

ECO ANXIETY REPORT GERMANY

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

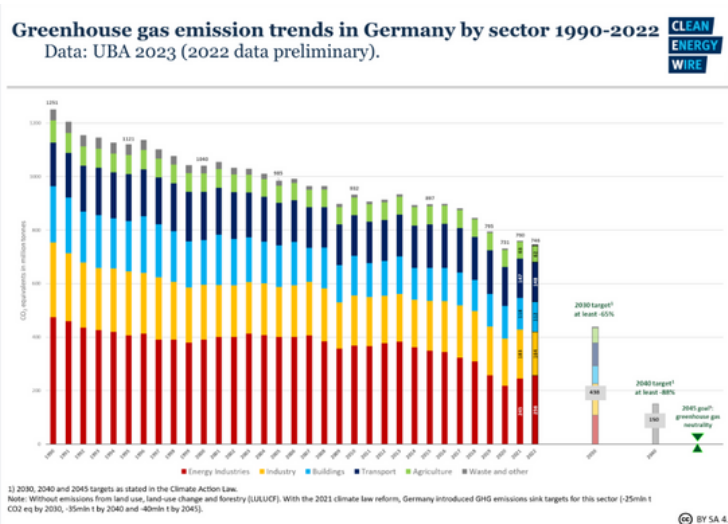
The target group of the German national report are citizens of Germany and/or people (ages 18-50) that are experiencing climate change in the country.

Climate change impacts in Germany

Germany is part of the temperate, rainy climate zone of the mid-latitudes. Northwestern and coastal Germany have a maritime influenced climate which is characterized by warm summers and mild cloudy winters. Most areas on the country's North Sea coast have midwinter temperatures about 1.5°C or even higher. Farther inland, the climate is continental, marked by greater seasonal variations in temperature, with warmer summers and colder winters. Temperature extremes between night and day and summer and winter are considerably less in the north than in the south. The annual mean temperature between Sylt (an island in northern Germany) and the Zugspitze (Germany's highest peak) from 1961 to 1990 was 8.2°C. The sun shines an average of 1,544 hours per year. Prevailing westerly winds carry moist air masses in from the Atlantic throughout the year, bringing up to 789 l/m² of annual precipitation.

Greenhouse gas emissions

Germany aims to become greenhouse gas neutral by 2045. It has set the interim targets of cutting emissions by at least 65 percent by 2030 compared to 1990 levels, and 88 percent by 2040. Germany's greenhouse gas emissions decreased slightly (2%) in 2022 compared to the previous year. Preliminary data showed that more coal use during the energy crisis fuelled by Russia's war against Ukraine led to rising emissions in the energy sector, while high prices pushed down emissions in industry. The country's Federal Environment Agency (UBA) warned that the reduction was not enough to put the country on track to reaching its 2030 climate target. Compared to 1990, emissions in Germany have fallen by 40.4 percent (Clean Energy Wire, 2023)



Source: Clean Energy Wire

Climate change impacts in Germany

Extreme weather events

One notable chapter in Germany's recent climate narrative unfolded in 2013 when the country experienced severe flooding along the Elbe and Danube rivers. Prolonged rainfall saturated the soil, leading to swollen rivers that breached their banks and inundated towns and agricultural areas. Cities such as Dresden and Passau faced significant challenges, prompting discussions about the increasing frequency and intensity of extreme rainfall events linked to climate change.

Conversely, Germany has faced periods of extreme heat, challenging the nation's perception of its temperate climate. In 2018, a heatwave dubbed the "Heat Dome" gripped the country, with temperatures soaring above 40 degrees Celsius (104 degrees Fahrenheit). The intense heat not only strained energy infrastructure and posed health risks but also prompted reevaluations of Germany's preparedness for such extreme temperature events.

In 2019, Germany experienced another facet of climate change with prolonged drought conditions, particularly impacting agricultural regions. Low water levels in rivers, such as the Rhine, disrupted transportation routes, and farmers faced challenges with crop yields as the dry conditions persisted. The event underscored the interconnected nature of climate impacts, affecting both urban and rural areas.

The Alps, a defining feature of Germany's southern landscape, have faced changing precipitation patterns and diminishing snow cover. Winter tourism in regions like Bavaria has been affected as warmer temperatures alter the traditional snowy landscapes, prompting adaptations in the tourism industry and discussions about the resilience of alpine ecosystems.

