



Glossary of Terms

Carbon Dioxide (CO₂)

CO₂ is naturally present in the Earth's atmosphere and is a greenhouse gas considered to be the main anthropogenic contributor to global warming and climate change. Burning fossil fuels to produce electricity and drive our cars releases significant amounts of CO₂ into the atmosphere.

Carbon Footprint

Your carbon footprint is a representation of the effect you, or your business, have on the climate in terms of the total amount of CO₂ emissions you produce. Activities that constitute a household's carbon footprint include, but are not limited to, electricity usage, vehicle travel, airline travel and natural gas usage.

Carbon Neutral

Businesses or individuals can become carbon neutral by eliminating or zeroing out their carbon footprint; this is done by first reducing emissions and then balancing out the remainder by investing in carbon offsets.

Carbon Offset

A carbon offset is a project or technology that seeks to reduce or absorb (sequester) CO₂. Carbon offsets are used to help individuals or businesses become carbon neutral by balancing out emissions associated with certain activities through actions or projects that reduce or eliminate other emissions. Examples of offsets include renewable energy generation, forest sequestration efforts and energy efficiency projects.

Carbon Reduction

Taking action to lessen fossil fuel energy consumption with the intent to reduce carbon dioxide emissions and impact climate change.

Climate Change

Climate change describes the ongoing transformation of the Earth's average climate over time (from decades to millions of years). The majority of the world's climate scientists have concluded that greenhouse gas (GHG) emissions resulting from human activities, such as transportation and electricity production, have a significant impact on the atmosphere and are having a discernible influence on global climate.

Emissions

Emissions are the release of a substance (usually a gas when referring to the subject of climate change) into the atmosphere.

Forest Sequestration Offsets

A forest sequestration offset represents the environmental attributes resulting from the planting of trees in re-forestation or tree planting projects funded, in part, through the purchase of Carbon Offsets. Among the many environmental benefits associated with planting trees, one of the most important is the carbon sequestration that occurs over the life of the trees as they remove CO₂ and other pollutants from the atmosphere.

Fossil Fuels

Fossil fuels include coal, oil, natural gas, petroleum, coke or other petroleum-based fuels. They're called fossil fuels because they are formed from the decayed remains of prehistoric plants and animals. Fossil fuels are non-renewable energy sources which have a finite supply. All fossil fuels contain carbon, and when they are combusted to make electricity or power an airplane or automobile engine, they create carbon dioxide (CO₂), a major greenhouse gas.

Greenhouse Gas

Greenhouse gases are a family of gases that trap radiant energy. They include carbon dioxide, methane, nitrous oxide, water vapor and halocarbons (i.e. chlorofluorocarbons). Human beings are increasing the amount of greenhouse gases in the air by burning fossil fuels. These increases affect our environment in the form of global warming or climate change.

Kilowatt (kW)

A kilowatt is a measure of instantaneous power. One kilowatt equals 1,000 watts. Ten 100-watt light bulbs, for example, have a total power rating of one kilowatt.

Kilowatt (kWh)

A kilowatt hour (kWh) is a quantity of electricity usage measured by your electric meter. One kilowatt hour equals 1,000 watt hours, which is the same as running a 100 watt light bulb for 10 hours, or ten 100-watt light bulbs for one hour.

Metric Ton

The metric ton is the universal standard of measurement for carbon dioxide (CO₂) emissions. One metric ton is equal to 2,204.6 pounds.

Reforestation

Reforestation is the restoration of woodlands or forests that have been previously damaged or harvested.

Renewables

Renewable energy comes from sources that are infinite like the sun, wind and tides, or that replenish themselves naturally. Examples include hydro, geothermal and biomass.

Renewable Energy Credits (RECs) –

RECs are a commodity that represent the environmental attributes of electricity generated from renewable sources like wind, solar, hydro and biomass. Purchasing RECs ensures that more electricity is generated from renewable energy sources, which reduces the amount of electricity that has to be generated from polluting fossil fuel generation. As a result, RECs may be used to offset CO₂ emissions associated with electricity usage and other sources. In addition to the carbon impact, purchasing RECs also supports renewable energy and encourages more renewable development.

Solar

Solar energy is derived from the sun. Sunlight can be converted to electricity directly, as in the case of photovoltaic (PV) applications, or indirectly as in the case of solar thermal applications. According to the U.S. National Renewable Energy Laboratories, the amount of energy from the sun that falls to the Earth in one day could supply the entire world's energy needs for 27 years.