

Terminology

Resilience

The capacity of a community, business, or natural environment to prevent, withstand, respond to, and recover from a disruption.

Mitigation

Processes that can reduce the amount and speed of future climate change by reducing emissions of heat-trapping gases or removing them from the atmosphere.¹

Sustainability

Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. To pursue sustainability is to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations.²

Adaptation

The process of adjusting to new (climate) conditions in order to reduce risks to valued assets.

Vulnerability

The propensity or predisposition of assets to be adversely affected by hazards. Vulnerability encompasses exposure, sensitivity, potential impacts, and adaptive capacity.³

Assets

People, resources, ecosystems, infrastructure, and the services they provide. Assets are the tangible and intangible things people or communities value. The infrastructure of roads, airports, and seaports are assets. The service of supply chain stability (supported by transportation infrastructure) is an asset. A community's local "charm" is an example of an intangible asset.

Impacts

Effects on natural and human systems that result from hazards. Evaluating potential impacts is a critical step in assessing vulnerability. In the West, the

¹ <https://toolkit.climate.gov/content/glossary>

² <https://www.epa.gov/sustainability/learn-about-sustainability>

³ <https://toolkit.climate.gov/content/glossary>

destruction of homes by wildfires is among the impacts of hotter and drier conditions and earlier snowmelt.

Climate Stressors

A condition, event, or trend related to climate variability and change that can exacerbate hazards. Increasing frequency and intensity of drought conditions can be a climate stressor for forests and crops. Rising sea level is another climate stressor.

Hazard

An event or condition that may cause injury, illness, or death to people or damage to assets. Extended periods of excessive heat are likely to be an increasingly common hazard in the coming decades.

Non-climate Stressors

A change or trend unrelated to climate that can exacerbate hazards. Altering drainage patterns and replacing open land with roads and buildings are non-climate stressors for flooding hazards. Population growth along exposed coasts is another non-climate stressor.⁴

Climate Drivers

Natural climate drivers include changes in the sun's energy output, regular changes in Earth's orbital cycle, and large volcanic eruptions that put light-reflecting particles into the upper atmosphere. Human-caused, or anthropogenic climate drivers include emissions of heat-trapping gases (also known as greenhouse gases) and changes in land use that make land reflect more or less sunlight energy. Since 1750, human-caused climate drivers have been increasing, and their effect dominates all natural climate drivers.⁵

Climate Indicators

Are a set of parameters that describe the changing **climate** without reducing **climate** change to only temperature.

Driver Indicators Factors that change the Earth's radiative balance. Natural climate drivers include changes in the sun's energy output, regular changes in Earth's orbital cycle, and large volcanic eruptions. Human-caused climate drivers include emissions of heat-trapping gases (GHGs) and changes in land use.

⁴ <https://toolkit.climate.gov/content/glossary>

⁵ <https://www.climate.gov/maps-data/primer/climate-forcing#:~:text=Another%20way%20to%20refer%20to,particles%20into%20the%20upper%20atmosphere.>

Impact Indicators—The effect/result of interaction between climate phenomena, related hazards, vulnerability, and exposure. Increased heat, drought and insect outbreaks, all linked to climate change, have increased wildfires. Health impacts in cities due to heat, rainfall, and mosquito-borne illness; or coastal flooding and erosion are other examples.

Carbon Sequestration

Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide. It is one method of reducing the amount of carbon dioxide in the atmosphere with the goal of reducing global climate change.⁶

Renewable Energy

Renewable energy, often referred to as clean energy, comes from natural sources or processes that are constantly replenished. For example, sunlight or wind keep shining and blowing, even if their availability depends on time and weather.⁷

⁶ https://www.usgs.gov/faqs/what-carbon-sequestration?qt-news_science_products=0#qt-news_science_products

⁷ <https://www.nrdc.org/stories/renewable-energy-clean-facts#sec-what-is>