



Caribbean
Climate
Justice



Climate Change Brief No. 2 – An Explanation of Key Terms

One of the challenges for someone wishing to get more information on climate change is understanding and navigating through a labyrinth of technical terms. This brief explains some of the most commonly used phrases in the discussions on climate change.

Adaptation

This refers to the actions that need to be taken to help communities, countries or regions adapt or adjust to the impacts of climate change. They can range from the construction of sea walls to keep out rising sea levels to the installation of water storage tanks in buildings to capture water that can be used during droughts or periods of water shortage.

Adaptation Fund

The Adaptation Fund (AF) is a climate finance mechanism that was established in 2001 to provide funding for climate change adaptation projects in climate-vulnerable developing countries that are party to the Kyoto Protocol. Although it was established at the 7th Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC), the Adaptation Fund was launched in 2007.

Carbon Dioxide

Carbon dioxide is a gas made up of carbon and oxygen. It is produced by all living organisms that use oxygen for respiration. It is produced by the decay of organic material, the burning of wood and the combustion of fossil fuels to produce energy. It lasts long in the Earth's atmosphere, which makes it the most significant greenhouse gas.

Carbon Footprint

The carbon footprint is the total volume of greenhouse gases produced by an individual, event, building, process, company or country.

Carbon Neutral (Net Zero Carbon)

This describes the state of a company, an event, a product or a country where the amount of carbon dioxide emitted is equal to the amount of carbon dioxide that is removed or avoided, through actions that replace carbon-intensive processes with low or no-carbon processes. In other words, where the net production of carbon dioxide is zero. An example of a process that reduces or avoids the emission of carbon dioxide is changing the generation of energy from fossil fuels to renewable sources such as wind, hydro or solar.

Carbon Tax

A carbon tax is a fee or a tax that is imposed on a company for burning fossil fuels that lead to the production of the greenhouse gas carbon dioxide. The aim of a carbon tax is to discourage companies from burning fossil fuels to produce energy for their operations.

Climate Change

Climate change is the term used to describe the changes in the temperature, precipitation levels and wind patterns of our planet over an extended period of time. There is confusion sometimes between weather and climate. Weather describes the day-to-day or short-term patterns in atmospheric conditions in a country or region as measured by temperature, pressure, humidity, wind, rainfall, snow, flooding, while climate, on the other hand, is the average of the things that constitute the weather, observed over a much longer period of time.

Conference of the Parties (COP)

The Conference of the Parties (COP) is the annual meeting of the countries that are parties to the United Nations Framework Convention on Climate Change. The COPs are sequentially numbered and are usually held in November or December, over a two-week period, in a different country and region each year. The first COP, COP 1 was held in Berlin, Germany in 1995.

Decarbonization

Decarbonization refers to the reduction of carbon in industry or an economy through the conversion to processes that use less carbon in the production of energy. The ultimate goal is to eliminate the use of carbon-emitting fuels in the production of energy and to create a zero carbon economy.

Emissions Trading/Carbon Trading

This is known as a market-based approach to reduce the emissions of greenhouse gases, most particularly carbon dioxide. In an emissions trading system, a government agency allocates or sells permits that will allow a company to emit a set quantity of greenhouse gases, usually based on some sort of historical baseline information. If a company does not use all of the permits that have been allocated to it, that company may sell its excess permits to another company that needs more permits. In effect, this system offers a financial compensation mechanism for companies that reduce their levels of greenhouse gas emissions and penalize companies that emit more greenhouse gases than their historical levels.

Fossil Fuels

A fossil fuel is a fuel that is formed over a long period of time, usually millions of years, through the decomposition of dead organisms. Because they are derived from previously living organisms, fossil fuels are carbon-based. The major types of fossil fuels are coal, (crude) oil and natural gas. Because they take so long to form and are used up more quickly than they can be replenished, fossil fuels are non-renewable. The burning of fossil fuels to produce energy results in the release of carbon dioxide.

Global Warming

Global warming describes the increase in average global temperature that occurs as a result of an increase in the concentrations of greenhouse gases in the atmosphere.

Green Climate Fund

The Green Climate Fund (GCF) is a fund that was established under the jurisdiction of the United Nations Framework Convention on Climate Change to provide a financial mechanism to assist developing countries undertake climate change mitigation and adaptation projects, programs and policies. The goal of the GCF is to raise US\$100 billion a year.

