intensity of the flames. The event underscored the vulnerability of Mediterranean ecosystems to the increasing frequency of extreme heat and prolonged droughts linked to climate change.

Spain, accustomed to warm summers, faced an exceptional heatwave in 2019 that shattered temperature records across the country. The southern region of Andalusia experienced scorching temperatures exceeding 45 degrees Celsius (113 degrees Fahrenheit). Cities like Seville and Cordoba became focal points for discussions about the implications of extreme heat on public health, agriculture, and energy demand. The 2023 summer in Spain was the third warmest on record (second only to 2022 and 2003). Over the course of the summer, four heat waves were recorded, with a total of 24 days of heat waves. The average summer temperature in Spain was 1.3 °C above the normal average. These high temperatures have left Spain with a 1,834 deaths attributable to these heat waves, according to MoMo data, a figure below the attributable mortality in the summer of 2022, which was 4,663, registered by the same daily mortality monitoring system of the Carlos III Health Institute. On the other hand, the same meteorological situations that cause these high temperatures have had an impact on the exacerbation of drought in our country at a level that had not been seen since 1995 - conditions that have led our reservoirs to a dammed volume of only 36.5% of their total capacity, according to data from 25 September 2023.

Conversely, Spain has also grappled with episodes of intense rainfall, leading to flash floods and landslides. In 2018, the island of Mallorca faced a devastating flash flood that claimed lives and caused extensive damage. Even so, it has been recently experienced another of the risks associated with climate change, such as the DANA that occurred in Central Spain, leaving several people dead and damaging public infrastructure and homes.

## Survey results

### LOCATION



Urban Area



Rural Area



### EDUCATION

Elementary School Degree  0%

High School's Degree  0%

Bachelor's Degree  36%

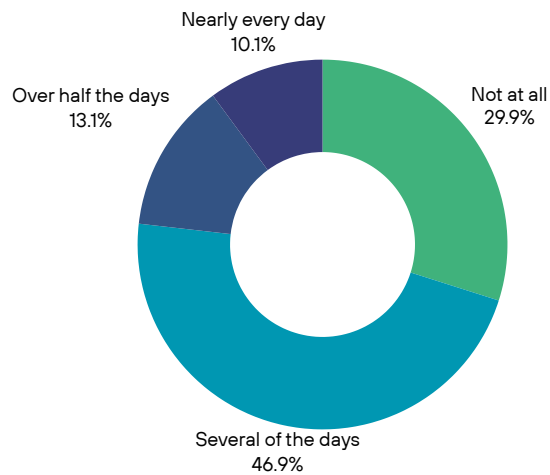
Master's Degree or higher  64%

## Survey results: The Hogg Scale

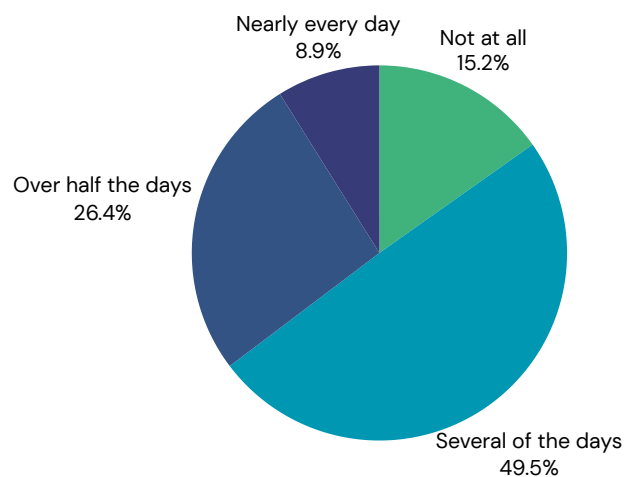
*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?*

