

CLIMATE TERMS GLOSSARY

Term	Definition
Activism	Campaigning, such as protesting, used to bring about social or political change.
Adaptation	The process in which individuals, communities or species change to become better suited to their environment.
Adaptive Capacity	The capability of individuals or communities to adjust to changes or challenges like climate change.
Afforestation	The process of creating a forest on land that was not previously covered by trees.
Amendment	A change or addition made to law or agreement.
Anthropogenic	Cause or influenced by human activity.
Atmosphere	A mixture of gases that surround Earth. These gases help with protecting us from harmful UV rays and regulate the planet's temperature. Without the atmosphere, life on Earth could not exist.
Atmospheric Layers	The atmosphere that surrounds Earth is separated into different layers, each with unique temperature and pressure characteristics.
Biology	The scientific study of living organisms and their interactions with each other and their environments.
Biome	A large area defined by its climate, soil and the community of wildlife and vegetation that inhabit it. The five major types of biomes include tundra, desert, aquatic, forest and grassland.
Biosphere	The region on Earth where life exists, including all plants, animals, and bacteria. It spans from the depths of the ocean to the highest peaks, like Mount Everest.
Bushfire	A type of wildfire that spreads through bushland. Bushfires are often unpredictable, hard to control, and are becoming more common and severe due to climate change.
Capacity Building	Helping people or organisations adapt and thrive in a fast-changing world by developing and improving their knowledge, skills and/or resources.

Carbon Capture & Storage (CSS)	The process of trapping, transporting and storing the carbon dioxide emissions created by burning fossil fuels, before they are released into the atmosphere.
Carbon Credits	Permits that allow companies to emit a certain amount of carbon dioxide. One credit allows for the emission of one ton of carbon dioxide. Carbon credits create a financial incentive for companies to reduce their carbon emissions.
Carbon Dioxide (CO2)	A greenhouse gas that traps heat in the atmosphere and contributes to global warming. Carbon dioxide is released from a range of sources, but predominantly from the burning of fossil fuels.
Carbon Footprint	A measure of the amount of carbon dioxide (or other greenhouse gas) released into the atmosphere by an individual, community or community. These include emissions from electricity used in your home or through the petrol in your car.
Carbon Neutral	When the amount of carbon dioxide emitted and carbon dioxide removed from the atmosphere is in balance, and therefore the overall amount remains the same.
Carbon Sink	Anything that absorbs more carbon dioxide from the air than it releases. Carbon sinks include forests, oceans and soil.
Circular Economy	A system where materials and products remain in circulation for as long as possible to minimise waste. A circular economy will often use processes like reusing, recycling and composting.
Climate	The average weather conditions in an area over a long period of time, typically 30 years or more.
Climate Action	Policies, programmes or measures taken to combat and mitigate the effects of climate change.
Climate Activism	Targets and pressures governments and large organisations to take action on climate change and environmental issues.
Climate Change	Long term shifts in temperature and weather patterns.
Climate Change Lobbying	Efforts to directly or indirectly influence legislative and governmental decision-making on climate change issues.
Climate Crisis	Challenges as a result of long-term shifts in temperature and weather patterns.
Climate Denial	Downplaying, denying or dismissing the reality, effects and significance of climate change.

Climate Finance	Financial resources used to address the causes and impacts of climate change.
Climate Indicator	Indicators that show the long-term changes of variables used to assess regional and global changes in climate trends.
Climate Justice/Climate Equity	The fair and equal distribution of the benefits of climate protection efforts. This reduces the unequal burden created by climate change, and ensures all individuals benefit from a clean environment with access to adequate resources for protection against the impacts of climate change.
Climate Projection	An estimation of the future climate based on current trends and human activities.
Climate Refugees	People who have been forcibly displaced either internally or across international borders due to the sudden or gradual impact of climate change. This could be as a result of fires, floods or famines.
Climate Security	The risk of climate change impacting communities and resulting in resource conflicts, mass displacement and economic instability.
Climate Sensitivity	Describes how much the Earth's temperature is expected to rise if the level of carbon dioxide in the atmosphere doubles compared to pre-industrial levels.
Conference of the Parties (COP)	A conference that focuses on global climate policy and action. It is attended by countries that signed the United Nations Framework Convention on Climate Change (UNFCCC).
Conservation	Protecting natural resources to prevent them from deteriorating.
Coral Bleaching	Occurs when corals become stressed due to warming ocean temperatures. This causes the corals to turn white and can cause them to die if stressed for too long.
Cryosphere	The combined mass of all frozen water in the Earth system.
Data	Facts and statistics collected for analysis.
Deforestation	The large-scale removal of trees from forests, typically to clear land for farming, housing, or industrial use.
Democracy	A system of government where people have the power to elect or choose their leaders and shape policies.
Disinformation	False or misleading information that is deliberately spread to deceive people.

