

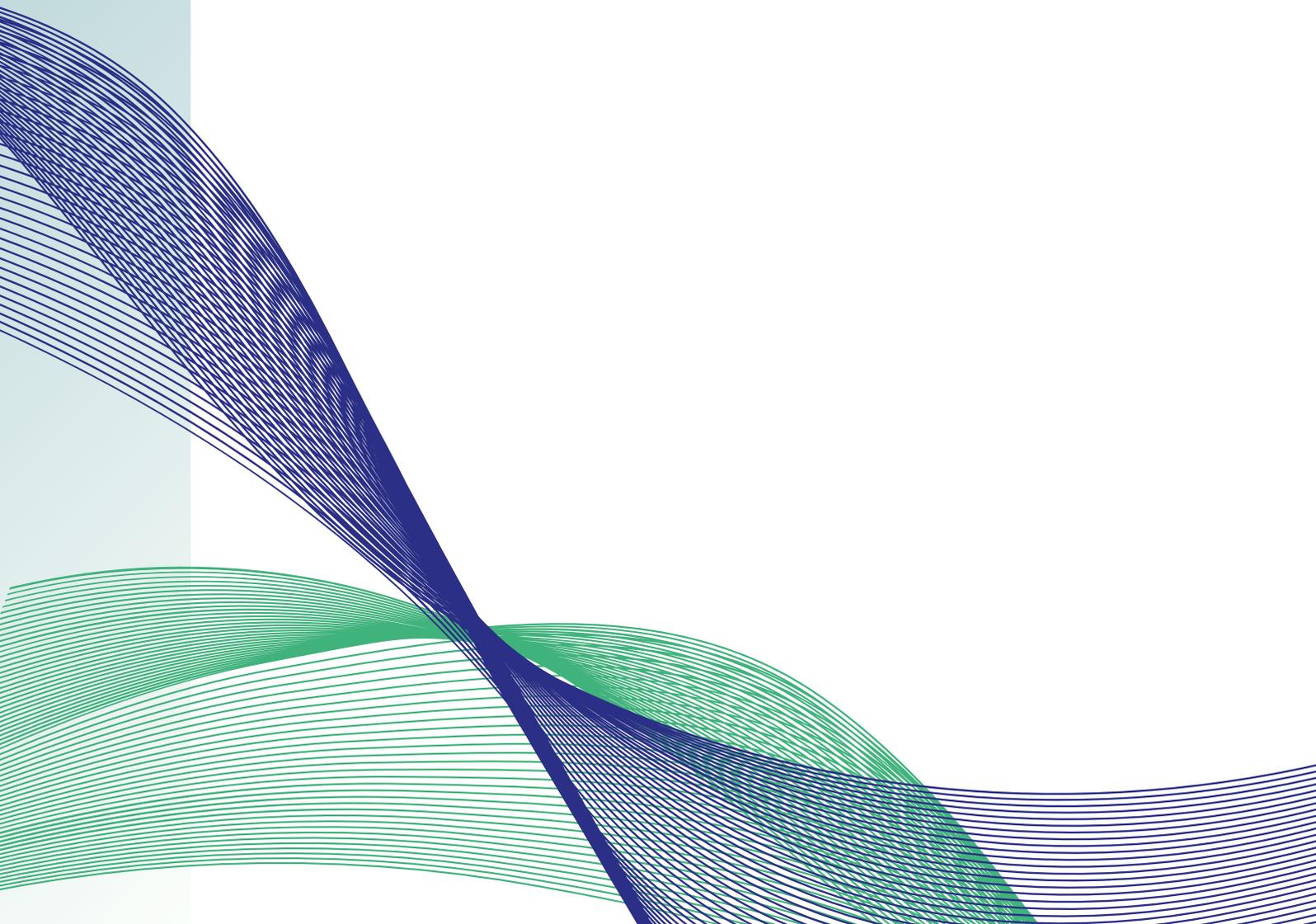
# ECO ANXIETY REPORT

CANADA

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

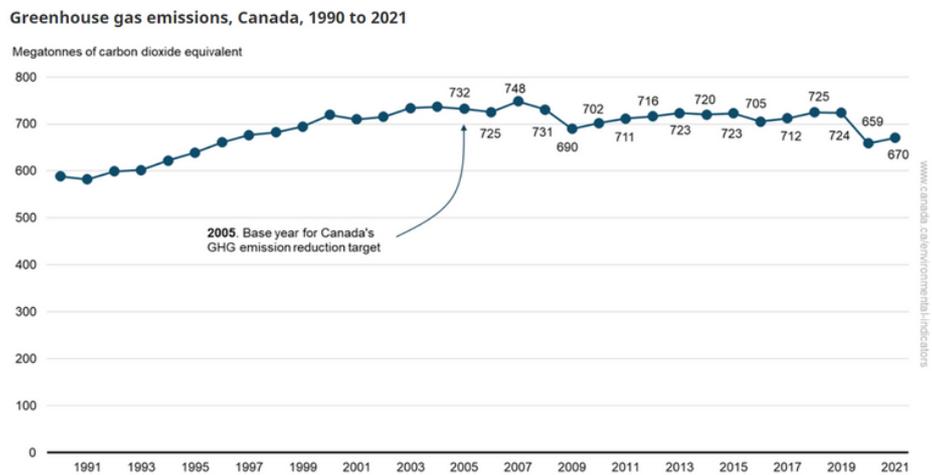
The target group of the Canadian national report is citizens of Canada and/or people (ages 18-50) that are/have been experiencing climate change in the country.

# Climate change impacts in Canada

Canada has a large landmass, with a low population density - a country of physical extremes and contrasts, spanning 41 degrees of latitude and 88 degrees of longitude. Its surface area is 9,984,670 km<sup>2</sup>, with land accounting for 9,093,507 km<sup>2</sup> and freshwater accounting for 891,163 km<sup>2</sup>. The country extends 5,300 kilometers east to west and is the second largest country in the world and encompasses six time zones. Canada's Pacific coast is relatively mild year-round, while the Prairie Provinces (in the central western portion of the country) have greater extremes (cold winters and warm summers) (World Bank, 2023). Ocean currents play a vital role, with both the warm waters of the Gulf Stream in the Atlantic and the Alaska Current in the Pacific affecting climate. Westerly winds, blowing from the sea to the land, are the prevailing air currents in the Pacific and bring coastal British Columbia heavy precipitation and moderate winter and summer temperatures. Inland, the Great Lakes moderate the weather in both southern Ontario and Quebec. In the east the cold Labrador Current meets the Gulf Stream along the coast of Newfoundland and Labrador, cooling the air and causing frequent fog (Britannica, n.d)

## Greenhouse gas emissions

Canada's total GHG emissions in 2021 were 670 megatonnes of carbon dioxide equivalent (Mt CO<sub>2</sub> eq), a 1.8% increase from 659 Mt CO<sub>2</sub> eq in 2020. From 2005 to 2021, Canada's GHG emissions decreased by 8.4% (62 Mt CO<sub>2</sub> eq). Between 1990 and 2021, Canada's GHG emissions increased by 13.9% (82 Mt CO<sub>2</sub> eq) (Government of Canada, 2023).



Government of Canada. (2023). Greenhouse Gas Emissions. Canada.ca.

# Climate change impacts in Canada

## Extreme weather events

In the expansive canvas of Canada, where landscapes stretch from the rugged Rocky Mountains to the icy shores of the Arctic, the past decade has woven a complex tale of extreme weather events, each chapter echoing the unmistakable impacts of climate change on this vast nation.