*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

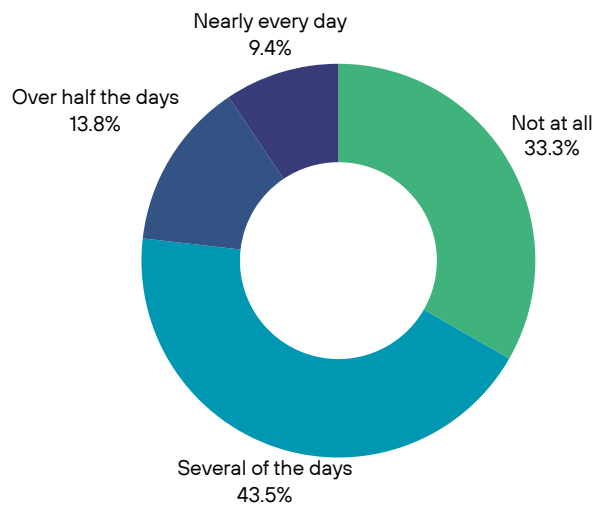


## Survey results: The Hogg Scale

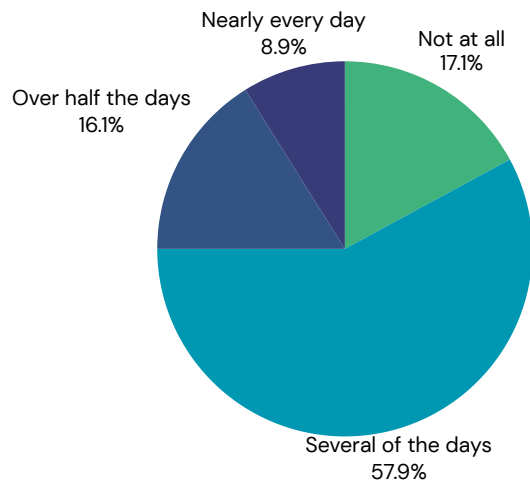
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### Worrying too much



### Feeling afraid

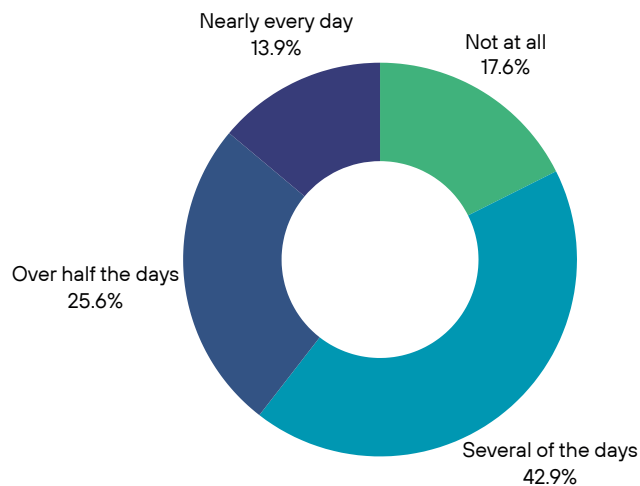




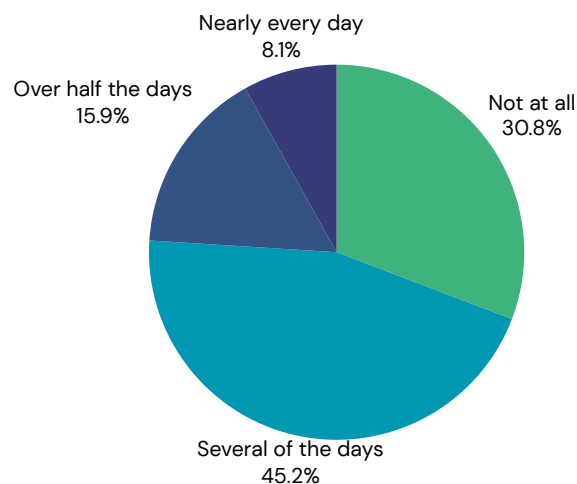
## Survey results: The Hogg Scale

*“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



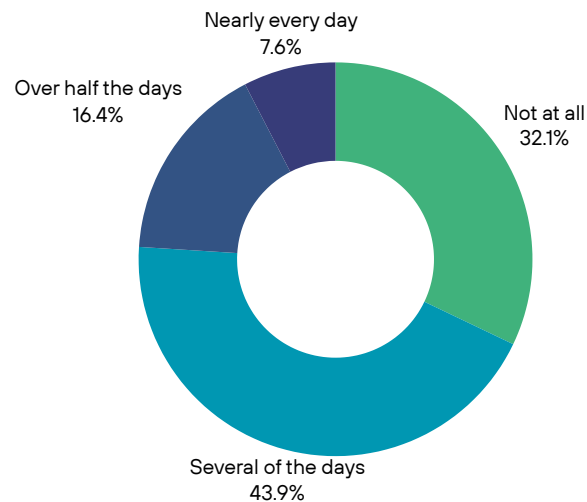
### Unable to stop thinking about past events related to climate change