Various regions in Europe were hit by extreme rainfall from July 12 to 19, 2021 generated by a quasi-stationary atmospheric low pressure system named "Bernd". The mainly affected areas were two federal states in western Germany and adjacent regions in Belgium. The July flood was the costliest natural disaster in Germany in recent history, with losses in the order of 33 billion euros (USD 40 billion¹). At least 189 people died, more than in any other flood in Germany in the past 50 years.

Extreme destruction due to the flooding, floating debris, bank erosion and deposition occurred. Local traffic infrastructure, power, gas, and water supply as well as the telecommunication networks were damaged and disrupted (Kron, 2022)

Survey results

LOCATION



Urban Area



Rural Area



EDUCATION

Elementary School Degree  0%

High School's Degree  7%

Bachelor's Degree  21%

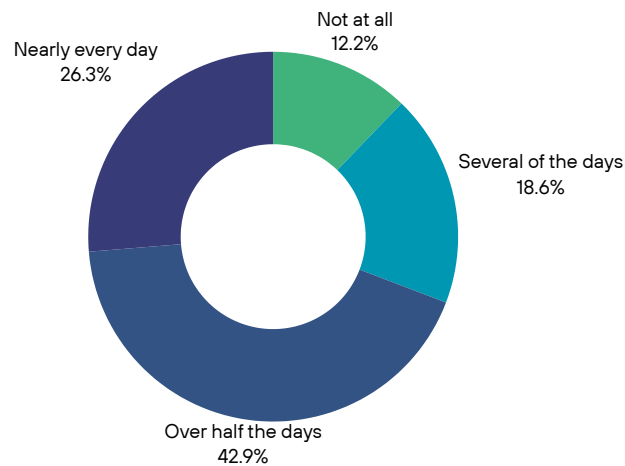
Master's Degree or higher  72%

Survey results: The Hogg Scale

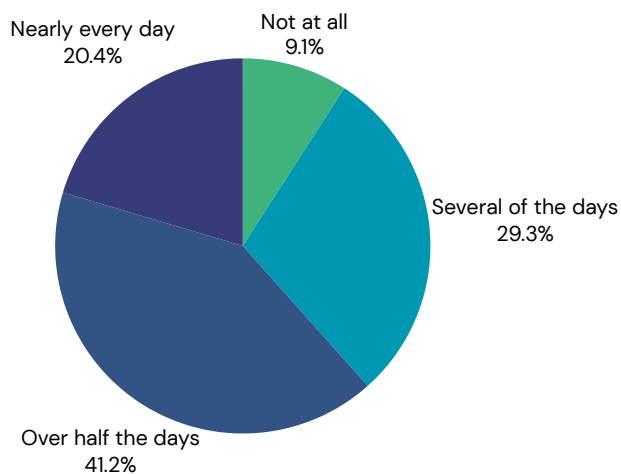
“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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

