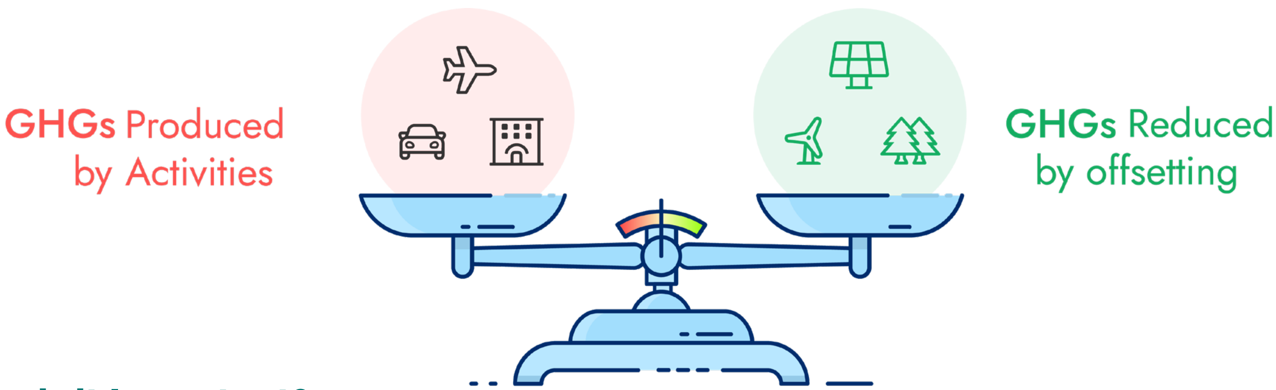
Carbon Credits 101

ClimeCo

What is a Credit?

A **carbon credit** represents one metric ton of carbon dioxide equivalent that was either removed or prevented from entering the atmosphere. A measurable and verified carbon credit can be traded, sold in the marketplace, or retired for voluntary claims. A carbon credit becomes a **carbon offset** when it is retired (taken out of circulation and can no longer be sold). Offsets are often used by individuals or organizations who desire to reduce their carbon footprint but are otherwise unable to do so in a practical or economically viable way.



Why is it Important?

Rising levels of (Greenhouse Gases) GHG from human activities are responsible for climate change. Companies and individuals can do their part by understanding and reducing their carbon footprint where possible. By purchasing credits, we support significant efforts that have or are currently destroying, converting, or sequestering GHG. The figure above illustrates the balance achieved when offsets are applied to neutralize carbon emissions.

There are many common contributors to carbon emissions that are difficult to avoid, including:

- Automobile
- Utilites
- Agriculture
- Air Travel
- Industrial
- Waste Management

Utilizing carbon credits is a great way for individuals and organizations to achieve their sustainability goals or become net zero.

How Are They Generated?

Carbon credits are generated when one entity, often referred to as the project developer, voluntarily implements practices that reduce emissions. The reductions generated can then be purchased and claimed by another entity. There are rigorous processes and standards in place that ensure that the emission reductions are:

- Verifiable
- Quantifiable
- Permanent
- Enforceable
- Preventing Leakage
- Additional
- Registered on Reputable Carbon Registry

There are many types of projects that can generate carbon reductions. A few examples are:

- Nature-Based Projects – Improved forestry management, reforestation, mangrove restoration, grassland conservation, etc.

- Emission Destruction – Nitrous oxide emissions from industrial processes, methane emissions from solid and agricultural waste decomposition, etc.

- Carbon Capture, Storage and Utilization – Direct capture of emissions from the atmosphere for either permanent sequestration or for further use.

Carbon credit sales compensate the project developer for the costs associated with developing and implementing the project.

What Are Carbon Markets?

Credits are typically purchased through carbon markets. A carbon market is simply an arena where buyers and sellers trade carbon credits.

There are two types of credit markets; compliance (or regulated) and voluntary Compliance markets are created and regulated by governments (national, state, or provincial) that establish limits on how much carbon regulated entities can emit into the atmosphere. Carbon credits are often included in regulated markets as a compliance flexibility mechanism.

Meanwhile, voluntary markets are driven by corporate sustainability commitments and individuals taking personal responsibility. Here, credit buyers tend to be selective by purchasing credits from projects that align with their specific goals or interests.

About ClimeCo

ClimeCo is a global sustainability company with projects and partners all over the world. Our mission is to advance the low-carbon future and restore nature with market-based solutions. As experienced industry experts, our technical advisory team consults with companies, governments, and capital markets players on ESG, decarbonization, and policy—allowing us to develop high-quality, purpose-built projects with measurable impact for all businesses. We create value throughout the sustainability journey by crafting end-to-end solutions with essential education, resources, technical skills, financing, and more.