

## Carbon Offsetting Frequently Asked Questions

From taking international flights, to buying your morning coffee, we all generate greenhouse gas emissions as businesses and also as individuals.

### Q: What is carbon offsetting?

Every business operation creates a certain amount of greenhouse gas emissions. This is its “carbon footprint”. After reducing wherever possible, businesses can compensate for unavoidable emissions by financing emission reduction projects around the world. This practice is called “carbon offsetting”.

### Q: How does carbon offsetting work?

By investing in a project or activity that results in reduced emissions in one place, a business can “offset” some of the emissions created by its operations.

An emission reduction project reduces carbon dioxide emissions, creating one carbon offset for each tonne of CO<sub>2</sub> reduced through its activity. Each one-tonne carbon offset created is represented by a tradeable certificate, called a “carbon credit”, which represents one tonne of carbon dioxide emissions reduced or avoided.

When a company buys carbon credits to “offset” emissions, it is investing in emission reduction projects; in other words, it is helping to finance a project activity that results in the reduction of emissions that are *additional* and would not occur without the project.

### Q: Why should the levels of greenhouse gases in the atmosphere be reduced?

Robust science has proven that increased levels of greenhouse gases (heat-trapping gases like carbon dioxide and methane) in the atmosphere are driving a process called “global warming”. Global warming refers to an increase in the average global temperature, leading to climate change, which in turn is resulting in extreme weather changes around the world.

The current increase in greenhouse gas levels is primarily caused by burning fossil fuels—coal, oil and gas—to generate energy. Under the UN Paris Agreement, countries around the world have declared that urgent action must be taken to stabilise, reduce and lower our emissions if we are to maintain a habitable planet that can support the world’s population.

### **Q: What are the different types of emission reduction projects?**

Emission reduction projects achieve greenhouse gas emission reductions in one of three ways: *avoiding* emissions (replacing fossil fuel-derived energy with renewable energy), *removing* emissions (for example, planting more trees, which capture carbon), or *capturing and destroying* emissions (for example, methane gas capture from wastewater).

South Pole is the world's leading carbon project developer, with hundreds of emission reduction projects covering the following areas:

Forestry and conservation, including:

- Reforestation
  - Land restoration
  - Forest protection
  - Sustainable land management
- Renewable energy, including:
    - Hydropower
    - Wind power
    - Solar power
    - Geothermal energy
  - Community projects, including:
    - Improved cooking stoves
    - Safe water access
  - Waste-to-energy, including:
    - Biogas from landfill and industry
    - Biomass

### **Q: Is carbon offsetting really a valid strategy to achieve carbon neutrality?**

While the first step should always be to prevent emissions from occurring in the first place, carbon offsetting is an internationally-recognised way to take responsibility for those emissions that are unavoidable by preventing the same amount of emissions from entering the atmosphere elsewhere on Earth. As climate change is a global problem, emission reductions supported through carbon offsetting can occur anywhere in the world.

### **Q: How does South Pole ensure that the emission reductions are actually happening?**

To produce verifiable carbon credits, projects must adhere to a strict set of criteria. These criteria are monitored and guaranteed by internationally-recognised certification standards, such as the [Gold Standard](#) and [Verra's Verified Carbon Standard \(VCS\)](#).

South Pole is the world's leading developer of carbon offset projects. As a member of the [International Carbon Reduction and Offset Alliance \(ICROA\)](#), all South Pole projects are certified under such ICROA-approved standards. As well as ensuring that the emission reductions achieved by a project are real, verified, permanent and additional (meaning that they would not happen without the project), these standards also help highlight different project co-benefits.

In terms of transparency, carbon credits are assigned serial numbers and issued, transferred and permanently retired in publicly accessible emission registries, such as the [Markit Environmental Registry](#) and the [APX VCS Registry](#).