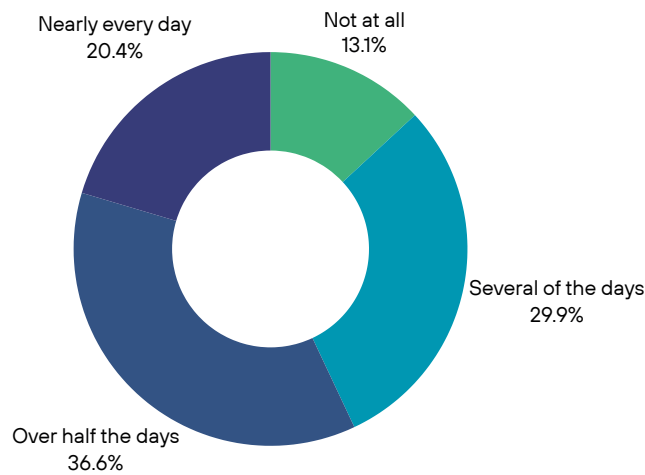


Survey results: The Hogg Scale

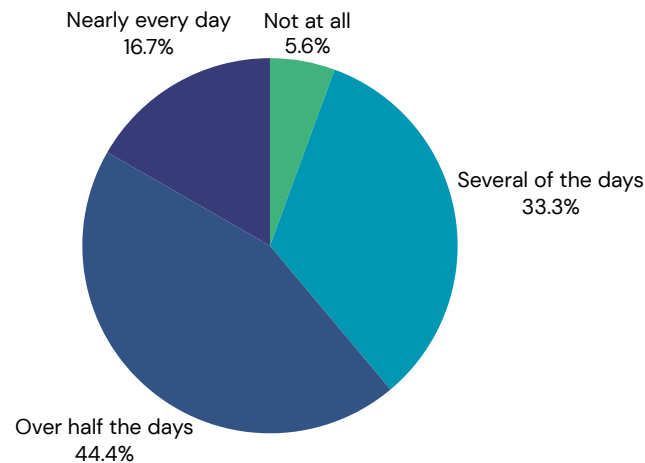
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Response scale: 0 = not at all, 1 = several of the days, 2 = over half the days, 3 = nearly every day.

Worrying too much



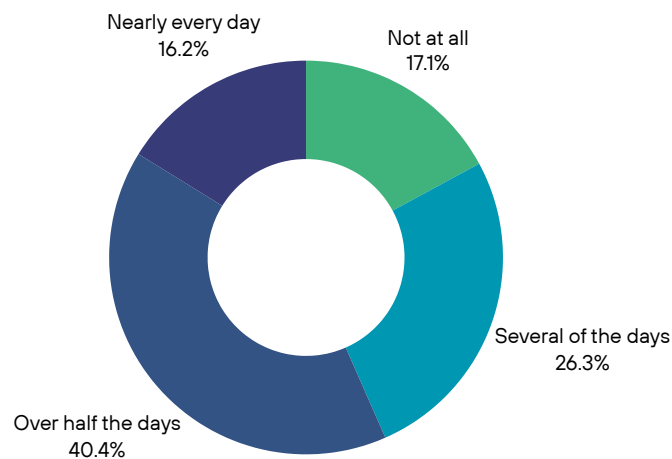
Feeling afraid



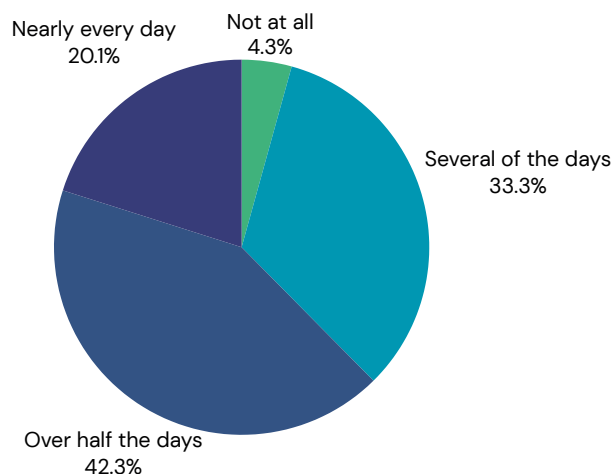
Survey results: The Hogg Scale

“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



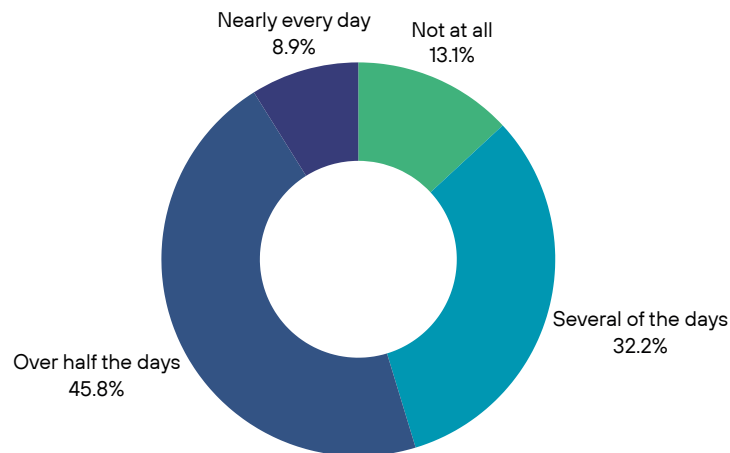
Unable to stop thinking about past events related to climate change