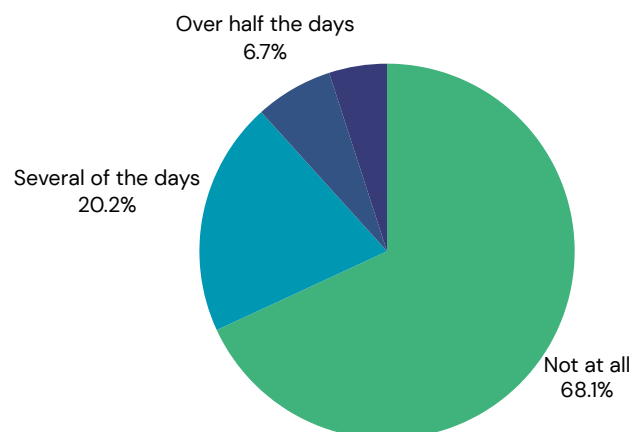
## Survey results: The Hogg Scale

*“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



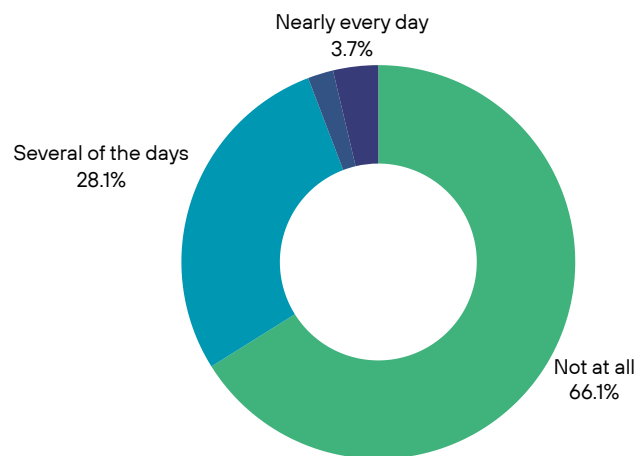
### Difficulty sleeping



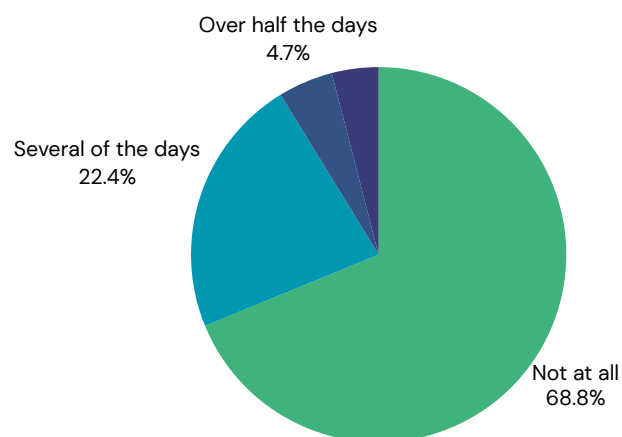
## Survey results: The Hogg Scale

*“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



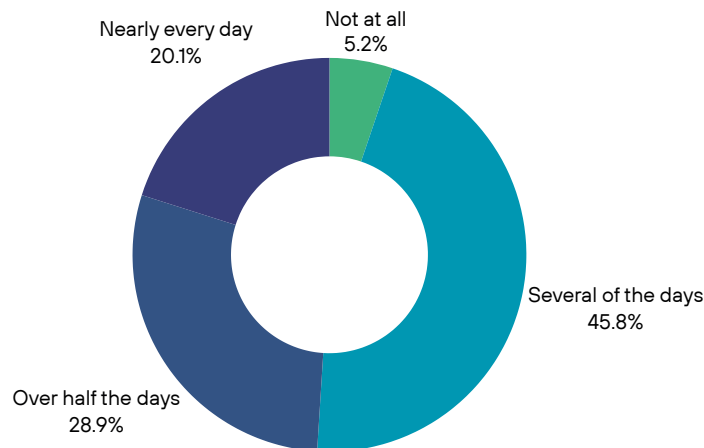
### Difficulty working and/or studying



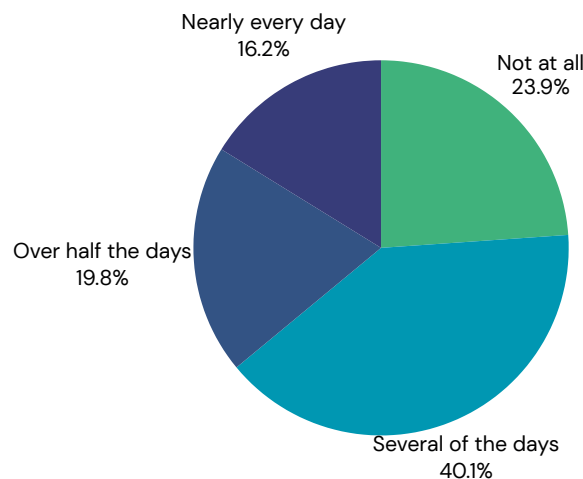
## Survey results: The Hogg Scale

*“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



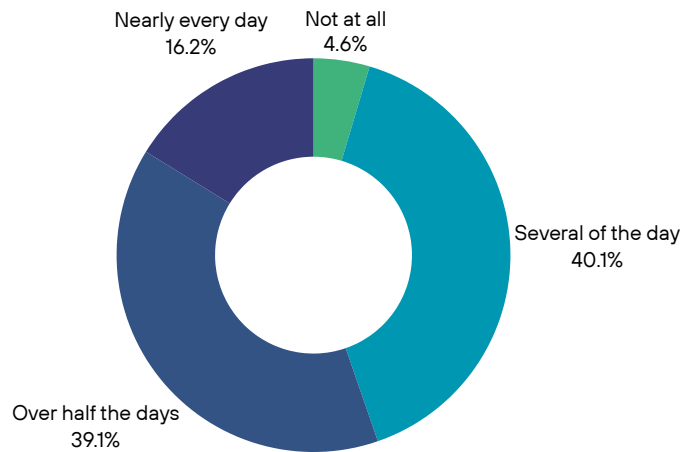
Feeling anxious about your personal responsibility to help address environmental problems



