

# Geography Term 4 Knowledge Organiser – Global Warming and Climate Change

## Key Vocabulary

<b>Sustainability</b>	The idea that humans must interact with the environment in a way that ensures there will be enough physical resources left for future generations
<b>Endangered</b>	When a species is threatened by extinction.
<b>Extinction</b>	The process of a species, family, or other group of animals or plants becoming <u>extinct</u> .
<b>Conservation</b>	The act of protecting the environment through the responsible use of natural resources.
<b>Renewable energy</b>	Energy sources such as solar, wind and waterpower. They cannot be used up and produce very little pollution.
<b>Non-renewable energy</b>	Energy comes from sources that will run out or will not be replenished in our lifetimes.
<b>Fossil fuels</b>	A natural substance (oil, coal and natural gas) formed over millions of years from the buried remains of ancient organisms that can be used as a source of non-renewable energy.
<b>Greenhouse gases</b>	Gas in the atmosphere, such as carbon dioxide, methane, water vapour, and ozone that absorbs solar heat reflected by the surface of the Earth, warming the atmosphere.
<b>Biodiversity</b>	All the different kinds of life you'll find in one area—the variety of animals, plants, fungi, and even microorganisms like bacteria that make up our natural world.



## What is Climate Change?

- Climate describes the weather conditions that are expected in a region at a particular time of year.
- Climate change describes a change in the average conditions - such as temperature and rainfall - in a region over a long period of time.

## How are the rising global temperatures affecting the natural world?

- Rising global temperatures can cause extreme weather patterns.
- The increased temperatures are causing environmental changes including melting of polar ice caps and rising sea levels.
- Environmental change impacts eco-systems and food chains and populations of animals. Animals such as polar bears, whales, sea turtles and snow leopards are at risk of extinction due to climate change.

## Renewable energy sources:

**Wind power** describes the process by which the wind is used to generate mechanical power or electricity.

**Solar energy** is radiant light and heat from the Sun that is harnessed using a range of technologies such as solar power to generate electricity.

**Hydroelectric energy** is a form of energy that harnesses the power of water in motion—such as water flowing over a waterfall—to generate electricity.

**Biomass energy** is energy generated or produced by living or once-living organisms. The most common biomass materials used for energy are plants.

## Non-renewable energy sources:

These comes from natural resources that are not naturally replenished, such as **coal**, **oil**, and **natural gas**.