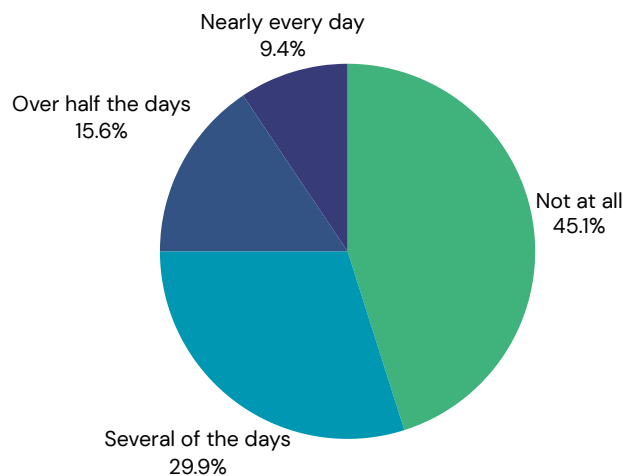
Survey results: The Hogg Scale

“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



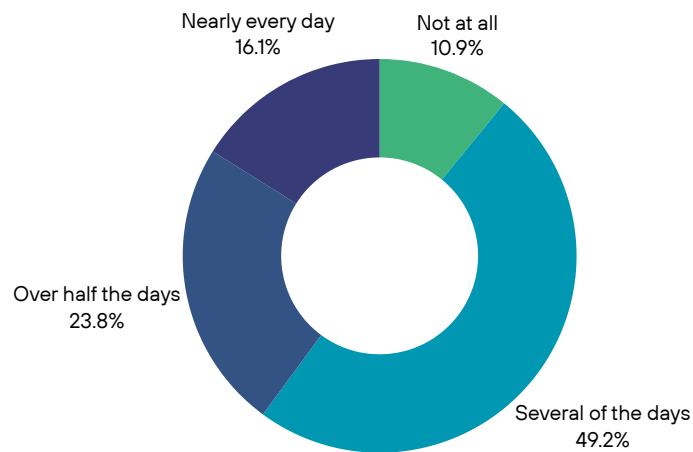
Difficulty sleeping



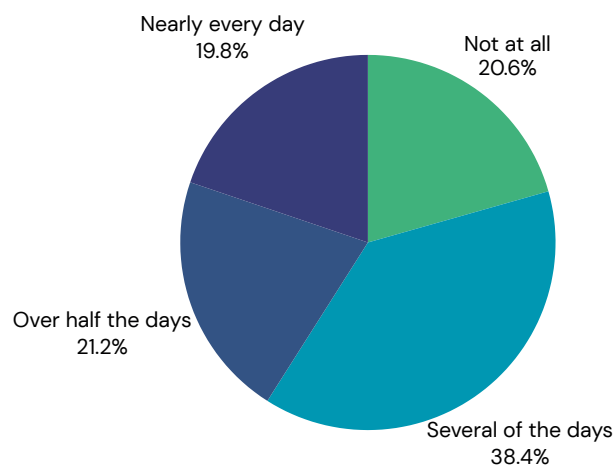
Survey results: The Hogg Scale

“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



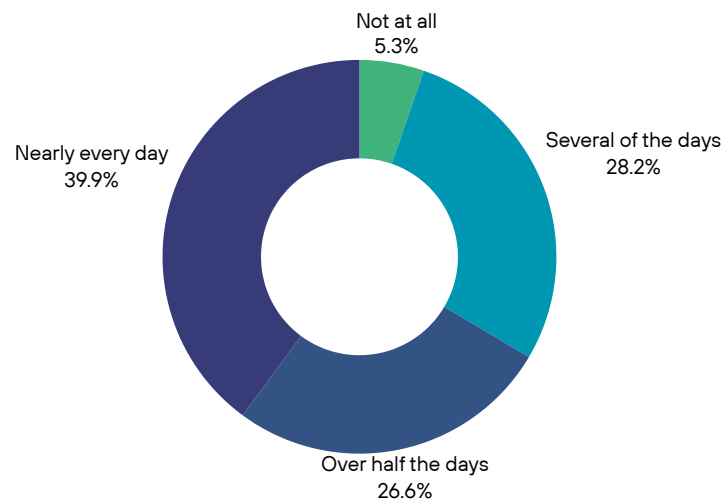
Difficulty working and/or studying