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

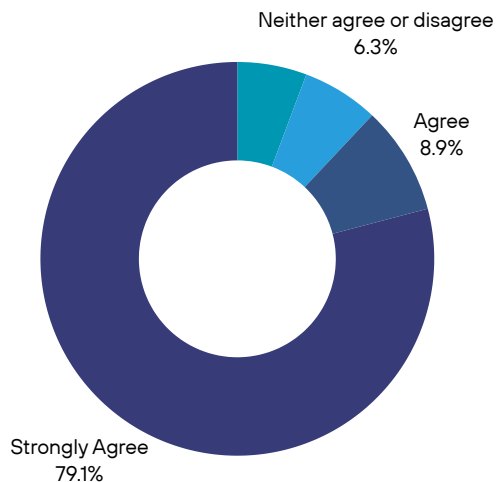
*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?”*

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



## Beliefs about Climate Change

Climate change is real

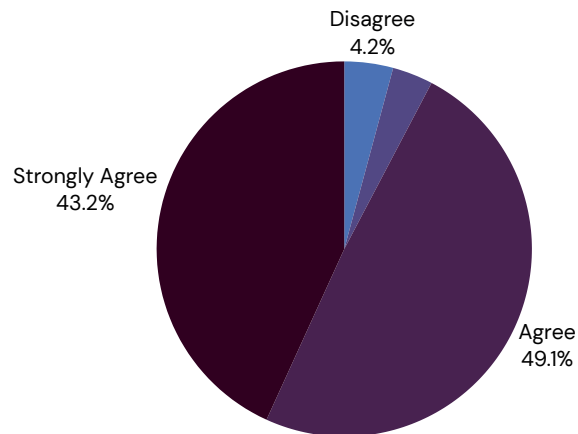




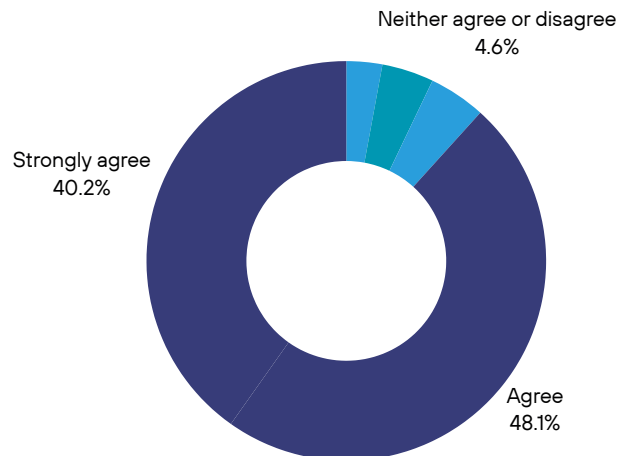
# Survey results: Beliefs about climate change

## Beliefs about Climate Change

### Climate change is caused by humans

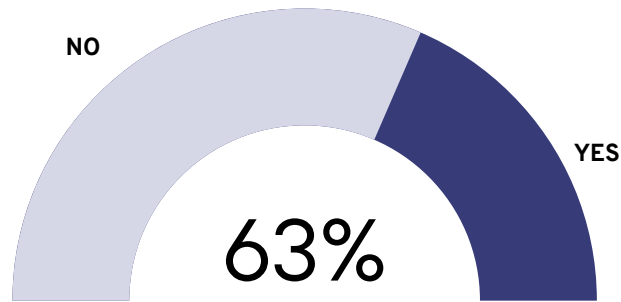


### Climate change is reversible



## 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 Spanish 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 69% 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 90% 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 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 Spain 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

Science Media Centre Spain. (2023). Spain and Extreme Weather Events: Health and Climate Change Observatory Needs to Be Set Up as a Matter of Urgency. Science Media Centre Spain. Retrieved from <https://sciencemediacentre.es/en/spain-and-extreme-weather-events-health-and-climate-change-observatory-needs-be-set-matter-urgency>

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Registration number: 802533-9881

Kungsbro strand 29, 112 26 Stockholm, Sweden

[info@irissd.org](mailto:info@irissd.org)

[www.irissd.org](http://www.irissd.org)