One of the most notable examples unfolded in Alberta during the summer of 2013 when the province faced catastrophic flooding. Exceptional rainfall, nearly double the average, inundated cities like Calgary and High River, causing widespread displacement and infrastructure damage. The event showcased the vulnerability of urban centers to intensified rainfall and prompted discussions about the need for adaptive strategies in the face of changing precipitation patterns.

Conversely, Canada's Arctic regions experienced a different facet of climate change during the same period. Rapidly warming temperatures led to an alarming decline in sea ice cover, impacting the traditional ways of life for indigenous communities that rely on the ice for transportation and hunting. The changing Arctic landscape is not only a local issue but also a global concern, as the melting ice contributes to rising sea levels and alters weather patterns. From flooding to storms, insured damage caused by severe weather events hit \$3.1 billion in Canada during 2023 making 2022 the third worst year for insured losses in the country's history, according to the Insurance Bureau of Canada (IBC).

Canada's eastern coastal regions, including Atlantic Canada, have also felt the impacts of a changing climate. In 2015, an unusually warm ocean contributed to a powerful winter storm known as "Snowmageddon" that battered the Atlantic provinces with heavy snowfall and intense winds, disrupting normal life and prompting discussions about the influence of warming oceans on weather patterns.

## Survey results

### LOCATION



Urban Area



Rural Area



### EDUCATION

Elementary School Degree  0%

High School's Degree  9%

Bachelor's Degree  43%

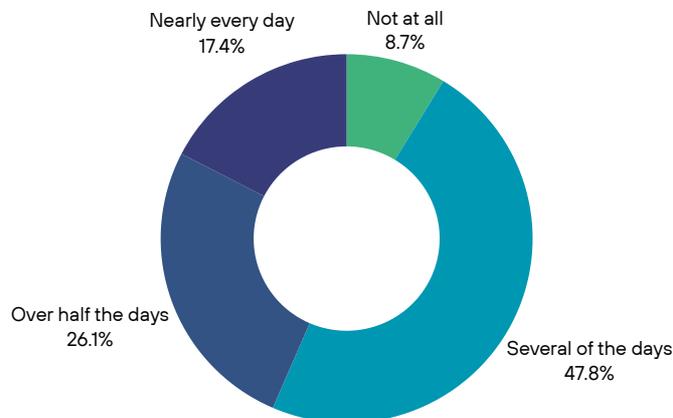
Master's Degree or higher  48%

## Survey results: The Hogg Scale

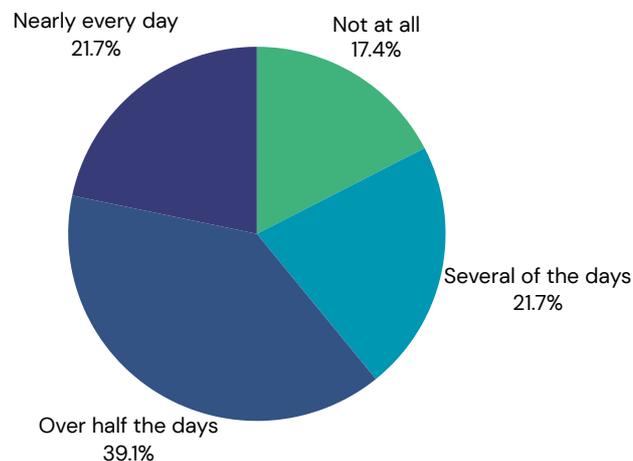
*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?*