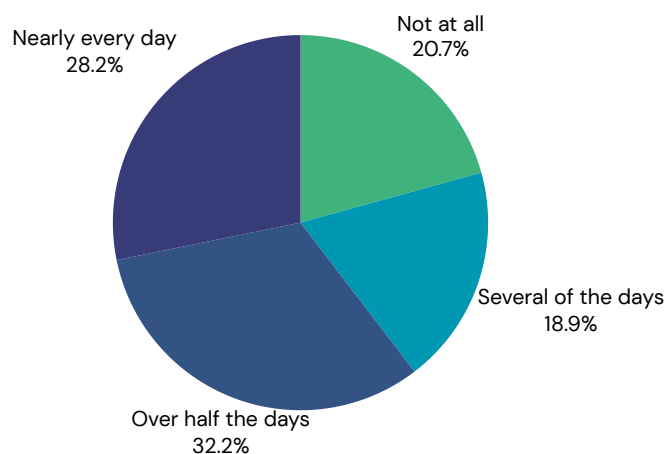
Survey results: The Hogg Scale

“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



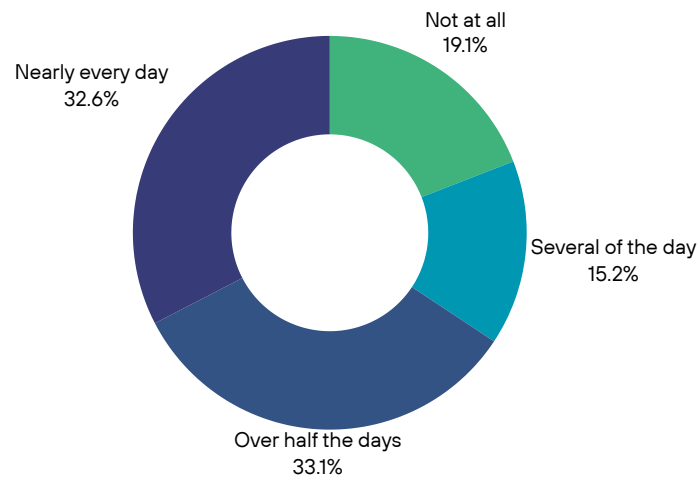
Feeling anxious about your personal responsibility to help address environmental problems



Survey results: The Hogg Scale and Beliefs about climate change

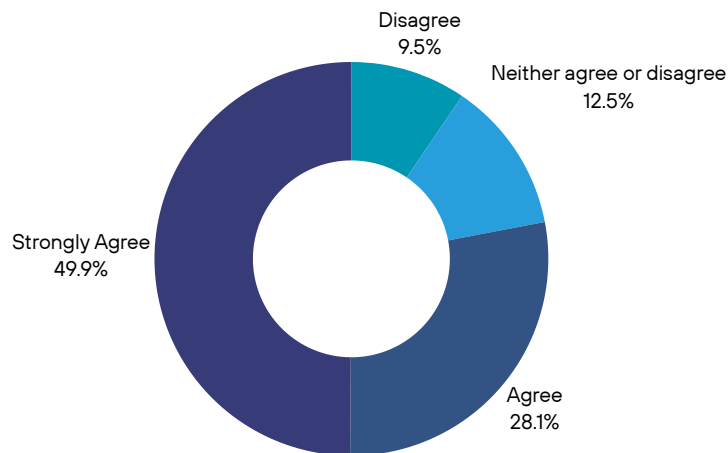
“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?”