Drought	A prolonged period of extremely low rainfall that leads to a shortage of water.
Ecosystem	A community of living organisms – plants, animals and microbes – in a particular area that interact with each other and their environment.
Emissions	Gases released into the atmosphere primarily due to human activities.
Endangered Species	Animals or plants that are at risk of disappearing because their numbers are very low. They can be found on the IUCN Red List.
Environmental Legal System	The judicial system that includes laws and regulations designed to protect the environment.
Environmental Legislation	Laws and rules made by the government to protect the environment and biodiversity.
Environmental Regulation	Rules set by the government to control how business and people impact the environment.
EPA (Environmental Protection Authority)	Governmental organisation or agency responsible for enforcing laws and regulations that protect the environment.
Epoch	A period of time marked by significant events or characteristics. For example, the Holocene (the period that we are currently living in).
Environmental Social Governance (ESG)	A process to regulate how companies manage environmental challenges, treat their employees, and run their business.
Eutrophication	A process in which large quantities of nutrients in water cause rapid plant and algae growth. This can reduce oxygen levels, harm aquatic life and impact ecosystems.
Evolution	Gradual change in a species over time that helps it better perform in its environment. This occurs through the process of adaptation, where traits that benefit a species are more likely to survive and be passed onto offspring.
Extinction	The complete disappearance of a species, with no individuals left in the wild or in captivity.
Extreme Weather Events	A rare weather event for a specific location or time of year due to its strength, timing or magnitude. Examples include cyclones, bushfires and floods.

Famine	An extreme shortage of food, often as a result of climate change. Famine typically prompts urgent efforts to improve food security.
Feedback Loop	A circular cause-and-effect process where positive feedback loops amplify climate change impacts while negative feedback loops diminish them. For example, a positive feedback loop would be warming temperatures leading to ice melt, releasing greenhouse gases and further increasing temperatures.
Food Chain	The order of who eats whom in an ecosystem, with every organism relying on the next as a food source. In the ocean, for example, plankton sit at the bottom of the food chain, with sea creatures like fish in the middle, and then sharks at the top. Within the broad food chain each species sits within a 'trophic level'.
Food Security	Reliable access to safe, affordable and nutritious food, regardless of location or financial situation.
Global Warming	The long term heating of Earth's surface since pre-industrial times due to human activities such as the burning of fossil fuels.
Greenhouse effect	The process in which greenhouse gases trap heat inside the atmosphere, warming the Earth's surface.
Greenhouse Gas	A gas that absorbs infrared radiation and traps heat inside the atmosphere. Examples include carbon dioxide, methane and nitrous oxide.
Greenwashing	The act of making false or misleading statements about the environmental benefits of a product or practice. It is often used in advertising to entice customers.
Habitat	The natural home of a species, providing them with food, water, shelter and a space to thrive. Species are adapted to their specific habitats, such as polar bears in the cold Arctic and kangaroos in the dry Australian outback.
Heatwave	Occurs when daytime and nighttime temperatures are unusually warm over three or more consecutive days.
Holocene	The Holocene is the current geological period, starting 11,700 years ago, marked by a stable climate and human development.
Hydrosphere	The combined mass of all water found below, on, or above the surface of the Earth.

