What is a Carbon Footprint?

A carbon footprint is a concept that measures the amount of carbon dioxide (CO2) and other greenhouse gases emitted into the environment by an individual, organization, product, or activity. The carbon footprint, typically expressed in metric tons, serves as an indicator of the environmental impact on a personal, corporate, or product level.

The carbon footprint is utilized to assess the greenhouse gas emissions generated by an activity or entity and generally encompasses the following elements:

Direct Emissions (Scope 1): Emissions under the direct control and responsibility of an individual, company, or product. Examples include exhaust gases from factories.

Indirect Energy-Related Emissions (Scope 2): Emissions resulting from energy sources such as electricity, heat, or steam. While these sources may not be directly controlled, choices in using such energy can impact emissions.

Other Indirect Emissions (Scope 3): Indirect emissions arising throughout a broad spectrum, from product manufacturing and supply chains to product usage. This scope often includes emissions beyond an individual's or organization's direct control but within their influence.

Carbon footprint calculations typically involve a series of steps, including measurement, reduction, and offsetting. This process aids individuals, companies, and countries in understanding their environmental impacts and developing sustainable practices. Consequently, carbon footprint calculations are becoming increasingly important as part of environmental sustainability efforts.