About Carbon Offsets

1. What is carbon offset?

Carbon offset refers to a reduction in greenhouse gas (GHG) emissions, or an increase in carbon storage (carbon sinks like afforestation, land restorations etc.), that is used to compensate for the GHG emissions elsewhere. When you develop projects that reduce GHG emissions, every ton of emissions is reduced, resulting in the creation of 1 carbon offset. You can then sell these offsets in the tradeable carbon marketplace in the form of credits.

2. What is Carbon Credit?

A carbon credit is a tradeable unit, representing 1 metric ton of carbon dioxide (1000 kgs of CO2), or an equivalent amount of another greenhouse gas (GHG), removed, reduced or avoided from the earth's atmosphere. Carbon credit is not a carbon offset. It only becomes carbon offset when used for carbon offsetting.

3. Purpose of carbon offset?

Projects that reduce carbon emissions, such as afforestation, switching to renewable form of energy, converting waste to energy etc., require large financing. This kind of funding could be provided through the sale of carbon credit. As the credit price increases, the offset projects become more viable economically. Hence, this mechanism provides incentives to reduce emissions and also allows individuals and organizations to reduce their carbon footprints.

4. How are carbon offsets generated?

Carbon offsets are generated emission reducing projects in three ways;

a. By capturing and destroying a greenhouse gas that would otherwise be emitted into the atmosphere. An example of this is a methane gas capture project at a landfill.
b. By producing energy using a clean, renewable resource that eliminates the need to produce that same energy from fossil fuels, the burning of which releases greenhouse gas into the atmosphere. An example of this is wind power.
c. By capturing and storing (or "sequestering") greenhouse gases to prevent their release into the atmosphere. An example of this is a project that promotes the healthy growth and maintenance of forests.

Some projects include more than one of these activities at the same time. For example, gas capture projects at landfills not only prevent the release of methane gas into the atmosphere, but they also use the captured methane to generate electricity that would otherwise be generated by burning fossil fuels such as coal or natural gas.

5. What is a Voluntary Carbon Market?

The voluntary carbon market enables private investors, governments, non-governmental organizations, and businesses to voluntarily purchase carbon credits to offset their emissions. The largest category of buyers comprises private firms that purchase carbon offsets for resale or investment. Companies that are unable to reduce their emissions can purchase carbon offsets from verified suppliers to offset their emissions. The revenues collected are used to finance the carbon reduction project