Intergovernmental Panel on Climate Change (IPCC)	A body of the United Nations responsible for assessing the science of climate change, including impacts and risks as well as adaptation and mitigation strategies.
Kyoto Protocol	Legislation established in 2005 which aimed to limit greenhouse gas emissions. Parties involved set their own targets which they report on to the United Nations.
Land Cover Change	Changes to the physical land type and characteristics of Earth's surface. For example, vegetation cover and soil properties.
Land Use Change	Changes in the way humans are using land. This could be as a result of agriculture, industry, or residential development.
Lithosphere	The rocky outermost part of Earth's surface including the crust and the solid layer of the mantle.
Logical Fallacy	An argument that may sound convincing or true but is actually flawed. They typically involve leaps of logic and can be used to manipulate or deceive.
Methane	A greenhouse gas with no colour or smell, 30 times more potent than carbon dioxide. Methane comes primarily from agricultural industries and natural gas.
Misinformation	The unintentional spread of incorrect or misleading information.
Mitigation	Actions taken to reduce the amount of greenhouse gas emissions into the atmosphere to slow global warming.
Montreal Protocol	Legislation which was approved in 1987 to reduce and limit the production of chemicals which were destroying the ozone layer. It is the first and only effective treaty ever to have been upheld by all parties.
Natural Climate Variability	Natural change in long-term weather patterns due to non-human factors.
Natural Hazards	Natural phenomena that may cause loss of life, injury or other negative impacts, for example, earthquakes, landslides, and hail.
Net Zero	The achievement of balance between the amount of greenhouse gas produced and the amount removed from the atmosphere.
Non-Government Organisations (NGOs)	Independent groups that work outside of government to provide services or advocate for social or political issues. Most operate on a non-profit basis.

Nitrogen	A colorless, tasteless gas that makes up 78 percent of Earth's atmosphere, nitrogen is essential for plant growth and the food chain.
Oxygen	A colourless, odourless gas that makes up around 20 percent of Earth's atmosphere. It is essential for life.
Ozone	Ozone is a gas that occurs both naturally and as a result of human activities in Earth's atmosphere. Ozone absorbs harmful ultraviolet (UV) radiation from the sun before it reaches the surface of the Earth.
Paris Agreement	Legislation signed by 196 UN parties in 2016 to limit carbon emissions and keep Earth's average temperature rise to 1.5 degrees Celsius above pre-industrial levels.
Planetary Boundaries	A chart designed by Johan Rockstrom showing nine processes that must be kept within reasonable limits. If any of these nine categories move beyond the limit, Earth's systems will have irreversible damage.
Protected Areas	Locations like national parks that are renowned for their biodiversity, environmental or cultural significance and protected by the government.
Recycling	The process of converting waste materials into new products that can be used again.
Reforestation	Planting trees in an area where forests have been cut down. This helps restore ecosystems and improves air quality.
Renewable Energy	Energy from natural sources that are replenished more quickly than they are used, for example wind and sunshine.
Sea Level Rise	An increase in the water level of the world's oceans due to climate change. The two main causes are melting ice sheets and glaciers, and the expansion of seawater as it warms.
Soil Pollution	The addition of harmful substances like chemicals to soil, making it unhealthy for plants, animals and humans.
Sustainability	The ability to maintain or improve conditions to allow future generations to thrive. There are three key dimensions to this – environmental, economic and social. The environmental dimension refers to managing natural resources in a way that does not damage the environment.
Tectonic Plate	Large pieces of the Earth's crust. Movement of tectonic plates can cause earthquakes, eruptions and form mountains.

Tectonic Boundary	The edge where two tectonic plates meet.
The International Union for Conservation of Nature (IUCN) Red List of threatened species	A list of all species currently facing extinction. This list is divided into several sections, ranging from least concerned to extinct.
Tipping Point	The limit at which Earth can maintain its current systems. Once exceeded, the Earth will undergo accelerated, often-irreversible change.
Troposphere	The lowest, densest part of Earth's atmosphere where most of our weather changes occur.
United Nations Framework Convention on Climate Change (UNFCCC)	Originating in 1992, it is the UN process for negotiating an agreement to limit climate change. It is an international treaty among countries to combat "dangerous human interference with the climate system".
Vegetation Management	The control of plants that are not native to the area and are unwanted or in competition with other vegetation.
Water Scarcity	A lack of safe freshwater supplies. Water scarcity can be caused by physical impacts, where the location's natural reserve lacks water or economic impacts, where the location's infrastructure does not store water effectively.
Water Security	An adequate amount of clean water to protect against water-related disasters, maintain human wellbeing and development and preserve ecosystems.
Water/Hydrological Cycle	The circular flow of water between rivers, oceans, atmosphere and land. This involves precipitation (rain and snow), drainage through rivers and streams, evaporation and transpiration (return of water to the atmosphere).
Weather	Short-term changes in the atmosphere over days or weeks. This includes changes in temperature, precipitation, humidity, air pressure, wind and cloud cover.