

## **Why do the levels of carbon and greenhouse gases (GHG) in the atmosphere need to be reduced?**

Scientists at the IPCC have shown that increased levels of GHG in the atmosphere are warming the planet. This creates extreme weather changes around the world. Currently, burning fossil fuels - coal, oil and gas – is the main driver of increased GHG levels.

Under the banner of the UN and Paris Agreement, the world's countries have come together to declare that urgent action must be taken to lower emissions if we are to maintain a habitable planet that can support the world's population.

The latest research emphasises that urgent action must be taken by everyone in order to safeguard some of the most vulnerable ecosystems and communities on the planet.

## **What Are Carbon Credits?**

Carbon credits, also known as carbon offsets, are permits that allow the owner to emit a certain amount of carbon dioxide or other greenhouse gases. One credit permits the emission of one ton of carbon dioxide or the equivalent in other greenhouse gases.

Carbon credits were devised as a mechanism to reduce greenhouse gas emissions by creating a market in which companies can trade in emissions permits. Under the system, companies get a set number of carbon credits, which decline over time. They can sell any excess to another company.

Carbon credits create a monetary incentive for companies to reduce their carbon emissions. Those that cannot easily reduce emissions can still operate, but at a higher financial cost. Proponents of the carbon credit system say that it leads to measurable, verifiable emission reductions.

## **How does the carbon credit work?**

Carbon credits are measurable, verifiable emission reductions from certified climate action projects like Solar energy, Biomass based energy etc. These projects reduce, remove or avoid greenhouse gas (GHG) emissions. But they also bring a whole host of other positive benefits, for example, they empower communities, protect ecosystems, restore forests or reduce reliance on fossil fuels.

Projects must adhere to a rigorous set of criteria to pass verification by third-party agencies and a review by a panel of experts at a leading voluntary carbon market standard like Verra or Gold Standard.

After an organisation or an individual buys a carbon credit, the credit is permanently retired so it can't be reused.

## **How much does a carbon credit cost?**

Carbon credits have different prices, depending on the location and market where they are traded. In the current year (2023), the average price for carbon credits from Solar is \$2.00 per ton.