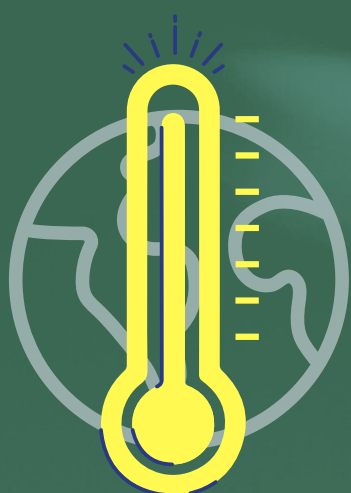


# THE BASICS OF CLIMATE CHANGE

BACKGROUND, IMPACTS, SOLUTIONS



## WHAT IS CLIMATE CHANGE?

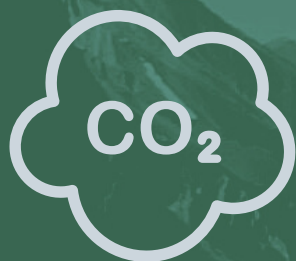
Climate change and global warming differ in meaning.

Climate change is a long-term change in **average climate patterns** because of natural processes and human activities. Global warming focuses on **rising average temperatures** on Earth.

## WHAT EXACTLY CAUSES IT?

Natural processes contributing to climate change include changes in Earth's orbit and volcanic eruptions.

One way humans contribute to climate change is the burning of fossil fuels for electricity, heat, and transportation. This activity produces greenhouse gases and enhances the greenhouse effect.



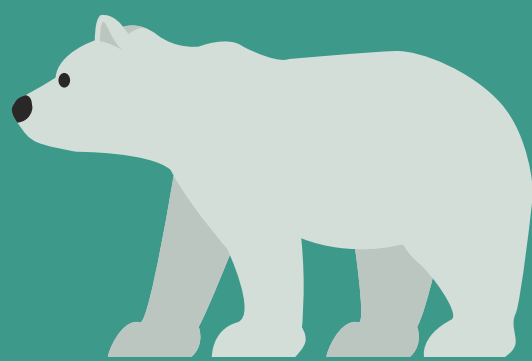
## THE GREENHOUSE EFFECT

The greenhouse effect is a natural process that helps life thrive on Earth. As the sun's rays pass through the atmosphere, they warm the Earth's surface. Some heat is trapped by greenhouse gases in our atmosphere, and some is released back into space.

The main greenhouse gases include water vapour, carbon dioxide, methane, and nitrous oxide.

## THE IMPACTS

Earth's climate is like one big connected system. As global temperatures rise, this has many impacts. Melting glaciers, rising sea levels, extreme weather, loss of habitat for species, among other things, are occurring and expected.



## SOLUTIONS

We are not alone! Together, our small changes can make a difference. We can reduce our carbon footprint. The term carbon footprint refers to the amount of carbon dioxide one individual will release into the environment.

Consider using energy wisely, using active transportation (biking and walking), taking up climate-friendly gardening, and staying engaged in the conversation.