Greenhouse Gases

Greenhouse gases is the term used to describe gases that are able to absorb heat energy that is emitted from the surface of Earth and reradiated back to the surface of the planet. This causes the temperature of the planet to increase over time. In this manner, greenhouse gases mimic the manner in which the covering of a greenhouse works. Greenhouse gases are carbon dioxide, methane, water vapor, nitrous oxide and fluorinated gases.

Intergovernmental Panel on Climate Change (IPCC)

The Intergovernmental Panel on Climate Change (IPCC) is a scientific body that was created under the United Nations to provide policy makers with periodic scientific assessments on climate change. It indicates areas where there is consensus within the scientific community on issues related to climate change and it also identifies areas where further research is required. The IPCC prepares Assessment Reports on the state of scientific, technical and socio-economic knowledge on climate change, its impacts, future risks, and options for reducing the rate at which climate change is progressing.

Just Transition

Just Transition is a principle that seeks to ensure that the benefits of the transition to a sustainable development pathway and a green-blue economy are shared by all.

Kyoto Protocol

The Kyoto Protocol is an international climate change treaty, which was adopted in Kyoto Japan in December 1997 and entered into force in February 2005. The objective of the Kyoto Protocol is to control emissions of the main greenhouse gases in a manner that takes into consideration national differences in greenhouse gas emissions, wealth and the country's capacity to make reductions.

Loss and Damage

Loss and Damage is a term of art within the United Nations Framework Convention on Climate Change. It describes the negative impacts that result from sudden-onset events, such as hurricanes) and slow-onset events such as sea-level rise and ocean acidification. It is widely accepted that Loss and Damage describes adverse impacts of climate change that are beyond adaptation measures.

Methane

Methane is a gas, made up of carbon and hydrogen (hydrocarbon) that is emitted from livestock and from the decomposition of landfills. As a greenhouse gas, methane has a significantly higher global warming potential than carbon dioxide.

Mitigation

Mitigation describes those actions that are designed to reduce the emission of greenhouse gases or reduce the concentration of greenhouse gases in the atmosphere. Examples of mitigation actions are shifting energy generation from fossil fuels to renewable (non-carbon) sources, adopting energy efficient measures that reduce on the consumption of energy, and more sustainable use of lands and forests to reduce the release of carbon dioxide (deforestation) and increase sinks that capture and store carbon dioxide (reforestation or afforestation).

Nationally Determined Contribution

Nationally Determined Contributions (NDCs) are voluntary commitments made by countries under the Paris Agreement that outline the efforts of the respective parties to reduce their emissions of greenhouse gases and adapt to the varied impacts of climate change. Successive NDCs are expected to be more ambitious in their intent to reduce greenhouse gas emissions.

Ocean Acidification

Ocean acidification is the gradual increase in the acidity of the world's oceans (reduction in the pH) resulting from increasing absorption of carbon dioxide by these oceans. When carbon dioxide dissolves in water this leads to the formation of carbonic acid. The increased acidity of the oceans has a detrimental effect on marine life and on marine ecosystems.

Paris Agreement

The Paris Agreement is an international treaty on climate change that was adopted by 196 Parties to the United Nations Framework Convention on Climate Change at its 21st Conference of the Parties in Paris on 12 December 2015 and entered into force on 4 November 2016. The goal of the Paris Agreement is to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by: (i) holding the increase in the global average temperature increase to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, (ii) increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production, and (iii) making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

Renewable Energy

Renewable energy refers to energy that is generated from renewable, non-carbon sources. These sources include solar energy, wind energy, hydro power, wave energy, geothermal energy and ocean thermal energy conversion. In order to achieve the goal of limiting global warming to 1.5 degrees Celsius, it will be necessary to shift global energy systems from fossil fuel sources to renewable sources.

Sea Level Rise

One of the consequences of the warming of the planet's temperature is the melting of glaciers and land ice, particularly at the polar ice caps. This melting causes water from the glaciers and land ice to be deposited into the sea, which over time leads to an increase in sea levels. This has devastating impacts on Small Island Developing States (SIDS), low-lying countries and cities and communities that are located near the coast.

United Nations Framework Convention on Climate Change

The United Nations Framework Convention on Climate Change (UNFCCC) is an international climate change treaty that was signed by 154 states at the Earth Summit in Rio de Janeiro in 1992. The primary goal of the UNFCCC is the "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system". The convention goes on to state that "such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure food production is not threatened and to enable economic development to proceed in a sustainable manner". It entered into force in 1994. Currently, there are 197 parties that are signatures to the UNFCCC. The secretariat of the UNFCCC is headquartered in Bonn, Germany. Each year, the decision-making body of the UNFCCC, the Conference of the Parties (COP) meets to assess progress on the goal of the convention.