*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

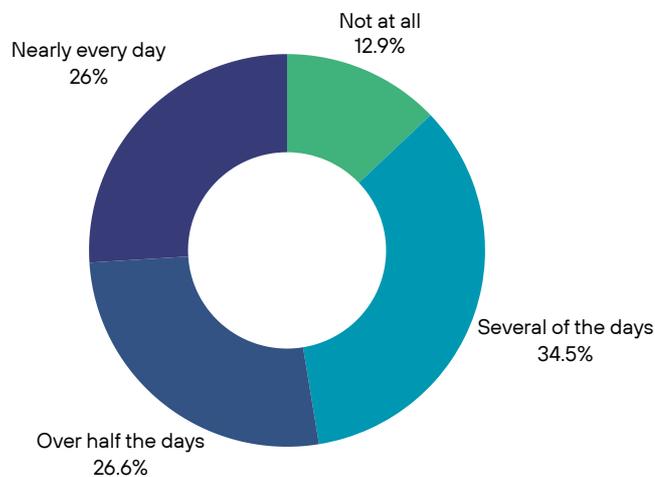


## Survey results: The Hogg Scale

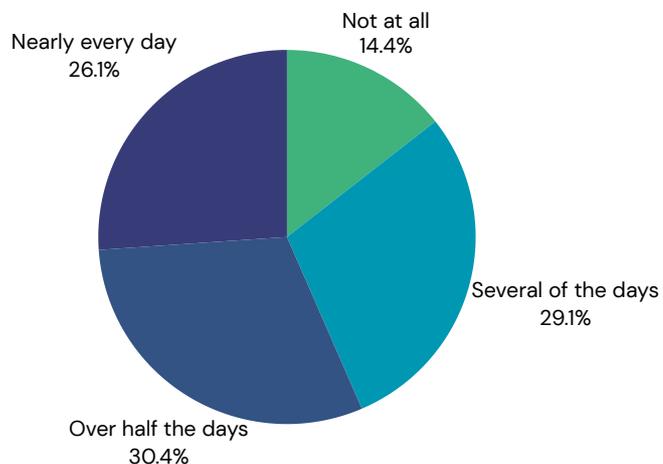
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### Worrying too much



