



Carbon Offsets: Achieving Emission Reduction Goals

A Trusted, Verified Commodity for Shrinking Carbon or Environmental Footprints

As the 'currency' of carbon markets, carbon offsets are an effective way for organizations of all types to meet climate action goals and reduce the level of greenhouse gas emissions either directly or indirectly caused by everyday activities.

Cities, businesses, government agencies, colleges and many other entities are taking a close look at the carbon or greenhouse gas emissions associated with routine operations. After assessing their carbon or environmental footprints, these sustainability-minded organizations work for progress toward these goals:

- **Reduce** use energy more efficiently
- Renew turn to renewable energy sources
- Restore bring back nature's carbon balance

Sterling Planet helps clients address all three goals with White Tags[®] energy efficiency certificates, renewable energy certificates (RECs) and carbon offsets.

Definition of Carbon Offsets

A carbon offset is a verified reduction in emissions of carbon dioxide or other greenhouse gases. Carbon offsets are measured in metric tons of carbon dioxide equivalents. As shown in the illustration below, the six main types of greenhouse gases are carbon dioxide (CO_2) , sulfur hexafluoride (SF_6) , methane (CH_4) , nitrous oxide (N_2O) , hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs). Each carbon offset verifies the reduction of one metric ton of carbon dioxide or its equivalent in the other greenhouse gases listed.

Measuring and Managing Carbon Footprints

To decide how many offsets are needed, organizations take a greenhouse gas assessment, a comprehensive inventory of emissions. These emissions fall into three categories, as shown below. Completing scope 1 and 2 inventories is straightforward, while scope 3 is more complex. Sterling Planet helps clients measure and then manage carbon footprints.

Sources of Carbon Offsets

Certified carbon reduction project types include energy efficiency, renewable energy, sustainable land use, methane abatement and alternative transportation. Sterling Planet's carbon offsets come from domestic and international sources

Premium Quality

Sterling Planet offsets must meet established criteria:

Real: Offsets represent actual emission reductions that have already occurred.

Additional: Offsets go beyond requirements or what would have happened in a business-as-usual scenario **Permanent**. Offsets are guaranteed and fully retired once sold to prevent double counting.

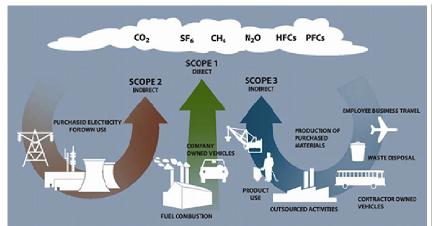
Verifiable: Emission reductions from approved projects are precisely measured, tracked and recorded.

Independent Verification and Certification

Sterling Climate™ offsets carry Green-e[®] Climate certification. All offsets are also independently verified by a third party, and source projects have certification from respected authorities such as the Voluntary Carbon Standard or Climate Action Registry.

Sterling Planet Advantages

- Complete portfolio White Tags[®] energy efficiency certificates, RECs and carbon offsets
- Solutions for all emission offsets scopes 1, 2 and 3
- Support for greenhouse gas assessments
- Premium supply sources
- Certification and verification
- Carbon reinvestment fund opportunities



Greenhouse Gas Protocol

Emissions are grouped in scopes:

Scope 1 – Direct emissions from sources an entity owns or controls

Scope 2 – Indirect emissions from purchased electricity

Scope 3 – Other indirect emissions from the production of purchased goods and services

For scopes 1 and 3, Sterling Planet offers carbon offsets. For scope 2, renewable energy certificates (RECs) or White Tags® energy efficiency certificates for electricity savings can be used.