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



Beliefs about Climate Change

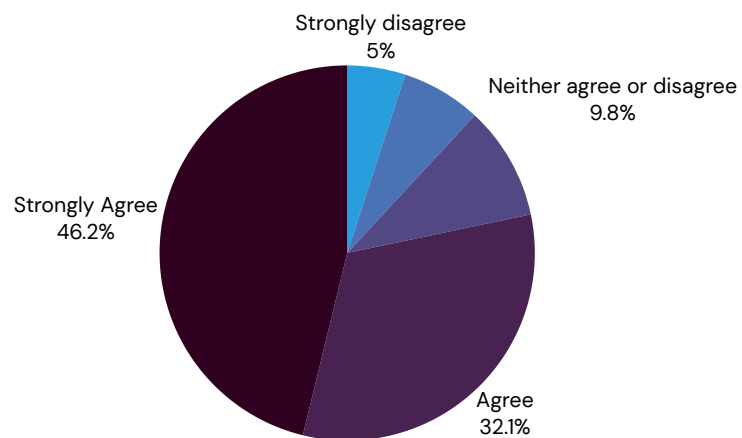
Climate change is real



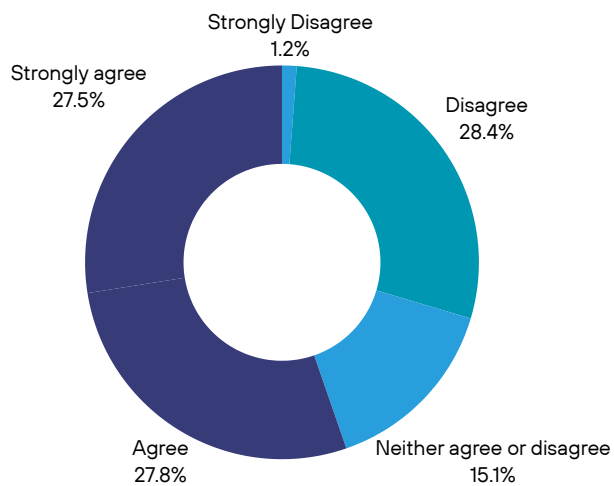
Survey results: Beliefs about climate change

Beliefs about Climate Change

Climate change is caused by humans

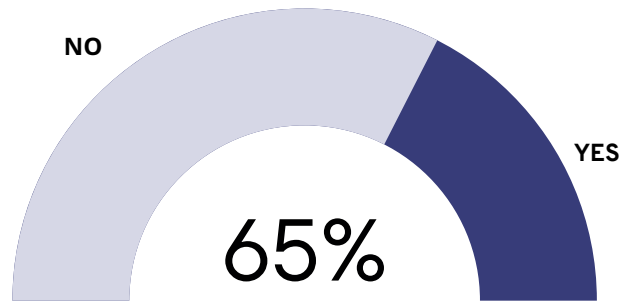


Climate change is reversible



Survey results: Beliefs about climate change

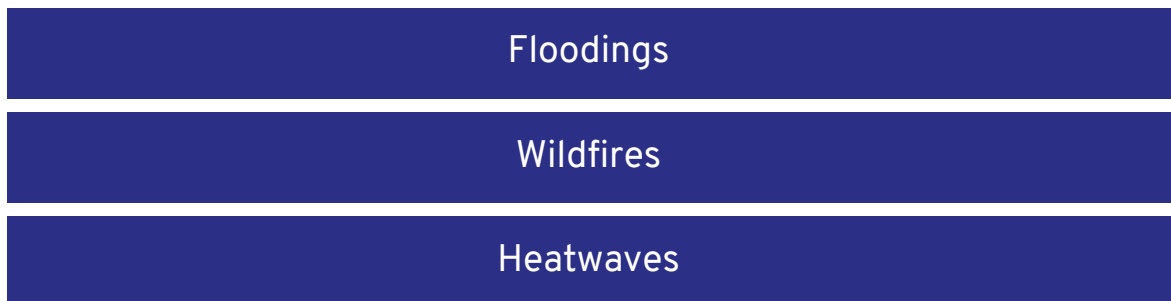
Do you have direct experience of environmental crisis?



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 German 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 72% 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 78% 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 correlation 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, floodings, and global warming 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 eco-anxiety rates in Germany 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

Clean Energy Wire. (n.d.). Germany's Greenhouse Gas Emissions and Climate Targets. Clean Energy Wire. Retrieved from <https://www.cleanenergywire.org/factsheets/germanys-greenhouse-gas-emissions-and-climate-targets>

Kron, W., Bell, R., Thiebes, B., & Thieken, A. H. (November 2022). The July 2021 Flood Disaster in Germany. In 2022 HELP Global Report on Water and Disasters (pp. 12-44). High-level Experts and Leaders Panel on Water and Disasters (HELP). University of Bonn, German Committee for Disaster Reduction - DKKV, Universität Potsdam.

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