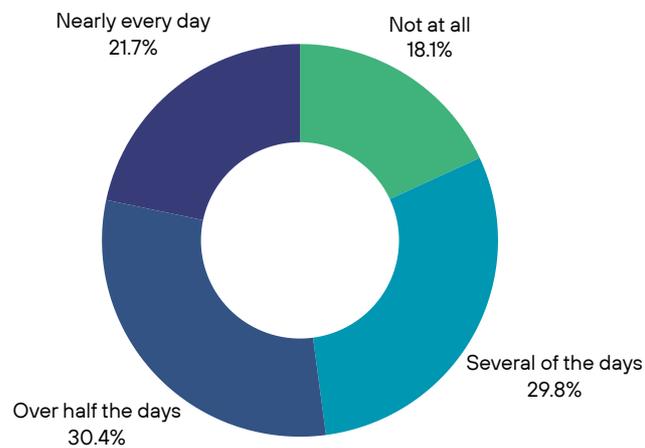
### Feeling afraid



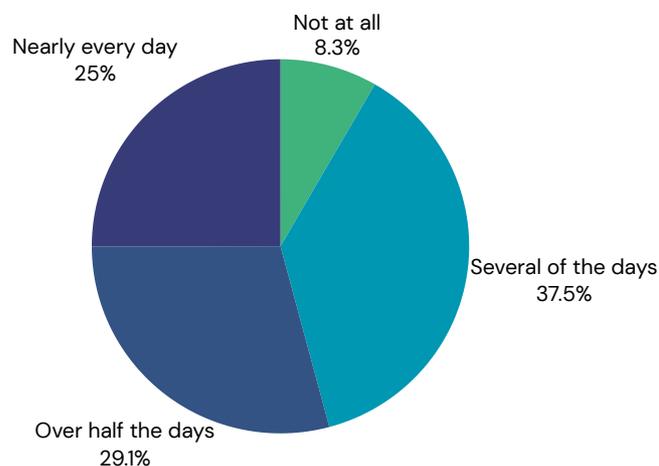
## Survey results: The Hogg Scale

*“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



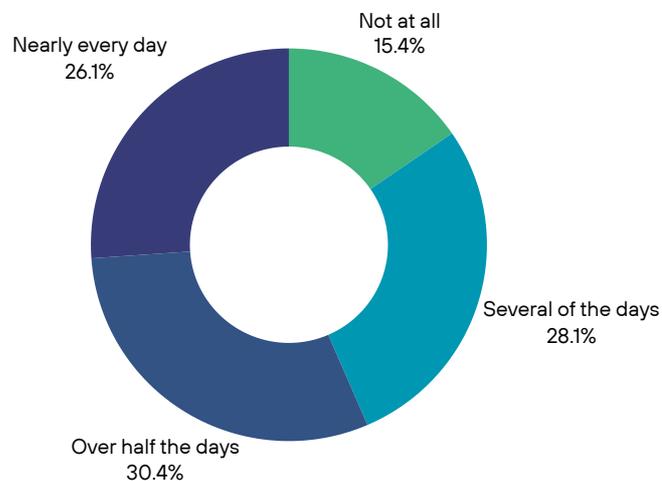
Unable to stop thinking about past events related to climate change



