

Appendix A: Glossary

This glossary includes a number of terms used within the Climate Action Plan, but is not intended to be a complete reference for climate change related terminology.

Visit the United States Environmental Protection Agency's Glossary of Climate Change Terms (www.epa.gov/climatechange/glossary.html) to learn more.

Adaptation

Adjustment or preparation of natural or human systems to a new or changing environment which moderates harm or exploits beneficial opportunities.

Source: United States Environmental Protection Agency

Anthropogenic

Made by people or resulting from human activities. Usually used in the context of emissions that are produced as a result of human activities.

Source: United States Environmental Protection Agency

Biomass

Materials that are biological in origin, including organic material (both living and dead) from above and below ground, for example, trees, crops, grasses, tree litter, roots, and animals and animal waste.

Source: United States Environmental Protection Agency

Carbon dioxide equivalent

A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP). Carbon dioxide equivalents are commonly expressed as "million metric tons of carbon dioxide equivalents (MMTCO₂E)." The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated GWP.

Source: United States Environmental Protection Agency

Climate

On the simplest level, the weather is what is happening in the atmosphere at any given time. The climate, in a narrow sense, can be considered as the "average weather", or in a more scientifically accurate way, it can be defined as "the statistical description in terms of the mean and variability of relevant quantities over a period of time".

In a broader sense, climate is the status of the climate system which comprises the atmosphere, the hydrosphere, the cryosphere, the surface lithosphere and the biosphere. These elements all determine the state and dynamics of the Earth's climate.

Source: World Meteorological Organization

Co-benefits

Benefits associated with GHG emissions reduction strategies other than the direct reduction of those emissions. Co-benefits vary, but can include improvements to air quality, the economy, public health, social equity, transportation, etc.

Community solar

A solar-electric system that, through a voluntary program, provides power and/or financial benefit to, or is owned by, multiple community members.

Cooling degree days

A measurement of weather-related energy demand. A cooling degree day is the difference between 65F the mean daily temperature. When the mean daily temperature is lower than 65F, there are no cooling degree days.

Source: National Oceanic and Oceanographic Administration

Directly purchased renewables

Renewable energy sources that may be in a different geographic location than the consumer, and which include some type of agreement that guarantees the power produced is dedicated to that customer. Examples could include community solar projects, WindSource power, or power-purchase agreements.

Energy efficiency

Providing the same level of service (e.g., lighting, indoor temperature) while using less energy.

Environmental justice

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Source: United States Environmental Protection Agency

Equity

Equity is when everyone has access to the opportunities necessary to satisfy their essential needs, advance their well-being and achieve their full potential. We have a shared fate as individuals within a community and communities within society. All communities need the ability to shape their own present and future. Equity is both the means to healthy communities and an end that benefits us all.

Source: Portland Plan

Green infrastructure

An interconnected network of open spaces and natural areas, such as greenways, wetlands, parks, forest preserves and native plant vegetation, that naturally manages stormwater, reduces flooding risk and improves water quality.

Greenhouse gases (GHGs)

Gases that trap heat in the atmosphere, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Each of these gases can remain in the atmosphere for different amounts of time, ranging from a few years to thousands of years. All of these gases remain in the atmosphere long enough to become well mixed, meaning that the amount that is measured in the atmosphere is roughly the same all over the world, regardless of the source of

the emissions. Human activities are responsible for almost all of the increase in greenhouse gases in the atmosphere over the last 150 years.

Source: United States Environmental Protection Agency

Heating degree day

A measurement of weather-related energy demand. A heating degree day is the difference between 65F and the daily mean temperature. When the mean daily temperature exceeds 65F, there are no heating degree days.

Source: National Oceanic and Oceanographic Administration

Incentives

Rewards or penalties applied through the regulatory processes, designed to induce specific outcomes seen as beneficial. Incentives are not requirements, but rather encourage specific choices and discourage others.

Local renewables

Energy production sources derived from renewable resources (wind, solar, biomass, hydroelectric, or anaerobic digestion) that are located in close proximity to the intended point of consumption. Examples include rooftop solar photovoltaics or rooftop solar thermal.

Ozone

A gas that occurs both in the Earth's upper atmosphere and at ground level. Ozone can be "good" or "bad" for people's health and for the environment, depending on its location in the atmosphere. In the troposphere, the air closest to the Earth's surface, ground-level or "bad" ozone is a pollutant that is a significant health risk, especially for children with asthma. It also damages crops, trees and other vegetation. It is a main ingredient of urban smog.

Source: United States Environmental Protection Agency

Particulate matter

Very small pieces of solid or liquid matter such as particles of soot, dust, fumes, mists or aerosols. The size of particles is directly linked to their potential for causing health problems.

Source: United States Environmental Protection Agency

Policies

The principles and directives guiding the City's actions, both in day-to-day operations and long-term planning.

Regulation

The creation and enforcement of rules set through the legislative process or allowed under existing law.

Resilience

A capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment.

Source: United States Environmental Protection Agency

Requirements

Mandates applied through the City's regulatory processes. The City cannot set requirements in areas that it does not regulate.

Sequestration

Terrestrial, or biologic, carbon sequestration is the process by which trees and plants absorb carbon dioxide, release the oxygen, and store the carbon.

Source: United States Environmental Protection Agency

Wastewater

Water that has been used and contains dissolved or suspended waste materials.