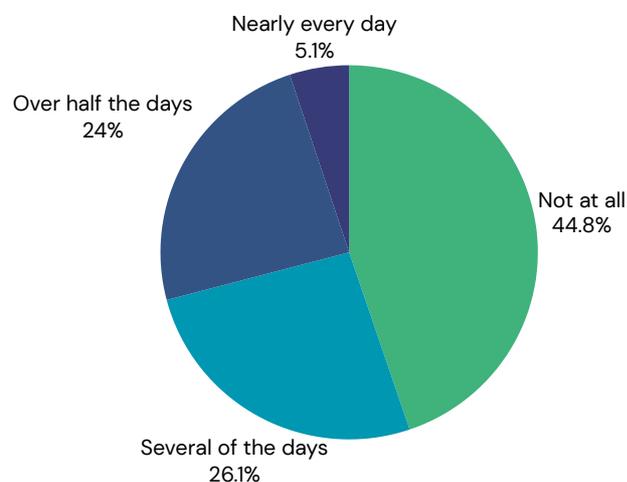
## Survey results: The Hogg Scale

*“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



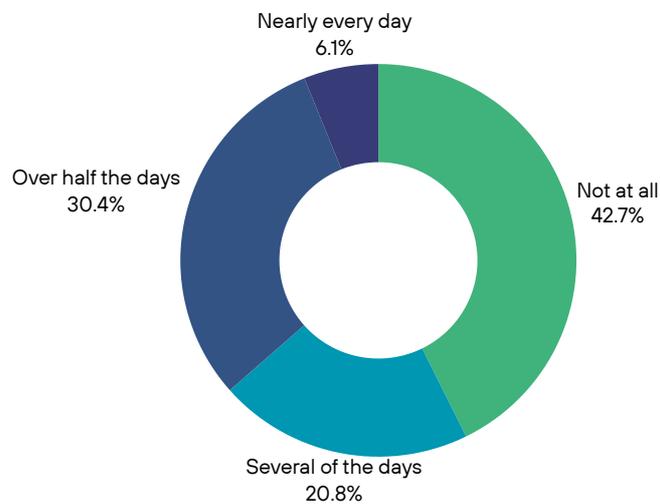
### Difficulty sleeping



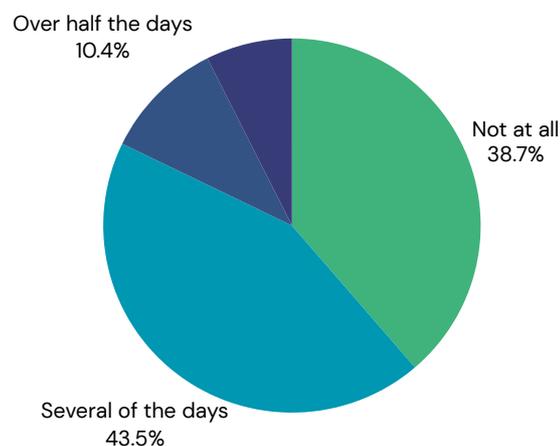
## Survey results: The Hogg Scale

*“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



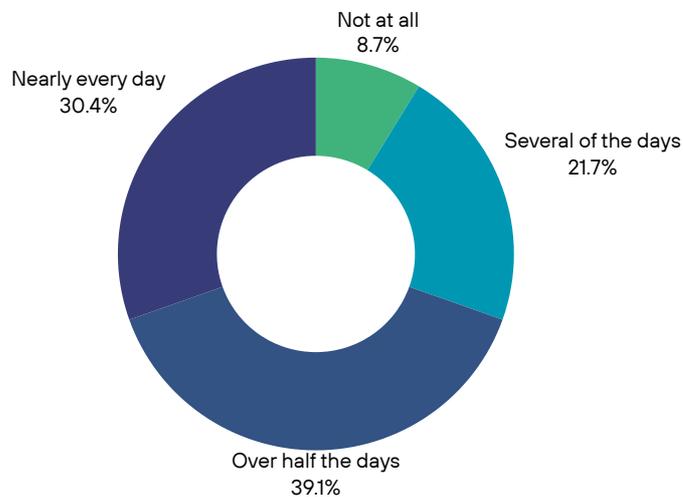
### Difficulty working and/or studying



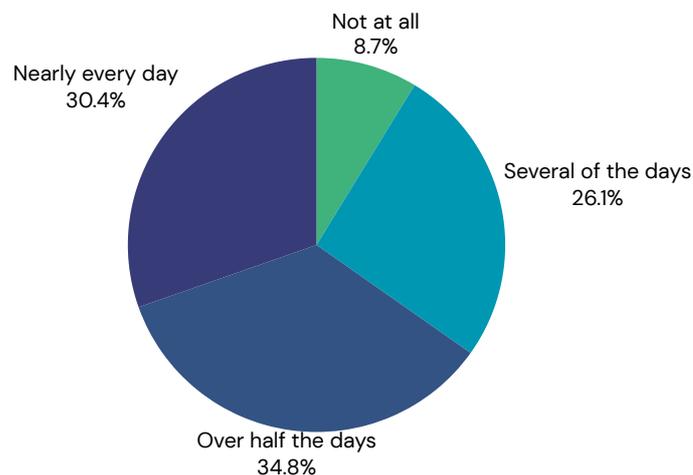
## Survey results: The Hogg Scale

*“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



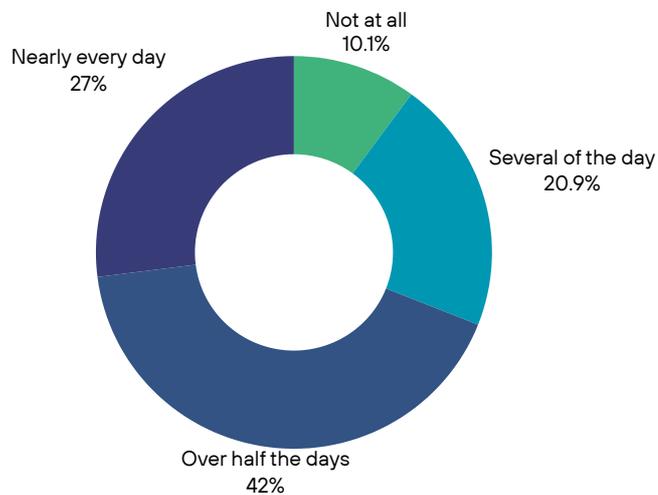
Feeling anxious about your personal responsibility to help address environmental problems



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

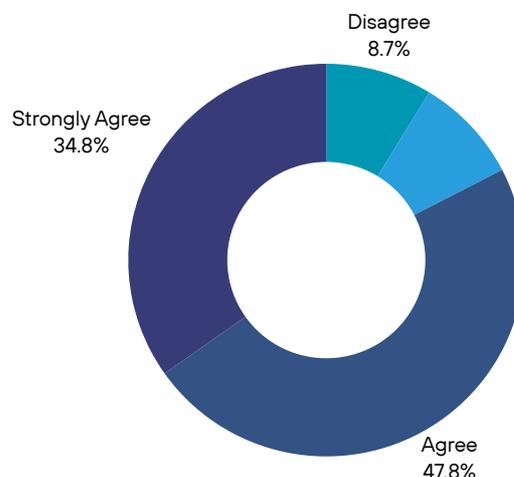
*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?”*

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



## Beliefs about Climate Change

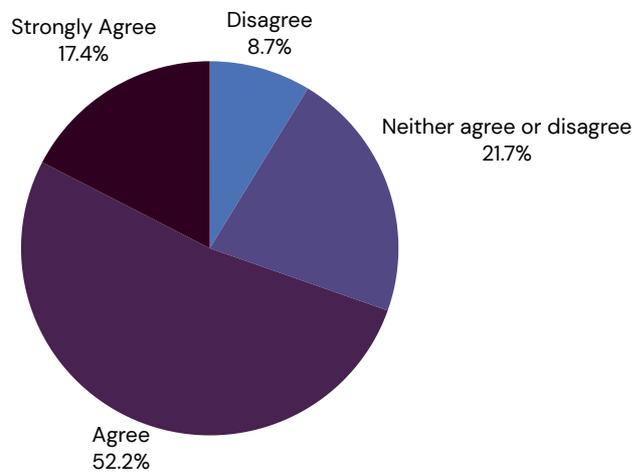
Climate change is real



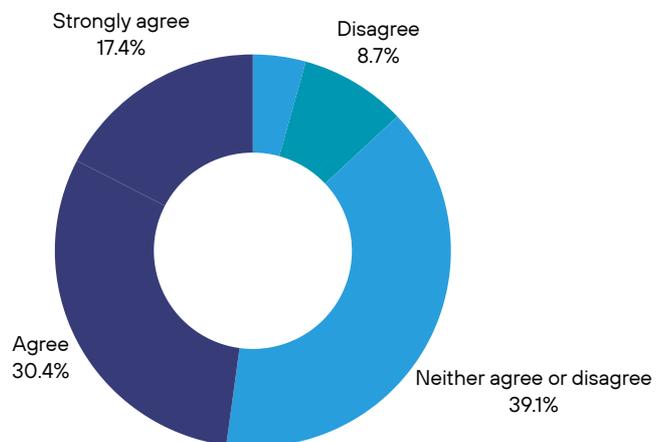
# Survey results: Beliefs about climate change

## Beliefs about Climate Change

### Climate change is caused by humans

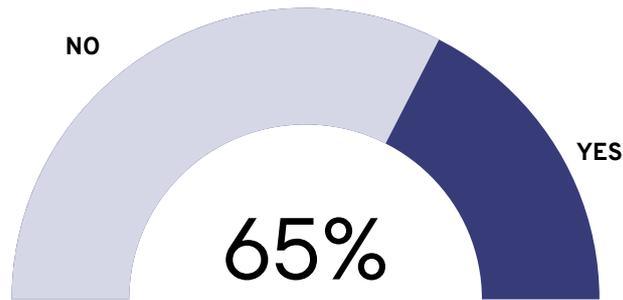


### Climate change is reversible



## 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 Canadian 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 interconnected with eco-anxiety. It is important that the 78% of the respondents are urban residents and they are exhibited higher levels of eco-anxiety compared to their rural counterparts. Additionally, while a slight connection with education was observed, we address that eco-anxiety can be experienced via media and public discourse, since the 83% 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, floodings, and hurricanes 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 Canada 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.

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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)

